BLAUPUNKT BPA-E602 Class Amplifier User Manual

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PLEASE READ CAREFULLY BEFORE INSTALLING OR OPERATING 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.

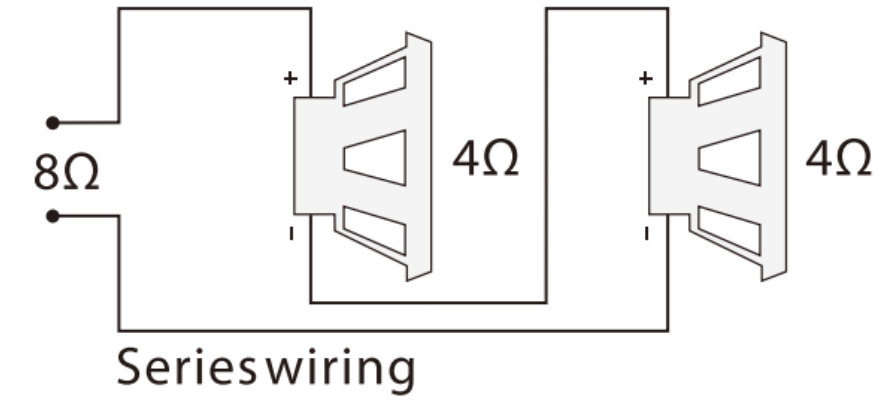
Contents

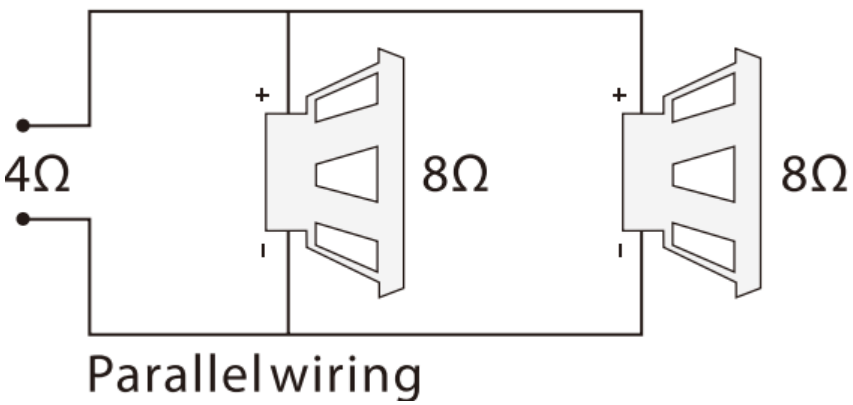
System planning

Proper system planning is the best way to maximize your amplifier performance. By planning your installation carefully you can avoid situations where the performance of the reliability of your system is compromised. Your authorized dealer has been trained to maximize your system's sonic potential. Your dealer is a valuable resource in helping you with your system design and installation.

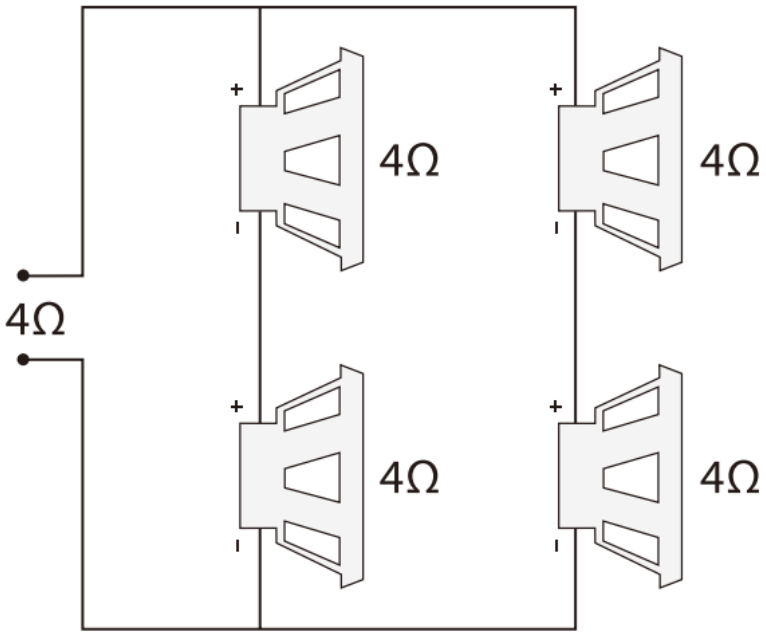
Speaker requirements

Each channel of your amplifier can easily drive 40 speaker loads when used in the stereo mode. When a channel-pair is bridged, the recommended minimum load impedance is 30 for subwoofer use, and 40 for full range operation. Although operation with lower impedances is not likely to cause immediate damage to the internal circuitry, the unit will most likely overheat, causing the thermal protection circuitry to shut down the amplifier. When the chassis cools down, normal operation will resume. Continuing to operate the amplifier under these conditions is not recommended and will reduce its life expectancy.



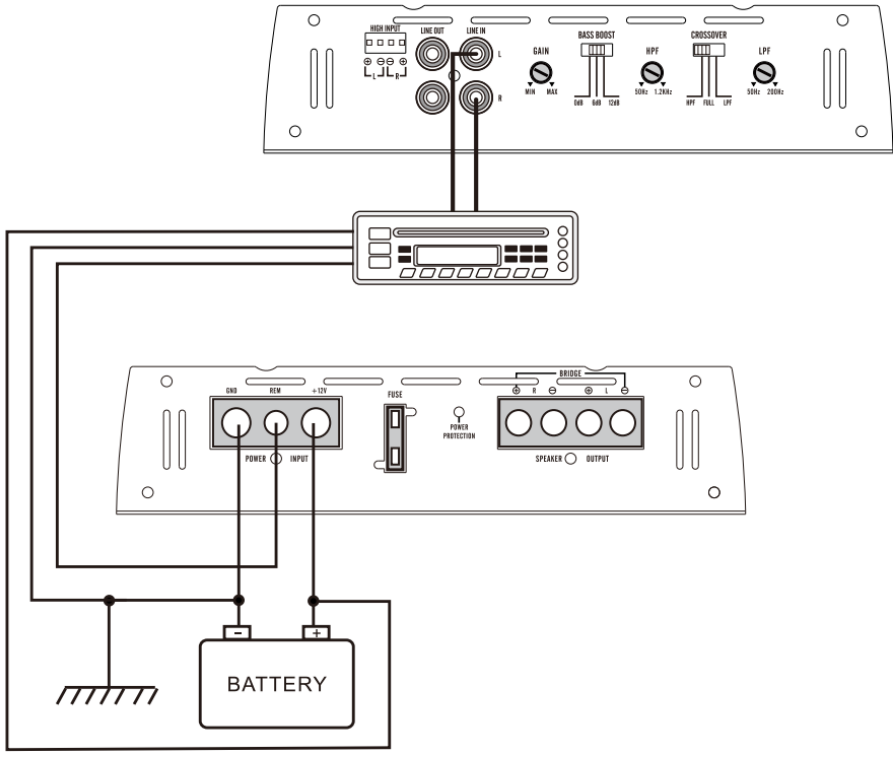


Most speakers designed for car audio operation are 40 impedance. Connecting two such speakers in parallel will result in a 20 impedance load as seen by the amplifier. Some subwoofer models feature a dual 40 voice coil design. Connecting these voice coils in parallel will result in a 22 nominal impedance, which is not recommended for use with bridged channels of your amplifier.



Series/Parallelwiring

Power Connection Leads

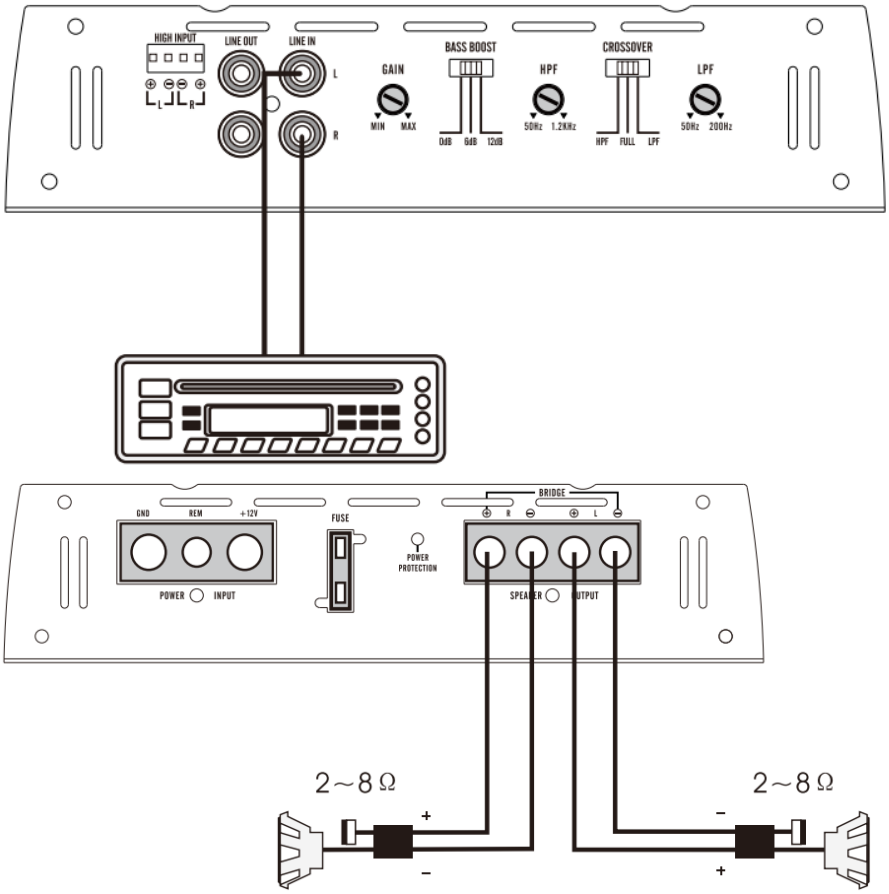


Notes on the power supply

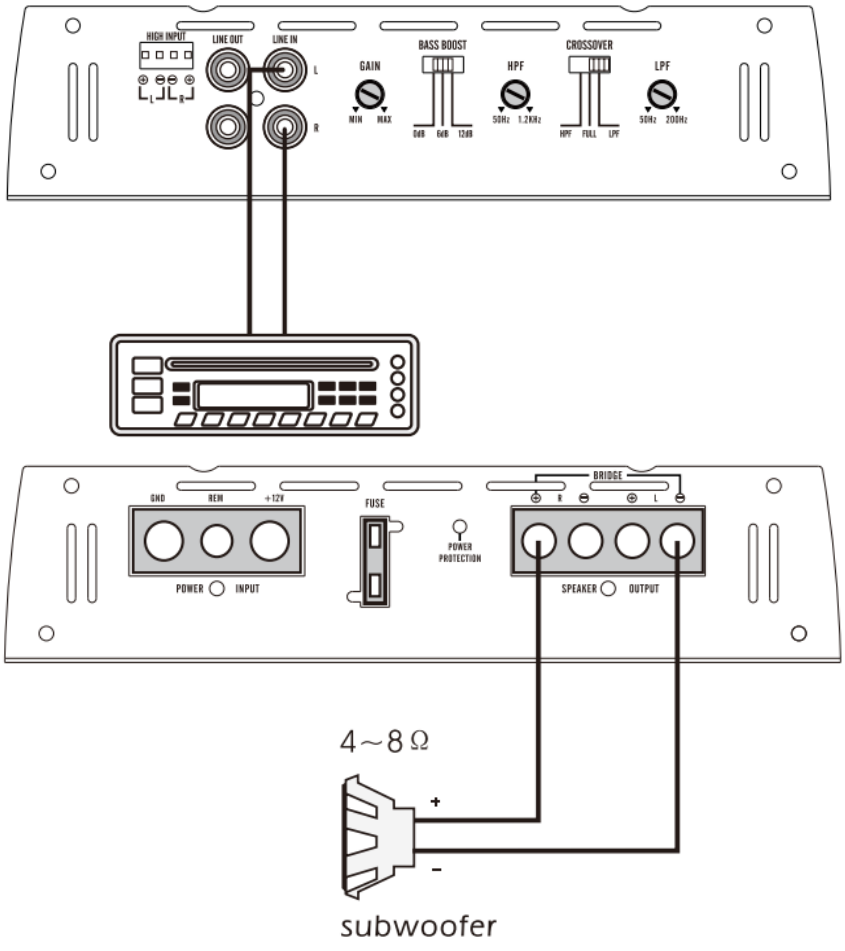
Connect the + 12V power input lead only after all other leads have been connected. Be sure to connect the ground wire of the unit securely to a metal part of the car. A lose connection may cause a malfunction of the amplifier. REMOTE: The unit is turned on by applying + 12 Volts to this terminal This terminal dose not draw heavy current like the two power terminal so a thinner connecting wire is acceptable. Standard 18 GAUGE is fine and the standard colour is yellow. If the radio is equipped with a power antenna control wire, it can drive this terminal. If the power antenna wire is already in use, you can still splice into it. With this method, the unit will turn on automatically with the radio. Use the power supply lead with a fuse attached whose value is the same as original fuse. Place the fuse in the power supply lead as close as possible to the car battery. During a full power operation, Maximum current will run through the system. Therefore, Make sure the that the leads to be connected to the +

12v and GND terminals of the unit respectively must be larger than 10-Gauge (AWG. 10).

System 1: 2 channel mode



System 2: bridged connection subwoofer



Power Connection Leads

symptom	possible cause	action to take
no output	low or no remote turn-on inputfuse blownpower wires not connectedaudio input not connected or no output from source speaker wires not connected	check remote turn-on voltage output at amplifier and correct as needed check power wire integrity and rev ersed polarity, repair as needed and replace fuse che ck power wire and ground connections and repair of r eplace as needed check input connections and signal integrity, repair or replace as needed check speaker wires and repair or replace as needed
audio cycles on and off	speakers are blownthermal protecti on engages when amplifier heatsink temperature exceeds 90°C loose or poor audio input	check system with known working speaker and repair or replace speakers as needed
distorted output	amplifier level sensitivity set too hig h; exceeding maximum output capa bility of amplifier impedance load to amplifier too lowshorted speaker wir esspeaker not connected to amplifi er properlyinternal crossover not set properly for speaker	reset gain referring to the tuning section of the manual for detailed instructionscheck speaker imped ance load if below 20stereo or 42mono rewire speakers to achieve a higher impedancecheck speak er wire connections and repair or replace as neededc heck speaker wiring and repair of replace as needed refer to the installation section of this manual for detai led instructionsreset crossovers referring to the multi-cross crossover configuration section of this manual
distorted output (cont'd)	speakers are blown	check system with known working speakers and repa ir or replace as
poor bass response	speakers wired wrong polarity causi ng cancellation at low frequenciescr ossover set incorrectly	check speaker polarity and repair as neededreset cro ssovers referring to the multi-cross crossover configuration section of this manual for detailed
battery fuse blow ing	impedance load to amplifier too low short in power wire or incorrect pow er connectionsfuse used is smaller t han recommended too much curren t being drawnshort in power wire or incorrect	check speaker impedance load, if below 20stereo or 40 mono rewire speakers to achieve a higher impeda ncecheck power and ground connections and repair as needed replace with proper fuse sizecheck speaker impedance load, if below 20stereo or 40mon o rewire speakers to achieve a higher impedancecheck power and ground connections and repair as needed
amplifier fuse blo wing	too much current being drawnfuse u sed is smaller than recommended	check speaker impedance load, if below 20stereo or 42mono rewire speakers to achieve a higher impedance and replace with recommended fuse size replace with proper fuse size

Specifications

Amplifier section

Power output 42 (watts): 60W x 2CH
Power output 22 (watts): 90W x 2CH
Power output BTL (watts): 180W x 1CH
THD: ≤0.1%
frequency response (±2dB): 20Hz~20KHz
signal to noise ratio: ≥90dB

sensitivity: 0.2~6V
recommended fuse type: 30A x 1
dimensions: 233mm x 204mm x 49mm

Documents / Resources

	BLAUPUNKT BPA-E602 Class Amplifier [pdf] User Manual BPA-E602 Class Amplifier, BPA-E602, Class Amplifier, Amplifier

References

- User Manual