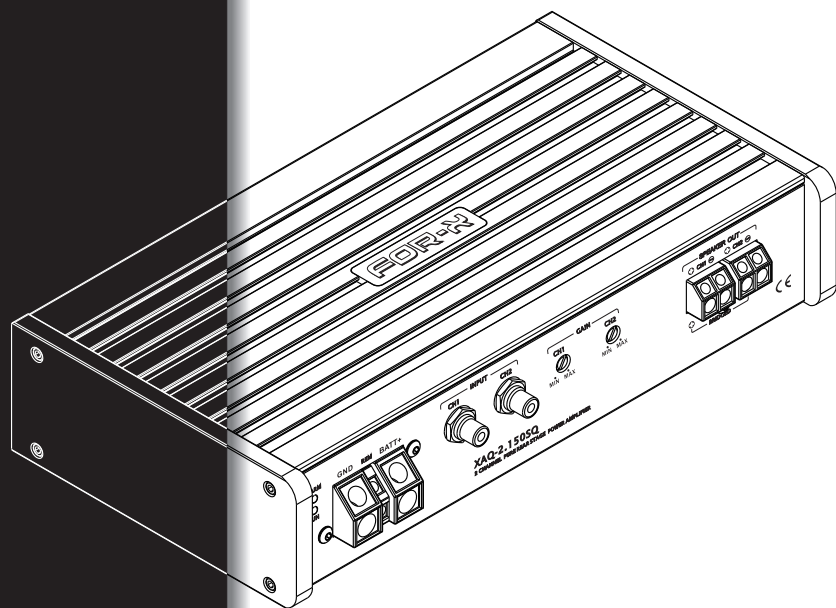


# FOR-X



**XAQ-4.80SQ**  
**XAQ-2.150SQ**

## **OWNERS MANUAL**

**Pure Rear Stage Power Amplifier**

## CONGRATULATIONS

Thank you for purchasing FOR-X Class AB Full Range amplifier for your car audio system. Now you own an amplifier of uncompromising design and engineering.

Incorporating the latest advanced circuit technology. You will discover soon the amplifier displays optimum sound with high quality and reliable performance. All are proven the high quality of FOR-X products.

FOR-X amplifier are the result of advanced craftsmanship which using the highest quality components and strict quality control system. In order to provide you a long joyful listening journey, we recommend you install your amplifier by an authorized FOR-X dealer. It will ensure the proper installation of your amplifier and it will also increase the warranty to one year.

Please read this manual thoroughly to ensure that you can get the maximum benefit from this new amplifier. When you install it properly, this unit will provide you years of trouble-free performance. To be better serve or replace for your amplifier, please record the following information which will help you protect your investment.

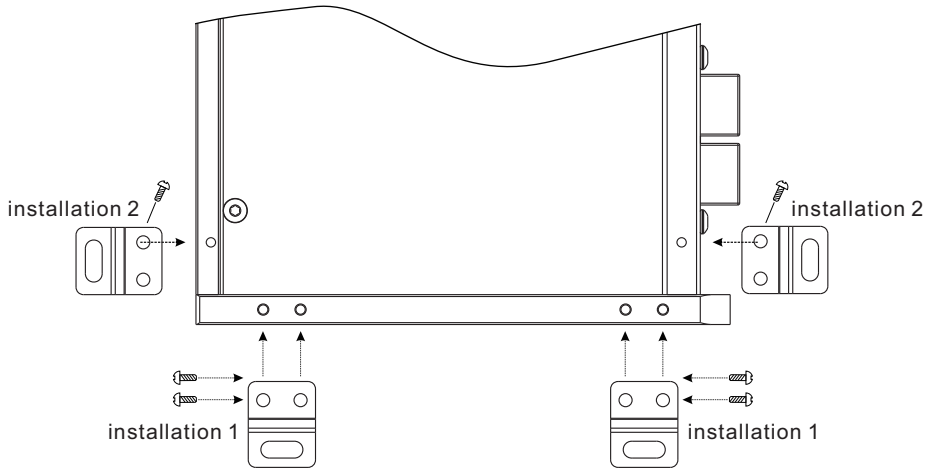
## DESIGN FEATURES

- ☒ High Power, Compact Size Design
- ☒ Single side connection design for convenient installation.
- ☒ MCU Power Management
- ☒ Fully independent separation circuit design of left and right channels
- ☒ High quality SMD components can short the circuit path and avoid EMC interfering. Audio SMD E-Capacitors is optimized for Audio performance
- ☒ With high volume capacitors, N-type MOSFET and High-current high-efficiency switching power supply
- ☒ Overload, Shortcircuit, Overheat, High/Low voltage Protection
- ☒ Rohs Compliant Production Technique

## INSTALLATION

1. Turn the amplifier upside down.
2. Use eight screws from the standard accessories to install four fixtures on the amplifier (Fig. 1). According to the actual installation position of the amplifier, you can flexibly select vertical (installation 1) or horizontal (installation 2) fixtures to install on the amplifier.
3. Use four black screws from the standard accessories to fix the amplifier to the installation position.

(Fig. 1)

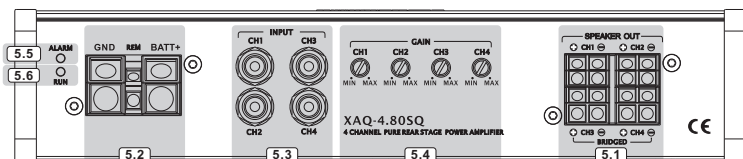


## CONNECTING THE AMPLIFIER

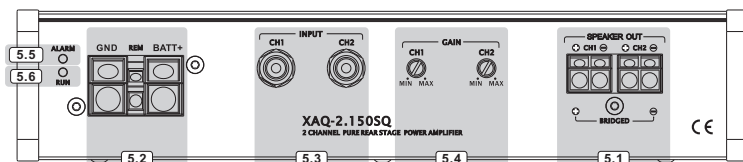
- Please prepare sufficiently to layout car space before installation. We recommend having the installation done by an authorized FOR-X dealer.
- Amplifier requires large electric current consumption when working at full power. Please use good insulated power cable to endure long-term use with high electric current.
- The 12 volt power cable must be connected with a fuse in near 45cm(18") of Battery + terminal.
- Please use car audio RCA cables to connect source unit and amplifier. Make sure the RCA jack must not touch the vehicle body. Power cables and signals cables should be layout separately on two sides of the vehicle. All cables should keep away from equipment such as automobile ignition coil and vehicle computer.
- Don't expose any cable out of your vehicle. Please take care insulated cables to avoid damaged when cables pass through metal, Rubber and plastic etc. Do not pull the cable too tight during installation.
- The amplifier must be mounted securely at a solid, Dry and low vibration surface in the trunk or passenger area. Fix the amplifier in an open air area to insure proper heat dissipation.
- When installing the unit, Be careful to avoid perforations on gas tank, Drake lines, fuel lines, hydraulic lines or electrical wiring etc.

## AMPLIFIER FUNCTIONS

### XAQ-4.80SQ



### XAQ-2.150SQ



#### 5.1:SPEAKER

Connect your speakers correctly which means plus to plus and minus to minus. Never connect the speaker cables to chassis ground directly. It may destroy your amplifier.

#### 5.2:POWER

**BATT+:** Used to connect the positive terminal 12V car battery. In order to ensure adequate power supply for the amplifier, special cable should be used to connect directly to the positive pole of the battery, and the fuse should be connected in series within 20 centimeters from the positive pole of the battery.

**GND:** Used to connect amplifier grounding cable. The power supply grounding cable need to be firmly connected to the frame of the vehicle or other places with good conductivity. Please use the cable with same specifications as the power supply cable and connect to frame of the vehicle near the installation position of the amplifier. Please ensure that the grounding point is good and take appropriate anti-oxidation measures.

**REM:** Connect it to the remote turn on lead of the head unit or signal source so that the amplifier will switch on and off automatically with source unit.

#### 5.3:INPUT

Unit has built-in high-performance balanced input circuit to ensure high fidelity signal input. Meanwhile, It can perfectly filter out the vehicle current noise.

#### 5.4:GAIN

Adjustable Input level control knob

XAQ-2.150SQ / XAQ-4.80SQ input level adjustable between 0.5V ~ 5V

When installing and tuning, it is necessary to adjust the GAIN knob to match the input level of the amplifier with the output level of the sound source equipment.

#### 5.5:ALARM

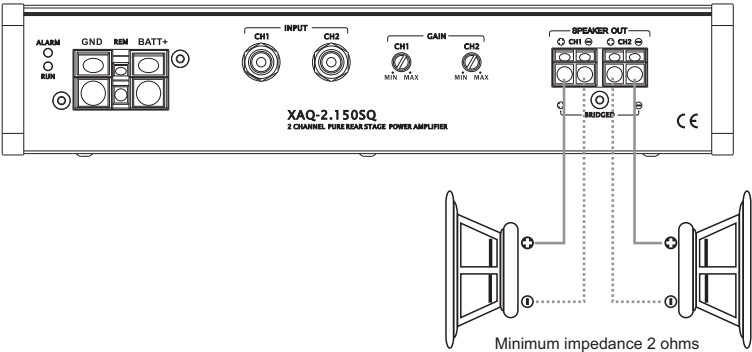
The red led will light up and will be flashing if there is fault presented to the amplifier. This may be caused by one of the following: Short circuit, Overload, Overheating, Over voltage and Under voltage. Please disconnect the amplifier and resolve the fault before reconnecting the amplifier.

#### 5.6:RUN

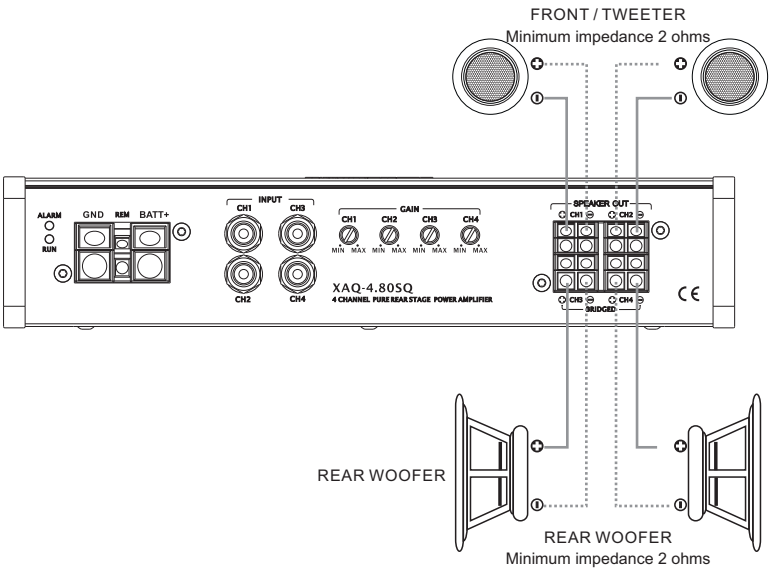
When the unit finishes self-checking and go into proper working status, Blue led will illuminate. (when turn on the amp, Blue led will flash 3 times before it illuminates. Red led will not illuminate.)

AMPLIFIER INSTALLATION WIRING DIAGRAM

XAQ-2.150SQ wiring diagram (stereo connection mode)



XAQ-4.80SQ Connection Diagram (4 Channel/ 2-Way Active Connection Mode)



## TROUBLE SHOOTING

| SYMPTOM                          | POSSIBLE REMEDY                                                                                                                                                                 |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power LED off                    | Check connections both at amplifier and at other ends<br>Check plus and minus battery cables<br>Check all fuse on amplifier<br>Check remote voltage                             |
| No Output<br>(Power LED on)      | Check volume control on the source unit<br>Check GAIN regulator on amplifier<br>Check RCA cables and connections<br>Check speaker cable and connections                         |
| One Channel h<br>as no function  | Check RCA connections of this channel<br>Check speaker connection of this channel<br>Balance regulator of source unit do not set in middle<br>Speaker of this channel is damage |
| Amplifier switches<br>on and off | Check chasis ground connection with amplifier<br>Check cable terminals and battery terminals<br>Low voltage from battery<br>Check remote wire connect righ                      |
| Distorted Output                 | Source unit gain set too high<br>Amplifier gain set too high<br>Speaker(s) blown                                                                                                |
| No Output<br>(Protect LED on)    | Speaker is short circuit or damage<br>Amplifier is over temperature<br>Amplifier overloaded<br>Battery is low voltage                                                           |

If your amplifier is still malfunction after checking through the troubleshooting section, please contact our authorized FOR-X dealer.

**SPECIFICATION**

|                                                  | <b>XAQ-2.150SQ</b> | <b>XAQ-4.80SQ</b> |
|--------------------------------------------------|--------------------|-------------------|
| <b>RMS Power</b>                                 |                    |                   |
| 4 Ohm Load                                       | 2 x 150W           | 4 x 80W           |
| 2 Ohm Load                                       | 2 x 200W           | 4 x 105W          |
| Bridged 4Ohm Load                                | 1 x 380W           | 2 x 240W          |
| <b>Frequency Response</b>                        | 10~50KHz (-3dB)    | 10~50KHz (-3dB)   |
| <b>THD</b>                                       | <0.15%             | <0.15%            |
| <b>Input sensitivity</b>                         | 0.5~5V             | 0.5~5V            |
| <b>Input impedance</b>                           | >20K               | >20K              |
| <b>Intelligent Power Management System</b>       | YES                | YES               |
| <b>S/N ratio</b>                                 | >100dB             | >100dB            |
| <b>Damping factor (4 ohms)</b>                   | >250               | >250              |
| <b>Minimum Load</b>                              | 2 Ohm              | 2 Ohm             |
| <b>Voltage Range</b>                             | 8.2~16V            | 8.2~16V           |
| <b>Recommend to use external fuse</b>            | 60A                | 80A               |
| <b>Product size<br/>(LengthxWidthxHeight )mm</b> | 270 x 143 x 56mm   | 270 x 143 x 56mm  |

