

PS8 SPECIFICATIONS

Impedance:

For use with low impedance microphones (150 ohm nominal)

Mating Connectors Required:

Switchcraft A3M or equiv. (IN) Switchcraft A3F or equiv. (OUT)

Battery Access:

By removing threaded outer case

Battery Required:

See Figure 1

Battery Life:

80 hours

(when used with CS15 microphone)

Operating Voltage:

8 Vdc

Case Material:

Steel

Finish:

Fawn Beige Micomatt

Weight:

9 oz. (255g)

Dimensions:

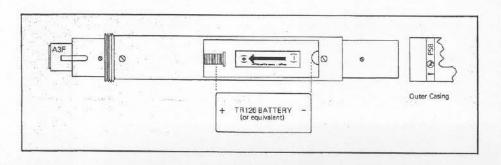
Length: 184mm (7-1/4 in.)

Diameter:

27mm (1-1/16 in.)

BATTERY REPLACEMENT GUIDE	
MALLORY	TR126
BURGESS	H126
RAY-O-VAC	1611M
RCA	VS126
NEDA	1611M
EVEREADY	E126

FIGURE 1



DESCRIPTION AND APPLICATIONS

The Electro-Voice Model PS8 is a battery operated remote power supply. Designed to power the Electro-Voice Model CS15 Condenser Microphone, the PS8 requires one 8.4 volt battery for proper operation. The PS8 may be inserted in the microphone cable anywhere between the microphone and the mixer input. The PS8 may be used with any balanced or unbalanced low impedance input. A rugged machined steel case offers protection from normal field abuse.

OPERATING INSTRUCTIONS

To prepare the PS8 for operation, remove the outer shell of the housing by holding the female Switchcraft connector (A3F) while rotating the outer shell in a counter-clockwise direction. After removing the outer shell, install a Mallory TR126 Battery (or equivalent) by placing the positive (+) end of the battery against the spring-loaded terminal. (See Fig. 2) Push the battery towards the female (A3F) Switchcraft connector until the negative (-) end of the battery drops into place. Replace the outer shell over the PS8. The PS8 is now ready to use.

To power the CS15 Microphone, connect its output via standard twoconductor shielded cable to the PS8 female connector. (See Fig. 4) No pads, filters or signal conditioners of any type should be inserted between the CS15 and PS8; however, due to the use of a transformer in the PS8, pads or filters, etc., may be inserted in-line between the PS18 and the mixer input. In other words, the output of the PS8 may be treated the same as the output from any low impedance balanced dynamic microphone. The output of the PS8 should be connected to the mixer input via standard 2-conductor shielded microphone cable. The CS15 is now powered. To turn the PS8 off, disconnect it from the microphone line. The battery need only be removed if the PS8 is to be stored for any prolonged length of time (to protect from battery leakage).

IN CASE OF DIFFICULTY

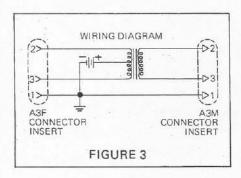
If the microphone fails to operate properly, check the power supply to be certain that the battery has been installed, observing the proper polarity orientation. Failure will also result if the PS8 has been inserted in the microphone cable with the label or female connector end of the housing facing the mixer input.

REMOTE POWER PRINCIPLES

With the low voltage requirements of today's condenser microphones, a method exists that allows the operating voltage required by the microphone to be sent down the same cable that carries the audio information from the microphone to the mixer input. This method of remote powering divides the positive side of the power supply equally between the two audio leads and connects the cable shield to the negative side of the power supply.

Because the current flowing in each audio lead is of the same polarity and magnitude, no degradation to the audio signal is encountered. The positive voltage at the microphone is recovered thru the use of a center-tapped transformer. The required voltage then appears across the center tap of the transformer and the cable shield.

There are two methods of dividing the positive voltage across the audio leads at the power supply. One method uses two 6.8K ohm 1% precision resistors bridged across the two audio leads with positive side of the power supply connected to the common ends of the resistors. This method can only be used with balanced mixer inputs that do not have a grounded center tapped primary. The second method of dividing voltage between the two audio leads uses a transformer with a one-to-one turns ratio with a center tapped secondary. The positive side of the power supply is connected to the center tap of the transformer, thus dividing the voltage between the two audio leads. (Fig. 3) The transformer isolates the supply voltage from the mixer input, allowing the use of the power supply with unbalanced mixer inputs. This second method of powering is employed by the PS8.



ARCHITECTS AND ENGINEERS SPECIFICATIONS

The supply shall be of the remote power type and shall be able to be installed "in-line" with the microphone. It shall utilize a one-to-one turns ratio, bi-filar wound, center tapped transformer. The supply shall accept and operate from a single 8.4 volt battery.

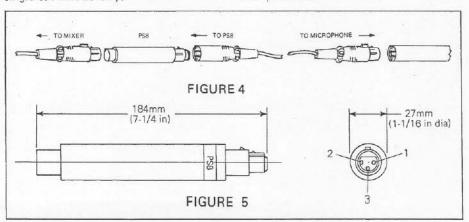
The case shall be made of steel. The maximum diameter of the case shall be 27mm (1-1/16 in.) and its length shall not exceed 184mm (7-1/4 in.). The power supply shall have two connectors equivalent to a Switchcraft A3M and A3F. The PS8 Power Supply is specified.

WARRANTY

Electro-Voice Professional Electret Condenser Microphones are guaranteed unconditionally against malfunction from any cause for a period of two years from date of original purchase. Also, Electro-Voice Professional Electret Condenser Microphones are guaranteed for the life of the microphone against malfunction due to defects in the acoustic system, and for three years against defects in the active electronics. If such malfunction occurs, microphone 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 cover finish, appearance items, cables, cable connectors, or switches and lifetime warranty does not cover 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 quarantee.

For correct shipping address, instructions on return of Electro-Voice products for repair, and locations of authorized service agencies, please write: Service Department, Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107 (Phone 616/695-6831).

Electro-Voice also maintains complete facilities for non-warranty service of E-V products.



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