

US1700/US1718

CONDENSER CARDIOID GOOSENECK MICROPHONE

SPECIFICATIONS

Generating Element:

Condenser, back electret

Frequency Response (see Figure 1), 5 inches or greater: 70 to 20,000 Hz 3-inch distance: 50 to 20,000 Hz

Polar Pattern (see Figure 2):

Cardioid

Sensitivity at 1,000 Hz,

Power Level:

-43.0 dB (0 dB=1 mV/pascal)

Open Circuit Voltage:

4.5 mV/pascal

Dynamic Range:

117 dB

Equivalent Output Noise:

23 dB SPL, A weighted (0 dB=20 micro-pascals)

Impedance,

Rated:

150 ohms, balanced

Actual:

95 ohms at 1,000 Hz, balanced

Power Requirements,

Voltage: 9-52 V dc phantom supply

Current: 2.5 mA Switch (see Figure 1):

Flat, low-frequency roll-off, f_{ϕ} =130 Hz,

12 dB/octave

Mounting:

Male XLR-type 3-pin connector

Finish:

Nonreflecting black

Environmental Conditions, Relative Humidity 0-50%:

–29 to 74 °C (–20 to 165 °F)

Relative Humidity 0-95%:

-29 to 57 °C (-20 to 135 °F)

Accessories,

Furnished: Windscreen

Optional: Flange mount, 1700MF

Dimensions (see Figure 3),

US1700:

Length: 406 mm (15.98 in.)

Maximum Diameter: 20.0 mm (0.79 in.)

Head Diameter: 10.5 mm (0.42 in.)

US1718:

Length: 571.5 mm (22.5 in.)

Maximum Diameter: 20.0 mm (0.79 in.)

Head Diameter: 10.5 mm (0.42 in.)

Net Weight,

US1700: 182 g (6.4 oz) **US1718:** 244 g (8.6 oz)

Shipping Weight,

US1700: 400 g (14.1 oz) **US1718:** 528 g (18.6 oz)



DESCRIPTION

The US1700/US1718 podium microphones are phantom-powered "back electret" miniature condenser gooseneck microphones. The "back electret" feature provides greater sensitivity, wider frequency response and superior immunity from handling noise than a diaphragm electret microphone. The US1700/US1718 are mechanically designed for easy mounting to a lectern, pulpit or podium and acoustically designed for high quality sound reinforcement and broadcast applications. The frequency response is tailored for wide range sound reproduction with very natural sound pickup for either distant or close-up use. The smalldiameter gooseneck has two supple joints and a rigid center tube. The rigid tube prevents unsightly twisting of the gooseneck but permits the user to exactly position the microphone. The electronics housing's 3/4-inch-diameter base is terminated with an XLR-type 3-pin connector which allows the microphone to be plugged directly into an existing panel mount XLR receptacle for rapid direct connection. The housing is machined steel for ruggedness and superior EMI/RFI attenuation. A low-frequency roll-off switch has been provided to configure the low-frequency response—reducing proximity effect, background noise and mechanical vibration. The switchable low-frequency response is not load sensitive and provides a constant corner frequency regardless of mixer input impedance. The electronic's output circuit design utilizes a specially produced hum-bucking transformer to further attenuate external magnetic pickup from lighting or electrical power sources and to provide a balanced low-output impedance. The low-output impedance, which is typically less than 95 ohms, permits applications which require very long cable runs without the usual degrading of microphone performance. The US1700/US1718 are designed to be operated from phantom power with a wide voltage range of 9-52 V dc (DIN Standard 45 596).

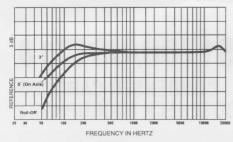


FIGURE 1 Frequency Response

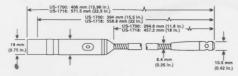
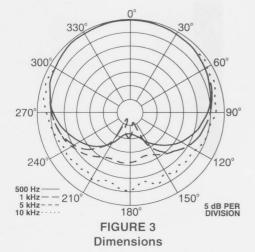


FIGURE 2 Polar Response at 1,000 Hz



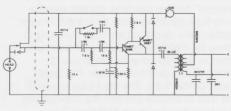


FIGURE 4 Wiring Diagram

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a Single-D cardioid back-electret condenser type with a frequency response of 70 to 20,000 Hz.

The microphone shall have a 150-ohm balanced output, with an output level of -43 dB (0 dB=1 mW/pascal). The microphone shall have a back-electret condenser generating element whose output shall not be appreciably affected by temperature extremes from – 17.8 °C (0 °F) to 54.4 °C (130 °F) and/or by humidity extremes. A switchable high-pass filter (f_{α} =130 Hz) shall be provided.

Dimensions shall be 20 mm (0.79 in.) diameter and 406 mm (15.98 in.) long for the US1700; and 20 mm (0.79 in.) diameter and 571.5 mm (22.5 in.) long for the US1718. The microphone shall include a 294.6 mm (11.6 in.) gooseneck for the US1700; and 457.2 mm (18.0 in.) gooseneck for the US1718. Both microphones will be provided with professional A3M-style terminating connectors and external windscreens. The microphones shall be of metal construction.

The US1700/US1718 are specified.

WARRANTY (LIMITED) —

Electro-Voice Commercial Microphones 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 Electro-Voice. Unit will be returned prepaid. Warranty does not extend to finish, appearance items, cables, cable connectors, switches, 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 will void this guarantee. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For warranty repair, service information or a listing of the repair facilities nearest you, contact the service repair department at: 405/324-5311 or 800/444-9516.

For technical assistance, call: 800/234-6831.

Specifications subject to change without notice.