

CAUTION RISK OF ELECTRIC SHOCK REFER SERVICING TO QUALIFIED SERVICE PERSONNEL! THIS UNIT CONTAINS HIGH VOLTAGE INSIDE!

FRONT & REAR PANEL CONTROLS



1. INPUT JACK

The 1/4" phone jack is an instrument input designed to handle both active and passive basses in connection with the Active Switch.

2. BLUE JEWEL LIGHT

The Blue jewel light indicates the power is on.

3. DRIVE CONTROL

The DRIVE control adjusts the input level to the class A preamps. The Drive control serves two purposes. The first half of the knob, 0-5, can be used to adjust the input sensitivity for the differences in bass pickups. The second half of the knob, 5-10, will increase the harmonic content of the tone. The closer to 10 the more overdrive the tone will become. The drive knob will increase the volume of the amplifier, so use it in combination with the master volume to achieve the desired amplifier volume.

4. MUTE SWITCH

The MUTE switch mutes the output of the amplifier. A blue LED indicates the MUTE switch is on. The mute switch is ideal for changing basses while the amp is on and silent tuning on stage, since the rear tuner output is not muted. The mute feature can also be switched with an FS22 footswitch.

5. ACTIVE SWITCH

Flip the active switch to the down "OFF" position for standard passive 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, a mid range cut is scooped at 250Hz. When the contour control is set to maximum, the mid-range is cut at -9dB at 300Hz.

7. BASS AND TREBLE TONE CONTROLS

The BASS and TREBLE tone controls are custom shaped controls to deliver punchy lows and crisp tight highs for a variety of bass sounds.

When the BASS control is turned to the right, it boosts the signal and when turned to the left cuts the signal. The effected frequencies are centered at 80Hz and can deliver a great deal of volume. Be careful not to distort the output.

When the TREBLE control is turned to the right, it boosts the signal and when turned to the left, it cuts the signal. The boosted frequency for the TREBLE control is centered at 8k Hz.

8. MID SWEEP TONE CONTROLS (GAIN & FREQ.)

These two controls will take some time to learn how to use. First, 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 turn the FREQ. control from full left to full right and notice the added mids change frequencies as

you play your bass. Now turn the GAIN to the full left and re-sweep the FREQ. control and notice the mids disappear at different frequencies. There are many variables as you can hear, so write down some of the settings for future reference. The mid sweep system is designed for fine tuning your overall sound.

9. COMPRESSOR (COMP)

For some people, a compressor is a new feature. What it basically does is reduce (or compress) the volume of the incoming signal to conform to a preset maximum output level. This describes the COMP knob in the full-clock wise position where it functions as a limiter. As the knob is turned back (counter clockwise) the compressor lets a larger and larger percentage of the incoming signals to pass through. This is raising the threshold of where the compressor turns on. The maximum compression ratio is 3:1.

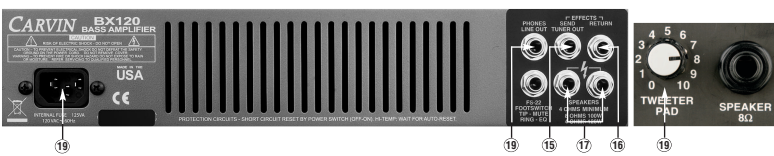
The advantages of a compressor is to increase the overall level of playing (or the average level) and not have peaks or other sudden loud parts (transients). For example, in slap bass playing, the plucked notes can put out peaks that could distort the amplifier at normal playing volumes. On the other hand, if the amplifiers volume was adjusted for these peaks, the rest of the notes would be too quiet to hear. Now, when the compressor is adjusted to where the indicator LED comes on when the peaks are present, the amplifier can be played louder and still reduce the peaks without distortion. It's like having someone constantly and instantly re-adjusting the volume of the amplifier to prevent distortion when the peaks occur.

The Compressor circuit is also internally connected to the power amplifier. When the amplifier reaches a distortion level that maybe harmful to speakers it activates the compressor to reduce the input signal. This in turn takes the amplifier out of distortion and protects the speakers even when the compressor control is set to "0".

10. 5-BAND POST SHAPE EQUALIZER AND EQ IN SWITCH

5 band's of the GRAPHIC EQ have been custom shaped and selected for the bass guitar. The levels and tonal shaping of each band are customized individually unlike a standard graphic EQ to increase its usefulness and sweeten the sound of each band. Here are some references for the individual sliders to help relate the frequencies in hertz to perceived sounds.

- The 80Hz slider is for the ultra lows. Often used in the cut region to boost or reduce the low end.
- The 250 Hz slider is for the mid-low bass. The bass has a great deal of sound here, so this slider can change the sound drastically. Slide it up and down to hear what you like.
- The 500Hz slider is for the mid-bass frequencies. Like the 250Hz slider, there is a great deal of bass guitar here also.
- The 800Hz slider is for the bass guitar's high mids. This is where the mids start to get snappy, but they can also get honky.
- The 2KHz slider is for the bass guitar's highs. The crispy high's in slap bass playing start in the range of this slider.



ADJUSTING THE GRAPHIC EQ SLIDERS:

The best way to use the GRAPHIC EQ is to set all the sliders to their center detent positions. When the sliders are in this position, they do no affect the audio signal. After playing in this "flat" setting for a few minutes, raise one slider (to boost) and play a broad range of notes to hear the change. Then lower the same slider pass the center detent (to out), play a few notes to hear the change and return the slider to the center position. Try this with each slider to hear what they do, then go back and adjust them together if needed for your sound.

EQ IN switch: when the blue LED is lit the Graphic EQ is in and will effect the sound of the amplifier. The Graphic EQ can also be switched in and out with an FS22 footswitch.

11. MASTER VOLUME

The master is the last volume control of the amplifier. This is where overall level of the amplifier is set. The master volume also effects the headphone output.

12. DI LEVEL & DI XLR OUTPUT

The BR series provides this professional feature only found on our larger bass amplifiers. The direct output is used to send a direct signal to the main PA system or a recording track. The signal is a buffered and balance version of the signal straight from the input jack. Use the DI level control to adjust the output level of the direct output, and use the Ground lift switch to break a ground loop buzz caused by creating power ground loops through making the direct output connection to the PA system.

13. POWER SWITCH

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

14. HEADPHONE/LINE OUT JACK

The 1/4" jack can be used for mono headphone or a line output to feed a mixer or power amp.

15. SEND JACK (EFFECTS LOOP)

The SEND jack is the output of the preamp. This jack, used in conjunction with the RETURN jack, makes up the external effects loop. The SEND jack is designed to put out the proper level for the input of an external effects processor.

16. RETURN JACK (EFFECTS LOOP)

The RETURN jack completes the effects loop in conjunction with the SEND jack. This jack is designed to receive signals from an external effects processor. When something is plugged into this jack it goes directly into the power amp portion of the bass amplifier and breaks the connection between the bass preamp and the internal power amp.

17. SPEAKER OUTPUT JACK(S)

There are 2 speaker output jacks designed for a total minimum impedance of 4 ohms.

18. AC POWER

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 defeat or use the amp without the ground connected.

19. HF DRIVER LEVEL CONTROL (ENCLOSURE)

In the back of the BR12 and BR15 there is a small jack plate with a level knob for the HF Driver. This level control adjusts the volume of the HF Driver and does not effect the 15" woofer.

The HF Driver level control is another way to increase or decrease the highs coming from your bass. If more highs are desired, the HF Driver level can be turned up (clock wise), or turned off if a warmer sound is desired.

Note: One thing to consider with the HF Driver volume is the 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.