J-Tech Digital JTECH-MV41AE

J-Tech Digital 4K HDMI Multiviewer Switch (JTECH-MV41AE) Instruction Manual

Model: JTECH-MV41AE

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and troubleshooting of your J-Tech Digital 4K HDMI Multiviewer Switch (JTECH-MV41AE). Please read this manual thoroughly before using the product to ensure proper functionality and to maximize your experience.

Image: J-Tech Digital 4K HDMI Multiviewer Switch (JTECH-MV41AE) with remote and a display showing multiple video inputs.

SAFETY INFORMATION

- Ensure proper ventilation around the device.
- Do not expose the device to water or excessive moisture.
- Use only the provided power adapter.
- Avoid placing heavy objects on the device.
- Keep the device away from heat sources.

PACKAGE CONTENTS

Verify that all items are present in your package:

- 1x J-Tech Digital 4K HDMI Multiviewer Switch (JTECH-MV41AE)
- 1x IR Remote Control
- 1x 5V DC Power Adapter
- 1x User Manual

Image: Package contents of the JTECH-MV41AE.

PRODUCT OVERVIEW

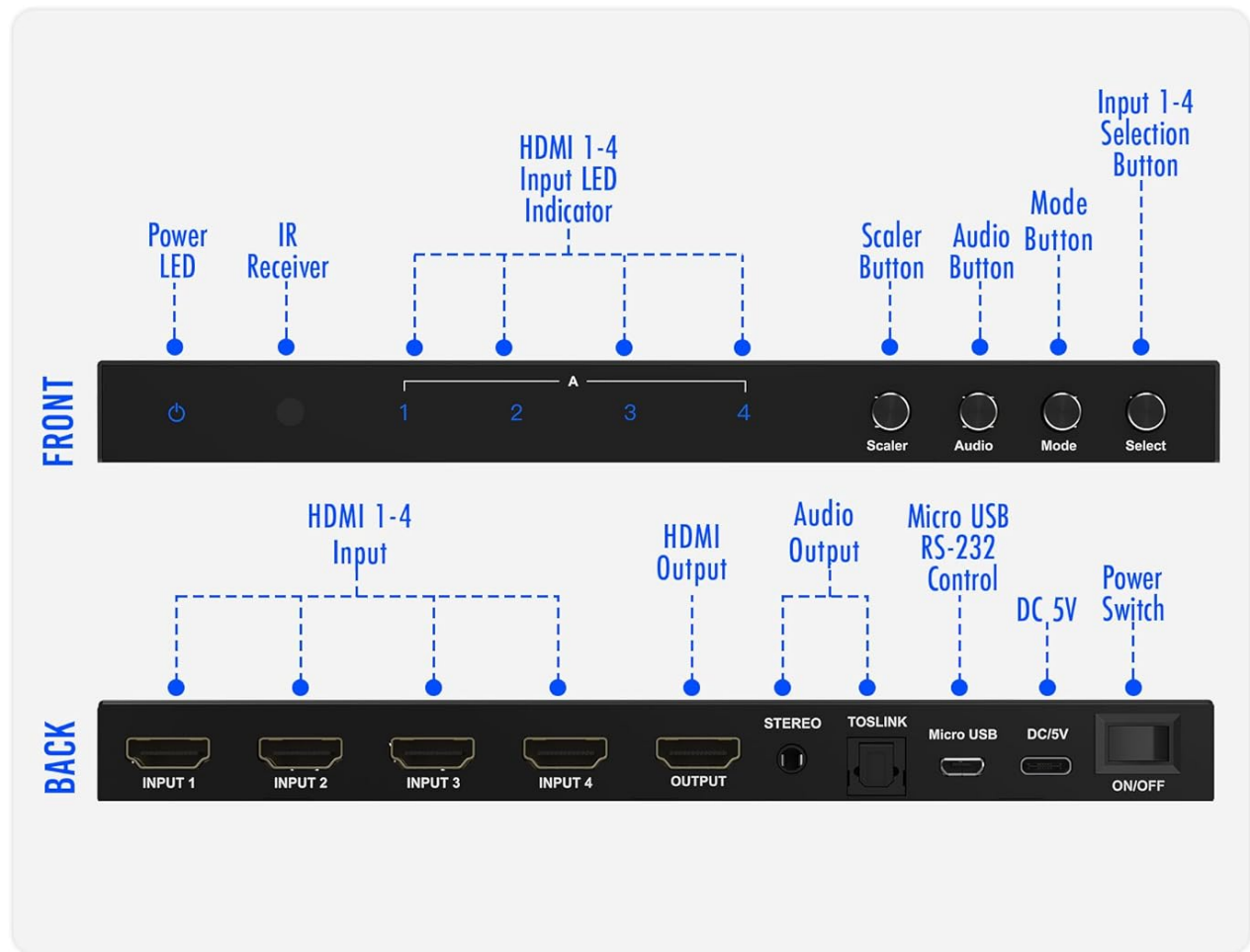**Front and Rear Panel Interface**

Multiviewer Interface

Image: Detailed diagram of the multiviewer switch's front and rear panels.

Front Panel:

- **Power LED:** Indicates power status.
- **IR Receiver:** For remote control signals.
- **HDMI 1-4 Input Indicators:** LEDs show active HDMI inputs.
- **Input 1-4 Selection Buttons:** Select individual HDMI inputs.
- **Scaler Button:** Adjusts output resolution.
- **Audio Button:** Controls audio output settings.
- **Mode Button:** Cycles through viewing modes.
- **Select Button:** Confirms selections or activates PiP.

Rear Panel:

- **HDMI 1-4 Input:** Connect your HDMI source devices.
- **HDMI Output:** Connect to your display (TV, monitor, projector).

- **Audio Output (Stereo):** 3.5mm jack for analog audio extraction.
- **Audio Output (TOSLINK):** Optical port for digital audio extraction.
- **Micro USB (RS-232 Control):** For advanced control via PC.
- **DC 5V:** Power input port.
- **ON/OFF Switch:** Power toggle.

Key Features

- Supports up to 4 HDMI sources on a single display.
- Seamless switching between source devices without delay or black screen.
- Supports 4K@30Hz resolution.
- Features 6 different viewing modes, including Picture-in-Picture (PiP) with custom location control.
- Audio extraction via Optical (TOSLINK) and 3.5mm stereo outputs.
- Control via remote control, front panel buttons, or RS232.

SETUP AND INSTALLATION

Follow these steps to set up your J-Tech Digital 4K HDMI Multiviewer Switch:

1. **Connect HDMI Sources:** Connect up to four HDMI source devices (e.g., PC, game console, Blu-ray player, STB) to the HDMI Input 1-4 ports on the rear panel of the multiviewer switch.
2. **Connect HDMI Display:** Connect an HDMI cable from the HDMI Output port on the multiviewer switch to the HDMI input of your display (TV, monitor, or projector).
3. **Connect Audio Output (Optional):** If you wish to extract audio to an external sound system, connect an optical cable to the TOSLINK port or a 3.5mm stereo cable to the Stereo port on the rear panel.
4. **Connect Power:** Plug the provided 5V DC power adapter into the DC 5V port on the rear panel, then plug the adapter into a power outlet.
5. **Power On:** Flip the ON/OFF switch on the rear panel to the 'ON' position. The Power LED on the front panel should illuminate.
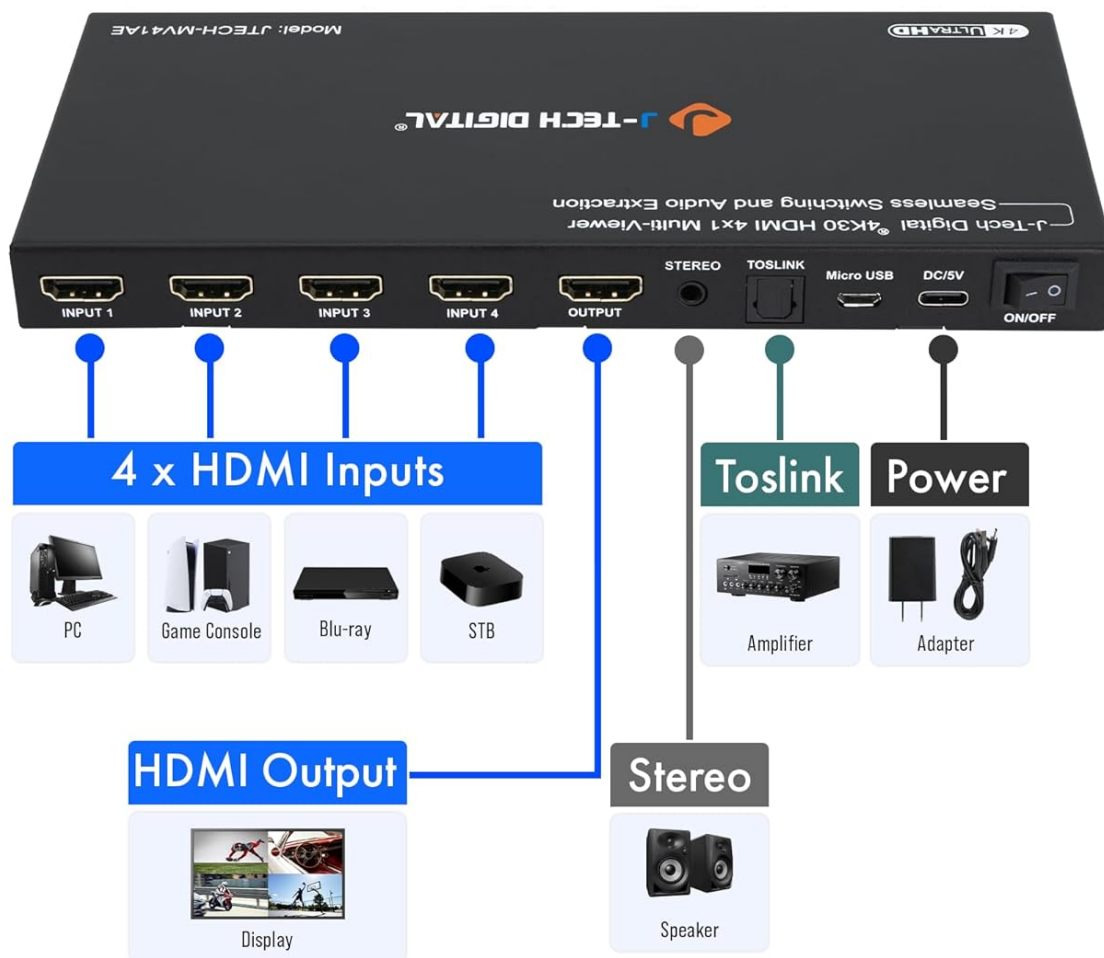
Image: Connection diagram for the JTECH-MV41AE.

OPERATION

Powering On/Off

Use the ON/OFF switch on the rear panel to power the device. The front panel Power LED indicates the power status.

Input Selection

You can select the desired HDMI input using the front panel buttons (Input 1-4) or the corresponding number buttons on the IR remote control.

Viewing Modes

The multiviewer switch offers 6 different viewing modes. Press the **Mode** button on the front panel or remote to cycle through these modes:

- Single Display Mode
- Dual Side Mode (Side by Side)

- Dual Side Mode (Up and Down)

- 4 Equal Display Mode

- 1 Big, 3 Small Display Mode

- Picture-in-Picture (PiP) Mode (1 Big, 1 Small)

Image: Six display modes supported by the JTECH-MV41AE.

Picture-in-Picture (PiP) Function

In PiP mode, you can customize the location of the small window. Press the **PiP** button on the remote control to adjust its position on the screen.

Image: Custom Picture-in-Picture location control feature.

Seamless Switching

The device features seamless switching, meaning there is no black screen or delay when transitioning between different source devices. This ensures a smooth viewing experience.

Image: Seamless switching functionality.

Audio Extraction

Audio from any of the incoming HDMI signals can be extracted to an external sound system using the Optical (TOSLINK) or 3.5mm analog audio outputs on the rear panel.

RS232 Control

For advanced control and integration into professional setups, the device can be controlled via RS232 using the Micro USB port and appropriate software.

MAINTENANCE

To ensure the longevity and optimal performance of your J-Tech Digital 4K HDMI Multiviewer Switch, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Avoid using harsh chemicals or abrasive

cleaners.

- **Ventilation:** Ensure that the ventilation openings are not blocked to prevent overheating.
- **Storage:** When not in use for extended periods, store the device in a cool, dry place away from direct sunlight and extreme temperatures.
- **Cable Management:** Keep cables neatly organized and avoid sharp bends or excessive tension to prevent damage.

TROUBLESHOOTING

If you encounter issues with your multiviewer switch, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No video output or flickering screen.	Loose cable connections, incompatible resolution, power issue.	Check all HDMI and power cable connections. Ensure they are secure. Try a different HDMI cable. Verify that your display supports the output resolution (4K@30Hz). Cycle power to the device and display.
No audio output.	Incorrect audio settings, loose audio cable, incompatible audio format.	Check audio cable connections (Optical/3.5mm). Ensure your external sound system is correctly configured. Press the 'Audio' button on the device or remote to adjust audio settings.
Remote control not working.	Dead batteries, obstructed IR path.	Replace batteries in the remote. Ensure there are no obstructions between the remote and the device's IR receiver.
Device defaults to 2K resolution on startup.	Default setting behavior.	Press the 'Scaler' button multiple times to cycle to the desired 4K resolution. This setting may need to be reapplied after each power cycle.
Cannot switch between inputs.	No signal from source, faulty button/remote.	Ensure all source devices are powered on and sending a signal. Try using both the front panel buttons and the remote control.

SPECIFICATIONS

- **Model:** JTECH-MV41AE
- **Product Dimensions:** 3.58 x 7.78 x 0.72 inches
- **Item Weight:** 1.4 pounds
- **Color:** Black
- **Connector Type:** HDMI
- **Cable Type:** HDMI
- **Input Ports:** 4x HDMI
- **Output Ports:** 1x HDMI, 1x Optical (TOSLINK), 1x 3.5mm Stereo
- **Resolution Support:** Up to 4K@30Hz
- **Control Methods:** IR Remote, Front Panel Buttons, RS232
- **Compatible Devices:** Blu-Ray Player, Gaming Console, Laptop, Projector, Television

Image: Wide compatibility of the JTECH-MV41AE.

WARRANTY AND SUPPORT
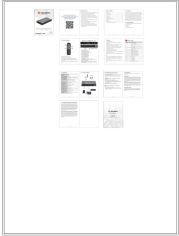
All J-Tech Digital products include a one-year manufacturer replacement warranty. Additionally, J-Tech Digital provides free lifetime technical support from their customer support team located in Stafford, TX.

Technical Support Hours: Monday – Friday, 9 AM – 6 PM CST.

Contact information is available on the J-Tech Digital seller page or official website.

Related Documents - JTECH-MV41AE

	[J-Tech Digital 8K HDMI Switcher 2x1 User Manual (JTD-1226, JTECH-EKSW21AE)](#) User manual for the J-Tech Digital ULTRA HD 2x1 HDMI Switcher supporting 8K60Hz, HDR10+, Dynamic HDR, with audio extraction and EDID control. Includes specifications, connection guide, and troubleshooting.
	[J-Tech Digital 4x4 Seamless Switch 4K HDMI Matrix & Video Wall Controller User Manual](#) Comprehensive user manual for the J-Tech Digital 4x4 Seamless Switch, a 4K HDMI Matrix and Video Wall Controller (Model: JTECH-VWM04). Learn about its features, specifications, operation, connection, and IP control.
	[J-TECH DIGITAL ULTRA HD HDMI 3x3 Video Wall Processor User Manual](#) Comprehensive user manual for the J-TECH DIGITAL ULTRA HD HDMI 3x3 Video Wall Processor (JTD-3260, JTECH-VW0109-AE) with 4K30-IN 1080-OUT and audio extraction. Features, specifications, setup, troubleshooting, and warranty information.
	[J-TECH DIGITAL 8K HDMI 2x1 Switcher User Manual	JTD-2936](#) User manual for the J-TECH DIGITAL JTD-2936 (JTECH-8KSW21P) 8K HDMI 2x1 Switcher. Learn about its features, specifications, and troubleshooting for seamless 8K@60Hz and 4K@120Hz video switching.
	[J-TECH DIGITAL JTECH-4K60-UNT/UNR ProAV HDMI Extender User Manual](#) User manual for the J-TECH DIGITAL JTECH-4K60-UNT/UNR ProAV Many-to-Many 4K@60Hz HDMI Extender with IR. Covers features, specifications, installation, and troubleshooting.
	[J-Tech Digital 4K60Hz 16x16 HDMI Matrix with Audio Extraction User Manual](#) Comprehensive user manual for the J-Tech Digital JTD-2956 (JTECH-4KMX256A) 16x16 HDMI Matrix Switch. Features 4K@60Hz, HDR, Dolby Vision, HDCP 2.2, audio extraction, RS232, and TCP/IP control.