# **OWNER'S MANUAL**



"No Chrome, No Carbon Fiber, No BS!! Period...."

http://www.incriminatoraudio.com

# **IA5.1**

**C E** Digital Class-D Linkable Mono Block Amplifier

Before operating this unit, please read this manual and keep it for future reference

Congratulations, and thank you for your purchase of Incriminator Audio amplifiers.

Like all of IA's products, the 5.1 series amplifier was designed with only one thing in mind.....Performance! The new 5.1 has been completely redesigned, and comes with many performance upgrades.

The first and major upgrade you will notice when you opened the box should be the new case design.

You may be surprised to see that the new amplifier has grown SMALLER in size.

Don't be alarmed, smaller doesn't always mean less performance.

In fact, IA believes smaller can mean bigger! New technology has allowed us to use fewer and smaller parts on the board and in effect, has allowed the amps to become more efficient using our multi-layering technology to protect themselves better than ever, bullet proof technology is here to stay.

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

Contact us: Incriminator Audio 2935 Hwy. 101 N Rogersville, AL 35652 (256) 417-6658

## FEATURES & SPECIFICATIONS

- Digital Class-D Linkable Mono Block Amplifier
- Exclusive Bullet Proof Technology Layering
- Daisy-Chain Through Output RCA for Strapping
- 1 ohm Stable and 2 ohms Stable when Strapped
- Dual MOS-FET PWM Power Supplies
- 24 dB Low Pass (LPF) Crossover Variable 35 Hz to 250 Hz
- 24 dB Subsonic Filter Variable 10 Hz to 60 Hz
- Selectable Switch for Master and Slave Operation
- Multi-Layer Protection Speaker Short, Over Current, Thermal, and DC Protection Circuit
- Line Input and Master Output / Slave Input RCA Connectors
- Heavy Duty Copper Layer Double Sided Epoxy PCB
- 4 Gauge Battery Input Connectors
- 8 Gauge Speaker Output Connectors
- 100% QC Testing and Warm Up
- Efficiency: 86% at 4 ohms, 100 Hz
- Tested Voltage & THD: 14.4V and Less Than 1% THD at 4 ohms RMS Watt
- Operating Voltage: DC 10V ~ 16V Power Input
- Damping Factor: 350+ into 1 ohm
- Input Sensitivity 200mV to 6 Volts
- Rated Power Output RMS:

1000 watts at 1 ohm Linked

500 watts at 1 ohm

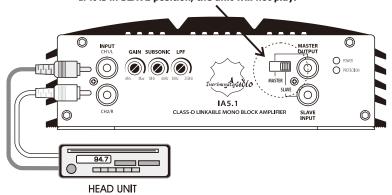
250 watts at 2 ohms

125 watts at 4 ohms

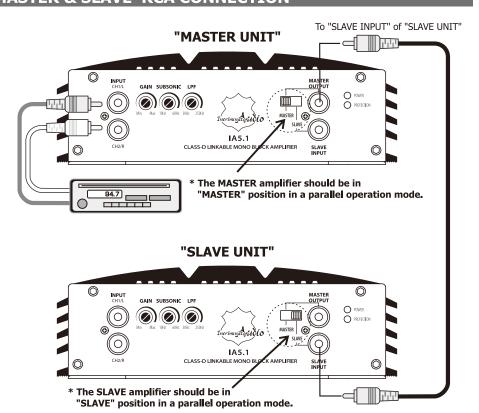
■ Dimensions- 7.00 (W) x 2.25 (H) x 7.87 (L)

## SINGLE AMP RCA CONNECTION

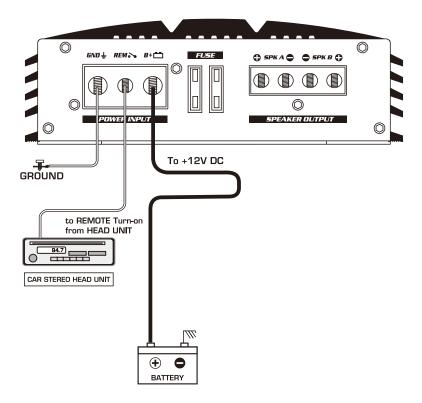
If there is no sound, please check the MASTER/SLAVE switch. The mode switch should be in MASTER position. If it is in SLAVE position, the unit will not play.



## MASTER & SLAVE RCA CONNECTION



## **POWER CONNECTIONS**



## +12V Power

Connect B+ terminal of the amplifier to the + terminal of the battery using the wire that has the same diameter of the ground cable. Make sure you install in-line fuse holder approximately 300 to 400 mm away from the + terminal of the battery. Please ensure that there is no fuse in the fuse holder.

#### GROUND

Disconnect the battery and connect the GND (ground) terminal to the cars chassis. Keep this cable as short as possible (no longer than 500 mm).

Make sure that the connection with the chassis is rust free and clear of paint or grime.

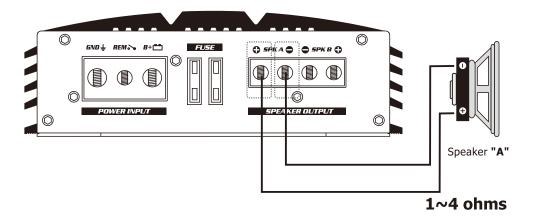
### **REMOTE**

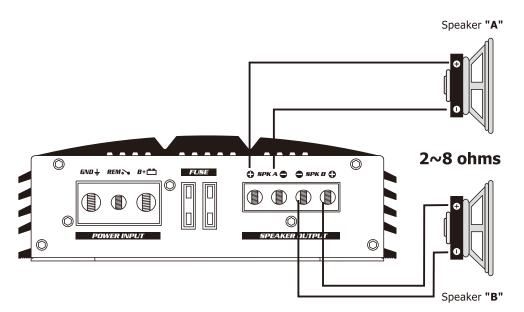
Connect the RMT terminal of the amplifier to the power antenna terminal in the car ignition switch using 12 or 16 ga. electrical wire.

## **A** Caution

First make the ground connection, then +12V wire connection, and finally the remote connection. Furthermore, the +12V wire must always be fused at the battery to protect the amplifier from possible damage. If you need to replace the power fuse, replace it with a fuse of the same value. It may cause serious damage to your amplifier and/or your vehicle if you use fuses with different type or rating.

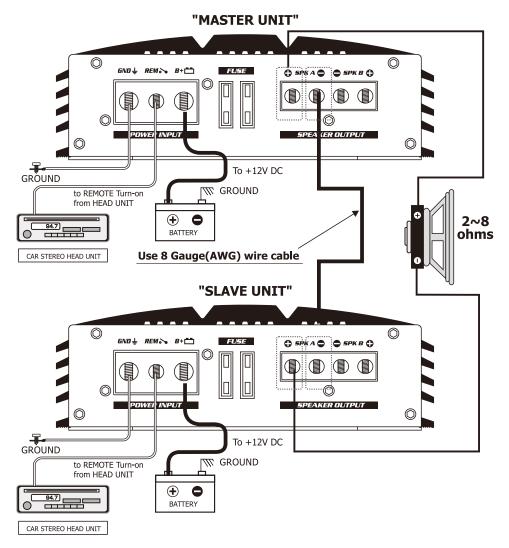
## SINGLE AMP SPEAKER CONNECTION





Please note that this unit is a mono block unit and only has one channel. Speaker A and Speaker B are just labeled for clear illustration. Connecting to either the positive or negative of either of the two connections will end in the same result as both positive connections (or both negative connections) are tied together inside the unit. For example, if you connect two 2 ohm subwoofers, the amp will parallel the connections for an 1 ohm load.

## **DUAL AMP POWER AND SPEAKER CONNECTION (Linkable)**



Using a dual amplifier configuration, the MASTER amplifier has total control over the SLAVE amplifier. The positive terminal of the subwoofer's voice coil must be connected to the positive terminal of the MASTER Amplifier and the negative terminal of the subwoofer's voice coil must be connected to positive terminal of the SLAVE Amplifier. Since the dual amplifier configuration has tremendous output potential, please ensure that your subwoofers can handle such a large amount of power.

## **A** Caution

In strapped mode your total impedance must be at least 2 ohms. Any impedance less than 2 ohms can possibly damage your amplifiers.

## **TROUBLESHOOTING**

This power amplifier has protection features to prevent damage from misuse or faulty conditions. If the unit senses excessive heat, short circuited speakers or overload, protection LED will light up and system will be turned off. Prior to checking the wiring for any fault, you should turn all level controls down and turn off power. If the amplifier shuts down due to excessive heat, protection LED will not light up. In this case, simply allow the amplifier to cool down. Before removing your amplifier, refer to the list below and follow the troubleshooting instructions. Always test the speakers and their wires first.

#### **AMPLIFIER DOES NOT POWER UP**

- ◆ Check if at least +12V DC is available on the battery power terminal.
- ◆ Check if at least +13.8V DC is available on the remote terminal.
- ◆ Check if a good ground connection is present. Check all fuses.
- ◆ Check if protection LED is not lit.

#### PROTECTION LED LIGHTS UP WHEN AMPLIFIER IS POWERED ON

- ◆ Check if speaker wires are short-circuited.
- Remove speaker wires and reset the amplifier. If protection LED still lights up, then the amplifier is faulty.

#### **FUSE BLOW**

- ◆ Check the value of minimum speaker impedance.
- ◆ Check for short-circuits on power cable and vehicle chassis.

#### **OVERHEATING**

- ◆ Check the value of minimum speaker impedance.
- ◆ Check speakers for short-circuits.
- ◆ Check if there is good airflow around the amplifier.

#### **SOUND TOO LOW-DISTORTED SOUND**

- ◆ Check if the input level control has been set to match the output level of the unit.
- ◆ Check the volume of head unit.
- Check speakers for short-circuits.
- ◆ Check if crossover frequencies have been properly set.

## **HIGH HISS-ENGINE NOISE IN SPEAKERS**

- ◆ Check if a good ground connection is present and check speakers for short-circuits.
- ◆ Disconnect all RCA inputs from the amplifier. If hissing / engine noise disappears, replace the RCA connectors and re-check. Then check the component driving the amplifier.



