



BRX300

S E R I E S

QUICK START GUIDE

IMPORTANT SAFETY INSTRUCTIONS

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 is 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 a 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.
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. Use the mains plug to disconnect the apparatus from the mains.
16. **WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.**
17. **DO NOT EXPOSE THIS EQUIPMENT TO DRIPPING OR SPLASHING AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, ARE PLACED ON THE EQUIPMENT.**
18. **THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE.**



TO PREVENT ELECTRIC SHOCK DO NOT REMOVE TOP OR BOTTOM COVERS OF THE AMPLIFIER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WATCH FOR THESE SYMBOLS:

The lightning bolt triangle is used to alert the user to the risk of electric shock.

The exclamation point triangle is used to alert the user to important operating or maintenance instructions.

WELCOME

Thank you for purchasing a BRX300 Series system. This system is designed to be a true plug-and-play high-output loudspeaker system solution that features a combination of the BRX308-LA dual 8" 2-way line array element and the BRX325SP dual 15" subwoofer that also houses a 6-channel high-power amplifier along with 48kHz/24-bit DSP for loudspeaker tuning. All the components are packaged to maximize use of space, ease of handling and setup.

For additional product information, please download the owner's manual at <http://jblpro.com>.

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ORDERING INFORMATION

MODEL	DESCRIPTION
BRX308-LA	Dual 8" line array element
BRX325SP	Dual 15" subwoofer with power amplifier and system DSP
BRX308-ACC	Accessory kit: Transport cart for 4 x BRX308-LA, soft cover for cart, soft cover for subwoofer, speaker cables for system
BRX308-AF	Array frame for suspending up to 8 x BRX308-LA
BRX308-PM	Pole mount + adapter kit



The BRX300 Series amplifier is only certified for 230V operation.

MAGNETIC FIELD

CAUTION! Do not locate sensitive high-gain equipment such as preamplifiers directly above or below the unit. Because this amplifier has a high power density, it has a strong magnetic field which can induce hum into unshielded devices that are located nearby. The field is strongest just above the unit.

1 AMPLIFIER PANEL OVERVIEW



1 POWER SUPPLY INPUT
This PowerCon connector provides the mains power supply to the unit.

2 POWER BUTTON
Turns the amplifier power on or off.

3 COOLING VENTS
The vents provide air flow to cool the amplifier. DO NOT BLOCK these vents.

4 AMPLIFIER OUTPUTS FOR TOPS
There are two 4-pole outputs for the tops labelled TOP A and TOP B. Each output may be used to power up to 2 x BRX308-LA speakers.

5 AUDIO INPUTS
There are two audio inputs on balanced XLR connectors labelled TOP and SUB. These provide the audio input signal to the TOP amplifier and SUB amplifier respectively.

6 AUDIO THRU OUTPUTS
There are two audio THRU outputs on balanced XLR connectors that are connected in parallel to the audio inputs. These outputs are unprocessed and are not buffered. They may be used to daisy-chain multiple amplifier units.

7 MODE SWITCH
This switch toggles the amplifier between 'INPUT Y' and 'DUAL' input modes.
In 'INPUT Y' mode, the amplifiers receive their Input ONLY from the connector labelled 'TOP'. This signal drives both the SUB and TOP outputs.
In 'DUAL' mode, a separate signal is required at the input labelled 'SUB' to drive the subwoofer (SUB output).

2 BRX308-LA OVERVIEW



Fig. 2: Speaker Connectors

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1 IN/THRU SPEAKER CONNECTORS

There are two 4-pole speaker connectors on each BRX308-LA loudspeaker. See Figure 2. These are connected in parallel and either connector may be used as INPUT or THRU to daisy-chain to another loudspeaker. Up to two BRX308-LA speakers may be connected in parallel to one amplifier output.



Fig. 3: BRX308-LA Angle Bar View

The BRX308-LA has captive rigging hardware that allows for inter-box angles of 0, 1, 2, 3, 4, 5, 6, 8, 10 and 12°.

To set the inter-box angle to one of the values mentioned above, align the bottom box's angle bar 'Lock' hole to match with the desired angle value on the top box and lock it in place with the Quick Release Pin.

3 AMPLIFIER SETUP

CONNECTING THE AC POWER CORD

Connect your amplifier to the AC mains power outlet using the supplied AC power cord. First, connect the PowerCon end of the cord to the PowerCon connector on the amplifier. Then plug the other end of the cord to the AC mains.

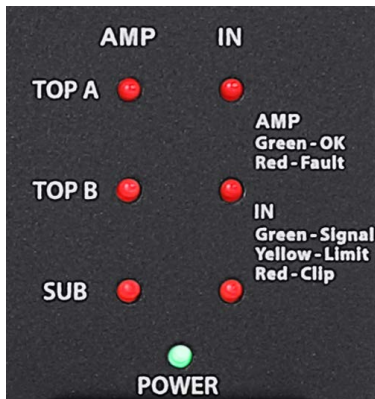


WARNING: The third (ground) prong of the supplied AC power cord connector is a required safety feature. Do not attempt to disable this ground connection by using an adapter or other methods.

Make certain the AC mains voltage and current ratings are sufficient to deliver full power to the speaker system. The BRX300 Series amplifier is made to operate at 230 VAC, 50 Hz ONLY.

POWER-UP PROCEDURE

1. Connect the tops to the amplifier using 4-core cable wired to the NL4 connectors. Up to two tops may be wired in parallel to each output of the amplifier (labelled 'TOP A' and 'TOP B'). Connect the input source to the XLR inputs and select the appropriate drive mode ('Dual' or 'INPUT Y').
2. Toggle the amplifier's POWER button to the ON position. The POWER indicator will light green and the amplifier will boot as long as sufficient mains power is provided. During boot-up, all the other status LEDs are red. The LEDs turn off to indicate the amplifier is ready. If Input signal is present, the Input LED's will light green.
3. Turn your audio source up to an optimum level. The BRX300 Series amplifier will begin to limit input signals at +17 dBu, and the inputs begin clipping at +21 dBu. To prevent damage to the system, it is recommended that you do NOT run the system in the limit or clip state for long periods.



The bottommost LED, labelled POWER, is lit green when the unit is receiving power and is in the ON state.

The left three LEDs show the amplifier status for each of the three pairs of amplifier channels that drive the SUB, TOP A and TOP B. When the LEDs are lit green, the amplifier is in the 'ready' state and will pass audio through to the loudspeakers. If these LEDs light red, it indicates a fault with the amplifier. Possible reasons could be thermal shutdown or extended period of output limiting.

The LEDs on the right are used to indicate the status of input signal to each of the three pairs of amplifier channels that drive the SUB, TOP A and TOP B. Green indicates signal presence (≥ -40 dBu), yellow indicates the onset of Input limiting (≥ 17 dBu), while red indicates clipping (≥ 21 dBu) of the input signal.

It is advised to set up the gain structure so that the yellow status LEDs only light momentarily during maximum drive level from the mixer. Extended periods of limiting and clipping of the input signal will lead to failure of the loudspeaker components.

4 SYSTEM SETUP EXAMPLES

The most common use case for the BRX308 system is the ground stack option, as shown in Figure 4.

It is advised to use an inter-box angle of at least 2° between each BRX308-LA to allow for wide enough vertical coverage of the high frequencies.

When ground-stacking on the subwoofer, the built-in anchor point on the subwoofer (Figure 5) allows for +ve angle values (tops pointing upwards). To set +ve angles for the 1st top on the sub, align the 'Lock' hole on the sub anchor point to the desired angle on the top and secure in place with the Quick Release Pin.

To set the inter-box angles, align the bottom box's angle bar 'Lock' hole to match the desired angle value on the top box and lock it in place with the Quick Release Pin.

When setting inter-box angles of 8° and above, the angle bar of the upper box may obstruct the angle bar from the box below from aligning with the desired value. In such cases, the angle bar of the upper box must be stored using the Quick Release Pin in the 'Standby' hole.



Fig. 4: Ground Stack Option



Fig. 5: BRX325SP Top View

The other option is to set up the system using the pole mount option, as shown in Figure 6.

A maximum of 2 x BRX308-LA speakers may be mounted on the pole adapter kit that is available for purchase as part of the BRX308-PM Kit.

It is advised to use an inter-box angle of at least 2° between each BRX308-LA to allow for wide enough vertical coverage of the high frequencies.

The pole mount adapter bar allows for the following angles for the first mounted box: 0, -2, -3, -4, -5, -6, -8, -9, -10, -11 and -12°. The negative angles allow the first box to aim downwards and cover audience members that are closer to the array.

To set the first box at the desired -ve angle value, align the desired value on the adapter bar (see Figure 7) to the bottom of the box and lock it in place with the Quick Release Pin in the matching hole.

We recommend an inter-box angle of 10° or 12° for the second box. This allows for more uniform coverage from front to back.

The system sub/top balance in this pole mount configuration will have more sub energy (when compared to the ground stack option using 1 sub + 4 tops). We recommend reducing the sub volume from the mixer if required.



Fig. 6: Pole Mount Option

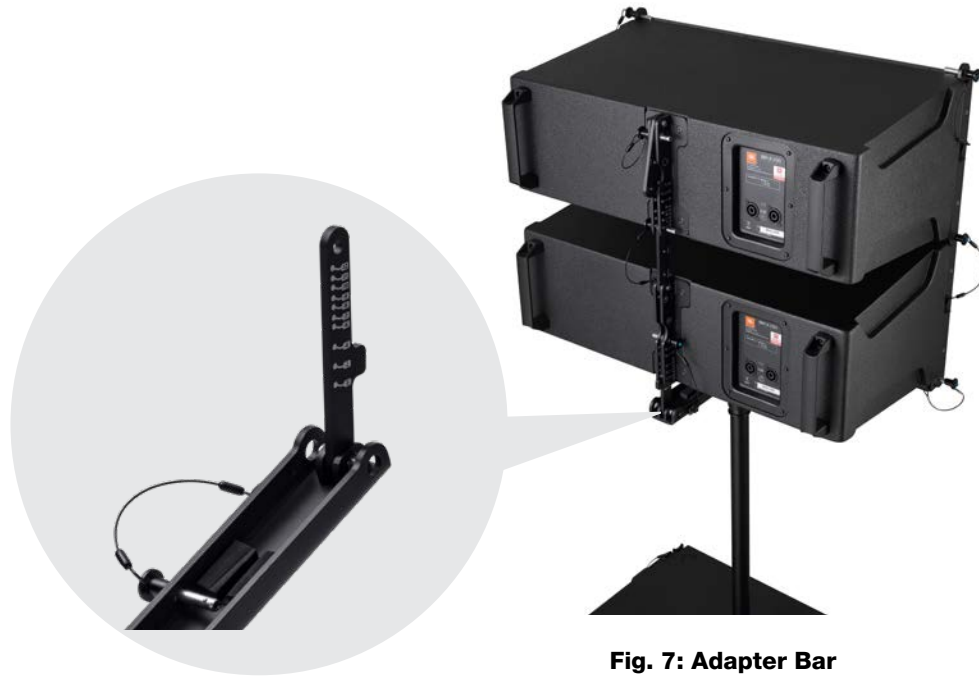


Fig. 7: Adapter Bar



BRX300 SERIES

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Website URLs

China: <https://jblpro.com/zh/products/brx300>

Asia: <https://jblpro.com/en-asia/products/brx300>