

A100
Class D 100W Subwoofer Amplifier

User Guide



Important Safety Instructions



CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.

• Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

PORTABLE CART WARNING



13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
16. **CAUTION:** Servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
17. **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
18. Where an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
19. **CAUTION:** Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

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| APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR USAGE |
| CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE PLUG TO WIDE SLOT, INSERT FULLY. |
| ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND. |

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Introduction

Congratulations and thank you for purchasing the **D2.1 A100 Subwoofer Amplifier!**

The A100 may be small in physical appearance but its got all the muscle you need to drive even the most demanding subwoofers to house thumping levels.

The A100 is a Class D 100 Watts amplifier that when properly installed, runs cool under almost any load.

The A100 features a stereo/mono line level audio input that can receive full band audio from any audio amplifier, receiver or preamp or an LFE input from an appropriately featured device.

The adjustable crossover allows fine-tuning the A100 low frequency input setting to properly complement any full-range speakers or room conditions.

In addition the A100 features a phase adjustment that provides sub performance optimization given the subs placement relative to the main speakers.

Finally, if you just need more thump, there is a Boost switch that will provide a 6dB boost at 40 Hz...just in case you want some extra kick.

The A100 is auto-sensing so anytime an audio signal hits the A100 inputs, the amp will instantly turn ON. The amp will also turn itself OFF after 15 minutes when no audio signal is present. There is also a 12VDC Trigger that will turn the A100 ON when 12-24VDC is applied and turn the amp OFF when the voltage is removed.

The A100 is the perfect match for many applications but makes a particularly great running mate with the **D2.1 Stereo amp with subwoofer out**, (see the system illustration in the Connections section).

Please read and follow the instructions in this User Guide to assure you are getting the most from your new **D2.1 A100 Subwoofer Amplifier**.

Features

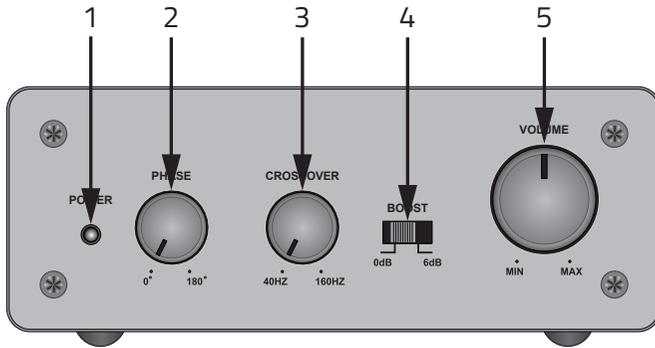
- Compact Size...Fits Almost Anywhere
- Cool, Efficient Digital Design
- Stereo Or Mono Audio Line Level Input (RCA)
- Adjustable Subwoofer Crossover Frequency
- Adjustable Phase Settings
- 40Hz 6dB Boost Switch
- Audio Sensing
- 12/24VDC On/Off Trigger Input
- 110/220V Switchable

What's Included

- 1 - A100 Amplifier
- 1 - AC Power Cord
- 1 - User Guide

Front Panel Features

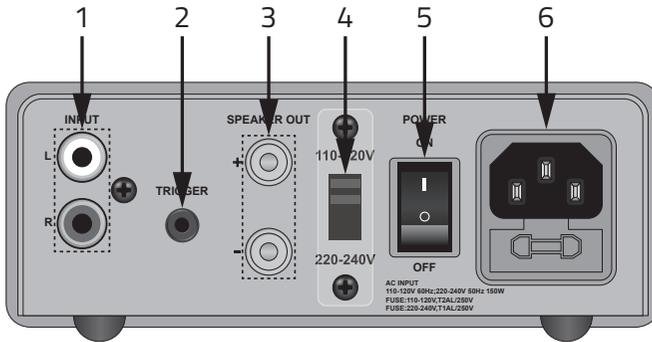
This is the stuff on the front panel...



- 1. POWER LED** - One, green LED. Green LED illuminates when the A100 is connected to AC power and turned ON.
- 2. PHASE** - The Phase setting allows compensation for subwoofer location relative to the main speakers. Adjust the Phase setting to the point of highest sub audio output.
RANGE: 0° to 180°.
- 3. CROSSOVER** - The Crossover sets the frequency at which audio content will pass to the A100 Speaker Out.
RANGE: 40Hz to 160Hz.
- 4. BOOST** - One, slide switch. Set to 0dB for normal signal. Set to 6dB for 6dB boost @ 40Hz.
- 5. VOLUME** - Adjusts the A100 audio output level to the connected subwoofer.
RANGE: MIN (OFF) to MAX (Eyeballs bouncing around in eye sockets.)

Rear Panel Features

This is the stuff on the rear panel...

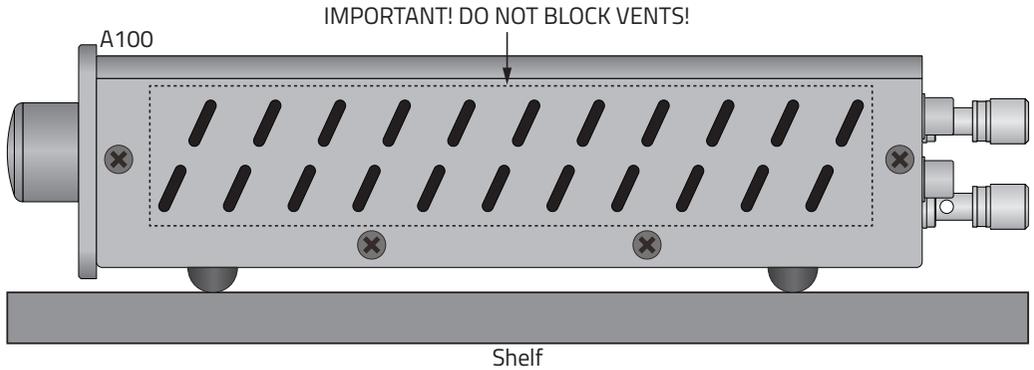


- 1. INPUT** - Two, RCA jacks. Stereo or mono audio sensing line level audio input. A100 will turn ON when a line level audio signal is present on either jack. Amp will turn OFF after 15 minutes of no audio signal.
- 2. TRIGGER** - One, 3.5mm mini jack. Connect to the DC voltage Control OUT on an amplifier, AV Receiver or other audio processor to automatically turn the A100 ON/OFF. When DC voltage is applied, the A100 will turn ON. When DC voltage is removed, the A100 will turn OFF. RANGE: +12 to +24V DC. POLARITY: Tip: +VDC, Sleeve: GND.
- 3. SPEAKER OUT** - Two, gold spring push terminals. Connect to a passive subwoofer or a powered sub with speaker level input.
- 4. 110/220V** - One, switch. Select either 110V-120V or 220V-240V as appropriate for local AC line voltage. Please confirm local voltage prior to use or making changes to the setting.
- 5. POWER** - One, switch. Set to ON position to turn power to the amp ON. Set to OFF position to turn power to the amp OFF.
- 6. AC MAINS** - One, three-prong socket. Use the supplied 3-pin ground power cable to connect the unit to an external AC power supply.

Side Panel Vents

Even though the A100 will typically run cool, the side vents allow air to circulate through the chassis allowing optimum performance, and besides...they just look cool...get it...air vents... look *cool*...never mind...

One serious item...please be sure to not block the vents with wires or other objects that will block the free flow of air through the amp.



Installation

SHELF MOUNT

The A100 can be conveniently mounted on a shelf top as shown. Leave room for wires. Allow adequate space for airflow. Do not set objects on top of the amp.

A100

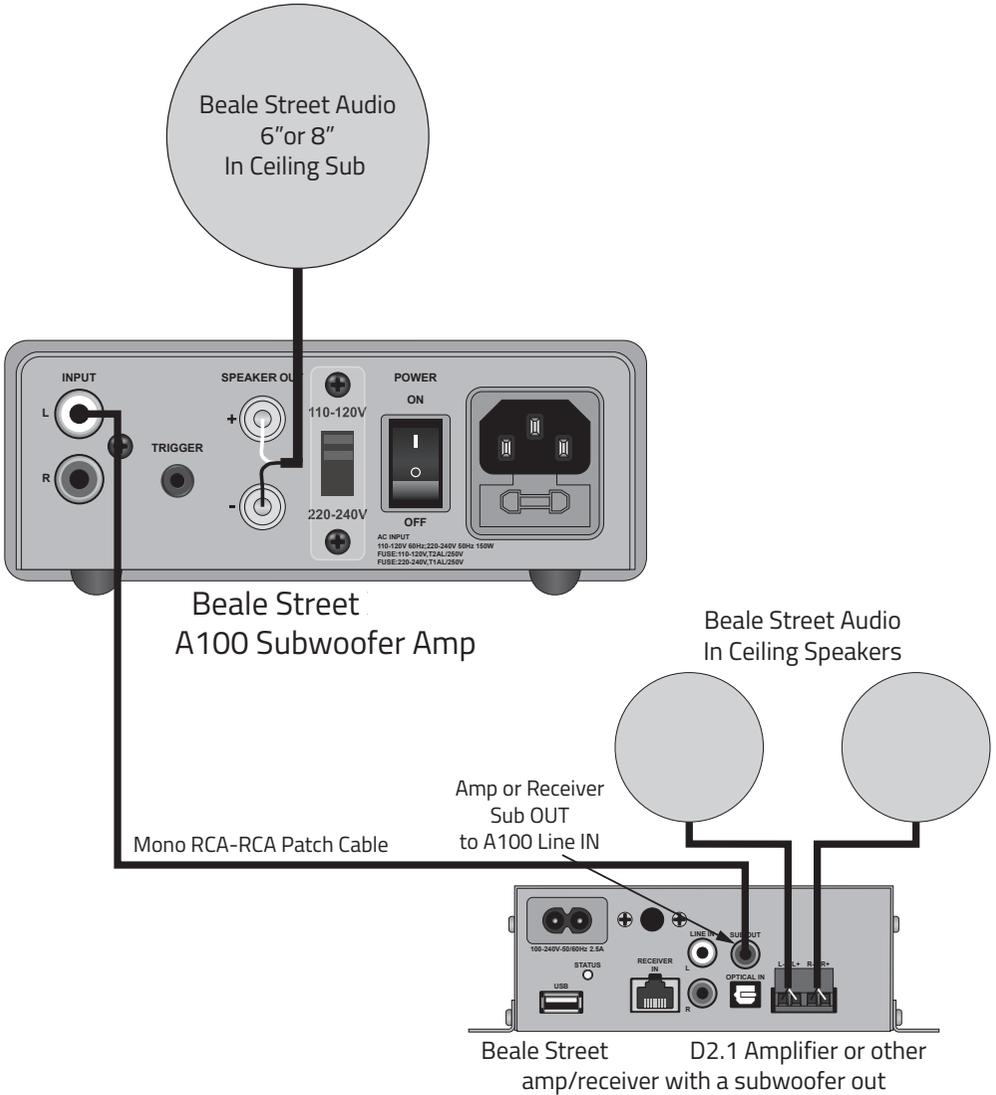


Shelf

Connections

All connections are conveniently placed on the rear panel for sane wire management, convenient connections and simple service.

The illustration shows the A100 in a typical home entertainment system driving an in ceiling subwoofer for TV audio with stereo in ceiling speakers.



Connections

NOTE: Do not connect the AC power cord or turn the amp on until all connections have been made and confirmed. Making connections with the power on can result in...well...undesirable circumstances...that may not be covered under the factory warranty.

INPUT (A100)

1. Using a stereo or mono RCA-RCA cable with gold ends, connect the LFE OUT, Sub OUT, or other line level audio OUT on an amplifier, surround receiver or other audio preamp to the Input on the A100.

SPEAKER OUT (A100)

1. Use 16AWG (min) 2-conductor stranded speaker wire for subwoofer connection
2. Strip approximately 1/2 to 3/4 of an inch off the ends and twist the strands together so there are no loose strands that can cause shorts.
3. While observing proper wire polarity, insert the stripped and twisted ends of the speaker wire into the appropriate + and - terminals. Be sure there are no loose strands that can cause shorts.
4. Confirm connection and polarity.
5. Connect the speaker wires to the appropriate + and - terminals on the subwoofer.
6. Confirm connection and polarity.

TRIGGER

1. Using a 2 circuit 3.5mm mini plug, connect +12 to 24VDC from the trigger device to the striped wire (tip). Connect GND from the trigger device to the unmarked wire (sleeve).

AC MAINS

1. Selects AC power mode (110VAC/220VAC) before connecting to AC power. Set as appropriate for geographic location.
2. After all connections have been made connect the supplied AC Power Cord to an unswitched AC power outlet.

NOTE: Do not connect the AC power cord or turn the amp on until all connections have been made and confirmed. Making connections with the power on can result in...well...undesirable circumstances...that may not be covered under the factory warranty.

Operation

Once installed and setup, the A100 doesn't typically need a whole lot of attention. But just in case you need to tweak something, here's what you'll want to do...

ON/OFF

The A100 is auto-sensing, so typically once the system is installed and setup, the power will automatically turn ON with the presence of an audio signal on either of the L & R Line Inputs. The amp will automatically turn OFF when no audio signal has been detected for 15 minutes.

TRIGGER - If you are using the Trigger IN, the amp will automatically turn ON when DC voltage is applied to the Trigger jack and turn OFF when DC voltage is removed..

POWER - If however you are a major control freak and just have to have the ability to turn the amp ON/OFF, toggle the Power ON/OFF button once to turn the amp ON/OFF.

VOLUME - Adjust the volume to the subwoofer until low frequency level has a smooth, natural sounding transition from the left and right speakers.

PHASE - The Phase setting allows compensation for subwoofer location relative to the main speakers. Adjust the Phase setting to the point of highest sub audio output.
RANGE: 0° to 180°.

CROSSOVER - The Crossover sets the frequency at which audio content will pass to the A100 Speaker Out. Adjust the crossover so there is a slight overlap with the low-midrange cut-off to produce a natural sounding transition to low frequencies.
RANGE: 40Hz to 160Hz.

BOOST- Set to 0dB for normal signal. Set to 6dB for 6dB boost @ 40Hz.

Specifications

AUDIO

| | |
|---------------------------|-------------------|
| Maximum Output Power..... | 70W/8Ω; 100W/4Ω |
| THD..... | 1% |
| Frequency Response..... | 40Hz-160Hz +/-3dB |
| Signal to Noise..... | 95dB |
| Input Sensitivity..... | 200mV |
| Crossover..... | 40-160Hz |
| Phase..... | 0-180° |

GENERAL

| | |
|--|---|
| Trigger Input..... | +12VDC to +24VDC |
| Line Voltage Range..... | 110-120/220-240 VAC |
| Standby Power..... | 1.8W |
| Max Power Consumption..... | 150W |
| Dimensions..... | 5.5"W x 2"H x 7.5" D (140mm W x 52mm H x 189mm D) |
| Overall Length (including knobs/connectors)..... | 8.74" (222mm) |
| Weight..... | 3.3lbs (1.5kg) |

Limited Warranty

All in-wall, in-ceiling, outdoor speakers, volume controls, and freestanding loudspeakers have a Lifetime Limited Warranty. This warranty includes lifetime parts and repair on components. Powered subwoofers and amplifiers have a two (2) year limited warranty. This warranty includes two (2) year parts and repair labor on components. obligation under this warranty is limited to repairing or replacing any component found defective in material or workmanship under normal conditions of use. This warranty shall not apply to products which have been abused, modified, disassembled, or repaired by anyone other than Xpress or one of its appointed service centers. Products to be repaired under this warranty must be returned to the factory or designated service center with all transportation and insurance charges pre-paid.

IMPORTANT: This warranty is ONLY valid if the product is purchased through a Certified Dealer. Proof of purchase may be required.

Note: It is the policy of Xpress to continuously incorporate improvements into our products. All specifications, warranty terms, and prices are subject to change without notice.

Notes

