



General Description:

The Electro-Voice US690 is a cardioid, shock-mounted, gooseneck-supported, dynamic microphone. This microphone utilizes a revolutionary neodymium alloy to form the exclusive N/DYM® magnet with four times the power potential of conventional microphone magnets. With a computer-optimized design, the N/DYM magnet structure is maximized in the US690 to provide up to 6 dB more output sensitivity over conventional designs, while the more uniform magnetic field lowers distortion during peak sound pressure levels.

The exceptional sensitivity of the US690 combined with the inherently low noise of a dynamic transducer ensures a superior signal-to-noise ratio.

A unique diaphragm design provides 50 percent more surface area than conventional designs and is reinforced to prevent "breakup." The result is an extended high-frequency response with an open transparent sound quality that provides greater intelligibility for today's most demanding sound system.

The uniform cardioid polar pattern of the US690 ensures superior gain-before-feedback in live applications at all frequencies—compared with other directional microphones with widely varying polar characteristics. The US690 is enclosed in a rugged Memraflex™ grille with Acoustifoam™ pop filter to virtually eliminate explosive breath sounds and wind noise. Coupled with a unique shock mount system which totally surrounds the microphone element, further reduces all forms of handling or mechanically induced noise, and makes the US690 the microphone of choice when ruggedness and performance are essential.

Application

The model US690 gooseneck microphone was designed for use on lecterns as a high quality mixing console talkback microphone, or applications that require a plug-in gooseneck microphone.

Operation

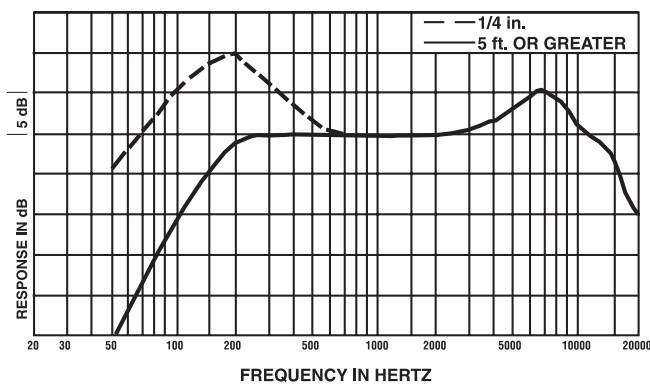
The frequency response of the US690 has been tailored for optimum performance where smooth, extended, highly intelligible sound character is required. The microphone output is balanced and low impedance. The dynamic element of the US690 will provide reliable operation in humidity and temperature extremes—adverse conditions that would render condenser microphones useless—for years of trouble-free operation.



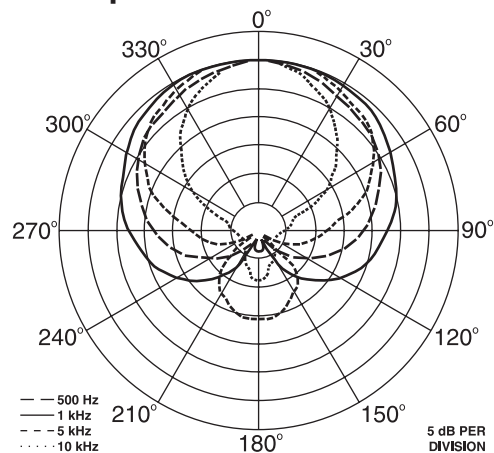
Technical Specifications:

Element:	Dynamic N/DYM magnet structure
Freq. Response, Close:	60 Hz - 20,000 Hz
Freq. Response, Far:	150 Hz - 20,000 Hz
Polar Pattern:	Cardioid
Sensitivity, Open Circuit Voltage @ 1 kHz:	3.1 mV/pascal
Dynamic Range:	144 dB
Equivalent Output Noise:	14 dB (0 dB = .002 dyne/cm ²)
Polarity:	Positive pressure on diaphragm causes positive voltage on pin2 ref. pin3
Impedance:	350 ohms balanced (low-z)
Microphone Connector:	3-pin, XLR-type
Finish:	Non-reflecting black
Materials:	Memraflex™ grille screen
Dimensions, Length:	16.58" (421 mm)
Diameter:	2.05" (52 mm)
Net Weight:	15.3 oz (433 g)
Shipping Weight:	23.5 oz (665 g)

Frequency Response:



Polar Response:



Microphone Use and Placement

Please note that micing techniques are a matter of personal preference. These are merely guidelines to assist in the placement of the microphone to gain optimal performance.

Usage

Vocals

Spoken Word

Optimal Placement

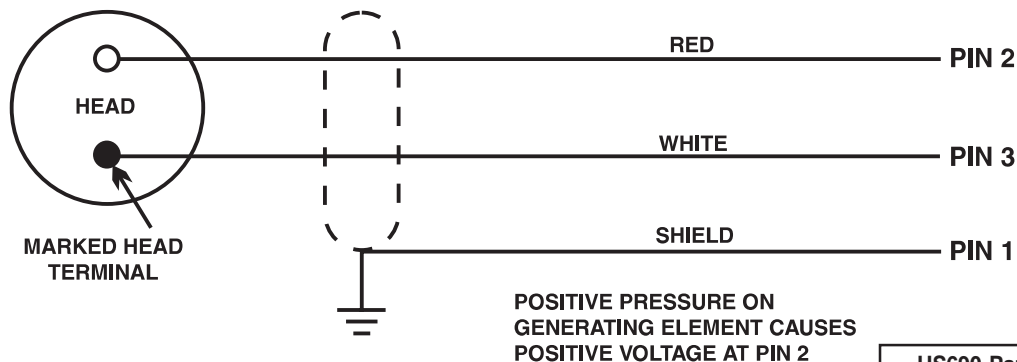
Zero to six inches from the windscreen, and on axis with the microphone.

Five to ten inches from the windscreen, and on axis with the microphone.

Standard Placement & Use Guidelines

1. Always point the microphone at the desired source of sound, and away from any unwanted sources.
2. The microphone should be located close to the sound source to minimize interference from other potential sound sources.
3. Use the 3-to-1 rule when using multiple microphones. Place each microphone three times farther from other microphones as from the desired sound source.
4. Minimize over-handling of the microphone to reduce unwanted mechanical noise.
5. Working close to the microphone will increase the bass tone and also provide increased gain-before-feedback.

Phase:



US690 Part Number: 690967



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www.electrovoice.com

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Part Number 532595 Rev. B

U.S.A. and Canada only. For customer orders, contact Customer Service at:

800/392-3497 Fax: 800/955-6831

Europe, Africa, and Middle East only. For customer orders, contact Customer Service at:

+ 49 9421-706 0 Fax: + 49 9421-706 265

Other International locations. For customer orders, contact Customer Service at:

+ 1 952 884-4051 Fax: + 1 952 736-4212

For warranty repair or service information, contact the Service Repair department at:

800/553-5992 or 402/467-5321

For technical assistance, contact Technical Support at:

800/392-3497 or 952/736-4656

Specifications subject to change without notice.