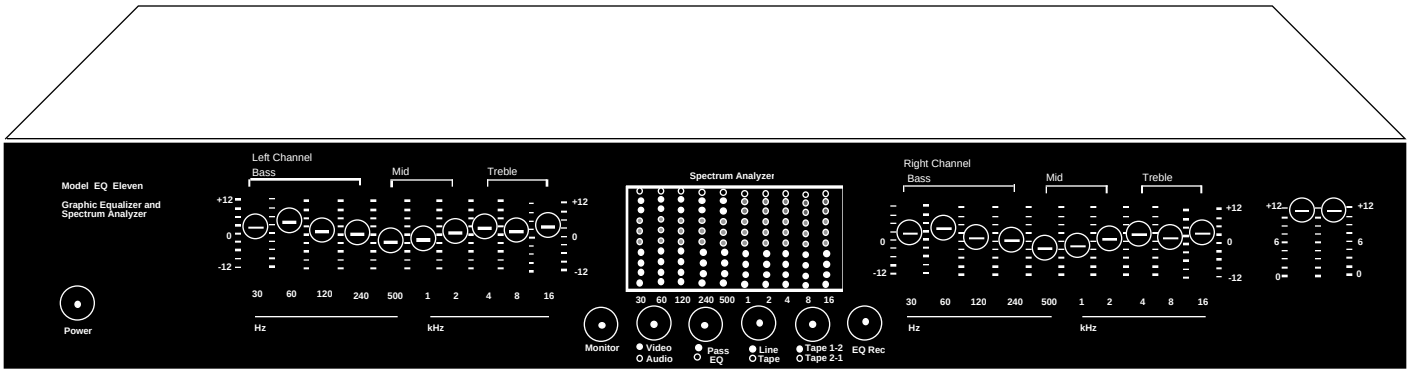
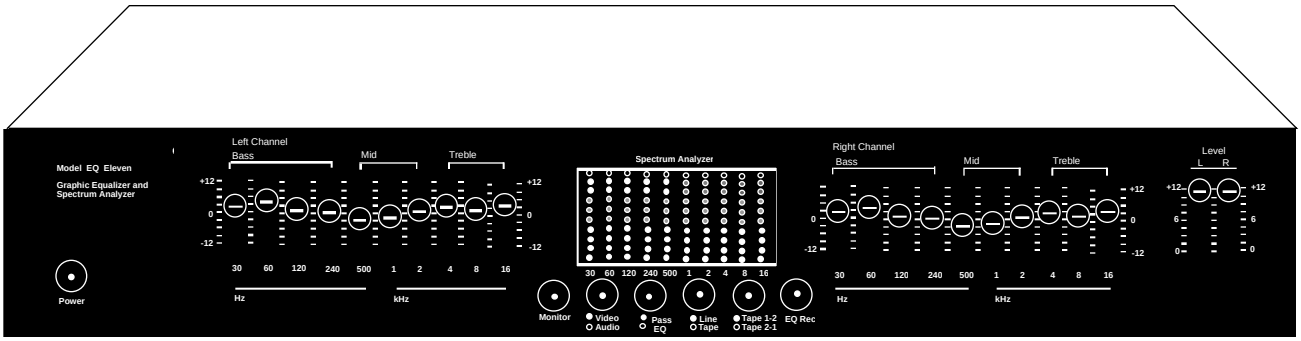
AudioSource

EQ ELEVEN

Ten-Band Stereo Graphic Equalizer with Spectrum Analyzer Display



Congratulations on your new purchase, and welcome to the AudioSource family of satisfied customers. We trust that you will continue to enjoy the value and quality of your AudioSource EQ Eleven Stereo Graphic Equalizer. In order to make sure that you are experiencing the best performance from your unit, please take a few moments to read this manual before you get started. Also, be sure to retain this manual should you need to refer to it in the future.



Using The Controls

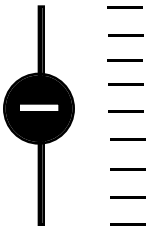
Power : Press this button to activate the power on the EQ Eleven.The Red LED will light to show power is "On". Push the button again to turn "Off" the EQ Eleven. The red LED will disappear at this time.

EQ Rec. : EQ Record. Press this button to make a tape copy with the equalization curve you have just set. This can be useful when making a cassette tape to play in your car. A well-equalized tape can improve the sound from smaller, less expensive car stereo speakers. With this button in the "Off" position, the cassette tape copy will be recorded without equalization.

Monitor: Press this button to hear the sound from your cassette deck. This cassette deck should be connected into the "Tape In" and "Tape Out" jacks on the rear panel of the EQ Eleven.

Audio/Video : This button selects between two input sources. Press the Button "IN" to select an Audio input source, such as a C.D. player. The red LED will light to show this selection. Leave the button "OUT" to select a Video input source, such as a V.C.R., or Lazerdisc player. The red LED will remain unlit to show this selection. **Note:** the EQ Eleven equalizes the *sound* of these various components. At no time does the EQ Eleven alter the picture, and no "Video-Type" connections are included. These inputs will accept any "Line Level" source, such as a CD player, tape deck, laserdisc, VCR, etc.

EQ / Pass : Use this switch to instantly compare the "equalized" and unequalized" sound. Press this button "IN" to hear the result of your equalization curve. The red LED will light to show this selection. Leave this switch in the "OUT" position to bypass the equalization of the EQ Eleven.



EQ Sliders : Each of these sliders will give 12Db. of "Boost" and 12 dB. of "Cut". There are ten sliders per channel - Ten for the Left channel, and Ten for the Right channel. Looking at the front panel, the sliders that control the lowest frequencies are on the left, with the higher frequencies farther right. Usually, identical adjustments should be made for both channels.

A Few Words About Graphic Equalizers

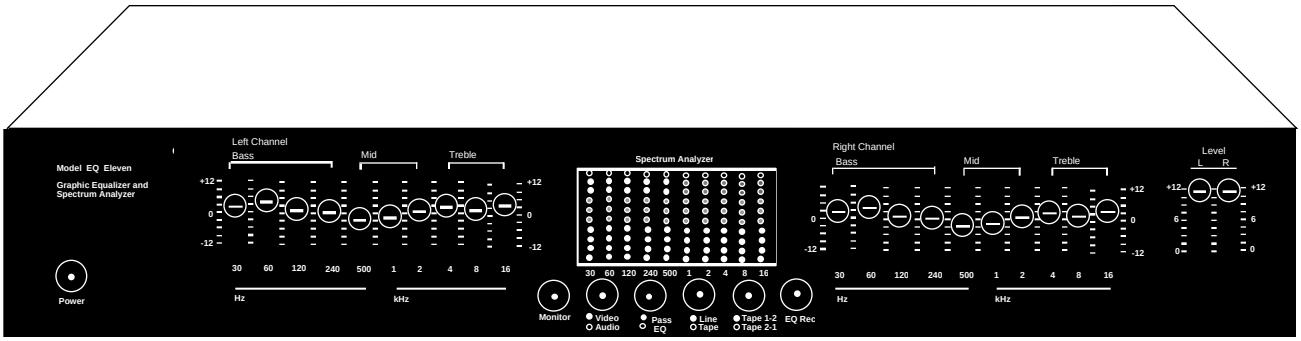
Thank you for choosing this AudioSource EQ Eleven Graphic Equalizer. Used correctly, a Graphic Equalizer is a powerful tool for very detailed control over the sound of your speakers, far more than available from simple tone controls. With the EQ Eleven, you can enhance the sound of older recordings, alter instrumental and vocal balance to suit your own tastes, make "Custom Equalized" recordings, and a multitude of other uses. However, like any tool, excessive or incorrect adjustments can yield very unpleasant results, and can overload your amplifiers and speakers. Improvement of sound quality, particularly in the extreme bass and treble regions, is completely dependent upon thequality of the other equipment you are using in your system. Limited amplifier power and speakers with a limited frequency range are the greatest barriers to achieving accurate, flat response. If you detect any distortion in the bass or treble regions while boosting the EQ Eleven's sliders in these areas, back off immediately, as you are probably overtaxing either your amplifier or your speakers. Please read this manual before use, and follow our suggestions and basic guidelines for the best sound.

Having said that, be assured that "good sound" is a relative thing... We all have different opinions and tastes - The EQ Eleven is designed to allow you to change the sound of your speakers to suit your own musical choices. On the last page of this manual is a chart designed to show you the frequency content and range for a variety of musical instruments. This chart will help you find the proper sliders to adjust to achieve the desired results.

Basic Guidelines

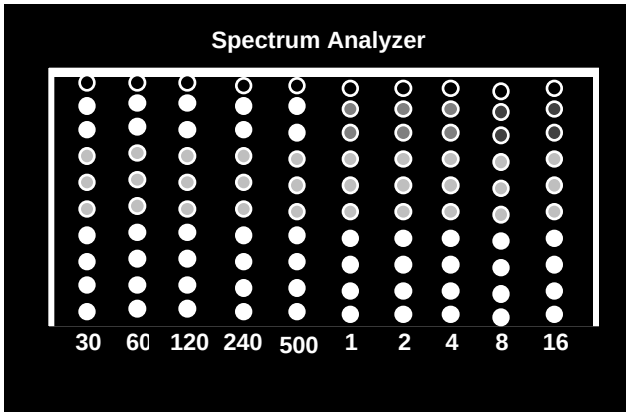
Before adjusting the sliders, it is VERY IMPORTANT to clearly define your objectives. Without this consideration before adjustment takes place, it will be very difficult to attain pleasing results. Carefully listen to your system - ask yourself "What *don't* I like about the sound ?". If the answer is "I want more Bass", you have two ways to accomplish this. Choice #1 - Raise or "Boost" the sliders for the lowest frequencies - on both channels - Left & Right. Choice #2 - lower or "Cut" the sliders on the midrange and higher frequencies. The end result will be the same - You'll have more bass. Conversly, if you'd like to hear more High Frequencies, you have two ways to accomplish this. #1 -"Boost" the sliders for the highest frequencies - on both channels - Left & Right. #2 - "Cut" the sliders of the Midrange and Bass frequencies.

As you can see, there are a variety of ways to accomplish your objectives. Be aware that due to the nature of all equalizer sliders, you will find that movement of any given slider will also have some effect on the setting of the sliders adjacent to either side of it. Experiment - let your ears decide what sounds best, but try to have a clear objective before you begin, One suggestion : avoid the "Boost-Boost Syndrome"... avoid "Boosting" one frequency area too much, by "Cutting" another frequency area. Don't just radically boost everything - it will add noise to the system, and overtax your other components. Subtle, careful equalization will make a huge improvement in the overall sound of your system. Enjoy your EQ Eleven, and if you have any questions, we are here to help. You can call AudioSource at (800) HELP-115.

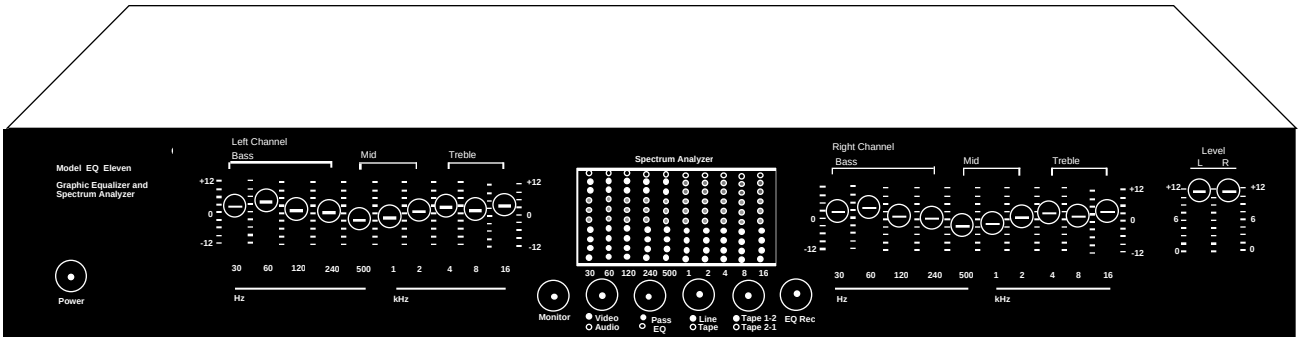


Using The Controls

E.Q Sliders, cont.: These sliders are One Octave apart from one another. This corresponds with the entire range of human hearing. The last page of this owner's manual contains a chart, showing which sliders to adjust to affect the sound of various instruments. For instance, the lowest note of a Bass Guitar is at 42 Hz.. By adjusting the sliders at 30 Hz. and 60 Hz., you can raise or lower the volume of the bass guitar, bass drum, and any other musical instruments that occupy this frequency range. In another instance, the sound of the female vocalist occupies a frequency range from roughly 200 Hz. to 1500 Hz.. By adjusting the sliders within this range, you can change the tonal character of the female voice, and any other musical instruments that occupy this frequency range.



Spectrum Analyzer Display: This provides a visual display of the relative signal levels in each of the EQ Sliders. The Spectrum Analyzer display is divided into ten columns of LED's which correspond to the ten EQ Sliders. You can use this display to assist you in setting you equalzer sliders, as well as to obtain information about the frequency content of the music as you play it through the EQ Eleven.

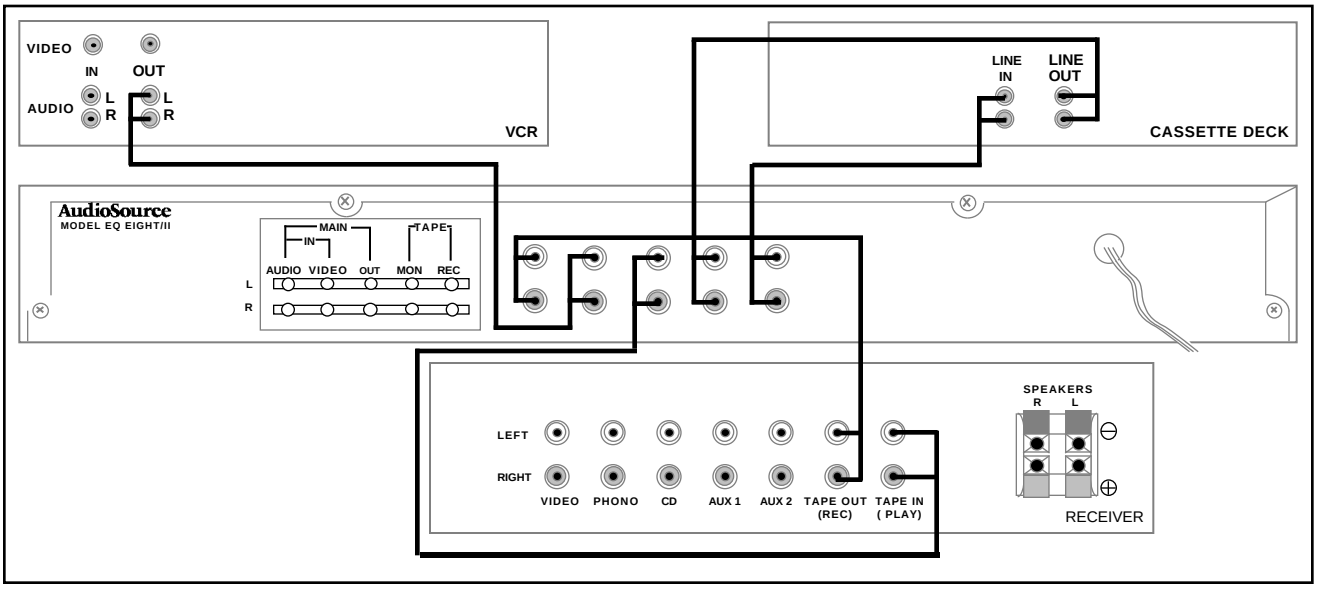


Hooking It All Up

The EQ Eleven should be connected through the "Tape Monitor Loop" of you receiver, integrated amplifier, or preamplifier. Since the EQ Eleven replaces the tape deck, remember to activate the "Tape Monitor" switch on your receiver, integrated amplifier, or preamplifier - as you would when playing your tape deck. Your tape deck can now be plugged into the back of the EQ Eleven.

When making or changing connections, it is always wise to unplug the power cords of your components - or at least make sure the power is "Off", so you won't hear any unexpected "pops" during connection of cables.

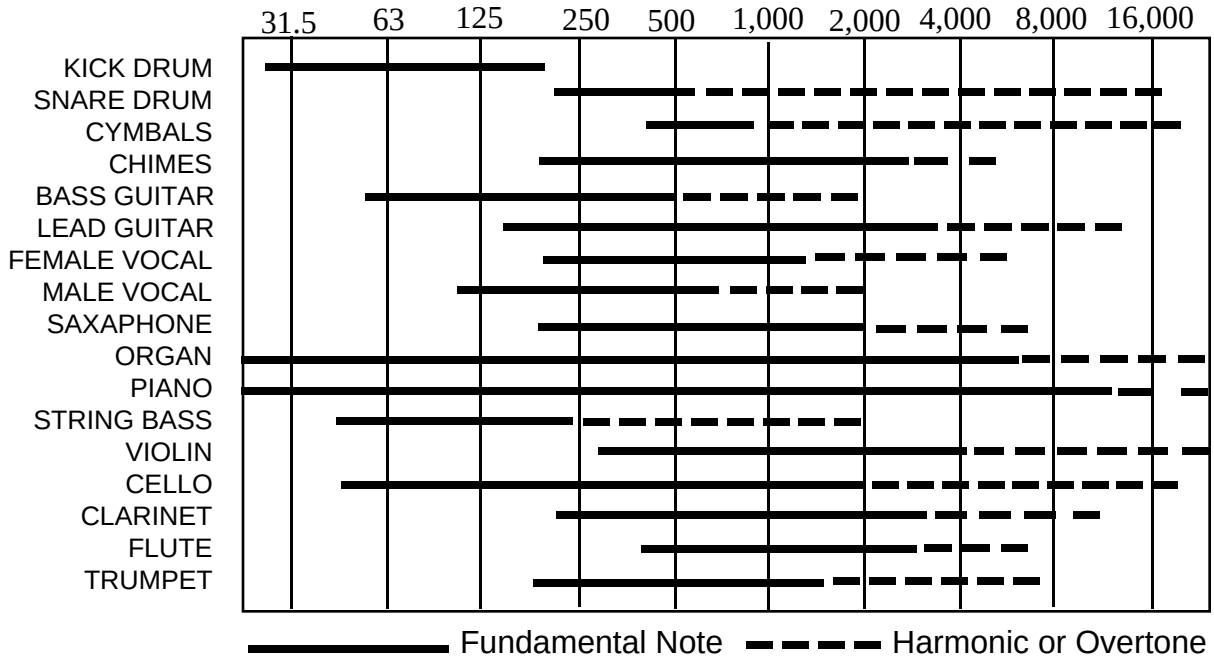
1.Connect the **Tape Out** or **Tape Record** jacks (different components use different terminology) on the back of your receiver/integrated amplifier/preamplifier to the **Main In Audio** jacks of the EQ Eleven.
2. Connect the **Main Out** jacks of the EQ Eleven into the **Tape In** or **Tape Monitor** jacks of your receiver/integrated amplifier. this completes the "loop".
3. Always make sure to engage the **"Tape Monitor"** button on your receiver, no matter which input source you want to listen to. This allows the "Equalized" signal to be heard on any source material.
4. You can connect two tape decks to the EQ Eleven. For Tape 1, connect the **Line In** or **Record** jacks on your tape deck to the **Tape 1 Rec** jacks on the EQ Eleven. Next, connect the **Line Out** or **Monitor** jacks on your tape deck to the **Tape 1 Mon** jacks on the EQ Eleven. For Tape 2, repeat this step using the **Tape 2 Rec** and **Tape 2 Mon** jacks on the EQ Eleven.
5. To listen to your cassette decks, press either the **"Tape 1"** or **"Tape 2"** switch on the EQ Eleven.
6. You may use the **"Main In Video"** jacks on the EQ Eleven to connect any high output source, such as a CD player, tape deck, or the *audio* outputs of a VCR or laserdisc.



Specifications

Frequency Response	5 Hz -100kHz + or - 1 dB
Harmonic Distortion	0.03% of nominal output
Signal to Noise Ratio	- 85 dB
Input Impedance	100 k Ohms
Output Impedance	600 Ohms
Load Impedance	10 k Ohms or more
Inputs	Audio,Video, Tape 1, Tape 2
Outputs	Main , Tape 1,Tape 2
Control Center Points	30 Hz, 60 Hz, 120 Hz, 240 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, 16 kHz
Control Range	+ or - 12 dB
Dimensions	16 1/2" (W) x 2 7/8" (H) x 7 1/8" (D)
Weight (without packaging)	5 1/2 lbs.
Power Consumption	6 Watts

The chart below will help you identify which sliders on the GRAPHIC EQUALIZER Section will most affect the sound and balance of particular instruments by illustrating where they lie in the overall sonic spectrum



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