

# **MVI** Digital Audio Interface

The Shure compact digital audio interface, MVi, user guide. Version: 2.1 (2020-K)

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## MVi Digital Audio Interface

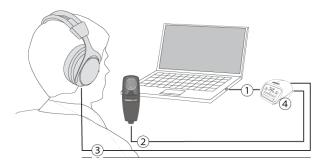
# General Description

The Shure MVi is a compact digital audio interface used to connect a microphone, guitar, or other instrument to a computer or mobile device. Audio and power are delivered through a single USB or Lightning<sup>®</sup> connection to provide a simple and portable recording solution. The MVi headphone output delivers the microphone/instrument signal for real-time monitoring, in addition to audio from the computer for playback and overdubbing.

### Features

- · Easily adjust settings with the intuitive touch panel interface
- · Compatible with most iDevices (iPhone, iPad, and iPod) through Lightning interface
- Compatible with most computers, tablets and smart phones through USB interface
- · Sleek design includes all-metal housing for professional-grade durability
- · Headphone output allows real-time monitoring of the live signal and audio from the computer or device
- · Preset DSP modes include equalization and compression settings for specific applications

### Overview



#### **① USB connection**

The MicroUSB port on the MVi rear panel connects it to a computer or mobile device through a USB or Lightning connection. Both power and audio are passed through this connection.

#### **②** Microphone or Instrument

A microphone, instrument, or line source plugs into the combo XLR-1/4" input.

#### **③ Headphone Monitoring**

Connect headphones to hear real-time audio from the microphone and audio playback from the computer.

#### ④ Controls

The MVi touch-panel provides control of microphone gain, headphone level, and recording mode selection.

# Quick Setup

The MVi is compatible with most devices that have a USB or Lightning connector.

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

Drivers will be installed automatically. The touch panel illuminates to indicate a successful connection.

#### 2. The MVi is automatically assigned as the active audio device.

If MVi is not the selected audio device, open the sound control panel and select the Shure MVi driver.

#### 3. Adjust the headphone volume on the MVi device driver.

Open the Shure MVi driver from the sound control panel and raise the headphone volume from the playback or output tab.

#### 4. Plug a microphone or instrument into the input on the rear panel.

The XLR/TRS combo input is compatible with microphones, guitars, instruments, and other line-level sources.

**Note:** Condenser microphones require phantom power to operate. To turn on phantom power, press and hold the mute button for 3 seconds. The PH PWR LED on the rear panel illuminates when phantom power is activated.

Caution: Never activate phantom power if using a ribbon microphone, as this may cause damage to the microphone.

### 5. Use the MODE button to select the preset mode that fits your application and adjust the microphone gain to suit the application.

If the audio is too quiet or causes distortion, adjust the gain manually. Refer to the "Adjusting Microphone Level" topic in this guide for more details.

Note: When using the MVi, you can monitor and listen to playback through the device headphone output.

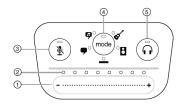
#### 6. Plug in headphones to monitor the real-time audio and playback.

Pressing the headphone button changes to volume control slider to adjust the headphone volume (LEDs switch from green to orange when adjusting headphone volume).

Note: Do not use the gain adjustment to get more volume from the headphones.

You are ready to record.

# Touch Panel Interface Controls



**Touch Panel** 

#### **① Volume Control Slider**

Adjust microphone or headphone level by sliding your finger across the control surface.

- Press the mode button to activate microphone level.
- Press the headphone button to activate headphone volume.

#### ② LED bar

Displays microphone and headphone level. The LED color indicates the level being displayed or adjusted.

- Green: Microphone level
- Orange: Headphone level

#### **③ Mute Button**

Press to mute and unmute the microphone.

#### ④ Mode Selector

Press to select preset mode.

#### **⑤** Headphone Volume Selector

Press to select headphone level controls (orange LED bar). Then use the volume control slider to adjust headphone level. Press again to return to microphone level display (green LED bar).

### **Rear Panel**

#### ① Headphone output (3.5 mm)

Connect headphones to monitor audio.

#### ② Microphone/Instrument Input

Accepts an XLR or 1/4" connection.

#### **③ Micro-USB Port**

Connects to a computer or mobile device with the appropriate cable.

#### **④** Phantom Power Indicator

Illuminates when active (press and hold mute for 3 seconds to switch on/off).

### 1/4" Instrument Input Monitoring

The MVi features a combination XLR and 1/4" TRS input. When a 1/4" input is inserted to an MVi, input mode switches to Hi-Z (instrument) and only flat mode is available. The flat preset mode enables the input monitor to be turned on or off.

Note: When a 1/4" input is inserted no other preset modes are available and the Mode button toggles the input monitor on and off.

#### Mode LED on: Input monitoring is enabled Mode LED off: Input monitoring is disabled

Use input monitoring when you want to hear the input signal as you record. If you want to hear the signal after it has been effected, turn off input monitoring and monitor through the recording device.

# Preset Modes

Five selectable modes optimize settings for gain, stereo width, equalization, and compression. Set the microphone level and try the modes to find which sounds best. Preset modes can affect the strength of the input signal, so adjust the microphone level as needed after changing presets.

Mode	Application	Characteristics
Speech	speech	Narrow stereo width to reject background noise, equalization that emphasizes clarity and fullness, and gentle compression.
<b>P</b> Singing	solo or group vocal performances	Medium stereo width with subtle equalization to add richness and clarity for a natural sound.
- Flat	any	An unprocessed signal (no equalization or compression settings used). Adds flexibility when processing the audio after recording.
<ul><li>✓</li><li>Acoustic</li></ul>	acoustic instru- ments and quiet music	Medium stereo width with transparent compression to smooth out volume spikes and bring out quiet passages. The equalizer setting emphasizes detail and an overall natural sound.
B Loud	live performance and louder sources	Wide stereo to increase separation between sources. Equalization further improves defi- nition by reducing frequencies that can make the instrumentation sound crowded.

# 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.

EQ

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.

# Adjusting Microphone Level

Select the correct preset mode for your recording application. 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.

Tips:

- · Set the microphone level before adjusting headphone volume.
- The headphone volume does not affect the signal level sent to the computer.
- Use the volume slider on the front panel to adjust the microphone gain level.

**Note:** The microphone gain control is independent of the preset modes. Set your microphone level and experiment with dynamic processing options via the preset modes.

### Adjusting Headphone Level

The headphone monitoring level is affected by the MVi device level and the computer settings level. Raise your computer volume up and easily adjust headphones through the MVi touch panel headphone control.

### Accessing the Control Panel

#### PC

- 1. Open the sound control panel and select the Recording tab.
- 2. Open the Shure MVi device.
- 3. Under the Levels tab, adjust the volume using the slider.

#### Mac®

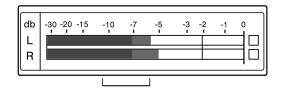
- 1. Open the Audio Midi Settings panel.
- 2. Select the Shure MVi device.
- 3. Click on Input to adjust the gain using the slider.

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#### 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.





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

# Monitoring with the MOTIV Device

The headphone output provides an equal blend of the direct microphone signal and audio playback from the computer. This allows you to conveniently adjust the overall headphone volume with one control on the device touch panel. To change the playback audio level relative to the direct microphone signal level, adjust 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 on the device 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.

# Troubleshooting

Issue	Solution
The display does not illuminate	Make sure that the MVi is fully plugged in.
Audio is too low	Check the computer sound control panel settings. When first connecting the MVi to your computer, make sure to raise the computer volume level.

Issue	Solution
Audio sounds bad	Check the sound control panel of the computer to ensure that the MVi 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.
Device not working with USB hub.	The MVi 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



MFi Certified Yes DSP Modes (Presets) Speech/Singing/Acoustic/Loud/Flat

Input Combination XLR and 6.35 mm (1/4") TRS

Input Impedance 1/4 inch instrument input >1 MΩ

Bit Depth 16-bit/24-bit

Sampling Rate 44.1/48 kHz

Frequency Response 20 Hz to 20,000 Hz <sup>[1]</sup>

Adjustable Gain Range

3-pin XLR	0 to +36 dB
6.35 mm (1/4") TRS	+9 dB

Maximum Input Level

3-pin XLR	0 dBV <sup>[1]</sup>
6.35 mm (1/4") TRS	+9 dBV <sup>[1]</sup>

Headphone Output 3.5 mm (1/8")

Power Requirements Powered through USB or Lightning connector

Phantom Power +48V USB/+12V iOS

Mute Switch Attenuation Yes

Housing all metal construction

Net Weight 310.0 g (10.93oz.)

Dimensions 42 x 84 x 72 mm H x W x D  $^{[1]}$ 

# Accessories

### **Furnished Accessories**

1 m USB cable	AMV-USB
1 m USB-C cable	95C38076

# 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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