

EXPERIENCE THE POWER



USA-50hc

USA-100hc

USA-5Q442

OWNER'S MANUAL

Please read carefully before using

INTRODUCTION

Congratulations and thank you for purchasing USA-series amplifiers, the logical choice in mobile audio amplification. Your amplifiers have been designed and engineered with the highest quality components and top of the line workmanship to help you reach the superior sound you are after.

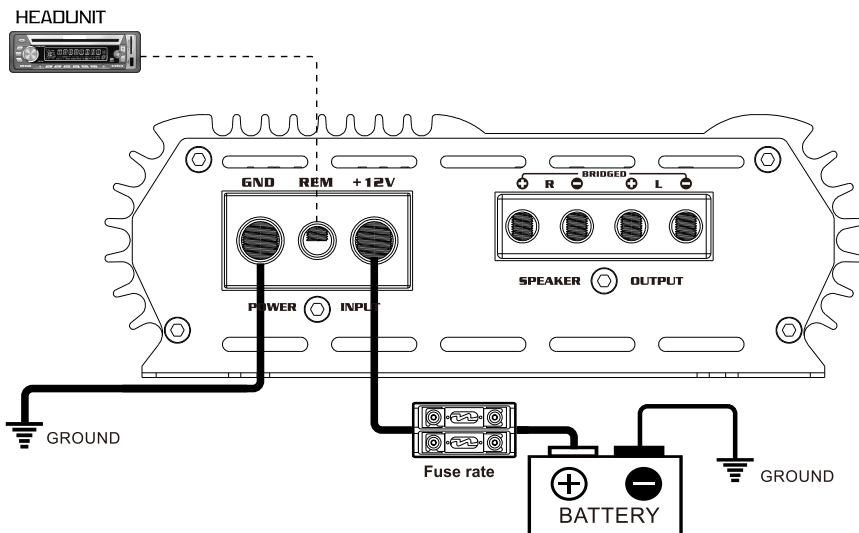
To achieve optimal performance of your system, please take a few moments to read over this Owner's manual or visit authorized dealer if needed before starting your installation.

FEATURES

- ◆ PROPRIETARY POWER SWING
- ◆ HIGH SPEED MOSFET POWER SUPPLY
- ◆ 12dB/OCT, HIGH PASS FILTER
- ◆ 12dB/OCT, LOW PASS FILTER
- ◆ 6dB / 12dB SELECTABLE BASS BOOST / USA-50hc
- ◆ BAND-PASS CAPABLE
- ◆ SURFACE MOUNT TECHNOLOGY
- ◆ DOUBLE SIDED PRINTED CIRCUIT BOARD

SPECIFICATIONS

Model	USA-50hc	USA-100hc	USA-SQ442
RMS power @ 4 ohm	25 X 2	50 X 2	100 X 4
RMS power @ 2 ohm	50 X 2	100 X 2	250 X 4
RMS power @ 1 ohm	275 X 2	500 X 2	
RMS power @ 4 ohm mono			
RMS power @ 2 ohm mono	1000 X 1	1650 X 1	
Working impedance	2 ohm	2 ohm	2 ohm stable
Input Sensitivity	0.2 V-6 V	0.2 V - 6 V	6 V - 0.2 V
High Pass Filter	20 Hz - 5KHz	20 Hz - 5KHz	20 Hz - 6 kHz
Low Pass Filter	50 Hz - 500 Hz	50 Hz - 500 Hz	50 Hz - 500 Hz
Subsonic Filter	-	-	NA
Bass Boost	0dB 6dB 12dB	0dB 6dB 12dB	0 - 6 - 12 dB
Frequency Response	20 Hz - 20 khz	20 Hz - 20 KHz	20 Hz - 20 KHz
Signal to Noise Ratio	>85 dB	85dB	> 105 dB
THD @ 4ohm	0.05% >	0.05%>	0.1% >
Damping Factor	-	-	> 150
Working voltage	9 V - 15 V	9V - 15 V	9 V - 15 V
Fuse Rating	200A	250A	180A
Dimensions (L inches)	17.72	17.72	17.72
6.28 W x 2.19 H inches			



BATT (12V POWER)

Before mounting amplifiers, disconnect the negative cable from the battery to protect any accidental damage to your amplifiers and audio system.

Connect the power cables to power terminal 12V.

All USA-series amplifiers are not equipped with fuses so that external fuses should be used.

Connect one end of fuse holder to the power cable going into the amplifiers 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 holder adequate for the application.

GND (GROUND)

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 cable 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 amplifiers for connection to the amplifiers ground terminals and connect the ground cable to the GND (ground terminal).

REM (REMOTE)

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 cables, or power antenna trigger cable.

Connect the remote turn on cable to the REM (remote) terminal.

TROUBLE SHOOTINGS

- ◆ USA-series amplifiers have protection features to prevent any damages from misuse or faulty conditions.
- ◆ If USA-series amplifiers sense excessive heat, short circuited speakers DC, or voltage the protection indicator will light, and the system will be turned off.
- ◆ In order to check the problem, you should turn all levels down and all power off and carefully check the installation for wiring mistakes or short.
- ◆ If USA-series amplifiers shuts down due to excessive heat, They will be working later when it is cooled down
- ◆ Before removing your amplifier, refer to the list below and follow the suggested procedures.

NO SOUND (NO OUTPUT)

- ◆ Please check all connections, cables' routing, short & voltage.
- ◆ Please check the fuses , If they are blown, please replace with new one..
- ◆ Please check whether speakers work well, you can test speakers by connecting to another amplifier

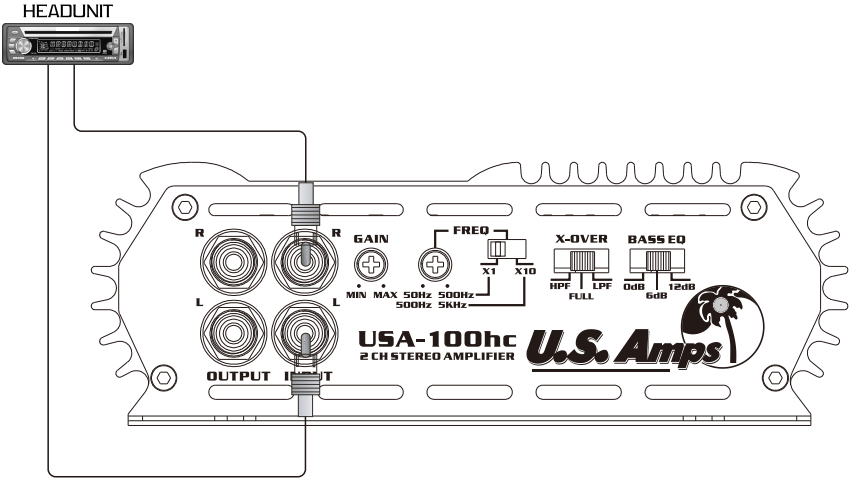
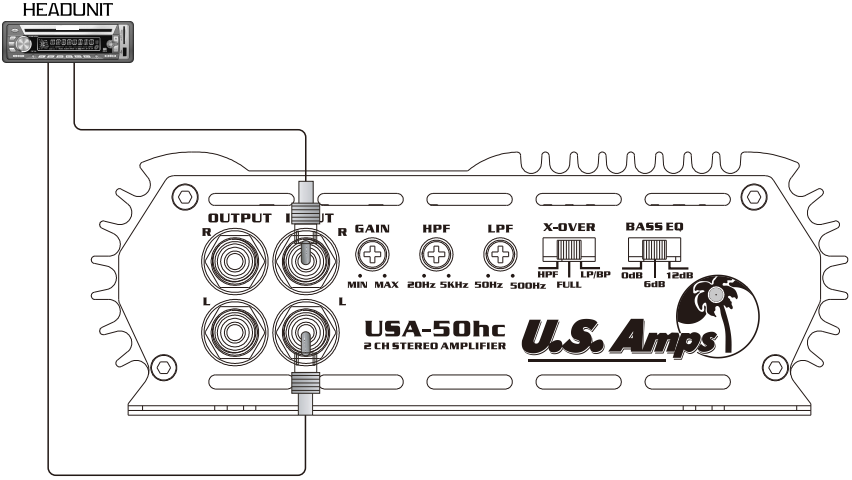
DISTORTION & NOISE

- ◆ Readjust input level and check the speaker quality at another amplifier. Replace poor quality speakers with good quality ones.
- ◆ Check amplifiers and headunit's ground contact. all grounds should be common.
- ◆ Check RCA Jack, then replace with new one or reroute RCA Jack.
- ◆ Engine noise is caused by poor grounding of amplifiers, headunit, other components, battery or alternator, so please check all grounding connection.

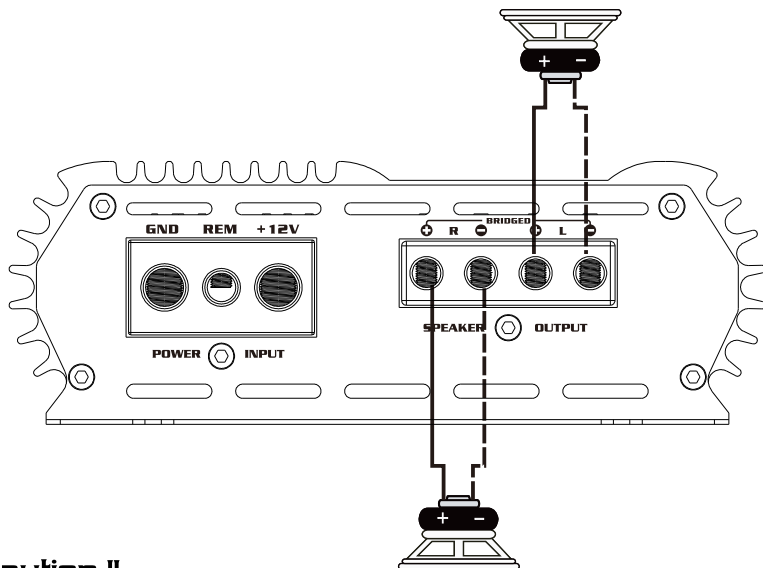
POOR BASS RESPONSE

- ◆ Please check speaker cables and reverse polarity.

2 CHANNEL RCA CONECTION

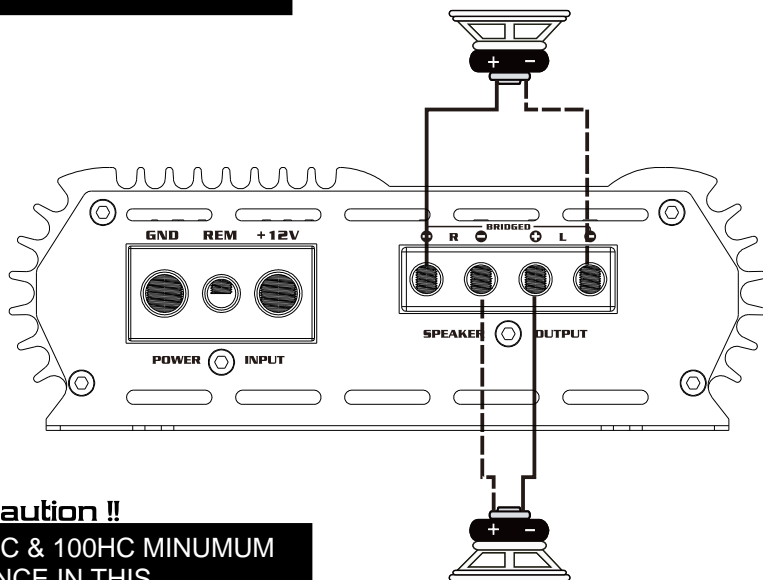


2 CHANNEL SPEAKER CONECTION



! Caution !!

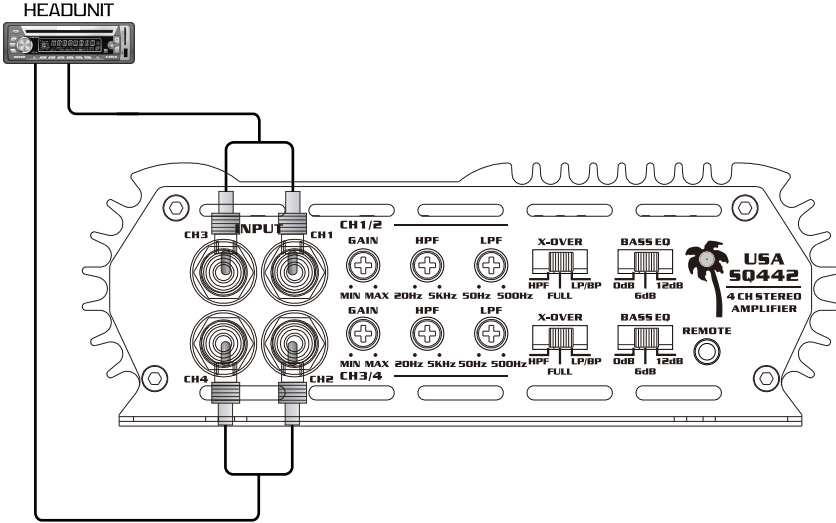
THE 50HC & 100HC MINIMUM
IMPEDANCE IN THIS
CONFIGURATON IS 1 OHM



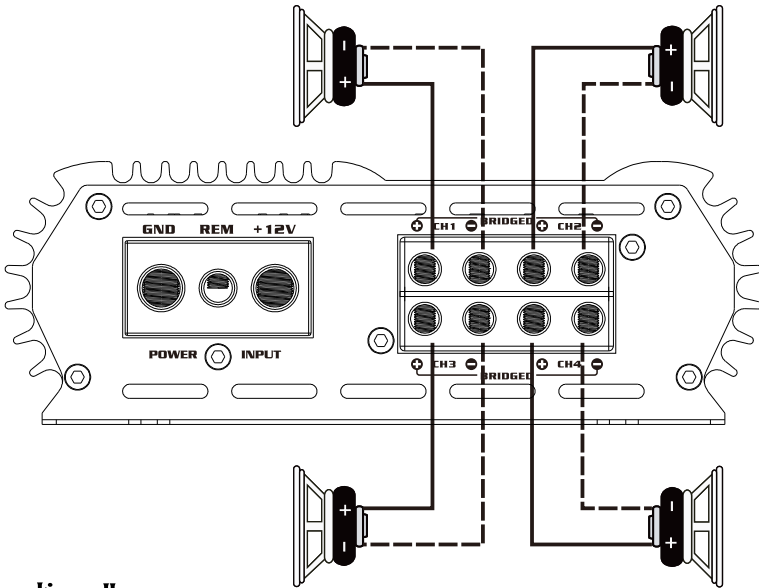
! Caution !!

THE 50HC & 100HC MINIMUM
IMPEDANCE IN THIS
CONFIGURATION IS 2 OHMS

4 CHANNEL RCA CONNECTION

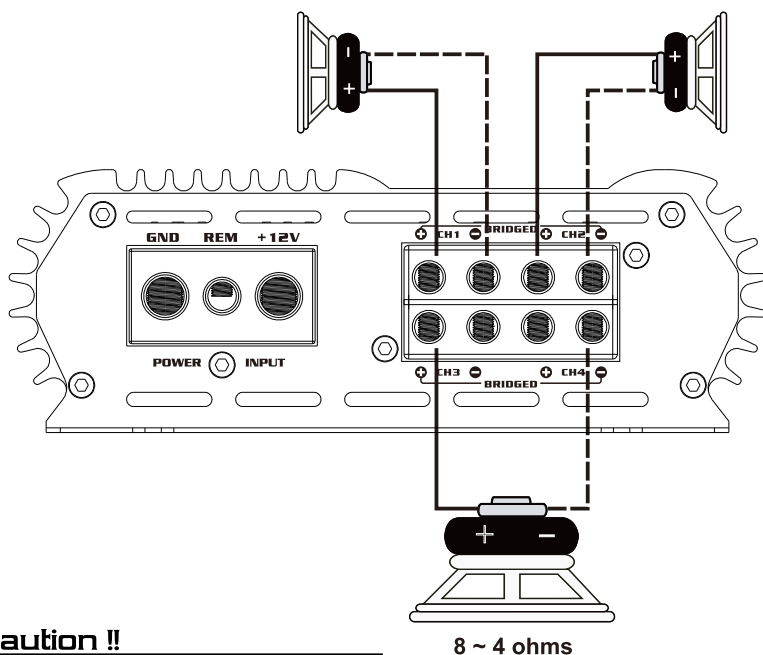


4 CHANNEL SPEAKER CONNECTION



! Caution !!

THE USA-SQ442 MINIMUM
IMPEDANCE IN THIS
CONFIGURATION IS 2 OHMS



Caution !!

THE USA-SQ442 MINIMUM IMPEDANCE IN
THIS CONFIGURATION IS 4 OHMS