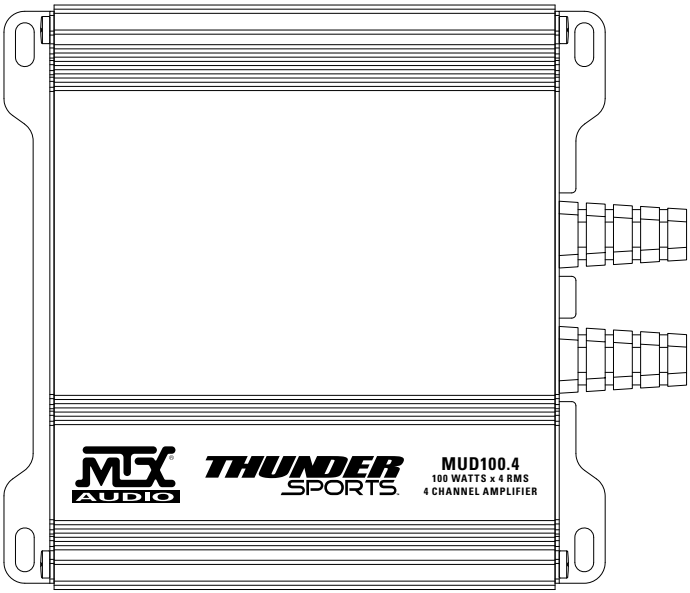


OWNER'S MANUAL
MUD100.4 AMPLIFIER

INTRODUCTION

Thank you for purchasing this MTX Audio Hi-Performance amplifier. Proper installation matched with MTX speakers and subwoofers provide superior sound and performance for endless hours of enjoyment whether you are waking the neighbors or just out enjoying your tunes. Congratulations and enjoy the ultimate audio experience with MTX!

FEATURES

- Compact Size
- Double Sided PCB
- Surface Mount Components
- MOSFET Design
- LPF and HPF Crossover
- Noise Free Design

CONTROL FUNCTIONS

1. Wiring Harness - All wiring to the amplifier will run through the wiring harness.

   Speakers - Connect speakers/subwoofers to these terminals. Be sure to check wire for proper polarity. Never connect the speaker cables to the chassis ground.

   +BATT (+12 Volt Power) - Connect this terminal through a FUSE or CIRCUIT BREAKER to the positive terminal of the vehicle battery or the positive terminal of an isolated audio system battery. **WARNING:** Always protect this power cable by installing a fuse or circuit breaker of the appropriate gauge within 18 inches (45cm) of the battery terminal connection.

   Remote Turn On - This terminal turns on the amplifier when (+) 12 volt is applied to it. Connect it to the remote turn on lead of the head unit or signal source.

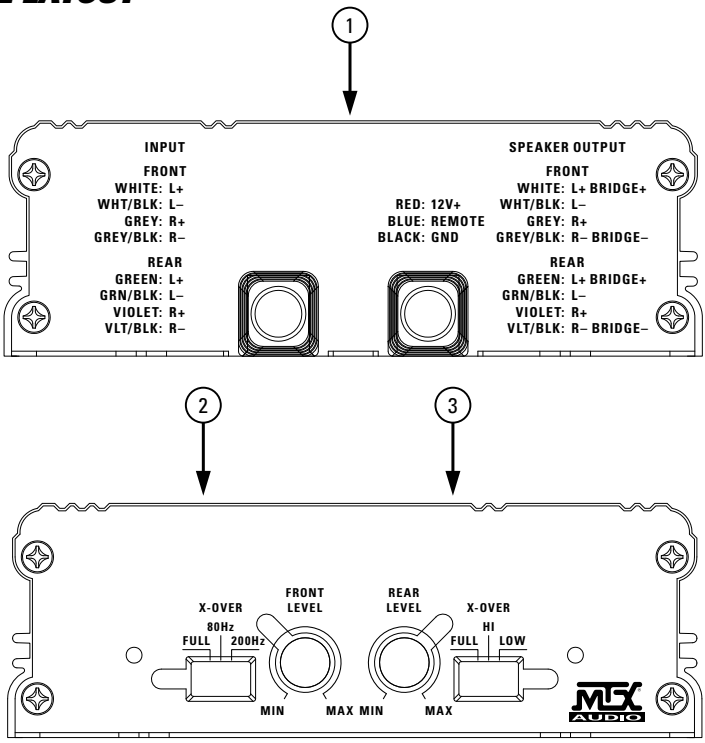
   GND - Connect this cable directly to the frame of the vehicle. Make sure the metal frame has been stripped of all paint down to the bare metal. Use the shortest distance possible. If a suitable ground point is not available on the frame, connect this terminal directly to the vehicle battery ground terminal, or any other factory ground points.

   RCA Input Jacks - This unit is designed to function with source units that feature RCA outputs. If your source unit does not have RCA outputs you will need to use the speaker level inputs. A source unit with a minimum level of 200mV is required for proper operation.

2. Gain Control - The Gain control will match the amplifier's sensitivity to the source units signal voltage. The operating range is 10V to 200mV. **NOTE:** This is NOT a volume control.

3. X-Over Mode - These controls allow control over the frequencies played. There is an option for Full, 80Hz, or 200Hz on the front channels, and an option for Full Range, High Pass, or Low Pass on the rear channels.

PANEL LAYOUT



WIRING DIAGRAM

See page 22 for amplifier wiring diagrams.

INSTALLATION AND MOUNTING

MTX recommends your new Thunder Sports™ amplifier be installed by a 12 volt installation specialist. Any deviation from specified installation instructions can cause serious damage to the amplifier, speakers and/or vehicle's electrical system. Damage caused from improper installation is NOT covered under warranty. Please verify all connections prior to system turn on.

1. Disconnect the vehicle's negative battery cable.

2. Determine the mounting place for your MTX amplifier. Keep in mind there should be sufficient air flow for proper cooling. Mark the mounting holes from the amplifier to be drilled. Before drilling make sure all vehicle wires, gas lines, brake lines and gas tank are clear and will not interfere with installation. Drill the desired holes and mount the MTX amplifier.

3. Install a positive (+) power cable from the vehicle's battery through the firewall using a grommet or firewall bushing to avoid cable damage from sharp edges of the firewall. Run the cable through the interior of the vehicle and connect it to the amplifier's +12V wire. Do not connect to the battery at this time. **NOTE:** Use only proper gauge wire for both positive and negative connections.

4. Install a circuit breaker or fuse within 18 inches of the battery. This effectively lowers the risk of severe damage to you or your vehicle in case of a short circuit or accident. Make sure the circuit breaker is switched Off or the fuse is taken out of the fuse holder until all connections are made. Now connect your positive power cable to the positive battery terminal of the battery.

5. Grounding - Locate a proper ground point on the vehicle's chassis and remove all paint, dirt or debris to reveal a bare metal surface. Attach the amplifier's ground wire to that contact point. If a suitable location is not available connect this terminal to the vehicle's negative battery terminal.

6. Connect a Remote Turn-On wire from the source unit to the MTX amplifier's (REM) wire. If the source unit does not have a dedicated Remote Turn-On lead, you may connect to the source unit's Power Antenna lead.

7. Supply the signal to your MTX amplifier by connecting the signal cables using high quality RCA or speaker wires to the corresponding outputs at the source unit and inputs of the amplifier.

8. Connect your speakers to your MTX amplifier's speaker wires using the correct gauge speaker wire. Your MTX amp can drive a 2Ω stereo/4Ω bridged minimum load for optimum power.

9. Double check all previous installation steps, in particular, wiring and component connections. Once verified, reconnect the vehicle's negative battery cable, turn the circuit breaker on or place the fuse in the fuse holder.

NOTE: Gain Levels on the amplifier should be turned all the way down (counter clockwise) before proceeding with adjustments.

INSTALLATION

For proper performance and safety, MTX recommends installing an inline fuse per the owner's manual instructions according to the following.

MUD100.4	30A Fuse

TROUBLESHOOTING

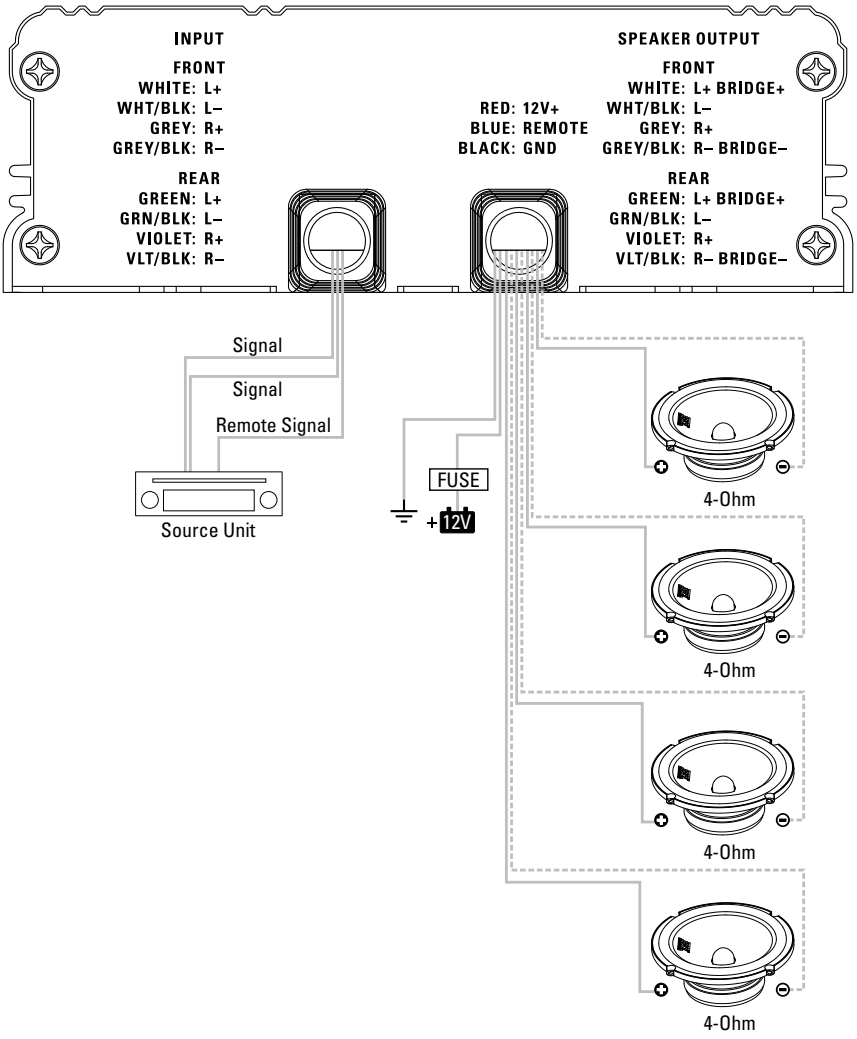
Problem	Cause	Solution
Output Distorted	Head Unit Volume Set Too High	Lower Head Unit Volume
	Amplifier Gain Set Too High	Lower Amplifier Gain
Balance Reversed	Speaker Wire L & R Reversed	Correct Speaker Wire Orientation
	RCA Inputs Reversed	Reverse RCA Inputs
Bass is Weak	Speakers Wired Out of Phase	Wire Speakers with Correct Phase
	Not Using MTX Subwoofers	Buy MTX Subwoofers
Blowing Fuses	Excessive Output Levels	Lower the Volume
	Amplifier Defective	Return for Service

SPECIFICATIONS

Model	**MUD100.4**
Description	50 W RMS/CH Stereo
RMS Power at 14.4V	
4Ω Bridged Load	200 W RMS
2Ω Load	100 W RMS
4Ω Load	50 W RMS
Features	
Input Level	0.2 - 5V Low Level, 0.4 - 10V High Level
Frequency Response	10Hz - 32 kHz
Low Pass Filter (LPF) Rear Only	80Hz Fixed
High Pass Filter (HPF) Rear	80Hz Fixed
High Pass Filter (HPF) Front Selectable	80/200Hz
THD at 4Ω , 1W	<0.2%
Signal-to-Noise Ratio	>75dB
Minimum Load	2Ω
Low Voltage Protection	Yes, Protect <8.5V
Components & PCB	SMD Parts / Double Sided FR-4 PCB
Dimensions	
Height	1.86" (47.2mm)
Width	5.51" (140mm)
Length	6.52" (165.5mm)

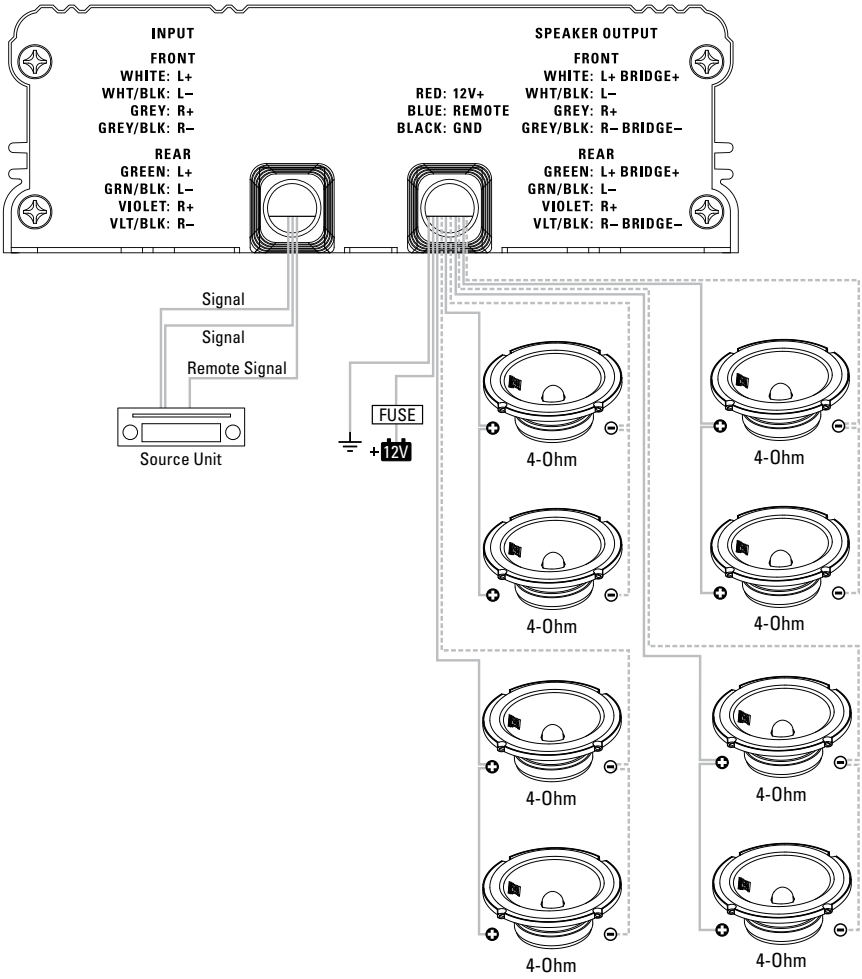
WIRING DIAGRAM

4Ω Stereo



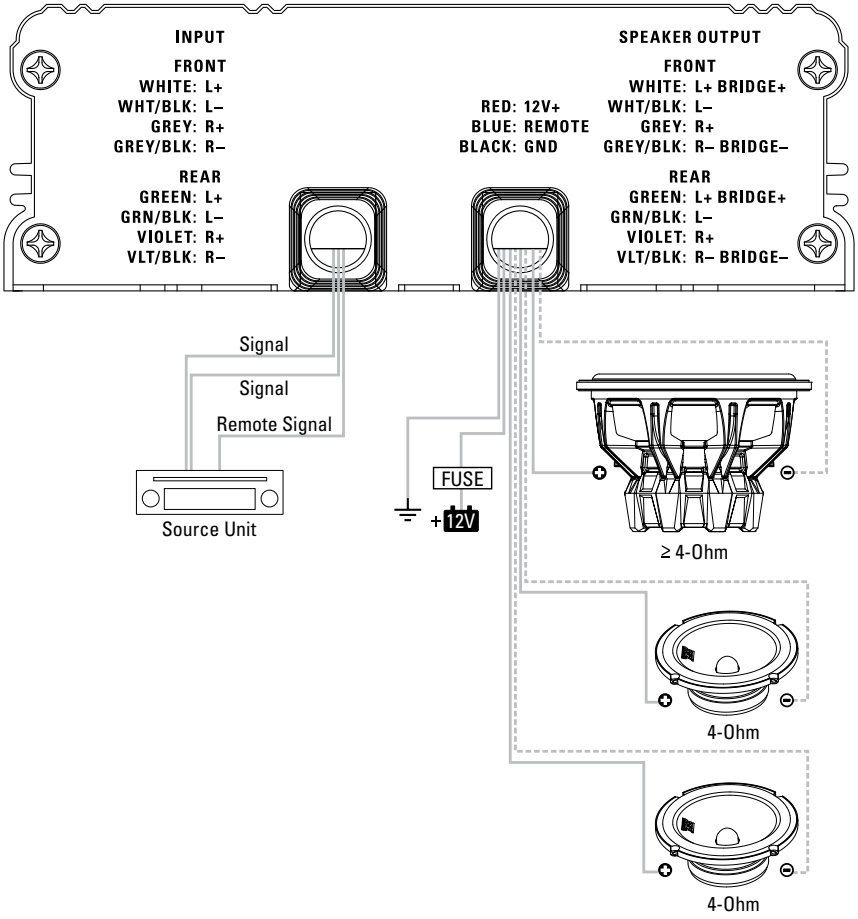
WIRING DIAGRAM

2Ω Stereo



WIRING DIAGRAM

Stereo 4Ω Front/4Ω Bridged Rear



WIRING DIAGRAM

4Ω Bridged Subwoofers