

# MTX<sup>®</sup>

## AUDIO



# RFL4001D

High-End Mono Block Class-D Power Amplifier  
4000W RMS CEA

[mtxaudio.eu](http://mtxaudio.eu)

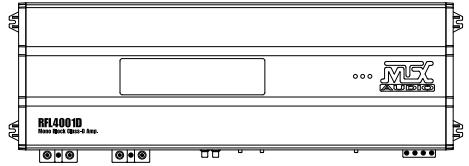


## ● Thank You !

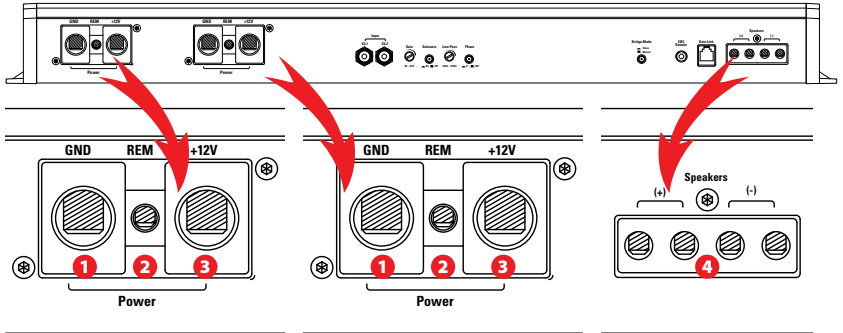
Thank you for purchasing an MTX Audio High-End amplifier. Proper installation matched with MTX speakers and subwoofers provide superior sound and performance for endless hours of waking the neighbors, slammin' your friends or flat out stomping wanna-be players. Congrats and enjoy the ultimate audio experience with MTX !

## ● Specifications :

- Mono block class-D amplifier
- CEA2006 certified Power Output :
  - 4000 Watts RMS x 1-channel at 1 ohm and THD+N  $\leq$  1%
  - 2400 Watts RMS x 1-channel at 2 ohm and THD+N  $\leq$  1%
  - 1500 Watts RMS x 1-channel at 4 ohm and THD+N  $\leq$  1%
- Crossover :
  - Low pass 24dB/oct variable from 40Hz to 150Hz
  - Subsonic filter 24dB/oct at 20Hz
- Signal-to-Noise Ratio (1 Watt) : > 95dB
- THD+Noise (Distortion) (1 Watt) :  $\leq$  0,08%
- Frequency Response ( $\pm$ 0,5dB) : 10Hz-150Hz
- Maximum Input Signal : 6V
- Maximum Sensitivity : 200mV
- Phase switch 0° or 180°
- EBC remote control
- Bridged mode with gain management
- Dimensions : 626mm x 204mm x 59mm

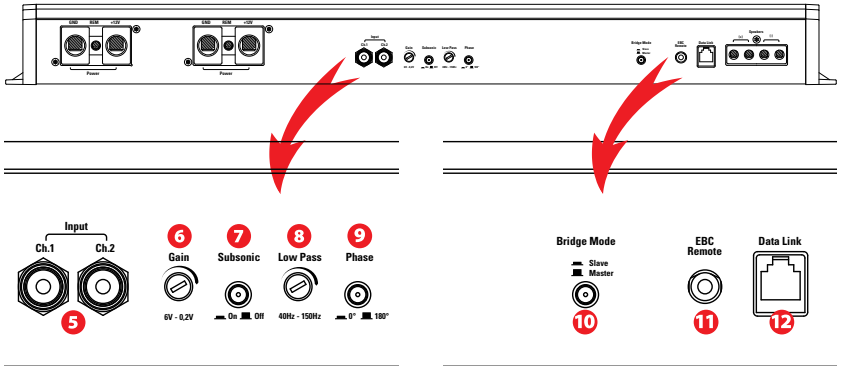


## ● Power and Speaker connections :



- 1** Ground Terminal – A proper ground is required for your amplifier to operate at peak performance. A short ground cable the same diameter as the power cable should be used to attach the ground terminal directly to the chassis of the vehicle. Always remove paint, dirt or debris to expose bare metal where the ground cable will be attached.
- 2** Remote Terminal – The amplifier can be turned on by applying 12 volts to this terminal. Typically this voltage is supplied by a wire from the source unit marked “remote” or “power antenna”.
- 3** (+12) Power Terminal - This is the main power input for the amplifier and must be connected directly to the positive terminal of the vehicles battery for proper operation. Use caution when installing (+12) power cable in the vehicle. Avoid running this cable parallel with RCA cables, antennas, or other sensitive equipment due to massive currents that can induce noise into the audio system. It is also very important to have a tight, secure connection for maximum performance. MTX recommends using 50mm<sup>2</sup> power wire with the MTX RFL4001D amplifier.
- 4** Speaker Terminals - Connect subwoofer(s) to these terminals. If using two subwoofers or a dual voice coil subwoofer, respect the phase. Attention : The two (+) connectors are wired parallel internally. Same for the two (-) connectors.

## ● Controls and Inputs :



- 5** RCA Inputs - These RCA inputs are used with head units that have RCA or Line level outputs (head units need a minimum level of 200mV output for proper operation of the amplifier). MTX recommends only high quality RCA cables to decrease the possibility of radiated noise entering the system.
- 6** Gain Control - The gain control matches the input sensitivity of the amplifier to the head unit being used. The operating range varies from 200mv to 6V.

**Adjusting the gain**

  1. Turn the gain control on the amplifier all the way down (counter clockwise).
  2. Turn up the volume control on the head unit to approximately 3/4 of maximum.
  3. Adjust the gain control on the amplifier until audible distortion occurs.
  4. Adjust the gain control down until audible distortion disappears.
  5. The amplifier is now calibrated to the output of the head unit.
- 7** Subsonic Switch - Used to switch the subsonic filter on or off. The subsonic filter frequency is set to 20Hz. The subsonic filter protects subwoofer(s) against low frequencies that can cause damage. Very useful with vented enclosures.
- 8** Low Pass X-Over Frequency Control - Used to select the desired low-pass (LP) x-over frequency. The frequency is adjustable from 40Hz to 150Hz.
- 9** Phase switch - Used to match the bass from subwoofers and front speakers. Toggle the phase switch from 0° to 180°. Keep the loudest bass response.
- 10** Bridge mode Switch - Used to put the amp in Master mode or Slave mode when bridging two RFL4001D's. For more details, see Master/Slave Mode section.
- 11** EBC Port (External Bass Control) - The Remote Subwoofer Level Control (EBC) plugs directly into this port, while the EBC itself can be placed anywhere in the vehicle for on demand bass adjustments. EBC is included.
- 12** Data link Port - Used to connect two RFL4001D's when used in Master/Slave mode. The RJ15 cable is included. For more detail see Master/Slave mode section.

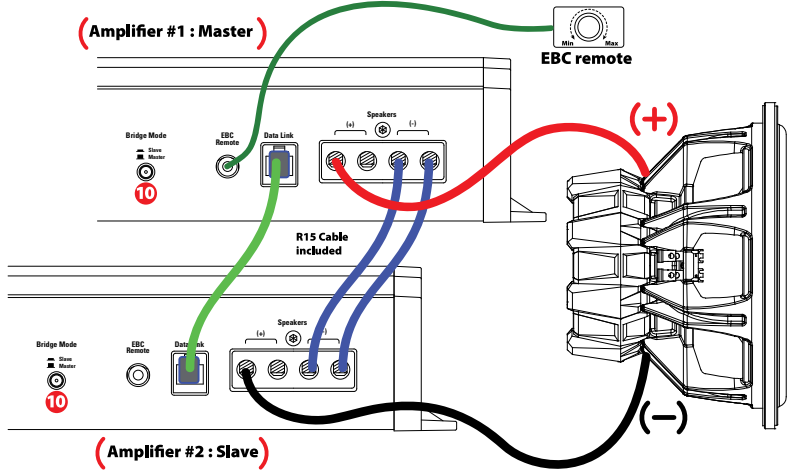


## ● Master Slave mode (Bridge mode) :

For MAXIMUM output power, two RFL4001D amps can be bridged together.

1. Decide which RFL4001D is the "Master" amp. The other one will be the "Slave" amp. Set the "Bridge Mode" switch (10) to "Master" on the master amp. Set the slave amp to "Slave" (10).
2. Connect the input signal from the head unit to the RCA inputs of the master amp. The slave amp does not need RCA connections. It will take the signal from the master amp through the RJ15 cable.
3. Connect the included RJ15 cable to both amps.
4. Adjust the gain, x-over, subsonic filter and phase on the master amp. All slave amp controls are disconnected through slave mode. The master amp fully manages the slave amp.
5. Your (+) speaker output is the (+) speaker output from the master amp.
6. Your (-) speaker output is the (+) speaker output from the slave amp.
7. Connect both (-) speaker outputs from the master and slave amp together (2 cables recommended).

Note: The EBC remote works fine in master/slave mode. It only needs to be connected to the master amp.



## ● Installation & Mounting :

MTX recommends your new amplifier be installed by an Authorized MTX retailer. Any deviation from specified installation instructions can cause serious damage to the amplifier, speakers and/or vehicles 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 +BATT terminal. 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 20cm 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 circuitbreaker 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 ground wire to that contact point. Connect the opposite end of the ground wire to the GND terminal on the MTX amplifier.

MTX is proud to be an American Audio Company since 1971.



# **MITEK** *Corporation*

Designed and Engineered by MTX in Phoenix - AZ, USA.  
Assembled in Korea.

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