**It is important to thoroughly read and understand the **Owner's Manual** before proceeding with the installation of your amplifier.**

**Safety Considerations:**
- Make sure the amplifier is placed in a dry, well-ventilated location to prevent overheating.
- Do not mount the amplifier in areas where it can be exposed to direct sunlight or high humidity.
- Secure all wiring to prevent loose connections and ensure safety.

**Installation Procedure/Connections:**
1. Disconnect the negative battery post connection and secure the disconnected cable to prevent accidental reconnection during installation. This is an essential safety precaution during installation!
2. Connect the RED power lead to the positive (+12V) battery post. A 4 AWG is the minimum power wire size for this amplifier.
3. An appropriate fuse (sold separately), such as the JL Audio Water-Resistant Master MAXI™ Fuse Block (XD-MFBW-MAXI), at the main power wire(s) to the amplifier is vital for vehicle/vehicle safety. This fuse must be installed within 18 inches (45 cm) of the positive battery post connection. If this is the only device connected to this main wire, use a SA fuse. Do not install the fuse until the power wire has been securely connected to the amplifier.
4. Connect the BLACK negative ground lead to a clean, solid metal grounding point near the amplifier. This can be metal chassis ground, if available. If no metal chassis ground is available, it may be necessary to make this connection to the negative battery post. A 4 AWG is the minimum ground wire size for this amplifier. All ground connections (source unit and amplifier) should be made at the same location.
5. Connect the blue remote turn-on lead to the source unit's positive (+12V) remote turn-on output. If your 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.
6. Signal Input (Hi-Level). Connect the amplifier's RCA input jacks to the source unit's preamp output jacks.
7. Signal Input (Hi-Level). If your source unit does not offer preamp level signal outputs, you can splice the speaker output wires of the source unit onto a pair of RCA plugs for each input pair or use the JL Audio BCS Speaker Wire to RCA adaptor (XD-CLAIR2-5WAY). Make sure to observe correct polarity in making "Hi-Level" input connections. Failure to do so will result in a loss of signal (poor performance).
8. Connect the speaker output leads to the corresponding speaker wires.

**WARNING:** Failure to make safe, tight, high-integrity power connections can result in fire and extensive damage!

**Connections:**
- **Input Mode Switch**
  - 2 / 3 / 4 Channel
  - 4CH
  - 2CH

**Specifications:**
- **Rated RMS Power** at 12V: 180W x 2 @ 4 Ω
- **Frequency Response:** 20Hz - 20kHz (-3dB)
- **Input Voltage Range:** 10V - 18V
- **Filter Mode:** High Pass, Low Pass, or High Pass, Shelf, or Link-Bridgeable
- **Dimensions:** 9.33 in x 4.50 in x 1.77 in / 237 mm x 114.5 mm x 45 mm

**Status LED’s / Protection Circuitry:**
- There are two status indicator lights on the wiring end panel of the amplifier.
  1. **POWER** (Green): Lights to indicate that the amplifier is turned on and operating normally.
  2. **PROTECT** (Red): Lights to indicate the amplifier's protection circuitry has been activated to prevent power failure due to thermal overload, over current or short circuit to the amplifier's outputs. When this protection mode is activated, the amplifier will shut down to protect its circuitry. When the problem is corrected, the amplifier will return to normal operation and the "PROTECT" LED will shut off. Connecting the speaker outputs to impedances lower than 2 ohms stereo (4 ohms bridged) will also cause this protection mode to activate.
Appendix A: Input Sensitivity Level Setting

Following the directions below will allow the installer to adjust the input sensitivity of each amplifier channel pair in just a few minutes using equipment commonly available in installation bays.

### Necessary Equipment
- Digital AC Voltmeter
- CD or file with a sine-wave test tone recorded at 0 dB reference level in the frequency range to be amplified for that set of channels (10 Hz for subwoofer channels, 1 kHz for a midrange application). Do not use attenuated test tones (>10 dB, 20 dB, etc.).

### The Nine-Step Procedure
1. Disconnect the speakers from the amplifier's speaker output connectors (you need only disconnect one speaker wire).
2. Turn off all processing (bias, equalization, loudness, EQ, etc.) on the source unit, processors (if used) and amplifier. Set the source unit's fader control to center position and its subwoofer level control to 3/4 of maximum.
3. Turn the "Input Sens." control all the way down.
4. Set the source unit volume to 1/4 of full volume. This will allow for a reasonable gain overlap with moderate clipping at full volume.
5. Using the chart on this page, determine the target voltage for input sensitivity adjustment according to the nominal impedance of the speaker system connected to the amplifier output.
6. Verify that you have disconnected the speakers before proceeding. Play a track with an appropriate sine wave (within the frequency range to be amplified) at 1/4 source unit volume.
7. Connect the AC voltmeter to the speaker output connectors of the amplifier. Make sure you test the voltage at the correct connectors (+ and –).
8. Increase the "Input Sens." control until the target voltage is observed with the voltmeter.
9. Once you have adjusted the amplifier to its maximum low-distortion output level, reconnect the speaker(s) and listen to the system. The "Input Sens." controls can now be adjusted downward if the amplifier requires attenuation to achieve the desired system balance.

### Troubleshooting

#### Problem Possible Cause Solution

- **Faulty fuse**
  - Remove fuse and check with continuity meter. Replace if necessary.
- **Amplifier doesn’t turn-on**
  - Check if there is a sufficient <12V supply at the "Remote" connectors if not a relay may be required.
- **Intermittent output, fluctuations when I tap on it or hit a bump**
  - Poor connection integrity
  - Make sure input connectors are making good contact with input jack of the amplifier.
- **Distorted, attenuated, or popping sound**
  - Faulty speaker connection (Short Circuit / Dear Current Protection)
  - Connect the AC voltmeter to the speaker output connectors of the amplifier. Make sure you test the voltage at the correct connectors (+ and –).
  - Increase the "Input Sens." control until the target voltage is observed with the voltmeter.
- **Poor connection integrity**
  - Make sure input connectors are making good contact with input jack of the amplifier.
- **Output shorts off after a while**
  - Overheating condition (Thermal Protection)
  - Make sure amplifier mounting area has adequate space for ventilation and heat dissipation.

### Important

Do not increase any "Input Sens." setting for any amplifier channel or channel pair in the system beyond the maximum level established during this procedure. Doing so will result in audible distortion and possible speaker damage.

It will be necessary to re-adjust the "Input Sens." for the affected channels if any equalizer boost is activated after setting the "Input Sens." with this procedure. This applies to any EQ boost circuit, including source unit tone controls or EQ circuits. EQ cuts will not require re-adjustment.

### Limited Warranty - Amplifiers (USA)

JL Audio warrants this product to be free of defects in materials and workmanship for a period of two (2) years from the original date of purchase. This warranty is non-transferable and applies only to the original purchaser from an authorized JL Audio dealer. Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction, JL Audio will (at its discretion), repair or replace the defective product with new or remanufactured product at no charge. Damage caused by the following is not covered under warranty: accident, misuse, abuse, product modification or neglect, failure to follow installation instructions, unauthorized repair attempts, misrepresentations by the seller. This warranty does not cover incidental or consequential damages and does not cover the cost of removing or reinstalling the unity). Cosmetic damage due to accident or normal wear and tear is not covered under warranty.

Warranty is void if the product’s serial number has been removed or defaced. Any applicable implied warranties are limited in duration to the period of the express warranty provided herein beginning with the date of the original purchase at retail, and no warranties, whether express or implied, shall apply to this product thereafter. Some states do not allow limitations on implied warranties, therefore these exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

If you need service on your JL AUDIO product:

All warranty returns should be sent to JL Audio’s Amplifier Service Facility freight prepaid through an authorized JL Audio dealer and must be accompanied by proof of purchase (copy of the original sales receipt). Direct returns from consumers or non-authorized dealers will be refused unless specifically authorized by JL Audio with a valid return authorization number. Warranty expiration on products returned without proof of purchase will be determined from the manufacturing date code. Coverage may be invalidated as these date is previous to purchase date. Non-defective items received will be returned freight-collect. Customer is responsible for shipping charges and insurance in sending the product to JL Audio. Freight damage on returns is not covered under warranty.

For Service Information in the U.S.A. please call JL Audio Customer Service: (954) 443-1100 9:00 AM – 5:30 PM (Eastern Time Zone)

### International Warranties

Products purchased outside the United States of America are covered only by that country’s distributor and not by JL Audio, Inc.