MVX2U

MVX2U Digital Audio Interface

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Important Product Information

IMPORTANT SAFETY INSTRUCTIONS

1. READ these instructions.
2. KEEP these instructions.
3. HEED all warnings.
4. FOLLOW all instructions.
5. DO NOT use this apparatus near water.
6. CLEAN ONLY with dry cloth.
7. DO NOT block any ventilation openings. Allow sufficient distances for adequate ventilation and install in accordance with the manufacturer's instructions.
8. DO NOT install near any heat sources such as open flames, radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not place any open flame sources on the product.
9. DO NOT defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wider blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. PROTECT the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. ONLY USE attachments/accessories specified by the manufacturer.
12. USE only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. UNPLUG this apparatus during lightning storms or when unused for long periods of time.
14. REFER all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. DO NOT expose the apparatus to dripping and splashing. DO NOT put objects filled with liquids, such as vases, on the apparatus.
16. The MAINS plug or an appliance coupler shall remain readily operable.
17. The airborne noise of the Apparatus does not exceed 70dB (A).
18. Apparatus with CLASS I construction shall be connected to a MAINS socket outlet with a protective earthing connection.
19. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
20. Do not attempt to modify this product. Doing so could result in personal injury and/or product failure.
21. Operate this product within its specified operating temperature range.

⚡	This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.
⚠	This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

WARNING

LISTENING TO AUDIO AT EXCESSIVE VOLUMES CAN CAUSE PERMANENT HEARING DAMAGE. USE AS LOW A VOLUME AS POSSIBLE. Over exposure to excessive sound levels can damage your ears resulting in permanent noise-induced hearing loss (NIHL). Please use the following guidelines established by the Occupational Safety Health Administration (OSHA) on maximum time exposure to sound pressure levels before hearing damage occurs.

90 dB SPL	95 dB SPL	100 dB SPL	105 dB SPL
at 8 hours	at 4 hours	at 2 hours	at 1 hour
110 dB SPL	115 dB SPL	120 dB SPL	
at ½ hour	at 15 minutes	Avoid or damage may occur	

Information to the user

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. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause interference with radio and television reception.

Notice: The FCC regulations provide that changes or modifications not expressly approved by Shure Incorporated could void your authority to operate this equipment.

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.

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.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Canada, ISED Notice

Notice: The Industry Canada regulations provide that changes or modifications not expressly approved by Shure Inc. could void your authority to operate this equipment.

General Description

Designed for easy portable use, the Shure MVX2U digital audio interface enables you to connect an XLR microphone directly to your computer for streaming or sending professional quality audio. When used with the MOTIV Desktop App, presets, limiting, compression and equalization are all available to provide exceptional definition and clarity. Consistent with Shure's commitment to quality and durability, the MVX2U features an all-metal housing for reliable performance.

Features

Convenient Plug-and-Play Operation
Compatible with Windows and Mac computers.
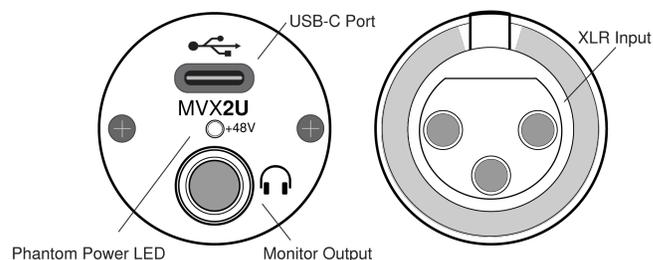
Durable, Versatile Design

- USB connector allows XLR microphones to be used for digital recording
- Rugged, all-metal construction for outstanding reliability

Flexible Sound Control with the ShurePlus MOTIV™ Desktop Application
The MOTIV Desktop Application offers control over input settings and includes the following additional features:
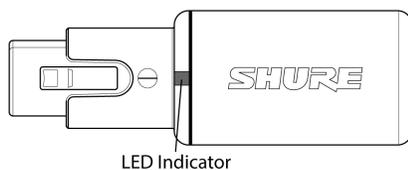
- **Auto Level Mode** Automatically adjusts microphone settings to take the guesswork out of gain and compression settings
- **Manual Mode** Create and save custom presets

MVX2U Inputs and Outputs

- **USB-C port:** Use the included USB-C cable to send and receive audio from your computer or recording device.
- **Phantom Power LED:** LED indicates whether Phantom Power is on or off.
- **3.5mm monitor output:** Connect to headphones or earphones for zero-latency direct monitoring.
- **XLR input:** Connect your microphone directly to the MVX2U or with an XLR cable.
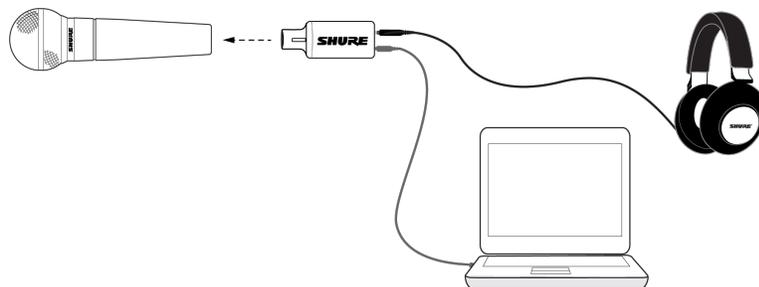
LED Status

LED Indicator

- **Green:** USB connection is made.
- **Amber:** USB connection has failed.
- **Amber Flashing:** Firmware update is in progress.
- **Red:** MVX2U has been muted.
- **Off:** No connection.

Note: Upon first connection, LED is amber and turns green once the device is ready.

Quick Setup

1. **Begin by connecting your audio equipment.** Plug your microphone into the MVX2U XLR connector directly or with an XLR cable.
2. **Connect the MVX2U to your computer with the USB-C cable.** The MVX2U LED will glow amber when the connection is made and then turn green when the mic is ready to use.
3. **Plug your headphones into the monitor output.**
4. **Open the MOTIV Desktop app or download the app at https://wwww.shure.com/MOTIVdesktop.** Your computer may request permission to use the external device the first time the app is opened.
5. **Check audio levels and adjust microphone settings as needed.** Manually adjust microphone gain or select Auto Level Mode for worry free audio setup. See the "Advanced Mic Settings" topic for information on advanced features.
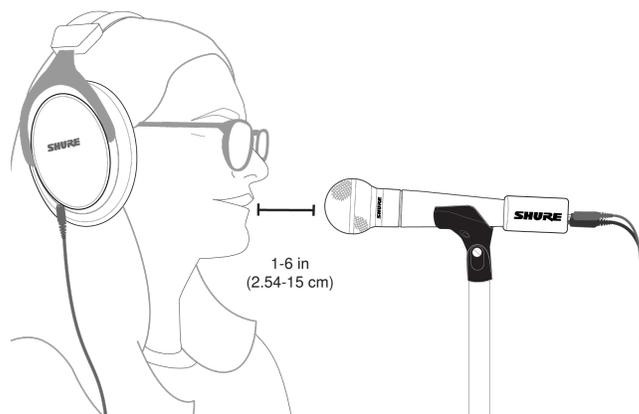
Note: The first time you connect the MVX2U, phantom power will be on. Be sure to turn phantom power off in the MOTIV Desktop app if you are using a ribbon microphone. Phantom power can damage a sensitive ribbon microphone. You can find the phantom power toggle in MOTIV Desktop app settings.

Auto Level Mode

Use the following suggestions as a great starting point for your most common recording needs. Keep in mind that there are many effective ways to mic a voice. The closer you can get to the microphone, the better, but Auto Level Mode really helps to get you sounding your best. Experiment to find which mic placement works best for you.

Near

For podcast and voice recording applications. Position the microphone in front of and as close to your face as possible. Speak directly into the mic, 1-6 inches (2.54 - 15 cm) away for a more intimate voice sound with maximum rejection of off-axis sounds. Make additional gain adjustments if necessary.

Far

Ideal when the sound source is further from the microphone, like in gaming when the person needs to be closer to the screen or gaming console. Aim the microphone directly at the sound source. Place the microphone 6 to 18 inches (15 to 45 cm) away from the sound source. Make additional gain adjustments if necessary.

Tip: Ensure that the microphone is directly pointed towards the source. If possible, experiment with mic placement to find where it sounds best. Make additional gain adjustments as necessary.
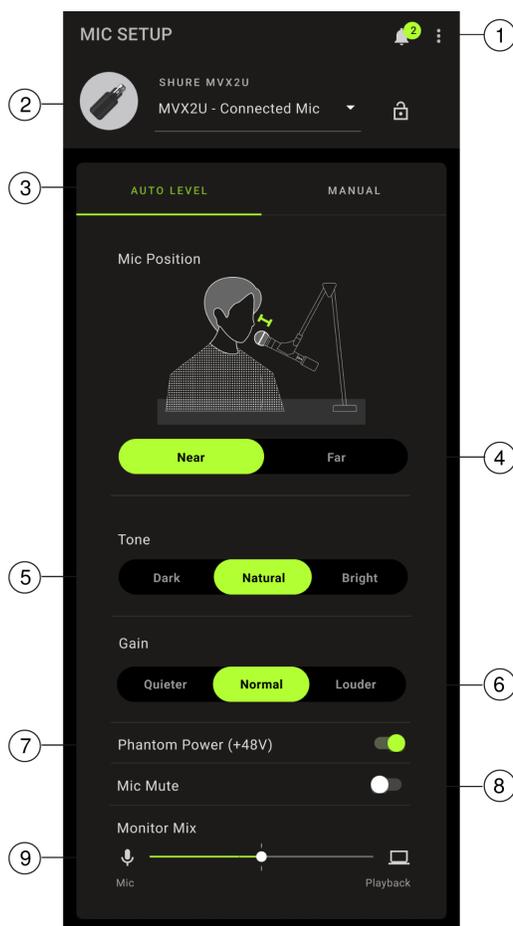
Additional Tips

Shure offers educational articles and publications on recording techniques for a variety of instruments and applications. Visit Shure Educational Articles for more information.

The Shure MOTIV Desktop App

Use the Shure MOTIV desktop app to quickly adjust microphone settings. The device stores the most recently used settings for quick setup.

Mic Setup: Auto Level

① **Settings** Click the three dots to access MOTIV software information, manage presets, application preferences and check for firmware updates.

② **Mic Selection** Tap the caret to select your microphone and view available features.

③ **Auto Level Mode / Manual Mode** AUTO LEVEL mode allows the app to select best choices for your recording needs. Or select MANUAL mode for full control over the microphone settings.

④ **Mic Position** Select the distance, Near or Far, from the sound source to the microphone.

⑤ **Tone** Adjust the tonal qualities of your audio by selecting Dark, Natural or Bright tone. Tone controls a variety of settings to quickly dial in the sound that works best for your voice.

⑥ **Gain** Select the Quieter, Normal or Louder gain level that works best.

⑦ **Phantom Power** Toggle on to provide 48V of power to microphones that require a power supply.

Note: The first time you connect the MVX2U, phantom power will be on. Be sure to turn phantom power off in the MOTIV Desktop app if you are using a ribbon microphone. Phantom power can damage a sensitive ribbon microphone.

⑧ **Mic Mute** Use the toggle to mute and unmute your microphone.

⑨ **Monitor Mix slider** Move the slider to adjust the levels of mic and playback sound sources. See "Monitor Mix Blend" for more information on monitoring.

Mic Setup: Manual

① **Auto Level Mode / Manual Mode** AUTO LEVEL mode allows the app to select best choices for your recording needs. Or select MANUAL mode for full control over the microphone settings.

② **Presets** Use the preset that works best for your needs. Or use the drop-down to create your own custom presets to quickly access your mic settings once it sounds the way you like.

③ **Phantom Power** Toggle on to provide 48V of power to microphones that require a power supply.

Note: The first time you connect the MVX2U, phantom power will be on. Be sure to turn phantom power off in the MOTIV Desktop app if you will be using a ribbon microphone. Phantom power can damage a sensitive ribbon microphone.

④ **Mic Mute / Mic Gain** Use the toggle to mute and unmute your microphone. Use the slider to control microphone gain.

Note: Some programs can control microphone gain while in Manual mode.

⑤ **Monitor Mix slider** Move the slider to adjust the levels of mic and playback sound sources. See "Monitor Mix Blend" for more information on monitoring.

⑥ **Equalizer** Use the 5-band parametric equalizer to adjust the gain of independent frequency ranges, to precisely shape the frequency response. Tap Reset to return to an unchanged equalization state.

⑦ **High Pass Filter, Limiter and Compressor settings** Fine tune your audio with filtering, limiting and compressor controls. See "Advanced Mic Settings" for more information.

Preset Modes

Four selectable modes optimize settings for gain, equalization, and compression. Try out the modes to find which sounds best for your room and recording application. Preset modes can affect the strength of the input signal, so adjust the microphone level as needed after changing presets.

Mode	Characteristics
Dynamic Mic - Speech	Equalization that emphasizes clarity and fullness, and gentle compression.
Dynamic Mic - Singing	Subtle equalization to add richness and clarity for a natural sound when capturing solo or group singing.
Condenser Mic - Speech	A more sensitive signal that emphasizes spoken clarity and fullness with gentle compression.
Condenser Mic - Singing	Transparent compression to smooth out volume spikes and bring out quiet passages in sung performances. The equalizer setting emphasizes detail and an overall natural sound.

Custom Presets

Create and save custom presets to quickly access frequently used mic settings.

1. Start with the preset mode that best suits your application needs.
2. Adjust advanced settings, like compression, for clarity and consistency.
3. Tap Save to rename and save your new custom preset. The original preset will remain available.
4. The new custom preset is added to your list.

To access saved presets:

1. Tap the caret (arrow) in the Preset row to view your list of available presets.
2. Tap custom preset and Apply Preset to instantly apply gain, equalization, and compression preferences.
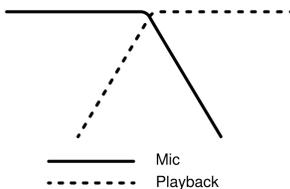
Tip: You can save a custom preset at any point. Tap Save and give the current settings a new name.

Monitor Mix Blend

Monitor Mix

Mic   Playback

Use the monitor mix slider to adjust how much of each source you can hear. For best results, start monitoring at the midpoint and adjust.

- Move the slider towards the microphone icon (Mic) to hear more of the audio going into the mic. Like when you're singing over a recorded guitar track and want to clearly hear your voice.
- Move the slider towards the device icon (Playback) to hear more of the track playing back. When you're recording a harmony to your original vocal track and want to clearly hear the original performance.

Mic
Playback

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 applications.

Limiter

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

Compressor

Choose no compression on your sound, or select light, medium or heavy compression to control volume peaks when your sound source is dynamic. Compression boosts quiet sounds and lowers louder sounds to make sound levels more even.

High Pass Filter

Choose no HPF for the most natural sound. Or select 75 Hz or 150 Hz to reduce wind noise, room noise, or proximity effect.

75 Hz Low frequency cutoff Provides a 6 dB-per-octave cutoff at 75 Hz. Helps eliminate floor rumble and low-frequency room noise from heating and air conditioning systems. This setting may also be used to compensate for proximity effect or to reduce low frequencies that make an instrument sound dull or muddy.
150 Hz Low frequency rolloff Provides a 6 dB-per-octave rolloff filter at 150 Hz. Use this to compensate for proximity effect or to reduce low frequencies that could make an instrument sound dull or muddy.

Equalizer

Use the equalizer to boost or cut bands of frequencies to filter out unwanted sounds and improve sound clarity.

Streaming Tips

Control your Levels

To ensure consistent volume levels, determine the microphone placement that works best for you and maintain that distance. Record several practice tests to determine the spot where your voice sounds best and background sounds are minimized.

Monitor Your Sound

To hear your audio with no latency, plug headphones into the headphone output on your MVX2U.

Mounting Instructions

The MVX2U interface fits into a standard A25D mic clip. So you can place it anywhere that you can put a standing or tabletop mic stand.

Troubleshooting

Issue	Solution
Audio is distorted	Audio distortion usually comes from overloading the microphone which causes clipping. Lower your mic gain for the best sound recording. Select Auto Level Mode to allow the software to control audio settings. Near for up-close applications (1-6 in. / 2.54-15 cm) and Far for a distance of 6-18 inches. (15-45 cm) Check that the all cables are correctly and completely connected. If listening through headphones, check the connection or try using a different pair.
You hear no audio and MOTIV Desktop app reads "No Mic. Disconnected."	Check that the all cables are correctly and completely connected. If listening through headphones, check the connection or try using a different pair.
You hear no audio even though the desktop application is displaying the correct microphone.	If you are using a condenser mic, check the Phantom Power toggle in the MOTIV Desktop app to ensure that you are providing power to your condenser microphone. The +48V LED will illuminate on the MVX2U. Check the Monitor Mix slider. Move the Monitor Mix slider to the center to ensure that you are listening to a balance of audio going into the mic and the audio being played back at the same time. **Note:** Playback audio will only be heard when playing back the track.
General troubleshooting	Disconnect and reconnect the MVX2U. Quit and re-start the app. Reboot the computer. Check for firmware update. Tap the three dots in the top right corner and select `About MOTIV > Check for Update`

Note: Contact Shure Service and Repair if you continue to experience any issues.

Firmware Update

Take advantage of additional features and design enhancements by updating the firmware when prompted. A notification will appear when a firmware update is available. You have the option to download the update immediately or at a later time.

To access firmware update at a later time, tap the `three dots` > `About` > `Check for Update`. Tap the caret icon and if the available firmware package is newer than the current version, tap Send to device. Contact Shure Service and Repair if you experience any issues.

MOTIV Desktop App System Requirements

System Requirements and Compatibility: Mac

- MacOS 10.15 to 13
- 64-bit
- Minimum 2 GB of RAM
- Minimum 500 MB of hard disk space

System Requirements and Compatibility: Windows

- Windows 10
- 64-bit
- Minimum 2 GB of RAM
- Minimum 500 MB of hard disk space

Specifications

Frequency Response
  20 Hz to 20,000 Hz

Input Impedance
(@ 1 kHz)
  5.8 kΩ

Maximum Input Level
  7 dBV

Digital Noise Floor (20 Hz to 20 kHz, A-Weighted)
  -105 dBFS

Minimum MIC GAIN setting
  0 dB

Maximum MIC GAIN setting
  60 dB

Adjustable Gain Range
(0.5 dB/step)
  0 dB to 60 dB

Headphone Output
  3.5 mm (1/8 inch) 20 mW @ 32Ω

Weight
  100g (3.5 oz.)

MFi Certified
  No

DSP Modes (Presets)
  Dynamic Mic (Speech)/Dynamic Mic (Singing)/Condenser Mic (Speech)/Condenser Mic (Singing)

Limiter
  Yes

Compressor
  Yes

Equalizer
  5-band

Housing
  All metal construction

Power Requirements
  Powered through USB connector

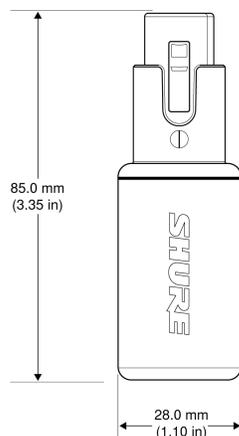Phantom Power Supply
  48V, 7 mA

Max. Current Draw through USB
  5V

Operational Temperature Range
  -5 to 40°C (23 to 104°F)

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

Dimensions

Bit Depth	Sampling Rate
24	48 kHz
16	48 kHz

Accessories

Furnished Accessories

1 m USB-C to USB-C cable	95D52640

Certifications

Conforms to electrical safety requirements based on IEC/EN 62368-1.

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.

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

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.

Waste Electrical and Electronic Equipment (WEEE) Directive

In the European Union and the United Kingdom, this label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling.

Please consider the environment, electric products and packaging are part of regional recycling schemes and do not belong to regular household waste.

Registration, Evaluation, Authorization of Chemicals (REACH) Directive

REACH (Registration, Evaluation, Authorization of Chemicals) is the European Union (EU) and the United Kingdom (UK) chemical substances regulatory framework. Information on substances of very high concern contained in Shure products in a concentration above 0.1% weight over weight (w/w) is available upon request.