

EXTENDERS · HDBASET WALL-PLATE KIT

BLU-HDC-WP70-HD-TX / -RX

4K over one wall plate, 70 metres out.

A wall-plate transmitter in a standard 86×86 mm box takes HDMI and analogue audio, and sends them over a single CAT6/6a run — up to 70 m at 1080p, 40 m at 4K60 — to the matching receiver. Two-way IR, RS-232, EDID and 24 V PoC included.



86 × 86

1-GANG PLATE

70 m

1080P

40 m

4K60

18 Gbps

HDMI 2.0B

PoC 24V

SINGLE CABLE

SPECIFICATION SUMMARY

Type	HDBaseT wall-plate TX + RX	Audio	Embed (TX) / de-embed (RX)
HDMI	HDMI 2.0b	Control	2-way IR, RS-232, EDID
HDCP	HDCP 2.2	IR	5 Vp-p, 20–60 kHz
Bandwidth	18 Gbps	Front/rear	Aluminium / metal
Max resolution	4K @ 60 Hz 4:4:4	Colour	White front, black rear
HDR	HDR10, HDR10+, HLG, DV	Plate size	86 × 86 × 38 mm
Colour depth	8 / 10 / 12-bit	Weight	185 g
Link cable	CAT6 / 6a	Power	DC 24 V / 1 A, PoC
Reach	70 m 1080p / 40 m 4K	Consumption	9 W (PoC)

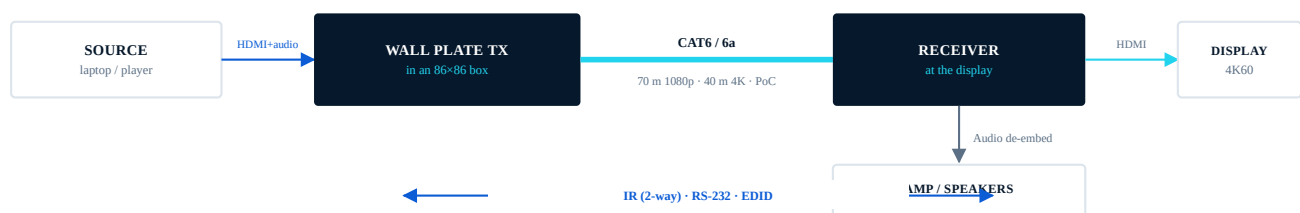
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TYPICAL USE

- Meeting rooms and lecture theatres
- Classrooms and training spaces
- Digital signage from a wall input
- Direct-to-projector HDBaseT runs

A tidy input point. The transmitter is a faceplate: it drops into a standard 86×86 mm gang box so a source plugs in at the wall, and one CAT6 run carries video, audio, control and power to the display end. A compatible HDBaseT projector can connect directly, no receiver needed.



SIGNAL PATH · WALL PLATE IN, ONE CABLE, RECEIVER OUT

01 Overview

What the kit does, what it carries, and where each half sits.

The **BLU-HDC-WP70-HD** is a two-piece HDBaseT extender. The **-TX** transmitter is a wall plate that fits a standard 86×86 mm gang box; it takes one HDMI source and a 3.5 mm analogue audio input, embeds the audio, and sends everything over a single CAT6/6a cable. The **-RX** receiver sits at the display, recovers the HDMI signal and de-embeds analogue audio for a local amplifier.

The link reaches **70 m at 1080p** or **40 m at 4K60 4:4:4** on one cable, carrying 18 Gbps of uncompressed video with the full HDR range. Two-way IR and RS-232 pass in both directions for source and display control, EDID is managed automatically, and **24 V PoC** means only one end needs a power supply. A compatible HDBaseT projector can be driven directly from the wall plate, with no receiver in between.

CAPABILITIES

- **HDMI 2.0b and HDCP 2.2** compliant
- **18 Gbps** video bandwidth
- **4K @ 60 Hz 4:4:4** maximum resolution
- **70 m at 1080p, 40 m at 4K** over one CAT6/6a run
- **Audio embedding** at the TX, **de-embedding** at the RX
- **Two-way IR and RS-232** control
- **Full HDR** — HDR, HDR10, HDR10+, Dolby Vision, HLG
- **EDID management** built in
- **24 V PoC** or local 24 V supply
- **Standard 86×86 mm** 1-gang faceplate

AT A GLANCE

Kit TX + RX

HDMI 2.0b

HDCP 2.2

BW 18 Gbps

Max 4K60 4:4:4

Reach 70/40 m

HDR Dolby Vision

Ctrl IR + RS-232

Power 24V PoC

AUDIO & HDR SUPPORT

HDMI audio	LPCM, Dolby Digital / Plus / EX, Dolby TrueHD, DTS, DTS-EX, DTS 96/24, DTS High Res, DTS-HD Master Audio, DSD
Analogue	PCM 2.0 in / out
HDR formats	HDR, HDR10, HDR10+, Dolby Vision, HLG

Straight to a projector. Because the plate outputs standard HDBaseT, a compatible HDBaseT projector can take the CAT6 run directly — useful for ceiling installs where a separate receiver box is awkward.

02 Specifications

Full technical, mechanical and environmental figures for the kit.

TECHNICAL

HDMI compliance	HDMI 2.0b
HDCP compliance	HDCP 2.2
Video bandwidth	18 Gbps
Video resolution	up to 4K @ 60 Hz 4:4:4
Video compression	Standard HDBaseT
Colour space	RGB, YCbCr 4:4:4 / 4:2:2, YCbCr 4:2:0
Colour depth	8 / 10 / 12-bit
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
IR level	5 Vp-p
IR frequency	Wideband 20–60 kHz
ESD protection	Human body model ±8 kV air / ±4 kV contact

AUDIO & TRANSPORT

HDMI audio	LPCM, Dolby Digital / Plus / EX, Dolby TrueHD, DTS, DTS-EX, DTS 96/24, DTS High Res, DTS-HD Master Audio, DSD
Analogue audio	PCM 2.0
Transmission	1080p – 70 m 4K – 40 m (CAT6 / 6a)

MECHANICAL

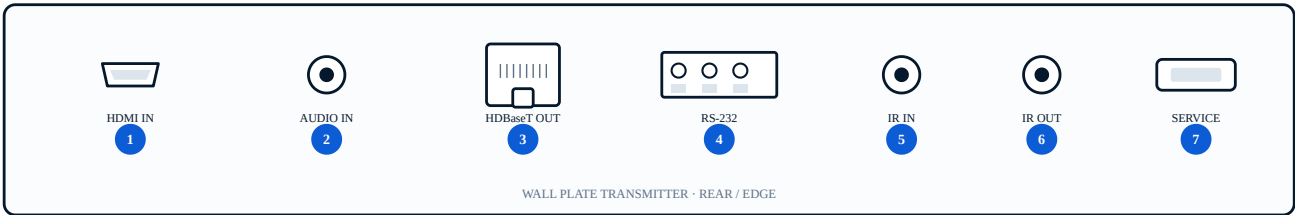
Housing	Front – aluminium Rear – metal
Colour	Front – white Rear – black
Dimensions	86 mm W × 86 mm D × 38 mm H
Weight	185 g

POWER & ENVIRONMENT

Adapter input	AC 100–240 V, 50/60 Hz
Adapter output	DC 24 V / 1 A (CE/FCC/UL)
Consumption	9 W (PoC)
Operating temp.	0 – 40 °C / 32 – 104 °F
Storage temp.	–20 – 60 °C / –4 – 140 °F
Humidity	20 – 90 % RH, non-condensing

03 Transmitter BLU-HDC-WP70-HD-TX

The wall-plate end. Drops into an 86×86 mm gang box, takes the source, and sends it down the CAT run.

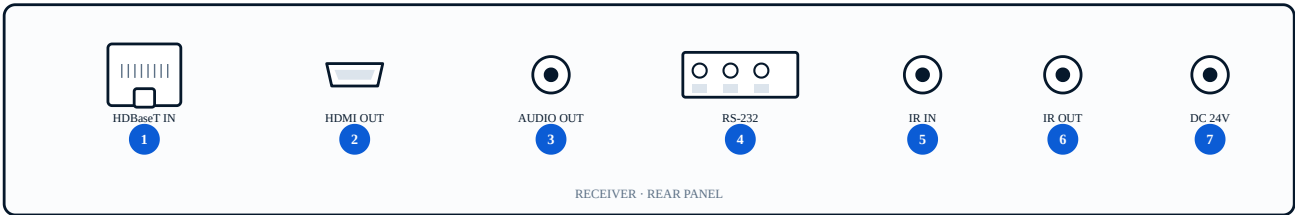


1	HDMI IN	Source input, HDMI Type A 19-pin female. HDMI 2.0b, HDCP 2.2.
2	AUDIO IN	3.5 mm stereo mini-jack. Analogue audio embedded into the HDBaseT stream.
3	HDBaseT OUT	RJ45 to the receiver's HDBaseT IN over one CAT6/6a cable — or directly to a compatible HDBaseT projector.
4	RS-232	Phoenix connector. Serial commands pass in both directions along the link.
5	IR IN	3.5 mm mini-jack for an IR receiver. Emitted at the receiver's IR OUT to drive the display.
6	IR OUT	3.5 mm mini-jack for an IR blaster on the source. Carries IR arriving at the receiver end.
7	SERVICE	Micro-USB port for firmware updates and diagnostics.

Powered once. With 24 V PoC, the transmitter can draw power from the receiver over the CAT cable — or take a local 24 V supply. Only one end needs the adapter.

04 Receiver BLU-HDC-WP70-HD-RX

The display end. Recovers HDMI, de-embeds stereo audio, and passes control back up the cable.

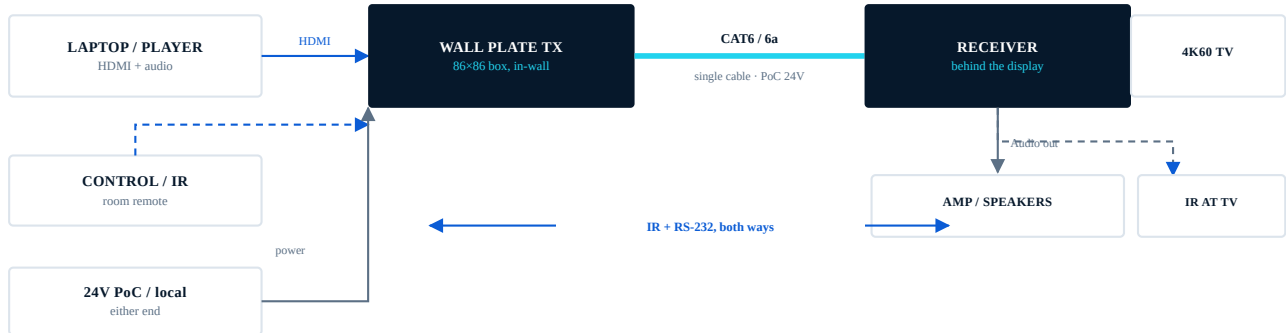


1	HDBaseT IN	RJ45 from the transmitter's HDBaseT OUT over one CAT6/6a cable.
2	HDMI OUT	Recovered HDMI signal to the display. Up to 4K60 4:4:4.
3	AUDIO OUT	3.5 mm stereo, de-embedded from the stream. PCM 2.0 to an amplifier or active speakers.
4	RS-232	Phoenix connector. Serial commands pass in both directions along the link.
5	IR IN	3.5 mm mini-jack for an IR receiver at the display, driving the source at the far end.
6	IR OUT	3.5 mm mini-jack for an IR blaster on the display. Carries IR arriving at the transmitter end.
7	DC 24V	24 V / 1 A input. Powers the kit, or draws PoC from the link when the transmitter is powered.

Receiver ports are shown to match a typical HDBaseT receiver for this kit. Confirm the exact receiver connector set against the supplied unit; the transmitter (wall plate) layout follows the published specification.

05 Application example

A wall input at the table, a display across the room, one cable between them.



One cable does the work. Video, audio, HDCP, EDID, IR, RS-232 and power all share the single CAT6/6a run between plate and receiver.

Power once. Use the 24 V adapter at whichever end is reachable; PoC feeds the other over the link.

ORDERING

BLU-HDC-WP70-HD-TX	HDBaseT wall-plate transmitter — 86×86 mm 1-gang, HDMI + analogue audio in, HDBaseT out, 2-way IR / RS-232, 24 V PoC
BLU-HDC-WP70-HD-RX	HDBaseT receiver — HDBaseT in, HDMI out, de-embedded stereo audio, 2-way IR / RS-232, 24 V PoC

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