

2-Gang HDMI & VGA HDBaseT Wall Plate Transmitter with Scaler, RS-232 & PoH

The KanexPro **WP-HDBASETX** is a 2-gang Decora-style HDBaseT wall plate transmitter for mixed HDMI and legacy VGA environments. Accepting one HDMI 1.4 and one VGA + 3.5mm audio input, it automatically selects the active source and extends the signal up to 230 feet over a single shielded CAT6 cable to a compatible HDBaseT receiver (sold separately). A built-in VGA scaler matches the VGA input to the display's native resolution.

Purpose-built for classrooms, lecture halls, and boardrooms where both modern HDMI laptops and legacy VGA workstations must connect to the same display, the WP-HDBASETX supports PoH so the transmitter can be powered remotely from the receiver. RS-232 bidirectional control enables full integration with third-party room control systems. A locking HDMI connector prevents accidental disconnection. Matte anodized aluminum 2-gang form factor. FCC Class A certified.

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

- ✓ HDBaseT Alliance certified
- ✓ Dual-gang Decora form factor with matte anodized aluminum finish
- ✓ Delivers uncompressed HD video, 3D, and 4K×2K up to 70m (230ft) over single Category cable
- ✓ Supports HDMI 1.4 including EDID and HDCP
- ✓ Built-in VGA scaler — automatically matches VGA signals to display native resolution
- ✓ PoH (Power over HDBaseT) — transmitter powered from receiver at display end
- ✓ Locking HDMI input connector prevents accidental disconnection
- ✓ Auto-switching between inputs; manual SOURCE button override
- ✓ RS-232 bidirectional control with full command set
- ✓ EDID management: bypass, 1080p PCM 2.0, 1080p Dolby 5.1, 1080p 3D, 1080i PCM, 4K PCM
- ✓ HDCP configurable via RS-232 (Active, On, Off)
- ✓ VGA image adjustment via RS-232: brightness, contrast, saturation, sharpness, aspect ratio
- ✓ Firmware update via Micro-USB
- ✓ Backed by KanexPro 3-Year Parts and Labor Warranty

PACKAGE CONTENTS

1× 4K Wallplate HDBaseT Transmitter • 4× Mounting Screws • 1× 2-pin Terminal Block • 1× 4-pin Terminal Block • 1× Top Cover • 1× User Manual



Specifications

INPUT / OUTPUT	
Inputs	1× HDMI [19-pin Type A female], 1× VGA [HD-15 female], 1× Audio [3.5mm mini-jack], 1× 12V Power [2-pin terminal block]
Outputs	1× HDBaseT [RJ45], 1× 12V Power OUT [2-pin terminal block]
CONTROL	
Control Ports	1× Firmware [Micro-USB], 1× RS-232 [3-pin terminal block]
RS-232 Protocol	Baud 9600, 8 data bits, 1 stop bit, no parity
TECHNICAL	
HDMI Standard	HDMI 1.4, HDCP compliant
Video Resolution — HDMI	Up to 4K×2K
Video Resolution — VGA	Up to 1920×1200@60Hz (scaler output up to 1920×1080)
Bandwidth	10.2Gbps
Transmission Distance	1080p: up to 230ft/70m with PoH • 4K×2K: up to 130ft/40m with PoH
Audio — HDMI	Embedded digital audio
Audio — VGA	Analog stereo via 3.5mm mini-jack
SNR	>85dB @ 20Hz–20kHz
Frequency Response	20Hz–20kHz
Impedance	75Ω
MECHANICAL	
Form Factor	Universal Decora-style 2-gang wall plate
Finish	Matte anodized aluminum
Dimensions	4.11" × 3.50" × 1.73" (104.5 × 89 × 44mm)
Weight	0.52 lbs (238g)
POWER	
Power Supply	Input: 100–240V AC • Output: 12VDC 2A
Max Power Consumption	9.6W
PoH	Receiver-to-transmitter power over HDBaseT
CERTIFICATIONS	
Regulatory	FCC Class A
ENVIRONMENT	
Operating Temperature	14–104°F / –10–40°C
Relative Humidity	10–90%
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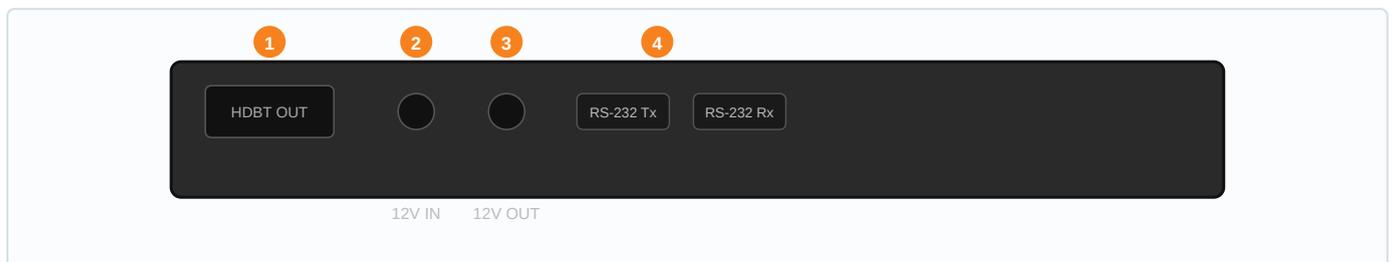
Operation Controls

TRANSMITTER PANEL



No.	Name	Function Description
1	POWER	LED glows red when power is applied.
2	LINK	LED glows green when HDBaseT link is established with receiver.
3	VGA / HDCP	VGA LED: green=active, amber=source available. Also indicates HDCP link.
4	RESET	Performs a soft reboot of the transmitter.
5	SOURCE/AUTO	Press and hold ~3 seconds to toggle Auto/Manual mode. In Manual, press to switch inputs.
6	VGA IN	HD-15 (VGA) connector — connect VGA source device.
7	AUDIO IN	3.5mm stereo jack — provides analog audio for the VGA input.
8	HDMI IN	HDMI input with locking connector — connect HDMI source. LED: green=active, amber=available.
9	FIRMWARE	Micro-USB connector for firmware updates.

RECEIVER PANEL



No.	Name	Function Description
1	HDBT OUT	HDBaseT output — connect to HDBaseT Receiver over Category cable. Supports PoH.
2	12V IN	12V power input — connect included power adapter.
3	12V OUT	12V output — connect to optional Control Panel.
4	RS-232	Serial Tx/Rx port — controls this transmitter and far-end devices via RS-232 commands.



Application Example

Mixed-Source Room — HDMI & VGA Extension with Built-In Scaler



How it works: Install the WP-HDBASETX at the presenter connection point. HDMI laptop connects to the locking HDMI input; VGA workstation connects to VGA with 3.5mm audio. The built-in scaler automatically matches VGA resolution to the display. Signal extends via HDBaseT over a single CAT6 cable to a compatible receiver at the display. The receiver supplies PoH power to the transmitter — no local AC outlet required. RS-232 pass-through integrates with room control systems.

TROUBLESHOOTING

Q: No video on display

A: Check all cable connections are secure. Verify HDMI or VGA source is active and outputting signal. Try RESET button for soft reboot.

Q: VGA image incorrect resolution

A: The built-in scaler defaults to 1920×1080. Use RS-232 command 50629% to set output resolution, or enable auto-scaling.

Q: Cannot control via RS-232

A: Confirm baud rate is 9600, 8 data bits, 1 stop bit, no parity. Verify RS-232 cable is wired correctly (Tx/Rx not crossed).

Q: Transmitter not powering on (PoH)

A: Confirm receiver is powered and HDBaseT link is active. PoH requires a compatible HDBaseT receiver connected via Category cable.

