

JCHICI US1-HS104H-4K-BS

JCHICI 1x4 HDMI Splitter User Manual

Model: US1-HS104H-4K-BS

Brand: JCHICI

1. INTRODUCTION

The JCHICI 1x4 HDMI Splitter is designed to distribute a single HDMI source to four HDMI displays simultaneously. It supports 4K@60Hz (4:4:4) HDR video, features advanced audio extraction capabilities (Optical and 3.5mm), and includes EDID management with independent 4K to 1080p downscaling for each output. This device is compatible with various HDMI sources and displays, ensuring a versatile solution for home theaters, gaming setups, and professional presentations.

Mixed Resolution Output Made Easy

Independent Downscaling for Each Display
— 4K to 1080P with DIP Switch Control



Image: The JCHICI 1x4 HDMI Splitter connected to a laptop, splitting the signal to four monitors (some 4K, some 1080p) and external audio devices.

2. SAFETY INFORMATION

- Ensure proper ventilation around the device to prevent overheating.
- Use only the provided power adapter. Using an incorrect adapter may damage the device and void the warranty.
- Do not expose the device to water, moisture, or extreme temperatures.
- Avoid disassembling the device. Refer all servicing to qualified personnel.
- Keep the device away from strong magnetic fields.

3. PACKAGE CONTENTS

Please verify that all items are present in your package:

- 1x JCHICI 1x4 HDMI Splitter
- 1x Power Adapter (DC 5V)
- 1x User Manual



Image: The JCHICI 1x4 HDMI Splitter, its power adapter, and the user manual laid out.

4. PRODUCT DIAGRAM AND INTERFACE DESCRIPTION



LED Indicators
Real-time status monitoring for
seamless signal distribution.

Image: Front and rear view of the JCHICI 1x4 HDMI Splitter, highlighting the Power, Input/Output indicators, HDMI ports, Audio Output ports, EDID DIP Switch, Downscaling DIP Switch, and Firmware Upgrade Port.

Front Panel:

- **Power LED:** Indicates the device is powered on.
- **IN LED:** Indicates an active HDMI input signal.

- **OUT1-OUT4 LEDs:** Indicate active HDMI output signals for each connected display.

Rear Panel:

- **DC 5V:** Power input port.
- **HDMI IN:** Connect your HDMI source device (e.g., PS5, Xbox, Blu-ray player).
- **HDMI OUT1-OUT4:** Connect to your HDMI display devices (e.g., TV, monitor, projector).
- **TOSLINK Optical Audio Out:** Connect to an optical audio receiver or soundbar for digital audio extraction.
- **3.5mm Stereo Audio Out:** Connect to headphones or analog audio systems for stereo audio extraction.
- **SERVICE:** Firmware upgrade port.
- **EDID DIP Switch:** Used to select EDID modes (AUTO, COPY, 4K->1080P Downscaler).
- **Downscaling DIP Switch:** Used to enable/disable 4K to 1080p downscaling for specific outputs.

5. SETUP INSTRUCTIONS

1. **Power Off Devices:** Ensure all HDMI source devices, displays, and the splitter are powered off before making connections.
2. **Connect HDMI Source:** Connect an HDMI cable from your source device (e.g., PS5, Xbox, PC) to the **HDMI IN** port on the splitter.
3. **Connect HDMI Displays:** Connect HDMI cables from the **HDMI OUT1** through **HDMI OUT4** ports on the splitter to your respective display devices (TVs, monitors, projectors).
4. **(Optional) Connect Audio Devices:**
 - For digital audio, connect an optical cable from the **TOSLINK Optical Audio Out** port to your audio receiver or soundbar.
 - For analog stereo audio, connect a 3.5mm audio cable from the **3.5mm Stereo Audio Out** port to your headphones or stereo system.
5. **Connect Power:** Connect the provided DC 5V power adapter to the **DC 5V** port on the splitter, then plug the adapter into a power outlet.
6. **Power On:** Power on the splitter, then your HDMI source device, and finally your display devices.




Image: The JCHICI 1x4 HDMI Splitter with its power adapter connected, showing the importance of external power for stable signal transmission.

6. OPERATING INSTRUCTIONS

6.1 EDID Management

The EDID (Extended Display Identification Data) DIP switch allows you to manage how the splitter communicates with your source device regarding display capabilities. This ensures optimal compatibility across different displays.



Image: The JCHICI 1x4 HDMI Splitter with an overlay explaining the three EDID modes: Auto, Copy, and 4K->1080P Downscaler.

- **AUTO Mode:** The splitter automatically detects the best common resolution and audio format supported by all connected displays. This is the recommended setting for most setups.
- **COPY Mode:** The splitter copies the EDID from the display connected to HDMI OUT1 and presents it to the source. Ensure the display connected to OUT1 supports the desired resolution and audio format.
- **4K->1080P Downscaler Mode:** This mode enables the downscaling feature. The splitter will attempt to downscale 4K signals to 1080p for displays that do not support 4K, while maintaining 4K on compatible displays.

6.2 4K to 1080p Downscaling

The independent downscaling feature allows you to connect both 4K and 1080p displays simultaneously to a 4K source. The splitter will automatically convert the 4K signal to 1080p for the displays that require it, without affecting the 4K output to other displays.

3 EDID Modes for Flexible Compatibility

Switch between Auto, Copy, and Downscaler modes to match your unique display requirements



AUTO



COPY



4K→1080P
Downscaler



Image: A setup showing a 4K monitor and a 1080p monitor receiving signals from the splitter, illustrating the independent 4K to 1080p downscaling function controlled by DIP switches.

- Use the **Downscaling DIP Switch** to enable or disable downscaling for specific outputs. Refer to the product diagram for switch positions.
- **Note:** Downscaling only applies to 4K@60Hz 4:4:4/4:2:0 signals. It will convert these to 1080p for non-4K screens. Other resolutions or refresh rates may not be downscaled.

6.3 Audio Extraction

The splitter provides dedicated audio outputs for connecting to external audio systems, bypassing HDMI audio limitations.



Image: The JCHICI 1x4 HDMI Splitter integrated into an audio-visual system, showing connections for audio extraction to a sound system, supporting formats like Dolby Atmos and DTS.

- **TOSLINK Optical:** Supports Dolby TrueHD, DTS-HD, and 7.1 LPCM audio formats.
- **3.5mm Stereo:** Provides 2-channel analog stereo audio output.

6.4 LED Indicators

External Power

Ensure stable signal transmission with the included power adapter.

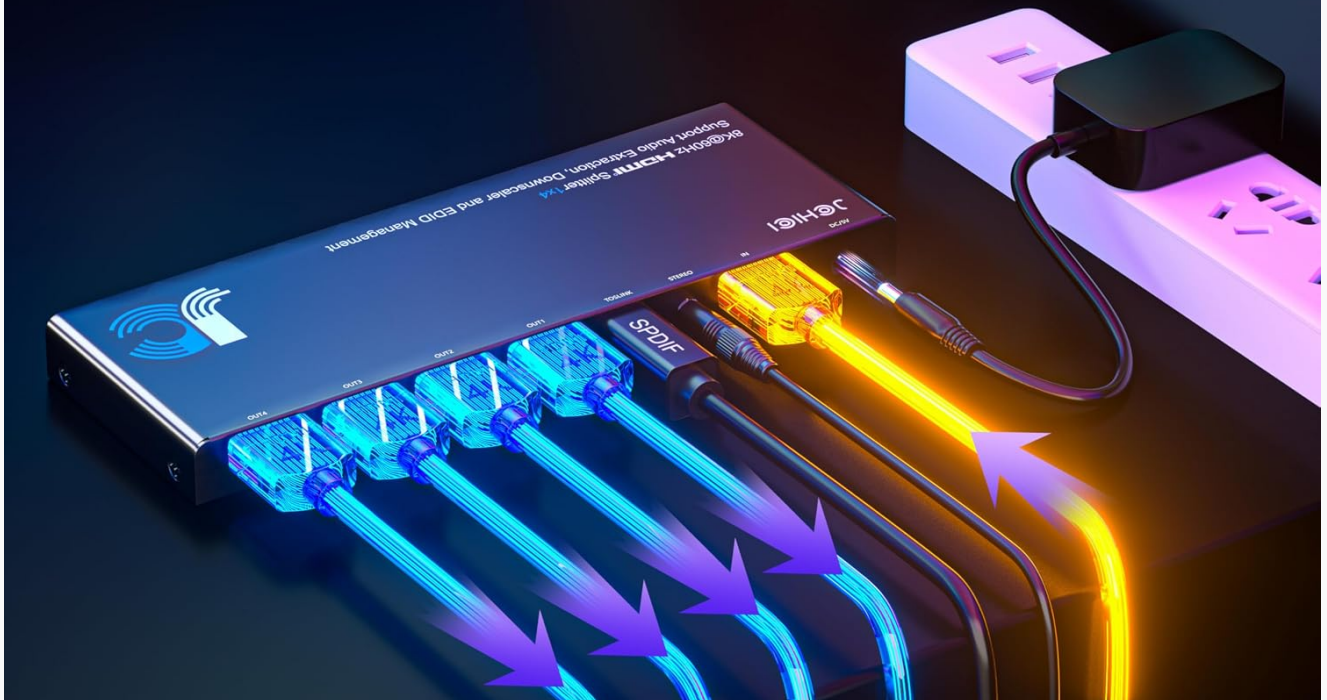


Image: The JCHICI 1x4 HDMI Splitter with its blue LED indicators illuminated, providing real-time status monitoring for signal distribution.

- The blue LEDs on the front panel provide real-time status of power, input signal, and active output connections.

7. MAINTENANCE

- Clean the device with a soft, dry cloth. Do not use liquid or aerosol cleaners.
- Keep the device in a cool, dry place, away from direct sunlight and heat sources.
- Ensure cables are securely connected but do not overtighten.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No picture on display(s)	No power to splitter; Loose HDMI cables; Incorrect EDID setting; Incompatible resolution.	Check power connection; Reconnect all HDMI cables; Adjust EDID DIP switch to AUTO; Ensure display supports source resolution or enable downscaling.

Problem	Possible Cause	Solution
No audio output	Loose audio cables; Incorrect audio format from source; EDID setting not allowing desired audio.	Check optical/3.5mm cable connections; Verify source audio settings; Adjust EDID to AUTO or COPY from a display that supports the audio format.
Flickering or distorted image	Poor quality HDMI cables; Cable length too long; HDCP incompatibility.	Use high-quality, certified HDMI 2.0 cables; Reduce cable length if possible; Ensure all devices support HDCP 2.2.
4K to 1080p downscaling not working	Source signal not 4K@60Hz 4:4:4/4:2:0; Downscaling DIP switch off.	Verify source output resolution and color space; Ensure the Downscaling DIP switch is set to ON for the respective output.

9. SPECIFICATIONS

Feature	Detail
Product Dimensions	7 x 0.6 x 2 inches
Item Weight	8.5 ounces
Model Number	US1-HS104H-4K-BS
Color	Black
Connector Type	HDMI
Compatible Devices	Blu-Ray Player, DVD Player, Gaming Console, Monitor, Television
Cable Type	HDMI
HDMI Version	HDMI 2.0
Bandwidth	18Gbps
HDCP Compliance	HDCP 2.2
Max Resolution	4K@60Hz (4:4:4) HDR10/HLG
Audio Outputs	TOSLINK Optical, 3.5mm Stereo



Image: Technical drawing illustrating the physical dimensions of the JCHICI 1x4 HDMI Splitter.



Image: HDCP 2.2 compatibility logo.

10. WARRANTY AND SUPPORT

- **1-Year Warranty:** The JCHICI 1x4 HDMI Splitter comes with a 1-year warranty covering manufacturing defects.
- **30-Day Money-Back Guarantee:** You may return the product for any reason within 30 days of purchase for a full refund.
- **24/7 Customer Service:** For technical assistance, setup guidance, or troubleshooting, please contact JCHICI customer service. Refer to the product packaging or official website for contact details.