



**BX600**



**BX1200**

**BR610**

**BR615**



The **BX Series Bass Amplifier Heads** offer classic natural bass tone with unprecedented tonal control and extended headroom. The **BX600 mono block** with the same front end features delivers 225w at 8 ohms, 400w at 4ohms and 600w at 2ohms. The **BX1200 "dual" mono block** amplifier delivers 2x275w at 8ohms, 2x400w at 4ohms and 2x600w at 2ohms.

Four discrete Class A input stages produce the harmonic basis for the preamp right from the input jack. It begins with a boutique flat response, then we add extensive tone control allowing you to carve out your signature sound. Harmonic content increases as you turn up the DRIVE control producing rich harmonics at maximum settings. Solid design, bullet-proof construction and a list of indispensable features assure the **BX600 or BX1200** will be the heart of your rig for years to come.

- Discrete Class A input stages
- Preamp DRIVE and master VOLUME controls
- 3 mid sweep semi-parametric EQ, BASS, and TREBLE
- 9-band Graphic EQ with front panel switch (also by optional FS22 footswitch)
- Signal MUTE front panel switch (also by optional FS22 footswitch)
- EFFECT LOOP front panel bypass switch (also by optional FS22 footswitch)
- DIRECT OUT balanced XLR with independent LEVEL control, switchable "Pre-Post" and "Ground Lift", DC isolated
- TUNER output jack independent of MUTE switch
- Single knob optical COMPRESSOR
- High current SPEAKON® combo connectors or 1/4" steel speaker jacks
- Metal shaft controls with threaded metal bushings mounted directly to front panel
- Circuit boards are MIL SPEC, double sided, FR-4 glass epoxy
- Lightweight design
- BX1200 -19" 2U all steel chassis, BX600 - aluminum chassis

**GETTING STARTED QUICKLY**

If you are like most players, you probably want to plug in your new amp and get started playing right away. Before you start, be sure your amp is plugged into the correct AC voltage.

1. With POWER off, connect a speaker cabinet to one of the rear SPEAKER OUTPUTS.
2. Set the DRIVE, MASTER volume, and the two amp volumes (**BX1200** only) to "0" and set the ACTIVE INPUT switch for your type of bass.
3. Set all tone controls to their center "0" position and the CONTOUR to FLAT. This is the "FLAT" setting for the amp. For now, turn off the graphic EQ.
4. Now, turn the amp ON. Turn up the volume on your bass guitar. Gradually increase the amp VOLUME control to the desired level. If no sound is heard, turn down the VOLUME control and check the MUTE switch.
5. Increasing the DRIVE control will add harmonic richness to your sound. Turning up the DRIVE also increases volume. Re-adjust the MASTER volume after adjusting the DRIVE.
6. Adjust the tone controls to your liking. Keep in mind that turning up a tone control isn't always the answer. Sometimes turning down one of the MID controls will get you the sound you want.
7. Need more volume? There is a limit to the amount of volume a speaker can produce and driving a speaker beyond it's limit can damage it. Even though these are powerful amplifiers, adding more speakers is the only way for substantially more output. Every time you double your speakers, you increase your acoustic output by a factor of four.

Hopefully, this will help you get started. Have fun exploring the features and sounds of the **BX600/BX1200**. Take the time with your new amp to realize it's full potential.

**RECEIVING INSPECTION—read before getting started**

INSPECT YOUR UNIT FOR DAMAGE which may have occurred during shipping. If damage is found, please notify the shipping company and CARVIN immediately.

SAVE THE CARTON & ALL PACKING MATERIALS. In the event you have to re-ship your unit, always use the original carton and packing material. This will provide the best possible protection during shipment. CARVIN and the shipping company are not liable for any damage caused by improper packing.

SAVE YOUR INVOICE. It will be required for warranty service if needed in the future. SHIPMENT SHORTAGE. If you find items missing, they may have been shipped separately. Please allow several days for the rest of your order to arrive before inquiring.

RECORD THE SERIAL NUMBER on the enclosed warranty card for your records. Keep your portion of the card and return the portion with your name and comments to us.

USA customers register online at: [www.carvin.com/registration](http://www.carvin.com/registration)

All other countries register online at: [www.carvinworld.com/registration](http://www.carvinworld.com/registration)

**SPECIFICATIONS:**

MODEL	BX600	BX1200
<b>Output Power</b>		
8ohms, THD <1.0%	225w	2x 275w
4ohms, THD <1.0%	400w	2x 400w
2ohms, THD <1.0%	600w	2x 600w
8ohms bridge	NA	800W
4ohms bridge	NA	1200W
Speaker Impedance:	4 Ohms total (BR610 and BR615 only)	
<b>Input Impedance:</b>	>200K	
<b>Tone Controls:</b>	TREBLE 10K, BASS 50Hz, 3 semi-parametric MIDs, CONTOUR, and 9-band Graphic EQ	
<b>Drive Control:</b>	Varies input gain and harmonic content	
<b>AC Requirements:</b>	120VAC 60 Hz or 240VAC 50 Hz optional models	
<b>Power Requirements:</b>	BX600: 500VA, BX1200: 1100VA	
<b>Dimensions</b>		
<b>BX1200(no cabinet):</b>	(2U) 3.5"H x 19"W x 10"D	
<b>BX600(only in cabinet):</b>	(2U) 5.7"H x 21.6"W x 12"D	
<b>BR610 &amp; BR615:</b>	23.8"H x 20.7"W x 18.5"D	
<b>Weight :</b>	<b>BX600:</b> 20 lbs. <b>BX1200:</b> 23 lbs net	
	<b>BR610:</b> 64 lbs. <b>BR615:</b> 61 lbs net	
<b>Warranty:</b>	One year parts and labor	

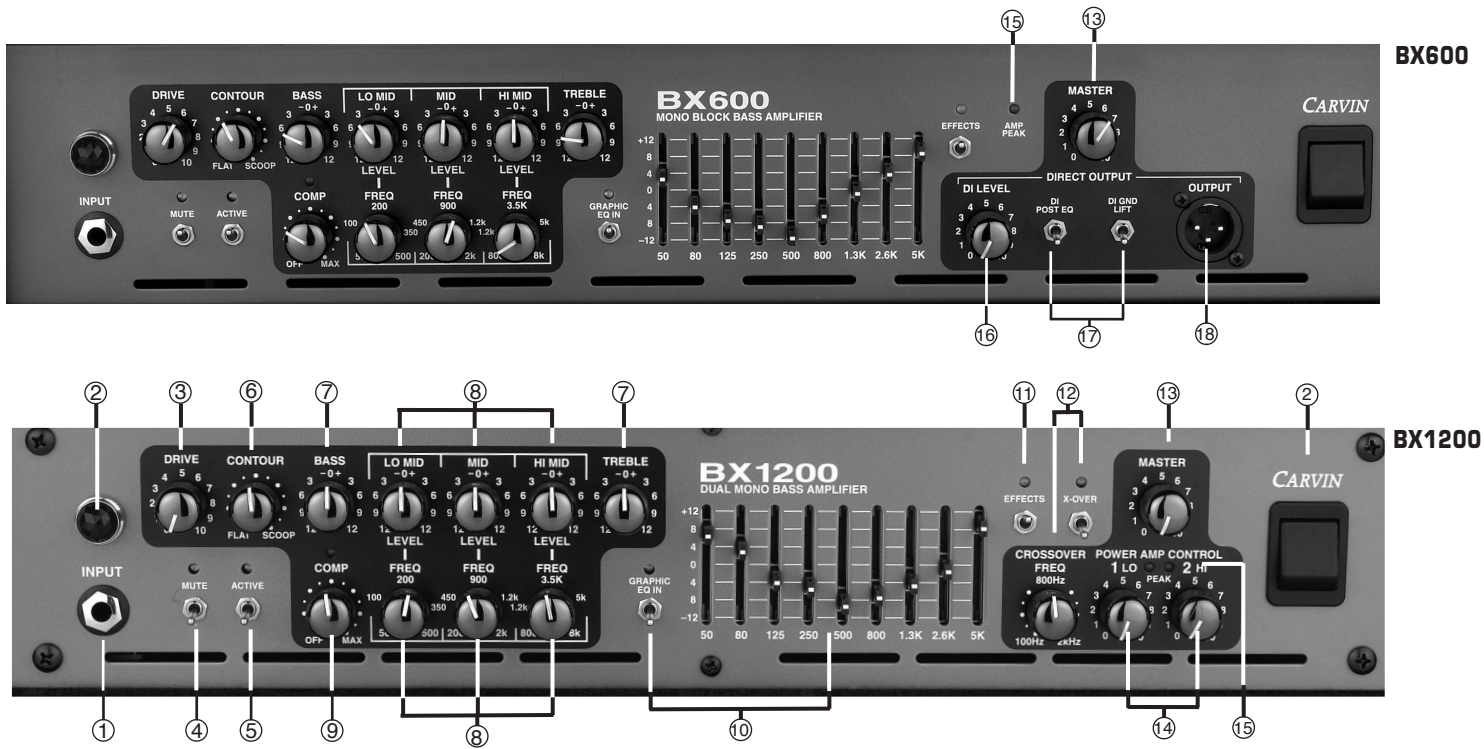


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# FRONT PANEL CONTROLS



## 1. INPUT JACK

The 1/4" phone jack is a high impedance instrument input designed to handle both active and passive basses in connection with the ACTIVE switch.

## 2. BLUE JEWEL LIGHT AND POWER SWITCH

The power switch turns on the amplifier and is indicated by the large blue jewel light over the input jack.

## 3. DRIVE CONTROL

The DRIVE control adjusts the input level to the class A preamps. The DRIVE control serves two purposes. DRIVE can be used to adjust the input sensitivity for the differences in bass pickups. DRIVE will also change the harmonic content of your sound. Turning the knob closer to 10 will create a more over-driven tone. The DRIVE will also change the volume of the amplifier, so use it in combination with the MASTER control to achieve the desired volume.

## 4. MUTE SWITCH

The MUTE switch turns off the output of the amplifier. A blue LED indicates the MUTE switch is on. The MUTE switch is ideal for changing basses and silent tuning on stage, since the rear tuner output is never muted. The mute feature can also be switched with an FS22 footswitch.

## 5. ACTIVE SWITCH

Flip the ACTIVE switch to the DOWN position for standard bass pickups. If your bass uses a battery with an onboard active preamp, put the switch in the UP position. A blue LED indicates the ACTIVE switch is on.

## 6. CONTOUR CONTROL

The CONTOUR control provides a variable mid range scoop. When this control is set to "FLAT" there is no change to the mid range frequencies. As you turn the contour control clockwise, the mid range is scooped at the center frequency at 250Hz. When the CONTOUR control is set to maximum the mid-range is cut by -9dB at 300Hz.

## 7. BASS AND TREBLE TONE CONTROLS

The BASS and TREBLE controls are custom shaped tone controls designed to deliver punchy lows and crisp highs for a variety of bass sounds. When a control is turned to the right it boosts the signal and when turned to the left cuts the signal.

The affected frequencies for the BASS start at 80Hz and can deliver a great deal of volume. Be careful not to distort the output or overpower the low end of your speakers.

The affected frequency for the TREBLE control begins at 5kHz.

## 8. SEMI-PARAMETRIC MID SWEEP TONE CONTROLS (LEVEL & FREQ)

These three EQ's can take some time to learn how to use. Start with the LO MID sweep. The FREQ control does not function if the GAIN control is set in the center "0" position. To demonstrate, turn the GAIN to the right for full boost. Now play your bass and turn the FREQ control from left to right and notice the how the added mids change frequency. Now turn the GAIN to the full left and turn the FREQ control again and notice the mids disappear at different frequencies. Try this with the MID and HI MID also. As you can hear, there are many variables, so write down some of the settings for future reference. The mid sweep system controls can be very effective to fine tune your overall sound.

## 9. COMPRESSOR (COMP)

For some people, a compressor is a new feature. What it basically does is reduce the volume of the incoming signal as it reaches a preset maximum level. As the COMP knob is turned up (clockwise), the compressor lets a lower percentage of peak signals to pass through. This percentage is called the "compression ratio". When the knob is at the off position (full counter-clockwise) the ratio is 1:1, where all of the input signal passes through the compressor without being affected. At the MAX setting, the compression ratio is 3:1.

The advantage of a compressor is to reduce peaks and other sudden loud parts (transients) of your playing so you can increase your overall volume. For example, in slap bass playing, the plucked notes can put out peaks that would distort the amplifier at normal playing volumes. If the amp's volume was adjusted for these peaks, the rest of the notes would be too quiet to hear with the band. When the compressor is adjusted to where the LED comes on for loud peaks, the amplifier can be played louder without distortion. It's like having someone re-adjusting the volume of the amplifier to prevent distortion when the peaks occur.

The compressor circuit in the BX series is also internally connected to the power amplifier. When the amplifier reaches peak clipping levels it activates the compressor and reduces the output signal. This helps prevent the amplifier from clipping and protects the speakers.

## 10. 9 BAND GRAPHIC EQUALIZER

The 9 band graphic EQ has been designed with center frequencies most requested by professional bass players. This EQ can be used to fine tune the tonal content of the amps output. Since the graphic EQ is switchable with either the optional FS22 footswitch or the EQ switch on the front panel, it can be used during passages of a song when the bass needs to punch through the mix. Musicians that play more than one bass on stage will also find this useful to get the sounds they desire out of each instrument. The BLUE LED located above the GRAPHIC EQ IN switch signifies when the graphic EQ is working. **NOTE:** When the front panel GRAPHIC EQ switch is off, it cannot be turned on with the footswitch.

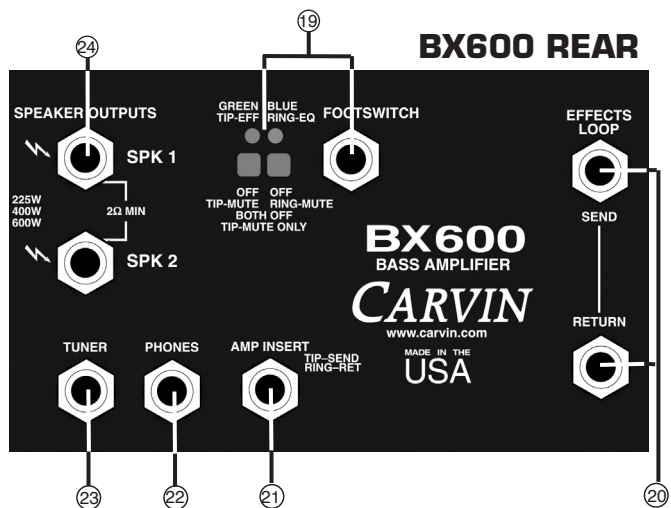
## 11. EFFECTS LOOP SWITCH

The green LED above the front panel EFFECTS switch indicates when the EFFECTS LOOP is active. When the EFFECTS switch is off the EFFECTS LOOP is bypassed. The signal is still present at the SEND jack, but the RETURN is not active. The EFFECTS LOOP can also be switched using the optional FS22 footswitch. **NOTE:** When the EFFECTS switch is off, the loop cannot be turned on with the footswitch.

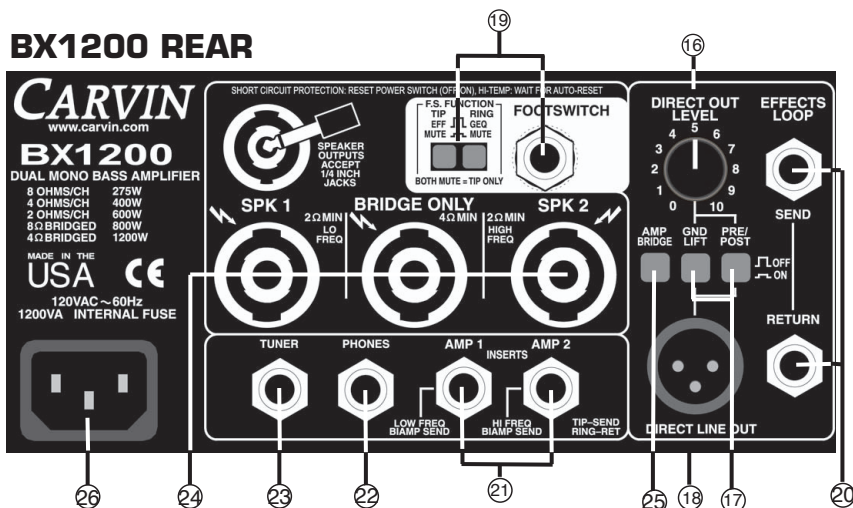
## 12. ELECTRONIC CROSSOVER (BX1200 ONLY)

The electronic X-OVER is used for a bi-amped speaker configuration. When the X-OVER switch is ON, the BX1200 is in bi-amp mode and the BLUE LED above it will be lit. To select the crossover frequency, rotate the FREQ control knob until the desired frequency is obtained. Low frequencies go to AMP1, and high frequencies go to AMP2. This allows speakers designed for specific frequencies to be utilized to their fullest potential, and allows the user even greater control over the tone of their rig. To start, try setting the FREQ at 300Hz. **NOTE:** BI-AMPING does not necessarily deliver the most volume from your system.

# REAR PANEL CONTROLS



# BX1200 REAR



## 13. MASTER VOLUME

Use the MASTER to control the overall volume of the amplifier. Reduce the MASTER level if clipping occurs as indicated by the PEAK LEDs (see #15). Using the COMPRESSOR will also help prevent clipping. The MASTER control also affects the HEADPHONE output.

## 14. POWER AMP CONTROL (BX1200 ONLY)

The 1 LO and 2 HI levels control the volume to the individual amps. These are used to balance the low and high frequency speaker cabinets when in X-OVER bi-amping mode. To set the balance, bring up the 1 LO knob until the desired volume level is reached. Now bring up the 2 HI knob until the desired balance has been achieved. Use the MASTER volume control to set the overall volume.

## 15. PEAK LEDS

The red PEAK LEDs are clipping indicators for the amplifier(s). If the amps are clipping use the MASTER to reduce the level. The COMPRESSOR may also serve to help prevent clipping. Be sure not to run the amps with heavy continuous clipping (PEAK LEDs ON) or your speakers could be damaged.

## 16. DI LEVEL (DIRECT OUT)

The DI LEVEL controls the output level of the XLR DIRECT OUTPUT. The DI level is not affected by the MASTER level.

## 17. DIRECT OUT PRE/POST SWITCH AND GROUND LIFT SWITCH

The direct out PRE/POST switch allows the choice of either a simple buffered signal straight from the input jack (PRE mode) or a processed signal including the Drive, Compressor, Tone, Graphic EQ, and Effect Loop processing (POST mode).

If a hum occurs when connecting the XLR to a mixer, try using the GND LIFT switch. The GND LIFT switch lifts the ground pin 1 of the XLR to 100 ohms above chassis ground.

## 18. DIRECT OUT XLR JACK

The DIRECT OUT XLR jack provides a balanced independent output for going direct to the main PA or recording input. The front MASTER control does not affect the output level. The XLR is protected against Phantom power (DC voltage) on cables coming from mixer inputs.

## 19. FOOTSWITCH AND CONFIGURATION SWITCHES

The optional FS22 footswitch can be used to remotely control 2 of these 3 features: MUTE, graphic EQ, or EFFECTS LOOP bypass.

The two configuration switches set the functions of the FS22 footswitch. The left switch controls the footswitch connected to tip of the 1/4" plug and the right switch controls the footswitch connected to the ring of the plug. There are four configurations:

TIP switch setting	RING switch setting	footswitch 1 function	footswitch 2 function	TIP LED 1 (must be on)	RING LED 2 (must be on)
IN	IN	Effect Loop	Graphic EQ	GREEN	BLUE
OUT	IN	MUTE	Graphic EQ	off	BLUE
IN	OUT	Effect Loop	MUTE	GREEN	off
OUT	OUT	MUTE	not used	off	off

The rear LEDs near each switch work with the front LED of the Effects loop and Graphic EQ. These LEDs will only light when the feature is turned ON by the footswitch. Use them to verify the configuration switches are in the desired positions.

Any standard footswitch with a stereo (TRS) plug will work.

## 20. EFFECTS LOOP (SWITCHABLE)

The SEND jack is the output of the preamp and is designed to deliver the proper level for the input of an external effects processor. The SEND signal source is after the TONE CONTROLS and COMPRESSOR (#7, #8, & #9).

The RETURN jack is designed to receive signals from the output of an external effects processor. When a signal is plugged into the RETURN, it breaks the connection between the preamp and the internal power amp. The RETURN signal goes through the GRAPHIC EQ (if active) and MASTER controls to the power amp(s).

The EFFECT LOOP can be bypassed with the front panel switch (see #11) or optional FS22 footswitch (see #19).

## 21. AMP INSERT JACKS

The AMP INSERT jacks are TRS (Tip-Ring-Sleeve). The "TIP" is the SEND and the "RING" is the RETURN. Using a TRS (Tip-Ring-Sleeve) insert cable, the preamp signal can be sent out via the TIP to an external processor and then returned to the internal power amp via the RING. If a standard (Tip-Sleeve) instrument cable is used, the signal can be routed from the preamp to an external power amp. These insert jacks break the signal to the internal power amplifier.

Use the MASTER (or AMP 1 & 2) controls on the front panel for SEND level adjustments.

When the X-OVER is OFF, both outputs receive the same full range signal. When the X-OVER is ON, AMP 1 receives the low frequency signals and AMP2 receives the high frequency signals.

## 22. HEADPHONE

The HEADPHONE jack is a stereo 1/4" jack. Volume is adjusted by the MASTER control. To listen to headphones without hearing other speakers, unplug the speakers. Effects used in the AMP INSERTS will be heard in the headphones. The BX600 sends a mono signal to each side of your headphones.

## 23. TUNER LINE OUT JACK (UNMUTED)

The TUNER LINE OUT jack is provided as a place to connect a tuner. This output is unaffected by the MUTE function so you may tune your bass quietly while using the MUTE.

## 24. SPEAKER OUTPUTS (SEE IMPEDANCE CHART ON BACK PAGE)

The BX1200 uses three combination 1/4" and SPEAKON® speaker output connectors. Multiple speakers can be attached by chaining cabinets together, so long as the total impedance is not below 2 ohms for each SPK 1 or SPK 2 jack and 4 ohms for the BRIDGE ONLY jack. 1/4" speaker cables can be plugged into the center of the green SPEAKON® jacks. The SPEAKON® connector is highly recommended for BRIDGE mode (see #25).

The BX600 uses two standard 1/4" speaker jacks. The jacks are connected in parallel and either or both jacks can be used so long as the total impedance does not go below 2 ohms. The BR610 and BR615 combos use 4 ohm speakers. When adding additional speakers to these combos, the extension speakers must be a total of 4 ohms or more to stay above the BX600's 2 ohm minimum load.

## 25. AMP BRIDGE SWITCH (BX1200 ONLY)

The AMP BRIDGE switch enables the full power of both amps in the BX1200 to be sent to the single BRIDGE ONLY jack. Total minimum impedance is 4 ohms. DO NOT connect speakers to the SPK 1 or SPK 2 when in AMP BRIDGE mode. NOTE: In the AMP BRIDGE mode, the MASTER and POWER AMP1 controls adjust the output volume.

## 26. AC POWER & FUSE

The detachable AC POWER CORD supplied is designed to operate with one type of voltage (the European 230V export model uses a CEE-7 plug cord set). Check the rear power cord label for the proper voltage. Plug the cord into a grounded 3 prong power source. No attempt should ever be made to use the amp without the ground connected.

The FUSE is located internally above the AC connector cord. To check or replace the fuse, remove the power cord and the enclosure lid. The fuse type is a 250V Fast Blow rated at 20A for 120V or 10A for 230V models.

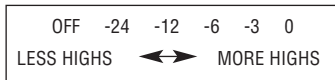
## TITANIUM HF DRIVER ATTENUATION CONTROL (BR610 & BR615)

On the back of the BR610 and BR615 speaker enclosures there is a jack plate with the HIGH FREQUENCY ATTENUATION control for the HF Driver. This control will only affect the volume of the HF Driver and does not affect the 10" or 15" woofers.

The HIGH FREQUENCY ATTENUATION control is another way to increase or decrease the highs coming from your amp. There are six settings ranging from "0" (full on) to "OFF". If more highs are desired turn the HF ATTENUATION control UP towards "0" (clockwise), or turn it DOWN towards "OFF" (counter-clockwise) if a warmer sound is desired.

**Note 1:** One thing to consider with the HF Driver volume is which direction the cabinet is facing. Because the combo amplifier's HF Driver is less than two feet off the ground, the listeners seated in front of the amplifier may be getting more of the HF Driver volume than you (the player) standing in front of the amplifier. So be conscious of the volume and direction of the HF Driver when adjusting.

**Note 2:** If you occasionally clip the power amp, the HF driver may make the clipping distortion more noticeable. Turning the HF LEVEL down a few clicks or "OFF" will reduce the unpleasant sound and will further protect the HF driver from damage.



## X-OVER (bi-amping) and BRIDGE modes on the BX1200:

The BX1200 is capable of three different power amp modes, each with different advantages:

### 1. DUAL MONO mode (standard)

Both the X-OVER and AMP BRIDGE switches are set to "off". Each power amp receives the same mono signal (unless effects are used in the AMP INSERTS). Speakers can be connected to a single or both SPK1 and SPK2 output jacks. The balance of volume between the two speaker outputs can be set by the "1 LO" and "2 HI" POWER AMP controls. This mode can be useful when using two different speaker cabinets (such as a 4x10" and 2x10") that have unequal output levels or when using cabinets with low wattage ratings.

### 2. X-OVER mode (bi-amping)

The X-OVER switch is "ON" and AMP BRIDGE switch is "off". Power amp 1 (LO freq) handles frequencies below the CROSSOVER FREQ setting. Power amp 2 (HI freq) handles frequencies above the CROSSOVER FREQ setting. Subwoofers such as 15" or 18" speakers should be plugged into the "SPK 1" jack. Full range (or high frequency) enclosures should be plugged into the "SPK 2" jack. The balance of volume between the two speakers is set by the "1 LO" and "2 HI" POWER AMP controls. The X-OVER mode takes full advantage of the frequency response of these two different types of speakers.

### 3. BRIDGE mode (mono, full power into one speaker load)

The AMP BRIDGE switch is "ON" (X-OVER settings are disabled). Plug speakers into the BRIDGE ONLY jack. DO NOT use SPK 1 or SPK 2 jacks in the BRIDGE mode. This mode is used to get the most power into one speaker enclosure, or several identical enclosures. Be sure your speaker(s) can handle 1200watts for 4ohm or 800watts for 8ohm enclosures. If two identical speaker enclosures are used each one will receive 1/2 the wattage. When using speakers of unequal impedance make sure they can handle the full wattage.

## HELPFUL HINTS

### 1) NO SOUND:

The MUTE function has been inadvertently engaged.  
Speakers have been improperly connected.  
Effect Loop has been improperly connected.

### 2) NO HIGH FREQUENCIES:

The BX1200 speaker connections are incorrect when in the X-OVER mode. Tweeters or midrange drivers have been damaged from too much power.

### 3) AMP SEEMS VERY SENSITIVE ON INPUT SIGNALS:

The drive control is turned all the way up.  
The active switch may need to be turned on.

### 4) DIR XLR HUM:

Try switching the rear GND LIFT switch IN or OUT.  
Try switching to pre DI.  
Check for noise from external effects or bad cabling.

### 5) POOR BASS FROM MULTIPLE ENCLOSURES (BX1200):

Make sure the AMP BRIDGE switch is "OFF" when using SPK1 and SPK2 jacks. The BX1200 speaker connections are incorrect when in the X-OVER mode.

### 6) FOR MAXIMUM OUTPUT:

To get more output, use multiple speakers or enclosures. Every time you double your speakers, your acoustic output goes up by a factor of four. Load the amplifier down to its lowest minimum impedance for maximum RMS power.


If you go below the minimum load, your amp will shut off and go into the "protect" mode. To reset, turn your amp off and connect the recommended load.

SPEAKON® cables are recommended for your BX1200 because of their high current capacity. While standard 1/4" speaker cables will work, 12 GA SPEAKON® cables will allow higher currents to pass through the cable to extract every watt from your amp.


## SPEAKER COMBINATIONS / OHMS:

Configuration	Impedance	Notes
Two 8 ohms speakers (output)	= 4 ohms	NOTE: BX1200 (OK) (OK for BRIDGE ONLY)
Four 8 ohms cabinets	= 2 ohms	(OK) (not for BX1200 BRIDGE)
Three 8 ohms speakers	= 2.66 ohms	(OK) (not for BX1200 BRIDGE)
Two 4 ohms speakers	= 2 ohms	(OK) (not for BX1200 BRIDGE)
One 8 & one 4 ohm cabinet	= 2.66 ohms	(OK) (not for BX1200 BRIDGE)
Two 8 & one 4 ohms speakers	= 2 ohms	(OK) (not for BX1200 BRIDGE)
One 2.66 & one 8 ohms speakers	= 2 ohms	(OK) (not for BX1200 BRIDGE)
Two 2 ohms speakers	= 1 ohm	(no)
Three 4 ohms speakers	= 1.33 ohms	(no)
Two 4 & one 8ohm speakers	= 1.6 ohms	(no)

The BX1200 and BX600 are powerful amplifiers. As with any amplifier, make sure your speakers are suitable for the available wattage. Driving speakers with too much wattage will cause them to distort and eventually fail. If distorted sound is coming from the speakers, reduce the volume until the distortion stops.

 This symbol is intended to alert the user 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.

**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN  


 This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

### IMPORTANT! FOR YOUR PROTECTION, PLEASE READ THE FOLLOWING:

**WATER AND MOISTURE:** Appliance should not be used near water (near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc). Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

**POWER SOURCES:** The product should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

**GROUNDING OR POLARIZATION:** Precautions should be taken so that the grounding or polarization is not defeated.

**POWER CORD PROTECTION:** Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, The appliance inlet is the disconnect device. Keep it readily accessible.

**SERVICING:** The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

**FUSING:** If your unit is equipped with a fuse receptacle, replace only with the same type fuse. Refer to replacement text on the unit for correct fuse type.

### SAFETY INSTRUCTIONS (EUROPEAN)

The conductors in the AC power cord are colored in accordance with the following code.  
GREEN & YELLOW—Earth BLUE—Neutral BROWN—Live

U.K. MAIN PLUG WARNING: A molded main plug that has been cut off from the cord is unsafe. NEVER UNDER ANY CIRCUMSTANCES SHOULD YOU INSERT A DAMAGED OR CUT MAIN PLUG INTO A POWER SOCKET.

### LIMITED WARRANTY

Your Carvin product is guaranteed against failure for 1 YEAR unless otherwise stated. Carvin will service and supply all parts at no charge to the customer providing the unit is under warranty. Shipping costs are the responsibility of the customer. CARVIN DOES NOT PAY FOR PARTS OR SERVICING OTHER THAN OUR OWN. A COPY OF THE ORIGINAL INVOICE IS REQUIRED TO VERIFY YOUR WARRANTY. Carvin assumes no responsibility for horn drivers or speakers damaged by this unit. This warranty does not cover, and no liability is assumed, for damage due to: natural disasters, accidents, abuse, loss of parts, lack of reasonable care, incorrect use, or failure to follow instructions. This warranty is in lieu of all other warranties, expressed or implied. No representative or person is authorized to represent or assume for Carvin any liability in connection with the sale or servicing of Carvin products. CARVIN SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

### MAINTAINING YOUR EQUIPMENT

Avoid spilling liquids or allowing any other foreign matter inside the unit. The panel of your unit can be wiped with a dry or slightly damp cloth in order to remove dust and bring back the new look. As with all pro gear, avoid prolonged use in caustic environments (salt air). When used in such an environment, be sure the amplifier is adequately protected.

### SERVICE

In the USA, please call 800-854-2235 for a RMA # (return authorization number). Write this number on the box and enclose a description of the problem. Prepay to 12340 World Trade Drive, SD, CA 92128

Outside the USA, contact your dealer or go to <http://www.carvinworld.com> for your nearest service center. Include a written description of the problem with serial number and date of purchase.



**CAUTION**  
RISK OF ELECTRIC SHOCK

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL! THIS UNIT CONTAINS HIGH VOLTAGE INSIDE!