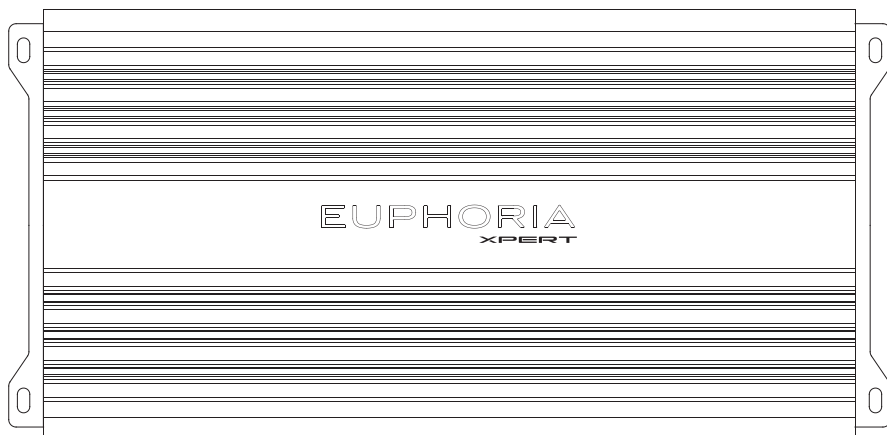




# EUPHORIA XPERT

**EX4.5**

5 CHANNEL FULL RANGE CLASS D AMPLIFIER



## **USER MANUAL**

Installation Instructions | Owner's Manual

# 1. AMPLIFIERS' SPECIFICATION

## 1-1. AMPLIFIER

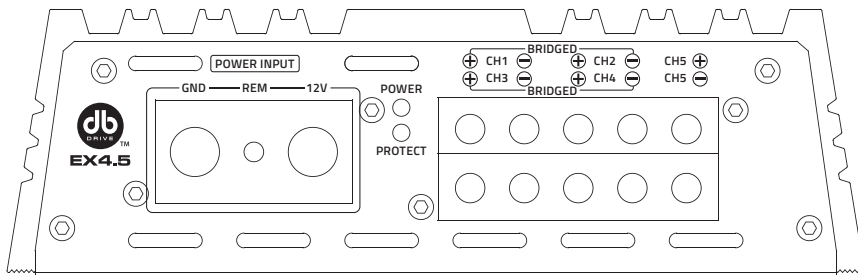
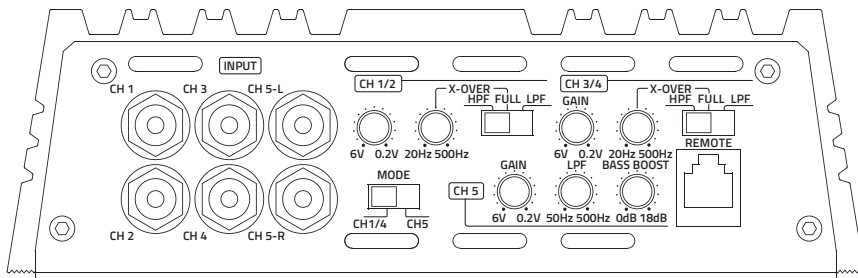
Load	Voltage & THD	EX4.5
4ohm	14.4 volts & 1%	4 x 200 Watts + 1x725 Watts @4ohm
2ohm	14.4 volts & 1%	4 x 400 Watts + 1x1000 Watts @2ohm

Working Voltage 10 ~ 16Volts

	EX4.5
Frequency Response	20Hz ~ 30KHz ( CH1-CH4 ) / 10Hz - 500Hz ( CH5 )
Signal to Noise Ratio	< 62dB
Damping Factor	100 dB<
Low Level Input	6V ~ 0.2V
High Pass Filter Variable	20Hz ~ 500Hz ( CH1-CH4 )
Low Pass Filter Variable	20Hz ~ 500Hz ( CH1-CH4 ), 50Hz ~ 500Hz ( CH5 )
Minimum working impedance	2 ohm in Stereo

# 2. AMPLIFIER'S CONTROL & CONNECTION.

## EX4.5



### **INPUT**

Connect RCA output cables from the headunit to EUPHORIA XPERT amplifiers' RCA Input

### **GAIN (6V ~ 0.2V)**

Matching the output voltage of the headunit's RCA line-outs to EUPHORIA XPERT amplifiers' input section.

### **HIGH PASS FILTER**

Controls the High Pass Crossover point for the speaker outputs.

### **LOW PASS FILTER**

Controls the Low Pass Crossover point for the speaker outputs.

### **+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.

### **SPEAKER OUTPUTS**

It connects amplifier's terminal to subwoofer speakers or full range speakers.

Minimum speaker wire is 12 gauge

### **POWER & PROTECTION INDICATOR**

Power LED - Green-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 owner's manual very carefully before your installation. Please take all steps into consideration or, you can have DB Drive or DB Research's authorized dealer to check 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 EX4.5 amplifier uses a specially designed heat radiation heatsink to avoid excessive heat from circuitry. But for better heat dissipation, it is good to find the mounting location where you can install vertically with the heatsink fins and better air flow around heatsink.

For the safety, You have to find a dry and well ventilated location and make sure any cables and drilling car equipment are not interfere with 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.

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

#### **12V ( POWER CONNECTION )**

Before mounting amplifier, disconnect the negative ( - ) wire from battery to protect any accidental damage to amplifier and audio system. EK4 amplifier requires at least the use of 4 gauge wiring for all power connections. Connect the power cables to power terminal labeled as +12V. EX4.5 Amplifier is not internally fused and require external fusing.

In order to install external fuses, connect one end of fuse holder to the power cable and the other end of fuse holder to positive battery within 18in 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.

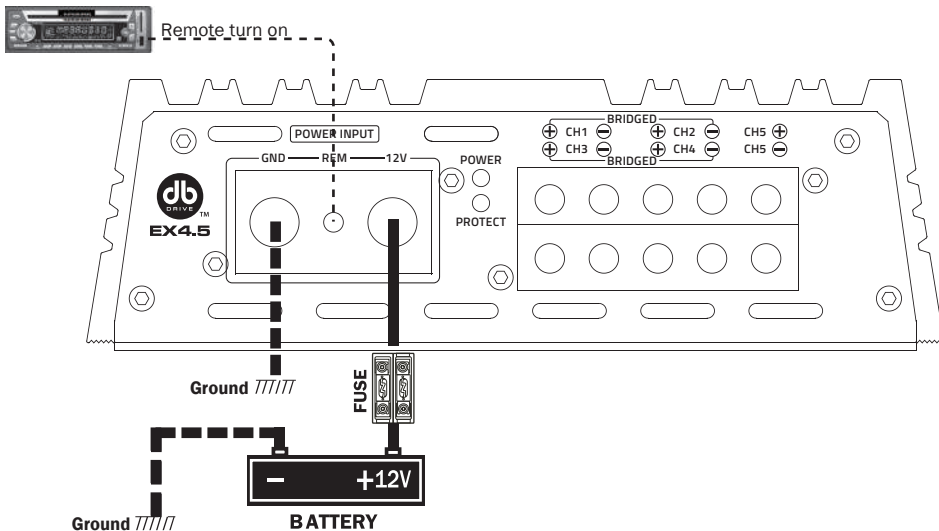
Run the one end of the cable to the grounding point. Run the other end of the cable to the mounting location.

Connect the ground cable to the screw terminal labeled as GND.

### REM ( REMOTE CONNECTION )

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

### AMPLIFIER +12V, GROUND, REMOTE CONNECTION DIAGRAM



### 3-4. SPEAKER CONNECTION

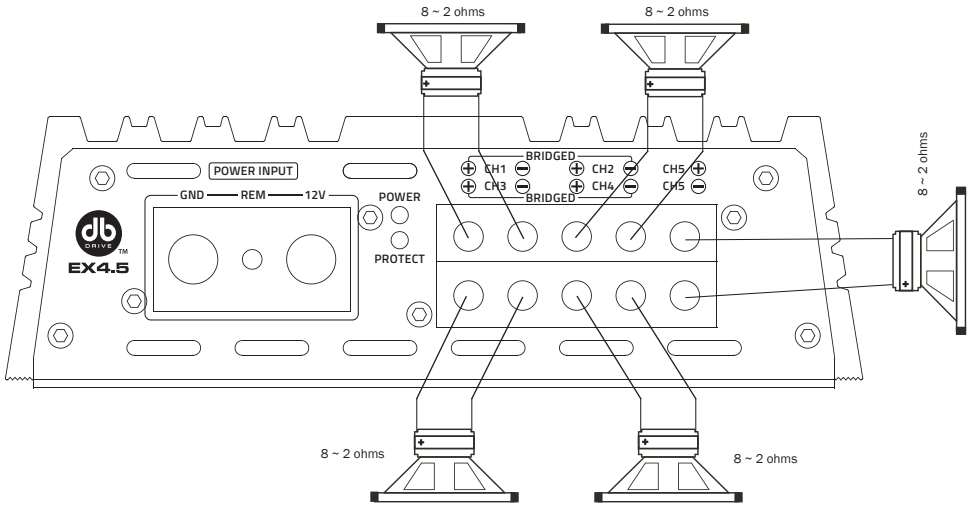
DB Drive recommends to use minimum 12 gauge speaker connecting cables. Run 12 gauge speaker connecting cables from your speakers to amplifier's mounting location.

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.

Crimp spade lugs over the cable ends or tin the ends with solder to provide a secure termination.

Connect the cable ends to amplifier as speaker system diagram.

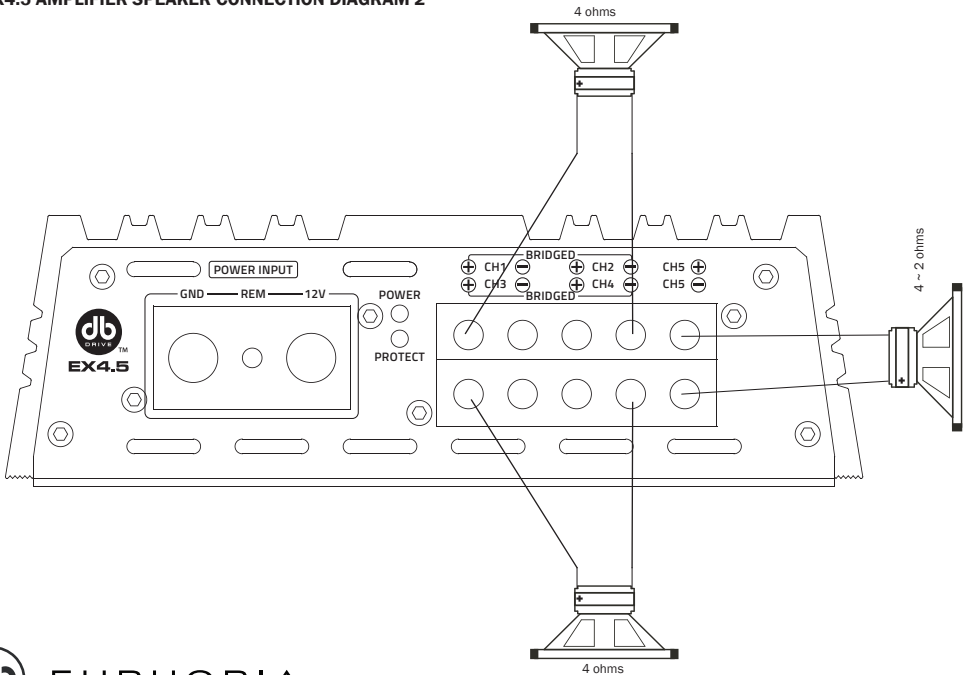
**EX4.5 AMPLIFIER SPEAKER CONNECTION DIAGRAM 1**



**⚠ CAUTION !!**

**EX4.5 working voltage is 10 ~ 16volts**  
**EX4.5 minimum working impedance is 2ohm in stereo or 4ohm bridged.**

**EX4.5 AMPLIFIER SPEAKER CONNECTION DIAGRAM 2**



## 4. TROUBLE SHOOTING

### NO SOUND ( NO OUTPUT )

- 1) Please check all connections, cables' routing, short and voltage at amplifier and headunit.
- 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 another amplifiers.

### PROTECTION

- 1) Please check overload, overheat ( thermal ) , short, voltage and DC offset.
- 2) Minimum working impedance for is 2ohm stereo or 4ohm bridged.  
EX4.5 working voltage is 10 ~ 16 volts.
- 3) If the amplifier is shut 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 amplifier to prevent thermal protection.

### WHINING NOISE

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

## 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:

Two (2) years, if purchased through an authorized Euphoria dealer with original proof of purchase.

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](http://www.euphoriacaraudio.com) for more details.



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