

RL-HDBT70AD-UK

18G HDMI 1-GANG UK WALL PLATE POC 70M WITH RX



The 4K60 HDBaseT Wall Plate (70m/CN-UK-1GANG, model RL-HDBT70AD-UK) is a single-gang HDMI wall-plate transmitter that sends 4K video and audio over a single Cat6/6a cable up to 70 m for 1080p and 40 m for 4K signals, while also supporting control and power over cable for a clean installation in CN/UK-style wall boxes.

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18G HDMI 1-Gang UK Wall Plate POC 70M with RX

This wall-plate provides one HDMI input and a separate analog audio input in a compact 86 mm × 86 mm housing, allowing a source device such as a media player or laptop to be connected at the wall and extended to a remote HDBaseT receiver or compatible projector. It delivers uncompressed HDMI 2.0b video with embedded audio, supports audio embedding at the transmitter and de-embedding at the receiver, and includes two-way IR and RS-232 for remote control and system integration. The unit supports 24 V power-over-cable (POC) or local DC 24 V power, simplifying deployment in meeting rooms, classrooms, and digital signage installations.

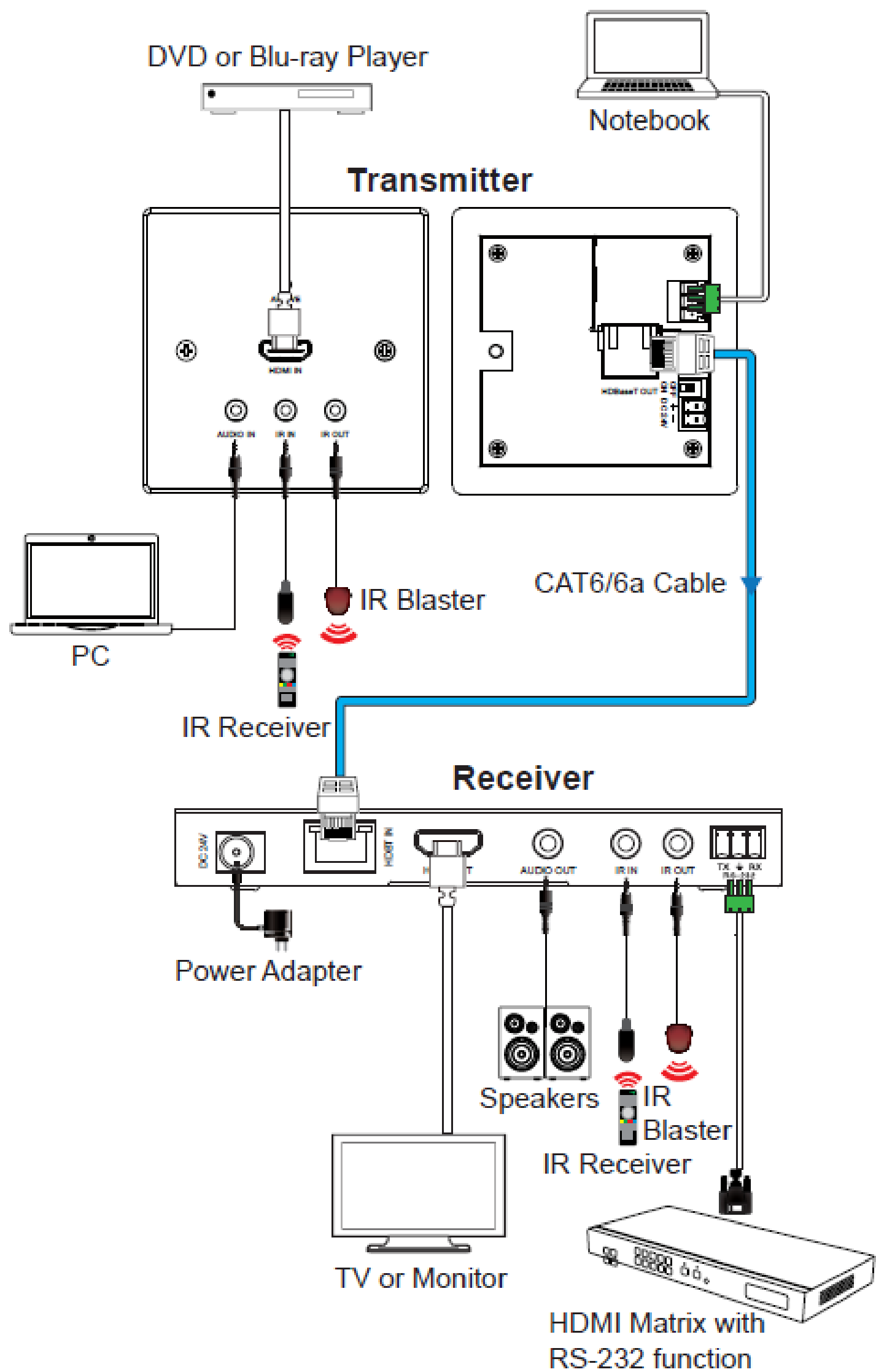
Video and audio performance

The wall plate is compliant with HDMI 2.0b and HDCP 2.2 and supports up to 18 Gbps video bandwidth, enabling resolutions up to 4K at 60 Hz with 4:4:4 chroma subsampling for high-quality images. It supports multiple colour spaces (RGB and YCbCr 4:4:4 / 4:2:2 / 4:2:0) and 8-, 10-, or 12-bit colour depth, along with HDR formats including HDR, HDR10, HDR10+, Dolby Vision, and HLG for enhanced dynamic range and colour reproduction. Audio support includes HDMI LPCM and a wide range of surround formats such as Dolby Digital/Plus/TrueHD and DTS variants, as well as 2-channel analog PCM via the 3.5 mm input, making it suitable for both basic and advanced AV systems.

Key features

- HDMI 2.0b and HDCP 2.2 compliant with 18 Gbps bandwidth for 4K60 4:4:4 video.
- Extends 1080p up to 70 m and 4K up to 40 m over a single Cat6/6a cable using HDBaseT technology.
- Supports HDR (HDR10, HDR10+, Dolby Vision, HLG) and 8/10/12-bit colour for high-dynamic-range visuals.
- Provides audio embedding at the transmitter and de-embedding at the receiver for flexible audio routing.
- Includes two-way IR and RS-232 control, POC 24 V or local 24 V power options, and robust ESD protection.

Design Architecture



Specifications

- Supports 1 HDMI input and 1 analog audio input in a standard 86 mm × 86 mm wall box.
- Extends signals over a single Cat6/6a cable up to 70 m for 1080p or 40 m for 4K video.
- Maximum video resolution up to 4K at 60 Hz with 4:4:4 chroma and 18 Gbps bandwidth.
- HDMI 2.0b and HDCP 2.2 compliant using HDBaseT video compression standard.
- Supports color spaces RGB, YCbCr 4:4:4 / 4:2:2 / 4:2:0 with 8/10/12-bit color depth.
- Compatible HDR formats: HDR, HDR10, HDR10+, Dolby Vision, and HLG.
- Audio formats: HDMI LPCM and multiple Dolby/DTS variants; analog audio supports PCM 2.0 via 3.5 mm jack.
- Provides two-way IR and RS-232 control; IR level 5 Vp-p and wideband 20 kHz–60 kHz frequency.
- Includes EDID management and supports audio embedding at the transmitter and de-embedding at the receiver.
- ESD protection: ±8 kV air-gap discharge and ±4 kV contact discharge (human body model).
- Front/IO: 1× HDMI IN (Type-A 19-pin), 1× AUDIO IN (3.5 mm stereo).
- Rear/IO: 1× HDBaseT OUT (RJ45), 1× RS-232 (Phoenix), 1× IR IN, 1× IR OUT (3.5 mm), 1× Micro-USB service port.
- Housing: Aluminium front panel, metal rear panel; color white front, black rear.
- Dimensions and weight: 86 mm (W) × 86 mm (D) × 38 mm (H), approx. 185 g.
- Power: AC100–240 V, 50/60 Hz input with DC 24 V/1 A output; supports 24 V POC; typical consumption 9 W.
- Environmental: Operating 0 °C–40 °C, storage -20 °C–60 °C, 20–90% RH non-condensing.

