

# HOW TO USE THIS INSTALL GUIDE



Open the Bookmarks menu and find your vehicle OR scroll down until you find the install guide for your vehicle.



Print only the pages for your vehicle using the advanced options in the Print menu.



Install your Maestro RR according to the guide for your vehicle.

# WARNING

Pressing the printer icon or "quick printing" this document will print all of the guides in this compilation.



# **INSTALL GUIDE**

# 2021-2022 NISSAN ALTIMA 7INCH TOUCHSCREEN

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

### PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

# WELCOME

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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| Radio Wire Reference Chart | 5 |
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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

## STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.
- Cut the brown/red and brown/yellow wires on HRR-NI2 T-harness near the 10-pin white connector. Tape up the 10pin side of the cut wires.
- Extend the othe side of the brown/red and brown/yellow wires to radio 40-pin OEM connector.
- Connect brown/red wire to purple/light blue wire, pin 21.
- Connect brown/yellow wire to purple/light green wire, pin 1.
- Plug in the 10-pin white connector from cable B to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable B near the 2-pin connector. Discard the 2-pin connector.

### STEP 3

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin green connector (refer to diagram).
- Connect red/brown wire to blue or purple/blue wire, pin 20.
- Connect yellow/brown wire to pink or purple/pink wire, pin 40.

## STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio

(if equipped).

• Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press SEEK DOWN for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

7000



# WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |  |
|---------------------------------|----------|-----------------------|--------------|--|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |  |

| ACC-HU-KEN1<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|-------------------------|----------|-----------------------|---------------------------------|
| САМ                             |                         | (+)      | Green/Red             | Refer to camera/radio<br>manual |
|                                 | CAM                     | [-]      | Green/White           | Refer to camera/radio<br>manual |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| • 1 RED flash                      |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
| • 3 GREEN flash                    |                                   | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ٠                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |





# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

# 2019-2022 NISSAN ALTIMA 8INCH TOUCHSCREEN WITH BOSE AND NAV

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

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**PROGRAMMED FIRMWARE** ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

## STEP 2

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### STEP 4

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin green connector (refer to diagram).
- Connect red/brown wire to blue or purple/blue wire, pin 20.
- Connect yellow/brown wire to pink or purple/pink wire, pin 40.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).

• Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to **th**e steering control input of the radio.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use "**SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

1100



# WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |  |
|---------------------------------|----------|-----------------------|--------------|--|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |  |

| ACC-HU-KEN1<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|-------------------------|----------|-----------------------|---------------------------------|
| САМ                             |                         | (+)      | Green/Red             | Refer to camera/radio<br>manual |
|                                 | CAM                     | [-]      | Green/White           | Refer to camera/radio<br>manual |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ۰                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
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| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin green connector (refer to diagram).
- Connect red/brown wire to blue or purple/blue wire, pin 20.
- Connect yellow/brown wire to pink or purple/pink wire, pin 40.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
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test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

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Press VOLUME UP or DOWN to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

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To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
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Repeat as needed to cycle through all sources on the radio.

1000



# WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

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|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
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| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



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| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ۰                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

# 2020-2021 NISSAN FRONTIER 7INCH TOUCHSCREEN

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.



<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

### **STEP 3**

- Plug in the 10-pin white connector from cable B to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable B near the 2-pin connector. Discard the 2-pin connector.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 19.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

## STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

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# WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+)      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| САМ                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| САМ                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |





# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

# 2022 NISSAN FRONTIER 7INCH TOUCHSCREEN

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

### PROGRAMMED FIRMWARE

ADS-RR[SR]-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

# WELCOME

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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| Module Diagnostics         | 6 |
| Troubleshooting Table      | 7 |

# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

## STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### STEP 4

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 19.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

## STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press SEEK DOWN for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use "**SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

1001



# WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| САМ                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| САМ                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ٠                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |





# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.


# **INSTALL GUIDE**

### 2018-2022 NISSAN KICKS 7INCH TOUCHSCREEN WITH BOSE

#### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

### PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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# WELCOME

<sup>®</sup>maestro

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### STEP 4

- Extend the othe side of the red/brown and yellow/brown wires to smart-key module 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 6.
- Connect yellow/brown wire to pink wire, pin 7.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).

• Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to **th**e steering control input of the radio.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press **SEEK UP** to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use "**SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

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# WIRING DIAGRAM





# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |





# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

## 2018-2022 NISSAN KICKS 7INCH TOUCHSCREEN WITHOUT BOSE

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

# WELCOME

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

### **TABLE OF CONTENTS**

| Installation Instructions  | 3 |
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| Wiring Diagram             | 4 |
| Radio Wire Reference Chart | 5 |
| Module Diagnostics         | 6 |
| Troubleshooting Table      | 7 |

# **NEED HELP?**







maestro.idatalink.com/support www.12voltdata.com/forum

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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable B to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable B near the 2-pin connector. Discard the 2-pin connector.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to Smart-key module 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 6.
- Connect yellow/brown wire to pink wire, pin 7.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

2001



## WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+)      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| САМ                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| САМ                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| ● or ●                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ٠                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
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| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

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Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

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# **INSTALL GUIDE**

## 2022 NISSAN KICKS 8INCH TOUCHSCREEN

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

#### PROGRAMMED FIRMWARE

ADS-RR[SR]-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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# WELCOME

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to Smart-key module 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 6.
- Connect yellow/brown wire to pink wire, pin 7.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.

• Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

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- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

6003



## WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
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| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ٠                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

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Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2019-2022 NISSAN MAXIMA 8INCH DISPLAY WITH NAV

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.



<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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| Troubleshooting Table      | 7 |

# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to gateway module 16-pin connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 1.
- Connect yellow/brown wire to pink wire, pin 2.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.

• Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

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# WIRING DIAGRAM





# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|-------------------------|----------|-----------------------|---------------------------------|
|                                 | CAM                     | (+)      | Green/Red             | Refer to camera/radio<br>manual |
|                                 | CAM                     | [-]      | Green/White           | Refer to camera/radio<br>manual |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|-------------------------|----------|-----------------------|---------------|
|                                 | E-Brake                 | [-]      | LtGreen               | LtGreen       |
|                                 | Reverse Light*          | (+)      | Purple/White          | Purple/White  |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |  |
|------------------------------------|-----------------------------------|--------------------------|--|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |  |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |  |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |  |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |  |
| •                                  | ٠                                 | OFF                      | Normal operation (inactive).   |  |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |





# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

## 2019-2022 NISSAN MAXIMA 8INCH DISPLAY WITHOUT NAV WITHOUT BOSE

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.



# WELCOME

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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| Installation Instructions  | 3 |
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| Radio Wire Reference Chart | 5 |
| Module Diagnostics         | 6 |
| Troubleshooting Table      | 7 |

# **NEED HELP?**





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# **INSTALLATION INSTRUCTIONS** P1/1

### STEP 1

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

Note: only connect purple/white wire to radio reverse input or module damage will occur.

### **STEP 2**

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to gateway module 16-pin connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 1.
- Connect yellow/brown wire to pink wire, pin 2.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then

test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake.

Press VOLUME UP or DOWN to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

Release foot brake and clock is set.

#### Steering wheel control note

To use "SOURCE" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

1002

ADS-RR(SR)-NI2H-AS-IG-EN



## WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|-------------------------|----------|-----------------------|---------------------------------|
|                                 | CAM                     | (+)      | Green/Red             | Refer to camera/radio<br>manual |
|                                 | CAM                     | [-]      | Green/White           | Refer to camera/radio<br>manual |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ۰                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

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IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2019-2022 NISSAN MURANO 8INCH DISPLAY

#### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

### PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.
## WELCOME

<sup>®</sup>maestro

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Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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## **NEED HELP?**







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## **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to gateway module 16-pin connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 1.
- Connect yellow/brown wire to pink wire, pin 2.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.

• Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

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## WIRING DIAGRAM



## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|-------------------------|----------|-----------------------|---------------|
|                                 | E-Brake                 | [-]      | LtGreen               | LtGreen       |
|                                 | Reverse Light*          | (+)      | Purple/White          | Purple/White  |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



## **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |  |
|------------------------------------|-----------------------------------|--------------------------|--|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |  |
| • 1 RED flash                      |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |  |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |  |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |  |
| ۰                                  | ٠                                 | OFF                      | Normal operation (inactive).   |  |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



## **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2019-2021 NISSAN NV 1500 2500 3500 7INCH DISPLAY AUDIO

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

#### PROGRAMMED FIRMWARE

ADS-RR[SR]-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.



<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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| Radio Wire Reference Chart | 5 |
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## **NEED HELP?**







maestro.idatalink.com/support www.12voltdata.com/forum

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## **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable B to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.

### **STEP 4**

- Connect the 2-pin black connector from cable B to OBDII cable.
- Plug the OBDII connector into the OBDII of the vehicle.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

5000



## WIRING DIAGRAM





## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |  |
|---------------------------------|----------|-----------------------|--------------|--|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



## **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ۰                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



## **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

## 2020-2021 NISSAN NV 200 7INCH TOUCHSCREEN

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

#### **PROGRAMMED FIRMWARE**

ADS-RR[SR]-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

## WELCOME

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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| Radio Wire Reference Chart | 5 |
| Module Diagnostics         | 6 |
| Troubleshooting Table      | 7 |

## **NEED HELP?**







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## **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.

### STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

#### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

3000



## WIRING DIAGRAM







## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| САМ                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| САМ                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



## **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |





## **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2018-2020 NISSAN ROGUE 7INCH SCREEN

#### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

### PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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<sup>®</sup>maestro

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Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

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## **NEED HELP?**







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## **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin green connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 40.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.

• Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

6000



## WIRING DIAGRAM



## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity               | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|------------------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]                    | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]                    | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)                    | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | ed sensor) (DATA) Pink |                                    | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)                    | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |  |
|---------------------------------|----------|-----------------------|--------------|--|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|-------------------------|----------|-----------------------|---------------|
|                                 | E-Brake                 | [-]      | LtGreen               | LtGreen       |
|                                 | Reverse Light*          | (+)      | Purple/White          | Purple/White  |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



## **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| • 1 RED fla                        |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
| • 3 GREEN flash                    |                                   | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ٠                                  | • OFF                             |                          | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



## **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

## 2021-2022 NISSAN ROGUE 7INCH TOUCHSCREEN

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

### PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.



<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

### **TABLE OF CONTENTS**

| Installation Instructions  | 3 |
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| Wiring Diagram             | 4 |
| Radio Wire Reference Chart | 5 |
| Module Diagnostics         | 6 |
| Troubleshooting Table      | 7 |

## **NEED HELP?**







maestro.idatalink.com/support www.12voltdata.com/forum

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## **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 16-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 6.
- Connect yellow/brown wire to pink wire, pin 5.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.

• Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

6005



## WIRING DIAGRAM



## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+)      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |  |
|---------------------------------|----------|-----------------------|--------------|--|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



## **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |





## **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact support if no voltage on red or vellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

## 2019-2021 NISSAN ROGUE SPORT OR QASHQAI 7INCH TOUCHSCREEN WITH NAV

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

### PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.



## WELCOME

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

### **TABLE OF CONTENTS**

| Installation Instructions  | 3 |
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| Radio Wire Reference Chart | 5 |
| Module Diagnostics         | 6 |
| Troubleshooting Table      | 7 |

## **NEED HELP?**







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maestro.idatalink.com/support www.12voltdata.com/forum


# **INSTALLATION INSTRUCTIONS** P1/1

## **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

## STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

## **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

## **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin green connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 40.

## STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

## STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.

• Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use "SOURCE" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

6000



# WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

## Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|-------------------------|----------|-----------------------|---------------|
|                                 | E-Brake                 | [-]      | LtGreen               | LtGreen       |
|                                 | Reverse Light*          | (+)      | Purple/White          | Purple/White  |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |  |
|------------------------------------|-----------------------------------|--------------------------|--|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |  |
| • 1 RED flash                      |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |  |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |  |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |  |
| • OFF                              |                                   | OFF                      | Normal operation (inactive).   |  |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

## 2019-2021 NISSAN ROGUE SPORT OR QASHQAI 7INCH TOUCHSCREEN WITHOUT NAV WITHOUT BOSE

## **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

# WELCOME

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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| Installation Instructions  | 3 |
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| Radio Wire Reference Chart | 5 |
| Module Diagnostics         | 6 |
| Troubleshooting Table      | 7 |

# **NEED HELP?**







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maestro.idatalink.com/support www.12voltdata.com/forum





# **INSTALLATION INSTRUCTIONS** P1/1

## **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

## STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

## **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

## **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin green connector (refer to diagram).
- Connect red/brown wire to blue or purple/blue wire, pin 20.
- Connect yellow/brown wire to pink or purple/pink wire, pin 40.

## **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

## **STEP 6**

• Connect all the harnesses to the Maestro RR module then

test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake.

Press VOLUME UP or DOWN to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

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# WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+)      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

## Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ۰                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

## 2020 NISSAN SENTRA (CANADA) 8INCH TOUCHSCREEN

## **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

**PROGRAMMED FIRMWARE** ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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# WELCOME

<sup>®</sup>maestro

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Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

## **TABLE OF CONTENTS**

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| Radio Wire Reference Chart | 5 |
| Module Diagnostics         | 6 |
| Troubleshooting Table      | 7 |

# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

## **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

## STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

## **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

## **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin gray connector (refer to diagram).
- Connect red/brown wire to purple/blue wire, pin 26.
- Connect yellow/brown wire to purple/pink wire, pin 27.

## STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

## STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press SEEK DOWN for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use "**SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

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# WIRING DIAGRAM





# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

## Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ٠                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |





# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
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|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
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| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

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#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

## 2020 NISSAN SENTRA (USA) WITHOUT NAV WITH BOSE

## **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

## PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

## **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

## STEP 2

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

## **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

## STEP 4

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin gray connector (refer to diagram).
- Connect red/brown wire to purple/blue wire, pin 26.
- Connect yellow/brown wire to purple/pink wire, pin 27.

## **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

## **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake.

Press VOLUME UP or DOWN to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

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# WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity     | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|--------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]          | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]          | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-) Lt Green |                                    | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor) (DATA) |              | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)          | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

## Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |  |
|---------------------------------|----------|-----------------------|--------------|--|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  | • 1 GREEN flash                   |                          | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| • 0FF                              |                                   | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |





# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |  |  |
|--|--|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |  |  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |  |  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |  |  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |  |  |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |  |  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact  |  |  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |  |  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

## 2019 NISSAN SENTRA WITHOUT NAV WITH BOSE

## **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

## PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.



<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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| Installation Instructions  | 3 |
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| Radio Wire Reference Chart | 5 |
| Module Diagnostics         | 6 |
| Troubleshooting Table      | 7 |

# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

## **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

## STEP 2

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

## **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.

## **STEP 4**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

## **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use "**SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

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# WIRING DIAGRAM





# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity     | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|--------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]          | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]          | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-) Lt Green |                                    | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor) (DATA) |              | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)          | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

## Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ۰                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact  |
| The steering wheel controls or accessory power are not working.  | Support if no voltage on red or yellow.<br>Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

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Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE** 2019 NISSAN TITAN 7INCH TOUCHSCREEN WITH NAV

## **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

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PROGRAMMED FIRMWARE

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ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

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# WELCOME

<sup>®</sup>maestro

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| Troubleshooting Table      | 7 |

# **NEED HELP?**





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# **INSTALLATION INSTRUCTIONS** P1/1

## **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

## STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

## **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

## **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 19.

## STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

## STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.

• Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use "SOURCE" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

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# WIRING DIAGRAM





# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+)      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |  |
|---------------------------------|----------|-----------------------|--------------|--|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |  |
|------------------------------------|-----------------------------------|--------------------------|--|--|
| • or • RED or GREEN flashing       |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |  |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |  |
| • 1 GREEN flash                    |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |  |
| •                                  |                                   | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |  |
| • •                                |                                   | OFF                      | Normal operation (inactive).   |  |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |





# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
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| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

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Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

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Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

# 2019 NISSAN TITAN 7INCH TOUCHSCREEN WITHOUT NAV

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

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# WELCOME

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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# **NEED HELP?**





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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

## STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### STEP 4

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 19.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

# STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press SEEK DOWN for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use "**SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

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# WIRING DIAGRAM





# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity         | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|------------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]              | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+) Purple/White |                                    | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)              | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)           | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)              | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |  |
|---------------------------------|----------|-----------------------|--------------|--|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |





# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

# 2020-2021 NISSAN TITAN 8INCH TOUCHSCREEN WITHOUT NAV WITHOUT BOSE

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

### PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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# WELCOME

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# **NEED HELP?**





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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 19.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

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# WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ۰                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
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| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

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IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

# 2020-2021 NISSAN TITAN 9INCH MULTI-TOUCHSCREEN WITH NAV

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

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### PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

# STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 19.

## STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.

• Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use "**SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

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# WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|-------------------------|----------|-----------------------|---------------|
|                                 | E-Brake                 | [-]      | LtGreen               | LtGreen       |
|                                 | Reverse Light*          | (+)      | Purple/White          | Purple/White  |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| • 1 R                              |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| • 1 GREEN fl.                      |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
| • 3 G                              |                                   | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| OFF                                |                                   | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

# 2020-2021 NISSAN VERSA 7INCH TOUCHSCREEN WITH CARPLAY OR ANDROID AUTO

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

### PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.



# WELCOME

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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| Installation Instructions  | 3 |
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| Radio Wire Reference Chart | 5 |
| Module Diagnostics         | 6 |
| Troubleshooting Table      | 7 |

# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 4.
- Connect yellow/brown wire to pink wire, pin 3.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

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# WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.



# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| ۰                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
|  | Connect the 3.5mm jack from the Maestro blue 4-pin cable to the radio's 3.5mm port (labeled steering, remote, or wheel). If no such port exists, wire the blue/yellow to blue/yellow (Kenwood/JVC) or to the radio's Key 1 wire (brands not listed/other) and secure the 3.5mm jack. It will not be used.  |
|  | Verify the buttons are set up in the flash. If any button is set to "none" for "press once", it will do nothing. "Hold" column can be left as none and the "press once" function will operate with one press and when holding the button.  |
|  | <ul> <li>Refer to radio's owner's manual to verify if the radio has this function:</li> <li>JVC/Kenwood : Steering Wheel Control (ON/OFF): choose ON</li> <li>Nakamichi : if model is listed, ensure PAC mode is on. If "other", learn the buttons in the radio steering wheel menu.</li> <li>Sony : Steering Wheel Control (Custom/Preset): choose Preset. If phone buttons do not operate properly, flash the module as Pioneer – 2009 and newer with BT. Then select "custom" instead of "preset" and learn the buttons in the radio menu.</li> <li>Other brands – radio should have a steering wheel menu to learn the buttons. You may have to select type A/B/C/1/2/3 and try learning again if buttons are not saving. Refer to radio manufacturer's tech support for further advice if not learning properly.</li> </ul> |
| Backup camera is not displayed.  | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.  |
| The radio does not turn ON.  | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.  |
| The steering wheel controls or accessory power are not working.  | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.  |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

# 2020-2021 NISSAN VERSA 7INCH TOUCHSCREEN WITHOUT CARPLAY OR ANDROID AUTO

### **RETAINS STEERING WHEEL CONTROLS AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness non-iDatalink radio

# PROGRAMMED FIRMWARE

ADS-RR(SR)-NI01-AS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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# WELCOME

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Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

## STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

### **STEP 3**

- Plug in the 10-pin white connector from cable B to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable B near the 2-pin connector. Discard the 2-pin connector.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 4.
- Connect yellow/brown wire to pink wire, pin 3.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Connect either the blue/yellow wire (Kenwood/JVC) or the 3.5mm to the steering control input of the radio.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

360 camera controls (with vehicle in reverse) SEEK UP - change view

SEEK DOWN - change view

#### To set CLOCK in instrument cluster:

- Turn ignition on
- Press foot brake 5 times and HOLD on the 5th push.
- Apply parking/e-brake and keep holding the foot brake. Press **VOLUME UP** or **DOWN** to adjust minutes

Press SEEK UP to adjust hour

Press **SEEK DOWN** for AM/PM vs 24hr clock display

• Release foot brake and clock is set.

#### Steering wheel control note

To use **"SOURCE**" steering wheel button to change radio source:

- Press SOURCE button on wheel.
- Instrument cluster will display "Music Box."
- Press OK button on wheel.

Repeat as needed to cycle through all sources on the radio.

2002

"maestro

# WIRING DIAGRAM


## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity         | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|------------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]              | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+) Purple/White |                                    | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)              | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)           | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)              | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow                     |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | Blue/Yellow   |

\* Reverse light wire: Only connect to radio or module damage will occur.

## **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS  | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|---|--|
| ● or ●                             | RED or GREEN<br>flashing          |   | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash   | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 1 GREEN flash   | After radio boots up : Normal operation.   |
| •                                  |                                   | <b>3 GREEN flashes</b> Bluetooth is activated.<br>Turns off after one minute: Normal operation. |  |
| • •                                |                                   | OFF   | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
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## **TROUBLESHOOTING TABLE**

| PROBLEM  | SOLUTION   |
|--|--|
| Steering wheel controls do not work but LED on the Maestro does blink when steering wheel buttons are pressed. | Ensure the blue 4-pin steering wheel control cable is connected between the Maestro and the radio. The radio will use either the 3.5mm jack OR the blue/ yellow wire, not both.  |
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IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# HOW TO USE THIS INSTALL GUIDE



Open the Bookmarks menu and find your vehicle OR scroll down until you find the install guide for your vehicle.



Print only the pages for your vehicle using the advanced options in the Print menu.



Install your Maestro RR according to the guide for your vehicle.

## WARNING

Pressing the printer icon or "quick printing" this document will print all of the guides in this compilation.



# **INSTALL GUIDE**

### 2021-2022 NISSAN ALTIMA 7INCH TOUCHSCREEN

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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## WELCOME

<sup>®</sup>maestro

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## **NEED HELP?**







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## **INSTALLATION INSTRUCTIONS** P1/1

#### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.
- Cut the brown/red and brown/yellow wires on HRR-NI2 T-harness near the 10-pin white connector. Tape up the 10pin side of the cut wires.
- Extend the othe side of the brown/red and brown/yellow wires to radio 40-pin OEM connector.
- Connect brown/red wire to purple/light blue wire, pin 21.
- Connect brown/yellow wire to purple/light green wire, pin 1.
- Plug in the 10-pin white connector from cable B to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable B near the 2-pin connector. Discard the 2-pin connector.

### STEP 3

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin green connector (refer to diagram).
- Connect red/brown wire to blue or purple/blue wire, pin 20.
- Connect yellow/brown wire to pink or purple/pink wire, pin 40.

### STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio

(if equipped).

• Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### **STEP 5**

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

7000



### WIRING DIAGRAM



## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |  |
|---------------------------------|----------|-----------------------|--------------|--|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

## **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



### **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2019-2022 NISSAN ALTIMA 8INCH TOUCHSCREEN WITH BOSE AND NAV

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PIO1, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.



### WELCOME

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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| Installation Instructions  | 3 |
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| Wiring Diagram             | 4 |
| Radio Wire Reference Chart | 5 |
| Module Diagnostics         | 6 |
| Troubleshooting Table      | 7 |

## **NEED HELP?**







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## **INSTALLATION INSTRUCTIONS** P1/1

#### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### STEP 4

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin green connector (refer to diagram).
- Connect red/brown wire to blue or purple/blue wire, pin 20.
- Connect yellow/brown wire to pink or purple/pink wire, pin 40.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).

• Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

1100



### WIRING DIAGRAM



## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

## **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



### **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
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| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

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# **INSTALL GUIDE**

### 2019-2022 NISSAN ALTIMA 8INCH TOUCHSCREEN WITHOUT NAV WITHOUT BOSE

### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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## WELCOME

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

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## **NEED HELP?**





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## **INSTALLATION INSTRUCTIONS** P1/1

#### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin green connector (refer to diagram).
- Connect red/brown wire to blue or purple/blue wire, pin 20.
- Connect yellow/brown wire to pink or purple/pink wire, pin 40.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

**Note:** On Pioneer radio, ensure that there is nothing plugged into the W/R port.

#### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

1000



### WIRING DIAGRAM



## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity           | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|--------------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]                | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | erse Light* (+)    |                                    | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-) Lt Green       |                                    | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | ensor) (DATA) Pink |                                    | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)                | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

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| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
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| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
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## **TROUBLESHOOTING TABLE**

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| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

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# **INSTALL GUIDE**

### 2020-2021 NISSAN FRONTIER 7INCH TOUCHSCREEN

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

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Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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## **NEED HELP?**







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## **INSTALLATION INSTRUCTIONS** P1/1

#### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable B to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable B near the 2-pin connector. Discard the 2-pin connector.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 19.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

**Note:** On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

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### WIRING DIAGRAM



## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity             | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]                  | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | ht* (+) Purple/White |                                    | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-) Lt Green         |                                    | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)               | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)                  | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | npter Kenwood Radio |  |
|---------------------------------|----------|-----------------------|---------------------|--|
| E-Brake                         | [-]      | LtGreen               | LtGreen             |  |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White        |  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                 |  |

\* Reverse light wire: Only connect to radio or module damage will occur.

## **MODULE DIAGNOSTICS**

<sup>®</sup>maëstro**/?/** 



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



## **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2022 NISSAN FRONTIER 7INCH TOUCHSCREEN

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

## WELCOME

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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## **NEED HELP?**







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## **INSTALLATION INSTRUCTIONS** P1/1

#### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 19.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

**Note:** On Pioneer radio, ensure that there is nothing plugged into the W/R port.

#### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

1001



### WIRING DIAGRAM


# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|-------------------------|----------|-----------------------|---------------|
|                                 | E-Brake                 | [-]      | LtGreen               | LtGreen       |
|                                 | Reverse Light*          | (+)      | Purple/White          | Purple/White  |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| • •                                |                                   | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



### **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

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Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2018-2022 NISSAN KICKS 7INCH TOUCHSCREEN WITH BOSE

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

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PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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# WELCOME

<sup>®</sup>maestro

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Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

#### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### STEP 4

- Extend the othe side of the red/brown and yellow/brown wires to smart-key module 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 6.
- Connect yellow/brown wire to pink wire, pin 7.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).

• Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

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### WIRING DIAGRAM





# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|-------------------------|----------|-----------------------|---------------------------------|
|                                 | CAM                     | (+)      | Green/Red             | Refer to camera/radio<br>manual |
|                                 | CAM                     | [-]      | Green/White           | Refer to camera/radio<br>manual |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |





# **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2018-2022 NISSAN KICKS 7INCH TOUCHSCREEN WITHOUT BOSE

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

## WELCOME

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

#### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable B to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable B near the 2-pin connector. Discard the 2-pin connector.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to Smart-key module 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 6.
- Connect yellow/brown wire to pink wire, pin 7.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

**Note:** On Pioneer radio, ensure that there is nothing plugged into the W/R port.

#### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

2001



### WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |





## **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2022 NISSAN KICKS 8INCH TOUCHSCREEN

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

### WELCOME

<sup>®</sup>maestro

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Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to Smart-key module 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 6.
- Connect yellow/brown wire to pink wire, pin 7.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view SEEK DOWN - change view

6003



### WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity                          | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|-----------------------------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]                               | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+) Purple/White                  |                                    | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-) Lt Green                      |                                    | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | vehicle speed sensor) (DATA) Pink |                                    | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)                               | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

|                         | ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|-------------------------|---------------------------------|----------|-----------------------|---------------------------------|
|                         | CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
|                         | CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls |                                 | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity Wire Color on Adapter |              | Kenwood Radio |  |
|---------------------------------|--------------------------------|--------------|---------------|--|
| E-Brake                         | [-]                            | LtGreen      | LtGreen       |  |
| Reverse Light*                  | (+)                            | Purple/White | Purple/White  |  |
| Steering Wheel Controls         | (DATA)                         | Blue/Yellow  | n/a           |  |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
| •                                  |                                   | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| • •                                |                                   | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2019-2022 NISSAN MAXIMA 8INCH DISPLAY WITH NAV

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.



<sup>®</sup>maestro

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# **NEED HELP?**





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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to gateway module 16-pin connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 1.
- Connect yellow/brown wire to pink wire, pin 2.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view SEEK DOWN - change view

6002



### WIRING DIAGRAM





# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity                          | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|-----------------------------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]                               | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+) Purple/White                  |                                    | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-) Lt Green                      |                                    | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | vehicle speed sensor) (DATA) Pink |                                    | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)                               | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

|                         | ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|-------------------------|---------------------------------|----------|-----------------------|---------------------------------|
|                         | CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
|                         | CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls |                                 | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.



<sup>®</sup>maëstro**/?/** 



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |  |
|------------------------------------|-----------------------------------|--------------------------|--|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |  |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |  |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |  |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |  |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |  |
| •                                  | ٠                                 | OFF                      | Normal operation (inactive).   |  |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2019-2022 NISSAN MAXIMA 8INCH DISPLAY WITHOUT NAV WITHOUT BOSE

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.



# WELCOME

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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# **NEED HELP?**





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# **INSTALLATION INSTRUCTIONS** P1/1

#### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to gateway module 16-pin connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 1.
- Connect yellow/brown wire to pink wire, pin 2.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

**Note:** On Pioneer radio, ensure that there is nothing plugged into the W/R port.

#### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

1002



### WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description      | Polarity   | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |  |
|--|--|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|--|
| Illumination                           | Illumination (+) Orange   Reverse Light* (+) Purple/White   E-Brake (-) Lt Green |                                    | N/A                           | Orange/White                   | Orange/White                   | Orange                      |  |
| Reverse Light*                         |  |                                    | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |  |
| E-Brake                                |  |                                    | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |  |
| VSS (vehicle speed sensor) (DATA) Pink |  | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |  |
| Power Antenna (+) Blue                 |  | Blue                               | Blue                          | Blue/White                     | Blue or Blue/White             |                             |  |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.
# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2019-2022 NISSAN MURANO 8INCH DISPLAY

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

# WELCOME

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to gateway module 16-pin connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 1.
- Connect yellow/brown wire to pink wire, pin 2.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view SEEK DOWN - change view

6004



### WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



## **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
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| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
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| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

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Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2019-2021 NISSAN NV 1500 2500 3500 7INCH DISPLAY AUDIO

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PIO1, SON1, KEN1, KEN2, ALP1

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## WELCOME

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

#### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable B to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.

### **STEP 4**

- Connect the 2-pin black connector from cable B to OBDII cable.
- Plug the OBDII connector into the OBDII of the vehicle.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the  $\ensuremath{\mathsf{W/R}}$  port.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view SEEK DOWN - change view

5000



### WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity         | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|------------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | (+)              | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+) Purple/White |                                    | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-) Lt Green     |                                    | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)           | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)              | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity Wire Color on Adapter |             | Alpine Radio |  |
|---------------------------------|--------------------------------|-------------|--------------|--|
| VSS (vehicle speed sensor)      | (DATA)                         | Green/White | Green/White  |  |

| ACC-HU-KEN1<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|-------------------------|----------|-----------------------|---------------------------------|
|                                 | CAM                     | (+)      | Green/Red             | Refer to camera/radio<br>manual |
|                                 | CAM                     | [-]      | Green/White           | Refer to camera/radio<br>manual |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |  |
|------------------------------------|-----------------------------------|--------------------------|--|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |  |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |  |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |  |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |  |
|                                    | • 3 GREEN flashes                 |                          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |  |
| •                                  | ٠                                 | OFF                      | Normal operation (inactive).   |  |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |





# **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2020-2021 NISSAN NV 200 7INCH TOUCHSCREEN

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

# WELCOME

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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| Wiring Diagram             | 4 |
| Radio Wire Reference Chart | 5 |
| Module Diagnostics         | 6 |
| Troubleshooting Table      | 7 |

# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.

### STEP 4

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the  $\ensuremath{\mathsf{W/R}}$  port.

### **STEP 5**

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view SEEK DOWN - change view

3000



### WIRING DIAGRAM







# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity     | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|--------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]          | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]          | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-) Lt Green |                                    | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)       | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)          | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |  |
|---------------------------------|----------|-----------------------|--------------|--|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



## **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2018-2020 NISSAN ROGUE 7INCH SCREEN

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.



<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

### **TABLE OF CONTENTS**

| Installation Instructions  | 3 |
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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### **STEP 2**

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

#### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin green connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 40.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

#### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view SEEK DOWN - change view

6000



### **WIRING DIAGRAM**



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | [+]      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



## **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2021-2022 NISSAN ROGUE 7INCH TOUCHSCREEN

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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<sup>®</sup>maestro

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Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 6.
- Connect yellow/brown wire to pink wire, pin 5.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view SEEK DOWN - change view

6005



### WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |


## **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2019-2021 NISSAN ROGUE SPORT OR QASHQAI 7INCH TOUCHSCREEN WITH NAV

### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

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PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

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HEAD UNIT ADAPTER: ACC-HU-PIO1, SON1, KEN1, KEN2, ALP1

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin green connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 40.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view SEEK DOWN - change view

6000



### WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

|                         | ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|-------------------------|---------------------------------|----------|-----------------------|---------------|
|                         | E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*          |                                 | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls |                                 | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
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| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

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# **INSTALLATION INSTRUCTIONS** P1/1

#### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin green connector (refer to diagram).
- Connect red/brown wire to blue or purple/blue wire, pin 20.
- Connect yellow/brown wire to pink or purple/pink wire, pin 40.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

**Note:** On Pioneer radio, ensure that there is nothing plugged into the W/R port.

#### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

1000



### WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+)      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

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# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
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| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

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|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



### **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2020 NISSAN SENTRA (CANADA) 8INCH TOUCHSCREEN

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

## WELCOME

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin gray connector (refer to diagram).
- Connect red/brown wire to purple/blue wire, pin 26.
- Connect yellow/brown wire to purple/pink wire, pin 27.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

**Note:** On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

1003



### WIRING DIAGRAM





# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**

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| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2020 NISSAN SENTRA (USA) WITHOUT NAV WITH BOSE

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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# WELCOME

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Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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# **NEED HELP?**







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# **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### STEP 4

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin gray connector (refer to diagram).
- Connect red/brown wire to purple/blue wire, pin 26.
- Connect yellow/brown wire to purple/pink wire, pin 27.

### **STEP 5**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

1103



### WIRING DIAGRAM



# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

|                | ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|----------------|---------------------------------|----------|-----------------------|---------------|
|                | E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light* |                                 | (+)      | Purple/White          | Purple/White  |
|                | Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**

<sup>®</sup>maëstro**/?/** 



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
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| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
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| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

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Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

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Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2019 NISSAN SENTRA WITHOUT NAV WITH BOSE

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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# **NEED HELP?**





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# **INSTALLATION INSTRUCTIONS** P1/1

#### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.

### **STEP 4**

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

**Note:** On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### **STEP 5**

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view SEEK DOWN - change view



### WIRING DIAGRAM







# **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

# **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



# **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.


### **INSTALL GUIDE** 2019 NISSAN TITAN 7INCH TOUCHSCREEN WITH NAV

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



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ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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| Troubleshooting Table      | 7 |

## **NEED HELP?**





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## **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 19.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view SEEK DOWN - change view

6001



### WIRING DIAGRAM





## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity         | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|------------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]              | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+) Purple/White |                                    | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)              | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)           | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)              | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|-------------------------|----------|-----------------------|---------------------------------|
| САМ                             |                         | (+)      | Green/Red             | Refer to camera/radio<br>manual |
|                                 | CAM                     | [-]      | Green/White           | Refer to camera/radio<br>manual |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

## **MODULE DIAGNOSTICS**

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| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | ٠                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



## **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
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| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

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# **INSTALL GUIDE**

### 2019 NISSAN TITAN 7INCH TOUCHSCREEN WITHOUT NAV

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



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PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

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## **NEED HELP?**







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## **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 19.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

**Note:** On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

1001



### WIRING DIAGRAM



## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity                      | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|-------------------------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | (+)                           | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+) Purple/White              |                                    | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-) Lt Green<br>) (DATA) Pink |                                    | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        |                               |                                    | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)                           | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |  |
|---------------------------------|----------|-----------------------|--------------|--|
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| ACC-HU-KEN1<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|-------------------------|----------|-----------------------|---------------------------------|
| САМ                             |                         | (+)      | Green/Red             | Refer to camera/radio<br>manual |
|                                 | CAM                     | [-]      | Green/White           | Refer to camera/radio<br>manual |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

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# **INSTALL GUIDE**

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If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### STEP 4

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 19.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

**Note:** On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

1001



### WIRING DIAGRAM



## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | [+]      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

## **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |



## **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
| The light on the Maestro is blinking <b>RED TWICE</b> but the radio is <b>NOT</b> turning on. | If installing a modular radio and it is not turning on, ensure the screen is<br>secured and any trim pieces on the radio have been installed fully. Not<br>installing these fully will prevent radio from powering up and show a 2x red<br>error as well.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.   |
| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

Phone: 1-866-427-2999

Email: maestro.support@idatalink.com

Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2020-2021 NISSAN TITAN 9INCH MULTI-TOUCHSCREEN WITH NAV

#### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.

### WELCOME

<sup>®</sup>maestro

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

### **TABLE OF CONTENTS**

| Installation Instructions  | 3 |
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| Wiring Diagram             | 4 |
| Radio Wire Reference Chart | 5 |
| Module Diagnostics         | 6 |
| Troubleshooting Table      | 7 |

## **NEED HELP?**







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## **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

• Determine if the vehicle has a factory amplifier. Look for badges on the radio, door panels and dash that indicate the presence of an amplifier (ex: BOSE).

#### If the vehicle DOES NOT have a factory amplifier:

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### If the vehicle DOES have a factory amplifier:

- Unlug the HRR-NI2 4-pin white and 4-pin green connectors.
- Connect the HRR-NI2 4-pin white to 4-pin white connector with RCAs. Connect the 4-pin green to 4-pin green connector with RCAs.
- Connect the RCAs to the radio outputs: white/left front, gray/right front, green/left rear, purple/right rear.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin black connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 20.
- Connect yellow/brown wire to pink wire, pin 19.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

Note: On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### **STEP 6**

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view SEEK DOWN - change view

6001



### WIRING DIAGRAM



## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |  |
|---------------------------------|----------|-----------------------|--------------|--|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |  |

| ACC-HU-KEN1<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|-------------------------|----------|-----------------------|---------------------------------|
|                                 | CAM                     | (+)      | Green/Red             | Refer to camera/radio<br>manual |
|                                 | CAM                     | [-]      | Green/White           | Refer to camera/radio<br>manual |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description |                         | Polarity | Wire Color on Adapter | Kenwood Radio |  |
|---------------------------------|-------------------------|----------|-----------------------|---------------|--|
|                                 | E-Brake                 | [-]      | LtGreen               | LtGreen       |  |
|                                 | Reverse Light*          | (+)      | Purple/White          | Purple/White  |  |
|                                 | Steering Wheel Controls | (DATA)   | Blue/Yellow           | n/a           |  |

\* Reverse light wire: Only connect to radio or module damage will occur.

## **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
|-------------------|--|
| VERIFY FLASH      | Last flash information, steering control configuration, vehicle information. |
| WEBLINK           | Software to program module.  |





## **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
| The light on the Maestro is blinking <b>RED TWICE</b> and the radio <b>IS</b> turning on.     | Ensure the 4-pin data cable is connected between the radio and the RR, and<br>that it is plugged into the black port on the Maestro RR. The red and blue<br>ports on the RR should be empty.<br>Make sure the correct radio model and serial number were entered during<br>the flash. Verify the radio's serial number entered during the flash matches<br>what is listed on the radio screen. This can be found in the settings of the<br>radio, listed as Device Id, Device Number, or Serial Number.   |
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| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

Turn the key to the OFF position, then disconnect all connectors from the module.

Press and hold the module's programming button and connect all the connectors back to the module. Wait, the module's LED will flash RED rapidly (this may take up to 10 seconds).

Release the programming button. Wait, the LED will turn solid GREEN for 2 seconds to show the reset was successful.

#### TECHNICAL ASSISTANCE

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Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2020-2021 NISSAN VERSA 7INCH TOUCHSCREEN WITH CARPLAY OR ANDROID AUTO

### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

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PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

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HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

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## **NEED HELP?**







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## **INSTALLATION INSTRUCTIONS** P1/1

### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable A to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable A near the 40-pin connector. Tape up the 40-pin side of the cut wires.

### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 4.
- Connect yellow/brown wire to pink wire, pin 3.

### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

**Note:** On Pioneer radio, ensure that there is nothing plugged into the W/R port.

### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

1004



### WIRING DIAGRAM



## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | [+]      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | [+]      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | (-)      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |  |
|---------------------------------|----------|-----------------------|--------------|--|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

## **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
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| <u>VIDEO HELP</u> | Installation, product information, vehicle specific videos.                  |
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## **TROUBLESHOOTING TABLE**

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| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
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| The steering wheel controls or accessory power are not working.                               | Verify module has been programmed.<br>Turn vehicle off, unplug all RR connections and hold the button while<br>plugging all connectors back in. Release the button when the LED on<br>module flashes rapidly RED. Ensure all connectors are fully seated and turn<br>the vehicle back on.<br>CAN connections may require wiring to another location so ensure the<br>correct vehicle guide is being followed.<br>Test red and yellow wires for DC voltage at radio using a multimeter. Contact<br>support if no voltage on red or yellow.<br>If LED is blinking RED TWICE, refer to the step above for troubleshooting.   |

#### MAESTRO RR RESET PROCEDURE:

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Web: maestro.idatalink.com/support add www.12voltdata.com/forum/

IMPORTANT: To ensure proper operation, the aftermarket radio needs to have the latest firmware from the manufacturer. Please visit the radio manufacturer's website and look for any updates pertaining to your radio.



# **INSTALL GUIDE**

### 2020-2021 NISSAN VERSA 7INCH TOUCHSCREEN WITHOUT CARPLAY OR ANDROID AUTO

### **RETAINS STEERING WHEEL CONTROLS, VEHICLE SETTINGS, AND MORE!**



#### **PRODUCTS REQUIRED**

iDatalink Maestro RR or RR2 Radio Replacement Interface iDatalink Maestro HRR-NI2 Installation Harness

PROGRAMMED FIRMWARE ADS-RR(SR)-NI01-DS

ADDITIONAL RESOURCES Maestro RR2 Programmable Outputs Guide

#### **OPTIONAL ACCESSORIES**



Click here for: Radar Installation Guides

HEAD UNIT ADAPTER: ACC-HU-PI01, SON1, KEN1, KEN2, ALP1

NOTICE: Automotive Data Solutions Inc. (ADS) recommends having this installation performed by a certified technician. Logos and trademarks used here in are the properties of their respective owners.


### WELCOME

Congratulations on the purchase of your iDatalink Maestro RR Radio replacement solution. You are now a few simple steps away from enjoying your new car radio with enhanced features.

Before starting your installation, please ensure that your iDatalink Maestro module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

Please note that Maestro RR will only retain functionalities that were originally available in the vehicle.

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| Radio Wire Reference Chart | 5 |
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| Troubleshooting Table      | 7 |

## **NEED HELP?**







maestro.idatalink.com/support www.12voltdata.com/forum



# **INSTALLATION INSTRUCTIONS** P1/1

#### **STEP 1**

Remove the factory radio

If using head unit adapter (sold separately), connect HRR-NI2 harness to adapter and skip to step 2.

- Unbox the aftermarket radio and locate its main harness.
- Cut and remove the black 20 pin connector from the HRR-NI2 T-harness and connect the wires, shown in the wiring diagram, from aftermarket radio main harness to the HRR-NI2 T-harness and match the wire functions.

**Note**: only connect purple/white wire to radio reverse input or module damage will occur.

### STEP 2

- Plug in the 4-pin white connectors.
- Plug in the 4-pin green connectors.

#### **STEP 3**

- Plug in the 10-pin white connector from cable B to NI2 main harness.
- Connect both the 20-pin and 40-pin connectors of HRR-NI2 T-harness to the factory radio harness.
- Cut red/brown and yellow/brown wires on cable B near the 2-pin connector. Discard the 2-pin connector.

#### **STEP 4**

- Extend the othe side of the red/brown and yellow/brown wires to BCM 40-pin connector (refer to diagram).
- Connect red/brown wire to blue wire, pin 4.
- Connect yellow/brown wire to pink wire, pin 3.

#### STEP 5

- Plug the harnesses into the aftermarket radio.
- Connect the backup cam cable into the aftermarket radio (if equipped).
- Plug the Data cable to the data port of the aftermarket radio.

**Note:** On Pioneer radio, ensure that there is nothing plugged into the W/R port.

#### STEP 6

• Connect all the harnesses to the Maestro RR module then test your installation.

#### 360 CAMERA CONTROLS (with vehicle in reverse)

SEEK UP - change view

SEEK DOWN - change view

2002

"maestro

### WIRING DIAGRAM



## **RADIO WIRE REFERENCE CHART**

| NI2 T-harness<br>Wire Description | Polarity | Wire Color on Maestro<br>T-Harness | Wire Color on Alpine<br>cable | Wire Color on Kenwood<br>cable | Wire Color on Pioneer<br>cable | Wire Color on Sony<br>cable |
|-----------------------------------|----------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------------|
| Illumination                      | (+)      | Orange                             | N/A                           | Orange/White                   | Orange/White                   | Orange                      |
| Reverse Light*                    | (+)      | Purple/White                       | Orange/White                  | Purple/White                   | Purple/White                   | Purple/White                |
| E-Brake                           | [-]      | Lt Green                           | Yellow/Blue                   | Lt Green                       | Lt Green                       | Lt Green                    |
| VSS (vehicle speed sensor)        | (DATA)   | Pink                               | Green/White                   | Pink                           | Pink                           | N/A                         |
| Power Antenna                     | (+)      | Blue                               | Blue                          | Blue                           | Blue/White                     | Blue or Blue/White          |

#### Head unit adapter wiring (optional accessory, sold separately)

| ACC-HU-ALP1<br>Wire Description | Polarity | Wire Color on Adapter | Alpine Radio |
|---------------------------------|----------|-----------------------|--------------|
| VSS (vehicle speed sensor)      | (DATA)   | Green/White           | Green/White  |

| ACC-HU-KEN1<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio                   |
|---------------------------------|----------|-----------------------|---------------------------------|
| CAM                             | (+)      | Green/Red             | Refer to camera/radio<br>manual |
| CAM                             | [-]      | Green/White           | Refer to camera/radio<br>manual |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a                             |

| ACC-HU-KEN2<br>Wire Description | Polarity | Wire Color on Adapter | Kenwood Radio |
|---------------------------------|----------|-----------------------|---------------|
| E-Brake                         | [-]      | LtGreen               | LtGreen       |
| Reverse Light*                  | (+)      | Purple/White          | Purple/White  |
| Steering Wheel Controls         | (DATA)   | Blue/Yellow           | n/a           |

\* Reverse light wire: Only connect to radio or module damage will occur.

## **MODULE DIAGNOSTICS**



| LED 1<br>Module/Firmware<br>status | LED 2 (RR2)<br>Bluetooth activity | LED STATUS               | DIAGNOSTIC   |
|------------------------------------|-----------------------------------|--------------------------|--|
| • or •                             |                                   | RED or GREEN<br>flashing | LED flashes 1 or more times, either red or green, <b>when a steering wheel button is pressed</b> : normal operation. |
| •                                  |                                   | 1 RED flash              | Module has no firmware.<br>Flash module using Weblink Desktop and log in. Do <u>NOT</u> use DEMO MODE.               |
| •                                  |                                   | 2 RED flashes            | Problem detected. Consult troubleshooting table.   |
| •                                  |                                   | 1 GREEN flash            | After radio boots up : Normal operation.   |
|                                    | •                                 | 3 GREEN flashes          | Bluetooth is activated.<br>Turns off after one minute: Normal operation.   |
| •                                  | •                                 | OFF                      | Normal operation (inactive).   |

| VIDEO HELP   | Installation, product information, vehicle specific videos.                  |
|--------------|--|
| VERIFY FLASH | Last flash information, steering control configuration, vehicle information. |
| WEBLINK      | Software to program module.  |



### **TROUBLESHOOTING TABLE**

| PROBLEM   | SOLUTION  |
|---|---|
| Gauges do not work, radio shows OBD2 Error 1 or Error 2.                                      | Ensure OBDII connector is securely attached to the OBDII connector of the vehicle.<br>If you hardwired connections at the OBDII, check connections at the OBDII connector. Make sure the <b>RED/BROWN</b> wire is on <b>PIN 6</b> and the <b>YELLOW/BROWN</b> wire is connected to <b>PIN 14</b> of the OBDII connector. Do not use T-Taps. Soldering or military splicing methods are recommended.<br>If anything else is connected to the OBD2 or CAN wires of vehicle (programmer, throttle controller, insurance tracker, etc.) try unplugging it to see if gauges work. If gauges work without it installed, call tech support for options.<br>Reset the RR. |
| Backup camera is not displayed.   | If radio doesn't switch to camera input, ensure purple/white from the NI2<br>harness is connected ONLY to radio reverse input wire. Do not power a<br>camera off it.<br>If radio switches to blank image, verify yellow "BACK UP CAMERA" RCA is<br>connected to the correct input. Most radios have a yellow "R CAM" or "CAM"<br>input. Pioneer models may use a brown "BC IN" input.   |
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