



**RL 680.4**

**USER MANUAL**

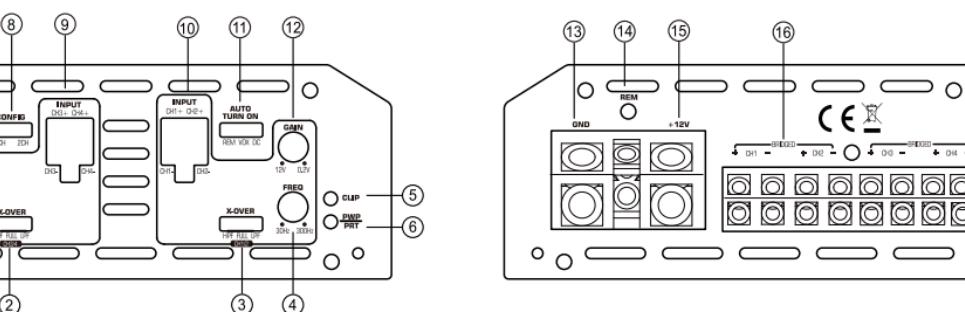
**RECOIL**  
WWW.RECOILAUDIO.COM

## INTRODUCTION

Thank you for purchasing Recoil amplifier RL680.4 for your car audio system. You have chosen Recoil because you deserve the best! Please thoroughly read through this manual before getting started. If you have any questions and require additional assistance, please contact support@recoilaudio.com.

- Designed with advanced power MOSFETs from International Rectifier
- High/Low Input modes
- Overload, thermal, voltage, speaker short, and DC-offset protection circuitry
- Switched turn on options (VOX/DC/REM)

## SIDE PLATE



### 1. CH3/4 Frequency Filter

Set up the crossover frequency. When select HPF, all frequencies below the setup will be blocked; When select LPF, all frequencies above the setup will be blocked;

### 2. CH3/4 Crossover Selector

This switch allows you to select the crossover. Select HPF (high pass filter) for midrange or tweeters. Select LPF (low pass filter) for mid-bass or subwoofers. Select FULL to full frequency signal.

### 3. CH1/2 Crossover Selector

This switch allows you to select the crossover. Select HPF (high pass filter) for midrange or tweeters. Select LPF (low pass filter) for mid-bass or subwoofers. Select FULL to full frequency signal.

### 4. CH1/2 Frequency Filter

Set up the crossover frequency. When select HPF, all frequencies below the setup will be blocked; When select LPF, all frequencies above the setup will be blocked;

### 5. Clip LED Indicator

When this LED lights up, it indicates clipping is present. At this point, please adjust the amplifier's gain level until the LED goes off.

### 6. PWR/PRT LED Indicator

This LED will light up in BLUE color when amplifier is turned on. When LED lights up in RED color, amplifier might be in protection mode or malfunction. Please shut down the amplifier immediately.

### 7. CH3/4 Gain

This gain control is preset to match the output of source units.

### 8. Config (Source Selection)

This switch allows the amplifier to be driven with either 2 or 4 pairs of inputs.

### 9. CH3/4 Audio Input

The jacks allow for a normal Left and Right channel signal input. Simply connect to the source unit using audio cables, keeping them away from power wiring whenever possible to reduce risk of noise.

### 10. CH1/2 Audio Input

The jacks allow for a normal Left and Right channel signal input. Simply connect to the source unit using audio cables, keeping them away from power wiring whenever possible to reduce risk of noise.

### 11. Turn On Selector

REM: Connect to REM to turn on amplifier.

DC: High level signal input to turn on amplifier. (DC offset)

VOX: Audio frequency input to turn on amplifier.

### 12. CH1/2 Gain

This gain control is preset to match the output of source units.

### 13. Ground Input

Locate a secure grounding connection as close to amplifier as possible. Make sure the location is clean and provides a direct electrical connection to the frame of the vehicle. The ground needs to have as low of a resistance as possible. Connect one end of a short piece of the same size cables as the power cable to the grounding point or to one of your batteries or battery bank. Run the other end of 4 ga cable to the mounting location of the amplifier for connection to the amplifier ground terminals and connect the ground cable to the GND (ground terminal).

### 14. Remote Input

Run a remote turn on cable from the switched 12V source. This may be a toggle switch, a relay, your source unit's remote trigger cable, or power remote trigger cable. Connect the remote turn on cable to the REM (remote) terminal.

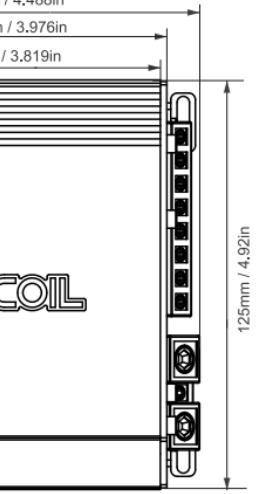
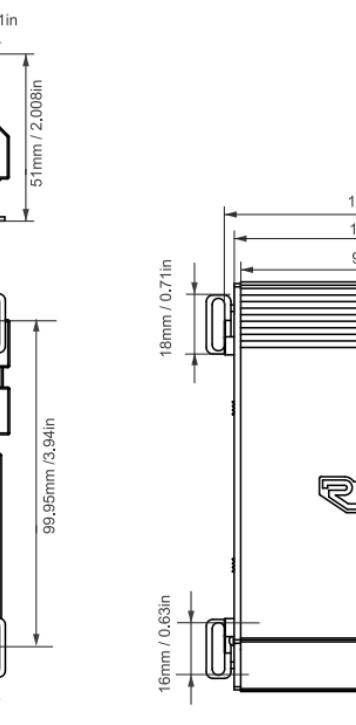
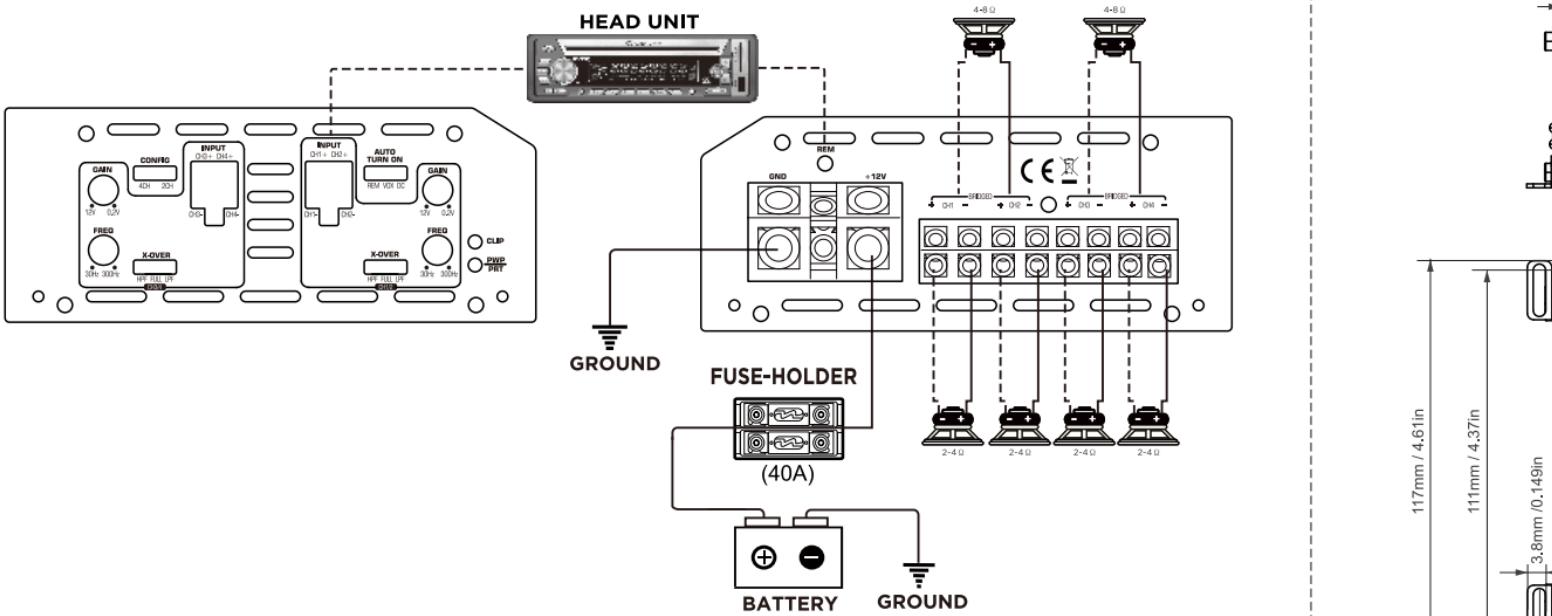
### 15. Battery+ (12V) Input

Before mounting amplifiers, disconnect the negative cable from the battery to protect any accidental damage to your amplifier and audio system. Connect the power cables to power terminal 12V. Connect one end of fuse holder to the power cable going into the amplifier and the other end of fuse holder to positive battery. This fuse location will protect the system and the vehicle against the possibility of a short circuit in the power cable. Be sure to use fuses and fuse holders adequate for the application.

### 16. Speaker Outputs

Connect speaker wire from amplifier's terminal block to Speaker. Speakers' impedance should be checked carefully.

## WIRING DIAGRAM



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## SPECIFICATIONS

RMS @4 OHM(THD<1%DISTORTION)	4x 95W
RMS @2 OHM(THD<1%DISTORTION)	4x 170W
MAX POWER	680W
Frequency Response	20Hz-20kHz
Signal To Noise Ratio	90dB
THD	≤0.5%
Input Sensitivity Level	12V-0.2V
Best Efficiency	>80%
Minimum Load	2 Ohm
Current Draw	50A
Short Circuit Test (max. power)	PASS
Overload Protection System	YES
Overheat Protection Temperature	75°C
Dimension(LxWxH)	3.98X4.92X2.01 in

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