

# OWNER'S MANUAL



**XCA3K**

**XCA6K**

**XCA9K**

**XCA2004**

## Before You begin installation

NVX amplifiers are one of the most rugged, reliable, powerful and best performing goods in the world and exemplifies our commitment to excellence in car audio musical reproduction.

Before you begin , you will need tools, supplies and adapters. It is best to make sure you have everything you need before you start.

## Amplifier Location

Allow air circulation around the amplifiers and never install amplifiers in the engine compartment or on the firewall.

When selecting a location, remember that amplifiers generate heat. Select a location where air can circulate around the amplifiers.

Do not cover the amplifiers with carpets or enclose them behind interior trim panels.

Every installation will be a bit different based upon vehicle design, check all locations and placements carefully before making any cuts or connections.

## Disconnect Battery

Before you begin, always disconnect the battery negative terminal.

## Important notes :

If wiring connections are made incorrectly the unit will not operate properly and could be damaged. Follow the installation instructions carefully or have the amplifiers installed by an authorized dealer.

## Things to remember when installing NVX amplifiers.

The design philosophy of NVX amplifiers and mode of regulation requires that proper installation and load impedance instructions be adhered to at all times.

Link & Single connection mode's minimum impedance for XCA3K, XCA6K & XCA9K is 1ohm.

Strap mode's minimum impedance for XCA3K, XCA6K & XCA9K is 2ohm.

Minimum impedance for XCA2004 is 2ohm stereo or 4ohm bridged.

XCA models are not equipped with fuses. Please use external fuses.

These fuse ratings should be sufficient under normal working conditions. However, if the amplifiers are overloaded ( see minimum impedance above ) fuses may blow.

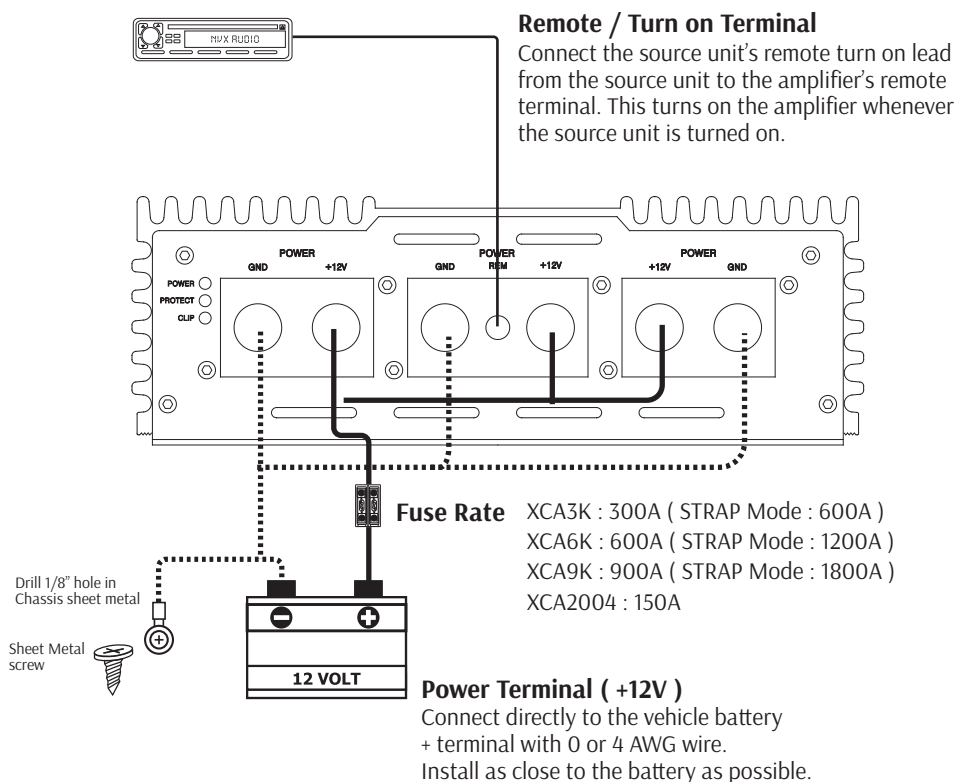
Fuse ratings are XCA3K ( 300A ), XCA6K ( 600A ), XCA9K ( 900A ) & XCA2004 ( 150A )

Therefore, please try to avoid operating the amplifiers under these conditions.

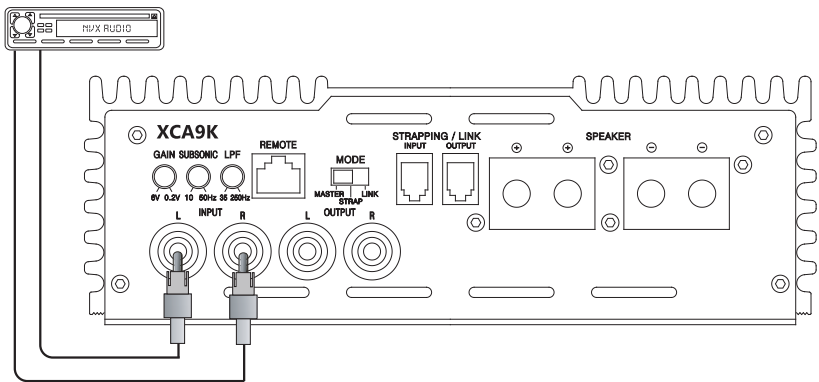
1. Mount the amplifiers where air flow is the best.
2. Mount the amplifiers to a solid surface away from vibration, as these amplifiers are heavy and the vibration can damage the amplifiers.
3. Take extreme caution when mounting the amplifiers, so as not to damage the chassis with a drill or screwdriver.
4. Run 0AWG or 4AWG wire from the battery, using fuses with 12" of the positive battery terminal. The fuses are to protect the car and your car audio system from the fire that could be caused by a short circuit.

5. Run 0AWG or 4AWG ground wire as short as possible, to the closest chassis ground point. Be sure to remove the paint around the chassis ground point to provide a more solid electrical connection.
6. Run a 16 AWG ( or larger ) wire to the remote turn-on lead of the headunit.
7. Connect the speakers as per wiring diagrams in the manual. 12AWG or larger speaker wire is recommended.
8. Mount remote level control in the car where it can be easily reached from the driver's seat, if desired.
9. Using RCA interconnect cables, connect all line inputs per the wiring diagrams which follow. If possible, keep rca cables away from the 12V power and ground wire.
10. Set the controls as described on following pages.

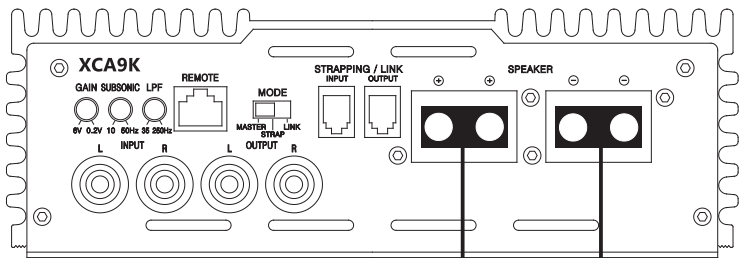
## Power, Remote, Ground Connection.



# MONOBLOCK RCA INPUT CONNECTION

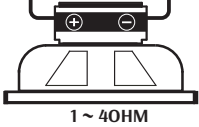


# MONOBLOCK SPEAKER CONNECTION

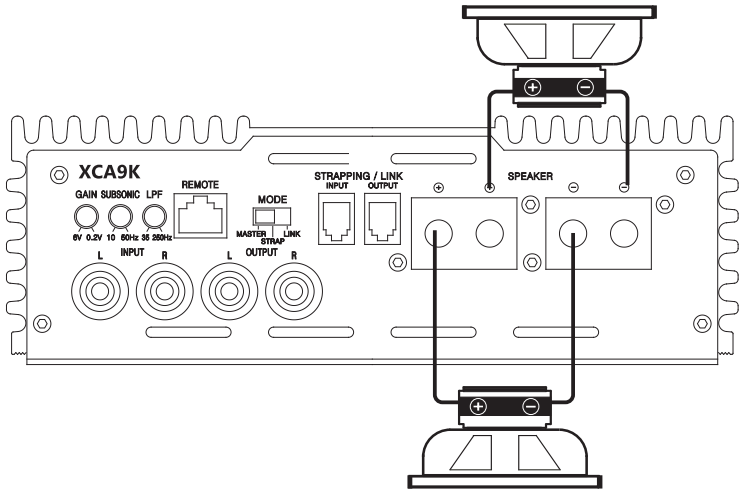


## Caution !!

XCA3K, 6K & 9K Minium working impedance  
Single use is 1ohm  
Strap mode impedance is 2ohm.  
Link mode impedance is 1ohm.  
Impedance lower than 1ohm or 2ohm strap mode can damage the amplifiers.



2 ~ 40HM



## MONOBLOCK STRAP CONNECTION

Strap connection makes two of same amplifiers to 2ohm.

Strap connection makes the power double than their each 1ohm power.

Please read the following connection and diagram carefully to make correct connection.

### INPUT CONNECTION ;

Step 1. Connect the Master amplifier to the head-unit and set its mode switch to **MASTER**

Step 2. Set Strap amplifier Its mode switch to **STRAP**

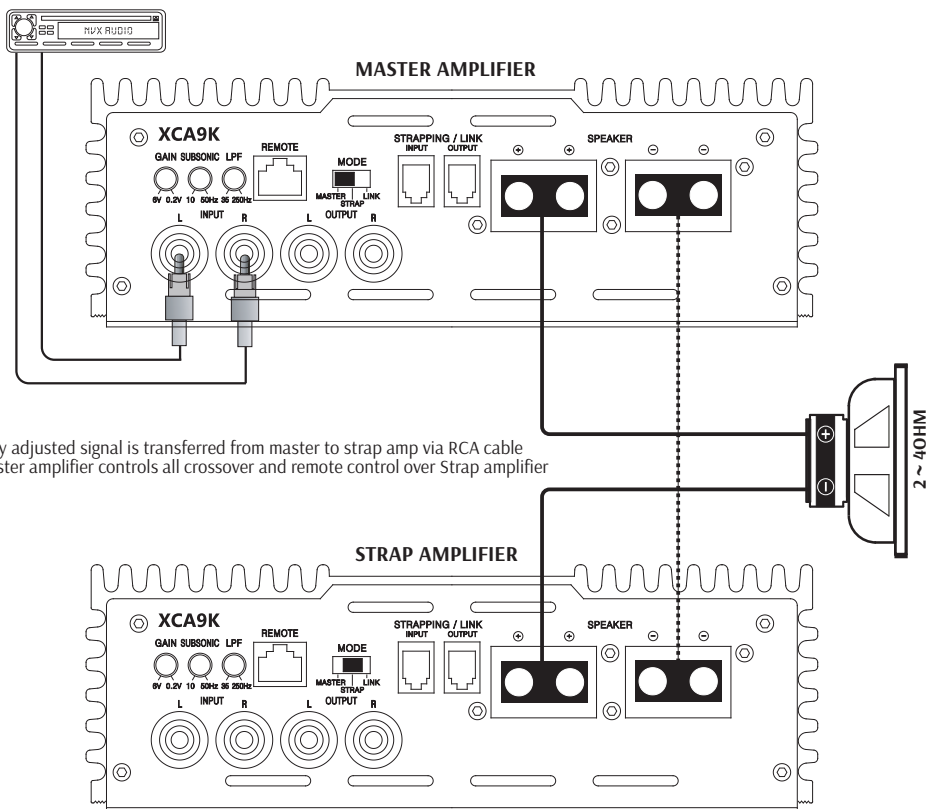
Step 3. Connect RCA cable from “**OUTPUT**” the master to “**INPUT**” the Strap amplifier as shown in the diagram.

### POWER & SPEAKER CONNECTION ;

Step 1. Connect speaker cable (+) on master amplifier to subwoofer (+)

Step 2. Connect speaker cable (+) on Strap amplifier to subwoofer (-)

Step 3. Connect speaker cable (-) on master amplifier to speaker cable (-) on Strap amplifier



Fully adjusted signal is transferred from master to strap amp via RCA cable  
Master amplifier controls all crossover and remote control over Strap amplifier

### Caution !!

*In Strap connection,  
Minimum working impedance is 2ohm.*

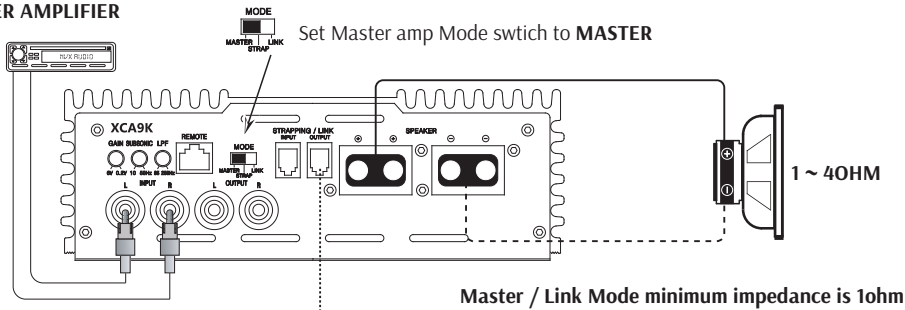
*Impedance lower than 2ohm can damage the amplifiers*

# MONOBLOCK LINK CONNECTION

## IN MASTER / LINK CONNECTION MODE

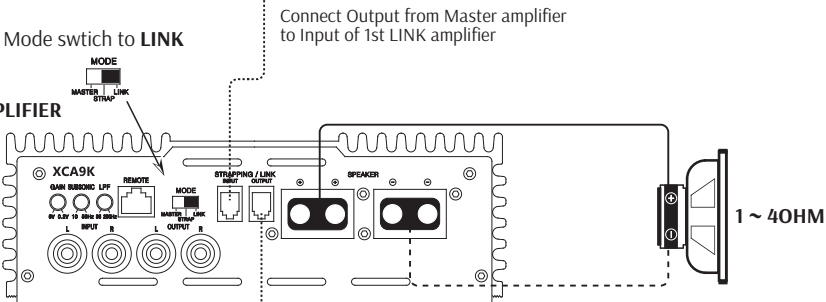
The Entire crossover section of LINK amplifiers is bypassed and feed directly from the MASTER amplifier's crossover with Master / LINK cable - which in term gives you exact and perfect gain and crossover matching across all amplifiers. The phase of all the LINK amplifiers is not reversed, so all subwoofers will be in phase and each amplifier will be independent in function other than signal. Set the MASTER / LINK switch on each amplifier as shown on the diagram below, you will have one MASTER and unlimited LINK amplifiers in this configuration.

### MASTER AMPLIFIER



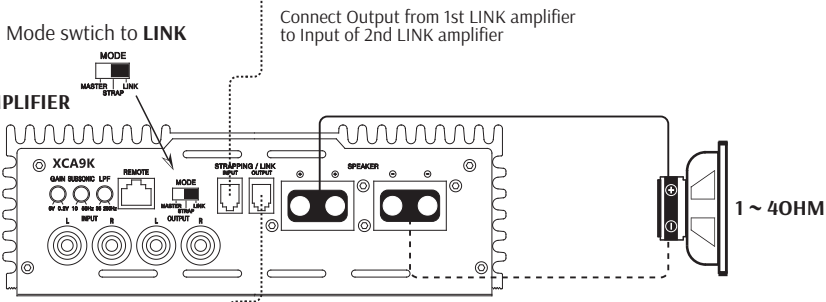
Set LINK amp Mode switch to **LINK**

### 1st LINK AMPLIFIER



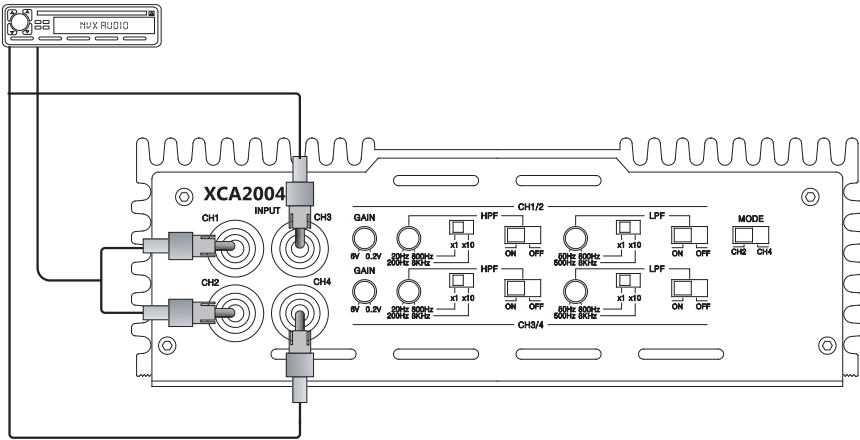
Set LINK amp Mode switch to **LINK**

### 2nd LINK AMPLIFIER

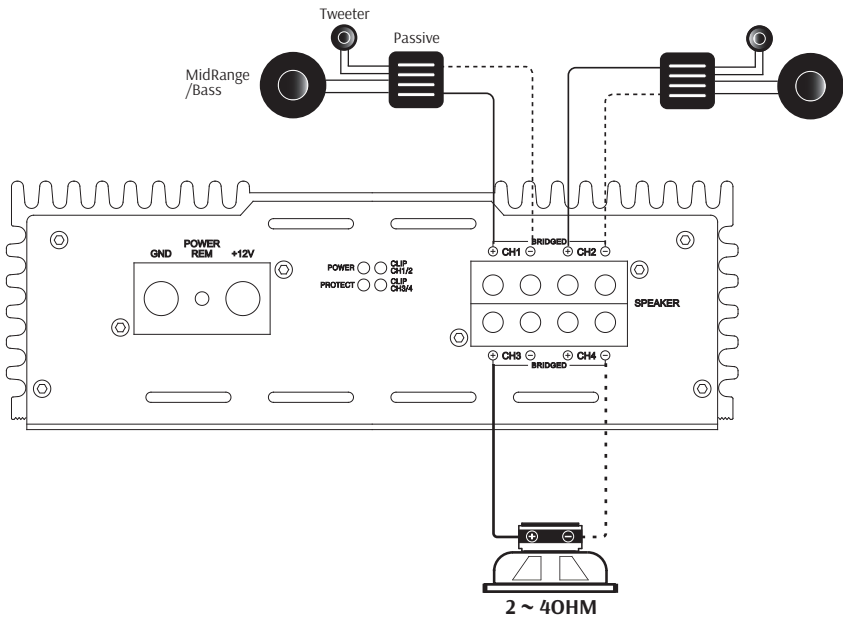


Connect Output from previous LINK amplifier to Input of next LINK amplifier, repeatedly as many as needed

XCA2004 RCA INPUT CONNECTION



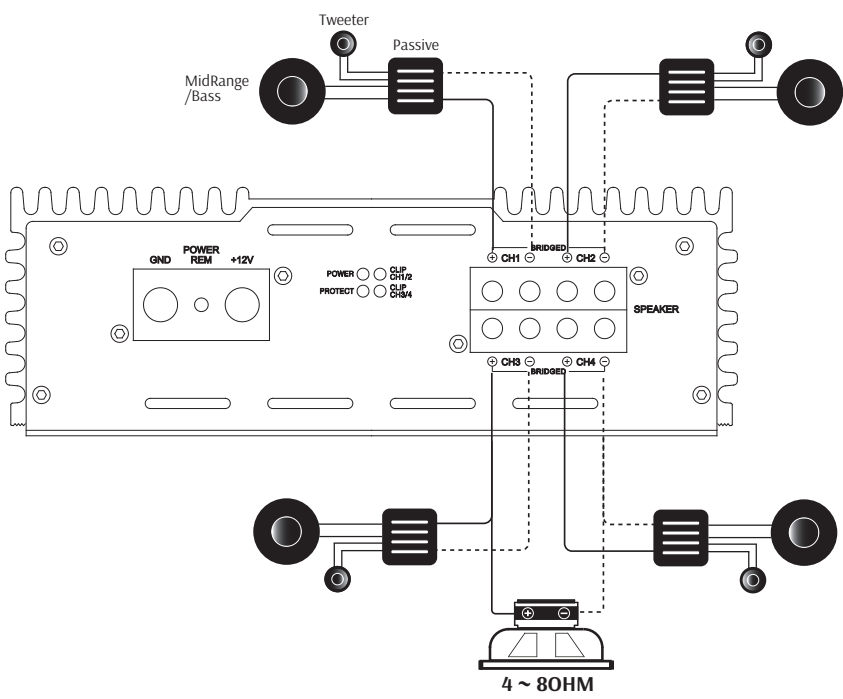
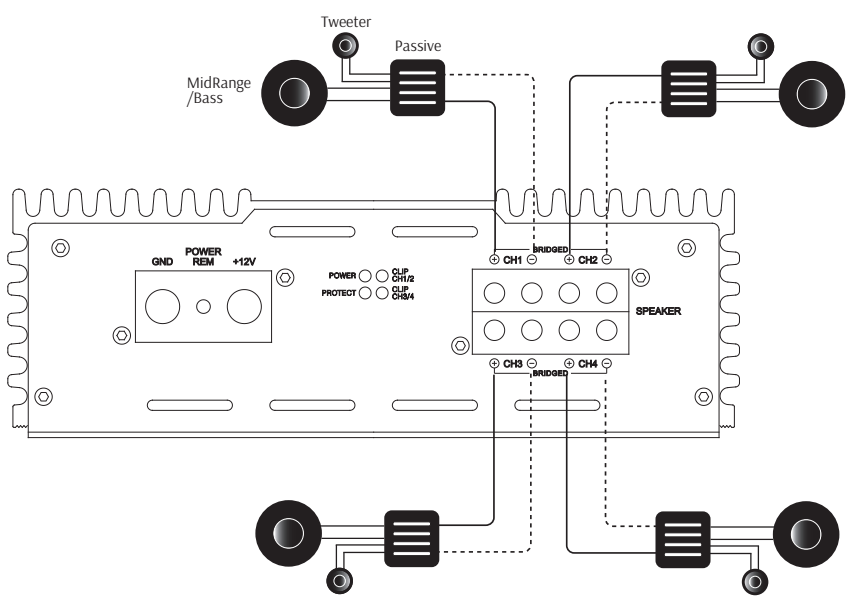
XCA2004 SPEAKER CONNECTION



Caution !!

XCA2004 Minium working impedance is 2ohm stereo or 4ohm bridged.  
Impedance lower than 2ohm stereo or 4ohm bridged can damage the amplifier

XCA2004 SPEAKER CONNECTION





## **TROUBLESHOOTING**

### **NO POWER LED ON, NO OUTPUT**

Check +12V and GND connection.  
Check remote signal +12V.  
Check the external fuses or built-in.

### **POWER LED ON, NO OUTPUT**

Check source unit for output.  
Check input gain control.  
Check RCA cable.  
Check speaker and wiring for shorts.  
Check for damaged speakers.

### **NO SOUND ON ONE CHANNEL**

Swap left/right input to check source  
... If sound swaps too, source or signal cable is bad.  
Swap left/right speaker to check speakers  
... If sound does not swap, speaker or speaker wiring is bad.  
... In any case, consult authorized dealer.

### **AMPLIFIER GOES IN PROTECTION MODE AT HIGHER GAIN**

Check speaker impedance.  
XCA3K, XCA6K & XCA9K are 1ohm for single connection and LINK mode connection.  
STRAP mode is 2ohm .  
XCA2004 is 2ohm stereo or 4ohm bridged.  
Check working voltages ( 9.5V - 16Volts ).  
Check speaker wiring for short circuit.

### **ENGINE OR ALTERNATOR WHINE NOISE**

Check wiring. make sure RCA cables are not run parallel on same side of vehicle as power cable.  
Check any preamps or black boxes in the signal path between source unit and amplifier.  
Make sure ground pin ( shield or outer barrel of RCA cables ) have not lost connection and that source unit has good reference ground.

# SPECIFICATIONS

Features	XCA3K	XCA6K	XCA9K	XCA2004
4ohm RMS power	1000W x 1	2000W x 1	3000W x 1	200W x 4
2ohm RMS power	2000W x 1	4000W x 1	6000W x 1	350W x 4
1ohm RMS power	3000W x 1	6000W x 1	9000W x 1	-
1ohm LINK power	3000W x 1	6000W x 1	9000W x 1	-
2ohm RMS STRAP power	6000W x 1	12000W x 1	18000W x 1	-
4ohm RMS bridged power	-	-	-	700W x 2
Frequency Response	10Hz - 250Hz	10Hz - 250Hz	10Hz - 250Hz	10Hz - 25000Hz
Signal to Noise Ratio	91dB <	91dB <	91dB <	95dB <
Damping Factor	400dB <	400dB <	400dB <	200dB <
Input Sensitivity	6V - 0.2V	6V - 0.2V	6V - 0.2V	6V - 0.2V
Subsonic Filter	10Hz - 50Hz	10Hz - 50Hz	10Hz - 50Hz	-
Low Pass Filter	35Hz - 250Hz	35Hz - 250Hz	35Hz - 250Hz	50Hz - 800Hz
x10 LPF multiply	-	-	-	x10 (500Hz - 8KHz )
High Pass Filter	-	-	-	20Hz - 800Hz
x10 HPF multiply	-	-	-	x10 (200Hz - 8KHz )
LINK / STRAP connection	yes	yes	yes	-
0 Gauge Power & Ground Input	0 gauge	0 gauge	0 gauge	4 gauge
Fuse Rate	300A	600A	900A	150A
Working Voltage	9.5V- 16V	9.5V- 16V	9.5V- 16V	9.5V- 16V
Remote Gain Control	Included	Included	Included	Na
Dimensions ( 8-3/8 x 2-3/4 inch WxH )	15-7/8.	21-3/4.	27-11/16.	11-11/16.

All features are subject to change in the continuing effort to improve the products without notice.