

EUPHORIA™

EA1.600 | EA1.1200 | EA1.1800

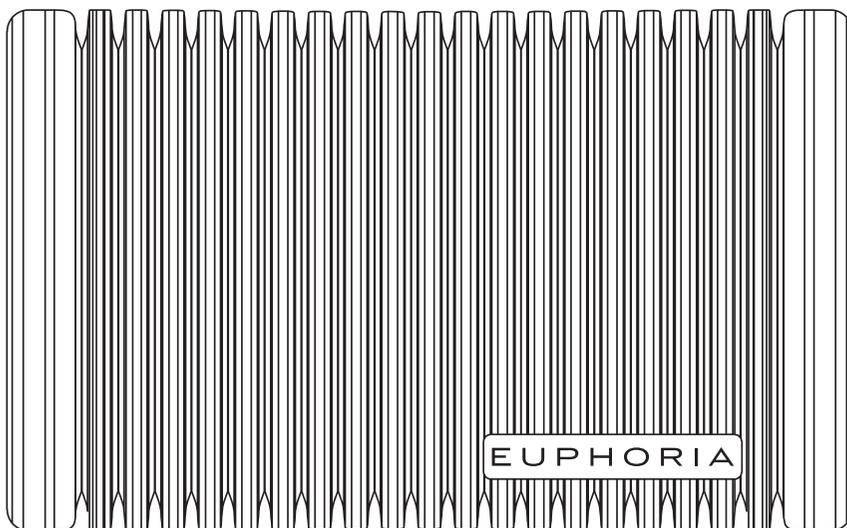
Full Range Class D Monoblock

EA4.300 | EA4.600 | EA4.900

4 Channel Full Range Class D Amplifier

EA8.600 | EA8.1200

8 Channel Full Range Class D Amplifier



USER MANUAL

Installation Instructions | Owner's Manual

1.1 AMPLIFIERS' SPECIFICATION

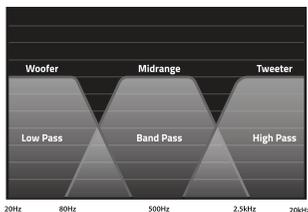
AMPLIFIERS: EA4.300, EA4.600, EA4.900

SPECIFICATIONS @14.4 volts - 1% THD	EA4.300	EA4.600	EA4.900
Rated Power:	4 x 65 Watts @ 4Ω	4 x 95 Watts @ 4Ω	4 x 165 Watts @ 4Ω
Rated Power:	4 x 100 Watts @ 2Ω	4 x 150 Watts @ 2Ω	4 x 250 Watts @ 2Ω
Rated Power:	2 x 150 Watts @ 4Ω (Bridged)	2 x 250 Watts @ 4Ω (Bridged)	2 x 350 Watts @ 4Ω (Bridged)
Working Voltage	9 - 16 Volts	9 - 16 Volts	9 - 16 Volts
Frequency Response:	20Hz - 20KHz	20Hz - 20KHz	20Hz - 20KHz
Signal to Noise Ratio:	<97dB	<97dB	<92dB
Damping Factor:	@ 100Hz - 4 volts/4Ω <66	@ 100Hz - 4 volts/4Ω <66	@ 100Hz - 4 volts/4Ω <66
Low Level Input:	400MV - 7V	400MV - 7V	450MV - 8V
Ch 1/2 High Pass Filter Variable:	50Hz - 5KHz	50Hz - 5KHz	50Hz - 5KHz
Ch 1/2 Low Pass Filter Variable:	50Hz - 5KHz	50Hz - 5KHz	50Hz - 5KHz
Ch 3/4 High Pass Filter Variable:	20Hz - 5KHz	20Hz - 5KHz	20Hz - 5KHz
Ch 3/4 Low Pass Filter Variable:	50Hz - 5KHz	50Hz - 5KHz	50Hz - 5KHz
Minimum Working Impedance:	2Ω Stereo	2Ω Stereo	2Ω Stereo

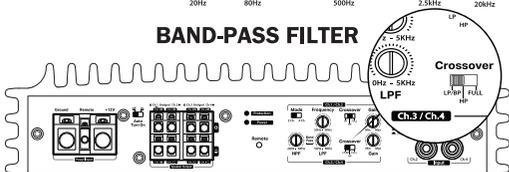
2.1 AMPLIFIER'S CONTROL & CONNECTION.

EA4.300
EA4.600
EA4.900

Selectable 12dB 3-Way Active Crossover

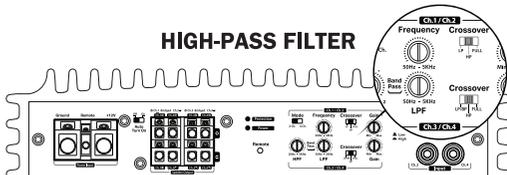


BAND-PASS FILTER



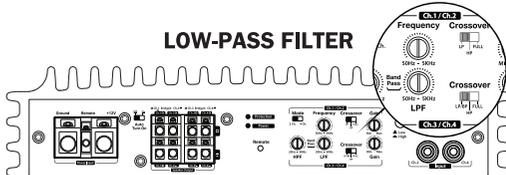
- Set LP/BP bandpass function on Ch.3-4

HIGH-PASS FILTER

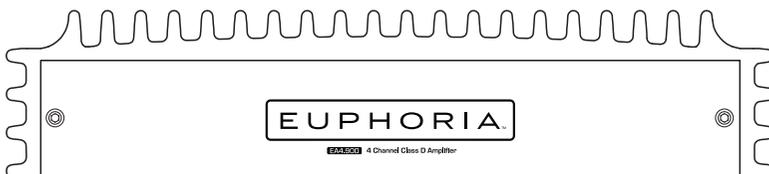


- Select only the HP crossover filter for High Pass functions

LOW-PASS FILTER



- Select LP crossover filter for Low Pass Functions



2.1 AMPLIFIERS' SPECIFICATION

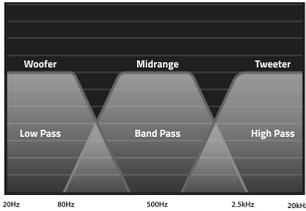
AMPLIFIERS: EA8.600, EA8.1200

SPECIFICATIONS @14.4 volts - 1% THD	EA8.600	EA8.1200
Rated Power:	8 x 65 Watts @ 4Ω	8 x 125 Watts @ 4Ω
Rated Power:	8 x 100 Watts @ 2Ω	8 x 200 Watts @ 2Ω
Rated Power:	4 x 150 Watts @ 4Ω (Bridged)	4 x 300 Watts @ 4Ω (Bridged)
Working Voltage	9 - 16 Volts	9 - 16 Volts
Frequency Response:	20Hz - 60KHz	20Hz - 50KHz
Signal to Noise Ratio:	<90dB	<92dB
Damping Factor:	@ 100Hz-4 volts/4Ω <100	@ 100Hz-4 volts/4Ω <100
Low Level Input:	400MV - 6.75V	400MV - 6.75V
Ch 1/2 High Pass Filter Variable:	50Hz - 5KHz	50Hz - 5KHz
Ch 3/4 High Pass Filter Variable:	20Hz - 5KHz	20Hz - 5KHz
Ch 3/4 Low Pass Filter Variable:	50Hz - 5KHz	50Hz - 5KHz
Ch 5/6 High Pass Filter Variable:	50Hz - 5KHz	50Hz - 5KHz
Ch 7/8 Low Pass Filter Variable:	50Hz - 5KHz	50Hz - 5KHz
Ch 7/8 High Pass Filter Variable:	20Hz - 5KHz	20Hz - 5KHz
Minimum Working Impedance:	2Ω Stereo	2Ω Stereo

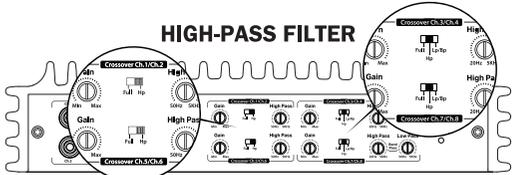
2.1 AMPLIFIER'S CONTROL & CONNECTION.

EA8.600
EA8.1200

Selectable 12dB 3-Way Active Crossover

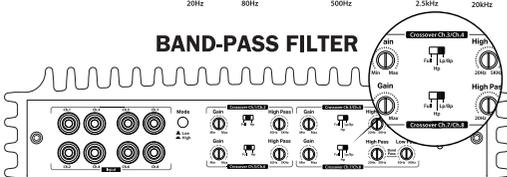


HIGH-PASS FILTER



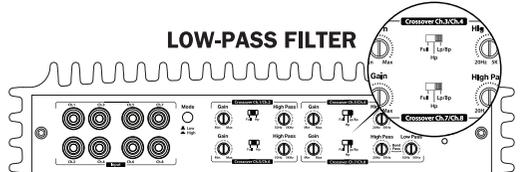
- Select only the HP crossover filter for High Pass functions

BAND-PASS FILTER

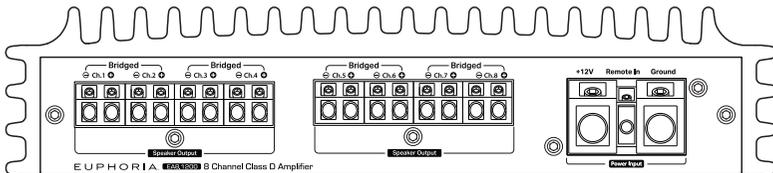


- Set Lp/Bp Band Pass function on Ch.3-4, Ch.7-8

LOW-PASS FILTER



- Select LP crossover filter on Ch.3-4, Ch.7-8



3.1 AMPLIFIERS' SPECIFICATION

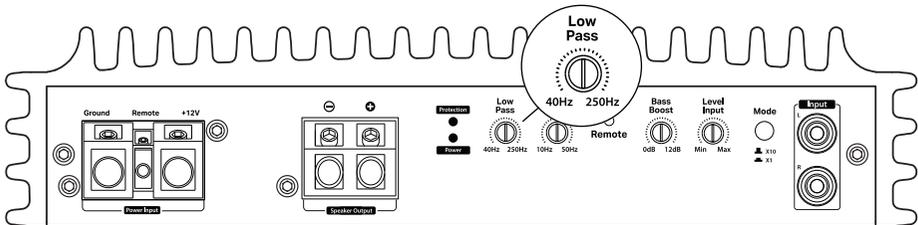
AMPLIFIERS: EA1.600, EA1.1200, EA1.1800

SPECIFICATIONS @14.4 volts - 1% THD	EA1.600	EA1.1200	EA1.1800
Rated Power:	1 x 600 Watts @ 1Ω	1 x 1200 Watts @ 1Ω	1 x 1800 Watts @ 1Ω
Rated Power:	1 x 300 Watts @ 2Ω	1 x 600 Watts @ 2Ω	1 x 900 Watts @ 2Ω
Rated Power:	1 x 150 Watts @ 4Ω	1 x 300 Watts @ 4Ω	1 x 450 Watts @ 4Ω
Working Voltage	9 - 16 Volts	9 - 16 Volts	9 - 16 Volts
Frequency Response:	20Hz - 250KHz	20Hz - 250KHz	20Hz - 250KHz
Signal to Noise Ratio:	<87dB	<85dB	<82dB
Damping Factor:	@ 100Hz -4 volts/4Ω <400	@ 100Hz -4 volts/4Ω <400	@ 100Hz -4 volts/4Ω <400
Low Level Input:	350MV - 7V	350MV - 6.75V	450MV - 6.5V
Low Pass Filter Range:	40Hz - 250Hz	40Hz - 250Hz	40Hz - 250Hz
Sub Sonic Filter Range:	10Hz - 50Hz	10Hz - 50Hz	10Hz - 50Hz
Minimum Working Impedance:	1Ω Stereo	1Ω Stereo	1Ω Stereo

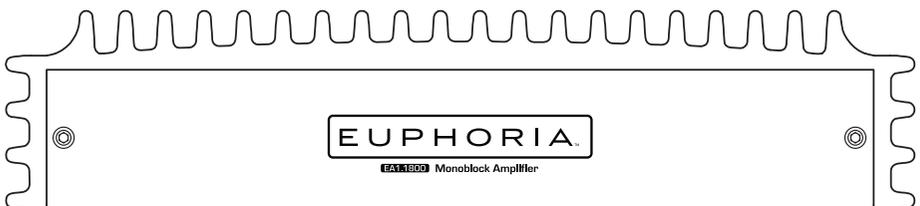
2.1 AMPLIFIER'S CONTROL & CONNECTION.

EA1.600
EA1.1200
EA1.1800

LOW-PASS FILTER



- Select LPcrossover filter for Low Pass Functions



INPUT

Connect RCA output cables from the head unit to EUPHORIA amplifiers' RCA Input

GAIN (6V ~ 0.2V)

Connect RCA output cables from the head unit to EUPHORIA amplifiers' RCA Input

ACT- Adaptive Crossover Technology

All models of EA amplifiers feature an active crossover system capable of adapting to any system configuration.

Select **HP** for smaller full range speakers or tweeters. This setting will filter out any unwanted lower frequencies according to the set frequency.

Select both **LP/BP** for bandpass for running midrange or midbass drivers. This setting will filter out both unwanted low or high frequencies according to the setting of each control.

Select **LP** for subwoofers drivers. This setting filters out any unwanted high frequencies a subwoofer can not produce.

+12V (POWER CONNECTION)

This must be connected to the fuse positive terminal (+12V) of the battery. Recommended wire is 4 gauge or thicker. Check the battery voltage.

GND (GROUND CONNECTION)

It is connected to the negative or ground cables of the vehicle. Recommended wire is 4 gauge or thicker.

REM (REMOTE)

It is connected to switched +12V with a trigger cable coming from the head unit.

APC-Audio Protection Circuit

The APC protects the amplifier against speaker shorting or malfunction. In the event that the APC is activated, resting the amplifier by removing a remote trigger input will allow the amplifier to restart as long as the fault has been removed.

SESI - Signal Evaluation Status Indicator

Power LED-lit shows normal operation.
Protect LED-RED-lit shows general malfunction, faulty connection or thermal protection.

3. INSTALLATION

In case you install the amplifier by yourself, please read the owner's manual very carefully before your installation. Please take all steps into consideration or, you can have a Euphoria authorized dealer check the installation and set your car audio systems.

3-1. MOUNTING PREPARATION

Disconnect the negative (-) battery cable before mounting your amplifier or making any connections. Check the battery and alternator ground (-) connections. Make sure they are properly connected and free of corrosion before selecting a mounting location. Please take some concerns into consideration with cooling efficiency and safety.

3-2. MOUNTING PREPARATION

The EA amplifiers use a specially designed heat radiation heat sink to avoid excessive heat from circuitry. But for better heat dissipation, it is good to find the mounting location where you can install horizontally with the heat sink fins and better air flow around heat sink. For safety reasons you must find a dry and well ventilated location and make sure any cables and drilling car equipment do not interfere with the mounting location. Be sure the mounting location and drilling of pilot cables will not present a hazard to any cables, control cables, fuel lines, fuel tanks, hydraulic lines or other vehicle systems or components.

NOTE: Special care must be taken when mounting amplifier, leave 1/4" of space from the ground.

3-3. +12V, GND, REM CONNECTION

12V (POWER CONNECTION)

Before mounting the amplifier, disconnect the negative (-) wire from the battery to protect any accidental damage to amplifier and audio system. EA amplifiers requires at least the use of 4 gauge wiring for all power connections. Connect the power cables to the power terminal labeled as +12V. EA Amplifiers are not internally fused and require external fusing. In order to install external fuses, connect one end of the fuse holder to the power cable and the other end of the fuse holder to the positive battery within 18 in of the same cable gauge. This fuse location will protect the system and the vehicle against the possibility of a short circuit in the power cable. Be sure to use fuses and fuse holders adequate for the current draw application.

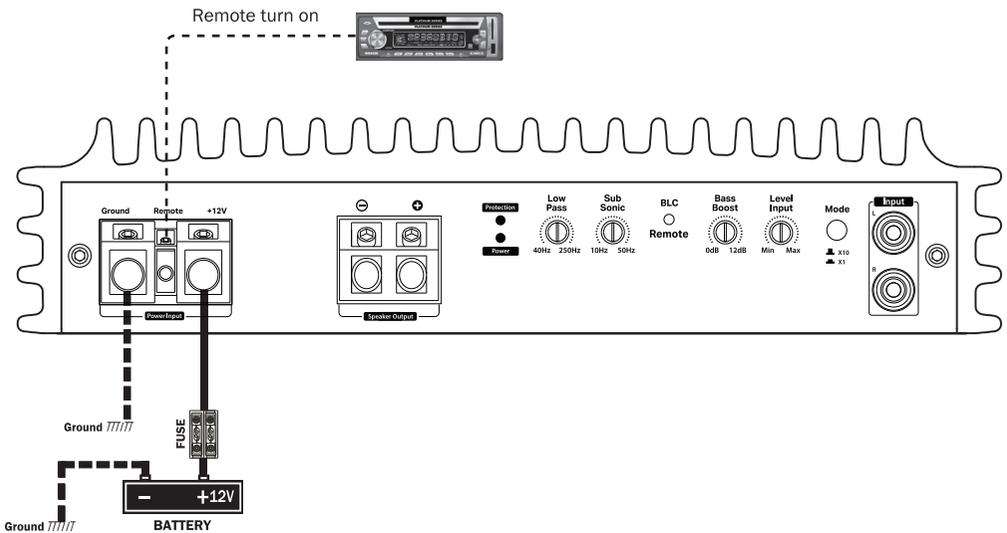
GND (GROUND CONNECTION)

Locate a secure grounding connection as close as possible. Make sure the location is clean and provides a direct electrical connection to the frame of the vehicle. Connect one end of a short piece of the same gauge cable as the power cable to the grounding point. Run the one end of the cable to the grounding point. Run the other end of the cable to the mounting location. Connect the ground cable to the screw terminal labeled as GND.

REM (REMOTE CONNECTION)

Run a remote turn on cable from the head unit's remote switched +12V output.

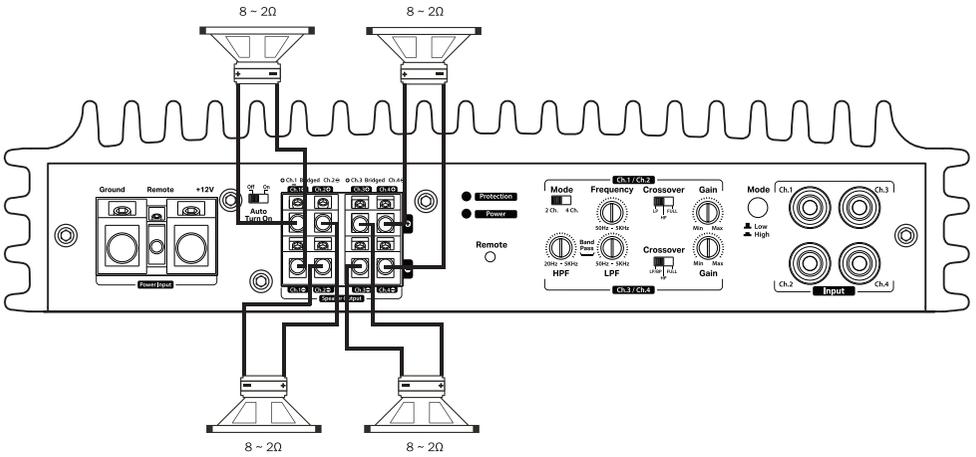
AMPLIFIER +12V, GROUND, REMOTE CONNECTION DIAGRAM



3-4. SPEAKER CONNECTION

Euphoria™ recommends to use a minimum 12 gauge speaker connecting cables. Run 12 gauge speaker connecting cables from your speakers to the amplifier's mounting location. Keep speaker cables away from the power cables and amplifier's input cables. Use grommets anywhere the cables have to pass through the holes in the metal frame or sheet metal. Connect to the speakers according to the type of terminals on each speaker. Strip 3/8" of insulation from the end of each cable and twist the cables strands together tightly. Make sure there are no stray strands that might touch other cables or terminals and cause a short circuit.

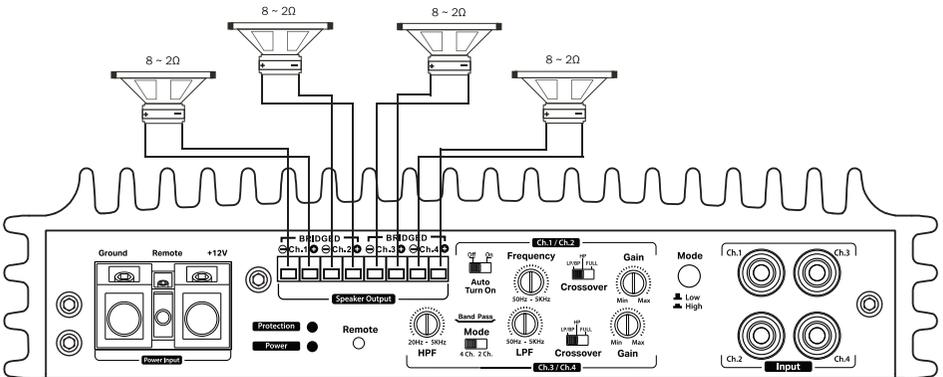
EA4.600/EA4.900 AMPLIFIER SPEAKER CONNECTION DIAGRAM 1



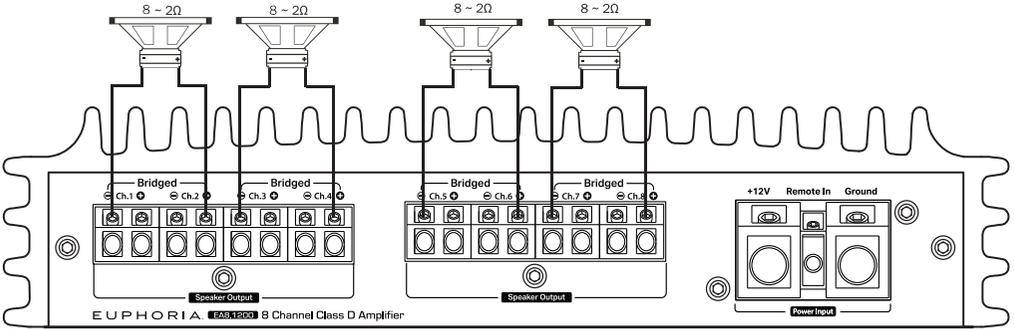
⚠ CAUTION!!

EA4.300/EA4.600/EA4.900 working voltage is 9-16 Volts
 EA4.300/EA4.600/EA4.900 minimum working impedance is 2Ω in stereo.
 EA4.300/EA4.600/EA4.900 working impedance is 4Ω bridged.

EA4.300 AMPLIFIER SPEAKER CONNECTION DIAGRAM 2



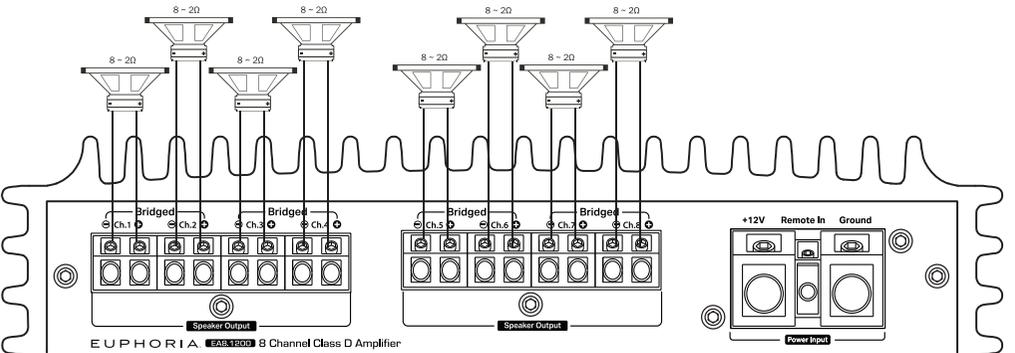
EA8.600/EA8.1200 AMPLIFIER SPEAKER CONNECTION DIAGRAM 1



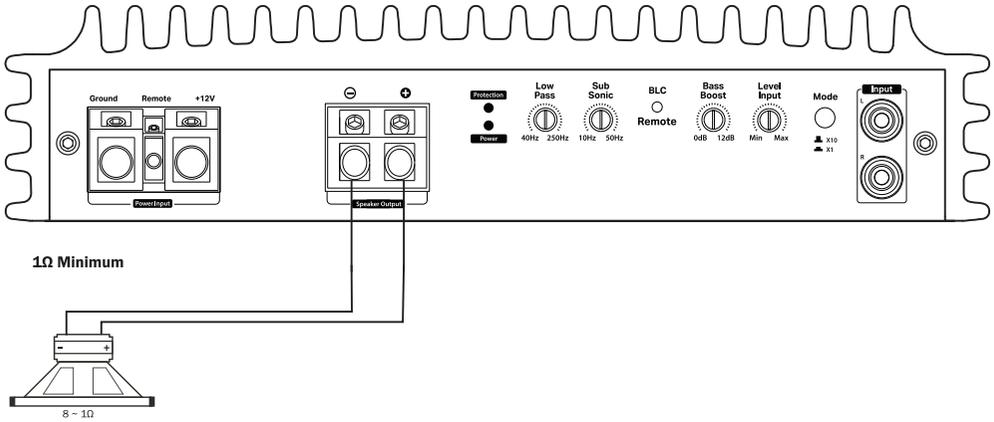
⚠ CAUTION!!

EA8.600/EA8.1200 working voltage is 9-16 Volts
EA8.600/EA8.1200 minimum working impedance is 2Ω in stereo.
EA8.600/EA8.1200 working impedance is 4Ω bridged.

EA8.600/EA8.1200 AMPLIFIER SPEAKER CONNECTION DIAGRAM 2



EA1.1200/EA1.1600/EA1.1800 AMPLIFIER SPEAKER CONNECTION DIAGRAM 1



⚠ CAUTION !!

EA1.1200/EA1.1600/EA1.1800 working voltage is 9-16 Volts
EA1.1200/EA1.1600/EA1.1800 minimum impedance is 1Ω.
EA1.1200/EA1.1600/EA1.1800 working impedance is 1Ω .

4. TROUBLESHOOTING

NO SOUND (NO OUTPUT)

- 1) Please check all connections, cables, routing, short and voltage at amplifier and head unit.
- 2) Please check built-in or external fuses, if it is blown, please replace with new one.
- 3) Please check whether speakers work well, you can test speakers by connecting to other amplifiers.

PROTECTION

- 1) Please check overload, overheat (thermal), short, voltage and DC offset.
- 2) Minimum working impedance for EA1.1200, EA1.1600 & EA1.1800 is 1Ω. Minimum working impedance for EA4.300, EA4.600 & EA4.900 is 2Ω stereo. Minimum working impedance for EA8.600 & EA8.1200 IS 2Ω stereo. Working voltage is 9-16 Volts.
- 3) If the amplifier shuts down due to overheat , Reset by turning off the remote input and allowing time to cool down. Please make sure there are no airflow obstructions around the amplifier to prevent thermal protection.

WHINING NOISE

- 1) Engine noise is caused by poor grounding of amplifier, head unit, other components, battery or alternator, so please check all grounding connections.

EUPHORIA™

LIMITED WARRANTY

Euphoria™ warrants any products purchased in the U.S.A. from an authorized Euphoria™ dealer. All products are warranted to be free from defects in material and workmanship under normal use and service for a period of two (2) years when the unit is installed by an authorized Euphoria dealer. Non-authorized dealer installed products carry a one (1) year parts and labor limited warranty. This warranty applies to the original purchase only.

Euphoria™ will either repair or replace (as its option) any unit that had been found to be defective and under warranty provided the defect occurs within: the (2) years warranty period.

This limited warranty periods do not extend to units having been subjected to misuse, abuse, neglect, or accident. Products that in Euphoria™'s judgment shows evidence of having been altered, modified, or serviced without Euphoria™'s authorization, will be ineligible under this warranty.

To obtain warranty services please contact your retailer or visit our website at www.euphoriacaraudio.com for more details.



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