

2×1 HDMI & Mini DisplayPort HDBaseT Wall Plate Extender Kit — 50 Meters

The KanexPro **WP-EXTHDMDP50** is a 2×1 HDMI and Mini DisplayPort HDBaseT wall plate extender kit for environments that need to accommodate both modern HDMI sources and legacy Mini DisplayPort devices from a single clean wall plate. The single-gang Decora-style transmitter routes either input over a single CAT5e/6 cable, extending 4K@24Hz up to 50m and 4K@60Hz 4:4:4 up to 35m.

Designed for education, corporate, and government installations where mDP-equipped legacy devices must coexist alongside HDMI sources, the WP-EXTHDMDP50 removes the need for dongles or adapters at the presentation point. The wall plate is remotely powered via POC from the receiver. Auto-switching selects the active source; HDMI takes priority. The receiver includes IR input for display control passback. 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.

TABLE OF CONTENTS

1. Introduction	1
2. Features	1
3. Package Contents	1
4. Specifications	2
5. Operation Controls	3
5.1 Transmitter Panel	3
5.2 Receiver Panel	3
6. Application Example	4
7. Troubleshooting	4

FEATURES

- ✓ Compliant with HDMI 2.0b, HDCP 2.2 and DisplayPort 1.2a
- ✓ Supports 18Gbps video bandwidth (HDMI); 5.4Gbps (mDP)
- ✓ Video resolution up to 4K/UHD@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 and HDR format video
- ✓ Does not support CEC control
- ✓ HDMI audio: LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS High Res, DTS-HD Master Audio, DSD
- ✓ Supports HDMI and Mini DisplayPort (mDP) input
- ✓ 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

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

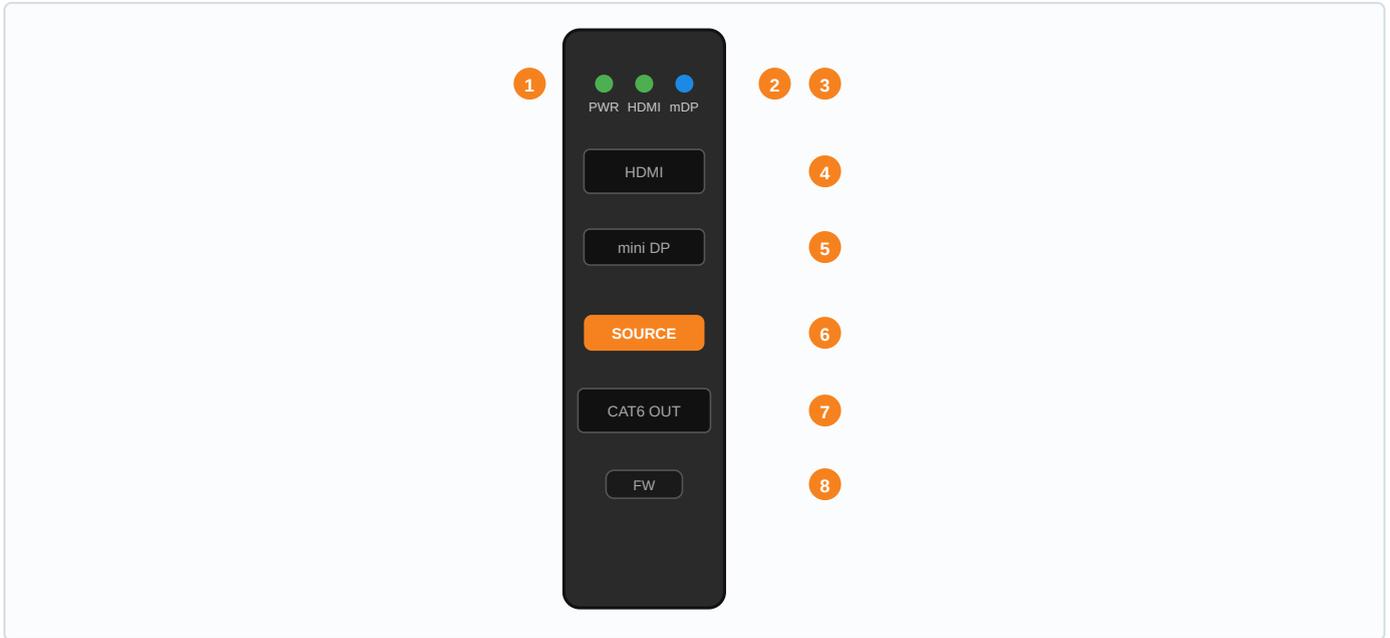


Specifications

TECHNICAL	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
DP Compliance	DisplayPort 1.2a
Video Bandwidth	HDMI: 18Gbps • mDP: 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	Supported
CEC	Not supported
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× Mini DP [20-pin female]
Output	1× CAT6 OUT [RJ45, 8-pin female]
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	0.39 lbs (175g)
Weight — RX	0.34 lbs (155g)
POWER	
Power Supply	POC from Receiver to Transmitter • RX: DC 12V/1A (included)
Consumption — TX	2.2W 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)
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	CONTENTS
	888.975.1368 support@kanexpro.com kanexpro.com
	2 4
	1× 18Gbps CAT 50M mDP/HDMI Wall Plate Transmitter
	1× Extender Receiver

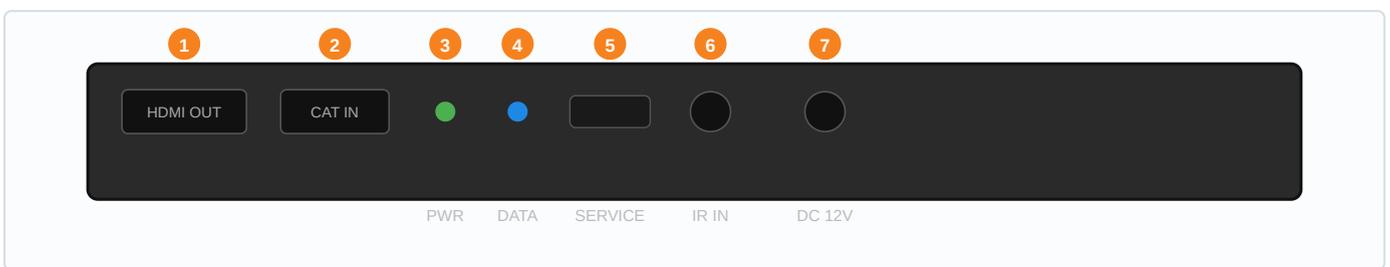
Operation Controls

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	MDP LED	Green when Mini DisplayPort input active and signal detected.
4	HDMI Port	HDMI input — connect to HDMI source device.
5	MDP Port	Mini DisplayPort signal input (20-pin female).
6	SOURCE Button	Toggles HDMI/mDP input; auto mode prioritizes HDMI.
7	CAT6 OUT	Connect to CAT IN on Receiver via CAT5e/6 cable.
8	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).
6	IR IN	IR signal input — connect IR Receiver cable for display control.
7	DC 12V	Plug DC 12V/1A power supply into unit; connect adapter to AC outlet.



Application Example

Mixed mDP & HDMI Environment — 50M Extension over CAT5e/6



How it works: Install the WP-EXTHDMDP50 where both mDP-equipped workstations (older MacBooks, Surface Pro, engineering PCs) and HDMI laptops must connect to a shared display system. Eliminates dongles at the wall plate. Auto-switching selects the active source; HDMI is prioritized when both are active. Signal extends up to 50m over CAT5e/6. IR passback enables display control.

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.

