

# MV5

Digital Condenser Microphone

The Shure digital condenser microphone, MV5, user guide.

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Adjusting Headphone Level

# MV5 Digital Condenser Microphone

# General Description

The Shure MV5 microphone connects directly to a computer or mobile device over a USB or Lightning<sup>®</sup> connection. Ideal for home recording or podcasting, the MV5 features preset voice and instrument record modes for fast, easy configuration.

### **Features**

- Convenient, Compact Design: This sleek and durable microphone mounts on the MV5 desktop stand or any stand with a 1/4" threaded adapter.
- Plug and Play: The MV5 automatically becomes the active audio device when plugged into a USB or Lightning compatible device
- **Preset Modes:** Minimize setup time with preset DSP modes designed to adjust your gain, equalization and compression for a variety of applications.

# Quick Setup

1. Connect the microphone to a computer or mobile device. Use the appropriate cable (USB or Lightning).

The Green status LED indicates a successful connection.

Note: When using apps like Voice Memo, the LED will not light until Record is engaged.

2. Confirm that the MV5 is the selected audio device.

Most computers and mobile devices automatically detect the MV5 and assign it as the primary audio device. If your computer settings default to another device, open the sound control panel and select the MV5. To quickly verify that the device is recognized, plug headphones into the MV5 audio output and play an audio track. If you can hear sound, the microphone is functioning properly.

**Note:** When the MV5 is assigned as the audio device, all monitoring and playback from the recording software goes to the headphone output of the MV5.

3. Use the MODE button to select the preset mode that fits your application.

If the audio is too quiet or causes distortion, gain can be manually configured. However, the modes typically do not require additional gain adjustments. Refer to the "Adjusting Microphone Level" topic in this guide for details.

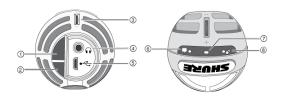
4. In your recording application, select the MV5 as the input source.

See your software user guide for information on assigning input sources.

5. Record.

The microphone is ready to use!

### Connections and Controls



#### **1 Mode Selection Button**

Press to switch between preset modes

#### 2 Mute Button

Press to mute the microphone input

#### **3 Headphone Volume Control**

Adjusts the headphone volume

#### **4** Headphone Output

Plug in any headphones with a 3.5 mm (1/8 inch) connector

#### **⑤ Micro USB Port**

Use the appropriate cable (USB or Lightning) to connect the MV5 to a computer or mobile device

#### **6** Voice Mode

The LED indicator illuminates when this mode is selected

#### **7** Status Indicator

LED Behavior	Status
Green	Active USB or Lightning connection
Flashing Red (all 3 LEDs)	Muted

#### **® Instrument Mode**

The LED indicator illuminates when this mode is selected

Note: Flat Mode is engaged when both mode LEDs are off.

### **Preset Modes**

Three selectable modes adjust settings for gain, equalization, and dynamics to bring out the best sound characteristics for your recording needs.

Mode	Application	Characteristics
Voice	Use for speech or vocals in podcasting or musical applications	Equalization to emphasize clarity and fullness, and gentle compression to keep levels consistent. A de-esser reduces sibilance (the harsh sound that occurs when words with an "S" are spoken).
Instru- ment	Best for acoustic instruments and live music applications	Transparent compression to smooth out volume spikes and bring quiet passages forward. Equalization emphasizes detail and gives an overall natural sound.
Flat	Suited for any application	A completely unprocessed signal (no equalization or compression settings used).  Adds flexibility when processing the audio after recording.

### **Advanced Mic Settings**

After selecting the preset mode, fine-tune your sound with limiter, compressor, and equalizer settings. These settings are retained in the microphone when using other audio and video recording applications.

### Limiter

Toggle the limiter on or off to prevent distortion from volume peaks in your recording.

### Compressor

Choose no compression, or select light or heavy compression to control volume when your sound source is dynamic. Quiet signals are boosted and loud signals are lowered.

### Equalizer



Change the preset modes to hear the DSP changes, and use the equalizer to boost or cut bands of frequencies to improve sound clarity.

Note: Equalization within presets will not be displayed. However, the EQ icon in the advanced settings status bar indicates user-selected equalization.



Equalization changes are displayed in the equalizer image.

EQ persists between preset mode changes.

### **Placement**

This section suggests microphone placement for typical use cases. Keep in mind that there are many effective ways to record a given source. Experiment with microphone placement and settings to find what works best.

### Podcast and Voice Recording

Set the microphone to the Voice mode. Speak directly into the front of the microphone, 2-12 inches (5-30 cm) away. Speaking closer to the microphone results in more bass response, similar to voices on a radio broadcast. Make additional gain adjustments if necessary.



### Music, Singing, and Acoustic Instruments

To capture acoustic sources, such as singing, acoustic guitar, soft percussion, or other musical instruments, use a close microphone placement. Start with Instrument mode for best results.

Aim the microphone directly at the sound source. For a single source, such as a string instrument or a vocalist, place the microphone 6 to 12 inches (15 to 30 cm) away. For a small group or a performer who is singing and playing an instrument simultaneously, use a distance of 2 to 10 feet (0.6m to 3 m). Placing the microphone farther away results in more ambient room sound. Make additional gain adjustments if necessary.

### **Bands and Louder Sources**

To record a band with drums, amplified instruments, or any other loud sources, start with Instrument mode for best results. Aim the microphone towards the group at a distance of 6 to 15 feet (1.83 to 4.6 m). Placement of the microphone depends on the size of the room, number of people, and instrument volume. If possible, walk around the room and listen to find where it sounds best. Make additional gain adjustments if necessary.



For a single electric guitar amplifier, aim the microphone towards the center of the speaker at a distance of 0 to 18 inches (0 to 45 cm).



### **Additional Tips**

Shure offers additional educational publications on recording techniques for specific instruments and applications. Visit www.shure.com for more information.

# Adjusting Microphone Level

Microphone level (gain) typically does not need adjustment when using the appropriate preset mode. However, if you hear distortion or the audio is too low, adjust the microphone level in the Audio or Sound control panel of your computer or recording device.

#### Keep the following in mind:

- · Set the microphone level before adjusting headphone volume.
- The headphone volume does not affect the signal level sent to the computer.
- Use the thumbwheel on the microphone to adjust headphone volume to a comfortable level. Do not change microphone gain to adjust the headphone volume.

### Adjusting Headphone Level

The headphone monitoring level is affected by the device and the computer settings level. Raise your computer volume and easily adjust headphones through the MV5 thumbwheel.



### Accessing the Control Panel

#### Windows

- 1. Open the sound control panel and select the **Recording** tab.
- 2. Open the Shure MV5 device.
- 3. Under the **Levels** tab, adjust the gain level using the slider.

#### Mac®

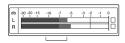
- 1. Open the Audio Midi Settings panel.
- 2. Select the Shure MV5 device.
- 3. Click on Input to adjust the gain using the slider.



Mac audio settings panel

### Input Meter Level

If your digital audio workstation or recording software has input meters, adjust the microphone level so it peaks between -12 and -6 dB. Otherwise, simply listen to the audio to make sure it is loud enough and not distorting.



**Peak Levels** 

The target range for peak levels on a typical meter is between -12 and -6 dB.

# Listening Through Headphones

The headphone jack provides an equal blend of the direct microphone signal and audio playback from the computer. This allows you to conveniently adjust the headphone volume for both with one control, the thumbwheel on the MV5. To adjust the amount of playback audio relative to the direct microphone signal, use the computer or DAW mixer settings.

**Tip:** When first connecting the microphone to your computer, make sure to raise the volume level in the sound control panel of the computer for a strong audio signal. Then adjust headphone level for comfortable monitoring.

### Sampling Rate and Bit Depth

Sample Rate and Bit Depth settings are found in a drop down menu in the audio or sound control panel of your computer. You can adjust these variables to fit your needs. Select a lower sample rate for podcast recording, when it is important to have a smaller file for easy download. Select a higher sample rate for music and more dynamic recordings.

Tip: Record at a higher sample rate and bounce down to an M4A for a file with the highest sound quality at a manageable size.

**Tip for PC users:** Make sure that the sample rate and bit depth microphone settings, found in the sound control panel of the computer, match with the sample rate and bit depth selected in your software.

# Demo Mode



Demo mode allows you to test out all devices in the MOTIV series.

- 1. Swipe through the list to see the available devices.
- 2. Tap Learn More for more information about each device. Or tap Next to explore the microphone settings.

**Note:** Settings in demo mode are for demonstration and are not saved within the app. Demo mode is only available when there is no microphone plugged in to the device.

# Troubleshooting

Issue	Solution
The display does not illuminate	Make sure that the MV5 is fully plugged in.
Audio is too low	Check the computer sound control panel settings. When first connecting the MV5 to your computer, make sure to raise the computer volume level.
Audio sounds bad	Check the sound control panel of the computer to ensure that the MV5 is fully plugged in and recognized.
Audio is distorted	Use the audio meter to ensure that volume peaks are within the target range. If level is reaching the red peak indicator of the input meter, turn the gain down.
Audio sounds unnatural or jittery	Make sure that the sample rate and bit depth microphone settings, found in the sound control panel of the computer, are consistent with the sample rate and bit depth selected in your software.

Issue	Solution
MV5 is plugged in, but the volume meter does not register a signal.	Edit the privacy setting for the iOS device under SETTINGS > PRIVACY > MICROPHONE to give the recording application permission to use the microphone.
Device not working with USB hub.	The MV5 requires 250 mA per port. Check USB hub documentation for current/port specification.

# System Requirements and Compatibility

Windows	Windows 7 and higher Minimum RAM = 64 MB USB 2.0
Macintosh	OS X Lion 10.7 and higher Minimum RAM = 64 MB USB 2.0
ios	iOS 10.0 and higher
iPhone	iPhone 5 and higher
iPod Touch	5th gen
iPad	iPad 4th gen and higher
iPad Mini	iPad Mini 1st gen and higher

# Specifications

MFi Certified

Yes

DSP Modes (Presets)
Voice/Instrument/Flat

### Cartridge Type

Electret Condenser (16 mm)

#### Polar Pattern

Unidirectional (Cardioid)

### Bit Depth

16-bit/24-bit

### Sampling Rate

44.1/48 kHz

### Frequency Response

20 Hz to 20,000 Hz

### Adjustable Gain Range

0 to +36 dB

### Sensitivity

-40 dBFS/Pa at 1 kHz [1][2}

#### Maximum SPL

130 dB SPL [2]

### Headphone Output

3.5 mm (1/8")

### **Power Requirements**

Powered through USB or Lightning connector

#### Mute Switch Attenuation

Yes

### Mounting Stand

Included

### Stand Adapter

1/4 inch 20 thread (standard tri-pod mount)

### Housing

PC/ABS

### Net Weight

Without Mounting Stand	0.09 kg(3.17oz.)
With Mounting Stand	0.16 kg(5.64oz.)

Dimensions

66 x 67 x 65 mm H x W x D

Dimensions with Stand

89 x 142 x 97 mm H x W x D

Cable

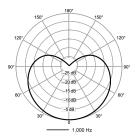
1 m USB cable/1 m Lightning cable (LTG models only)

<sup>[1]</sup>1 Pa=94

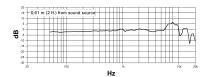
dB SPL

[2]

At Minimum Gain, Flat Mode



**Polar Pattern** 



**Frequency Response** 

# Accessories

### Furnished Accessories

MV5 Desktop Stand	AMV5-DS
1 m USB cable	AMV-USB
1 m Lightning cable	AMV-LTG

### Certifications

### Information to the user

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experienced radio/TV technician for help.

#### Industry Canada ICES-003 Compliance Label: CAN ICES-3 (B)/NMB-3(B)

**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.

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: www.shure.com/europe/compliance

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