

VP89

End-Address Shotgun Condenser Microphone

Shure VP89 shotgun microphone manual, including polar patterns, frequency response curve, and phantom power requirements for VP89L, VP89M, and VP89S.

Version: 2.1 (2024-K)

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Table of Contents

VP89 End-Address Shotgun Condenser Microphone	3		
		XLR Connector Gasket	5
General Description	3		
Variations	3	Load Impedance	5
Features	3	Power Requirements	5
Selecting Low-Frequency Response	4	Specifications	6
Changing Capsules	4	Accessories	9
Compatibility	4	Optional Accessories	10
	-	Furnished Accessories	13
Rycote Custom Accessories	4		
Wind Protection	4	Certifications	14
Suspension Mounts	4		

A89U Double-Barrel Adapter

VP89

End-Address Shotgun Condenser Microphone

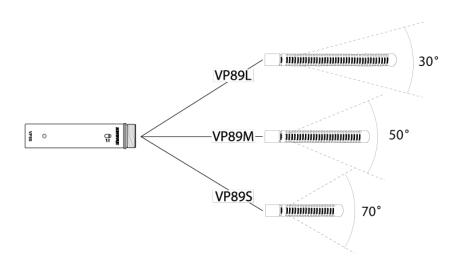
General Description

The VP89 is a professional shotgun microphone for use in critical A/V media production applications. Designed with interchangeable long, medium and short capsules, the VP89 models provide scalable, superior off-axis rejection for focus and flexibility in a wide variety of on-site locations.

Variations

The VP89 is available with long, medium, and short capsules in three model variations: VP89L, VP89M, and VP89S.

The VP89 microphone has a tighter acceptance angle (is more directional) when used with longer capsules, as shown in the graphic below.



Features

- · Premier production microphone crafted with Shure quality, ruggedness, and reliability
- · Highly directional, uniform polar pattern optimized for distant pickup
- · Modular design allows optimal performance in a wide variety of production settings
- Designed for extremely low susceptibility to radiated and conducted hum, GSM, and radio frequency interference (RFI)
- · Superior common mode rejection
- · Low self-noise and high output level
- Class A, discrete preamplifier provides transparent, extremely fast transient response with no crossover distortion and minimal harmonic and intermodulation distortion
- · Selectable low-frequency response
- Lightweight, compact design accommodates prolonged operation, minimizing operator fatigue attributed to many shotgun microphones
- · Aircraft-grade aluminum alloy construction resists wear and abuse
- · Operates over a wide range of temperatures and humidity

Selecting Low-Frequency Response

A two-position switch on the preamplifier adjusts the low-frequency response. Use the low-frequency filter to reduce room noise or proximity effect.

Normal response: Provides the most natural sound in most applications.



Low-frequency rolloff: Provides a 12 dB-per-octave rolloff below the specified frequency for each model (see product specifications). Reduces floor rumble and low-frequency room noise from heating and air conditioning systems.

Changing Capsules

- 1. Turn off phantom power supplied to the microphone.
- 2. Unscrew the capsule from the preamplifier. Store the unused capsule with its protective cap (included with the purchase of additional capsules).
- 3. Thread the replacement capsule to the preamp. Do not overtighten.

Note: Before each use, ensure the capsule is tightly secured to the preamp to prevent signal loss during operation.

Compatibility

The VP89 is designed for forward and backward compatibility with Shure SM89 shotgun microphones. Capsules and preamplifiers can interchange seamlessly between the two models.

Rycote Custom Accessories

Shure offers custom Rycote® suspension mounting and wind-protection solutions designed for Shure VP shotgun microphones.

Wind Protection

Use the supplied windscreen to reduce wind-noise. For increased protection, Shure offers two premium Rycote[®] wind protection accessories:

- Softie Windshield: Attenuates up to 25 dB of wind-noise
- Suspension Windshield Kit: Attenuates up to 38 dB of wind-noise while preserving critical high frequencies; included Lyre suspension mounts provide up to 25 dB of isolation

Suspension Mounts

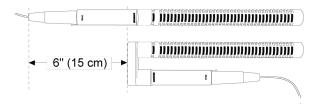
Shure offers four Rycote® Softie Lyre Mounts to reduce handling noise and low-frequency vibrations up to 15 dB:

- InVision Video: Secures to a standard camera shoe; for VP89S and VP89M
- Camera Clamp Adapter (CCA): Fits into a standard camera clamp; for VP89S, VP89M
- Pistol Grip: Adjustable handheld mount; for VP89S, VP89M
- Boom Adapter: Secures to a boom pole; for VP89L

Note: All Softie Lyre Mounts (except InVision Video) are equipped with 3/8" and 5/8" female threaded adapters for additional mounting options.

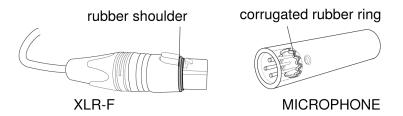
A89U Double-Barrel Adapter

The A89U adapter routes the VP89 preamp and cable connection beneath the capsule, shortening the length of the microphone by up to 6" (150 mm). Use the adapter to make a highly directional microphone in a compact form-factor.



XLR Connector Gasket

This microphone is supplied with a small corrugated rubber ring in the XLR connector to absorb the mechanical slack between the microphone and cable. Many high-end cables are made with a rubber shoulder on the XLR-F for the same purpose. When connecting this microphone to a cable with a rubber shoulder XLR-F connector, remove the corrugated rubber ring from the microphone to ensure a proper fit.



Load Impedance

Maximum SPL capability, output clipping level, and dynamic range vary with the input load impedance of the preamplifier to which the microphone is connected. Shure recommends a minimum input load impedance of 1000 Ohms. Most modern microphone preamplifiers meet this requirement. Higher impedance results in better performance for these specifications.

Power Requirements

This microphone requires phantom power and performs best with a 48 V DC supply (IEC-61938), but it can operate with supplies as low as 11 V DC. Most modern mixers provide phantom power and require the use of a **balanced** microphone cable: XLR-to-XLR or XLR-to-TRS.

Note: Information in this guide is subject to change without notice. For additional information about this product, please visit www.shure.com.

Specifications

Cartridge Type

Electret Condenser

Polar Pattern

Hypercardioid/Lobar

Frequency Response

VP89L	VP89M	VP89S
40 to 20,000 Hz	50 to 20,000 Hz	65 to 20,000 Hz

Output Impedance

115.0 Ω

Sensitivity

open circuit voltage, @ 1 kHz, typical

-33.5 dBV/Pa[1] (21.1 mV)

Maximum SPL

1 kHz at 1% THD[2]

2500 Ω load	132.0 dB SPL
1000 Ω load	128.5 dB SPL

Signal-to-Noise Ratio[3]

79.0 dB

Dynamic Range

@ 1 kHz

2500 Ω load	117.0 dB
1000 Ω load	113.5 dB

Clipping Level

@ 1 kHz, 1% THD

2500 Ω load	4.0 dBV
1000 Ω load	0.0 dBV

Self Noise

equivalent SPL, A-weighted, typical

15.0 dB

Common Mode Rejection

20 to 20,000 Hz

≥70.0 dB

Low-Frequency Filter Switch

-12 dB/oct below specified frequency

Flat Response	100 Hz
Low Frequency Rolloff	200 Hz

Operating Temperature Range

-18°C (0°F) to 57°C (135°F)

Storage Temperature Range

-29°C (-20°F) to 74°C (165°F)

Operating Relative Humidity

0 to 95%

Polarity

Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3

Housing

Charcoal-grey metallic painted aluminum alloy handle and grille with stainless steel screen

Power Requirements

11-52 V DC[4] phantom power (IEC-61938), <2.0 mA

Net Weight

VP89L	VP89M	VP89S
174 g (6.1 oz.)	138 g (4.9 oz.)	117 g (4.1 oz.)

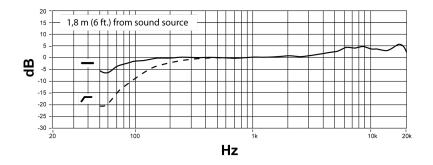
[1] 1 Pa=94 dB SPL

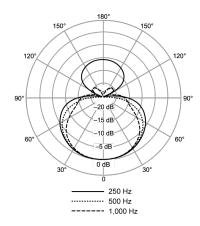
[2]THD of microphone preamplifier when applied input signal level is equivalent to cartridge output at specified SPL

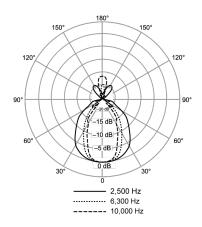
[3]S/N ratio is the difference between 94 dB SPL and equivalent SPL of self noise, A-weighted

[4]All specifications measured with a 48 Vdc phantom power supply. The microphone operates at lower voltages, but with slightly decreased headroom and sensitivity.

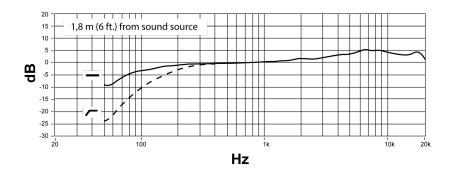
VP89L

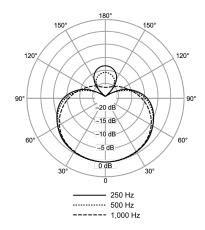


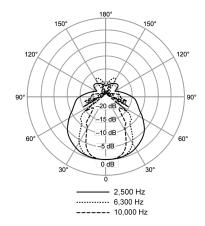




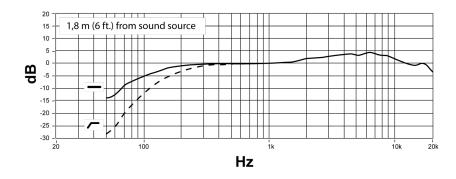
VP89M

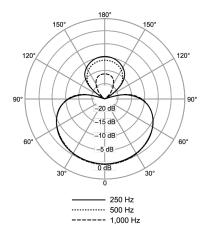


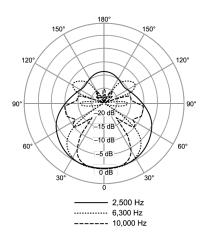




VP89S



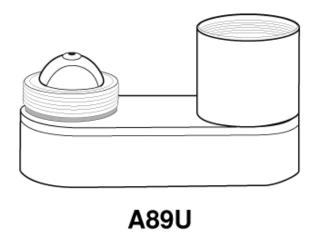




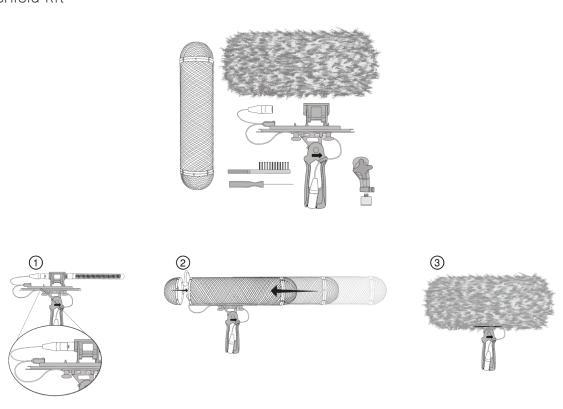
Accessories

Optional Accessories

Double-Barrel Adapter

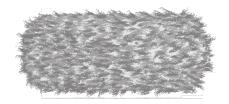


Windshield Kit



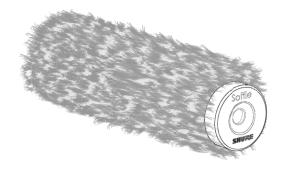
VP89L: A89LW-KITVP89M: A89MW-KITVP89S: A89SW-KIT

Replacement Windjammer



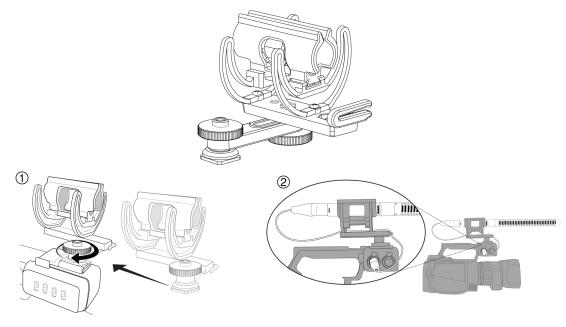
VP89L: A89LW-JMRVP89M: A89MW-JMRVP89S: A89SW-JMR

Softie Windshield



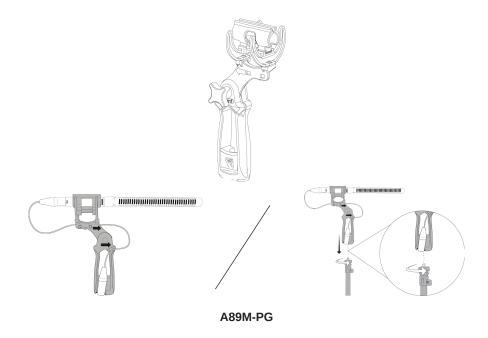
VP89L: A89LW-SFTVP89M: A89MW-SFTVP89S: A89SW-SFT

Softie Lyre Mount with InVision Video (Shoe) for VP89M and VP89S

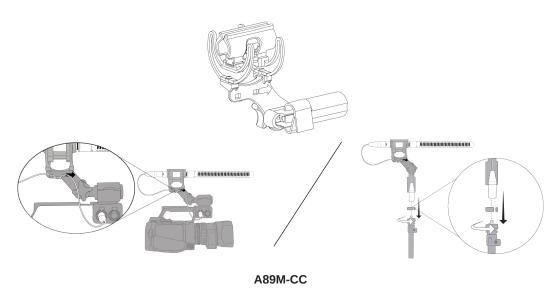


A89M-SH

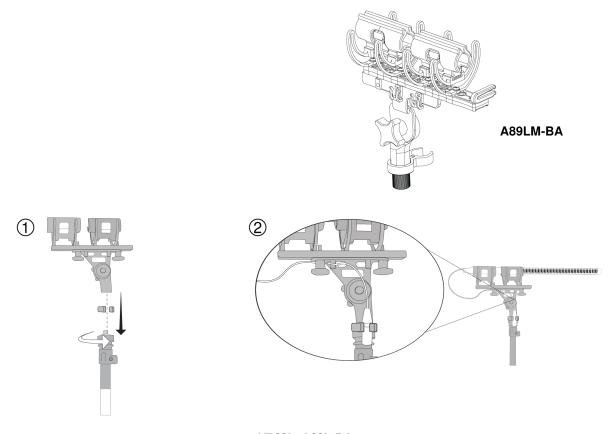
Softie Lyre Mount with Pistol Grip for VP89M and VP89S



Softie Lyre Mount with Camera Clamp Adapter for VP89M and VP89S



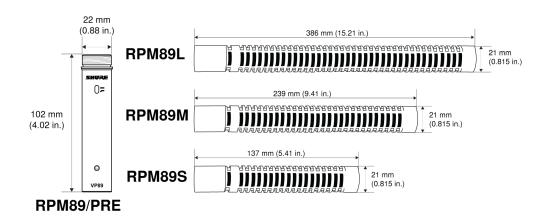
Softie Lyre Mount with Boom Adapter for VP89L



VP89L: A89L-BA

Furnished Accessories

Capsule



VP89L: RPM89LVP89M: RPM89MVP89S: RPM89S

Foam Windscreen



VP89L: A89LWVP89M: A89MWVP89S: A89SW

Protective Case



VP89L: A89LCVP89M: A89MCVP89S: A89SC

Certifications

This product meets the Essential Requirements of all relevant European directives and is eligible for CE marking.

The CE Declaration of Conformity can be obtained from Shure Incorporated or any of its European representatives. For contact information please visit www.shure.com

CE Notice:

Hereby, Shure Incorporated declares that this product with CE Marking has been determined to be in compliance with European Union requirements. The full text of the EU declaration of conformity is available at the following site: https://www.shure.com/en-EU/support/declarations-of-conformity.

UKCA Notice:

Hereby, Shure Incorporated declares that this product with UKCA Marking has been determined to be in compliance with UKCA requirements. The full text of the UK declaration of conformity is available at the following site: https://www.shure.com/en-GB/support/declarations-of-conformity.