

Owner's Manual



1100.1

2100.1

300.4

1000.4

HIGH PERFORMANCE AMPLIFIER

1. Introduction.

Congratulations and thank you for purchasing DC AUDIO 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.

2. Design Features.

Mini Digital monoblock and full range multi-channel amplifiers

- @ Stable into 1ohm load for 1100.1 & 2100.1
- @ Digital monoblock for 1100.1 & 2100.1
- @ Stable into 2ohm stereo for 300.4 & 1000.4
- @ Full range digital circuit for 300.4 & 1000.4
- @ High speed mosfet power supply
- @ Variable Crossover
- @ Remote control for 1100.1 & 2100.1
- @ Clipping indicator
- @ 4 way protection circuit
(Thermal, High & Low voltage, Speaker short & DC)
- @ High Purity copper printed boards
- @ 0 or 4 gauge power & ground terminals

3. Specifications

3-1. Monoblock

FEATURES	1100.1	2100.1
Power @ 4ohm	500W x 1	1000W x 1
Power @ 2ohm	800W x 1	1500W x 1
Power @ 1ohm	1100W x 1	2100W x 1
Frequency Response	10-250Hz	10-250Hz
Signal to Noise Ratio	90dB	90dB
Damping Factor	150 <	150 <
Input Sensitivity	6V-0.2V	6V-0.2V
Low Pass Filter	35-250Hz	35-250Hz
Subsonic Filter	10-50Hz	10-50Hz
Remote Gain Control	Included	Included
Power & Ground terminals.	4 Ga	0 Ga
Working Voltage	9V-16V	9V-16V
External Fuse	100A	200A
Dimensions (Length) (119 W x 50 H mm)	210 mm	330 mm

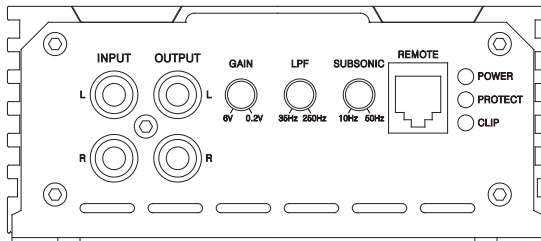
All features are subject to change in the continuing effort to improve the products without notice.

3-2. Multi-Channels

FEATURES	300.4	1000.4
Power @ 4ohm	50W x 4	150W x 4
Power @ 2ohm	75W x 4	250W x 4
Power @ 4ohm bridged	150W x 2	500W x 2
Frequency Response	10~30KHz	10~30KHz
Signal to Noise Ratio	90dB	90dB
Damping Factor	100 <	100 <
Input Sensitivity	6V-0.2V	6V-0.2V
CH1/2		
Crossover	50~500Hz	50~500Hz
Crossover selector	HPF/FULL/LPF	HPF/FULL/LPF
CH3/4		
Crossover	50~500Hz	50~500Hz
Crossover selector	HPF/FULL/LPF	HPF/FULL/LPF
Power & Ground terminals.	4 Ga	4 Ga
Working Voltage	9V-16V	9V-16V
External Fuse	30A	90A
Dimensions (Length)	160 mm	240 mm
(119 W x 50 H mm)		

4. Control & Connection

4-1. Monoblock control



RCA JACK INPUT

Low Level Rca Input will accept the signal from the output of head units. Plug in Rca jack cables from the head unit.

RCA JACK OUTPUT

The preamp output is a full range signal mixed from both input channels. Use this signal to feed a secondary full range amplifier in the system.

GAIN CONTROL (6V - 0.2V)

The gain control adjusts the gain level. so that this is used to match the signal level of different headunits.

LOW PASS FILTER (35Hz - 250Hz)

Linkwitz-Riley low pass crossover ensuring that only the lowest frequencies are reproduced by the amplifier.

SUBSONIC FILTER (10Hz - 50Hz)

Control the high Pass point for the speaker outputs to eliminate extreme low frequencies.

REMOTE CONTROL PORT

This port is for connecting the remote gain control. Remote control can be mounted around driver's seat for easy access.

POWER, PROTECT & CLIP INDICATOR

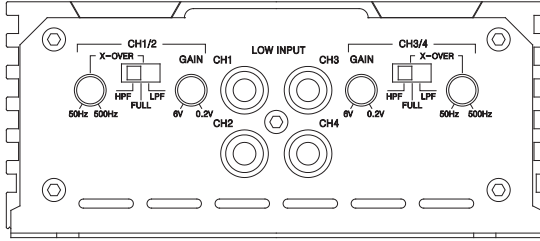
POWER LED : Green-lit shows correct operation.

PROTECT LED : Red-lit shows general malfunction, faulty connection or thermal protection.

CLIP LED : When input signal is close to clipping level, CLIP LED begins to light up.

At full clip, the protection LED will light up

4-2. 4channels control



RCA JACK INPUT

Low Level Rca Input will accept the signal from the output of head units. Plug in Rca jack cables from the head unit.

GAIN CONTROL (6V ~ 0.2V)

The gain control adjusts the gain level, so that this is used to match the signal level of different headunits.

HIGH PASS FILTER (50Hz ~ 500Hz)

Linkwitz-Riley high pass crossover ensuring that only the highest frequencies are reproduced by the amplifier

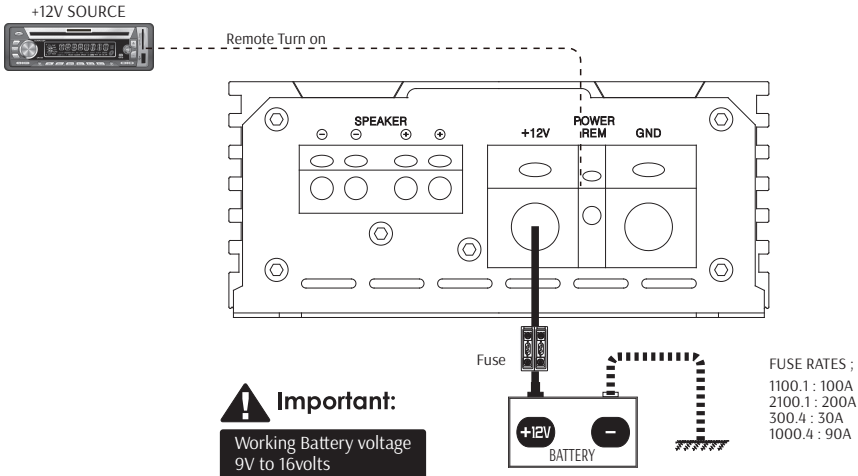
LOW PASS FILTER (50Hz ~ 500Hz)

Linkwitz-Riley low pass crossover ensuring that only the lowest frequencies are reproduced by the amplifier.

X-OVER SELECTOR SWITCH (HPF/FULL/LPF)

Selected x-over is in effective.

4-3. Power, Ground & Remote connection.



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 (0) gauge 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.

+12V (POWER CONNECTION)

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

Amplifiers are designed to use 4 (0) gauge power and ground connection.

Connect the power cables to power terminal + 12V.

All amplifiers do not have built-in fuses so they need external fuse connection.

Connect one end of fuse holder to the power cable going into the amplifiers and the other end of fuse holder to positive battery.

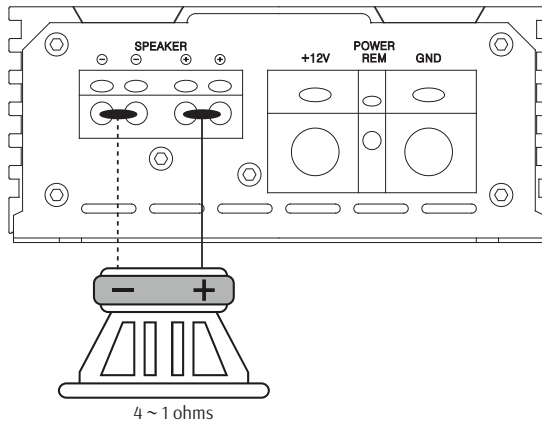
This fuse location will protect the system and the vehicle against the possibility of a short circuit in the power cable. Be sure to use fuses and fuse holder adequate for the application.

SPEAKER OUTPUT

This terminal connects the amplifiers to the speaker systems. Minimum speaker cable should be larger than 12 gauge.

Connect carefully the subwoofer or the speakers by checking the impedance 1ohm for 1100.1 & 2100.1 2ohm stereo or 4ohm bridged for 300.4 & 1000.4

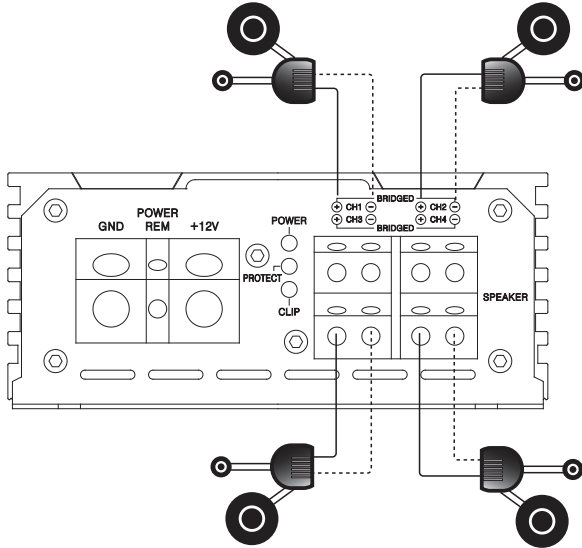
4-4. Monoblock speaker connection.



Caution !!

1100.1 & 2100.1
Minimum working impedance is 1ohm.
Impedance lower than 1ohm can damage the amplifier

4-5. 4 channels speaker connection.

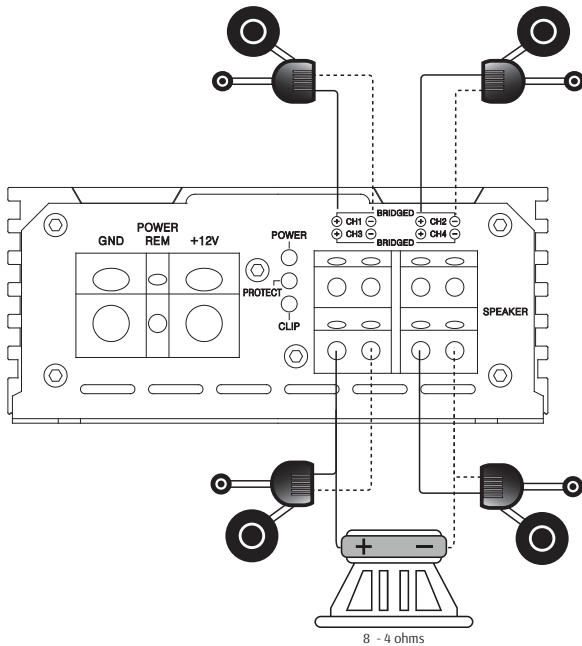


Caution !!

300.4 & 1000.4

Minimum working impedance is 2ohm stereo or 4ohm bridged.

Impedance lower than 2ohm can damage the amplifier



5. TROUBLE SHOOTING

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

PROTECTION

- @ Please check overload, overheat (thermal), short and voltage, DC offset.
- @ Minimum working impedance is 1 ohm for 1100.1 & 2100.1.
2ohm stereo or 4ohm bridged for 300.4 & 1000.4.
- @ If amplifiers are shut down due to heat, they will be on some minutes later after cooling down.
Please make better airflow and no obstruction around amplifiers for thermal protection.
- @ All amplifiers working voltage is 9V ~ 16Volts.
- @ When over 4V DC comes into amplifiers, then, they will be DC protected.
Check whether amplifiers work after removing RCA-Input.
If amplifiers work, then check DC by checking RCA-input .
When DC is over 4V at input, try by replacing +12V source unit .

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.

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