PRODUCTS › EXTENDERS

TC-RX-100

4K60 HDBaseT 3.0 Receiver with USB, Ethernet and PoH+

The display end of the wall-plate kit: picture, USB, network and power



4K60 4:4:4
40 m on shielded CAT6A · with USB, network and power

PoH+
powers the wall plate over the cable

USB 2.0
two USB-A and one USB-C device ports

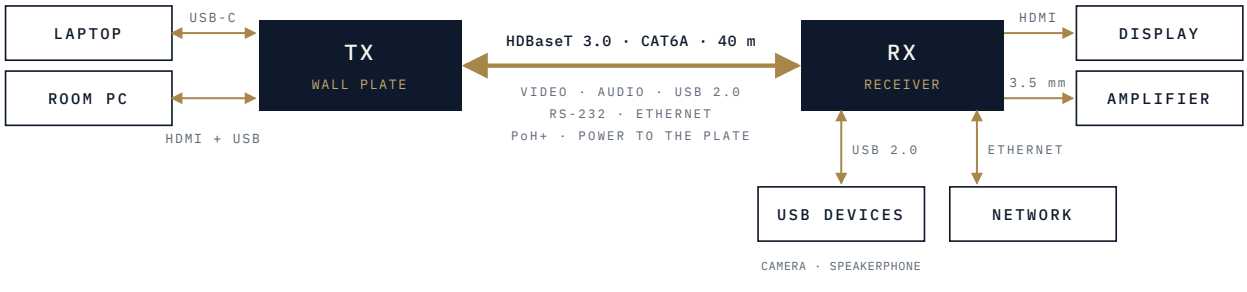
RJ45
Ethernet for the laptop at the plate

TC-RX-100 is the HDBaseT 3.0 receiver for the **TC-WP-SWC-210** wall plate. From one shielded CAT6A cable of up to 40 m it delivers uncompressed 4K @ 60 Hz 4:4:4 (8-bit) to the display on HDMI, with USB 2.0, Ethernet, audio and control on the same cable. Its 20 V supply powers the wall plate over that cable (one-way PoH+), so the table end needs no adapter for the picture; laptop charging at the plate needs the plate's optional 20 V / 6 A adapter.

At the display it serves the room. Three USB 2.0 device ports, two USB-A and one USB-C, take the camera or speakerphone for the computer on the plate's selected input. An Ethernet port gives the presenter's laptop the wired network through its USB connection. The audio of the HDMI signal is de-embedded to one 3.5 mm output, and the plate's line input arrives on another. EDID and the RS-232 mode are set by DIP switch.

01 KEY CAPABILITIES

- HDBaseT 3.0 receiver: uncompressed video, USB 2.0, Ethernet, audio and power together on one CAT6A cable, up to 40 m
- Network for the presenter's laptop: wired Ethernet reaches it over the cable and its USB connection
- Two stereo outputs: HDMI audio de-embedded, and the wall plate's line input passed through
- Powers the wall plate over the cable — one-way PoH+ (IEEE 802.3at, up to 25.5 W at the plate)
- Three USB 2.0 device ports at the display — 2 × USB-A, 1 × USB-C, 2.5 A shared
- Paired with **TC-WP-SWC-210**, the link runs at the plate's HDMI 2.0 and HDCP 2.2 (the receiver itself handles HDCP 2.3)



SIGNAL PATH · ONE CAT6A CABLE CARRIES VIDEO, USB, NETWORK, CONTROL AND POWER

02 VIDEO

HDCP	HDCP 2.2 with **TC-WP-SWC-210** · the receiver itself: HDCP 2.3 / 2.2 / 1.4
Maximum resolution	4096 × 2160 @ 60 Hz 4:4:4 (8-bit)
Bandwidth	18 Gbps
HDR	4K60 4:2:2 12-bit HDR carried from **TC-WP-SWC-210** (its documentation names no HDR formats) · the receiver itself accepts HDR10, HDR10+, HLG and Dolby Vision

03 AUDIO

HDMI audio formats	With **TC-WP-SWC-210**: PCM 2.0 / 5.1 / 7.1, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio, DTS:X · the receiver itself takes up to 7.1, adding Dolby Digital, Dolby Digital Plus and DTS 5.1
Audio de-embedding	AUDIO OUT: stereo, 3.5 mm — de-embedded from the HDMI signal
Analogue audio output	LINE OUT-P: stereo, 3.5 mm — the wall plate's LINE IN-P, passed through
Analogue performance	2 Vrms · SNR > 85 dB · THD+N < 0.05 % at 1 kHz · crosstalk > 60 dB (20 Hz–20 kHz)

04 TRANSPORT & DISTANCE

Transport	HDBaseT 3.0, uncompressed
Network	Ethernet over the link, for the computer at the transmitter — works only with the transmitter
Transmission distance	40 m on CAT6A/7 shielded: 4K60 4:4:4 and 4:2:2 12-bit, with audio, USB 2.0, Ethernet, RS-232 and power together · 70 m at 1080p when the wall plate has its own 20 V supply (not supplied by TELECIS)
Power over the link	Supplies the transmitter — one-way PoH+, IEEE 802.3at: up to 30 W out, up to 25.5 W at the transmitter

05 CONNECTIVITY

Inputs	1 × HDBaseT (RJ45)
Outputs	1 × HDMI · 2 × stereo 3.5 mm (LINE OUT-P, AUDIO OUT)
USB	2 × USB-A + 1 × USB-C device ports, USB 2.0 · 2.5 A shared · one hub tier · throughput about 160 Mbps for isochronous devices (cameras, audio), about 232 Mbps for bulk devices (storage)
Network ports	1 × RJ45 Ethernet
Control ports	RS-232 (3-pin 3.5 mm Phoenix) — pass-through, and firmware update
Other ports	DC 20 V locking input

06 CONTROL

Control methods	No control interface of its own: 4-way DIP switch for EDID and the RS-232 mode · RS-232 pass-through
EDID management	DIP switch: copy from the display (default), or fixed 4K60, 4K30 or 1080p60 with 2-channel PCM
Firmware update	RS-232, mode set by DIP switch — receiver and HDBaseT chipset
Pairs with	**TC-WP-SWC-210** — US 2-gang wall-plate transmitter

07 ELECTRICAL & PHYSICAL

Power supply	20 V DC, 3 A locking adapter (in the box) — also powers the wall plate over the cable; the plate's USB-C charging needs its own 20 V / 6 A adapter, not supplied by TELECIS
Dimensions (W × D × H)	212.5 × 110 × 25 mm (mounting ears extra) · 27.3 mm high on its feet
Housing	Sheet steel
Mounting	Mounting brackets (4 in the box)
Operating temperature	0 to 50 °C
Storage temperature	–20 to 60 °C
Humidity	20–90 % RH, non-condensing
ESD protection	±8 kV air · ±4 kV contact (human-body model)
Installation limits	On CAT5e/6 with patch cords: 30 m at 4K60 4:4:4 (and 4:2:2 / 4:2:0 36-bit) · patch cords count towards the maximum: at most one at each end, 5 m each · straight-through T568B; shielded CAT6A recommended

08 COMPLIANCE & ASSURANCE

Certification statement	Designed for global compliance — CE, FCC, RoHS, and regional certifications, as applicable.
Warranty	3 years

09 IN THE BOX

In the box	Receiver · 20 V / 3 A adapter · 4 mounting brackets with screws · 3-pin 3.5 mm Phoenix connector

10 ORDERING

Order code	**TC-RX-100**

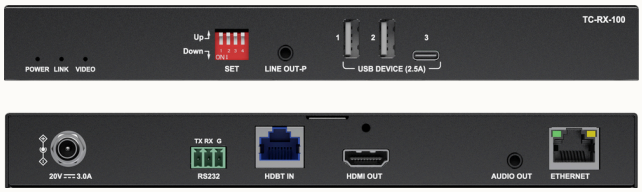
PRODUCT PAGE

telecis.com/products/extenders/tc-rx-100/

VIEWS



REAR



FRONT AND REAR PANELS

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