

## SOOMFON B09JFV45HC

# SOOMFON HDMI Switch Splitter User Manual

Model: B09JFV45HC

## 1. INTRODUCTION

Thank you for choosing the SOOMFON HDMI Switch Splitter. This device is designed to manage HDMI signals, functioning as both a 2-input, 1-output switch and a 1-input, 2-output splitter, or a 2-input, 2-output bi-directional switcher. It supports resolutions up to 4K@60Hz, HDR, and HDCP2.2, providing a versatile solution for your audio and video needs. Please read this manual carefully before use to ensure proper operation and to maximize the performance of your device.

## 2. KEY FEATURES

- **Bi-Directional Functionality:** Operates as a 2-input, 2-output HDMI switch and splitter. It can connect two HDMI sources to two displays, or one HDMI source to two displays, or two HDMI sources to one display.
- **Mirror Mode Output:** When using the 2-output function, both displays will show the same mirrored image. This device does not support extended desktop mode.
- **High Resolution Support:** Supports video resolutions up to 4K@60Hz, including 2K@60Hz and 1080P@120Hz.
- **Advanced Video Standards:** Compatible with HDR (High Dynamic Range), 3D video formats, and HDCP2.2.
- **Automatic Video Scaling (EDID):** Features EDID support, allowing the output resolution to automatically adjust to the capabilities of the connected display, preventing resolution reduction due to lower-resolution displays.
- **Flexible Control:** Easily switch between input sources using the built-in manual button or the included IR remote control.
- **Wide Compatibility:** Works with most standard HDMI interface devices, including PCs, Xbox consoles (Xbox 360, Xbox One, Xbox Series X), PlayStation consoles (PS3, PS4, PS5), Blu-Ray/DVD players, Roku, Chromecast, Apple TV, Fire TV Stick, monitors, projectors, and HDTVs.

## 3. PRODUCT DIAGRAM

Familiarize yourself with the ports and indicators on your SOOMFON HDMI Switch Splitter.



Image: Front view of the SOOMFON HDMI Switch Splitter, showing HDMI input/output ports, power input, and LED indicators.



Image: Close-up view of the LED indicators on the device, which show the active input and output status.



Image: Close-up view of the DC 5V power supply port, typically a USB-C port, for connecting external power.

## 4. SETUP INSTRUCTIONS

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Follow these steps to connect your HDMI Switch Splitter:

1. **Power Off Devices:** Ensure all HDMI source devices (e.g., PC, game console) and display devices (e.g., TV, monitor) are powered off before making connections.
2. **Connect HDMI Sources:** Connect your HDMI source devices to the HDMI IN ports on the SOOMFON HDMI Switch Splitter using HDMI cables.
3. **Connect HDMI Displays:** Connect your HDMI display devices to the HDMI OUT ports on the SOOMFON HDMI Switch Splitter using HDMI cables.
4. **Connect Power:** Connect the included USB power cable to the DC 5V power input port on the HDMI Switch Splitter, and then connect the other end to a 5V USB power adapter (not included) or a USB port on a device. For larger power consumption devices or longer cable runs, an additional power supply is required.
5. **Power On Devices:** Power on all connected HDMI source and display devices.

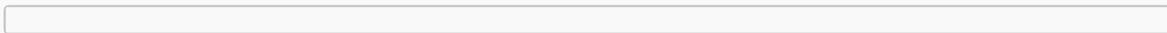


Image: Connection diagram illustrating how to connect a game console and PC as inputs, and a TV and projector as outputs, with the USB-C power adapter connected to the HDMI Switch Splitter.

## 5. OPERATING INSTRUCTIONS

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The SOOMFON HDMI Switch Splitter offers flexible operation modes:

### 5.1 Switching Inputs (2 In to 1 or 2 Out)

When you have multiple input devices connected, you can select which input signal is sent to the output displays.

- **Manual Button:** Press the 'Select' button on the front of the HDMI Switch Splitter to cycle through the available HDMI input sources. The corresponding LED indicator will light up.
- **IR Remote Control:** Use the included IR remote control to directly select the desired input (IN1 or IN2).

### 5.2 Output Modes (1 or 2 Outputs)

The device can output to one or two displays simultaneously. When two outputs are used, they will always mirror the same image.



Image: Illustration of the 2-in-2-out functionality, demonstrating how two input sources (PS4, Laptop) can be switched to display on two output screens (TV, Laptop) in mirror mode.

### 5.3 Example Configurations

- **1 Input - 2 Outputs:** Connect one source (e.g., PS4) to an HDMI IN port and two monitors to the HDMI OUT ports. Both monitors will display the PS4 content.



Image: Diagram illustrating a 1-input, 2-output setup, where a single HDMI source (PS4 or Laptop) is connected to the switch, and its signal is duplicated to two separate monitors.

- **2 Inputs - 2 Outputs:** Connect two sources (e.g., PS4, Laptop) to HDMI IN ports and two monitors to HDMI OUT ports. You can switch between PS4 and Laptop content, which will then be mirrored on both monitors.



Image: Diagram illustrating a 2-input, 2-output setup, showing two HDMI sources (PS4, Laptop) connected to the switch, and the selected input being mirrored to two monitors. Note: The monitor can choose to display any input source.

- **2 Inputs - 1 Output:** Connect two sources (e.g., PS4, Laptop) to HDMI IN ports and one monitor to an HDMI OUT port. You can switch between PS4 and Laptop content on the single monitor.



Image: Diagram illustrating a 2-input, 1-output setup, where two HDMI sources (PS4, Laptop) are connected to the switch, and the selected input is displayed on a single monitor.

## 6. TROUBLESHOOTING

- **No Picture/Signal:**

- Ensure all HDMI cables are securely connected to both the source, the switch, and the display.
- Verify the HDMI Switch Splitter is receiving power. Check the power LED indicator.
- Confirm the correct input source is selected on the HDMI Switch Splitter (via button or remote).
- Try connecting the HDMI source directly to the display to rule out cable or source issues.
- Restart all connected devices (source, switch, display).

- **Poor Picture Quality/Flickering:**

- Use high-quality HDMI 2.0 or higher cables, especially for 4K@60Hz signals.
- Ensure HDMI cable lengths are within recommended limits for your resolution (see Specifications section). Longer cables may require active HDMI cables.
- Verify that your source and display devices support the desired resolution and refresh rate.
- Ensure the HDMI Switch Splitter is receiving adequate power. If using high-bandwidth signals, ensure a dedicated 5V power adapter is used.

- **No Audio:**

- Check audio settings on your source device and display.
- Ensure HDMI cables are fully seated.

- **Remote Control Not Working:**

- Ensure the remote has working batteries.
- Point the remote directly at the IR receiver window on the HDMI Switch Splitter.
- Remove any obstructions between the remote and the device.

- **Displays Show Different Resolutions:**

- The device supports EDID for automatic scaling. If one display supports 4K@60Hz and the other only

1080P, the 1080P display will automatically downscale. This is normal operation.



Image: Diagram illustrating how the HDMI Switch Splitter handles mixed display resolutions, showing a 4K@60Hz output and a 1080P@60Hz output simultaneously. Note: Does not support resolution downscaling from 4Kx2K@60Hz 4:2:2 to 1080P.

## 7. SPECIFICATIONS

Feature	Specification
Model	B09JFV45HC
Brand	SOOMFON
Connector Type	HDMI
Number of Ports	4 (2 Input, 2 Output)
Max Resolution	4K@60Hz
Supported Resolutions	4K@60Hz, 2K@60Hz, 1080P@120Hz, and lower
HDCP Version	HDCP2.2
HDR Support	Yes
3D Support	Yes
Power Supply	DC 5V (via USB-C port)
Item Weight	5.3 ounces
Package Dimensions	6.02 x 4.84 x 1.22 inches
Compatible Devices	PC, Projector, Gaming Console, Monitor, Blu-Ray, DVD player, PS3/4/5, Xbox, Nintendo Switch, Apple TV, Fire TV Stick, Cable Box, Roku

### 7.1 Recommended HDMI Cable Lengths

To ensure optimal performance, especially for high resolutions, use appropriate HDMI cable lengths:

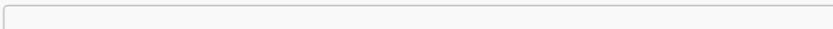


Image: Table detailing recommended HDMI cable specifications (AWG) and maximum lengths for 4K@60Hz, 4K@30Hz, and 1080P resolutions.

- **4K/60Hz:** 28AWG HDMI cable, maximum 5 meters (approx. 16.4 feet)
- **4K/30Hz:** 26AWG HDMI cable, maximum 12 meters (approx. 39.4 feet)
- **1080P:** 24AWG HDMI cable, maximum 20 meters (approx. 65.6 feet)

## 8. MAINTENANCE

- Keep the device in a cool, dry place, away from direct sunlight, high temperatures, and humidity.
- Do not expose the device to water or moisture.
- Clean the device with a soft, dry cloth. Do not use liquid or aerosol cleaners.
- Avoid dropping or subjecting the device to strong impacts.
- Do not attempt to open or repair the device yourself. Refer all servicing to qualified personnel.

## 9. WARRANTY AND SUPPORT

SOOMFON products are designed for reliability and performance. For warranty information or technical support, please refer to the warranty card included with your product or visit the official SOOMFON website. Please have your model number (B09JFV45HC) and purchase details ready when contacting support.

**Manufacturer:** SOOMFON

**Date First Available:** October 14, 2021