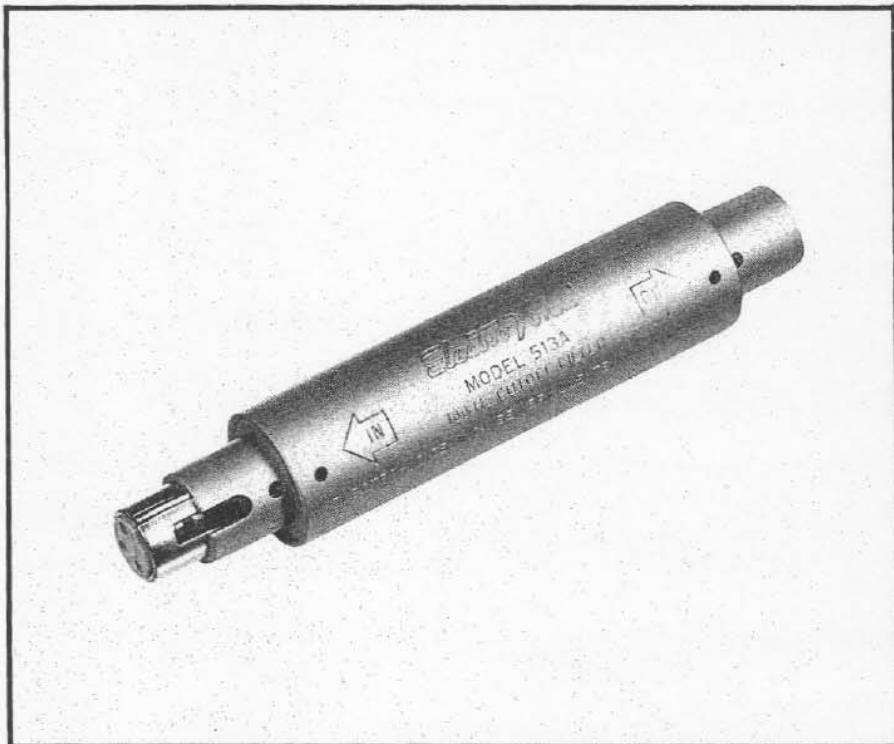




Electro-Voice®
a MARK IV company

Model 513A

100 Hz High Pass Filter

SPECIFICATIONS

Hum Pickup:

Less than -120 dBm for a 0.001 gauss field

Cutoff Frequency:

100 Hz

Insertion Loss:

Less than 0.25 dB

Maximum Input Level:

-20 dBm

Attenuation at 60 Hz:

40 dB minimum

Weight:

284 g (10 oz)

Dimensions:

29 mm (1.13 in.) diameter

152 mm (6.0 in.) long

DESCRIPTION

The Model 513A filter is a second generation device replacing the Model 513. The Model 513A is a high pass filter with severe attenuation of frequencies below 100 Hz (see Fig. 1).

Designed to be used in line between a microphone and preamplifier, the Model 513A attenuates unwanted noise and reverberation components below 100 Hz. Maximum attenuation occurs near 60 Hz (over 40 dB) reducing pickup of acoustic ac machinery noise.

The Model 513A is designed for use with low impedance microphones (typically 150 ohms balanced), and optimum performance to be expected when its input impedance is equal to the microphone's impedance. The device offers typically 0.2 dB insertion loss and therefore may be used in any situation.

When used in a microphone line with speech as the primary program material, little or no subjective change in vocal quality will be noted. Background noise and other objectionable ambient noise will, however, generally be greatly attenuated and the quality of the pickup is often enhanced.

INSTALLATION

The Model 513A uses standard 3 pin broadcast connectors for its input and output. It should be coupled into a microphone line as if it were simply a short extension cable.

IMPORTANT: An impedance mismatch between the device and the microphone will cause slight changes in its attenuation characteristics (see Figure 1).

OPERATION

The 513A can be used wherever low-frequency problems occur in Broadcasting, Recording, or Sound Reinforcement. Many times low frequency ambient noise can cause problems in studios or on location recording. A strong low-frequency component can cause feedback problems with wide range, high level reinforcement. Low frequency wind noise can be problematical. The 513A offers drastic attenuation at unwanted low frequencies (see Figure 1) while having little affect on most recorded material and no affect on vocal material. The 513A can effectively be used to "clean up" many otherwise problem sources of program material.

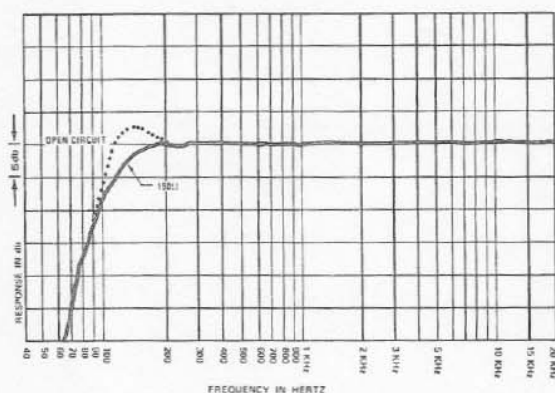


FIGURE 1 - Frequency Response

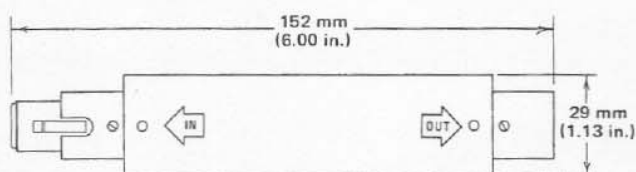


FIGURE 2 - Dimensional Drawing

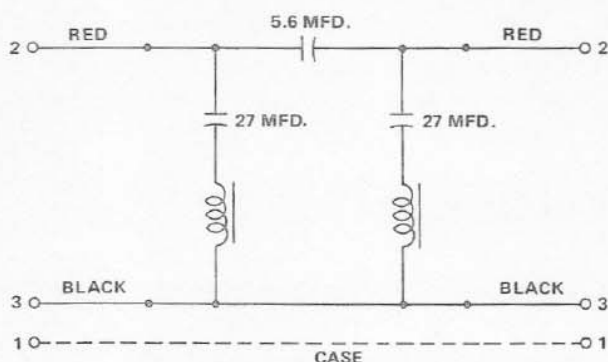


FIGURE 3 - Wiring Diagram

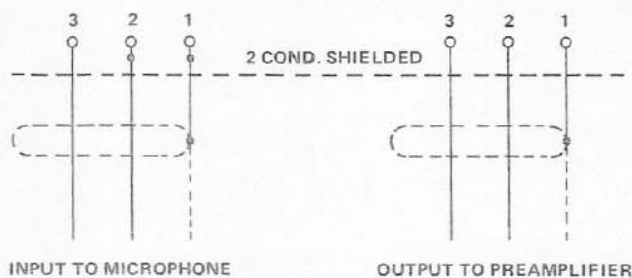


FIGURE 4 - Cable Connection Diagram

WARRANTY (Limited)

Electro-Voice Professional Sound Reinforcement Electronic Components are guaranteed for two years from date of original purchase against malfunction due to defects in workmanship and materials. If such malfunction occurs, unit will be repaired or replaced (at our option) without charge for materials or labor if delivered prepaid to the proper Electro-Voice service facility. Unit will be returned prepaid. Warranty does not extend to finish, appearance items or malfunction due to abuse or operation under other than specified conditions, nor does it extend to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee. A list of authorized service centers is available from Electro-Voice, Inc., 600 Cecil Street, Buchanan, MI 49107 (AC/616-695-6831); or Electro-Voice West, 8234 Doe Avenue, Visalia, CA 93291 (AC/209-651-7777). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Service and repair address for this product: Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107.

Specifications subject to change without notice.



ELECTRO-VOICE, INC., 600 Cecil Street, Buchanan, Michigan 49107

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