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## USER'S GUIDE



CS-88  
**DSLR VIDEO SHOTGUN  
MICROPHONE**

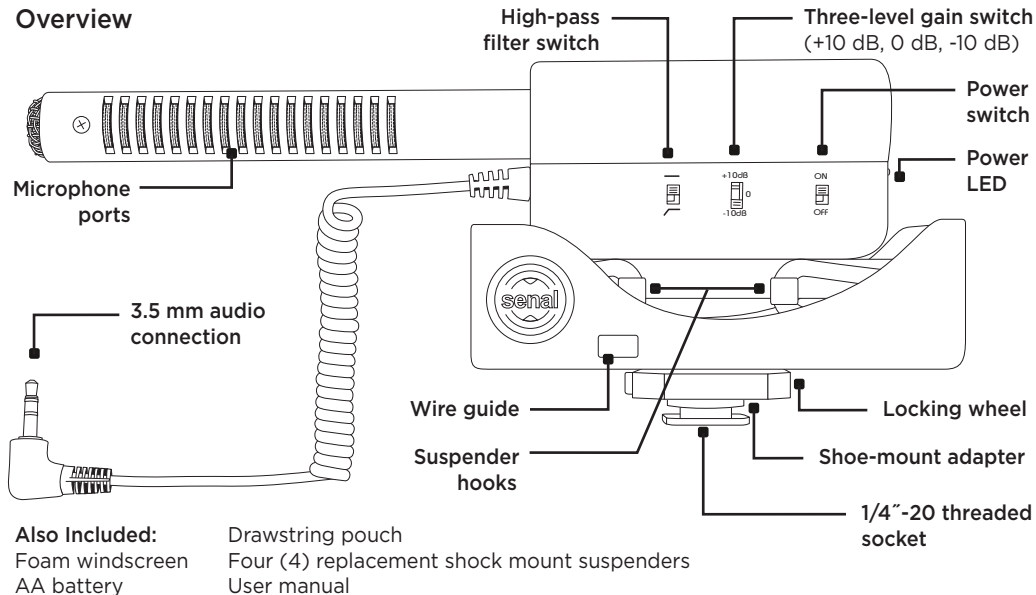
## **Thank you for choosing Senal.**

The Senal CS-88 DSLR-Video Shotgun Microphone is designed for recording live audio directly to your DSLR. The CS-88's cardioid polar pattern and shotgun design optimize the microphone to focus on the subject while rejecting off-axis sound. Ideal for run-and-gun productions like recording interviews and events indoors and in the field, the CS-88 attaches to your camera's shoe mount or to a boom pole and plugs into the camera's audio input jack to deliver natural, professional-quality sound.

### **Among the benefits you'll enjoy:**

- Cardioid polar pattern
- Three-level gain switch (-10 dB, 0 dB, +10 dB)
- High-pass filter
- Integrated shock mount
- Metal shoe-mount adapter with 1/4"-20 threaded socket
- 3.5 mm audio connection
- Power LED

## Overview



## Precautions

- Please read and follow these instructions and keep this manual in a safe place.
- Keep this product away from water and flammable gases or liquids.
- Do not attempt to disassemble or repair this product yourself.
- Handle this product with care.
- Clean this product with only a soft, dry cloth.
- Make sure that this product is intact and that there are no missing parts.
- All photos are for illustrative purposes only.

## Installing the Battery

The CS-88 runs on a single AA battery. To install a battery, make sure the CS-88 is turned off and follow these steps:

1. Press on the battery compartment cover and slide it to open it.
2. Insert the battery in the orientation indicated by the illustration inside the compartment.
3. Close the battery compartment cover by catching it on the track and sliding it firmly into place.

## Mounting the CS-88 and Turning It On

The CS-88 mounts onto your camera via the metal shoe-mount adapter under the shock mount. To mount the microphone onto your camera, make sure the CS-88 is turned off and follow these steps:

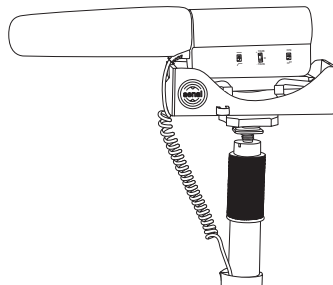
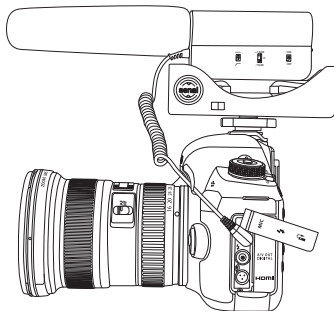
1. Rotate the locking wheel counterclockwise to loosen it.
2. Slide the shoe-mount adapter all the way into your camera's shoe mount.
3. Rotate the locking wheel clockwise until secure.

4. Insert the microphone's 3.5 mm audio connection into your camera's audio input jack.

**Tip:** Use the wire guides to keep the audio cable in place on top of your camera.

You can also mount the CS-88 onto a boom pole via the 1/4"-20 threaded socket in the shoe-mount adapter. To mount the microphone onto a boom pole, make sure the CS-88 is turned off and follow these steps:

1. Match the threaded post on the end of the boom pole with the threaded socket in the CS-88's shoe-mount adapter.
2. Screw the boom pole into the threaded socket until secure.
3. Insert the microphone's 3.5 mm audio connection into the female end of a 3.5 mm stereo extension cable (sold separately).



**Tip:** Use the wire guides to keep the audio cable in place on top of the boom pole.



**Note:** Make sure the extension cable is long enough to reach from your audio recorder to the microphone at the end of the boom pole.

4. Insert the extension cable's 3.5 mm male audio connection into the audio input jack of your audio recorder.

To turn the microphone on, slide the power switch to the ON position. The power LED will glow green to indicate that the power is on. When battery power is low, the power LED will glow red.

## Using the High-Pass Filter

The high-pass filter helps prevent the CS-88 from picking up low-frequency noises that can interfere with your recording, like the rumble from an air conditioner.

To turn on the high-pass filter, slide the high-pass filter switch so it rests just above the  marking. To turn off the high-pass filter, slide the switch back so it rests under the  marking.

## Using the Three-Level Gain Switch

The three-level gain switch provides a +10 dB boost or -10 dB pad. Boosting the microphone's gain can be useful for picking up low-level or distant sounds in a quiet environment. To boost the microphone's gain by 10 dB, slide the three-level gain switch so it rests under the +10 dB marking.

The -10 dB pad lowers the level of the incoming signal and is useful for preventing distortion when recording in high-decibel environments, like a rock concert. To use the 10 dB pad, slide the switch so it rests above the -10 dB marking.

To return the microphone's gain to normal, slide the switch so it rests at the middle 0 dB marking.

## The Windscreen

The CS-88 comes with a foam windscreen that helps reduce wind noise. To fit the windscreen onto the microphone, rotate the windscreen while gently pushing it onto the microphone barrel. Make sure that the windscreen covers all the ports on the sides of the microphone barrel.

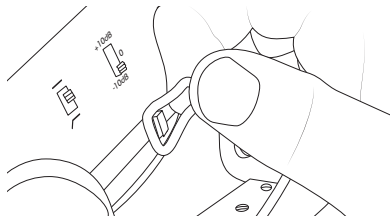
## Replacing the Shock Mount Suspenders

The CS-88's integrated shock mount isolates the microphone from your camera or boom pole. This helps prevent the microphone from picking up vibrations in the camera or the boom, which can cause disruptive and unwanted noise in your recording.



The CS-88 comes with replacement suspenders for the integrated shock mount. To replace the suspenders, follow these steps:

1. Unhook the two rear suspenders from the microphone, and then unhook the two front suspenders from the microphone.
2. Remove the microphone and the old suspenders from the shock mount.
3. Hook the new suspenders onto the suspender hooks inside the shock mount.
4. Make sure the microphone and the shock mount are facing the same direction, and position the microphone inside the shock mount.



**Note:** The Senal logo is at the front of the shock mount.

5. Hook the front suspenders onto the front suspender hooks of the microphone, and then hook the rear suspenders onto the rear suspender hooks of the microphone.

# Troubleshooting

Problem	Solution
The microphone is stuck in the camera's shoe mount.	Make sure the locking wheel is fully loosened.
The microphone will not turn on.	Make sure that a fresh battery is installed and is in the proper orientation.
The sound is distorted.	Make sure the microphone's audio connection cable is fully plugged into your camera's audio input jack.  Turn off the +10 dB boost on the microphone.
The sound is too low.	Turn off the -10 dB pad on the microphone.

## Specifications

<b>Transducer type:</b>	Back electret condenser
<b>Pattern:</b>	Cardioid
<b>Frequency response:</b>	50 Hz to 16 kHz
<b>Sensitivity:</b>	-32 dB, $\pm 3$ dB (0 dB = 1 V/Pa at 1 kHz)
<b>High-pass filter:</b>	60 Hz 10 dB/octave
<b>Output impedance:</b>	2000 $\Omega$ $\pm 30\%$
<b>Power requirement:</b>	One 1.5 V AA battery
<b>Dimensions (microphone with shock mount):</b>	8.7" $\times$ 3.4" $\times$ 2.3" (22 $\times$ 8.6 $\times$ 5.8 cm)
<b>Weight:</b>	6.4 oz. (181 g)

## Ten-Year Limited Warranty

This Senal product is warranted to the original purchaser to be free from defects in materials and workmanship under normal consumer use for a period of ten (10) years from the original purchase date or thirty (30) days after replacement, whichever occurs later. The warranty provider's responsibility with respect to this limited warranty shall be limited solely to repair or replacement, at the provider's discretion, of any product that fails during normal use of this product in its intended manner and in its intended environment. Inoperability of the product or part(s) shall be determined by the warranty provider. If the product has been discontinued, the warranty provider reserves the right to replace it with a model of equivalent quality and function.

This warranty does not cover damage or defect caused by misuse, neglect, accident, alteration, abuse, improper installation or maintenance. EXCEPT AS PROVIDED HEREIN, THE WARRANTY PROVIDER MAKES NEITHER ANY EXPRESS WARRANTIES NOR ANY IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. This warranty provides you with specific legal rights, and you may also have additional rights that vary from state to state.

To obtain warranty coverage, contact the Senal Customer Service Department to obtain a return merchandise authorization ("RMA") number, and return the defective product to Senal along with the RMA number and proof of purchase. Shipment of the defective product is at the purchaser's own risk and expense.

For more information or to arrange service, visit [www.senalsound.com](http://www.senalsound.com) or call Customer Service at 212-594-2353.

Product warranty provided by the Gradus Group.  
[www.gradusgroup.com](http://www.gradusgroup.com)

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