

REBEL

RA800W: Rebel Class AB 4-Channel amplifier
4 X 100W RMS / 4 X 200W MAX

RA1200W: Rebel Class D Mono amplifier
1 X 600W RMS / 1 X 1200W MAX

RA2000W: Rebel Class D Mono amplifier
1 X 1000W RMS / 1 X 2000W MAX

TABLE OF CONTENT

- * INTRODUCTION
- * INCLUDED IN THE PACKAGING
- SAFETY & WARRANTY
- INSTALLATION INSTRUCTIONS
- CONTROL PANEL
- SPECIFICATIONS
- DIMENSIONS
- TROUBLESHOOTING

INTRODUCTION

CONGRATULATIONS! Thanks for buying BASS HABIT.

Please read this manual in order to fully understand how to get the best result from this amplifier and ensure that the advices on how to look after it and the safety precautions are followed. We hope you enjoy using the amplifier as much as we enjoyed creating it.

Before mounting and installing your new amplifier, please read through the whole user manual. If you have any questions concerning your amplifier or any other Bass Habit products, contact your nearest Bass Habit dealer/distributor.

INCLUDED IN THE PACKAGING

- Amplifier
- Fuses
- Screws 4pcs
- User manual
- Bass Remote control (Included in RA1200W/RA2000W)
- Bass Remote control cable (Included in RA1200W/RA2000W)

SAFETY & WARRANTY

CAUTION & WARNING

Before wiring, disconnect the cable from the negative battery terminal.

Ensure good and correct connections.

Never connect any speaker lead to the car chassis. This can cause severe damage to your car audio setup.

Before drilling or cutting any holes, investigate the layout of your vehicle thoroughly.

Use caution when working near the fuel/hydraulic lines and electrical wiring.

Observe the correct polarity when wiring. Improper phasing may cause a loss of bass response.

Do not expose this product to excessive damp or moisture

Do not use any functions that may take your concentration away from driving your vehicle.

Do not setup your amplifier whilst driving. Doing so may result in an accident. For prolonged interaction with the product, make sure that your vehicle is stationary and parked in a safe location

Bass Habit equipment is capable of sound pressure levels that can cause permanent damage to your hearing and those around you. Please use common sense when listening to your audio system and practice safe sound. Keep the volume at a level so you can still hear outside noise. Failure to do this may result in an accident. Bass Habit recommends caution when listening at a high volume. For safety and enjoyable listening, the sound should be clear without distortion.

WARRANTY

All Bass Habit products carry a full warranty depending on the conditions in the country where it is sold. The warranty is valid from the date of the original receipt as proof of purchase (warranty period differs depending on local warranty laws and policies). Contact your international Bass Habit dealer or distributor concerning specific procedure for your country's warranty policies.

WHAT IS NOT COVERED

- Damage to product due to improper installation.
- Subsequent damage to other components.
- Damage caused by exposure to moisture, excessive heat, chemical cleaners and/or UV radiation.
- Damage through negligence, misuse, accident or abuse. Repeated returns for the same fault may be considered as abuse.
- Any cost or expense related to the removal and/or abuse. Repeated returns for the same fault may be considered as abuse.
- Damage caused by amplifier clipping or distortion.
- Items repaired or modified by any unauthorised repair facility.
- Return shipping on non-defective items.
- Products returned without a return authorisation number.
- Damage to product due to use of sealant.

INSTALLATION INSTRUCTIONS

INSTALLATION EXPERIENCE

Installation of Bass Habit amplifiers may require experience with a variety of mechanical procedures including cable wiring, drilling, etc.. If you have any reservations about your installation skills, please contact your local authorized Bass Habit dealer for help.

CHOOSING AMPLIFIER MOUNTING LOCATIONS

Choose a mounting location in an area where the amplifier will not be damaged, and where the amplifier is not covered up. Mount the amplifier so that it remains dry - never mount an amplifier outside the vehicle or in the engine compartment. Amplifier cooling is essential for proper amplifier operation. If the amplifier is to be installed in an enclosed space, make sure there is sufficient air circulation for the amplifier to cool itself. When mounting the amplifier under a seat, ensure that it is clear of all moving parts and does not affect the seat functionality. Make sure that the amplifier is mounted securely using nuts and bolts or the supplied mounting screws.

INSTALLATION PRECAUTIONS

NOTE! Proceed only if you are a qualified installer; otherwise let your dealer do it.

- Always wear protective eyewear when using tools.
- Turn off all stereo and other electrical devices before you begin.
- Disconnect the (-) negative lead from your vehicle's battery.
- Keep the amplifier in the package until final installation, and always rest it upwards.
- Locate all fuel lines, brake lines, oil lines and electrical cables when planning your installation.
- Check clearances on both sides of a planned mounting surface before drilling any holes or fixing screws.
- When routing cables, keep input-signal cables away from power cables and speaker wires.
- When making connections, make certain all cables are secure and properly insulated.

POWER CONNECTIONS

Bass Habit amplifiers are capable of delivering extremely high power levels and require a heavy duty and reliable connection to the vehicle's electrical system to work properly, carefully follow the instructions below:

POWER CONNECTION (+12V):

Connect a wire directly to the vehicles positive battery terminal, and install an appropriate fuse and holder within 30cm/12" from the battery terminal. Keep the fuse uninstalled at the time for routing and connecting the power wire. Be sure to use grommets whenever routing wires through the firewall or other metal parts. When routing/connecting is done, installation of the fuse into fuse holder can be finalised.

GROUND CONNECTION (GND):

Connect the amplifiers Ground (GND) terminal to a solid point on the vehicles metal chassis, as close to the amplifiers as possible. Scrape away any paint from this location; use a star-type lock washer to secure the connection.

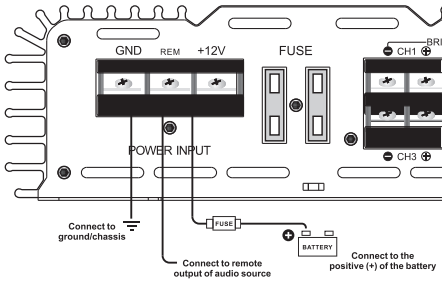
Minimal 12V+ Power / Ground wires recommended sizes:

- RA800W: 8AWG /10mm² • RA1200W: 4AWG /20mm² • RA2000W: 2AWG /33mm²

REMOTE CONNECTION (REM):

Connect the amplifiers Remote (REM) terminal to the source unit remote turn on lead using a minimum of 0.75mm²/18 gauge wire. If your source unit does not have a turn on connection, connect the amplifier (REM) terminal through a power switch button which can provide a +12V signal.

POWER CONNECTIONS



**RA800W
RA1200W
RA2000W**

SPEAKER CONNECTIONS

Speaker output connections should be made using a minimum of 16 AWG / 1.25mm² wires. The terminal accepts up to 8 AWG/10mm².

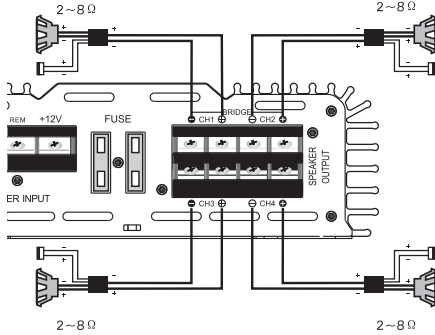
Minimum total allowed impedance load is:

RA800W : 2 Ohm stereo / 4 Ohm Bridge/ mono mode.

RA1200W / RA2000W: 1 Ohm mono mode

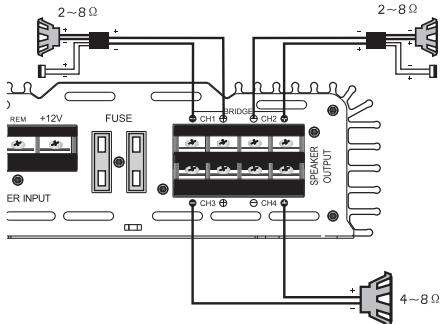
4-CHANNEL STEREO SPEAKER SYSTEM

RA800W

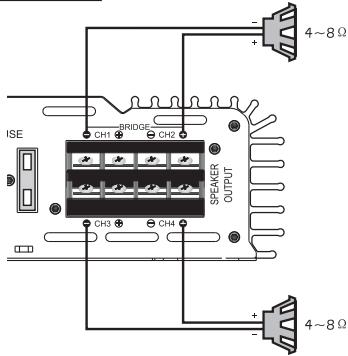


3-CHANNEL STEREO+BRIDGE MODE

RA800W

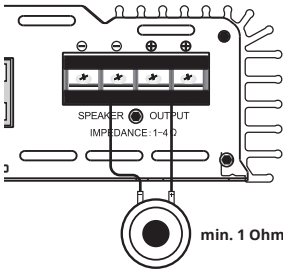


2-CHANNEL MONO BRIDGE MODE

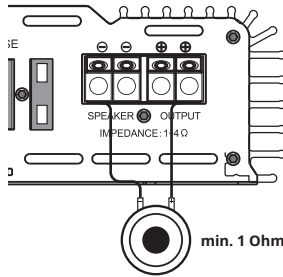


RA800W

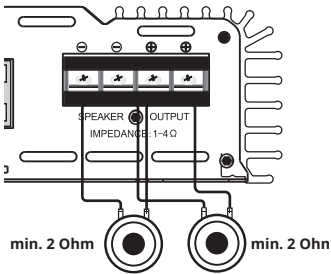
MONO CHANNEL SUBWOOFER SYSTEM (1 SUBWOOFER)



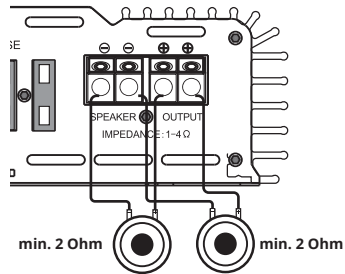
**RA1200W
RA2000W**



MONO CHANNEL SUBWOOFER SYSTEM (2 SUBWOOFER)



**RA1200W
RA2000W**



SIGNAL CONNECTIONS

Use high quality RCA jacks cable to make sure that you get the full audio experience.

On RA1200W / RA2000W there are rca signal options. OUTPUT is the same as INPUT signal for easy connection to next/other amplifier

CONTROL PANEL

Bass Habit 2 & 4 channel amplifiers can be used for speakers and subwoofers.

Bass Habit 1 channel amplifier can normally be used for subwoofers.

Input level control (GAIN):

GAIN control is a seamless adjustable between 0.2V - 6V.

Tips for adjusting the GAIN control correctly:

- Initially turn the GAIN control to minimum (counter clockwise).
- On the source unit, increase the volume control to the 3/4 of maximum volume.
- Slowly increase the GAIN control until you hear slight distortion in the speaker/speakers.
- Then reduce the GAIN slightly until distortion is no longer heard.

Bass Boost control (BASS BOOST):

RA800W: Bass Boost is adjustable between 0, 6, 12 db (@ 45Hz)

RA1200W/RA2000W: Bass Boost is variable adjustable between 0-12 dB(@ 45Hz)

Please use the BASS BOOST knob with care, excessive use can damage you system!

LPF Crossover (LPF):

RA800W: The low pass filter is seamless adjustable between 50Hz - 250Hz

RA1200W/RA2000W: The low pass filter is seamless adjustable between 32Hz - 250Hz

Tip! When using a subwoofer, set the frequency cut point at 80Hz and adjust to your own preferences.

HPF Crossover (HPF & Subsonic):

RA800W: The high pass filter is seamless adjustable between 32Hz – 2KHz, an can normally be used to remove and protect the subwoofer notes from midrange/coaxial and similar speakers. 80Hz is a good starting point.

RA1200W/RA2000W: The subsonic filter can be adjusted variable between 15-50Hz and are intended for removing the deepest bass notes from the subwoofer. It's possible protect and get a tighter more rhythmical sound. 20Hz is a good starting point.

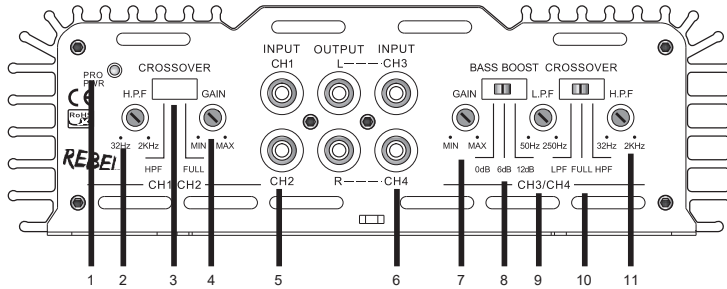
Line Input:

Connect the line outputs from your source unit and connect to the Line L and R inputs.

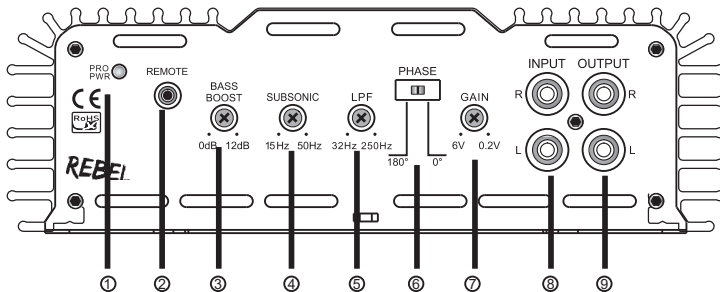
Power status & Protection LED:

- POW = Power LED lights up when the amplifier is turned on.
- PRO = Protect LED light flashing or solid. This light is an indicator of the protect mode status, see the trouble shooting section of the manual for more information.

RA800W



- 1) POW Power indicator (Green) / PRT Protect indicator (Red)
- 2) HPF High Pass Filter 32-2000Hz (12dB/Oct)
- 3) HPF/FULL: Filter mode settings
- 4) GAIN: Gain control CH 1/2 input signal adjustment 6V-0.2V
- 5) INPUT RCA CH 1/2
- 6) INPUT RCA CH3/4
- 7) GAIN: Gain control CH 3/4 input signal adjustment 6V-0.2V
- 8) BASS BOOST 0dB/6dB/12dB (45Hz)
- 9) LPF Low Pass Filter 50-250Hz (12dB/Oct)
- 10) LPF/FULL/HPF Filter mode settings
- 11) HPF High Pass Filter 32-2000Hz (12dB/Oct)



- 1) POW Power indicator (Green) / PRT Protect indicator (Red)
- 2) REMOTE: Bass Remote control input
- 3) BASS BOOST: 0-12dB (45Hz)
- 4) SUBSONIC: 15-50Hz (12 dB/Oct)
- 5)) LPF Low Pass Filter 32-250Hz (12db/Oct)
- 6) PHASE: 0 / 180 deg
- 7) GAIN: Gain control input signal adjustment 0.2V-6V
- 8) INPUT RCA R/L
- 9) OUTPUT RCA R/L

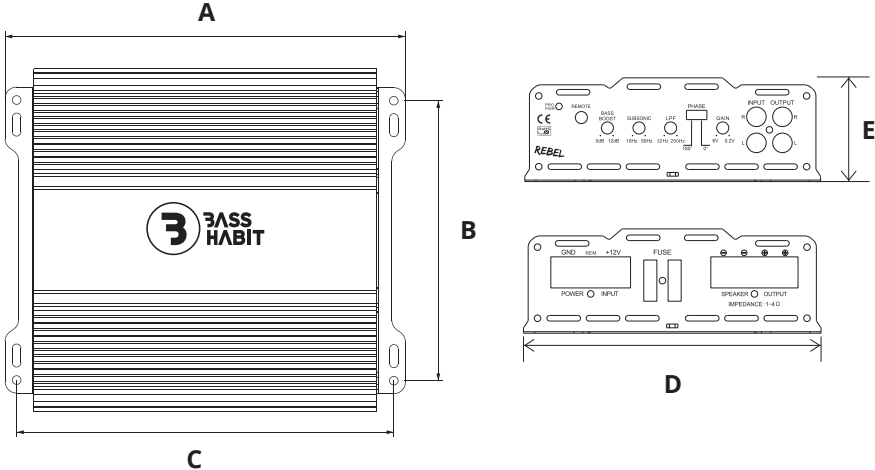
SPECIFICATIONS

| | RA800W | RA1200W | RA2000W |
|----------------------|---------------------------------|--------------------------|--------------------------|
| Component | CLASS AB amplifier | CLASS D amplifier | CLASS D amplifier |
| Number of channels | 4 channels | 1 channel | 1 channel |
| Power output MAX | 800W MAX | 1200W MAX | 2000W MAX |
| Power output @1 ohm | N/A | 1x600W RMS* | 1x1000W RMS* |
| Power output @2 ohm | 4x100W RMS* | 1x400W RMS* | 1x650W RMS* |
| Power output @4 ohm | 4x60W RMS* | 1x230W RMS* | 1x400W RMS* |
| Bridged power @4 ohm | 2x200W RMS* | N/A | N/A |
| S/N | >90dB | >90 dB | >90 dB |
| Frequency response | 15Hz-20Khz | 15Hz-250Hz | 15Hz-250Hz |
| High Pass Filter | 32Hz-2Khz | N/A | N/A |
| Low Pass Filter | 50Hz-250Hz | 32Hz-250Hz | 32Hz-250Hz |
| Subsonic Filter | N/A | 15Hz-50Hz | 15Hz-50Hz |
| Bass Boost | 0dB/6dB/12dB | 0dB-12dB | 0dB-12dB |
| Bass Boost frequency | 45Hz | 45Hz | 45Hz |
| Input adjustment | 0.2V-6V | 0.2V-6V | 0.2V-6V |
| Operation voltage | 10V-16V | 10V-16V | 10V-16V |
| Fuse rating | 2x25A | 2x40A | 3x40A |
| Protect | Short circuit protection | | |
| | Overload protection | | |
| | DC protection | | |
| | Thermal protection | | |

* RMS Power @ 14.4 V, THD 1%

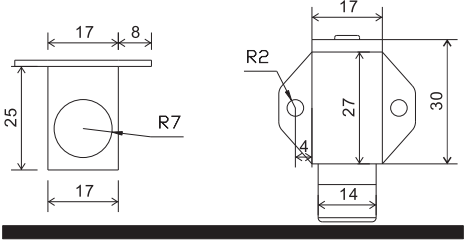
DIMENSIONS

Amplifier



| MODEL | A | B | C | D | E |
|---------|-----|-----|-----|-----|----|
| RA800W | 288 | 145 | 276 | 159 | 56 |
| RA1200W | 208 | 145 | 196 | 159 | 56 |
| RA2000W | 248 | 145 | 236 | 159 | 56 |

Bass Remote



Included in RA1200W/RA2000W

(mm)

TROUBLESHOOTING

| Symptom | Check / Control |
|--|---|
| No sound / No active POWER LED | <ul style="list-style-type: none"> • Check and measure voltage at +12V and REM terminals (allowed working range is 10-16V DC). • Check and measure ground connections. • Check external fuse. • Check input signal and cables from source unit. • Check speaker wires and terminals. |
| Noise or Distorted sound / Low output | <ul style="list-style-type: none"> • Check crossover/input level/control knobs and switches. • Check ground connections of all installed audio equipment, (source unit, dsp etc.). • Check speaker wires for possible short circuit. • Check impedance load of the speaker/speakers according to the manual. • Check speaker connections for proper polarity. |
| Amplifier Protection mode (PROTECT) | <ul style="list-style-type: none"> • Check impedance load of the speaker/speakers according to the manual. • Check chassis ground connections. • Check speaker wires for possible short circuit. • Check power input voltage (allowed working range is 10-16V DC). • Check RCA input voltage (allowed range is 0.2-6V). • Check RCA cable for possible short circuit. |



The crossed-out wheeled 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: dispose of them at a recycling point. For info on your nearest recycling point, check with your local waste authority.

Winn Scandinavia reserves for possible typos, factual or numeric errors that may have been printed on any products, package designs, user manuals and/or other included accessories.

Products marked with the RoHS symbol 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.

The product with the CE mark indicates that it has passed the corresponding conformity assessment procedure and the manufacturer's declaration of conformity, and it complies with the relevant EU directives, and is used as a pass for the product to be allowed to enter the European Community market. Relevant directives require industrial products to be affixed with the CE mark. Those that do not have the CE mark shall not be marketed. The product with the CE mark indicates that it has passed the corresponding conformity assessment procedure and the manufacturer's declaration of conformity, and it complies with the relevant EU directives, and is used as a pass for the product to be allowed to enter the European Community market. Relevant directives require industrial products to be affixed with the CE mark. Those that do not have the CE mark shall not be marketed.



Winn Scandinavia AB
Elementvägen 15, 702 27 Örebro
Sweden
www.winnscandinavia.com

Winn Scandinavia reserves for possible typos, factual or numeric errors that may have been printed on any products, package designs, user manuals and/or other included accessories.