

4K 60Hz HDMI Wall Plate HDBaseT Extender

Model: PANIO HAE

Support PoC, External Audio Embedding & EDID Management

1. Product Overview

The PANIO HAE is a professional 4K 60Hz HDMI Wall Plate HDBaseT Extender engineered for seamless long-distance signal transmission via a single Cat5e/Cat6 Ethernet cable. Boasting a compact wall-mounted form factor (compatible with standard wall boxes), it integrates critical functions to simplify AV setups: bidirectional PoC (Power over Cable) supply, external audio embedding, and flexible EDID management (automatic detection + manual adjustment).

Available in two variants (HAE_A/HAE_B) to match diverse distance needs, the extender adheres to HDMI 2.0 and HDCP 2.2 standards—ensuring broad compatibility with modern AV devices (e.g., TVs, projectors, laptops). It effectively reduces cable clutter and boosts operational efficiency, making it an ideal solution for meeting rooms, multimedia classrooms, commercial display spaces, and hospitality venues.

2. Key Features

- **4K Ultra HD Visuals**

Supports 4K@60Hz (4:4:4) and 1080P@60Hz resolutions, including 3D formats, delivering sharp, true-to-life imagery with zero signal degradation.

- **Dual Variants for Distance Flexibility**

- HAE_A: Transmits 1080P signals up to 100m (328ft) and 4K (30/60Hz) signals up to 70m (230ft) via Cat5e/Cat6 cable.
- HAE_B: Transmits 1080P signals up to 70m (230ft) and 4K (30/60Hz) signals up to 35m (115ft) via Cat5e/Cat6 cable.

- **PoC Bidirectional Power Supply**

Power either the transmitter or receiver through the transmission cable—eliminating the need for extra power outlets at one end, simplifying installation.

- **Intelligent EDID Management**

Comes with 7 built-in EDID presets and supports reading the display's native EDID, solving common issues like incomplete screen display or flickering.

- **External Audio Embedding**

Features a 3.5mm audio input to embed external audio (e.g., microphones, speakers) into HDMI signals, enhancing audio flexibility for AV setups.

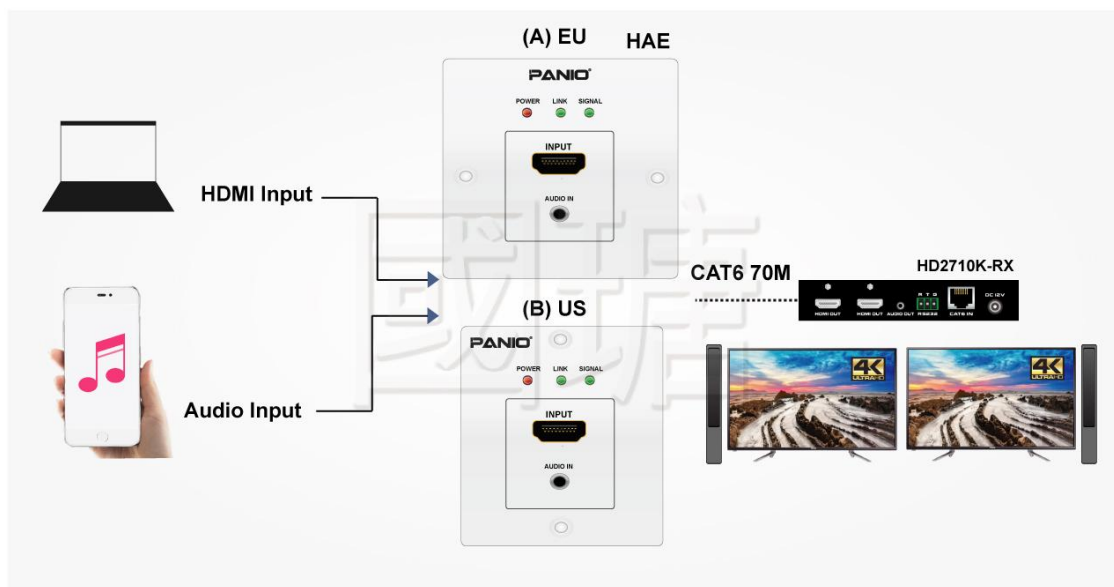
- **Wide Compatibility**

Complies with HDMI 2.0 and HDCP 2.2 standards, ensuring seamless integration with most modern audio-visual devices.

- **Space-Saving Wall-Mounted Design**

Compact dimensions (88×88×38mm or 114×70×38mm, L×W×H) fit standard wall boxes, keeping venues neat and organized.

Diagram



3. Technical Specifications

Category	Details
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Model Name	PANIO HAE (HAE_A / HAE_B)
Compliant Standards	HDMI 2.0, HDCP 2.2
Video Specifications	Resolution: 4K@30Hz/60Hz, 1080P@60Hz, 3D support Color Space: YUV4:4:4
Audio Specifications	Input: 1×3.5mm Stereo Audio IN Function: External audio embedding into HDMI signal
Transmission Distance (Cat5e/Cat6)	- HAE_A: 1080P → 100m (328ft); 4K (30/60Hz) → 70m (230ft)- HAE_B: 1080P → 70m (230ft); 4K (30/60Hz) → 35m (115ft)
HDMI Cable Compatibility	Supports 28AWG HDMI 2.0 cables up to 5m; longer distances require additional extenders
Port Configuration - Transmitter	Input: 1×HDMI IN (HDMI 2.0, Type A, 19-pin female), 1×AUDIO IN (3.5mm Stereo Jack) Output: 1×HDBT OUT (RJ45 female)
Port Configuration - Receiver	Compatible with HD2710K-RX (HAE receiver counterpart)
Power Requirements	Input: DC 12V/1.5A (transmitter or receiver) PoC: Unilateral power supply (power one end to feed the other)
Physical Dimensions	Transmitter: 88×88×38mm or 114×70×38mm (L×W×H)
Weight	Transmitter: 200g
Operating Environment	Temperature: 0°C~40°C (32°F~104°F) Humidity: 20%~80% RH (no condensation)

4. Important Installation Notes

1. Use **Cat5e/Cat6 unshielded twisted pair (UTP) cables** for optimal signal stability; avoid cross-wiring (follow T568B wiring standard).
2. For 4K@60Hz transmission, connect the signal source to the transmitter using a **certified 4K 60Hz HDMI cable** to ensure quality.
3. Only use the **original DC 12V/1.5A power adapter** provided—third-party adapters may cause performance issues or safety risks.

4. EDID Setup: Default to automatic detection; if screen issues (e.g., flickering, incomplete display) occur, manually select from 7 built-in EDID presets.
 5. Wall Mounting: Secure the transmitter to standard wall boxes using appropriate hardware (not included) to prevent accidental damage.
 6. Heat Dissipation: Place the device in a well-ventilated area; do not block the housing to avoid overheating.
 7. Avoid Hot-Swapping: Do not disconnect/reconnect HDMI cables during operation—this may cause signal interruption or device damage.
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5. Package Contents

Item	Quantity
PANIO HAE Transmitter	1 unit
DC 12V/1.5A Power Adapter	1 piece
User Manual	1 piece

6. Ideal Applications

Corporate Meeting Rooms

Eliminates cable clutter between distant laptops/PCs and displays. PoC reduces power outlet usage, while audio embedding supports external microphones—streamlining presentations and video conferences.

Multimedia Classrooms

Teachers can connect HDMI devices and external audio (e.g., microphones) to transmit lessons to wall-mounted displays. HAE_A's 100m 1080P transmission covers large classrooms without signal loss.

Commercial Display Spaces

Perfect for exhibitions, malls, or trade shows. 4K ultra HD quality ensures vivid product displays, and the wall-mounted transmitter keeps venues tidy.

Hospitality Venues (Hotels/Resorts)

Simplifies in-room entertainment or conference hall setups. PoC avoids messy wiring behind TVs, and EDID management ensures compatibility with various screen sizes—enhancing guest experience.

Retail Stores

Supports digital signage with distant media players. External audio embedding syncs promotional audio with video, attracting customer attention.
