infobit

WP301-Kit-EU

3x1 Wallplate Transmitter Switcher Kit

Datasheet

Version: WP301-KIT-EU_2021V1.0

Preface

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated till October, 2020. In the constant effort to improve the product, we reserve the right to make functions or parameters changes without notice or obligation. Please refer to the dealers for the latest details.

1. Product Introduction

Thank you for choosing the WP301-KIT-EU 3x1 Wallplate Transmitter Switcher Kit, which consists of a wallplate transmitter switcher and a receiver. The kit is designed to switch and extend HDMI or USB-C source signal to far-end display device, and the transmission distance is up to 131ft/40m at 4K and 229ft/70m at 1080p video by using a single CATx cable.

The switcher features two HDMI and one USB-C inputs, it can be selected by the **SOURCE AUTO** button on the front panel. The switcher supports CEC. The **DISPLAY ON/OFF** button on front panel is used to control the far-end display device, and it can be programmed by IR learning or RS232 command to ensure the compatibility with various display devices. Moreover, bidirectional 24V PoC allows the switcher to powered from the compatible HDBaseT receiver, or the receiver can be powered from the switcher.

1.1 Features

- Supports HDMI signal up to 4K@60Hz 4:4:4, USB-C signal up to 4K@30Hz 4:4:4.
- Supports HDMI V2.0 standard and HDCP 2.2 compliant. Ensures display of content-protected media and interoperability with other HDCP compliant devices.
- Active input automatic detective.
- Extending HDMI signal 4K@60Hz up to 131ft/40m and 1080p@60Hz up to 229ft/70m.
- The USB-C supports video and USB data transmission.
- Supports RS232 control with HDBaseT connection and local control.
- Supports bidirectional IR pass-through to control display device from local and control source device from remote.
- Supports CEC to turn on/off display by the DISPLAY ON/OFF button, and the button can be programmed by IR learning feature or RS232 command.
- Supports bi-directional 24V PoC power supply and wide voltage power receiving (12~48V), only one power adapter required.
- Supports USB 2.0 KVM solutions.
- Micro-USB port for firmware upgrade.

1.2 Package List

Wallplate Switcher	● 1x WP301T-EU Wallplate Transmitter Switcher
	● 1x 2-pin Terminal Blocks
	● 2x 3-pin Terminal Blocks
Receiver	● 1x WP301R Receiver
	● 2x Mounting Ears with 2 Screws
	● 1x 3-pin Terminal Block
	● 1x Power Adaptor (24V DC 1.25A)
	● 1x User Manual

Note: Please contact your distributor immediately if any damage or defect in the components is found.
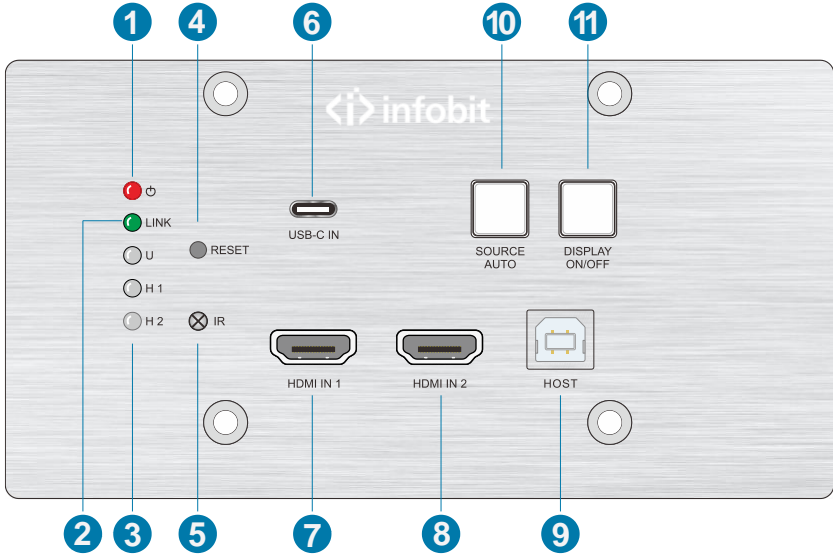
2. Specification

2.1 Switcher

Input	
Input	(2) HDMI, (1) USB-C
Input Connector	(2) Female type A HDMI, (1) Type-C USB
HDMI Input Resolution	Up to 4K@60Hz 4:4:4
USB-C Input Resolution	Up to 4K@30Hz 4:4:4
Output	
Output	(1) HDBT OUT
Output Connector	(1) RJ45
HDBT Output Resolution	Up to 4K@60Hz 4:4:4
Control	
Control Ports	(1) IR, (1) HOST, (1) FIRMWARE, (1) RS232, (1) IR IN, (1) IR OUT
Control Connector	(1) Built-in IR sensor, (1) Type-B USB 2.0, (1) Micro-USB, (2) 3-pin terminal block, (1) 2-pin terminal block
General	
Bandwidth	18Gbps
HDMI Version	2.0
HDCP Version	2.2
Transmission Distance	1080p ≤ 230 feet (70 meters), 4K@60Hz ≤ 131 feet (40 meters)
External Power Supply	Input:100V to 240V AC; Output: 24VDC 1.25A
Power Consumption	20W (Max, add extra HDBaseT receiver)
Operation Temperature	-5 to +55℃ (+23° to +131°F)
Storage Temperature	-25 to +70℃ (-13° to +158°F)
Relative Humidity	10% to 90%
Dimension (W*H*D)	146mm x 86mm x 42mm
Net Weight	240g

2.2 Receiver

Input	
Input	(1) HDBT
Input Connector	(1) RJ45
Output	
Output	(1) HDMI
Output Connector	(1) Type-A female HDMI
Control	
Control port	(1) FW, (1) IR IN, (1) IR OUT, (1) RS232, (3) USB IN
Control Connector	(1) Micro-USB, (2) 3.5mm jacks, (1) 3-pin terminal block, (3) Type-A USB 2.0
General	
Bandwidth	18Gbps
HDMI Version	2.0
HDCP Version	2.2
Video Resolution	Up to 4K@60Hz 4:4:4
Transmission Distance	1080p ≤ 230 feet (70 meters), 4K@60Hz ≤ 131 feet (40 meters)
AC Adapter Input Power	100 to 240V AC, 50/60Hz
Input Power	24V DC 1.25A
Power Consumption	20W (Max, work with the switcher)
Operation Temperature	-5 to +55℃ (+23° to +131°F)
Storage Temperature	-25 to +70℃ (-13° to +158°F)
Relative Humidity	10% to 90%, Non-condensing
Dimension (W*H*D)	152mm x 23.5mm x 84mm
Net Weight	300g

3. Panel Description

3.1 Switcher Front Panel
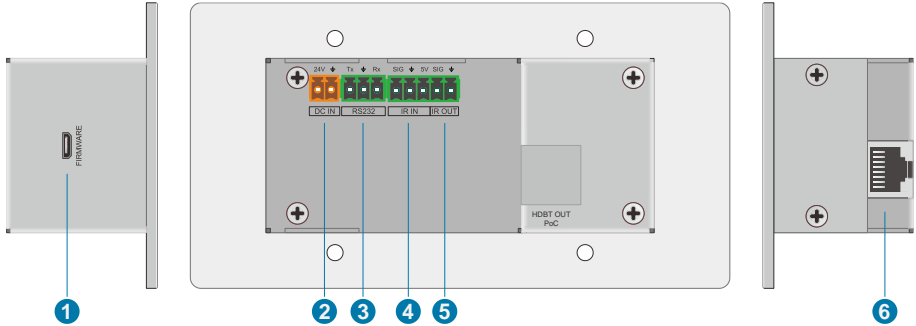

① **POWER LED:** The LED illuminates red when power is applied.

② **LINK LED:** The LED illuminates green when the switcher is successfully

connected to the receiver by a CATx cable.

③ **Input LED:**

- U: The LED illuminates green to indicate the USB-C input is selected.
- H 1: The LED illuminates green to indicate the HDMI input 1 is selected.
- H 2: The LED illuminates green to indicate the HDMI input 2 is selected.

④ **RESET:** Press the button to reboot the switcher.

⑤ **IR:** Built-in IR sensor for IR learning feature. It also supports IR pass-through to receive IR signal from IR remote to control display device.

⑥ **USB-C IN:** Connects to the Macbook or other device with SlimPort output.

⑦ **HDMI IN 1:** Connects to the HDMI source device.

⑧ **HDMI IN 2:** Connects to the HDMI source device.

⑨ **HOST:** Connects to the PC, which can be controlled by KVM devices.

⑩ **SOURCE AUTO:** Press the button to select the next input source, or press and

hold it at least 3 seconds to enable auto-switching mode. For more details, please refer to the *6.1 Signal Switching*.

⑪ **DISPLAY ON/OFF:** Press the button to turn on/off the display. For more details, please refer to the *6.2 Display Control*.
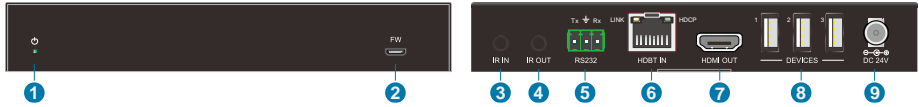
3.2 Switcher Rear Panel

① **FIRMWARE:** Micro-USB port for firmware upgrade.

② **DC IN:** Connects to 24V power supply.

③ **RS232:** Connects to a control device (such as PC) to send RS232 command to control this switcher by RS232, or control the far-end third-party device. For more details, please refer to the *6. RS232 Control*.

④ **IR IN:** Connects to IR receiver to control far-end display device by IR pass-through.

⑤ **IR OUT:** Connects to IR emitter to control local source device by IR pass-through.

⑥ **HDBT OUT (PoC):** Connects to the **HDBT IN** port of the receiver by a CATx cable. It supports 24V PoC to enable the switcher can be powered from receiver.

3.3 Receiver Front and Rear Panel

① **POWER LED:** The LED illuminates green when power is applied.

② **FW:** Micro-USB port for firmware upgrade.

③ **IR IN:** Connects to IR receiver to control far-end source device by IR pass-through.

④ **IR OUT:** Connects to IR emitter to control local display device by IR pass-through.

⑤ **RS232:** Connects to a third party device which needs to be controlled by RS232, or connects to a control device (e.g. PC) to control switcher. For more details, please refer to the *6. RS232 Control*.

⑥ **HDBT IN:** Connects to the **HDBT OUT** port of the switcher by a CATx cable. It supports 24V PoC to enable the receiver can be powered from switcher.
The LINK LED illuminates when there is a valid HDBaseT link between the switcher and the receiver. The HDCP LED illuminates when the video contains HDCP content, flashes when the video has no HDCP content.

⑦ **HDMI OUT:** Connects to the display device.

⑧ **DEVICES:** Three type-A USB ports for USB devices connection (keyboard, mouse, etc.). The 1 and 2 ports provide 5V 500mA power for USB devices, and the port 3 provides 5V 1A power.

⑨ **DC 24V:** DC connector for the power adapter connectio

<i>infobit

INFOBIT AV PTE. LTD.

www.infobitav.com

info@infobitav.com