

2x1 HDMI & USB-C HDBaseT Wall Plate Extender Kit — 50 Meters

The KanexPro **WP-EXTHDTC50** is a 2x1 HDMI and USB-C HDBaseT wall plate extender kit for conference rooms, classrooms, and presentation spaces that need clean 4K/60Hz signal routing without local power at the source. The single-gang Decora-style transmitter accepts HDMI 2.0b or USB-C sources and transmits over a single CAT5e/6 cable. Supports 4K@24 up to 50m and 4K@60Hz 4:4:4 up to 35m.

The WP-EXTHDTC50 includes POC so the wall plate transmitter requires no local AC power — the receiver handles power delivery over the CAT cable. An IR input on the receiver extends display control back to the source. Auto-switching prioritizes HDMI when both inputs are active; manual source selection via front-panel button. Includes interchangeable white and black faceplates. 3-year KanexPro warranty.

Surge Protection Recommended — This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, or lightning strikes. Use of surge protection systems is highly recommended.

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FEATURES

- ✓ Compliant with HDMI 2.0b, HDCP 2.2 and DisplayPort 1.2a
- ✓ HDMI input supports 18Gbps video bandwidth
- ✓ USB-C input supports 5.4Gbps video bandwidth
- ✓ Video resolution up to 4K2K@50/60Hz 4:4:4
- ✓ CAT6 output extends up to 164ft/50m for 4K@24 or 115ft/35m for 4K@60 via single CAT5e/6
- ✓ Supports 3D, HDR10 and Dolby Vision
- ✓ HDMI audio: LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS High Res, DTS-HD Master Audio, DSD
- ✓ Supports HDMI and USB-C input
- ✓ USB-C charging port on transmitter
- ✓ US one-gang enclosure for Decora-style wall plate openings
- ✓ Input selection: automatic and manual mode
- ✓ Supports POC function (Receiver to Transmitter only)
- ✓ Backed by KanexPro 3-Year Parts and Labor Warranty

PACKAGE CONTENTS


1x 18Gbps CAT 50M USB-C/HDMI Wall Plate Transmitter • 1x 50M Extender Receiver • 1x 12V/1A Power Supply (international plugs) • 1x User Manual



Specifications

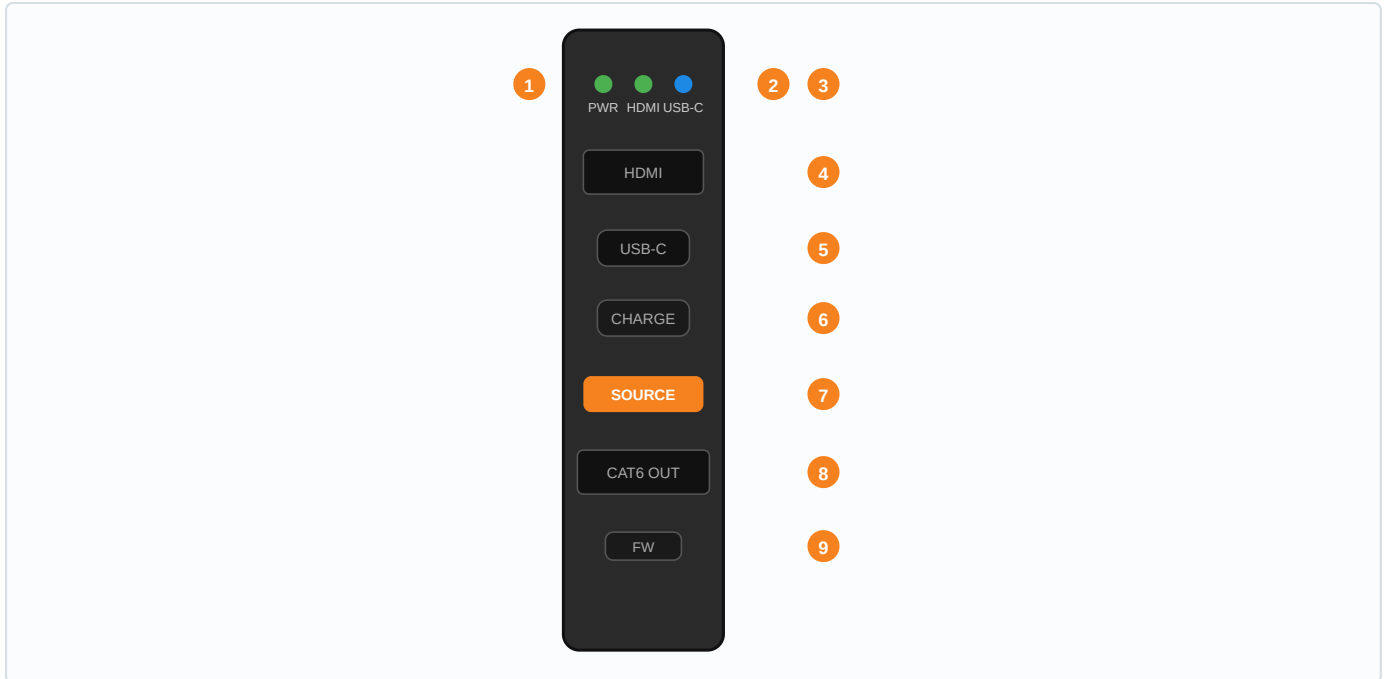
TECHNICAL	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
DP Compliance	DisplayPort 1.2a
Video Bandwidth	HDMI: 18Gbps • USB-C (DP): 5.4Gbps
Video Resolution	480i–1080p@50/60Hz, 4K×2K@24/30Hz, 4K2K@60Hz 4:4:4
Color Space	RGB, YCbCr 4:4:4/4:2:2, YUV 4:2:0
Color Depth	8/10/12-bit (1080p@60Hz) • 8-bit (4K@60Hz)
HDR	HDR10, Dolby Vision
HDMI Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
Transmission Distance	4K@24: 164ft/50m over CAT5e/6 • 4K@60: 115ft/35m over CAT5e/6
ESD Protection	Human body model ±8kV (Air-gap) & ±4kV (Contact discharge)
CONNECTION — TRANSMITTER	
Inputs	1× HDMI Type A [19-pin female], 1× USB-C
Outputs	1× CAT6 OUT [RJ45, 8-pin female], 1× USB-C (charging only)
Control	1× FW [Micro USB, update port]
CONNECTION — RECEIVER	
Input	1× CAT IN [RJ45, 8-pin female]
Output	1× HDMI OUT [Type A, 19-pin female]
Control	1× IR IN [3.5mm Stereo Mini-jack], 1× SERVICE [Micro USB]
Power	DC 12V/1A
MECHANICAL	
Housing	Metal Enclosure
Color	White/Black (interchangeable)
Dimensions — TX Wall Plate	1.31" × 2.59" × 2.70" (33.3 × 65.7 × 68.7mm)
Dimensions — Faceplate	2.75" × 0.12" × 4.50" (69.9 × 3 × 114.3mm)
Dimensions — Receiver	3.46" × 2.40" × 0.71" (88 × 61 × 18mm)
Weight — TX	0.43 lbs (195g)
Weight — RX	0.34 lbs (155g)
POWER	
Power Supply	POC from Receiver to Transmitter • RX: DC 12V/1A (included)
Consumption — TX	3W max
Consumption — RX	3.72W max
ENVIRONMENT	
Operating Temperature	32–104°F / 0–40°C
Storage Temperature	–4–140°F / –20–60°C
Relative Humidity	20–90% RH (no condensation)

PACKAGE CONTENTS

 <p>Scan for product page kanexpro.com/item/WP-EXTHDTC50</p>	1×	18Gbps CAT 50M USB-C/HDMI Wall Plate Transmitter	www.kanexpro.com 2 4
	1×	50M Extender Receiver	
	1×	12V/1A Power Supply (international plugs)	

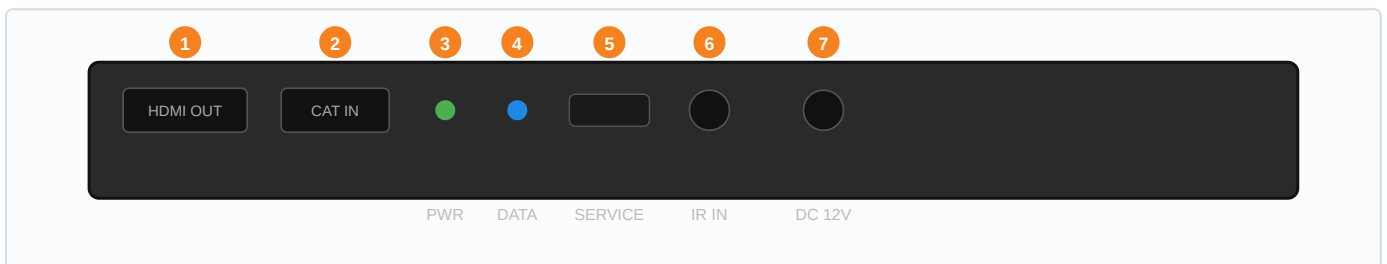
Operation Controls

TRANSMITTER PANEL



No.	Name	Function Description
1	Power LED	Green when powered on; red when on standby.
2	HDMI LED	Green when HDMI input active and signal detected.
3	USB-C LED	Green when USB-C input active and signal detected.
4	HDMI Port	HDMI input — connect to HDMI source device.
5	USB-C Port	(1) USB-C signal input. (2) Charging port for USB-C devices.
6	Charge Port	Connect to power supply to power USB-C device.
7	SOURCE Button	Toggles HDMI/USB-C input; auto mode prioritizes HDMI.
8	CAT6 OUT	Connect to CAT IN on Receiver via CAT5e/6 cable.
9	FW Port	Firmware update port (Micro USB).

RECEIVER PANEL



No.	Name	Function Description
1	HDMI OUT	HDMI output — connect to TV or projector.
2	CAT IN	Connect to CAT6 OUT on Transmitter via CAT5e/6 cable.
3	Power Indicator	Illuminates green when receiver is powered on.
4	Data Signal	Illuminates when signal is transmitting between TX and RX.
5	SERVICE Port	Firmware update port (Micro USB).



Application Example

Classroom & Conference Room — HDMI & USB-C Extension over CAT5e/6



How it works: Install the WP-EXTHDTC50 at the instructor's podium or table. MacBook connects via USB-C; legacy devices via HDMI. Signal extends over existing CAT5e/6 infrastructure. The receiver is powered from mains — the transmitter draws power via POC over the CAT cable, eliminating the need for a local outlet at the wall plate. IR passback enables display power control from the source position.

TROUBLESHOOTING

Q: No video on display

A: Verify all cables are securely connected. Use CAT6 or better — avoid patch cables and couplers. Power cycle source and display.

Q: No signal after switching source

A: EDID mismatch or handshake failure. Reconnect CAT cable at both ends. Power cycle the source device.

Q: Power LED not illuminating on TX

A: Verify receiver is powered and the CAT cable is properly connected from RX to TX. Check POC/POE is enabled.

Q: Image flickering or intermittent signal

A: Use shielded CAT6/6a with metal RJ45 connectors. Verify cable length does not exceed rated distance.

