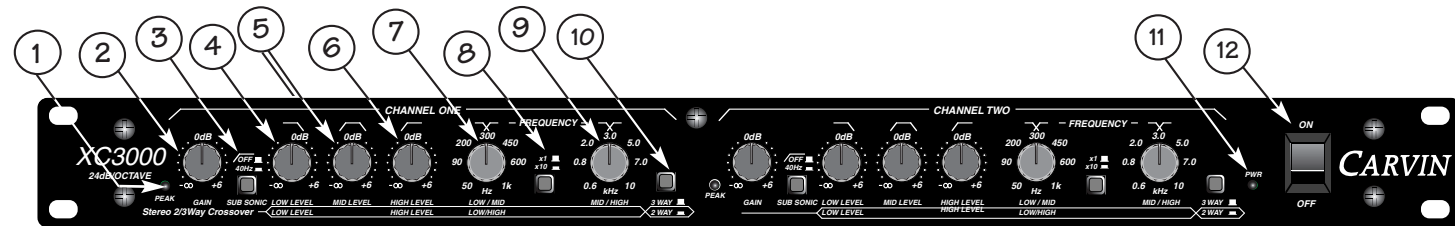


FRONT PANEL FEATURES



1. PEAK INDICATOR

The peak indication LED light is used to monitor both input and output distortion. This indicator will flash whenever any of these two conditions or a combination of these conditions exist. Should the peak indicator ever flash, you can compensate this condition by adjusting the gain control down (lower) accordingly.

2. GAIN

This control establishes the amount of input gain for the crossover. This control will also affect the output drive of the crossover thereby adjusting the overall gain of the crossover as well. Note: This control is best used in conjunction with the "peak" level indicator as a means of monitoring the amount of input gain and output distortion as it relates to any overload conditions.

3. SUB SONIC FILTER

This button provides a third-order high pass filter set at 40Hz. This allows you to reduce sub sonic noise, allowing your power amps and speakers to operate safely and more efficiently.

4. LOW LEVEL

The LOW LEVEL control sets the output level for the channels LOW OUT jack. Which frequencies will be cut or boosted at this control is dictated by the position of the LOW/MID frequency selector. For example, if the LOW/MID frequency control is set at 300Hz, the frequencies at and below 300Hz will be volumetrically boosted or cut by adjustment of the LOW LEVEL control.

5. MID LEVEL

The MID LEVEL control sets the output level for the channels MID OUT jack. Which frequencies will be cut or boosted at this control is determined by the positions of the LOW/MID and MID/HIGH frequency selectors.

6. HIGH LEVEL

The HIGH LEVEL control sets the output level for the channels HIGH OUT jack. Which frequencies will be cut or boosted at this control is determined by the position of the MID/HIGH frequency selector.

7. LOW / MID FREQUENCY SELECTOR

This control sets the desired upper frequency crossover point for the LOW OUT and lower frequency crossover point for the MID OUT. The frequency indicated by the knob pointer of this control establishes the LOW/MID crossover point for the channel.

8. 1X / 10X BUTTON

This button multiplies the selected frequency for the LOW / MID crossover network, by 1X or 10X as needed to establish a full range frequency spectrum from 50Hz to 10kHz. With the 1X button in the "out" position the crossover will sweep from 50Hz to 1kHz. With the 10X button pushed "in" the crossover has a range from 500Hz to 10kHz.

9. MID / HIGH FREQUENCY SELECTOR

This control sets the desired upper frequency crossover point for the MID OUT and lower frequency crossover point for the HIGH OUT. The frequency indicated by the knob pointer of this control establishes the MID / HIGH crossover point for the channel.

10. 2 WAY / 3 WAY BUTTON

This switch sets the XC3000 into either Bi-Amp or Tri-Amp mode. In the out position the unit is set for Tri-Amp mode. When the button is depressed the unit will operate in Bi-Amp mode, and the MID LEVEL control and output jack is not used.

11. POWER INDICATOR

This LED illuminates when power is applied to the unit.

12. POWER SWITCH

Push this switch vertically to the "on" position to apply power to the unit. The power indicator LED will light to show that the XC3000 is on.

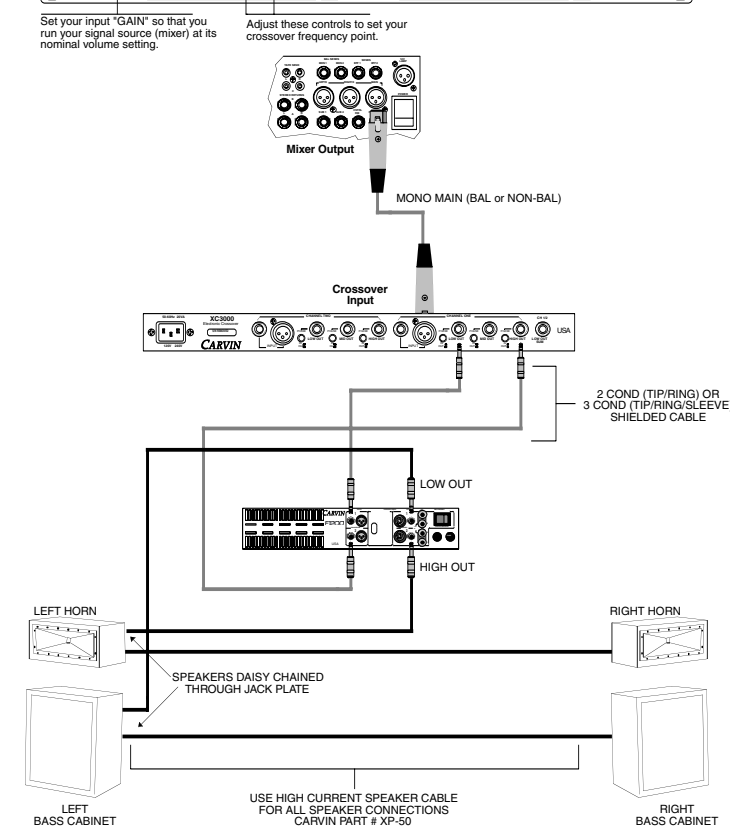
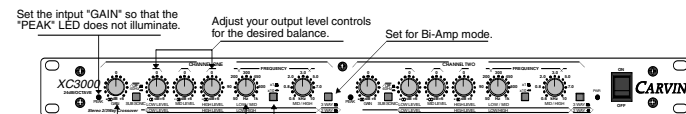
CHANNEL TWO

The controls of Channel "TWO" are identical to the controls of Channel "ONE".

MONO BI-AMP CONFIGURATION

System Requirements:

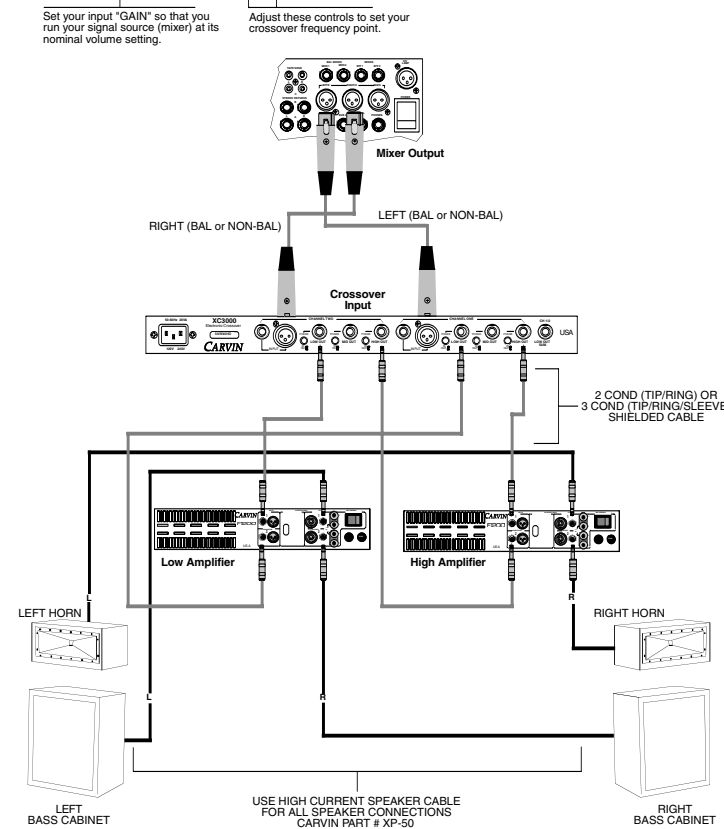
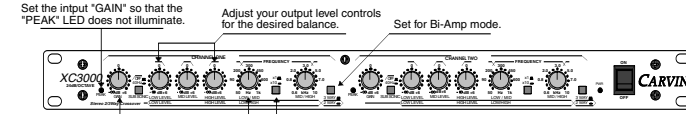
- A) Mono source (Mixer)
- B) One Stereo Power Amp
- C) Individual Horn and Woofer Connections



STEREO BI-AMP CONFIGURATION

System Requirements:

- A) Stereo source (Mixer)
- B) Two Stereo Power Amps
- C) Individual Horn and Woofer Connections



MONO BI-AMPING

If your system requires only mono bi-amplification, you will utilize only one side of the XC3000 "CHANNEL ONE". Simply plug your full range frequency source into the "CHANNEL ONE" 1/4" PHONE or XLR input connector at the rear panel of the XC3000. Then connect the "LOW OUT" and "HIGH OUT" XLR jacks to the input of your power amplifier. Note: If a stereo amplifier is used, you will make your connections to either side "Channel 1" or "Channel 2" of the amplifier as respectively used in connection to the horns and woofers of your sound system.

Depress the "2 WAY / 3 WAY" selector switch on the front panel of the XC3000 so that the unit will operate in Bi-Amp mode. Now set the "GAIN" of "CHANNEL ONE" to "0" dB (center of rotation). Set the "LOW LEVEL" and "HIGH LEVEL" controls to -∞ (off position). Adjust the "LOW / HIGH" frequency selector knob to the approximate desired crossover point. If the desired crossover frequency is above 1kHz, depress the "x10" multiplier switch.

Now power up your system. Note: your power amplifiers should be the last piece of equipment to turn on, and the first piece to turn off when applying and removing power from a sound system. Send a typical full range signal into the XC3000 and slowly bring up the "LOW LEVEL" control until the desired volume level is realized. Then bring up the "HIGH LEVEL" control until the highs and lows sound well balanced. Now you can fine tune the crossover frequency by adjusting the "LOW / HIGH" frequency selector knob.

STEREO BI-AMPING

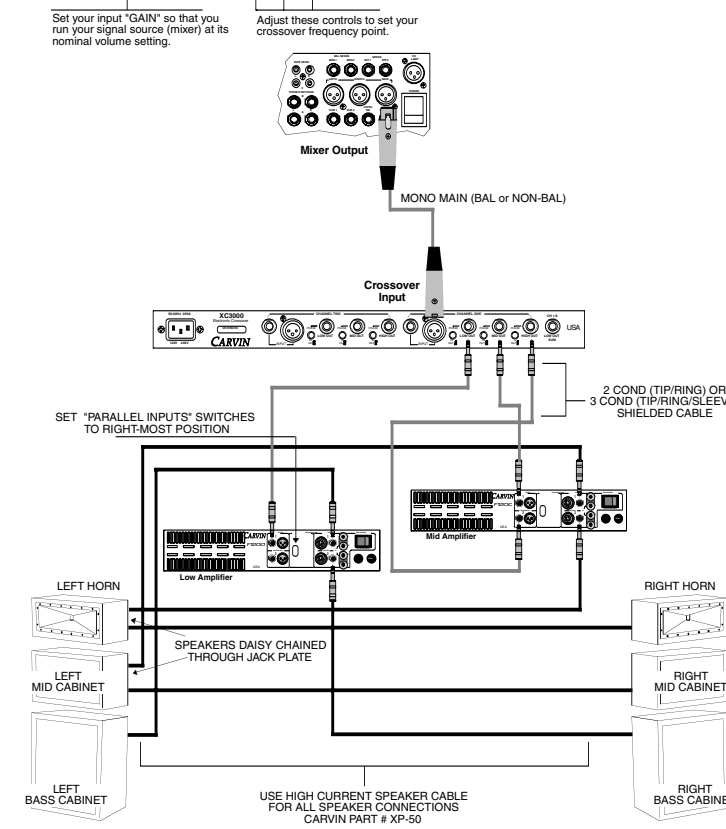
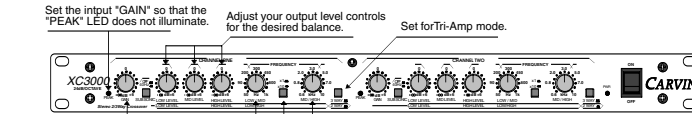
Stereo bi-amplification works in exactly the same manner as in mono bi-amping except that you have two full range input sources (stereo inputs). Make one connection from the stereo source to one side (CHANNEL ONE) of the XC3000 and connect the other source to (CHANNEL TWO) of the XC3000. The crossover frequency separation will work in the exact same manner as in mono amplification, however, "CHANNEL ONE" will bi-amplify one side of your stereo system. Note: In stereo bi-amplification you will have to utilize four separate power amplifiers or two stereo amplifiers. This will be required to amplify both low pass (woofer) and high pass (horn) signals to your stereo speaker array. As a general rule, the high pass amplifiers of your stereo speaker array only have to be 1 / 3 the wattage of the low pass amplifiers due to the higher efficiency and lower power consumption of the horns. Be sure to adjust the gain controls and level controls for each channel so that the "PEAK" indicator LED does not flash. Also be careful to note the position of the (1X / 10X) switch per channel, and the respective frequency crossover point in order not to deliver harmful low frequencies to the horn arrays.

TRI-AMPLIFYING WITH THE XC3000

MONO TRI-AMP CONFIGURATION

System Requirements:

- A) Mono source (Mixer)
- B) One Stereo Power Amp & One Mono Power Amp
- C) Individual Horn, Mid, and Woofer Connections



MONO TRI-AMPING

To use the XC3000 in a Tri-Amped sound system, connect your full range frequency source into the "CHANNEL ONE" 1 / 4" PHONE or XLR input connectors at the rear panel of the XC3000. Then connect the "CHANNEL ONE" "LOW OUT", "MID OUT", and "HIGH OUT" phone XLR jacks to the inputs of your power amplifiers. Note: this will require three separate amplifier channels. If you will be using two stereo power amps connect the mids and highs to channels one and two of one amp. Operate the second power amp in bridged mode and make the connections for the lows.

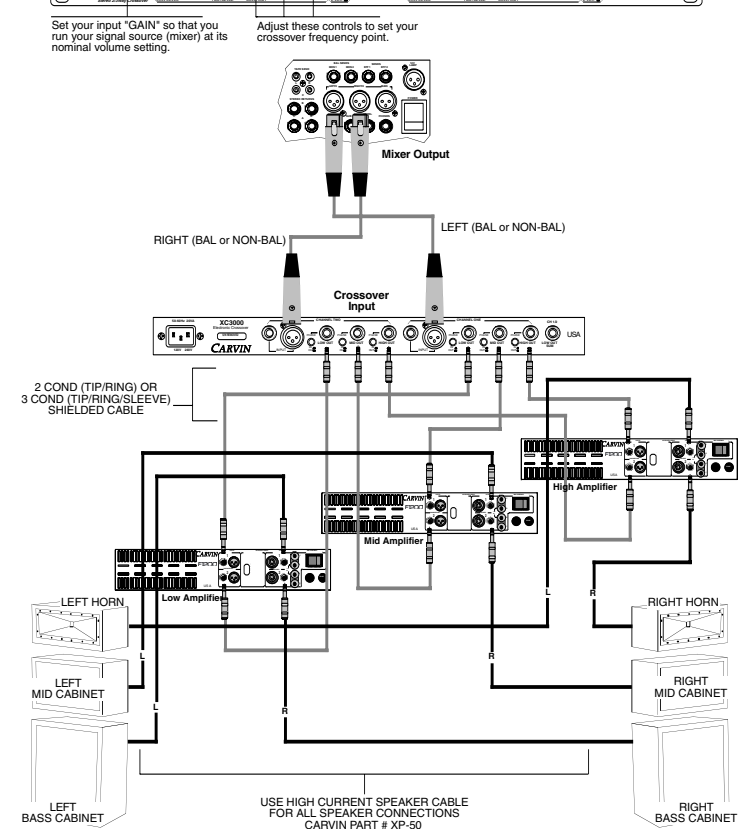
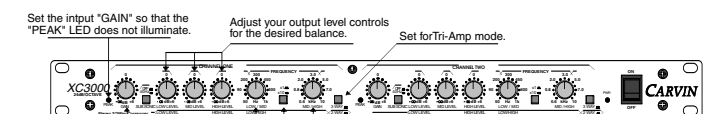
Set the "2 WAY / 3 WAY" selector switch on the front panel of the XC3000 so that the unit will operate in Tri-Amp mode. Now set the "GAIN" control of "CHANNEL ONE" to "0" dB (center of rotation). Set the "LOW LEVEL", "MID LEVEL", and "HIGH LEVEL" controls to -∞ (off position). Adjust the "LOW / MID" and "MID / HIGH" frequency selector knobs to the approximate desired crossover points.

Power up your system and send signal through your XC3000. Slowly bring up the "LOW LEVEL" control until the desired volume level is realized. Next bring up the "MID LEVEL" and "HIGH LEVEL" controls until the lows, mids, and highs sound well balanced. Now you can fine tune the crossover frequencies by adjusting the "LOW / MID" and "MID / HIGH" frequency selector knobs.

STEREO TRI-AMP CONFIGURATION

System Requirements:

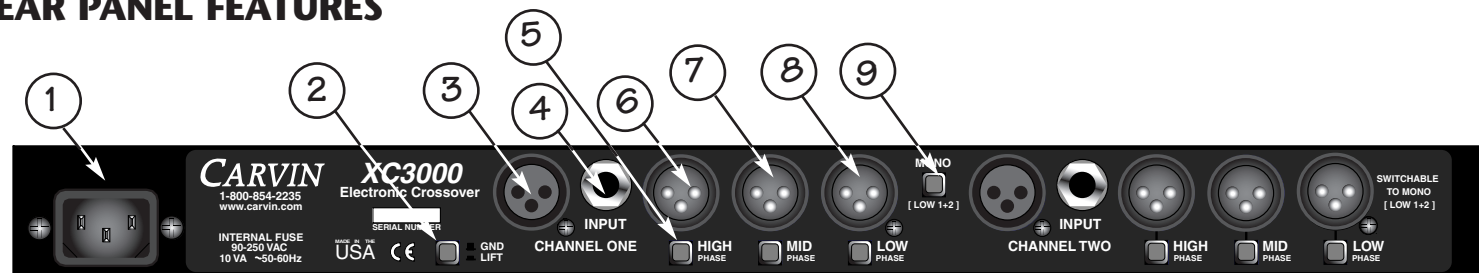
- A) Stereo source (Mixer)
- B) Three Stereo Power Amps
- C) Individual Horn, Mid, and Woofer Connections



STEREO TRI-AMPING

Stereo tri-amplification of the XC3000 works in exactly the same manner as in mono tri-amping except that you utilize both channels, and power two sets of speaker cabinets.

REAR PANEL FEATURES



1. LINE CORD

All Carvin equipment is supplied with 3 conductor line cords for maximum safety, greatly reducing the chance of electrical shock. If the XC3000 unit is to be plugged into a (2) prong outlet, use a quality 3 to 2 prong grounded adapter. Do not defeat the grounding pin of your AC line cord as this is for your protection.

2. GROUND LIFT SWITCH

Useful in getting rid of ground loop buzzing. This switch lifts the grounds on the inputs and outputs.

3. BALANCED XLR INPUT

Offers the best connection to the XC3000. The XLR connector wiring is as follows: Pin #1 ground, Pin #2 Positive Balance, Pin #3 Negative Balance.

4. BALANCED 1 / 4" PHONE INPUT

The balanced 1 / 4" phone input jack will accept either balanced or non-balanced connections. For best results use balanced (Tip, Ring, Sleeve) connections to reduce cable hum.

5. PHASE INVERTER SWITCH

The PHASE inverter switch gives you the option of inverting the phase of each of the main output to correct any phase inversion problem at your speakers or power amps.

6. LOW OUT XLR

The LOW OUT 1 / 4" phone jack provides a balanced output for the low pass filter of the channel. This is where you connect the power amp that will be driving your bass cabinets.

7. MID OUT XLR

The MID OUT 1 / 4" phone jack provides a balanced output for the band pass filter of the channel. This is where you connect the power amp that will be driving your mid range cabinets.

8. HIGH OUT XLR

The HIGH OUT 1 / 4" phone jack provides a balanced output for the high pass filter of the channel. This is where you connect the power amp that will be driving your high frequency horns or tweeters.

9. MONO (LOW 1+2) SWITCH

Combines both signals from each channel's low pass filters. Either or both LOW outputs may be used. This is where you would connect a power amp to drive a mono subwoofer system.