



REISS AUDIO

your car hifi specialist

OWNER'S MANUAL

FR SERIES

CAR AMPLIFIERS

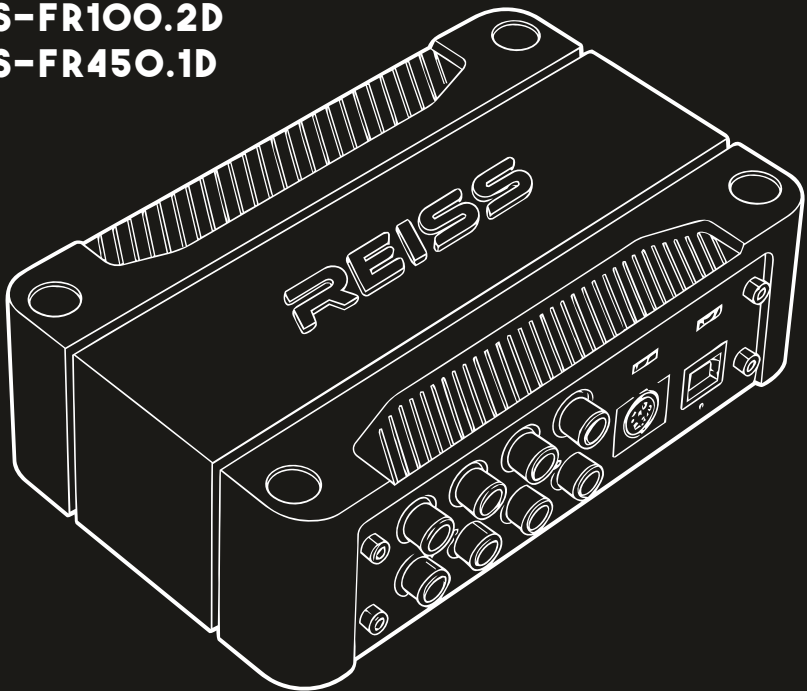
RS-FRP8DSP40.4

RS-FR60.4D

RS-FRP50.4D

RS-FR100.2D

RS-FR450.1D



Since 1985

TURKISH ENGINEERING

Congratulations on purchasing the High Speed Power Amplifier. The amplifier has been designed using the latest electronic technology available, allowing you to produce high quality stereo reproduction in mobile applications. This system provides you with low harmonic distortion, a huge considerable amount of reserve voltage and high temperature stability.

Just enjoy the perfect sound this amplifier produces!

INSTALLATION

* Since the amplifier is sensitive to electrical and motor noise and interference from the amplifier may affect your radio reception, try to mount it at least 3 feet away from the receiver. Good locations include under a seat, in the trunk or hatch area.

* Please remember this is a high power unit which generates high electrical energy and heat. Therefore be sure to install the unit in a place with sufficient airflow, a minimum of dust and no moisture. Allow enough space around the cooling fins to permit reasonable airflow and cooling. It is important to ensure that the cooling fins of the heat sink are not against a panel or a surface preventing air circulation.

* Never mount the amplifier in a location that is subject to direct sunlight or exposed to moisture. Be sure to mount the amplifier to a strong, solid surface which will not give way under the stress of a sudden stop or accident.

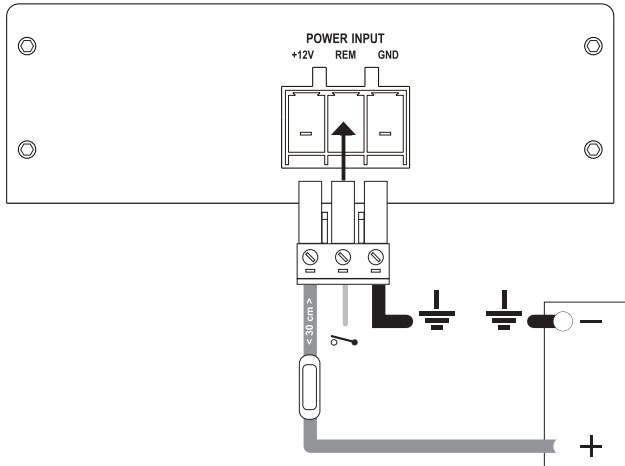
* When mounting the amplifier on a side wall, try to position it so that the slots in the cooling fins are vertical. Amplifier should not be mounted on the bottom of a rear deck with the fins facing down because the heat will radiate back up into the amplifier. Leave yourself enough room on either side of the amplifier to make all the wire connections and adjust the controls. If you have a subwoofer box in your vehicle, you can mount the amplifier on the outside of the box.

Caution: If you are mounting the amplifier to the vehicle's floor, check beneath the car to be sure your screws won't puncture a brake or gas line.

WARNING!

Continuous exposure to sound pressure levels over 100dB may cause permanent hearing loss. High power autosound system may produce sound pressure levels well over 130dB, use common sense and practice safe sound please!

POWER CONNECTION



IMPORTANT! Before making any connections, disconnect the car's battery until the installation is completed to avoid possible damage to the electrical system

* The +12V DC power cable should be heavy gauge stranded copper cable with heavy insulation, since it draws power directly from the positive battery terminal. Select the cable gauge at least 10mm^2 . And the ground cable gauge should be the same as the +12V DC.

* Connect the +12V Power terminal to the battery (+) position terminal. An in-line fuse must be installed in the +12V power cable near the battery less than 50mm. **Without one**, an accidental short circuit could pose a fire hazard and damage your amplifier. Connect the fuse holder to battery, however, do not install fuse at this time.

* Connect the GROUND Power terminal directly to the battery (-) position terminal or the car chassis. Ensure that all paint or other insulation is removed from around the hole area, and using self tapping screw, securely affix the bare wire ends to the vehicle chassis. Use as short as possible.

* Many radio's and other music sources have an output terminal for connection of the remote turn on of the power amplifier. **CONNECT** the output terminal to the amplifier REM control jack. If a radio doesn't have a remote turn on feature, you can connect the REM pole to external switch for positive +12V ON/OFF.

* To help minimize interference, it is best to run the power cables along the opposite side from the audio cables.

Caution: The power cables must be connected tightly. A loose connection may cause malfunctions or interference noise or distortion.

4 CHANNEL DSP POWER AMPLIFIER – FEATURES

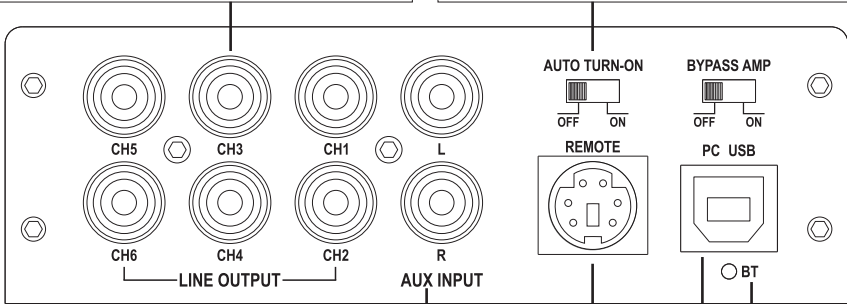
RS-FRP8DSP40.4

HIGH LEVEL INPUT

The RCA outputs CH1 - CH6 deliver the output signals modified by the DSP for other devices such as external amplifiers or active subwoofer systems.

AUTO TURN-ON

If your head unit does not have a turn-on signal (REM), you can use the automatic turn-on function of the device.



AUX INPUT

Connect the two RCA inputs AUX IN to the preamplifier outputs of another signal source using a suitable audio signal cable.

REMOTE CONTROL

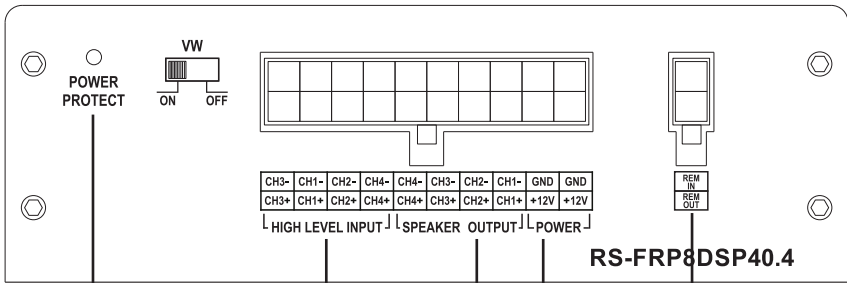
Adjust the low pass signal via the enclosed remote control

PC USB

This USB input is intended for the connection to a PC/laptop in order to set the DSP functions with the DSP Master software.

BT

The BT LED lights up as soon as the amplifier is connected to a Bluetooth device for audio streaming or for DSP control via smartphone app.



HIGH LEVEL INPUT TERMINALS

SPEAKER OUTPUT TERMINALS

RS-FRP8DSP40.4

REM IN

Connect a turn-on signal or the turn-on remote signal of your head unit (REM) with the REM IN terminal.

REM OUT

The REM OUT terminal can be connected with the REM terminal of another device to provide a turn-on signal (REM OUT function).

POWER ON LED

Lights up when the amplifier is energized indicating the unit is on

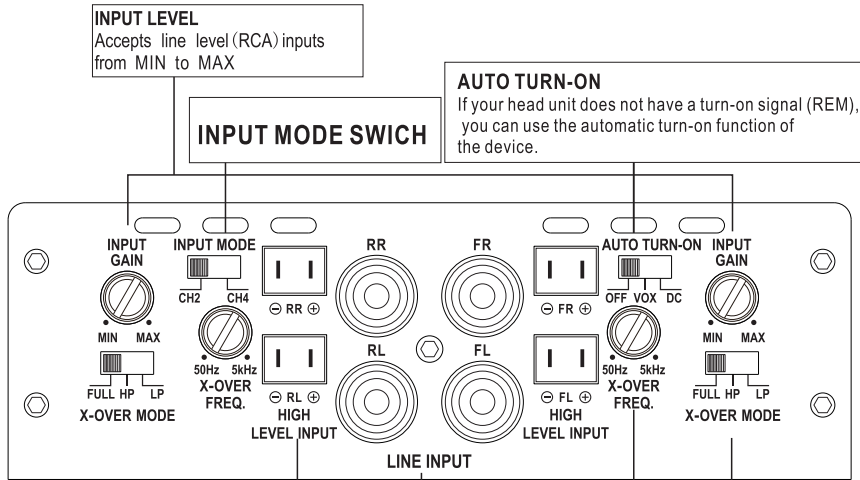
PROTECT LED

Lights indicating the amplifier has gone into a protection mode

POWER SUPPLY TERMINALS

4 CHANNEL AMPLIFIER – FEATURES

RS-FR60.4D



INPUT LEVEL
Accepts line level (RCA) inputs from MIN to MAX

INPUT MODE SWITCH

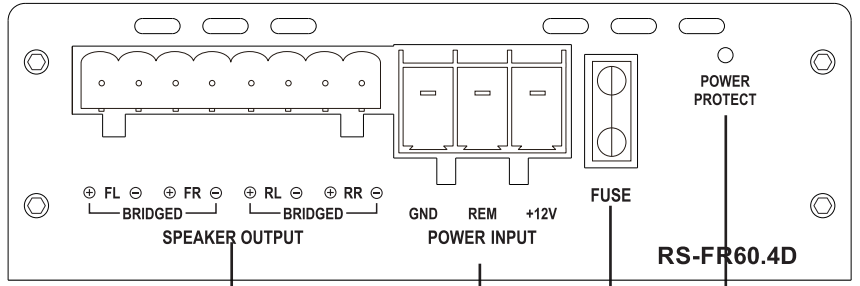
AUTO TURN-ON
If your head unit does not have a turn-on signal (REM), you can use the automatic turn-on function of the device.

HIGH LEVEL INPUT TERMINALS

X-OVER MODE
Crossover selector switch

LINE INPUT
The LINE INPUT RCA jacks must be connected with the RCA output jacks of the headunit

X-OVER FREQ.
Rotary controller for high pass / low pass filter > FRONT



SPEAKER OUTPUT TERMINALS

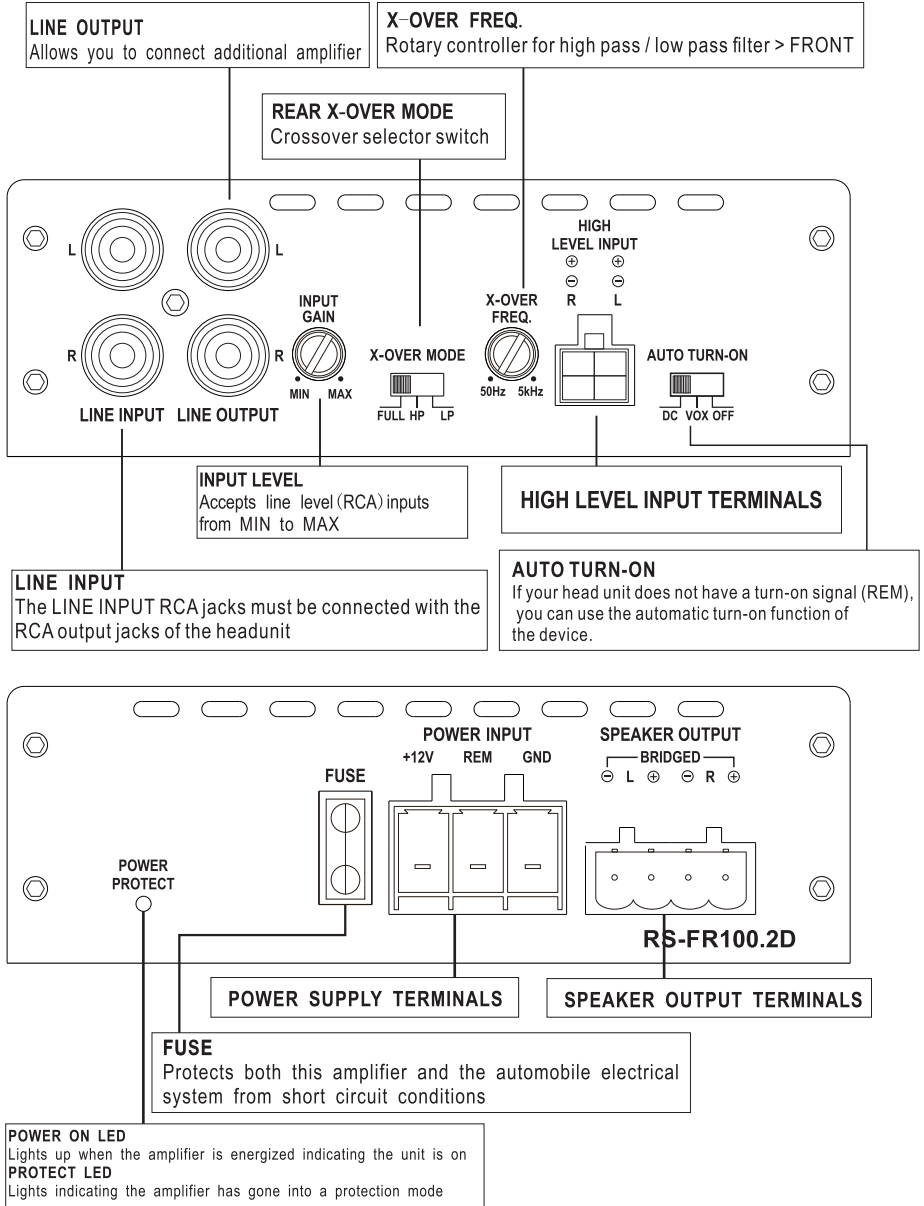
POWER SUPPLY TERMINALS

FUSE
Protects both this amplifier and the automobile electrical system from short circuit conditions

POWER ON LED
Lights up when the amplifier is energized indicating the unit is on
PROTECT LED
Lights indicating the amplifier has gone into a protection mode

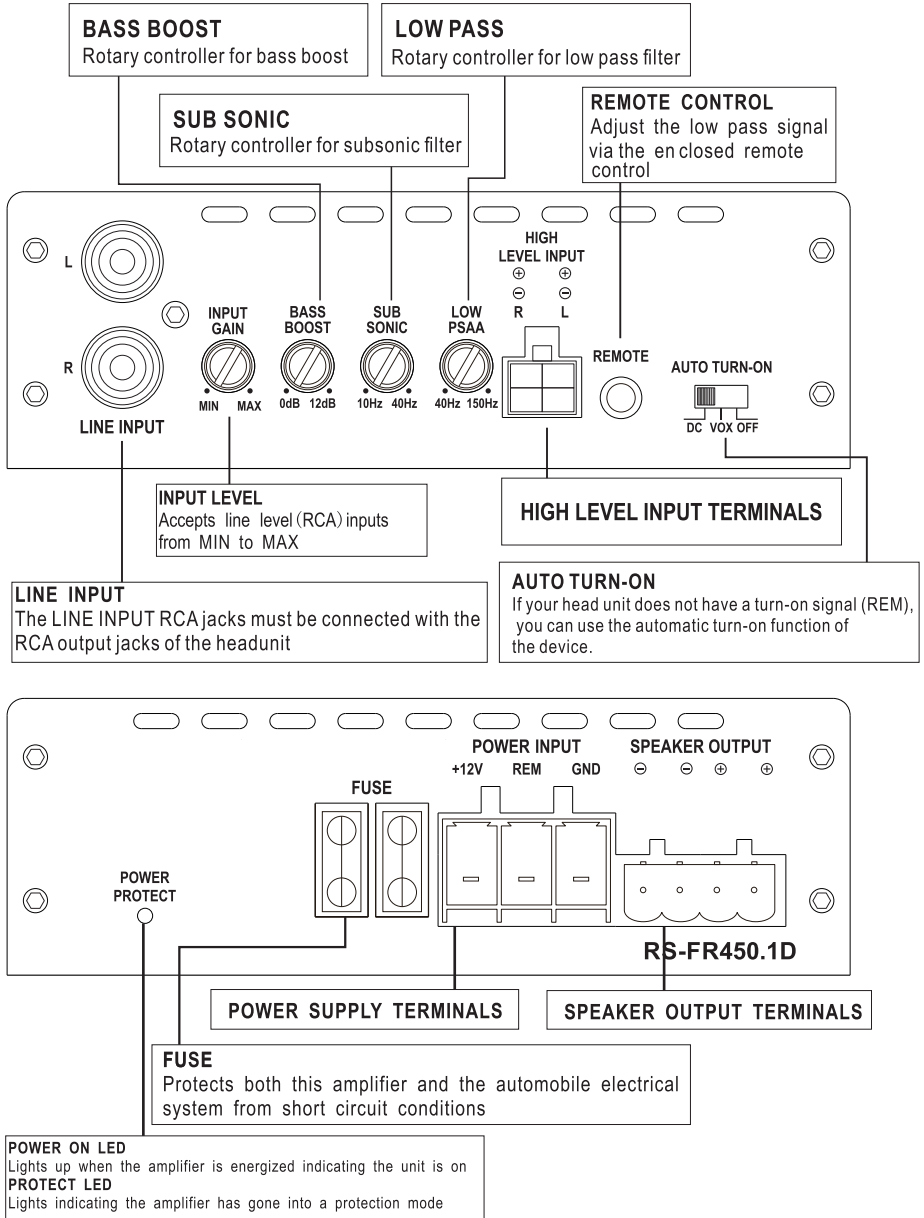
2 CHANNEL AMPLIFIER – FEATURES

RS-FR100.2D



1 CHANNEL AMPLIFIER – FEATURES

RS-FR450.1D



4 CHANNEL AMPLIFIER – APPLICATIONS

INPUT CONNECTIONS

* This amplifier has RCA connections for low level inputs. Low level signal is carried through RCA cables. It is preferred to use low level inputs to the amplifier if the head unit is equipped with the low level outputs.

SPEAKER OUTPUT CONNECTIONS

You do not need to make any adjustment for the input connection of amplifier before you connect the speaker output.

* Connect right and left speaker wire to corresponding speaker output terminals of the amplifier.

* Be sure to have the positive wire from the speaker to the positive speaker terminal of the amplifier and the negative wire from the speaker must connect with the speaker terminal of the amplifier. Reversing any of these connections will result in the speaker cones moving out of phase which causes bass cancellation.

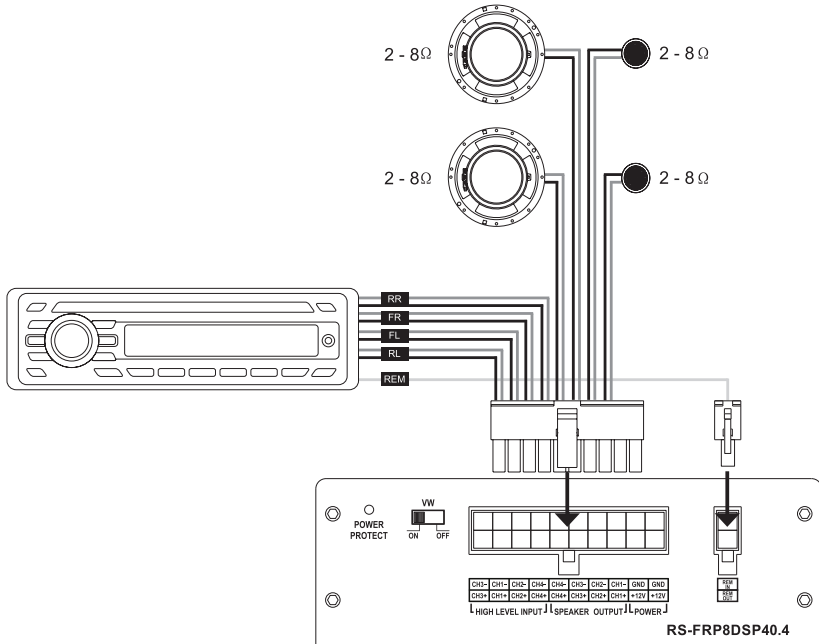
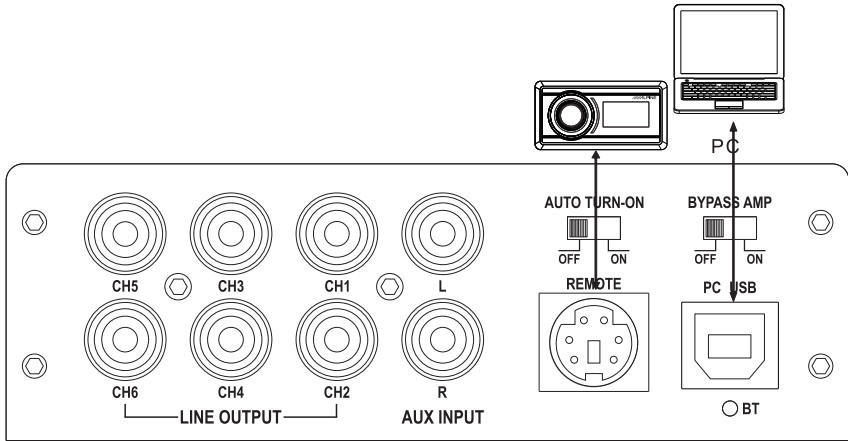
LEVEL CONTROLS

Turn the VOLUME control on the amplifier to Min initially.

Once the initial power sequence has been performed, set the CD/RADIO volume control to roughly 80% of full. Insert a CD or tune to a radio station and slowly turn up the amplifier VOLUME control until you hear some distortion, and then back it off for clean sound.

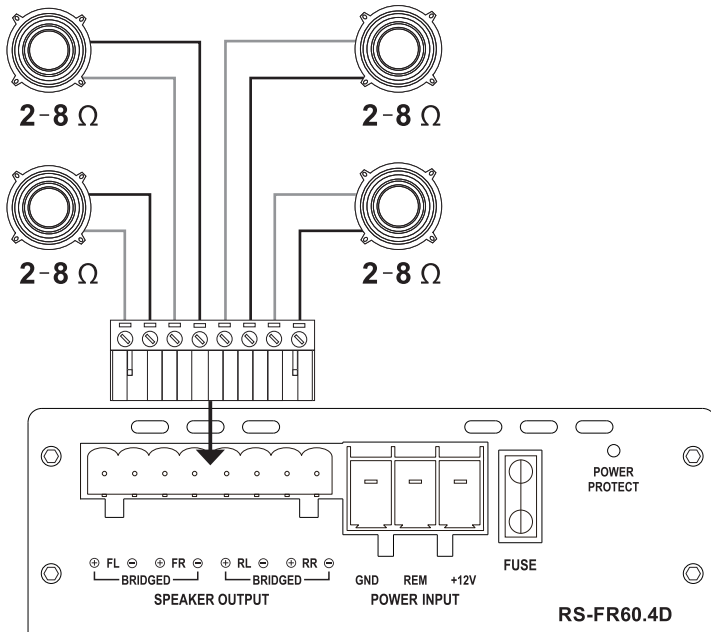
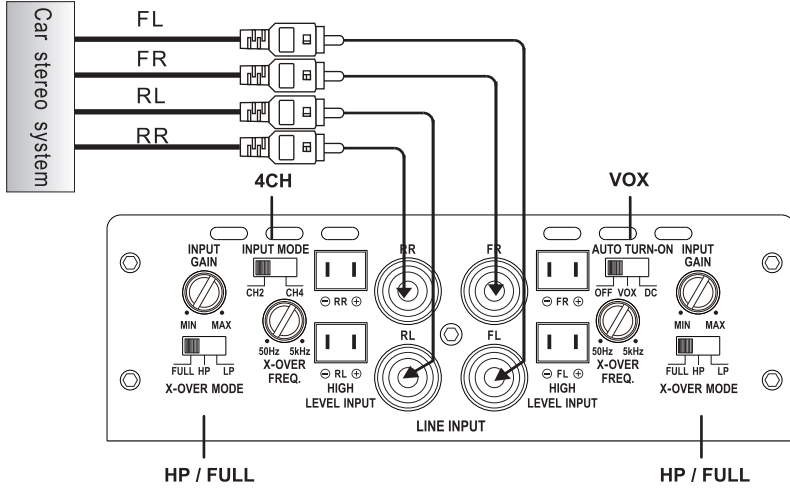
4 CHANNEL DSP POWER AMPLIFIER – APPLICATIONS

RS-FRP8DSP40.4



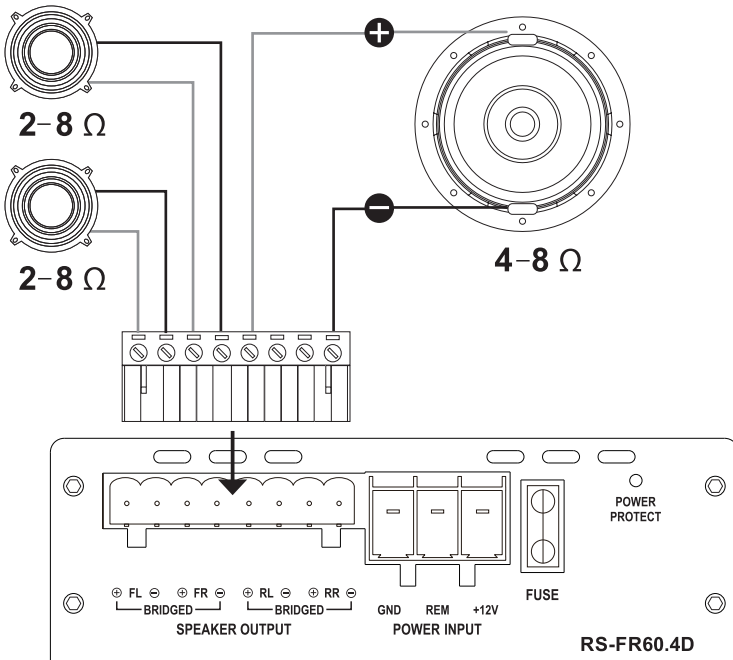
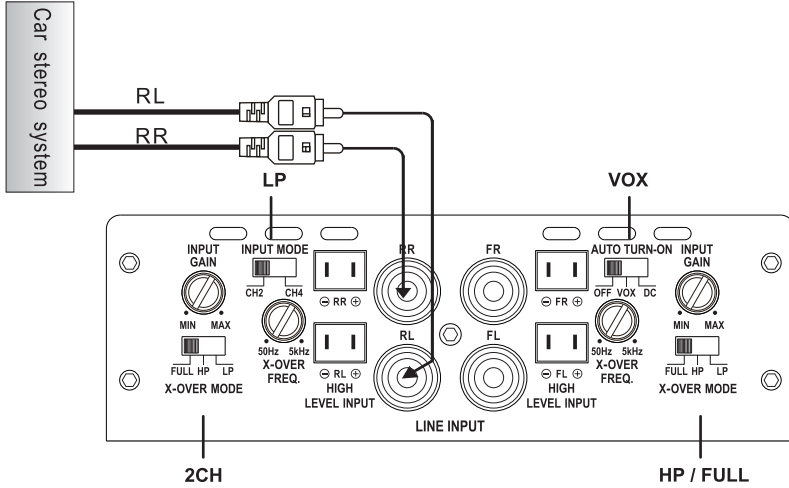
4 CHANNEL AMPLIFIER – APPLICATIONS

RS-FR60.4D 4 CHANNEL MODE



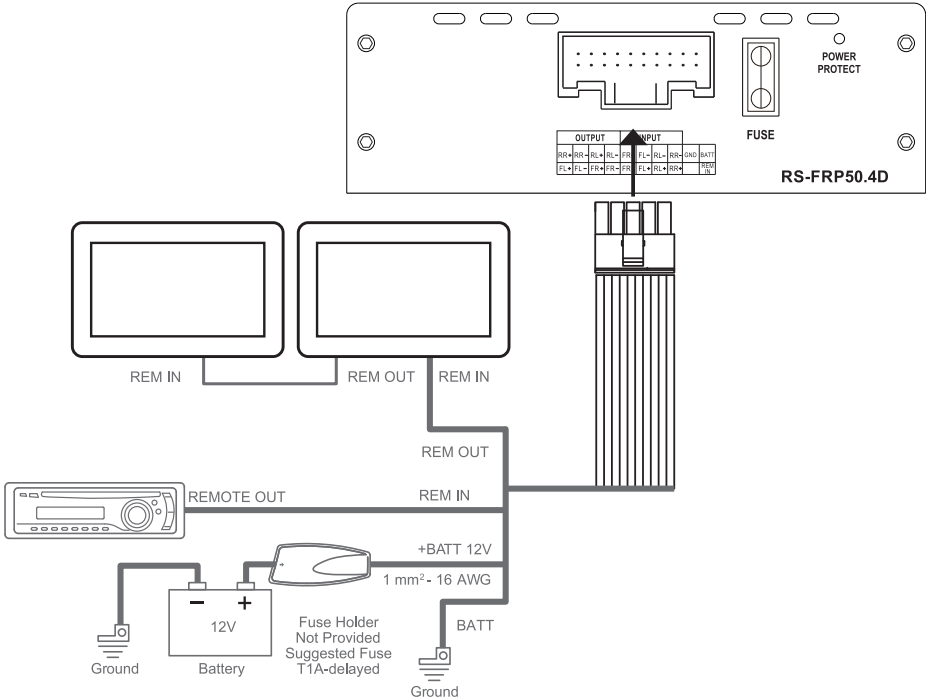
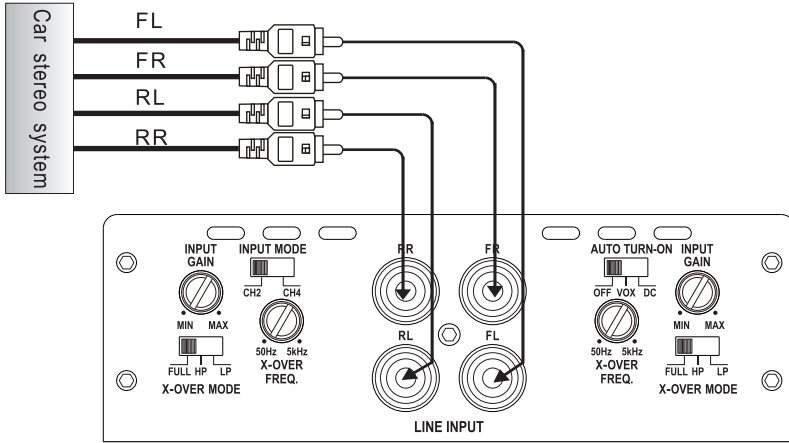
4 CHANNEL AMPLIFIER – APPLICATIONS

RS-FR60.4D 3 CHANNEL MODE



4 CHANNEL AMPLIFIER – APPLICATIONS

RS-FRP50.4D



2 CHANNEL AMPLIFIER – APPLICATIONS

INPUT CONNECTIONS

* This amplifier has RCA connections for low level inputs. Low level signal is carried through RCA cables. It is preferred to use low level inputs to the amplifier if the head unit is equipped with the low level outputs.

* This amplifier has high input connection. High level input is used from radios that do not have line-level outputs.

* **Be sure not to use both low and high level inputs simultaneously!**

SPEAKER OUTPUT CONNECTIONS

You do not need to make any adjustment for the input connection of amplifier before you connect the speaker output.

* Connect right and left speaker wire to corresponding speaker output terminals of the amplifier.

* Be sure to have the positive wire from the speaker to the positive speaker terminal of the amplifier and the negative wire from the speaker must connect with the speaker terminal of the amplifier. Reversing any of these connections will result in the speaker cones moving out of phase which causes bass cancellation.

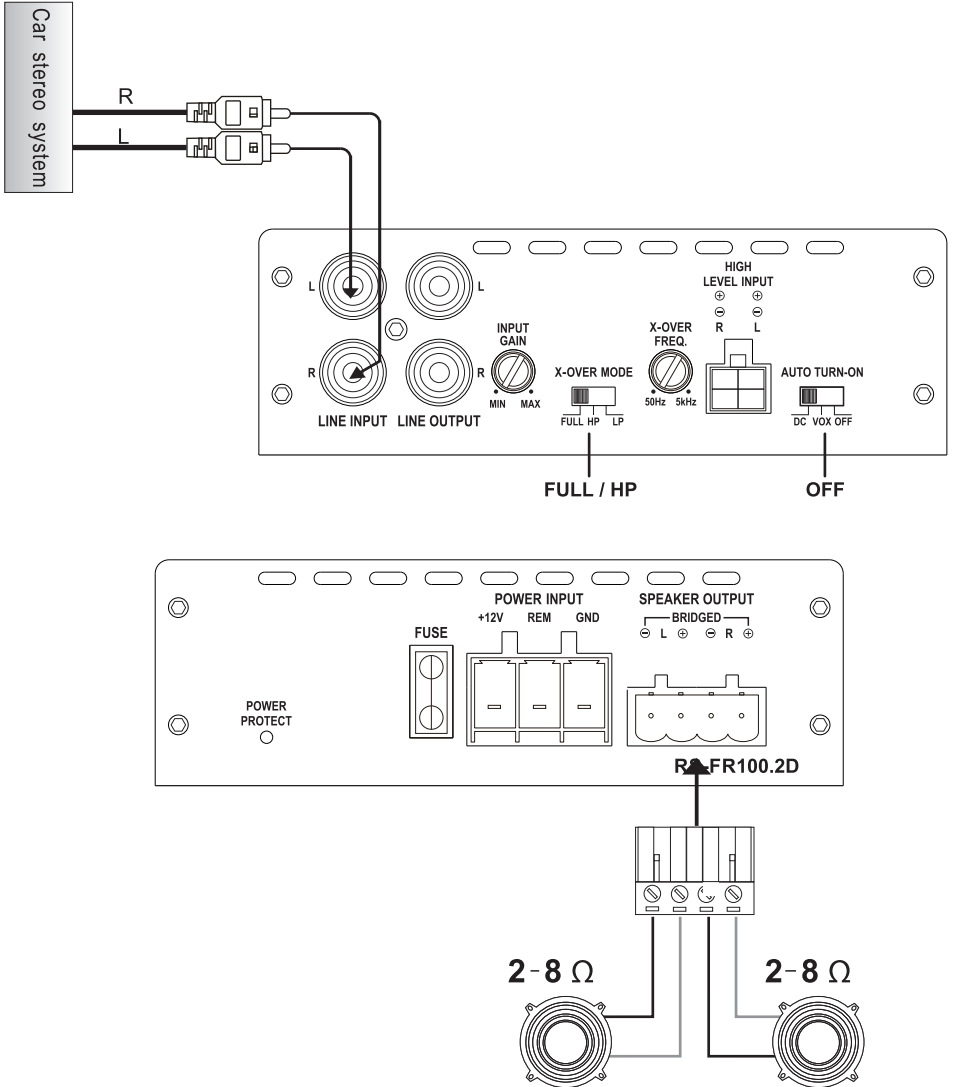
LEVEL CONTROLS

Turn the VOLUME control on the amplifier to Min initially.

Once the initial power sequence has been performed, set the CD/RADIO volume control to roughly 80% of full. Insert a CD or tune to a radio station and slowly turn up the amplifier VOLUME control until you hear some distortion, and then back it off for clean sound.

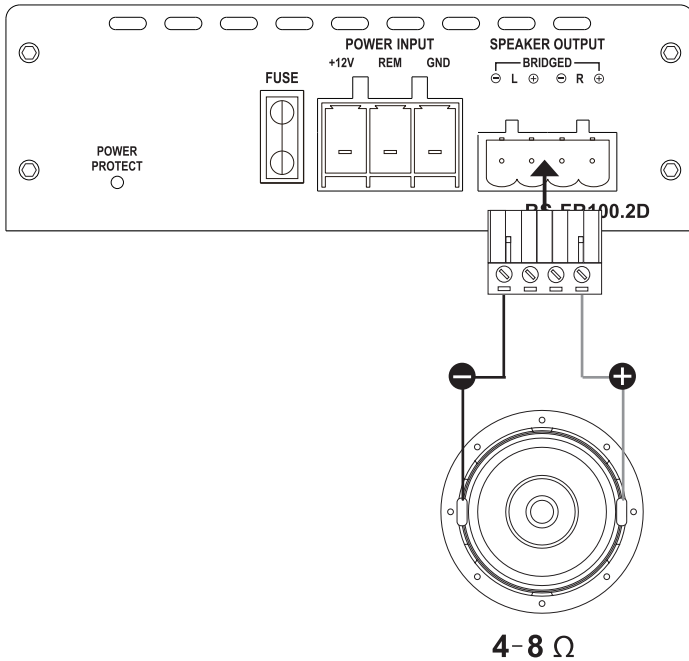
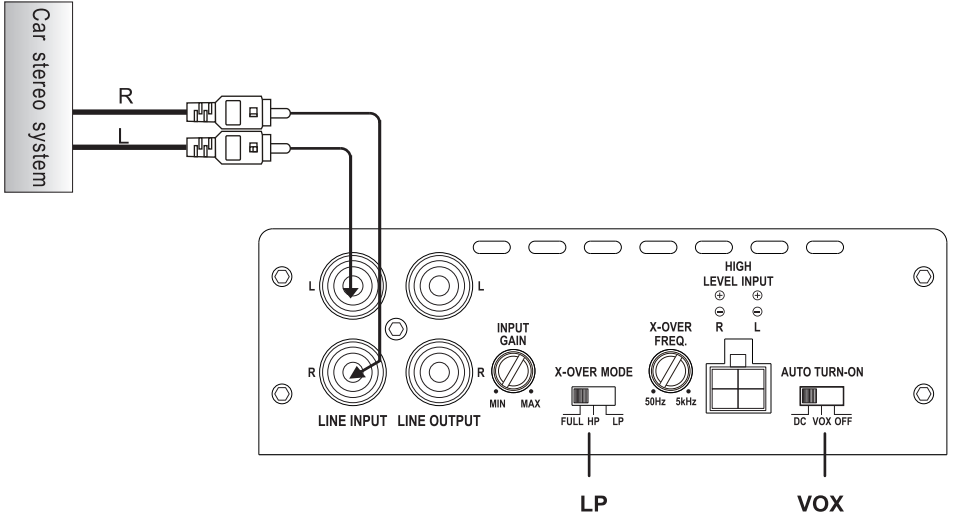
2 CHANNEL AMPLIFIER – APPLICATIONS

RS-FR100.2D 2 CHANNEL MODE



2 CHANNEL AMPLIFIER – APPLICATIONS

RS-FR100.2D MONO CHANNEL MODE



MONO CHANNEL AMPLIFIER-APPLICATIONS

INPUT CONNECTIONS

* This amplifier has RCA connections for low level inputs. Low level signal is carried through RCA cables. It is preferred to use low level inputs to the amplifier if the head unit is equipped with the low level outputs.

SPEAKER OUTPUT CONNECTIONS

You do not need to make any adjustment for the input connection of amplifier before you connect the speaker output.

- * Connect subwoofer wire to corresponding speaker output terminals of the amplifier.
- * Be sure to have the positive wire from the speaker to the positive speaker terminal of the amplifier and the negative wire from the speaker must connect with the speaker terminal of the amplifier. Reversing any of these connections will result in the speaker cones moving out of phase which causes bass cancellation.

LEVEL CONTROLS

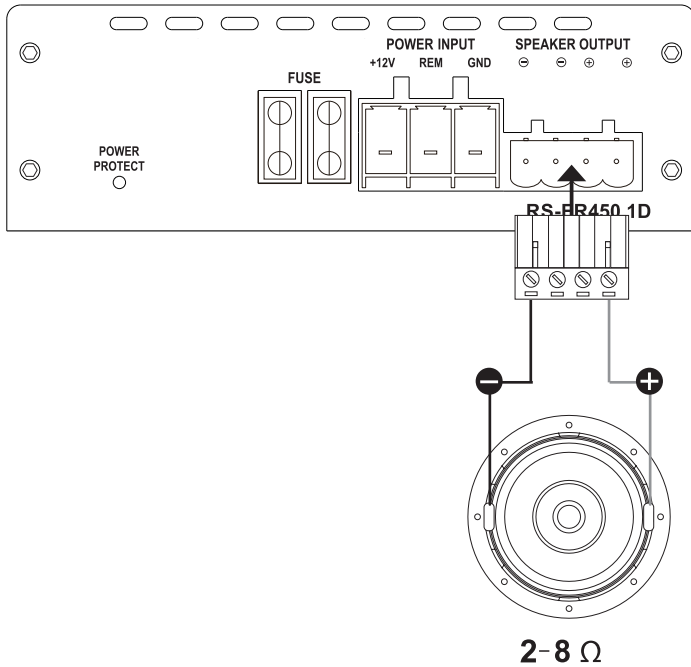
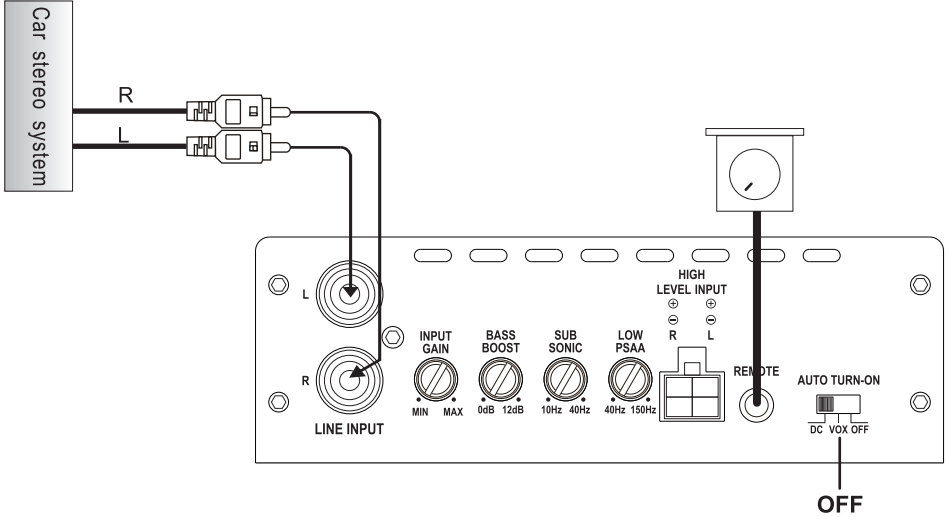
Turn the VOLUME control on the amplifier to Min initially.

Once the initial power sequence has been performed, set the CD/RADIO volume control to roughly 80% of full. Insert a CD or tune to a radio station and slowly turn up the amplifier VOLUME control until you hear some distortion, and then back it off for clean sound.

MONO CHANNEL AMPLIFIER – APPLICATIONS

RS-FR100.2D

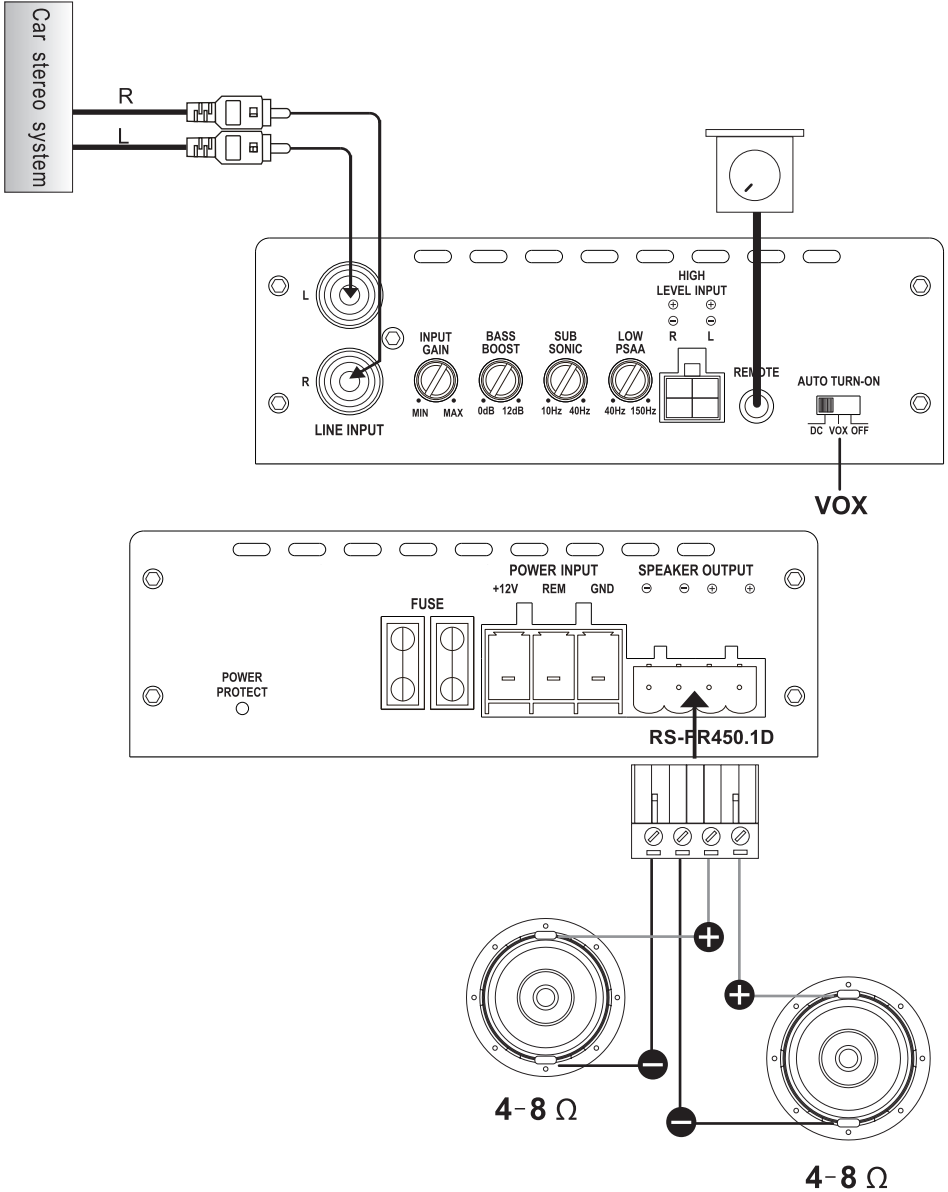
MONO OPERATION WITH SUBWOOFER



MONO CHANNEL AMPLIFIER – APPLICATIONS

RS-FR100.2D

MONO OPERATION WITH TWO SUBWOOFERS



PRODUCT SPECIFICATIONS

| | RS-FRP8DSP40.4 | RS-FR60.4D | RS-FRP50.4D | RS-FR100.2D | RS-FR450.1D |
|------------------------------|------------------------------|---------------|---------------|---------------|---------------|
| Output Power Rating @ 4 Ohms | 40W×4 | 60W×4 | 50W×4 | 100W×2 | 250W×1 |
| @ 2 Ohms | 80W×4 | 80W×4 | 70W×4 | 180W×2 | 450W×1 |
| @ 1 Ohms | — | — | — | — | NA |
| Bridged @ 4 Ohms | 160W×2 | 160W×2 | 140W×2 | 360W×1 | NA |
| Frequency Response | 10Hz~20KHz | 10Hz~30KHz | 10Hz~30KHz | 10Hz~30KHz | 10Hz~150Hz |
| Input Sensitivity | 低电平0dB: 0.6V 高电平0dB: 3.5V | 0.2~6V | 0.2~6V | 0.2~6V | 0.2~6V |
| Signal To Noise Ratio | >95dB | >85dB | >85dB | >85dB | >105dB |
| THD&Noise | <0.02% | <0.02% | <0.02% | <0.02% | <0.02% |
| Low Pass Cross Frequency | — | 50Hz~5KHz | 50Hz~5KHz | 50Hz~5KHz | 40Hz~150Hz |
| High Pass Cross Frequency | — | 50Hz~5KHz | 50Hz~5KHz | 50Hz~5KHz | — |
| Subsonic Filter | — | — | — | — | 10Hz~40Hz |
| Bass EQ | — | — | — | — | 0~6~12dB |
| Speaker Impedance | 2~32Ω | 2~32Ω | 2~32Ω | 2~32Ω | 1~16Ω |
| Fuse Size | NA | 30A | 30A | 40A | 2×30A |
| Dimensions (L×H×W) mm | 140×43.1×90.5 | 140×43.1×90.5 | 140×43.1×90.5 | 140×43.1×90.5 | 140×43.1×90.5 |

*All specifications subject to change without notice



**FOR MORE INFORMATION
PLEASE VISIT
www.reissaudio.com.tr**

Turkish Engineering Since 1985

REİS ELEKTRONİK SANAYİ VE TİCARET A.Ş
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