

IA SERIES

HIGH PERFORMANCE
CAR AMPLIFIER



IA3.4

75X4

IA6.4

135X4

IA10.1

1200X1

IA20.1

2400X1

OWNER'S MANUAL



**INCRIMINATOR
AUDIO**



OVERVIEW / CONTACT

Congratulations and thank you for purchasing an Incriminator Audio amplifier for your new automotive sound system. Like all of Incriminator Audio products, the IA Series amplifiers are designed with only one thing in mind.....Performance! The new 2013 models have been completely redesigned, and come with many performance upgrades from the previous models, such as remotes with clipping indicators, metal potentiometer, improved power output, high voltage input, and our new mirror technology for the mono block models.

For maximum performance, we highly recommend that you have your new IA Series amplifier installed by an authorized Incriminator Audio dealer. Your authorized dealer has the training, expertise and installation equipment to ensure utmost performance from this product. Should you decide to install the amplifier yourself, please take the time to read this manual thoroughly so as to familiarize yourself with its installation requirements and setup procedures.

If you have any questions regarding the instructions in this manual or any aspect of your amplifier's operation, please contact your authorized Incriminator Audio dealer for assistance. If you need further assistance, please contact us below.

Once again congratulations, and THANK YOU for being a valued Incriminator Audio customer!

Contact us:

Incriminator Audio, LLC
7751 Hwy. 72
Killen, AL 35645
(256) 417-6658
info@incriminatoraudio.com
<http://www.incriminatoraudio.com>



DIGITAL MONOBLOCK FEATURES

- Digital Class-D Linkable Mono Block Amplifier
- Dual MOS-FET Pulse Width Modulation Power Supply
- 1 Ohm Stable Topology
- 24 dB/octave - Variable State Subsonic Filter
- 24 dB/octave - Variable State Low Pass Filter
- 9 dB/octave - Variable State Bass Boost
- Heavy Duty Copper Layer Double Sided Epoxy PCB
- Advanced Strapping with Mirror Technology
- Multi-Layer Protection Circuit
 - (Thermal, Voltage, Speaker Short, DC)
- Wired Remote Control with Clipping Indicator

DIGITAL MONOBLOCK specifications

Rated Power (14.4V at 1% THD)	IA10.1	IA20.1
RMS Power - 2 Ohm Linked :	2400W	4800W
RMS Power - 1 Ohm Mono :	1200W	2400W
RMS Power - 2 Ohm Mono :	800W	1200W
RMS Power - 4 Ohm Mono :	400W	600W
Low Pass Filter (24dB/Oct.) :	35Hz - 250Hz	35Hz - 250Hz
Subsonic Filter (24dB/Oct.) :	10Hz - 50Hz	10Hz - 50Hz
Frequency Response (+/- 1dB) :	15Hz - 270Hz	15Hz - 270Hz
Bass Boost (45Hz) :	0 - 9dB	0 - 9dB
Input Sensitivity (Volt +/- 5%) :	6.0V - 0.2V	6.0V - 0.2V
Signal / Noise Ratio :	95dB	95dB
Dampening Factor (1 Ohm) :	350 +	350 +
Operation Mode :	Master/Slave/Mirror	Master/Slave/Mirror
Power Efficiency (4 Ohm) :	85%	85%
Fuse Rating (14.4V) :	125A	250A
Fuse Rating (14.4V Linked) :	250A	500A
Power Input Connection :	4 Gauge	1/0 Gauge
Operation Voltage :	8.5V - 16.0V	8.5V - 19.0V
Speaker Output Connection :	8 Gauge	8 Gauge
Dimensions (Inches) :	7.48 W x 2.24 H x 12.60 L	7.48 W x 2.24 H x 20.47 L
Dimensions (Millimeters) :	190 W x 57 H x 320 L	190 W x 57 H x 520 L

* Specifications are subject to change as advances and development continue.



FULL RANGE digital & a/b 4CH FEATURES

- Full Range Class A/B Amplifier (IA3.4)
- Full Range Digital Amplifier (IA6.4)
- Dual MOS-FET Pulse Width Modulation Power Supply
- 2 Ohm Stable Stereo / 4 Ohm Mono Topology
- 12 dB/octave - Variable State Subsonic Filter
- 12 dB/octave - Variable State Low / High Pass Filter
- Flexible Crossover Multipliers X1 / X10
- Heavy Duty Copper Layer Double Sided Epoxy PCB
- Mirror Technology (Channel 1/2 to 3/4) with
- Individual Clipping Indicators
- Multi-Layer Protection Circuit
- (Thermal, Voltage, Speaker Short, DC)
- Wired Remote Control with Clipping Indicator

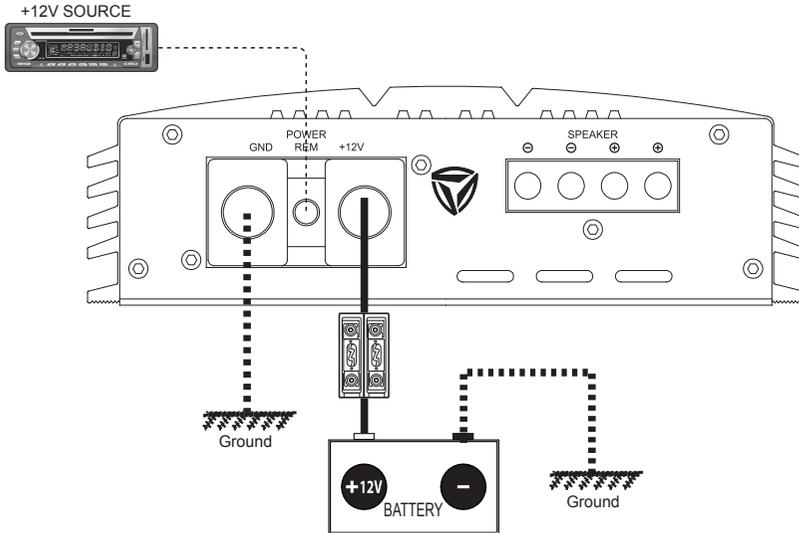
FULL RANGE digital & a/b 4CH specifications

	IA3.4(Full Range Class A/B)	IA6.4 (Full Range Digital)
Rated Power (14.4V at 1% THD)	IA3.4(Full Range Class A/B)	IA6.4 (Full Range Digital)
RMS Power - 4 Ohm Mono :	218W x 2CH	435W x 2CH
RMS Power - 2 Ohm Stereo :	110W x 4CH	220W x 4CH
RMS Power - 4 Ohm Stereo :	75W x 4CH	135W x 4CH
Low Pass Filter (12dB/Oct.) :	50Hz - 5000Hz (X1, X10)	50Hz - 5000Hz (X1, X10)
High Pass Filter (12dB/Oct.) :	50Hz - 5000Hz (X1, X10)	50Hz - 5000Hz (X1, X10)
Subsonic Filter (12dB/Oct.) :	10Hz - 500Hz	10Hz - 500Hz
Frequency Response (+/-1dB) :	20Hz - 20,000Hz	20Hz - 20,000Hz
Channel Separation :	55dB	55dB
Input Sensitivity (Volt +/- 5%) :	6.0V - 0.2V	6.0V - 0.2V
Signal / Noise Ratio :	105dB	105dB
Dampening Factor (4 Ohm) :	200 +	200 +
Operation Mode :	Mirror CH1/2 > CH3/4	Mirror CH1/2 > CH3/4
Clipping Indicator LED :	CH1/2 & CH3/4	CH1/2 & CH3/4
Power Efficiency (4 Ohm) :	65%	70%
Fuse Rating (14.4V) :	60A	80A
Power Input Connection :	4 Gauge	4 Gauge
Operation Voltage :	8.5V - 16.0V	8.5V - 19.0V
Speaker Output Connection :	8 Gauge	8 Gauge
Dimensions (Inches) :	7.48 W x 2.24 H x 12.60 L	7.48 W x 2.24 H x 11.81 L
Dimensions (Millimeters) :	190 W x 57 H x 320 L	190 W x 57 H x 300 L

* Specifications are subject to change as advances and development continue.



POWER CONNECTION



Warning!!

IA3.4, IA6.4, IA10.1 & IA20.1 do not contain on-board fusing. Be sure to install in-line fusing or circuit breakers from the 12+ volt (Positive) connection of the battery.

Before Installation

Disconnect the negative or ground from the vehicle's battery, before you begin to install the amplifier. Find a good place to mount the amplifier (Do not mount to the enclosure of the subwoofers) and secure it with hardware.

+12V Battery / Amplifier Connection

You will need to connect a power wire to the vehicle's positive battery terminal, using an appropriate power ring terminal. This connection must be tight and secure to ensure proper connectivity. This wire has to be fused appropriately (see each amplifiers fuse rating under specifications) within 12 to 16 inches for safety. You will then need to connect the power wire to the 12+ terminal of the amplifier with a hex head (allen wrench). Do not install the fuse until installation is complete. Any power wires running through metal barriers or firewalls, must be protected with an insulating grommet to prevent damage to the insulation of the wire. Failure to do so may result in a dangerous short circuit.

Ground Connection

The ground connection must be made to the vehicle's chassis and should be kept as short as possible, while accessing a solid piece of sheet metal in the vehicle. The surface should be sanded at the contact point to clean rust, paint or grime so a metal-to metal connection between the chassis and the termination of the ground wire is effective. You will then need to connect the ground wire to the GND terminal of the amplifier with a hex head (allen wrench) .

Remote / Turn-on Wire

The +12V remote turn-on wire is typically controlled by the source unit's remote turn-on output. The amplifier will turn on when +12V is present at its remote (REM) input and turn off when +12V is switched off. If a source unit does not have a dedicated remote turn-on output, the amplifier's turn-on lead can be connected to +12V via a switch that derives power from an ignition switched circuit. Connect the remote wire using 12 to 16 gauge wire to the REM connection of the amplifier with a hex head (allen wrench), then connect the other end of the remote wire to either the source unit's turn-on output or ignition switch circuit.

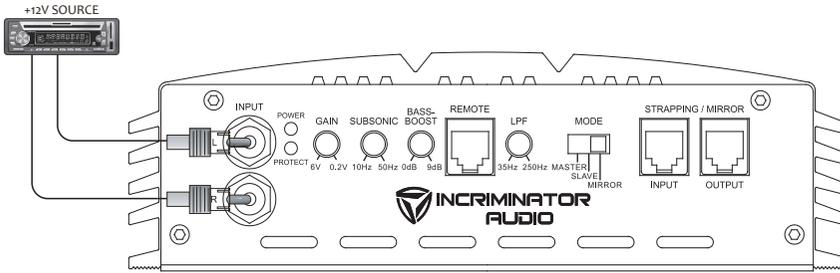
Finish Installation

When all connections have been made for power, ground and remote, move to the signal section and complete that step. Then wire all of your subwoofers to the correct impedance and adjust all control settings such as filters and gain, make sure you have the correct mode selected. You can then reconnect the ground cable to the vehicle's battery. Double check to make sure all connections are secure and you have finished the installation. Once you confirm this, install the fusing for the power wire and test the amplifier with a low signal level, make adjustments as needed.

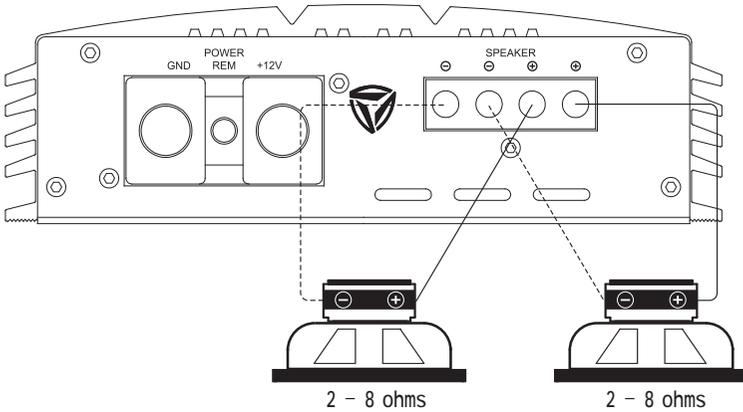
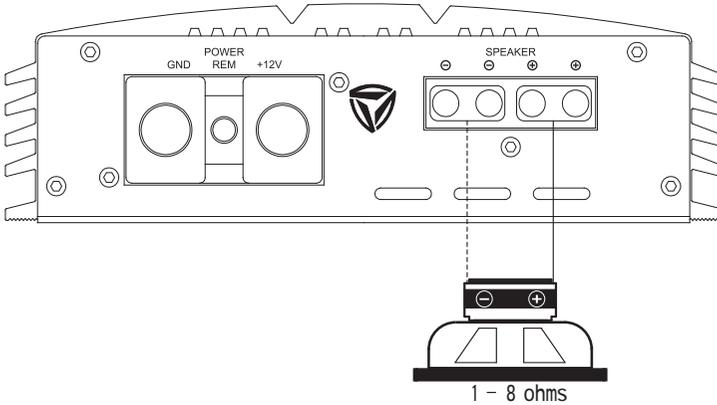


DIGITAL MONOBLOCK RCA CONNECTION

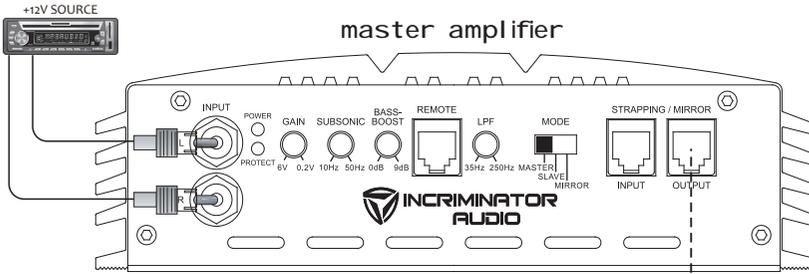
Single Amp Input Connection



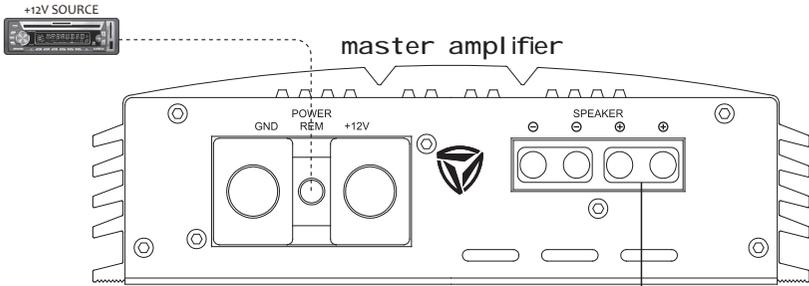
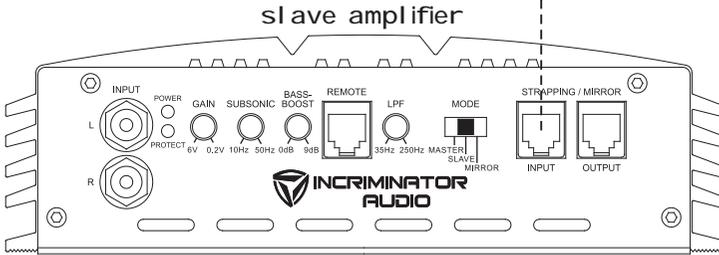
DIGITAL MONOBLOCK SPEAKER CONNECTIONS



dual amp input connection (master/slave)

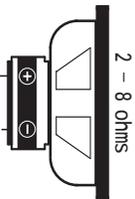
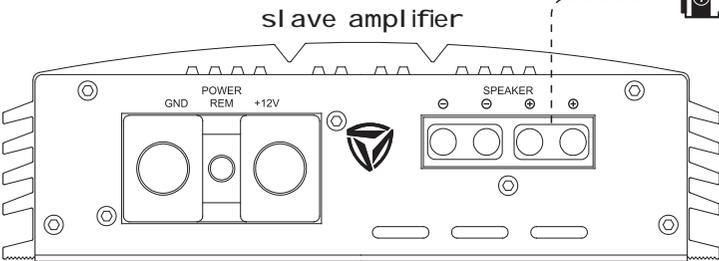


CONNECT STRAPPING / MIRROR CABLE FROM OUTPUT OF MASTER AMPLIFIER TO INPUT OF SLAVE AMPLIFIER.



CAUTION !!

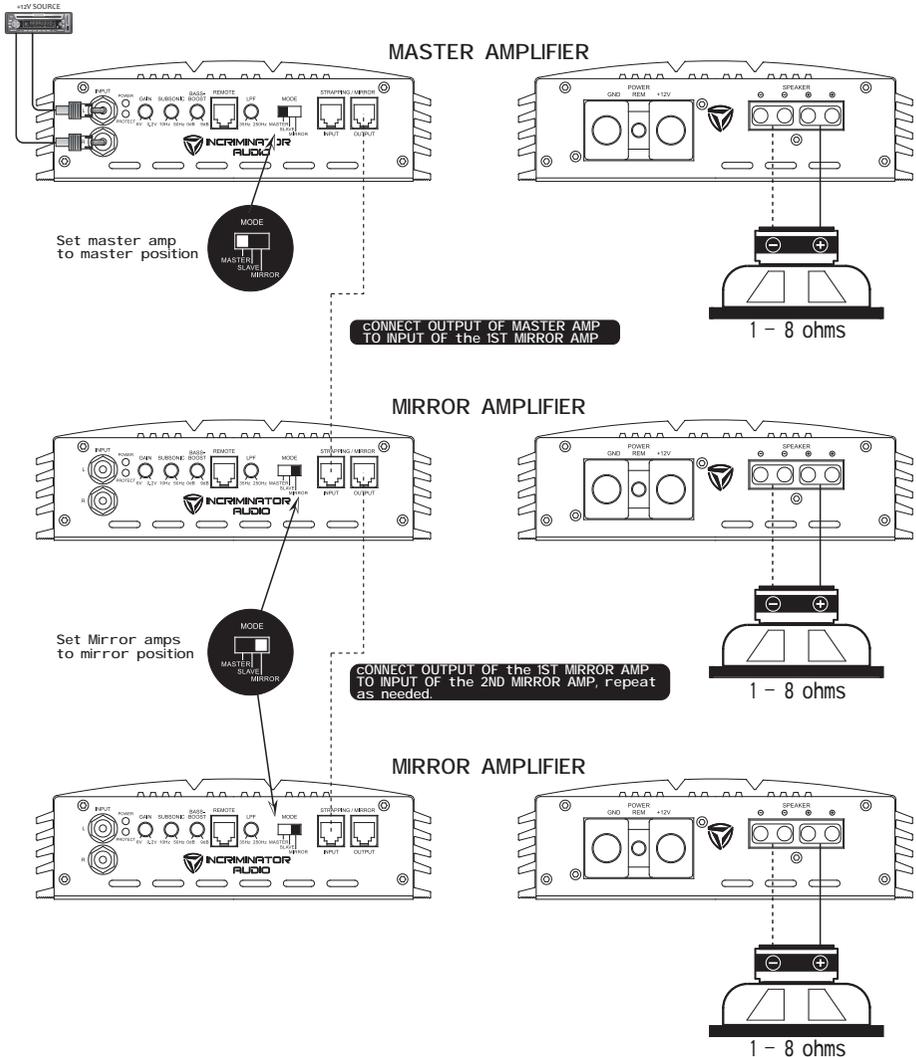
When a strapping connection is made the minimum working load is 2 ohms impedance any load (impedance) lower than 2 ohms can damage or blow the amplifiers.



multiple amplifier connection (master/MIRROR)

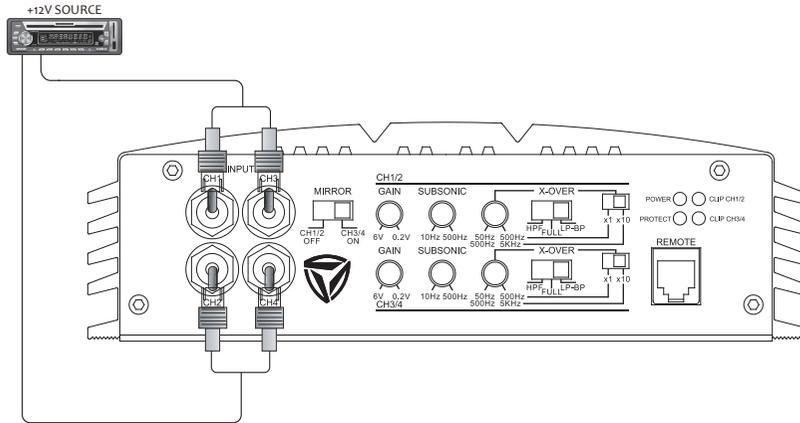
IN MASTER / MIRROR MODE

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



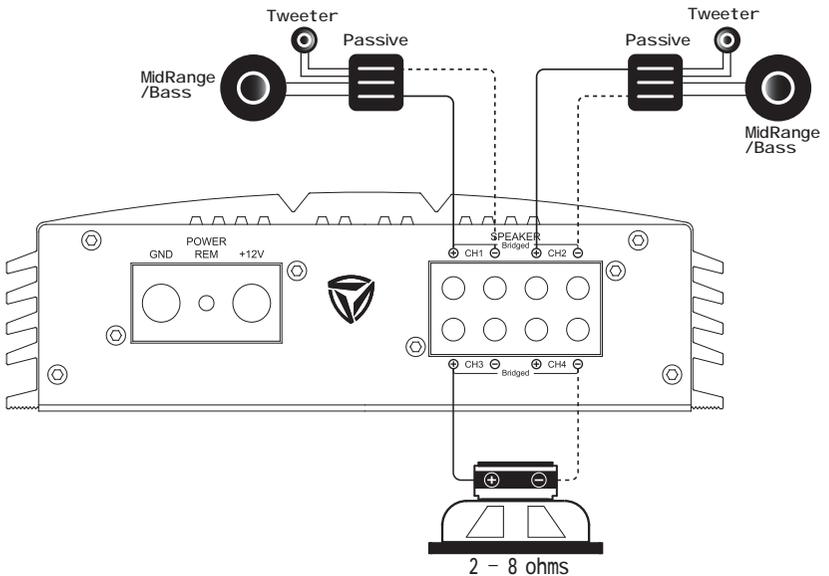
FULL RANGE DIGITAL & a/b 4CH INPUT CONNECTION

IA3.4 & ia6.4 Input Connection

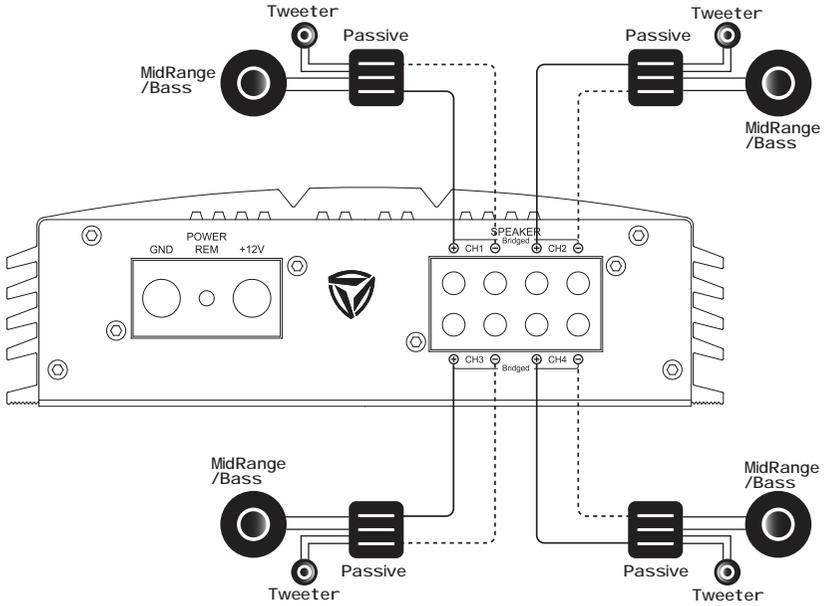


FULL RANGE DIGITAL & A/b 4CH SPEAKER CONNECTION

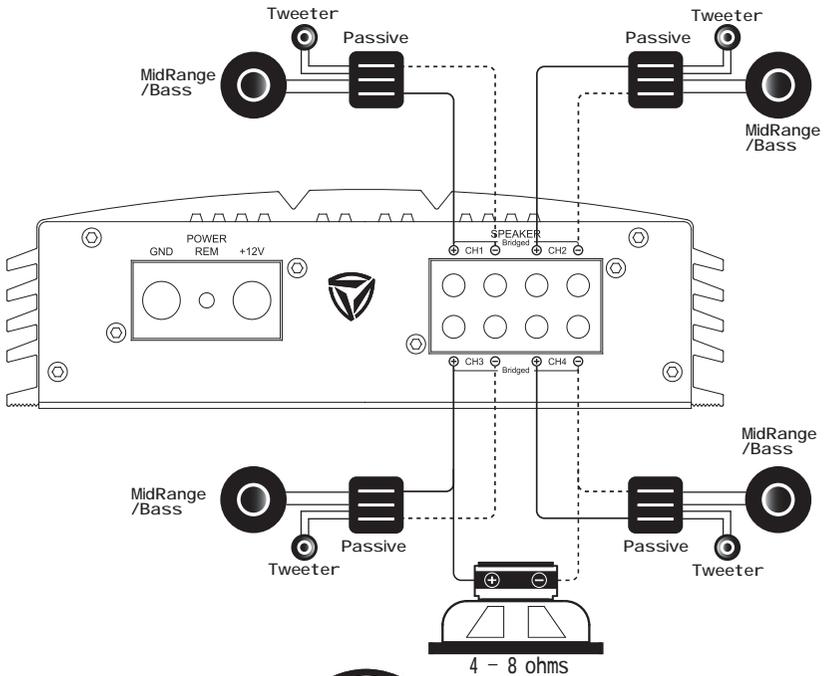
ia3.4 & IA6.4 3 channel speaker connection mode.



ia3.4 & IA6.4 4 channel speaker connection mode.



ia3.4 & IA6.4 5 channel speaker connection mode.



trouble shooting

All Incriminator Audio Series Amplifiers have multi-layer protection features to prevent damage from misuse or faulty conditions to ensure long lasting life of your investment.

If the unit senses excessive heat, short circuited speakers, overload, or voltage fluctuation outside of the working range the protection indicator light will turn red and the unit will turn off.

In order to solve this problem, you should turn all levels down, power off the unit, then carefully check the installation for wiring mistakes or shorts. If the amplifier is excessively warm the protection light will not turn on as the unit will turn off to protect itself from overheating. Let the unit cool down for 30 minutes and try again. If the unit works, try moving the amplifier or make sure nothing is covering it so it can vent heat off of the heatsink. Before you remove or uninstall the amplifier, refer to the list below for suggested solutions.

Amplifier Doesn't Turn On or No Output

- Check the fuse(s), not just visually, but with a continuity meter and all 12+ volt, remote and ground connection. Make sure you have 13+ volts. It is possible for a fuse to have poor internal connections, take the fuse out of the holder for the testing.
- Check the input signal from the source unit using an AC voltmeter to measure the voltage while it's being played. The voltage should be from 0.2 to 6.0 volts from the RCA cables.
- Check the output of the amplifier, test for output at the speaker outputs of the amplifier.
- Check to ensure that the speaker wires are making a good connection to the amplifier and the subwoofers.

Amplifier Goes Into Protection

- Check shorts on speaker wires or open coil.
- Check input voltage from RCA, if DC signal is over 4 volts, the amplifier will go into protect. Remove and reset power to see if it comes on.
- Check impedance to make sure it's over the minimum load. IA10.1 and IA20.1 have a working impedance of 1 ohm or 2 ohms strapped. IA3.4 & IA6.4 are 2ohm stereo or 4 ohm mono load.
- Check input voltage. IA6.4 and IA20.1 have a working range of 8.5 to 19 volts. IA3.4 & IA10.1 are between 8.5 to 16 volts working.
- Check chassis ground and remote using same ground.

Distorted / Attenuated / Noise Sound

- Check the chassis ground connections of all audio equipment.
- Check amplifier controls for errors, input level or crossover setting.
- Check the speaker wires for a possible short, either between the positive and negative leads or between a speaker lead and the vehicle's chassis ground.
- Check the nominal load impedance to verify that the amplifier is driving a load equal to or greater than 1 ohm (IA10.1 & IA20.1) or 2 ohm stereo or 4 ohm mono (IA3.4 & IA6.4).
- Check the input signal and input signal cables to make sure signal is present at the amplifier inputs and the cables are not pinched or loose. It may be helpful to try a different set of cables and / or a different signal source to be sure.
- Check speaker wiring for reverse polarity.





**INCRIMINATOR
AUDIO**



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