Owners Manual

GAS

PRO POWER

MONO AMPLIFIER

MODEL: **PRP700.1D, PRP1000.1D, PRP1500.1D, PRP2500.1D**

www.gascaraudio.com

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1. INTRODUCTION

Welcome to the loud world of GAS Car Audio! To make sure that you use this product to its full potential, read through this manual, follow all safety instructions and guides.

2. SAFETY INFORMATION

Make sure that your vehicle has a 12 VDC voltage negative ground system, that it can handle an increased power consumption, and that both the alternator and the battery are healthy and up to the task.

Do not install the amplifier inside the engine compartment or any other surface that may be compromised by water or dirt. Your amplifier will produce heat so make sure not to cover it up and install it with 4-5 centimeters breathing room around it to ensure air circulation.

Keep the cables inside the vehicle separate from sharp edges or components that may be affected or take damage. Follow the recommended cable sizes and always use high quality cables and accessories. Make sure that all connectors are protected and secured.

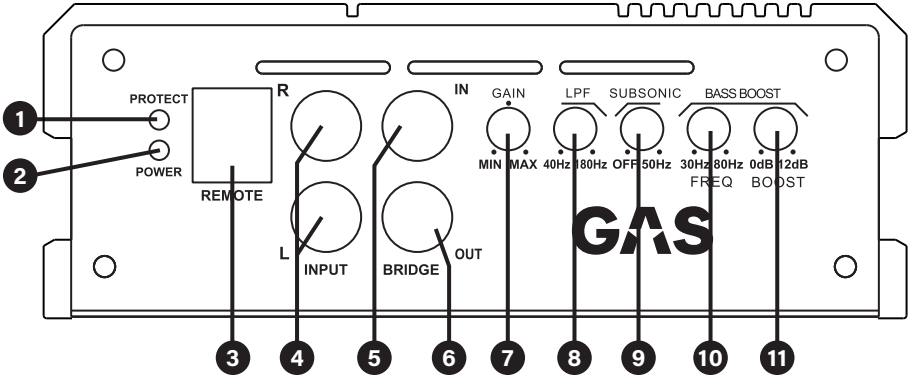
Do not drill any holes without checking what lies beneath, and do not cut anything without making sure that no important components risk being damaged.

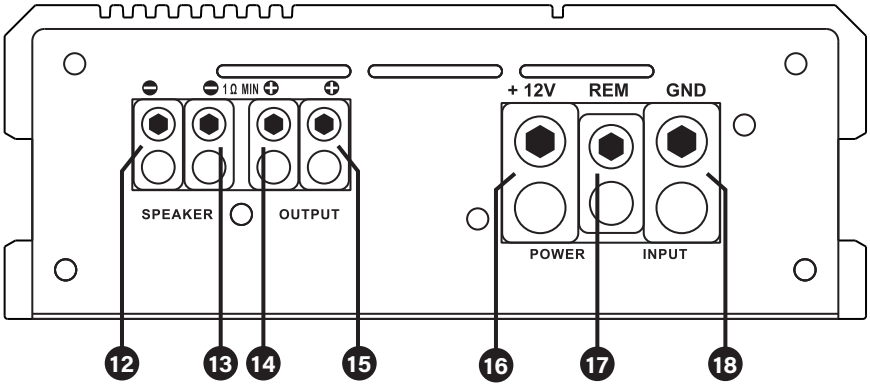
If you feel uncomfortable installing the amplifier yourself, contact your local GAS CAR AUDIO dealer/installer.

****A GAS CAR AUDIO amplifier can produce extreme sound pressure levels. Use common sense, respect high pressure levels and volume, and follow your local laws and regulations.****

Manufacturer: GAS car audio
Designed & Engineered in Sweden

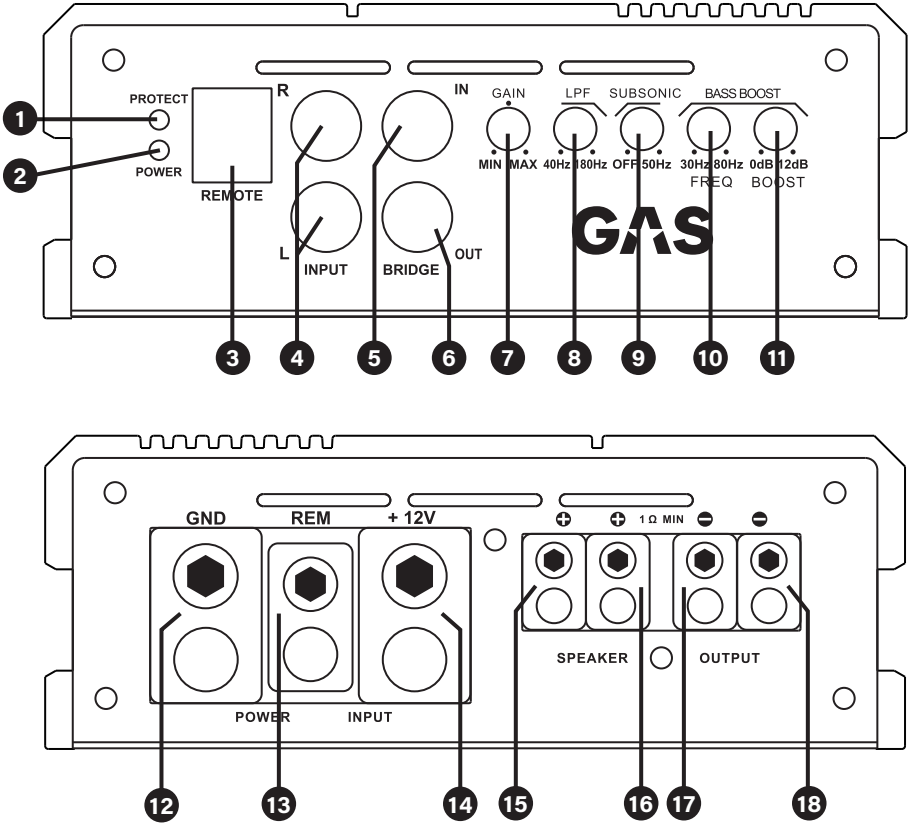
PRP700.1D, PRP1000.1D & PRP1500.1D





1: PROTECT – Protection indicator
2: POWER – Power indicator
3: REMOTE – Bass remote input
4: INPUT L/R – RCA input
5: BRIDGE IN – Bridge input
6: BRIDGE OUT – Bridge output
7: GAIN – Input level control
8: LPF – Low Pass Filter
9: SUBSONIC – Subsonic crossover
10: FREQ – Bass boost frequency control
11: BASS BOOST – Bass boost control
12: ⊖ Negative speaker level output
13: ⊖ Negative speaker level output
14: ⊕ Positive speaker level output
15: ⊕ Positive speaker level output
16: +12V – power cable input
17: REM – Remote signal input
18: GND – Negative ground input

PRP2500.1D



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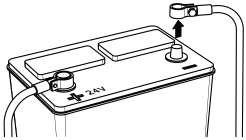
13: REM – Remote signal input
14: +12V – power cable input
15: ⊕ Positive speaker level output
16: ⊕ Positive speaker level output
17: ⊖ Negative speaker level output
18: ⊖ Negative speaker level output

4. INSTALLATION

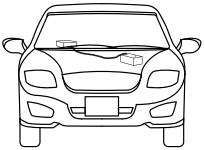
STEP 1) Disconnect the negative battery terminal

Place the battery terminal in a secure position so that it will not accidentally contact the positive or negative battery post.



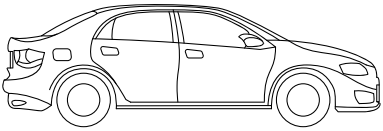
STEP 2) Route the cables

Properly route the power, speaker and RCA cables through the vehicle.



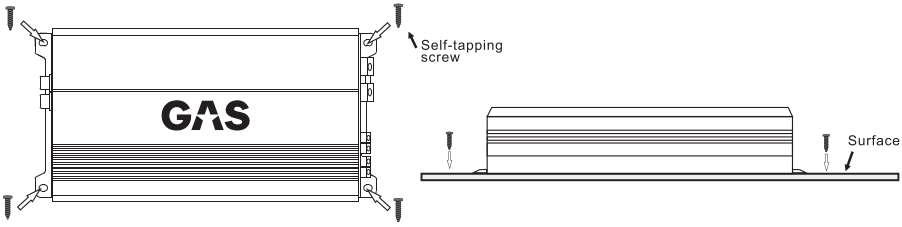
STEP 3) Mount the amplifier

Choose a mounting location that will provide adequate air ventilation. Mount the amplifier to a secure surface. Do not mount the amplifier upside down.



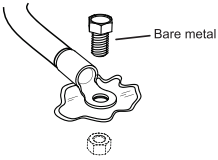
1. Put the amplifier on the mounting surface (non-conductive) and mark the position of the four screws.
2. Ensure that objects behind the mounting surface will not be damaged when drilling.
3. Drill the screw holes.
4. Use the four larger self-tapping screws to fix the amplifier to the mounting surface.

NOTE: Please ensure that the connection between grounding points/ground wire and the negative battery grounding and post is good and clean. Installing an extra ground wire between battery post and vehicles chassis ground, with the same gauge/size as positive wire, will improve the performance of your amplifier/system. Connect all devices to the same ground point as far as possible, to help reduce noise.



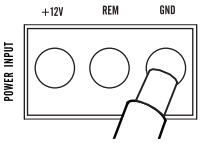
STEP 4) Chassis ground

The chassis ground connection is critical to the performance of the amplifier. Choose a location that is close to the amplifier. Completely scrape away the paint and use a nut and bolt if possible.



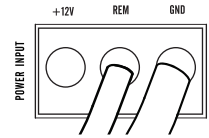
STEP 5) Negative power connection

Attach the ground wire to the amplifier GND connection. Ensure that there are no loose strands before you tighten the screw firmly.



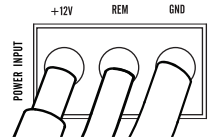
STEP 6) Remote turn on connection

Attach the remote turn on from source unit to the amplifier REM input. NOTE: Try to avoid to use thin cables as it easily will be broken etc. Recommended size is 0.75-1mm^2.



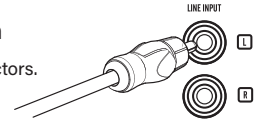
STEP 7) Positive power connection

Attach the main power cable to the amplifier +12V. The cable must run directly to the battery and be properly fused. Ensure that there are no loose strands before you tighten the screw fitmly.



STEP 8) Signal power connection

Connect the RCA cables to the input connectors.



STEP 9) Gain control

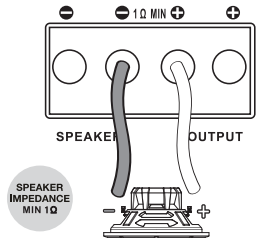
Turn the GAIN control completely counter-clockvise to minimum.

STEP 10) Speaker connections

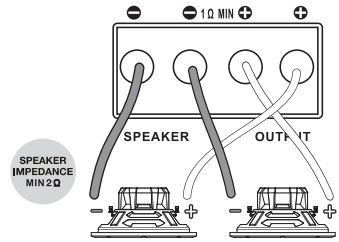
Connect the speaker cables to the speaker output connectors. Follow the diagram below that best fits your speaker configuration.

Note: Both the negative and positive speaker output terminals are internally connected in parallel, so either one can be used.

Model: PRP700.1D, PRP1000.1D, PRP1500.1D
Single woofer
Note: Amplifier Impedance min. 1 Ohm

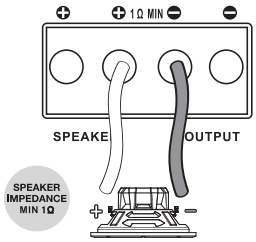


Model: PRP700.1D, PRP1000.1D, PRP1500.1D
Multiple woofer
Note: Amplifier Impedance min. 1 Ohm

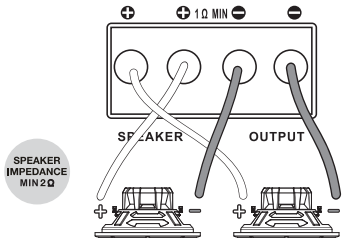


** Diagrams for connecting the model PRP2500.1D is shown on the following page**

Model: PRP2500.1D
Single woofer
Note: Amplifier Impedance min. 1 Ohm

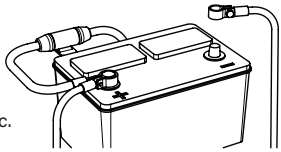


Model: PRP2500.1D
Multiple woofer
Note: Amplifier Impedance min. 1 Ohm



STEP 11) Positive battery connection

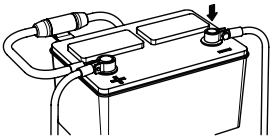
Connect the power cable to the positive battery terminal. The power cable must be fused within 15.5 inches/40cm from the battery terminal AND before any metal parts like the bulkhead etc.



WARNING! Be prepared to disarm your vehicle's alarm and to enter your radio / source unit code

STEP 12) Reconnect negative battery terminal

Reconnect the negative battery terminal making sure it is securely tightened.



SUBSONIC filter adjustments

Subsonic control will limit the output below the selected frequency. This will protect the speaker (e.g. subwoofer) from over excursion and damage.

LPF (Low pass filter) adjustments

Low pass filter control will limit the output above the selected frequency. This is used to allow a smooth transition to the higher frequency speakers.

Bass Boost adjustements

Bass Boost control will increase the power output (0-12dB) at a variable selected frequency (30-80Hz). Increase the level in small amounts until distortion is noticed, then back the level down (counter clockwise) until distortion is eliminated.

Remote level control

GAS PRP700.1D, PRP1000.1D, PRP1500.0D and PRP2500.1D includes a bass level remote. WARNING! Avoid adjusting the bass remote while driving.

GAIN settings

This is a critical step to ensure your amplifier is properly adjusted to match the signal output level of your source unit. WARNING! **This is not a volume control!**

1) If possible, with the source unit off, confirm that the primary volume control is turned down (counter clockwise)

2) Turn on the source unit (Stereo, CD or MP3 player). Re-confirm that the volume is turned down. Make sure the source unit controls; balance, fader, bass and treble are all set to center or "0" adjustment. Make sure that the green LED on the amplifier is illuminated.

3) Play a clean musical selection of which you are very familiar. CD is preferred. Do not use radio signals for the level setting. Hit play and start turning the volume of the source unit up.

4) Stop increasing the source unit volume when you reach 3/4 (about 75%) or until you hear the speakers begin to slightly start producing distortion.

5) Increase the amplifier level (clockwise) until distortion is heard, then back the level down (counter clockwise) until the distortion is eliminated. Small adjustments may need to be made to balace the levels of multiple amplifiers.

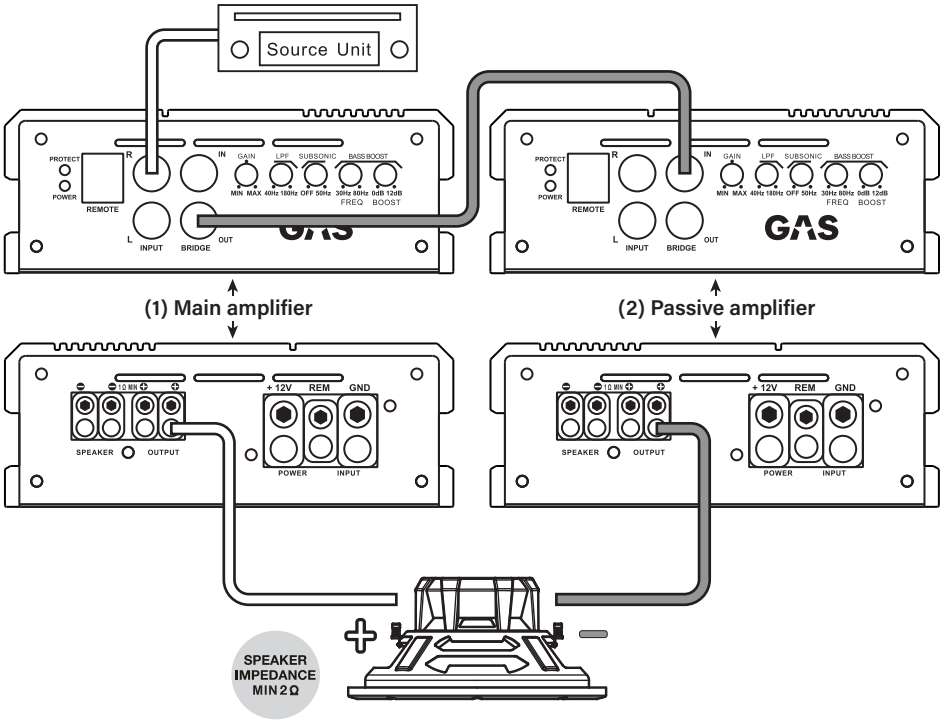
Bridging amplifiers

The bridge feature allows bridging two amplifiers for a greater power output. A bridge is only allowed when using two amplifiers of the exact same model, bridging two different model amplifiers will permanently damage your products. Never go below a **2 Ohm** load when bridging two amplifiers. **NOTE!** The settings on the main amplifier (1/Bridge Out) will be in control of the passive second amplifier (2/Bridge In). The passive amp control knobs and bass remote are disconnected and not functional in bridged mode.

Only possible bridge combinations:

- PRP2500.1D + PRP2500.1D
- PRP1500.1D + PRP1500.1D
- PRP1000.1D + PRP1000.1D
- PRP700.1D + PRP700.1D

Carefully follow the illustrated connections shown below:



6. SPECIFICATIONS

PRP700.1D

Monoblock Class D Power Amplifier
RMS Power: **1x700w@1ohm CEA 14.4V**
RMS Power: **1x380w@2ohm CEA 14.4V**
RMS Power: **1x200w@4ohm CEA 14.4V**
Subsonic Filter: **0- 50Hz**
Frequency Response: **15 - 300 Hz**
LPF: **40-180Hz**
S/N: **93dB**
Bass Boost: **0-12 dB**
Bass Boost Frequency: **30 - 80Hz**
Input Impedance: **22k ohms**
Input Sensitivity: **0,2-6V**
Operation Voltage: **DC 9-16V**
Minimum Impedance: **1ohm**
Remote Turn-on/Turn-off Circuit
Soft Turn-on Circuit
Thermal and Speaker Short Protection Circuit
LED Power and Protection Indicators
Dimensions:
248x140x51mm, 276x140x51mm (with legs)

PRP1000.1D

Monoblock Class D Power Amplifier
RMS Power: **1x1000w@1ohm CEA 14.4V**
RMS Power: **1x650w@2ohm CEA 14.4V**
RMS Power: **1x350w@4ohm CEA 14.4V**
Subsonic Filter: **0- 50Hz**
Frequency Response: **15 - 300 Hz**
LPF: **40-180Hz**
S/N: **93dB**
Bass Boost: **0-12 dB**
Bass Boost Frequency: **30 - 80Hz**
Input Impedance: **22k ohms**
Input Sensitivity: **0,2-6V**
Operation Voltage: **DC 9-16V**
Minimum Impedance: **1ohm**
Remote Turn-on/Turn-off Circuit
Soft Turn-on Circuit
Thermal and Speaker Short Protection Circuit
LED Power and Protection Indicators
Dimensions:
266x140x51mm, 296x140x51mm (with legs)

PRP1500.1D

Monoblock Class D Power Amplifier
RMS Power: **1x1500w@1ohm CEA 14.4V**
RMS Power: **1x850w@2ohm CEA 14.4V**
RMS Power: **1x450w@4ohm CEA 14.4V**
Subsonic Filter: **0- 50Hz**
Frequency Response: **15 - 300 Hz**
LPF: **40-180Hz**
S/N: **93dB**
Bass Boost: **0-12 dB**
Bass Boost Frequency: **30 - 80Hz**
Input Impedance: **22k ohms**
Input Sensitivity: **0,2-6V**
Operation Voltage: **DC 9-16V**
Minimum Impedance: **1ohm**
Remote Turn-on/Turn-off Circuit
Soft Turn-on Circuit
Thermal and Speaker Short Protection Circuit
LED Power and Protection Indicators
Dimensions:
341x140x51mm, 369x140x51mm (with legs)

PRP2500.1D

Monoblock Class D Power Amplifier
RMS Power: **1x2500w@1ohm CEA 14.4V**
RMS Power: **1x1600w@2ohm CEA 14.4V**
RMS Power: **1x900w@4ohm CEA 14.4V**
Subsonic Filter: **0- 50Hz**
Frequency Response: **15 - 300 Hz**
LPF: **40-180Hz**
S/N: **93dB**
Bass Boost: **0-12 dB**
Bass Boost Frequency: **30 - 80Hz**
Input Impedance: **22k ohms**
Input Sensitivity: **0,2-6V**
Operation Voltage: **DC 9-16V**
Minimum Impedance: **1ohm**
Remote Turn-on/Turn-off Circuit
Soft Turn-on Circuit
Thermal and Speaker Short Protection Circuit
LED Power and Protection Indicators
Dimensions:
473x140x51mm, 504x140x51mm (with legs)

7. TROUBLESHOOTING

No Power

1) Use a multimeter to measure the voltage on the +12V terminal and the remote signal terminal.

2) Use multimeter to make sure that you have a negative ground connection

3) Check the built-in fuse (if there is one) on the amplifier

4) If there is no power coming through – Control the fuse on the power cable, if this is intact - make a full check of the wiring to ensure cable integrity.

5) When all of the above has been tested/looked over, and all is as it should be but there is still no power coming through to the amplifier, consult your local GAS dealer.

No Sound

1) Check your head unit to make sure no settings are limiting the amplifier functions.

2) Check all signal cables.

3) Check all speaker cables.

4) Check all speakers.

5) When all of the above has been tested/looked over, and all is as it should be but there is still no sound, consult your local GAS dealer.

Unwanted noise

1) Check your negative grounding point and make sure that the surface is clean (consult the installation section).

2) Make sure that your signal cables or speaker cables are not too close to the power cables.

Distortion

1) Check the speaker cables to make sure that the polarity is not reversed on one channel.

2) Check the settings on the amplifier, make sure that the gain/level is set according to the instructions.

3) Lower/turn of the boost function on the amplifier.

4) Check all speakers.

Protection

1) Check all speakers and make sure that no leads or voice coils are damaged.

2) Make sure all connections are made as they should be and that no leads touch the amplifier chassis. The amplifier will go in to protection if it is overheated. As soon as the normal operating temperature is back it will automatically turn back on. To prevent the amplifier from overheating, make sure to follow the installation instructions and leave enough space around the amplifier so that the airflow is optimized.

3) The protection mode is activated if the Ohm load is lower than the amplifier limitations.

4) If the input voltage is lower or higher than the amplifier limited range the amplifier will go in to protection.

5) When all of the above has been tested/looked over, and all is as it should be but the amplifier is still in protection mode, consult your local GAS dealer.

8. WARRANTY AND DISPOSAL

All GAS Car Audio products are covered by warranty established by your local laws and regulations. Make sure to save your original dated receipt if the products need service!

The crossed-out wheelie bin symbol means that the product, literature and packaging included must be taken to separate collection at the end of their working life. Do not dispose of these products as unsorted municipal waste: take them for recycling. For info on your nearest recycling point, check with your local waste authority.

This product has been granted with the CE certification mark to show that the product follows the health, safety, and environmental protection standards for products sold within the European Economic Area (EEA).

RoHS compliant

GAS Car Audio products complies with the relevant provisions of the RoHS Directive for the European Union. In common with all Electrical and Electronic Equipment (EEE) the product should not be disposed of as household waste. Alternative arrangements may apply in other jurisdictions.

EMMA european mobile media association GLOBAL PARTNER

GAS Car Audio is a global partner of the European Mobile Media Association, an organisation that focus on promoting the custom made mobile media installations to consumers.

GAS

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