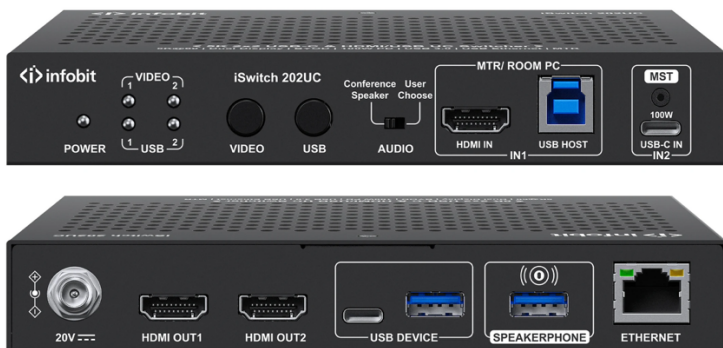


iSwitch 202UC

5K 2x2 USB-C & HDMI/ USB UC Switcher

Datasheet V1.0



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1. INTRODUCTION

1.1 OVERVIEW

The **iSwitch 202UC** is a **dual-screen conference switcher** designed to simplify modern meeting room setups. It integrates **video switching**, **USB host switching**, and **docking** functions into a single solution, enabling seamless switching between a dedicated **BYOM Room PC** and a **user BYOD laptop**.

It provides two input options: a dedicated **Room PC input** (HDMI 2.0 + USB 3.0) and a **full-featured USB-C input** (5K/4K video signal, **5Gbps** USB data transmission and **100W** charging). It supports **automatic** and **manual** signal switching for **dual-screen** display applications. Through **MST** technology, the **iSwitch 202UC** supports independent dual-screen video output up to 5K/4K, allowing **extended** or **mirrored** displays for enhanced productivity.

The device enables connecting **USB peripherals**, such as conference **cameras** and **speakerphones**, to be shared between the Room PC and USB-C host. The device also supports **Ethernet Bridge** functionality, allowing the selected USB host to access the network through the Ethernet port.

1.2 FEATURES

- Supports **two-source switching** for dual-screen conferencing, with mirrored output of HDMI 2.0b + USB 3.0 Type-B and independent extended dual-screen output of full-featured USB-C with **MST**.
- Supports HDMI 2.0b video input and dual HDMI 2.0b outputs with resolutions up to **5120×2160@30Hz**, 5120×1440@60Hz, and 3840×2160@60Hz, with HDCP 2.3 compliance.
- The **USB-C input** supports DP Alt Mode (MST/SST), USB 3.0 data transmission up to **5Gbps**, up to **100W PD** charging, and Ethernet Bridge functionality.
- Provides three **USB 3.0** peripheral ports, including one **USB-C** port, one **USB-A** port, and one dedicated USB-A **SPEAKERPHONE** port for connecting a conference speakerphone.
- Supports **Ethernet Bridging** for the selected USB Host computer (connected to USB HOST or USB-C IN port) via the device's Ethernet port.
- Supports **automatic** and **manual video switching**. USB host switching supports **Follow mode** and **Independent mode**, and both video and USB host can be switched via front panel buttons and API commands.
- Supports automatic **CEC** control to power displays on/off based on the active status of the selected source.
- Supports **firmware upgrade** through the USB-C IN port.

1.3 PACKAGE CONTENTS

- 1 x iSwitch 202UC
- 1 x DC 20V Power Adapter with US/EU/UK/AU Pins
- 1 x 2m USB 3.2 Type-C to Type-C cable (5Gbit/s)
- 1 x 1.8m USB 3.2 Type-A to Type-B cable
- 4 x Mounting Brackets (with Screws)

1.4 SPECIFICATIONS

Technical	
Input/Output Video Signal Type	Input: • HDMI input supports HDMI 2.0b, up to 5120x2160@30Hz, 5120x1440@60, 3840x2160@60Hz and HDCP 2.3; • USB-C input supports USB 3.0, up to 5Gbps data transfer rate, 5K/4K video, 1G Ethernet and 100W charging. Output: HDMI 2.0b, up to 5120x2160@30Hz, 5120x1440@60, 3840x2160@60Hz and HDCP 2.3
Input/Output Resolutions Supported	5120x2160⁵, 5120x1440⁸, 4096x2160^{5,8}, 3840x2160^{5,8}, 2560x1600⁸, 2560x1440^{8,9}, 2560x1080⁸, 2048x1152⁸, 2048x1080⁸, 1600x1200⁸, 1920x1200⁸, 1080p^{8,9,10}, 1080i⁸ (Input only) 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = at 60 Hz, 9 = at 120Hz, 10 = at 240Hz
USB Device	2 x USB 3.0 type-A ports, supports 5Gbps data transfer rate and 1.5A current output; 1 x USB 3.0 type-C port, supports 5Gbps data transfer rate and 1.5A current output.
Maximum Data Rate	HDMI IN/OUT: 18Gbps USB-C IN: 5Gbps (per lane)
Audio Format	Fully supports audio formats in HDMI 2.0/DP 1.2 specification, including PCM 2.0/5.1/7.1, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio and DTS:X

General	
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) / ±4kV (Contact discharge)
Power Supply	DC 20V/6A
Power Consumption	• 6.6 W (without charging or USB loaded)

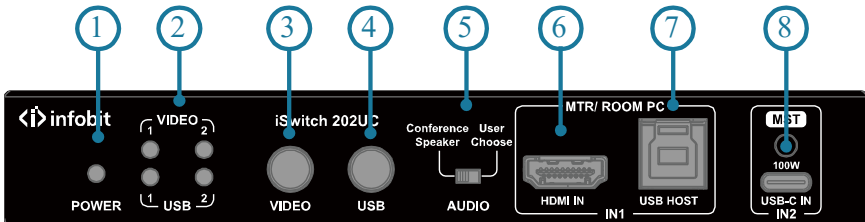
General	
(Max)	106.6 W (with 100w charging) 29.1 W (with full USB loaded)
Device Dimension (W x H x D)	100.2mm x 25mm x 160mm / 3.94" x 0.98" x 6.3"
Product Weight	0.45kg/0.99lb

Transmission Distance

Cable Type	Range	Supported Resolution
HDMI	Input / Output: 15m / 50ft	1080P@60Hz 4K@30Hz
	Input / Output: 10m / 33ft	4K@60Hz

2. PANEL OVERVIEW

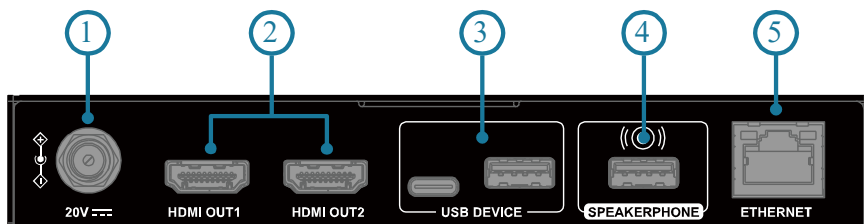
2.1 FRONT PANEL



#	Name	Description
1	POWER LED	On/Off: The device is powered on/off.
2	VIDEO LEDs (1-2) and USB LEDs (1-2)	VIDEO LEDs (1-2): - On: The corresponding video input is selected. - Off: The corresponding video is not selected. USB LEDs (1-2): - On: The corresponding USB HOST is selected. - Off: The corresponding USB HOST is not selected.
3	VIDEO Button	Press to select video input.
4	USB Button	Press to select USB HOST.
5	AUDIO	The Audio DIP Switch configures the audio information in the HDMI EDID. Please refer to the "DIP Switch" section for details.
6	HDMI IN	Connect to an HDMI source.

#	Name	Description
7	USB HOST	USB 3.2 & 3.0 Type-B port. Connect to a USB host device.
8	USB-C IN	USB 3.0 Type-C port. Connect to a USB-C device such as laptop. The full-featured USB type-C port supports the following features: - Video: DP alt mode, with resolutions up to 5120x2160@30Hz, 5120x1440@60, 3840x2160@60Hz; With DP MST mode supported, the port can output two videos at the same time; - USB: USB 3.0, 5Gbps; - Charging: Maximum 100W charging function, supports PD 3.0 / 2.0 protocols. The following cable is recommended: USB Type-C to Type-C Cable (USB 3.2 Gen 1x1 or above).

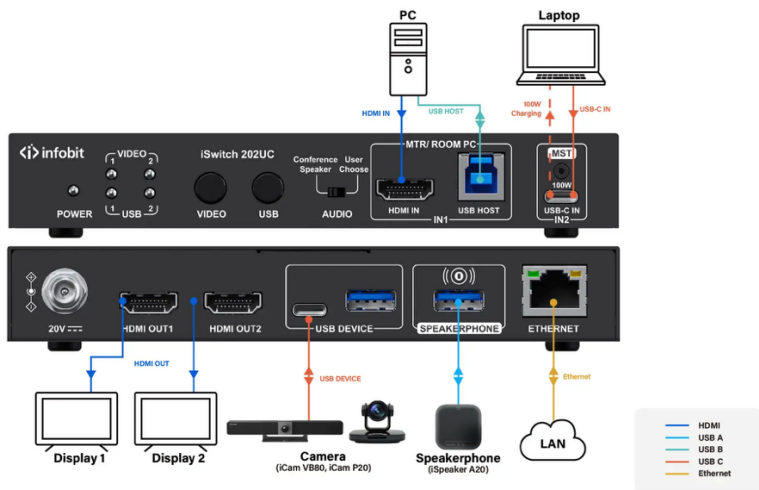
2.2 REAR PANEL



#	Name	Description
1	20V	Connect to the power adapter provided.
2	HDMI OUT 1 & 2	Connect to HDMI displays.
3	USB DEVICE	1 x USB 3.0 type-C port and 1 x USB 3.0 type-A port. Each USB device port supports data transfer rate up to 5Gbps, and supports 1.5A current output. Connect to USB devices such as USB camera.
4	SPEAKERPHONE	USB 3.0 type-A port. Supports data transfer rate up to 5Gbps, and supports 1.5A current output. Connect to a speakerphone.
5	ETHERNET	Connect to a local area network for USB HOST (based on the currently selected USB host) Ethernet bridge.

3. WIRING

When the HDMI IN source is selected, the two connected displays output mirrored video. When the USB-C IN source is selected, the two connected displays output independent MST video streams.



- **Ethernet Bridge:** The USB-B port and USB-C IN port support Ethernet Bridge functionality. When the device's ETHERNET port is connected to a network, the currently selected USB host can access the network through the device.
- **Auto-CEC:** Supports automatic CEC control. The device detects whether the currently selected source has an active signal. When an active signal is detected, the connected display is automatically powered on; when no signal is detected, the connected display is automatically powered off, and users can set power off delay time via API command. Detail API commands, please refer to the separate document "*API Command Set_ iSwitch 202UC*".