

FEATURES

X-2400.1

- Digital class-D linkable mono-block amplifier
- MOSFET PWM power supply
- Daisy-chain through output RCA
- Double sided through hole epoxy PCB
- Stable into 1 ohm and 2 ohms parallel amplifier connection availability
- 24dB/oct variable crossover
- Variable subsonic filter
- Variable bass boost
- Variable low pass filter
- Variable phase shift
- Efficiency:86% @ 1 ohm ,at 100Hz
- Multi-way protection circuitry (Thermal / over current / speaker short / speaker DC protection)
- RCA line input
- Tested voltage & THD:14.4V& less than 1% THD
- Operating voltage : DC10V~18V power input
- Wired remote controller

SPECIFICATIONS

X-2400.1

Rated power output

- RMS power, 2 ohms linkable/dual mono ----- 4000W R.M.S
- RMS power, 1 ohm mono -----2000W R.M.S
- RMS power, 2 ohms mono ----- 1200W R.M.S

Signal to Noise Ratio ----- >90dB

Low pass frequency crossover ----- 40Hz~180Hz

Subsonic filter ----- 30Hz~80Hz

Bass boost @ 45Hz ----- 0~18dB

Phase shift control ----- 0~180 degree

Frequency response ----- 10Hz~300Hz (+/-1dB)

T.H.D @ 1 ohm ----- <1%

Efficiency @ 1 ohm ----- 86%

Input Sensitivity ----- 150 mV~6V(+/-5%)

Dimensions ----- 430(L) x 234(W) x 62(H)mm

FOR-X

OWNER'S MANUAL

X-2400.1

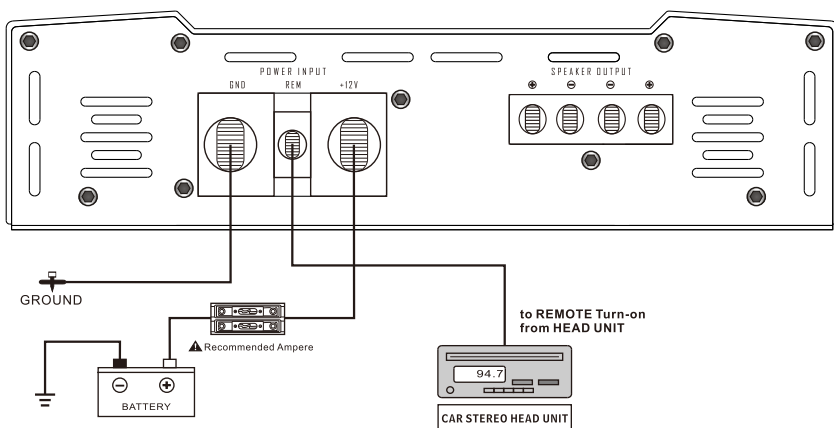
CAR AUDIO SYSTEM

*PLEASE READ CAREFULLY BEFORE INSTALLING
OR OPERATED THIS UNIT*

WARNING

Make sure you choose a suitable place to mount the unit. The position should be completely dry with a good circulation of air, and from a mechanical point of view very stable.

POWER CONNECTIONS



It is important that you read this manual very carefully and follow it for your installation carefully. Before you start your installation, please consider following concerns.

1. Disconnect the negative (-) battery cable before mounting the amplifier or making any connections. Check the battery and alternator ground (-) connections. Make sure they are properly connected and free of corrosion.
2. Before selecting a mounting location for amplifier, please take some concerns into consideration with cooling efficiency and safety.

This amplifier uses heavy-duty and good heat radiation heatsink design for avoiding excess heatsink from amplifier circuitry. But for better heat radiation performance, it is good to find the mounting location where you can install amplifier vertically with the heatsink fins and better air flow around amplifier. For the safety, you have to find a dry and well ventilated location and make sure any wires, cables and car equipment are not interfaced with amplifier installation. Be sure the mounting location and drilling of pilot cables for mounting will not present a hazard to any wires, control cables, fuel lines, fuel tanks, hydraulic lines or other vehicle systems or components.

3. Power connection

Before installing amplifier, disconnect the negative (-) wire from battery to protect any accidental damage to your amplifier and System. This Amplifier is designed to use 8 AWG POWER and GROUND cables.

4. Ground connection

Locate a secure grounding connection as close to the amplifier as possible. Make sure the location is clean and provides a direct electrical connection to the frame of the vehicle. Connect one end of a short piece of the same size cables as the power cable to the grounding point. Run the other end of the cable to the amplifier mounting location. Connect the ground cable to the screw terminal labeled as GND.

5. Remote connection

Run a remote turn on cable from the switched +12V source you will be using to turn on the system components. This may be a toggle switch, a relay, or your source unit's remote trigger wire, or power antenna trigger wire. Connect the remote turn on cable to the power terminal labeled as REM. Run this lead to the amplifier mounting location. Using 16AWG wire or larger.

TROUBLE SHOOTING

This power amplifier has protection features to prevent any damages from misuse or faulty conditions. If the unit senses excessive heat, short circuited speakers or overload, the protection indicators will light, and the system will be turned off. In order to check the occurred problem, you should turn all levels down and all power off and carefully check the installation for wiring mistakes or short.

If the amplifier shuts down due to excessive heat, the protection indicators will not light: simply allow time for the unit to cool.

Before removing your amplifier, refer to the list below and follow the suggested procedures.

Always test the speakers and their wires first.

AMPLIFIER IS NOT POWERED UP

- ◆ Check that there is battery power on the +12V terminal.
- ◆ Check that remote terminal has at least 14.4V DC remote connection.
- ◆ Check a good ground connection. Check all fuses.
- ◆ Check the protection LED is not lit.

PROTECTION LED ILLUMINATES WHEN AMPLIFIER IS POWERED UP

- ◆ Check shorts on speaker wires.
- ◆ Remove speaker wires and reset the amplifier. If the protection LED still comes on, then the amplifier is faulty.

FUSE BLOWING

- ◆ Check that the minimum speaker impedance is correct.
- ◆ Check short on power cable and vehicle chassis.

OVERHEATING

- ◆ Check that the minimum speaker impedance is correct.
- ◆ Check speaker shorts.
- ◆ Check that there is a good airflow around the amplifier.

SOUND TOO LOW -DISTORTED SOUND

- ◆ Check that the input level control is set to match the output level of the unit.
- ◆ Check the head unit volume.
- ◆ Check speaker shorts.
- ◆ Check that crossover frequencies have been properly set.

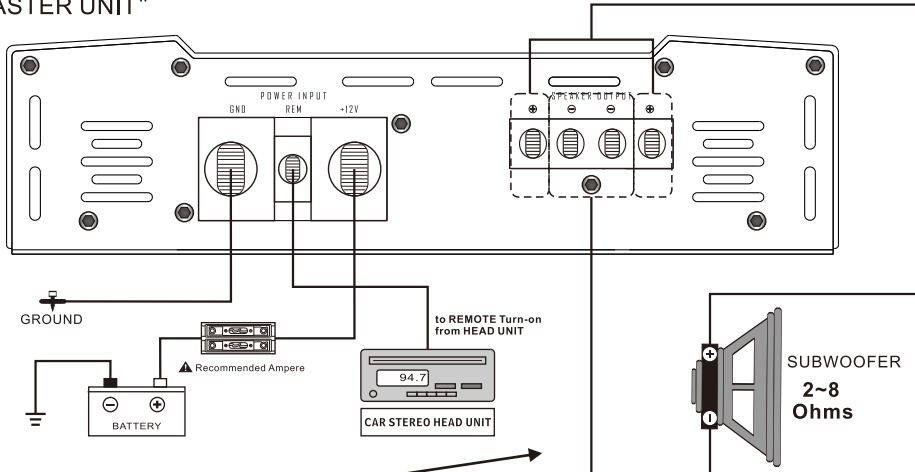
HIGH HISS-ENGINE NOISE IN SPEAKERS

- ◆ Check a good ground and for speaker shorts.
- ◆ Disconnect all RCA inputs from the amplifier. If hiss/noise disappears, check it with a good RCA interconnect. Then check the component driving the amplifier.

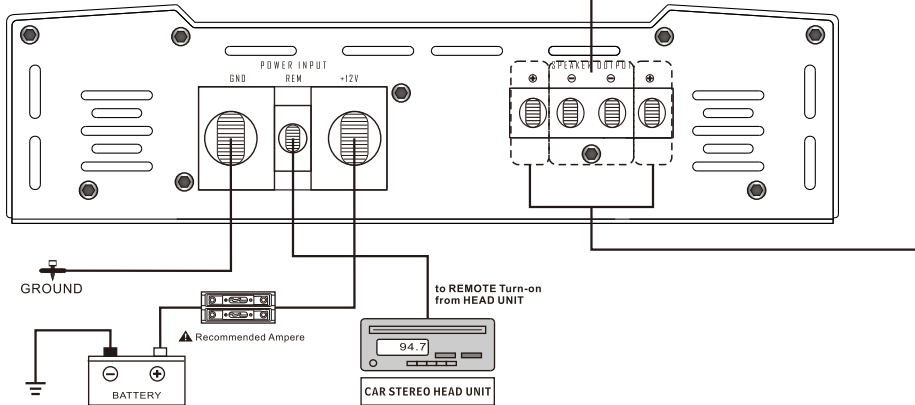
SPEAKER CONNECTIONS

Dual amp. power and speaker connection

"MASTER UNIT"



"SLAVE UNIT" Use 8 Gauge (AWG) wire cable



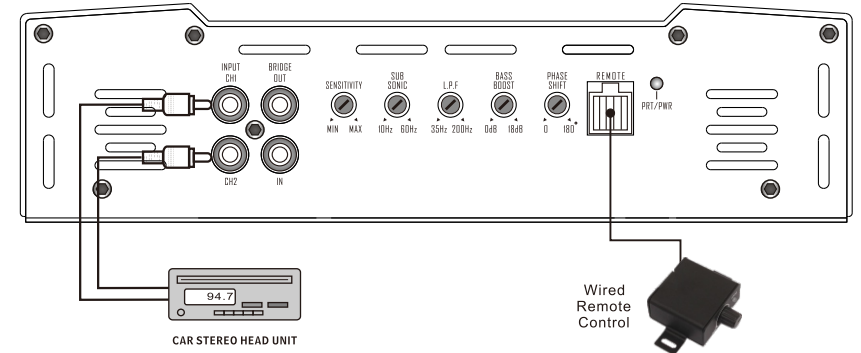
Using a dual amplifier configuration, the MASTER amplifier has total control over the SLAVE amplifier. When using dual amplifier to operate subwoofer, the positive terminal of the subwoofer's voice coil must be connected to the positive terminal of the MASTER Amplifier and the negative terminal of the subwoofer's voice coil must be connected to positive terminal of the SLAVE Amplifier. Be advised that the dual amplifier configuration has tremendous output potential, so ensure that your subwoofers can handle such a large amount of power.

⚠ Caution

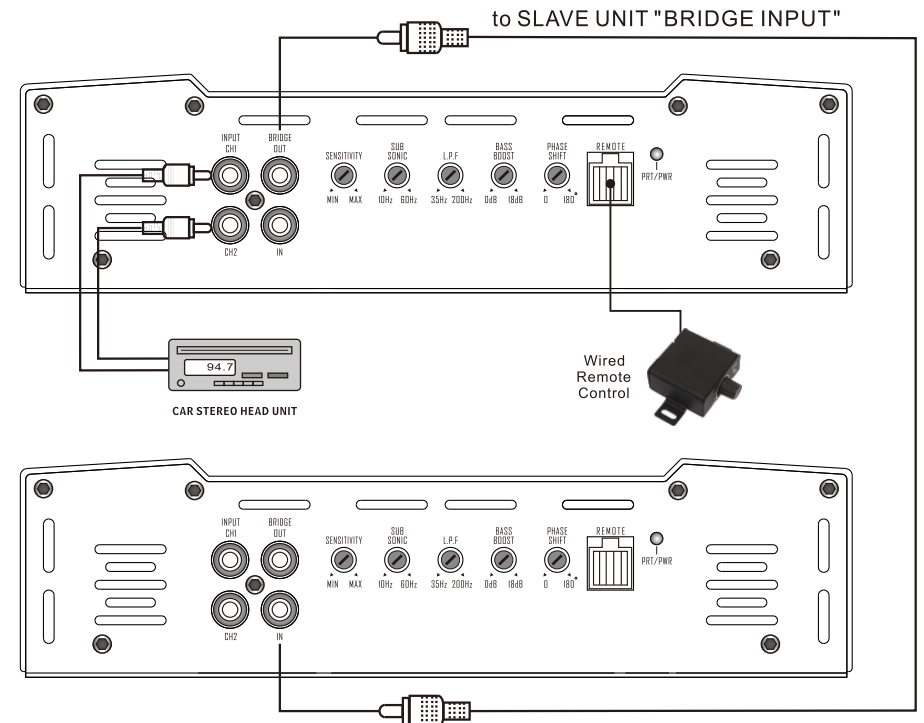
When utilizing the dual amplifier configuration it is important to note that the connected speaker load can be no lower than 2 ohms. Connecting a lower impedance load can damage the amplifier and void your warranty.

RCA CONNECTIONS

Single amp. input connection

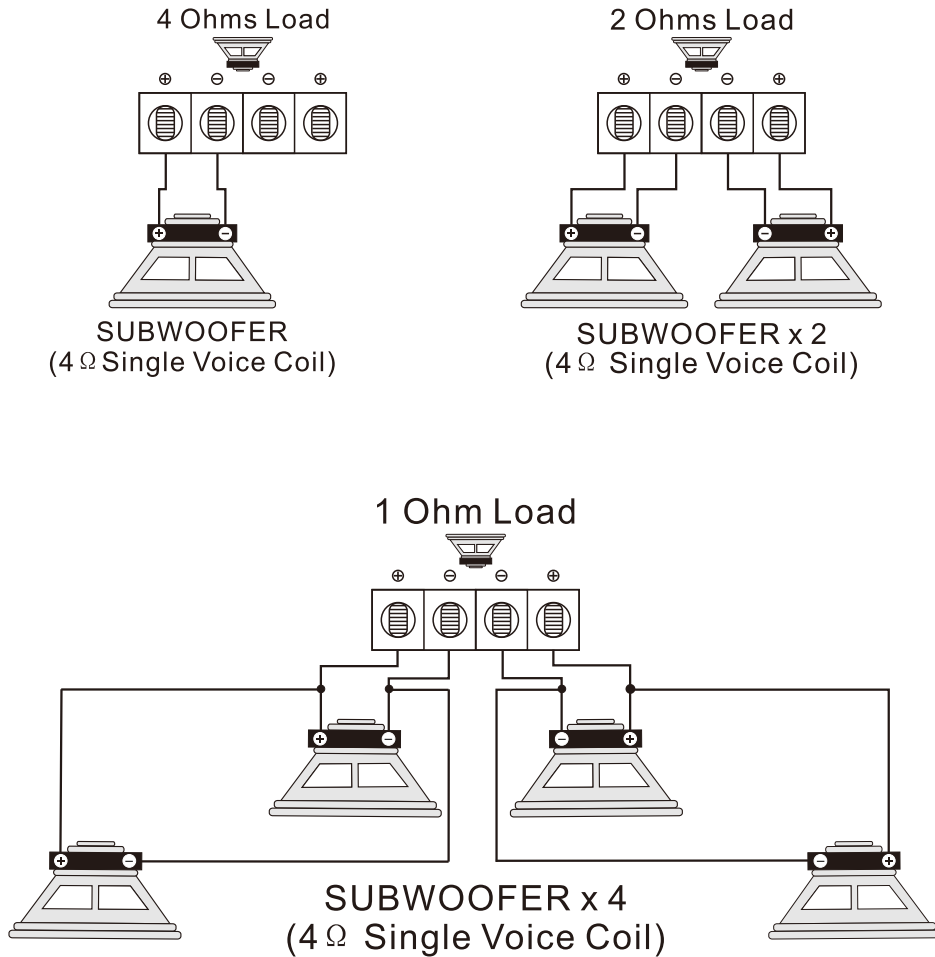


Dual amp. input connection (MASTER & SLAVE RCA connection)



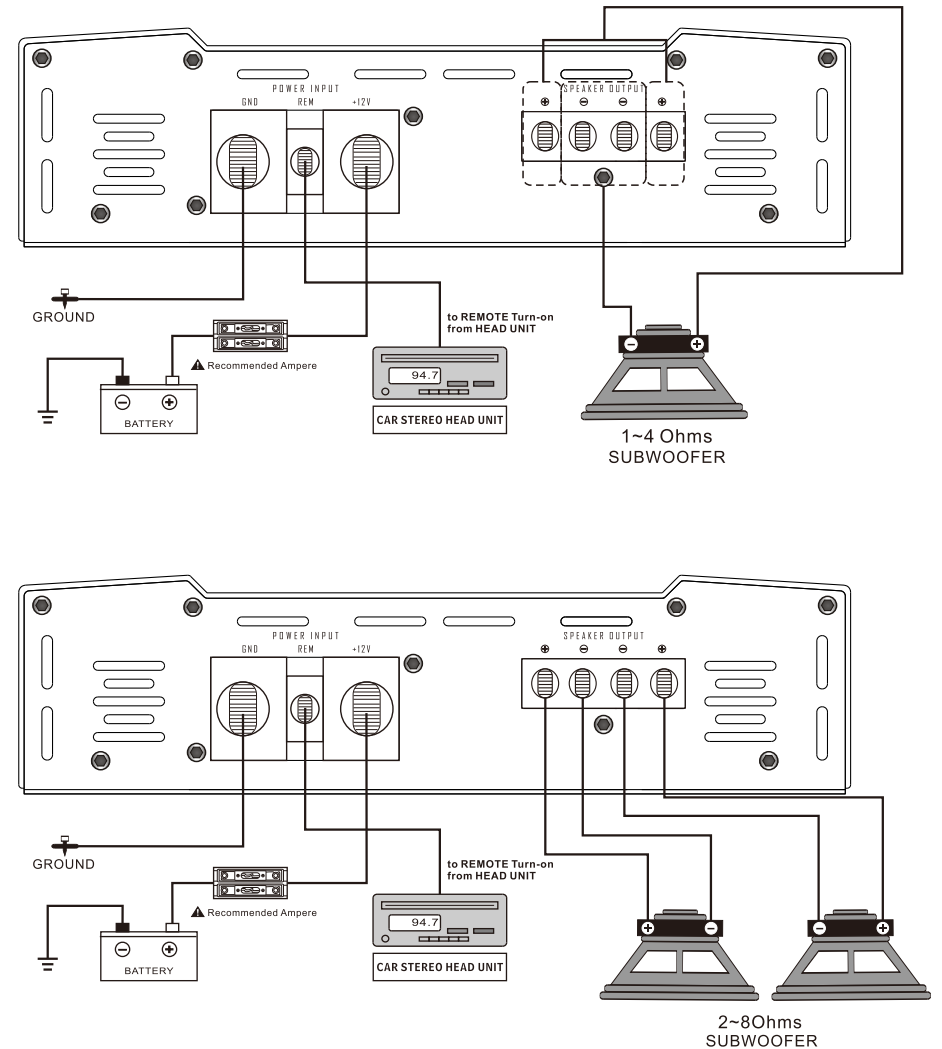
SPEAKER CONNECTIONS

SINGLE VOICE



SPEAKER CONNECTIONS

DUAL VOICE



The positive and negative terminal of the subwoofer's voice coil are connected to the positive and negative terminal of the Amplifier.