

SEQ Equalizer

INSTRUCTIONS

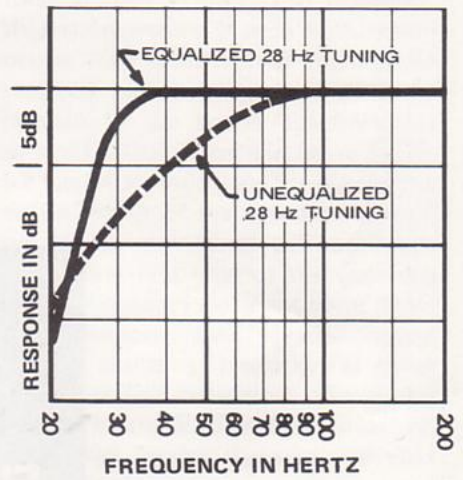
DESCRIPTION

Comprising two channels of active electronic compensation, the SEQ equalizer is designed to be used with a pair of Sentry III speaker systems. By retuning the Sentry III and adding the equalization provided by the SEQ equalizer, the low frequency response of the Sentry III may be extended one-half octave.

APPLICATION

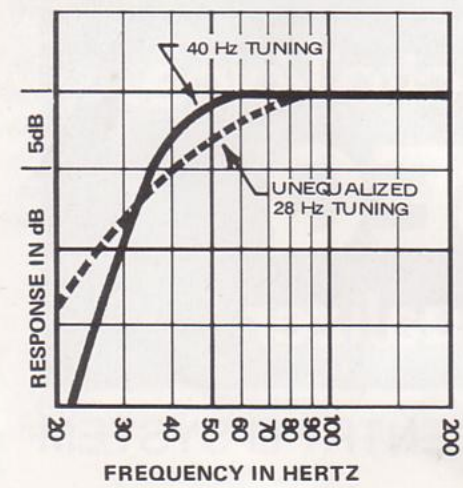
In the "normal" configuration, the resonance of the Sentry III is 40 Hertz, with response as shown below. When the port cover is added to the Sentry III, the system resonance drops to 28 Hz; the response is down 9 dB at the tuning frequency.

The electrical contour provided by the SEQ equalizer restores the acoustic curve to flat, with the 3 dB-down point now at 28 Hz.



Below the usable range of the system, the equalizer rolls off the electrical input to the amplifier, eliminating unwanted low frequency content (turntable rumble, record warp, etc.); thus conserving amplifier power and speaker excursion below the speaker system's usable low frequency limit.

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Archiv Michael-Otto*



Electro-Voice®
SEQ
Equalizer

FOR SENTRY III SYSTEM

INSTALLING THE EQUALIZER

Consumer Electronics

Most amplifiers and receivers include a Tape Monitor (also called Tape-Source) switch, which interrupts the normal signal path through the amplifier. The SEQ equalizer, like tape recorders and other electronic accessories, is connected to the Tape jacks, and is selected by the Tape Monitor switch. The equalizer can also be connected between preamplifier and power amplifier, if the system includes such separate components. Normally, however, best performance and greatest operating flexibility will be found with the Tape Monitor connection. The Tape jacks and Tape Monitor switching are duplicated on the equalizer, so that other equipment may be connected into the system.

Connections

The Tape Out jacks of your amplifier should be connected to the Input jacks on the equalizer, observing the left- and right-channel markings. Connect the Output jacks of the equalizer to the Tape In jacks on the amplifier in a similar manner.

Tape Machines

The Tape Out and Tape In jacks on the equalizer duplicate the Tape jacks of the amplifier which were used to connect the equalizer. Two pairs of Tape Out jacks are provided; either pair may be used. Both may be used if the input impedance of the auxiliary equipment is above 100K ohms.

Power

Connect the AC line cord to a convenient outlet. If a switched AC outlet is available on the amplifier, power will be applied to the equalizer when the amplifier is turned on. An unswitched AC outlet is provided on the back of the equalizer. Maximum power capacity of this outlet is 200 watts.

Professional Electronics

The SEQ equalizer may be used in professional systems; proper impedances and operating levels should be observed. Input impedance is 100K; the output impedance of 1,200 ohms permits the equalizer to look into 10K bridging inputs.

The equalizer has been designed for nominal signal levels of 1 volt or less; typical Tape Monitor levels are on the order of .25 to .5 volts. These levels leave a peak headroom of 20 dB or greater. If the equalizer were operated in a 600-ohm system at +8 dBm, for example, headroom would be 12 dB or less.

IMPORTANT POINTS

The port cover is supplied with the Sentry III, attached to the bottom of the cabinet with four wood screws. These screws should be used to attach the port cover to the lower section of the speaker system's port using the predrilled pilot holes.

The equalizer provides a modest amount of low-frequency compensation, reaching a maximum of 6 dB at 32 Hz. Maximum acoustic output is theoretically reduced by the amount of equalization. If the highest possible sound pressure level is required for your application, the unequalized 40 Hz configuration is recommended.

Do not use the equalizer for "bass boost" without retuning the system with the port cover. To do so will waste speaker excursion and amplifier power without improving performance.

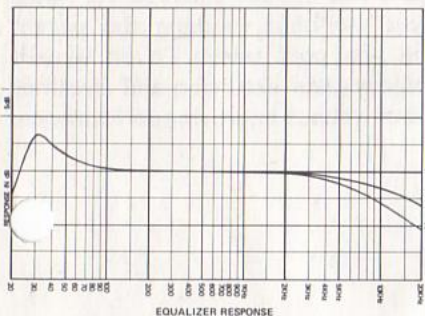
EQUALIZER CONTROLS

HIGH FREQUENCY switch combines the power on-off function and selection of high frequency contour.

When the switch is to the extreme left, the equalizer is turned off. However, if the equalizer is connected to a switched AC outlet on the amplifier or receiver, the equalizer will be turned on with the rest of the system, and the high frequency selection can be left set at all times.

A choice of three response contours is provided, as shown below:

1. Flat high-frequency response.
2. Down 3 dB at 10kHz.
3. Down 6 dB at 10kHz.



INPUT switch chooses the desired input to the equalizer. In the Source position, whatever program material is coming from the Tape Out jacks on the amplifier will continue through to the balance of the system. When Tape is selected, a tape machine connected to the Tape In jacks will play.

SPECIFICATIONS

Gain:	Unity
Maximum Input Signal:	8V RMS decreasing to 4V at 32 Hz
Noise Output (20kHz bandwidth):	20 μ V
Total Harmonic Distortion:	.01%
Intermodulation Distortion:	.01%
Input Impedance:	100K ohms
Output Impedance:	1,200 ohms
Suggested Minimum Load Impedance:	10K ohms
Controls:	Power/High Frequency Input Selector
Dimensions:	2 $\frac{1}{4}$ " h., 8" w., 7" d. overall
Power Requirements:	110-120V, 50-60 Hz, 3 watts

CUSTOMER SERVICE

Shipping Damage

Electro-Voice products are packed to provide protection well in excess of the shipping requirements of the Interstate Commerce Commission. Responsibility for delivery in good condition was accepted by the carrier, and therefore any damage claims must be made by the receiver against the carrier. If shipping damage has occurred, contact the carrier immediately, requesting inspection and instructions; or contact the dealer from whom the unit was purchased.

Reshipment

All packaging materials should be retained for possible future use. Whether used for returning units requiring service, or simply for normal moving, only the original packaging materials are certain to provide full protection. Bear in mind that a carrier can refuse a damage claim if they judge substitute packaging to be inadequate.

Warranty (Limited)

Electro-Voice high fidelity electronics are guaranteed for three years from date of original purchase against malfunction due to defects in workmanship and materials. If such malfunction occurs, the unit will be repaired or replaced (at our option) if delivered prepaid to the proper Electro-Voice service facility. There will be no charge for parts or return freight during the entire length of the warranty period; no charge for labor will be made during the first year of the warranty period. Warranty does not cover finish or appearance items or malfunction due to abuse or operation at other than specified conditions. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee.

Factory repair for this product is located at: Electro-Voice, Inc., Rank Road, Newport, Tennessee 37821.