

C1A1200

CLASS D MONOBLOCK
POWER AMPLIFIER

USER'S MANUAL

Congratulations on your purchase of the CIARE C1A1200 amplifier!
It has been designed, engineered, and manufactured to bring you the highest level of performance and quality, and for years of listening pleasure.

What's in the box?

When first unpacking your new amplifier, please check first that the package contains all of the items below. If something is missing, please contact us at www.ciareusa.com.

- **Amplifier**
- **Remote control**
- **Instruction manual**
- **High input cable with connector**
- **Four (4) mounting screws**
- **3x40A fuses**
- **Two (2) wrenches**

Features

Your new amplifier features the following:

- Class D Topology
- MOSFET Pulse Width Modulated Power Supply
- Stable down to a 1-Ohm load
- Soft turn-on circuit
- Remote Turn-On/Turn-Off circuit
- Auto Turn-On (when using high level inputs)
- 4 AWG power and ground input terminals
- 12 AWG speaker output terminals
- Variable input gain control
- Variable subsonic filter
- Variable low pass filter
- Variable Bass Boost
- RCA low level and high level input
- LED power & protection indicators
- Black anodized heatsink
- Remote subwoofer level control

About 1 Ohm operation

Your Amplifier has been designed to run with a minimum load of 1-Ohm. Operating the amplifier with a speaker impedance load below 1-Ohm may result in poor sound quality and damage to the amplifier circuitry. Such damage is not covered under the warranty for this product.

General precautions

Before installing and using your new amplifier, please become familiar with all the information contained in this manual. Please keep this manual in a safe place for future reference.

- Do not open or attempt to repair this unit yourself. Dangerous high voltage is present which may result in electric shock. Refer any repairs to a qualified service technician.
- To avoid risk of electronic shock or damage to the amplifier, do not permit any of this equipment to become damp or wet. If this does occur, immediately disconnect the power wires and remove the amplifier from its installed location. Only reconnect and reinstall the amplifier when it is completely dry.
- If smoke or an unpleasant smell exits the amplifier, please disconnect and uninstall the amplifier. Contact www.ciareusa.com for next steps.

Installation precautions

Before you drill or cut any holes, investigate your car's layout very carefully. Take special care when you work near the gas tank, fuel lines, hydraulic lines and electrical wiring.

Never operate the amplifier when it is unmounted. Attach all audio system components securely to prevent damage, especially in an accident.

Before making or breaking power connections in your system, disconnect the vehicle battery.

Confirm that your head unit or other equipment is turned off while connecting the input jacks and speaker terminals.

If you need to replace the power fuse, replace it only with a fuse identical to that supplied with the amplifier. Using a fuse of a different type or rating may result in damage to your audio system or your amplifier which is not covered by the warranty.

Installation precautions

1. Find a suitable location in the vehicle in which to mount the amplifier.

2. Make sure there is sufficient air circulation around the intended mounting location.

3. Mark the location for the mounting hole screws by positioning the amplifier where you wish to install it. Use a scribe or mounting screw, inserted through each of the amp's mounting holes, to mark the mounting surface. If the mounting surface is carpeted, measure the hole centers and mark with a felt tip pen.

4. Drill pilot holes in the mounting surface for the mounting screws. Place the amplifier in position, and attach the amplifier to the mounting surface securely using screws.

SHOCK HAZARD! Do not open the case of this product. There are dangerous voltages present within the unit. There are no user-serviceable parts within the unit.

Do not misuse the gain control!
Do not mistake the gain level control for a volume control! It is designed ONLY to match the output level of your audio source to the input level of your amplifier.

Do not adjust this input level to maximum unless your input level requires it.

Ignoring these instructions will result in an input overload to the amplifier, and excessive audio distortion. It can also cause the protection circuit to engage.

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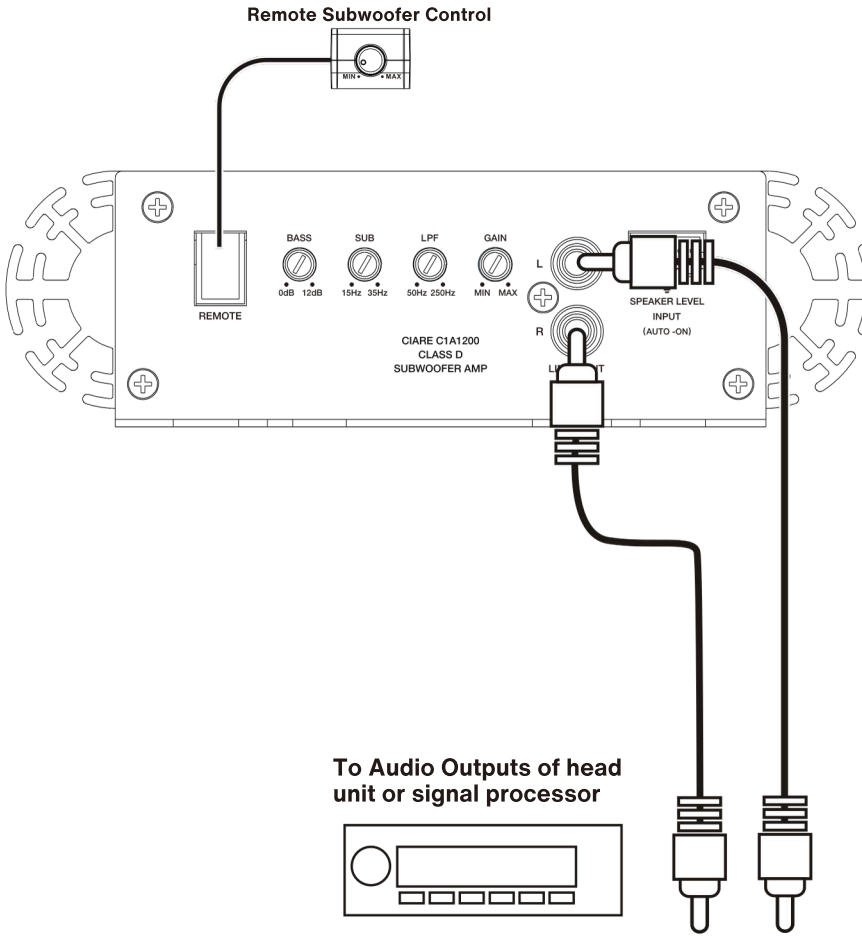
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Ignoring these instructions will result in an input overload to the amplifier, and excessive audio distortion. It can also cause the protection circuit to engage.

Low level Input Wiring

Low-level (RCA) input wiring is preferred for best audio performance. Always use a high quality RCA cables for best audio performance.

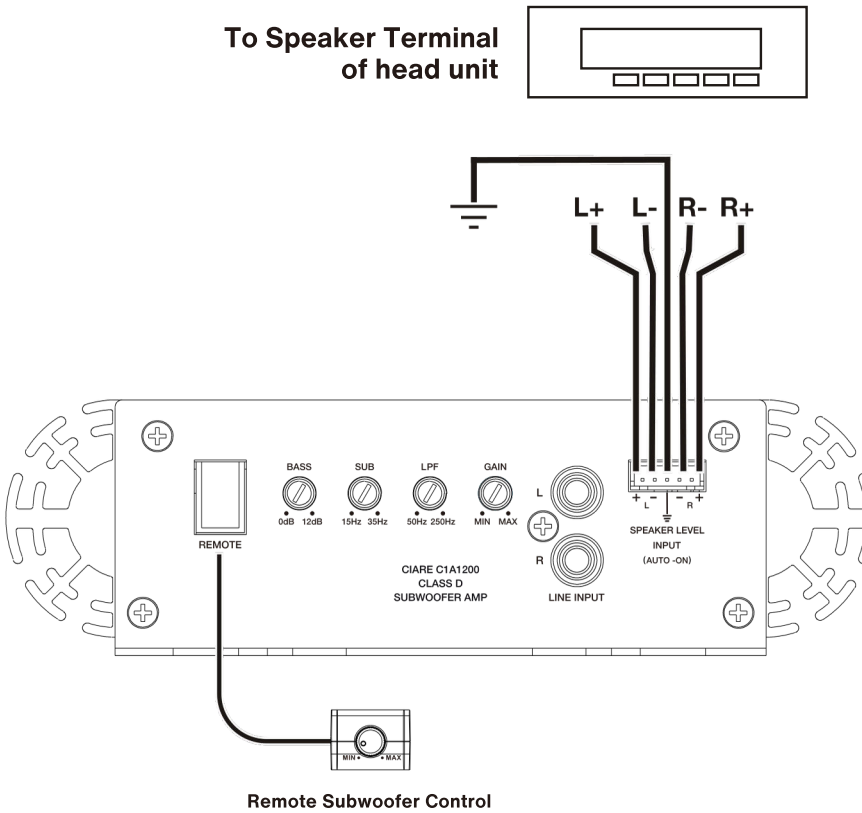
NOTE: Do not connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time! Only one input source can be used at a time.



High level Input Wiring

The high level input(s) should only be used when your head unit lacks RCA outputs.If the RCA outputs are not present, connect the speaker outputs from the receiver to the high level input connector of the amplifier. Be sure to observe polarity to avoid audio phase problems.

NOTE: Do not connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time! Only one input source can be used at a time.



Remote Subwoofer Control

Power connections

+12V Battery (4 AWG max)

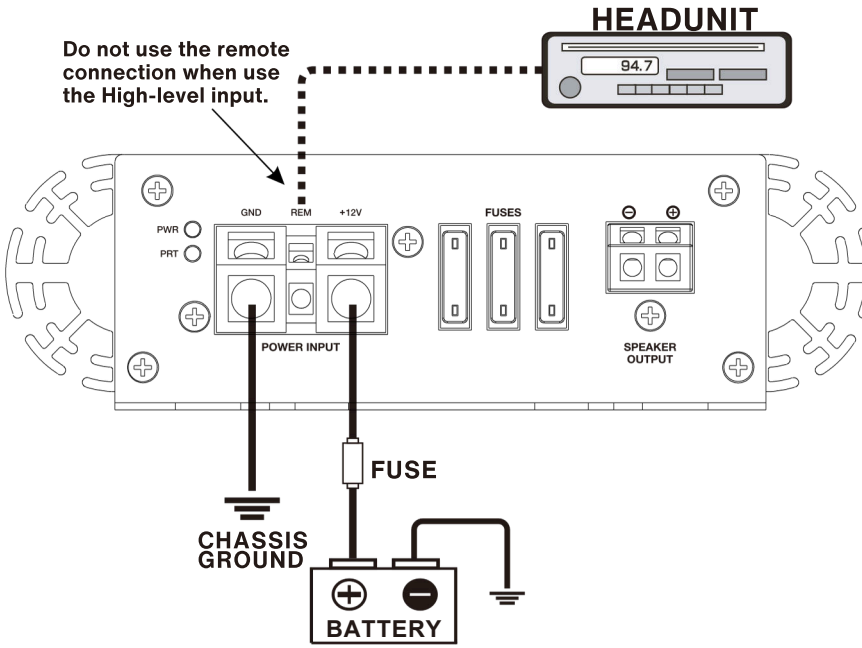
You will need to connect a power wire to the vehicle's positive battery terminal. This connection must be tight and secure to ensure proper connectivity. This wire has to be fused appropriately （see each amplifier's fuse rating under specifications) within 12 to 16 inches for safety. You will then need to connect the power wire to the 12+ terminal of the amplifier with an Allen screw driver. Do not install the fuse until installation is complete.

Ground Connection (4 AWG max)

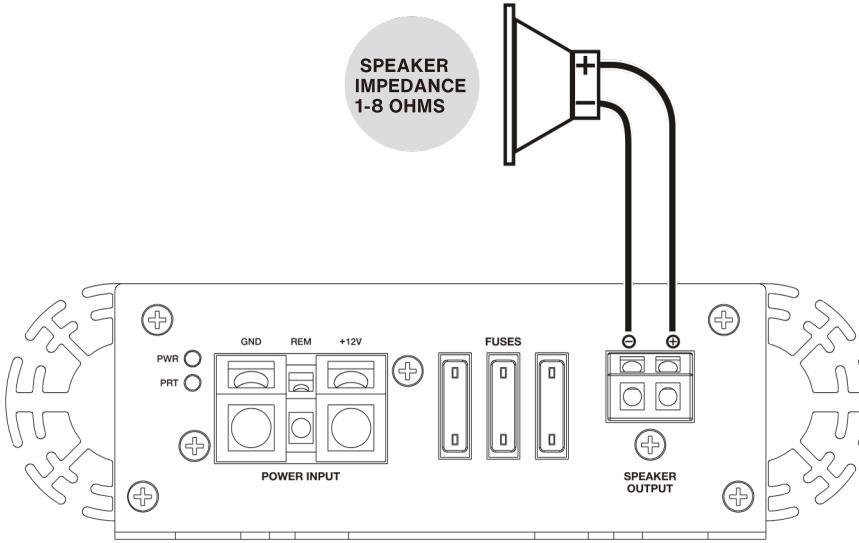
The ground connection must be made to the vehicle's chassis and should be kept as short as possible. The surface should be sanded at the contact point to clean rust, paint or grime so a metal-to-metal connection between the chassis and the termination of the ground wire is effective. You will then need to connect the ground wire to the GND terminal of the amplifier with an Allen screw driver.

Remote (12 AWG max)

The +12V remote turn-on wire is typically controlled by the source unit's remote turn-on output. The amplifier will turn on when +12V is present at its remote (REM) input and turn off when +12V is switched off. Connect the remote wire using 12 to 16 gauge wire to the REM connection of the amplifier with Allen screw driver, then connect the other end of the remote wire to either the source unit's turn on output or ignition switch circuit. **Do not** use Remote connection when using the High-level inputs.

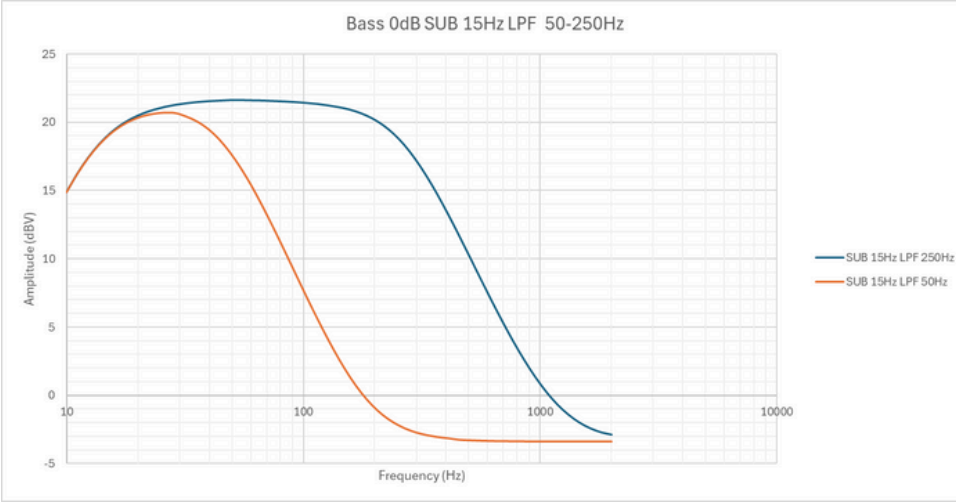


Speaker Wiring

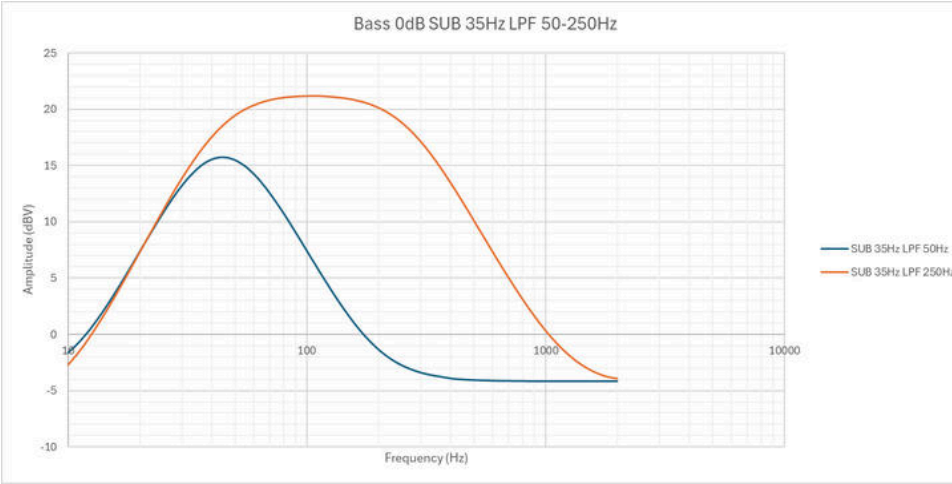


Filter Adjustment for the C1A1200

If Bass Boost is set to 0 dB:
Minimum Gain Input Sensitivity is 17.5 dBV (7.5 Vrms)
Maximum Gain Input Sensitivity is -13.7 dBV (206 mVrms)

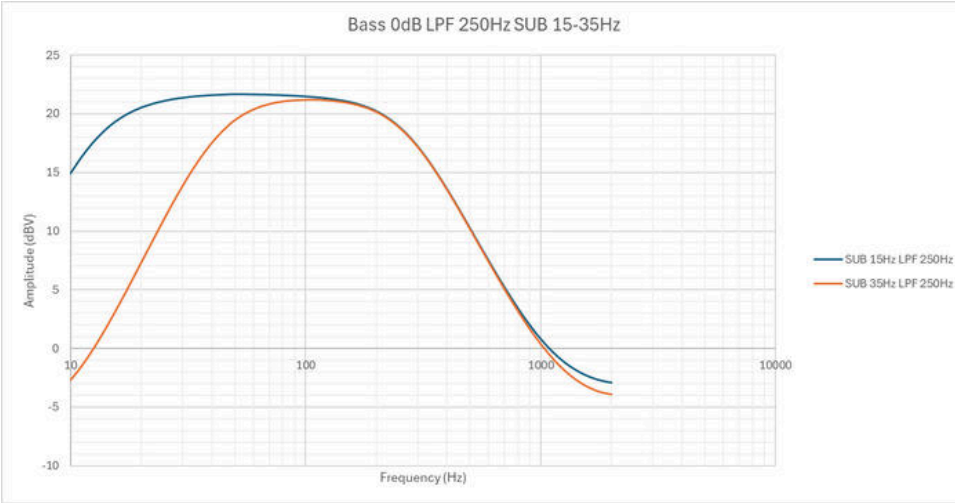


Adjusting the LPF (Low Pass Filter) from 50 Hz to 250 Hz
(Bass Boost: 0 dB, Subsonic Filter: 15 Hz, Gain: Max)

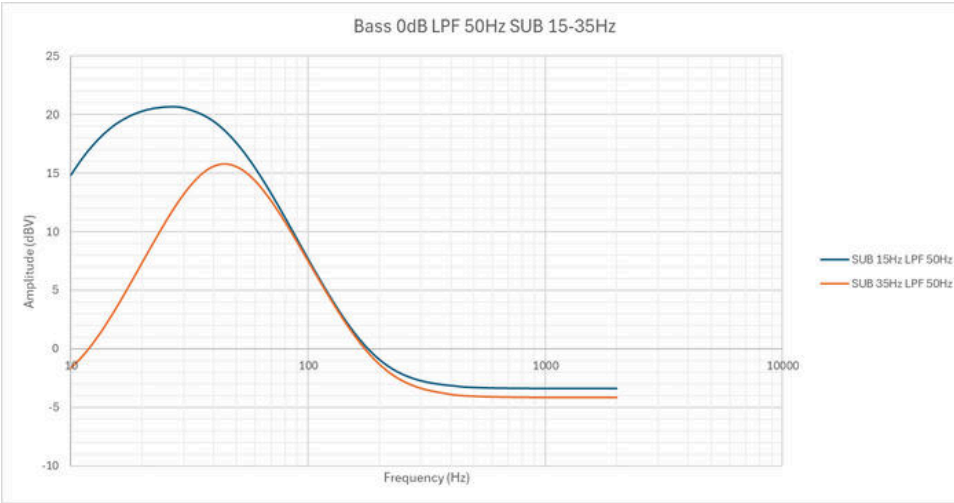


Adjusting the LPF from 50Hz to 250Hz
(Bass Boost: 0dB, Subsonic Filter: 35Hz, Gain: Max)

Filter Adjustment for the C1A1200 (cont'd)

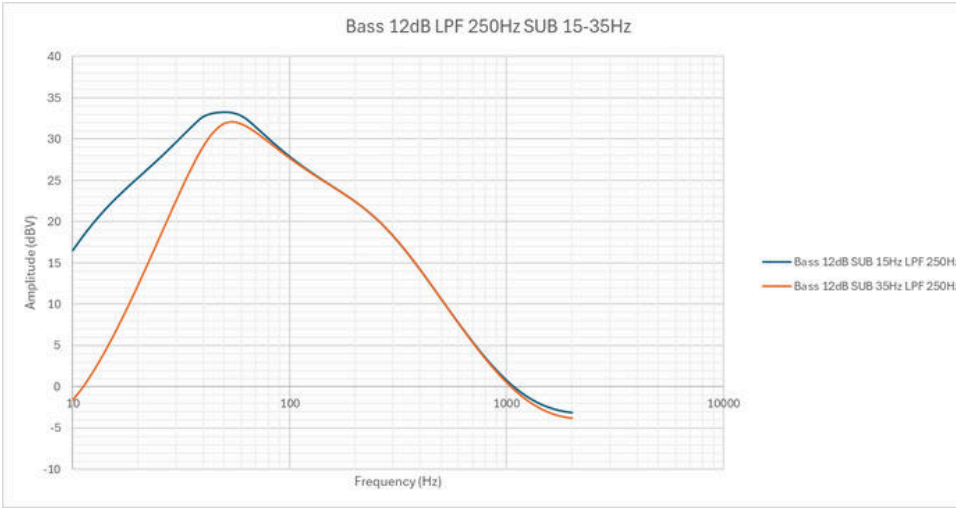


Adjusting the Subsonic Filter from 15 Hz to 35 Hz
(Bass Boost: 0 dB, Low Pass Filter: 250Hz, Gain: Max)

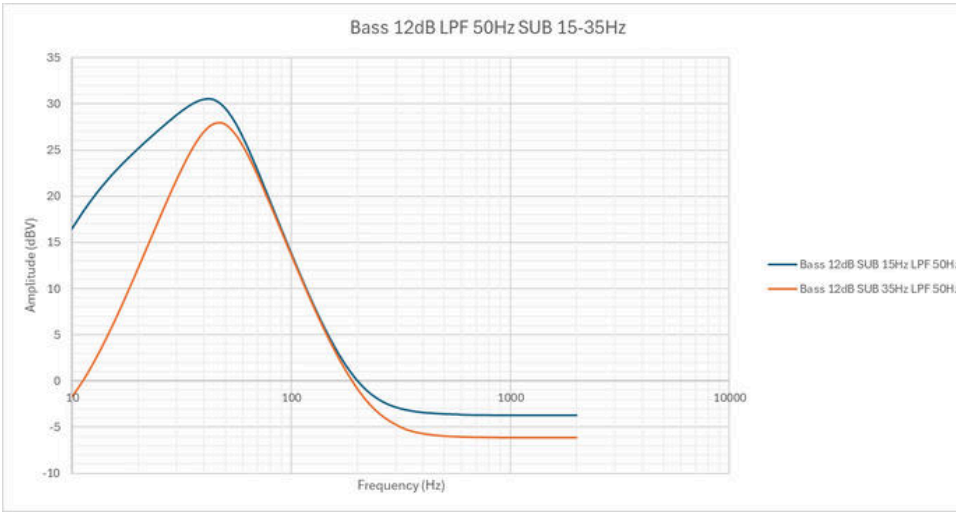


Adjusting the Subsonic Filter from 15 Hz to 35 Hz
(Bass Boost: 0 dB, Low Pass Filter: 50 Hz, Gain: Max)

Frequency Response and Filter Adjustment for the C1A1200 (cont'd)



Adjusting the Subsonic Filter from 15 Hz to 35 Hz
(Bass Boost: 12 dB, Low Pass Filter: 250 Hz, Gain: Max)



Adjusting the Subsonic Filter from 15 Hz to 35 Hz
(Bass Boost: 12 dB, Low Pass Filter: 250 Hz, Gain: Max)

Specifications

MODEL	C1A1200
Output Power Watts	
Max Power @ 4Ω	• 1 x 1000W
Max Power @ 2Ω	• 1 x 1600W
Max Power @ 1Ω	• 1 x 2400W
RMS Power @ 4Ω	• 1 x 500W
RMS Power @ 2Ω	• 1 x 800W
RMS Power @ 1Ω	• 1 x 1200W
THD @ Rated Power	• 0.01%
Input Sensitivity	• 0.2-8V
S/N Ratio	• ＞102 dB
Frequency Response (±3dB)	• 15 Hz - 250 Hz
Subsonic Filter	• 15 Hz - 35 Hz
Bass Boost	• 0 dB - 12 dB @45 Hz
Fuse Rating	• 40A x 3
Variable Low-Pass	• 50 Hz - 250 Hz
Dimensions (L x W x H)	• 330x180x53mm
	(13.0''x7.1''x2.1'')
Weight	• 7.0lbs/3.18kg

Features Subject To Change Without Notice

For more information, visit www.ciareusa.com