BUNGPUNG BP-HDC-MXB22AC

BUNGPUNG 4K@60Hz HDMI Matrix Switcher 2x2 Audio Extractor User Manual

Model: BP-HDC-MXB22AC

Introduction Features Package Contents Product Overview Setup Operating Troubleshooting Specifications Warranty & Support

1. Introduction

This manual provides detailed instructions for the BUNGPUNG 4K@60Hz HDMI Matrix Switcher 2x2 with Audio Extractor (Model: BP-HDC-MXB22AC). This device allows you to connect two HDMI source devices to two HDMI displays, enabling flexible routing of any source to any display. It supports high-resolution video up to 4K@60Hz, HDMI 2.0, HDCP 2.2, and HDR. Additionally, it features audio extraction capabilities, providing optical digital (SPDIF) and 3.5mm L/R analog audio outputs. Please read this manual thoroughly before operation to ensure proper setup and optimal performance.

2. Features

- **HDMI Matrix Switch 2x2:** Connects 2 HDMI sources to 2 HDMI displays, allowing independent or duplicated output.
- **HDMI Audio Extractor:** Extracts audio from HDMI output A to optical digital (SPDIF) and 3.5mm L/R analog audio outputs.
- **High Resolution Support:** Supports UltraHD 4K@60Hz RGB 4:4:4, backward compatible with 480i/p, 720p, 1080i/p60Hz/120Hz.
- **Advanced HDMI Standards:** Compatible with HDMI 2.0b, HDCP 2.2, and HDR.
- **Deep Color Support:** Supports 30-bit, 36-bit, and 48-bit deep color.
- **EDID Management:** Features 3 EDID management modes (AUTO, COPY, STD) for maximum compatibility.
- **Flexible Control:** Easily switch inputs/outputs via push buttons on the device or the included IR remote control.
- **Wide Compatibility:** Works with various HDMI devices such as Blu-ray players, game consoles (PS3/4 Pro, Xbox), PCs, streaming devices (Fire TV, Apple TV, Chromecast, Roku), and displays (HDTVs, monitors, projectors).
- **Durable Design:** Compact metal body with built-in ESD protection for stable and reliable operation.

3. Package Contents

Please check the package contents upon unpacking. If any items are missing or damaged, contact your vendor immediately.

- 1x BUNGPUNG 4K@60Hz HDMI Matrix Switcher 2x2
- 1x IR Remote Control
- 1x DC 5V Power Adapter
- 1x User Manual

4. Product Overview

Familiarize yourself with the front and rear panels of the HDMI Matrix Switcher.

4.1 Front Panel

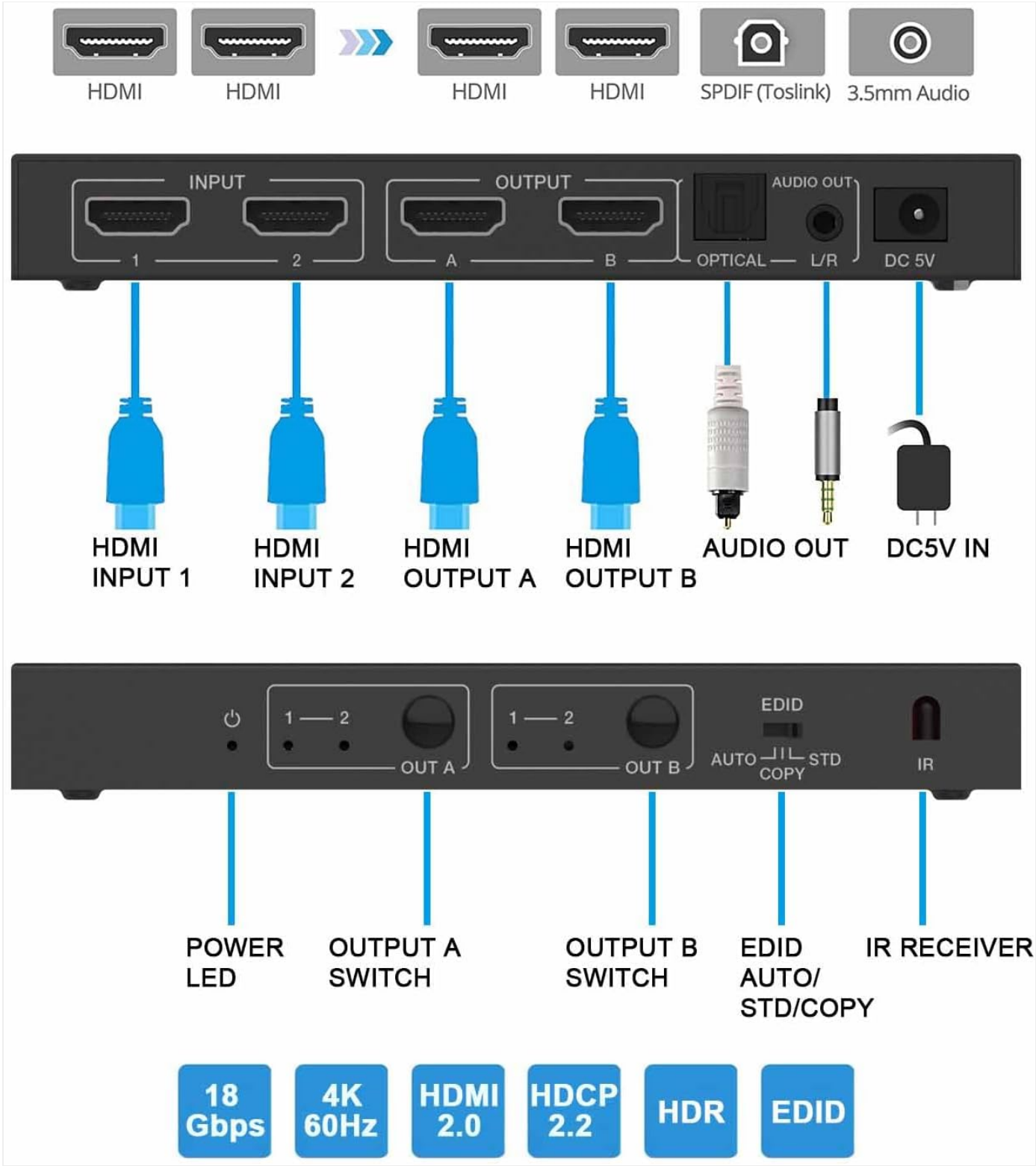


Image Description: The front panel features a power LED indicator, two sets of input selection buttons (1-2) for Output A and Output B, EDID management buttons (AUTO, STD, COPY), and an IR receiver for remote control. Each input selection button has an associated LED to indicate the active input.

4.2 Rear Panel



Image Description: The rear panel includes two HDMI input ports (Input 1, Input 2), two HDMI output ports (Output A, Output B), an Optical (SPDIF) audio output, a 3.5mm L/R analog audio output, and a DC 5V power input port.

4.3 Product Overview Video

Video Description: This video provides a visual overview of the BUNGPUNG 4K@60Hz HDMI Matrix Switcher 2x2 Audio Extractor, showcasing its design, ports, and general functionality. It demonstrates the physical aspects of the device and its various connection points.

5. Setup and Connection

Follow these steps to connect your HDMI Matrix Switcher:

1. Ensure all devices (HDMI sources, displays, and the matrix switcher) are powered off before making connections.
2. Connect your HDMI source devices (e.g., Blu-ray player, game console) to the HDMI Input 1 and Input 2 ports on the rear panel of the matrix switcher using high-quality HDMI cables.
3. Connect your HDMI displays (e.g., TV, monitor, projector) to the HDMI Output A and Output B ports on the rear panel using high-quality HDMI cables.
4. If you wish to extract audio, connect your audio receiver, soundbar, or headphones to the Optical (SPDIF) or 3.5mm L/R analog audio output port (audio is extracted from HDMI Output A).
5. Connect the DC 5V power adapter to the DC 5V input port on the matrix switcher, then plug the adapter into a power outlet.
6. Power on all connected devices. The power LED on the front panel of the matrix switcher will illuminate.



Image Description: This diagram illustrates a typical setup, showing two HDMI input devices (e.g., game console, media player) connected to the switcher's inputs, and two HDMI output devices (e.g., TVs) connected to the switcher's outputs. It also depicts connections for optical audio and 3.5mm analog audio to external sound systems.

6. Operating Instructions

The HDMI Matrix Switcher offers flexible control via front panel buttons or the included IR remote.

6.1 Switching Inputs/Outputs

- **Front Panel Buttons:** Use the "1-2" buttons under "OUT A" to select the input source for Output A. Similarly, use the "1-2" buttons under "OUT B" to select the input source for Output B. The corresponding LED will light up to indicate the active input.
- **IR Remote Control:** The remote control has dedicated buttons for selecting Input 1 or Input 2 for Output A and Output B. For example, to switch Output A to Input 1, press the "OUTPUT A 1" button.

6.2 Working Modes

The switcher supports two main working modes:

- **Matrix Mode:** Allows you to route any of the two input sources to any of the two output displays independently. For example, Input 1 to Output A, and Input 2 to Output B.
- **Splitter/Duplication Mode:** Allows you to send a single input source to both output displays simultaneously. For example, Input 1 to Output A and Input 1 to Output B.

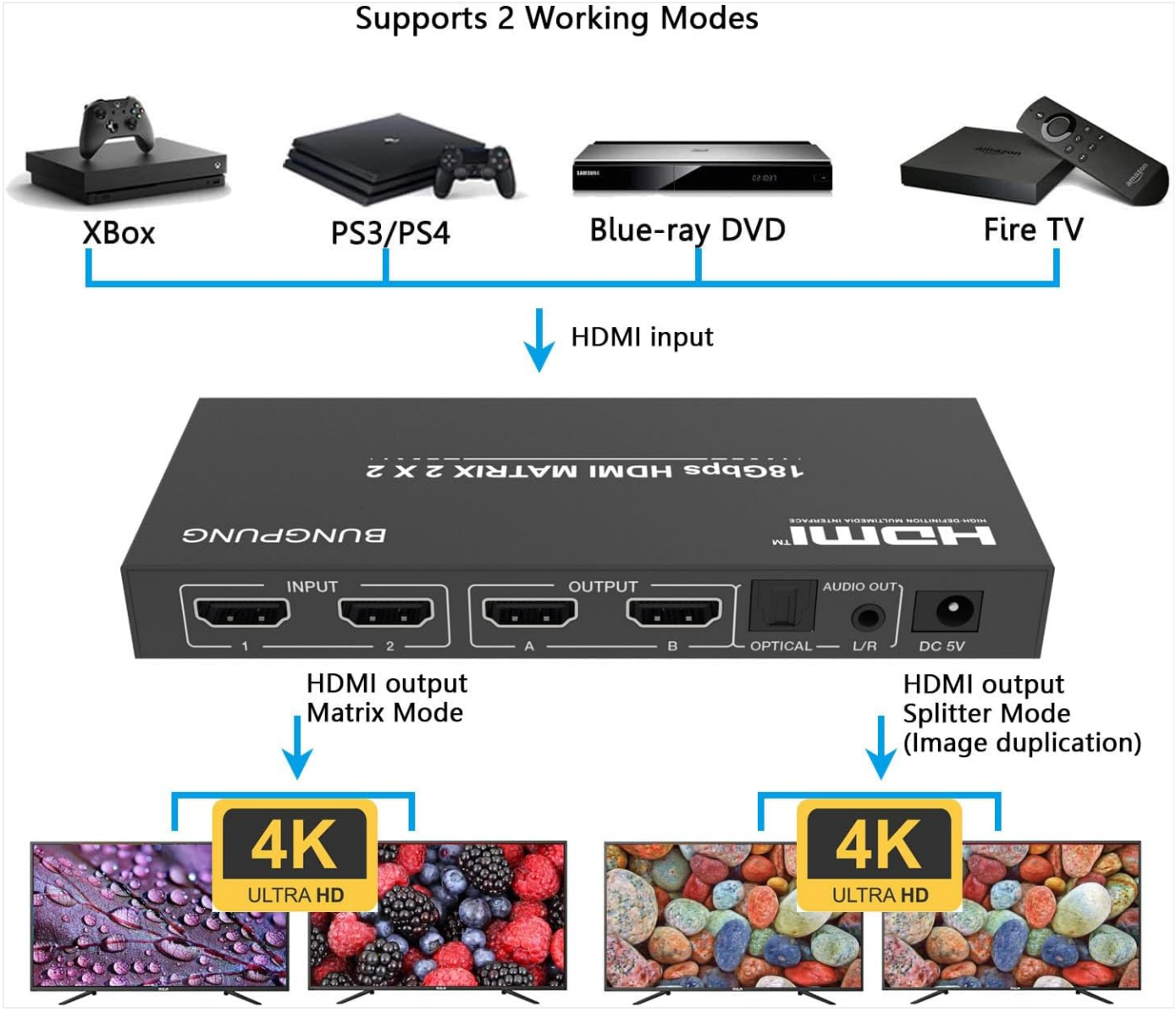


Image Description: This image visually explains the two operational modes. In Matrix Mode, different HDMI sources (e.g., Xbox, PS3/PS4) can be routed to different 4K Ultra HD displays. In Splitter Mode, a single HDMI source can be duplicated and sent to both displays.

6.3 EDID Management

EDID (Extended Display Identification Data) management ensures optimal compatibility between the source and display devices. Use the EDID buttons on the front panel or remote to select a mode:

- **AUTO EDID Mode:** The switcher automatically detects and selects the best EDID settings based on the connected displays. This is the recommended default setting for most setups.
- **COPY EDID Mode:** The switcher copies the EDID information from HDMI Output A. This is useful when you have multiple displays with different resolutions, and you want all outputs to conform to the capabilities of the primary display (Output A).
- **STD (Standard) EDID Mode:** The switcher uses a built-in standard EDID (typically 1080p@60Hz) to ensure compatibility with older or less capable displays.

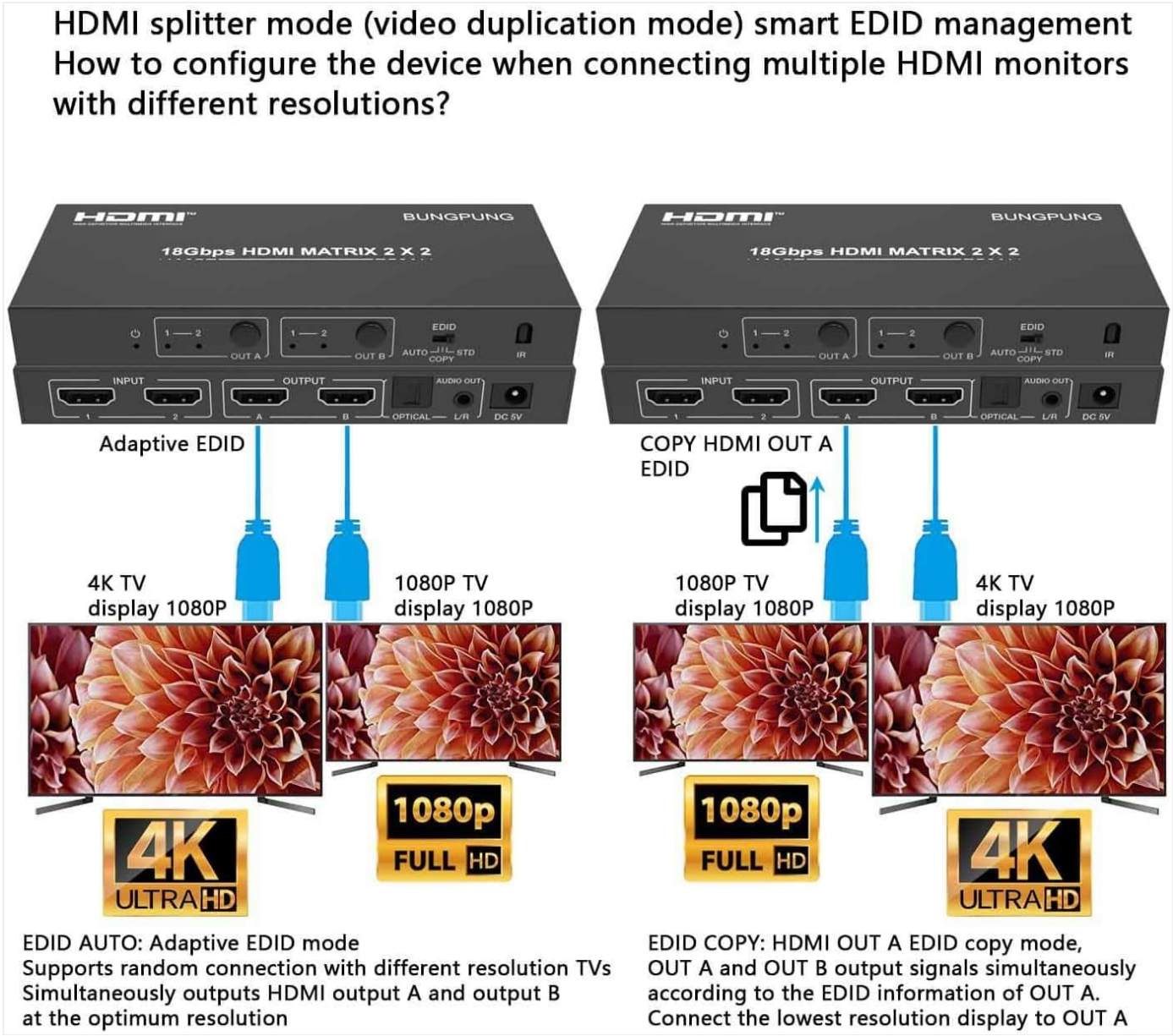


Image Description: This image illustrates how EDID management works. The Adaptive EDID (AUTO) mode allows simultaneous output to displays with different resolutions (e.g., 4K TV and 1080p TV) at their optimum resolution. The COPY HDMI Out A EDID mode forces both outputs to match the EDID of Output A, which can be useful for ensuring consistent output when one display has lower capabilities.

6.4 Audio Extraction

The matrix switcher can extract audio from HDMI Output A and send it to external audio devices.

- **Optical (SPDIF) Output:** Connect an optical cable from the "OPTICAL" port to your soundbar, AV receiver, or amplifier for digital audio.
- **3.5mm L/R Analog Output:** Connect a 3.5mm audio cable from the "L/R" port to headphones, active speakers, or

an amplifier for analog stereo audio.

- Audio synchronization is maintained to ensure high-definition and loss-free audio-video transmission.

7. Troubleshooting

If you encounter issues, refer to the following common problems and solutions:

- **No Picture/Signal:**
  - Ensure all HDMI cables are securely connected and not damaged.
  - Verify the power adapter is correctly connected and the power LED is on.
  - Check if the correct input source is selected for the respective output on the matrix switcher.
  - Try a different HDMI cable or input source.
  - Adjust the EDID settings (try AUTO or STD mode) to ensure compatibility with your display.
- **Flickering or Intermittent Picture:**
  - Use high-quality HDMI 2.0 cables, especially for 4K@60Hz signals.
  - Ensure cable lengths are within recommended limits (shorter cables are generally better for higher resolutions).
  - Check for interference from other electronic devices.
- **No Audio:**
  - Verify that the audio output device (soundbar, headphones) is correctly connected to the Optical or 3.5mm L/R port.
  - Ensure the audio output device is powered on and set to the correct input.
  - Check the audio settings on your HDMI source device to ensure it's outputting a compatible audio format.
  - Note that audio is extracted from HDMI Output A only.
- **Remote Control Not Working:**
  - Ensure the battery in the remote control is functional and correctly inserted.
  - Point the remote directly at the IR receiver on the front panel of the matrix switcher.
  - Remove any obstacles between the remote and the IR receiver.

8. Specifications

Model Number	BP-HDC-MXB22AC
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Resolution	Up to 4K@60Hz (RGB 4:4:4)
Deep Color	30-bit, 36-bit, 48-bit
Audio Output	Optical (SPDIF), 3.5mm L/R Analog
EDID Management	AUTO, COPY, STD

Control	Front Panel Buttons, IR Remote
Power Supply	DC 5V
Product Dimensions	5.67 x 2.36 x 0.71 inches (144 x 60 x 18 mm)
Item Weight	1.1 pounds (approx. 208g)
Operating Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)

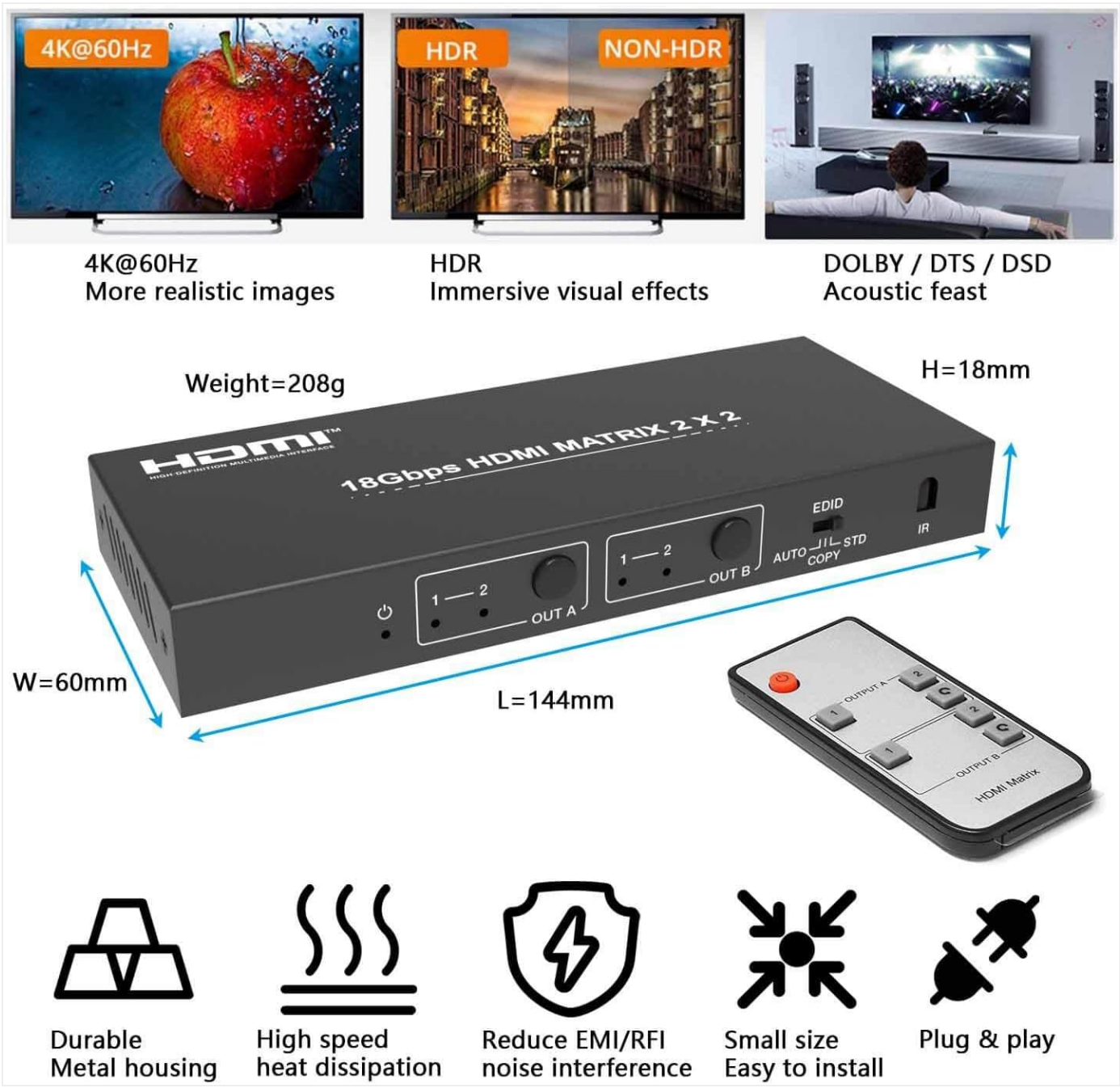


Image Description: This image provides a visual representation of the product's dimensions and highlights key physical attributes such as its durable metal housing, efficient heat dissipation, EMI/RFI noise reduction, compact size, ease of installation, and plug-and-play functionality.

9. Warranty and Support

This BUNGPUNG product is guaranteed for one year from the date of purchase. We strive to ensure the highest quality

and reliability of our products.
If you have any questions regarding compatibility, initial defects, or require technical assistance, please do not hesitate to contact our customer support. Our team is dedicated to providing prompt and helpful solutions.
For support, please refer to the contact information provided with your purchase or visit the official BUNGPUNG website.

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