



ReThink

There's a better way.

RAV-SW-2x1HU100-TxRx
Technical Specification

RAV-SW-2x1HU100-TxRx

2x1 HDMI and USB-C Auto Switcher over HDBaseT

Kratos family of switchers



Key Features

- Compliant with HDCP 2.3, 18Gbps video bandwidth.
- HDBaseT 3.0 VS3000 chipset-based design.
- Support video resolution up to 4K2K@60Hz (YUV 4:4:4) as specified in HDMI 2.0b.
- 4K60/4K30/1080P signal transmission distance up to 328ft/100m via a single CAT6A/7 cable (HDBT Standard Mode).
- 1080P 8bit signal transmission distance up to 492ft/150m via a single CAT6A/7 cable (HDBT Long Reach Mode).
- USB-C and HDMI signal inputs support auto or manual switching mode.
- Auto switching supports HDMI 5V or signal detect selection.
- USB-C supports DP-ALT mode for A/V, USB 2.0 data and charging up to 60 watts.
- TX/RX USB-A client ports VBUS on or off depends on USB host is connected or not.
- HDR, HDR10, HDR10+, Dolby Vision LLM and HLG pass-through.
- 4K to 1080p downscaling features on HDMI output, no frame rate conversion.
- Both TX and RX support analogue audio de-embedding.
- RS-232 signal pass-through and guest-mode control.
- Support bi-directional IR signal pass-through, USB 2.0 signal transmission.
- Advanced EDID management.
- Each USB-A port provides power up to 5V/500mA.
- Support bi-directional 24V POC, with POC switch.
- Compact design for easy and flexible installation.

Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.3
USB Compliance	USB 2.0
Video Bandwidth	18Gbps
Video Resolution	Up to 4K@60Hz 4:4:4
Colour Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Colour Depth	8/10/12bit
IR Level	12Vp-p
IR Frequency	Wideband 20K-60KHz
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
Audio Formats	HDMI/USB-C/HDBT: LPCM 2/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD 3.5mm Analog Audio: LPCM 2CH

Transmission Distance	HDBT Standard Mode (4K60/4K30/1080P): 328ft/100m (CAT6A/7) HDBT Long Reach Mode (1080P 8bit): 492ft/150m (CAT6A/7)
ESD Protection	Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)

Connection	
Transmitter	Input: 1 x HDMI IN [Type A, 19-pin female] 1 x USB-C IN [USB Type C, 24-pin female] Output: 1 x HDBaseT OUT [RJ45, 8-pin female] 1 x L/R OUT [3.5mm Stereo Mini-jack] Control: 1 x IR IN [3.5mm Stereo Mini-jack] 1 x IR OUT [3.5mm Stereo Mini-jack] 1 x RS-232 [3pin-3.81mm phoenix connector] 1 x SERVICE [Micro USB, 5-pin female] 1 x USB HOST [USB Type B, 4-pin female] 3 x USB Devices [USB Type A, 4-pin female]
Receiver	Input: 1 x HDBaseT IN [RJ45, 8-pin female] Output: 1 x HDMI OUT [Type A, 19-pin female] 1 x L/R OUT [3.5mm Stereo Mini-jack] Control: 1 x IR IN [3.5mm Stereo Mini-jack] 1 x IR OUT [3.5mm Stereo Mini-jack] 1 x RS-232 [3pin-3.81mm phoenix connector] 1 x SERVICE [Micro USB, 5-pin female] 2 x USB Devices [USB Type A, 4-pin female]
Mechanical	
Housing	Metal Enclosure
Colour	Black
Dimensions	Transmitter: 170mm [W] x 102mm [D] x 22mm [H] Receiver: 144mm [W] x 78mm [D] x 23mm [H]
Weight	Transmitter: 484g, Receiver: 318g
Power Supply	Input: AC 100 - 240V 50/60Hz Output: DC 24V/3.75A (US/EU standard, CE/FCC/UL certified)
Power Consumption (Max)	94.32W (Power supply from TX, 60W USB-C charging, POC to RX) 10.8W (Power supply from TX or RX, without USB-C charging)
Operating Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)

Resolution / Cable Length	4K60 - Feet / Meters	4K24 - Feet / Meters	1080P60 - Feet / Meters
HDMI IN / OUT	26ft / 8M	39ft / 12M	50ft / 15M
The use of "Premium High-Speed HDMI" cable is highly recommended.			