SHURE®

LEGENDARY
PERFORMANCE™

Wired Microphones
VP83



User Guide

Le Guide de l'Utilisateur

Bedienungsanleitung

Manuale d'uso

Guia del Usuario

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Gebruikershandleiding

Руководство пользователя

Pengguna Panduan

取扱説明書

사용자 안내서

用户指南

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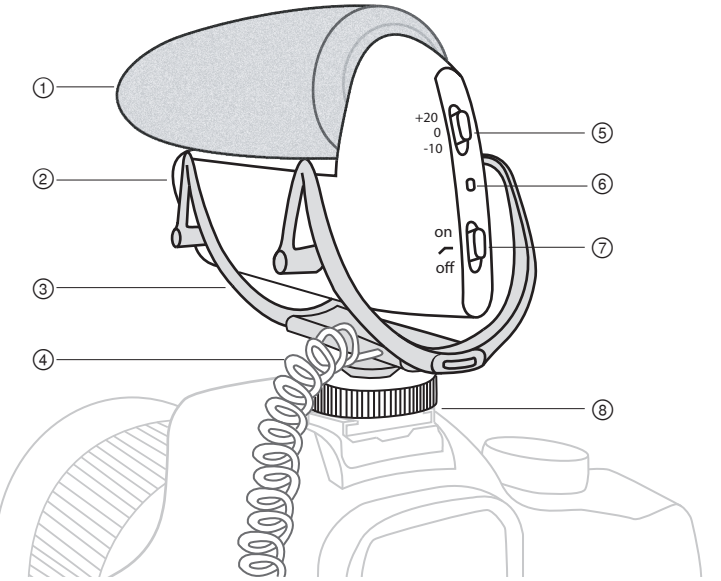
VP83

General Description

Designed for use with DSLR and video cameras, the Shure VP83 condenser microphone enables videographers to capture professional quality audio. Adjustable gain, superior off-axis rejection, and a selectable low-cut filter provide exceptional definition and clarity. Consistent with Shure's commitment to quality and durability, the VP83 features a lightweight, all-metal housing and a built-in Rycote® shock mount for reliable use in the field.

Features

- Supercardioid/lobar pattern rejects unwanted off-axis sounds
- Low-cut and gain switches for maximum adaptability
- Rycote® integrated shock mount
- 130 hours of battery life
- Built-in 3.5 mm audio output cable
- Superior RF immunity
- Durable, all-metal housing
- Shoe mount adapter for easy installation



① Rycote® Foam Windscreen

② Battery Compartment

③ Rycote® Integrated Shock Mount

④ Audio Output Cable

⑤ Gain Adjustment Switch

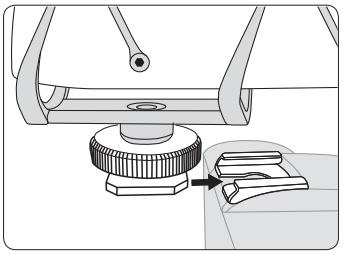
⑥ Power / Low Battery LED

⑦ Power / Low-Cut Filter Switch

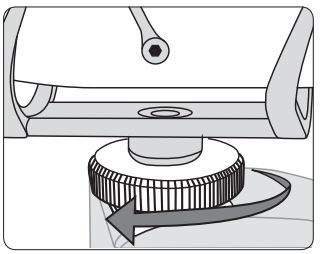
on	power on
⌐	power on with low-cut filter engaged
off	power off

⑧ Camera Shoe Mount Adapter

Mounting the Microphone



1. Slide the microphone onto the camera shoe.



2. Tighten the knurled ring to secure.

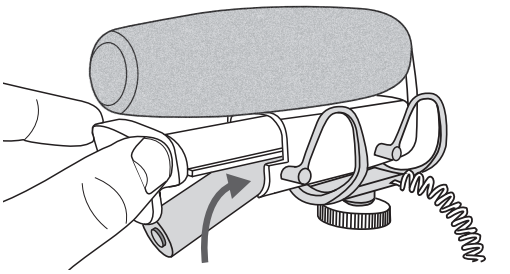
Tip: In addition to the vibration isolation provided by the shock mount, the low-cut filter can be used to further eliminate handling noise and low frequency rumble.

Installing Batteries

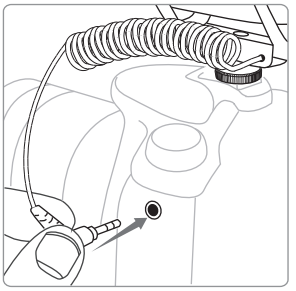
This microphone requires one AA battery to operate (Alkaline, NiMH, or Lithium). To install:

1. Squeeze the door latches and pull the battery compartment open.
2. Insert the battery into the holder according to the polarity indicator and secure it into place.
3. Close the compartment by pushing the holder back in until it latches.

Low Battery LED: When the battery is running low, the LED turns red and the battery should be replaced as soon as possible. See the battery life table in the user guide to determine remaining runtime after the LED turns red.

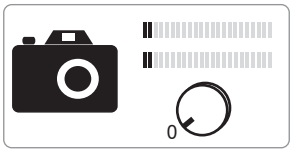


Audio Configuration



① Connect to the camera or recording device

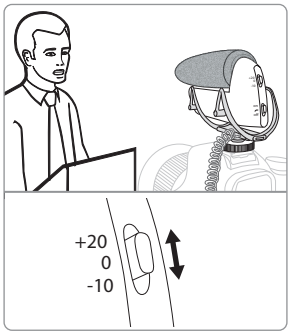
Plug the attached coiled cable into the camera's audio input. Alternatively, the microphone can be plugged into a field recorder or other external device. It may be connected to both a camera and a recorder by using a Y-splitter cable.



② Lower the camera's gain (input volume) to the minimum setting

Using the least amount of gain from the camera or recording device and more gain from the VP83 will result in a better signal-to-noise ratio.

Note: If automatic gain control on the camera (when applicable) introduces unwanted audio artifacts, consider bypassing the feature.

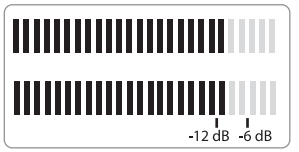


③ Perform a sound check and adjust the gain switch

The dB gain switch adjusts the level of the audio signal sent to the camera's audio input. Begin with the gain switch set to +20 dB. Monitor the camera's audio meter and adjust the switch so that the loudest sounds do not exceed -6 dB.

+20 dB:	Appropriate level for many cameras when recording typical sound levels (speech, for example) and for quiet sources.
0 dB:	Use when capturing sounds that are slightly louder than typical speech levels.
-10 dB:	Use when the signal is too loud and distorts the camera's preamp, or in loud environments, such as a concert or sporting event.

Note: Camera input sensitivity varies between manufacturers. Use this information for general reference.



④ If necessary, increase the camera's input gain

The audio signal should peak between -12 and -6 dB on the camera's audio meter. Follow the camera manufacturer's instructions to fine tune the gain to reach the appropriate level.

Why Gain Settings are Important

Proper gain adjustment is necessary to achieve the best signal-to-noise ratio. When recording audio, the camera's preamp circuitry may introduce a small amount of noise that increases as the camera's preamp gain is raised, or when volume levels are raised during post production.

How the VP83 improves performance:
The VP83 microphone has very low noise characteristics, which means that using more gain from the microphone and less from the camera will improve the signal-to-noise ratio and result in a cleaner audio signal.

Low-cut Filter

The low-cut filter reduces low frequency rumble caused by camera handling and other environmental factors by rolling off low frequencies 170 Hz and below (12 dB per octave). To engage, slide the power switch to the low-cut filter (⌐) position.

Monitoring the Audio Signal

To listen to the audio while recording, connect a pair of headphones to the camera's headphone output. Use the camera's headphone volume control to adjust the monitoring level. Do not use the gain switch on the VP83 to adjust the monitoring level.

Specifications

Cartridge Type
Electret Condenser

Polar Pattern
Supercardioid/Lobar

Frequency Response
50 to 20,000 Hz

Output Impedance
171 Ω

Sensitivity
open circuit voltage, @ 1 kHz, typical
-36.5 dBV/Pa[1] (14.9 mV)

Maximum SPL
1 kHz at 1% THD[2], 1000 Ω load
129 dB SPL

Signal-to-Noise Ratio[3]
76.6 dB

Dynamic Range
@ 1 kHz, 1000 Ω load
111.6 dB

Clipping Level
@ 1 kHz, 1% THD, 1000 Ω load
-2.7 dBV

Self Noise
equivalent SPL, A-weighted, typical
17.4 dB SPL-A

Operating Temperature Range
-18°C (0°F) to 57°C (135°F)

Storage Temperature Range
-29°C (-20°F) to 74°C (165°F)

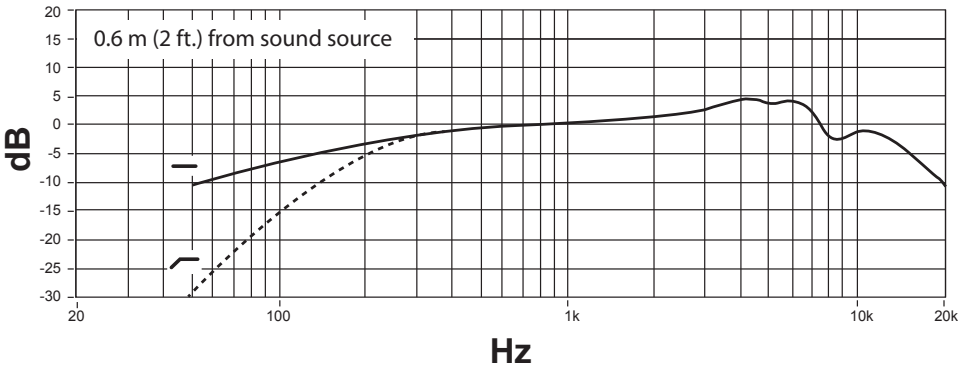
Operating Relative Humidity
0 to 95%

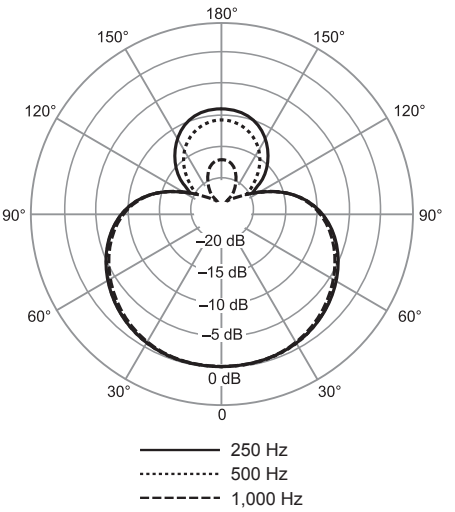
Housing
Cast aluminum

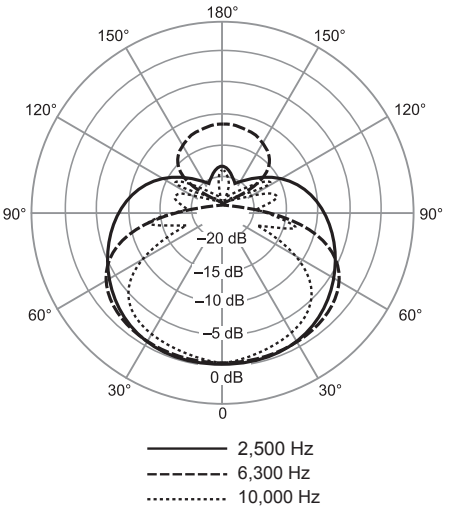
Power Requirements
1 AA battery (Alkaline, NiMH, Lithium)

Net Weight
133 g (4.7 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







Battery Life

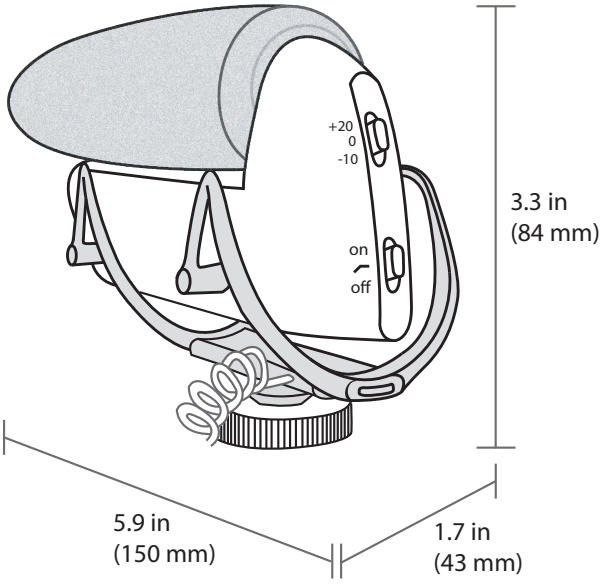
AA Battery Type	Typical Remaining Runtime (Hours)	
	New Battery	After power LED turns **red**
Alkaline	130	13
NiMH	108	2
Lithium	187	½

Troubleshooting

Issue	Solution
Unit does not turn on	Replace batteries and make sure that the batteries are installed correctly.
Sound is distorted	• Check that the audio cable is completely inserted into the camera. • Camera input gain may be set too high, resulting in clipping. Try lowering the gain. If the camera's gain appears to be adjusted properly, try setting the gain switch set to 0 or -10 dB. • If listening through headphones, check the connection or try using a different pair.
No sound	• Make sure the microphone is on and that the audio cable is connected to the correct audio input jack on the camera. • If the camera doesn't register a signal, try increasing the camera gain or setting the gain switch to +20.

Accessories and Replacement Parts

Rycote® replacement foam windscreen	A83W
Rycote® Windjammer™	A83-FUR



Certifications

Note: Testing is based on the use of supplied and recommended cable types. The use of other than shielded (screened) cable types may degrade EMC performance.

The CE Declaration of Conformity can be obtained from: www.shure.com/europe/compliance

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