



HDCP22





PUV-1605S-TXWP

HDMI/VGA with Scaling over Single CAT5e/6/7 HDBaseT™ Wallplate Transmitter (Full 5Play™ & Single LAN up to 100m, PoH





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SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

REVISION HISTORY

VERSION NO.	DATE	SUMMARY OF CHANGE
v1.00	20/06/2018	First release





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1. INTRODUCTION

This 4K UHD Wallplate Scaler is an HDMI/VGA switch with audio embedding and scaled HDBaseT output. The wall plate is designed for use with UK two-gang sized enclosures. This Transmitter can send high definition uncompressed audio/video along with Ethernet over a single cable up to a distance of 100 metres at 1080p@60Hz.

The HDMI input supports resolutions up to 4K@60Hz (4:4:4, 8-bit). The VGA input supports resolutions up to WUXGA (RB) and with the use of the associated 3.5mm audio input, stereo audio may be embedded as well. To provide maximum compatibility with a wide range of display types, all sources are scaled to a user-selected resolution and timing (up to 4K@30Hz) for transmission over HDBaseT.

This unit also supports automatic input selection between the HDMI and VGA inputs, with hot plug detection, enabling hands-free operation. Additionally, the unit may be powered locally or via 48V PoH (Power over HDBaseT) from a compatible HDBaseT Receiver, which allows for greater flexibility in installations. The unit is controllable via front panel controls with an OSD or RS-232 (via the RS-232 port on a compatible Receiver).

2. APPLICATIONS

- Household entertainment sharing and control
- Lecture halls, auditoriums and classroom
- Houses of worship
- Conference rooms and boardrooms
- Hotel event spaces

3. PACKAGE CONTENTS

- 1×HDMI/VGA over HDBaseT Wallplate Scaler
- 1×Operation Manual



4. SYSTEM REQUIREMENTS

- # HDMI source equipment such as a media player, video game console or set-top box.
- # HDMI receiving equipment such as an HDTV, monitor or audio amplifier.
- The use of industry standard Cat.6, Cat.6a or Cat.7 cable is highly recommended.
- The use of "Premium High Speed HDMI" cable is highly recommended.

5. FEATURES

- **III** HDMI 2.0 and DVI 1.0 compatible
- **III** HDCP 2.2 and HDCP 1.x compliant
- **##** 1 HDMI input
- 1 VGA input with 3.5mm mini-jack audio input
- Supports HDMI input resolutions up to 4K@60Hz (4:4:4, 8-bit)
- Supports VGA input resolutions up to WUXGA (RB)
- Simultaneous transmission of uncompressed video, audio and data over a single 100m Cat.5e/6/7 cable at 1080p and 70m at 4K
- Scaled HDBaseT output supports resolutions up to 4K@30Hz (4:4:4, 8-bit)
- Automatic input selection with hot plug detection enabling handsfree operation
- Unit may be powered locally or via 48V PoH (PD) from a compatible HDBaseT Receiver (PSE)
- Wall plate is designed for UK two-gang sized enclosures
- Front panel LEDs indicate input selection, power and link status
- Controllable via front panel controls with an OSD or RS-232 (via the RS-232 port on a compatible Receiver)

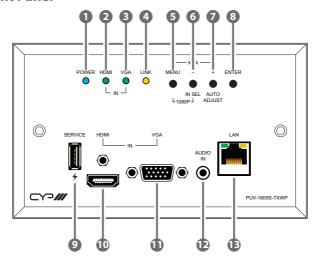
Note: The 48V PoH function is designed to receive power from compatible Receiver units only. PoH from other Receiver brands may not be compatible.





6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



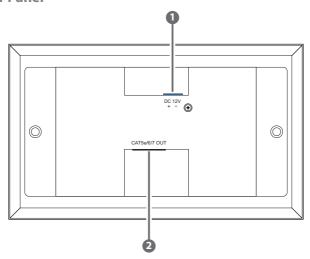
- POWER LED: This LED will illuminate to indicate the unit is on and receiving power.
- **2 HDMI IN LED:** This LED will illuminate when HDMI is the selected source.
- 3 VGA IN LED: This LED will illuminate when VGA is the selected source.
- 4 LINK LED: This LED will illuminate when both Transmitter and Receiver are connected and communicating with each other properly.
- **5 MENU:** Press to enter the OSD menu, or to back out from menu items.
- 6 –/IN SEL: Press to move down or adjust selections within OSD menus. When not in a menu press this button to switch between the available inputs. The LED will illuminate to indicate which source is currently selected.
- +/AUTO ADJUST: Press to move up or adjust selections within OSD menus. When not in a menu press this button to optimise the positioning of the picture (VGA sources only).
- ENTER: Press to confirm a selection within the OSD or to go deeper into a menu item.
- **9 SERVICE:** This slot is reserved for firmware update use only.





- **HDMI IN:** Connect to HDMI source equipment such as a media player, game console or set-top box.
- **ID VGA IN:** Connect to VGA source equipment such as a PC or laptop.
- **AUDIO IN:** Connect to the stereo analogueue output of a device such as a CD player or PC for embedding into the HDBaseT output.
- **LAN:** Connect to an Ethernet supporting device or to your local network, as appropriate, to extend the network to both ends of the HDBaseT connection.

6.2 Rear Panel



- 1 DC 12V: Connect a 12V DC power adapter to the twin terminal block and connect it to an AC wall outlet for power. (Optional, not required when powered by PoH from the Receiver.)
- **CAT5e/6/7 OUT:** Connect to the Receiver unit with a single Cat.5e/6/7 cable for transmission of all data signals.



6.3 OSD Menu

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Video	Video	HDMI	
		PC	
	Output	NATIVE	
		640×480@60	
		800×600@60	
		1024×768@60	
		1280×720@60	
		1280×768@60	
		1280×800@60	
		1280×1024@60	
		1360×768@60	
		1440×900@60	
		1400×1050@60	
		1600×1200@60	
		1680×1050@60	
		1920×1080@60	
		1920×1200@60RB	
		2048×1080@50	
		2048×1080@60	
		2560×1440@60RB	
		2560×1600@60RB	
		720×480p@60	
		720×576p@60	
		1280×720p@50	
		1280×720p@60	
		1920×1080p@24	
		1920×1080p@25	
		1920×1080p@30	



LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Video	Output	1920×1080p@50	
		1920×1080p@60	
		2560×1080p@50	
		2560×1080p@60	
		3840×2160p@24	
		3840×2169p@25	
		3840×2160p@30	
		4096×2160p@24	
		4096×2160p@25	
		4096×2160p@30	
	Aspect	Full	
		Best Fit	
		Pan Scan	
		Letterbox	
		Under 2	
		Under 1	
		Follow In	
		Overscan	
	HDMI HDCP	HDCP Support Off	
		Refer to Source	
		Refer to Display	
	No Signal Colour	Black	
		White	
		Blue	
		Red	
		Green	
	Blank	Off	
		On	
	Freeze	Off	
		On	



LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Video	Auto Setup	Auto Sync Off	Off
			30 Seconds
			60 Seconds
			3 Minutes
			5 Minutes
			10 Minutes
		Auto Switch	Off
			On
	PC Setup	PC Auto Setup	[Current Status]
		PC H Position	0 ~ 250
		PC V Position	0 ~ 250
		PC Phase	0 ~ 255
		PC Clock	0 ~ 250 (125)
		PC Reset	
Picture	Colour Gain R	0 ~ 1023 (512)	
	Colour Gain G	0 ~ 1023 (512)	
	Colour Gain B	0 ~ 1023 (512)	
	Colour Offset R	0 ~ 1023 (512)	
	Colour Offset G	0 ~ 1023 (512)	
	Colour Offset B	0 ~ 1023 (512)	
	Brightness	0 ~ 60 (30)	
	Contrast	0 ~ 60 (30)	
	Hue	0 ~ 60 (30)	
	Saturation	0 ~ 60 (30)	
	Sharpness	0 ~ 63 (0)	
	NR	Off	
		Low	
		Middle	
		High	
		Auto	



LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Picture	Reset Picture	'	1
Audio	Audio	Follow Video	
		Line In	
	Volume	0 ~ 100 (80)	
	Audio Mute	Off	
		On	
	Reset Audio		
OSD	H Position	0 ~ 60 (30)	
	V Position	0 ~ 60 (30)	
	Timer	Off	
		5 SEC	
		10 SEC	
		15 SEC	
		20 SEC	
		25 SEC	
		30 SEC	
		35 SEC	
		40 SEC	
	Transparent	0 ~ 50 (50)	
	Display	Off	
		On	
		5S	
		105	
	Reset OSD		
EDID	HDMI EDID	INT 1080P (2CH)	
		INT 4K (3G-2CH)	
		INT 4K (6G-2CH)	
		Output	
	EDID Status	[Current Status]	



LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
RS-232 Control	Control Baudrate	4800	
		9600	
		19200	
		38400	
		57600	
		115200	
	Control Stop Bits Control Data Bits	1 Bit	
		2 Bit	
		5 Bit	
		6 Bit	
		7 Bit	
		8 Bit	
	Control Parity	None	
		Odd	
		Even	
Reset	All Reset		
Information	[System Informatio	n Display]	

Note: Values in **bold** or () are factory default settings.



6.4 RS-232 Commands

COMMAND	
DESCRIPTION	PARAMETERS
HELP←	
Show the full command list.	
?←	
Show the full command list.	
GET FW VER ←	
Show the unit's firmware version.	
GET MODEL NAME ←	
Show the unit's model name.	
SET OUT A ROUTE N1 ←	
Select the input source.	Available values for N1 : 1 [HDMI] 2 [VGA]
GET OUT A ROUTE ←	
Show the current input source.	
SET OUT AUTO MODE N1 ←	
Set the auto source select mode.	Available values for N1 : 0 [Off] 1 [Auto Switch]
GET OUT AUTO MODE ←	
Show the current auto source select mode.	
GET OUT AUTO MODE LIST ←	
List all available auto source modes.	
GET IN N1 TIMING ←	
Show the video timing of the source connected to input N1.	Available values for N1 : 1 [HDMI] 2 [VGA]



COMMAND		
DESCRIPTION	PARAME	ETERS
GET IN TYPE LIST←		
List all available input types.		
SET OUT A MASK N1←	1	
Blank the video output (video masking).	Available ON OFF	values for N1 : [Blank video] [Enable video]
GET OUT A MASK←		
Show the current video masking state.		
SET OUT A TIMING N1←		
Set the scaler's output timing.	Available 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	(Native [Native [640×480@60] [800×600@60] [1024×768@60] [1280×720@60] [1280×768@60] [1280×800@60] [1280×1024@60] [1360×768@60] [1440×900@60] [1400×1050@60] [1600×1200@60] [1680×1050@60] [1920×1080@60] [1920×1200@60RB] [2048×1080@60] [2048×1080@60] [2560×1440@60RB] [2560×1600@60RB] [720×480p@60] [720×576p@60] [1280×720p@60] [1280×720p@60] [1280×720p@60] [1280×720p@60]



COMMAND		
DESCRIPTION	PARAMETER	S
(Cont.)	24 25 26 27 28 29 30 31 32 33 34 35	[1920×1080p@25] [1920×1080p@30] [1920×1080p@50] [1920×1080p@60] [2560×1080p@60] [2560×1080p@60] [3840×2160p@24] [3840×2160p@25] [3840×2160p@30] [4096×2160p@24] [4096×2160p@25] [4096×2160p@30]
GET OUT A TIMIING ←		
Show the scaler's current output timing.		
GET OUT A SYNC STATUS←		
Show the current status of the connected display.		
GET OUT TIMING LIST←		
List all available output timings.		
SET OUT A CONTRAST N1 ←		
Set the contrast of the scaled output.	N1 = 0 ~ 60	[Contrast]
GET OUT A CONTRAST←		
Show the current contrast setting.		
SET OUT A BRIGHTNESS N1 ←		
Set the brightness of the scaled output.	N1 = 0 ~ 60	[Brightness]
GET OUT A BRIGHTNESS←		
Show the current brightness setting.		



	_	
DESCRIPTION	PARAMETER	S
ET OUT A SATURATION N1 ←		
Set the saturation of the scaled output.	N1 = 0 ~ 60	[Saturation]
ET OUT A SATURATION←		
Show the current saturation setting.		
ET OUT A HUE N1←		
Set the hue of the scaled output.	N1 = 0 ~ 60	[Hue]
ET OUT A HUE⊷		
Show the current hue setting.		
ET OUT A SHARPNESS N1 ←		
Set the sharpness of the scaled output.	N1 = 0 ~ 63	[Sharpness]
ET OUT A SHARPNESS←		
Show the current sharpness setting.		
ET OUT A NR N1 ←		
Set the noise reduction level of the scaled output.	Available valu 0 1 2 3 4	les for N1 : [Off] [Low] [Middle] [High] [Auto]
ET OUT A NR←		
Show the current noise reduction setting.		



COMMAND	
DESCRIPTION	PARAMETERS
SET OUT A ASPECT RATIO N1 ←	
Set the aspect ratio of the scaled output.	Available values for N1: 0 [Overscan] 1 [Full] 2 [Best Fit] 3 [Pan Scan] 4 [Letterbox] 5 [Under 2] 6 [Under 1] 7 [Follow In]
GET OUT A ASPECT RATIO←	
Show the current output ratio of the scaled output.	
GET OUT ASPECT RATIO LIST←	
List all available output ratio settings.	
SET OUT A AUTO SYNC OFF N1 ←	
Set the auto sync off timeout.	Available values for N1 : 0 [Disabled] 1 [30 Seconds] 2 [60 Seconds] 3 [3 Minutes] 4 [5 Minutes] 5 [10 Minutes]
GET OUT A AUTO SYNC OFF←	
Show the current auto sync off timeout setting.	
SET OUT A R GAIN N1←	
Set the red gain level of the scaled output.	N1 = 0 ~ 1023 [Red Gain]
GET OUT A R GAIN←	
Show the current red gain level.	



COMMAND	
DESCRIPTION	PARAMETERS
SET OUT A G GAIN N1←	
Set the green gain level of the scaled output.	N1 = 0 ~ 1023 [Green Gain]
GET OUT A G GAIN ←	
Show the current red gain level.	
SET OUT A B GAIN N1 ←	
Set the blue gain level of the scaled output.	N1 = 0 ~ 1023 [Blue Gain]
GET OUT A B GAIN←	
Show the current red gain level.	
SET IN 2 PHASE N1 ←	
Set the PC input phase.	N1 = 0 ~ 255 [PC Phase]
GET IN 2 PHASE←	
Show the current PC input phase.	
SET IN 2 CLOCK N1 ←	
Set the PC input clock.	N1 = 0 ~ 250 [PC Clock]
GET IN 2 CLOCK←	
Show the current PC input clock.	
SET IN 2 HPOSITION N1 ←	
Set the PC input horizontal position.	N1 = 0 ~ 250 [PC H Position]
GET IN 2 HPOSITION ←	1
Show the current PC input clock.	
SET IN 2 VPOSITION N1←	1
Set the PC input vertical position.	N1 = 0 ~ 250 [PC V Position]
GET IN 2 VPOSITION ←	1
Show the current PC input clock.	



COMMAND		
DESCRIPTION	PARAMETER:	S
SET AUDIO OUT A ROUTE N1 ←	'	
Select the audio source.	Available valu 1 2	es for N1 : [Follow Video] [Analogue Audio]
GET AUDIO OUT A ROUTE ←		
Show the currently selected audio source.		
GET AUDIO IN TYPE LIST←		
List all available audio sources.		
SET AUDIO OUT A MUTE N1←		
Enable of disable the audio mute function.	Available valu ON OFF	es for N1 : [Mute Enabled] [Mute Disabled]
GET AUDIO OUT A MUTE←		
Show the current audio mute state.		
SET AUDIO OUT A VOLUME N1 ←		
Set the audio output volume level.	N1 = 0 ~ 100	[Volume]
GET AUDIO OUT A VOLUME ←		
Show the current audio output volume level.		
SET OUT A OSD TIMEOUT N1 ←	ı	
Set the OSD timeout length.	Available value 0 1 2 3 4 5 6 7	es for N1: [Off] [5 Seconds] [10 Seconds] [20 Seconds] [25 Seconds] [30 Seconds] [35 Seconds] [40 Seconds]



COMMAND		
DESCRIPTION	PARAMETER	S
GET OUT A OSD TIMEOUT ←		
Show the current OSD timeout length.		
SET OUT A OSD INFO DISPLAY N1 ←	<u> </u>	
Set the OSD Information Display timeout length.	Available valu 0 1 2 3	es for N1 : [Always Off] [Always On] [5 Seconds] [10 Seconds]
GET OUT A OSD INFO DISPLAY ←		
Show the current OSD Information Display timeout length.		
SET OUT A OSD VPOSITION N1 ←	l	
Set the OSD vertical position.	N1 = 0 ~ 60	[V Position]
GET OUT A OSD VPOSITION ←		
Show the OSD's current vertical position.		
SET OUT A OSD HPOSITION N1 ←	I	
Set the OSD horizontal position.	N1 = 0 ~ 60	[H Position]
GET OUT A OSD HPOSITION ←		
Show the OSD's current horizontal position.		
SET OUT A OSD TRANSPARENCY N1←		
Set the transparency level for the OSD.	N1 = 0 ~ 50	[Transparency]
GET OUT A OSD TRANSPARENCY←	I	
Show the OSD's current transparency level.		



COMMAND	
DESCRIPTION	PARAMETERS
SET IN 1 HDCP MODE N1←	
Set the HDCP mode for the HDMI input.	Available values for N1 : 0 [Disable HDCP] 1 [Follow Source] 2 [Follow Display]
GET IN 1 HDCP MODE←	
Show the current HDCP mode for the HDMI input.	
GET OUT A HDCP STATUS←	
Show the current HDCP mode of the HDMI output.	
SET UART 1 BAUDRATE N1 ←	
Set the unit's RS-232 baud rate.	Available values for N1 : 0 [4800] 1 [9600] 2 [19200] 3 [38400] 4 [57600] 5 [115200]
GET UART 1 BAUDRATE←	1
Show the current RS-232 baud rate.	
SET UART 1 STOP BITS N1←	
Set the number of stop bits for RS-232.	Available values for N1 : 0 [1 Bit] 1 [2 Bits]
GET UART 1 STOP BITS←	
Show the current RS-232 stop bits setting.	



COMMAND				
DESCRIPTION	PARAMETER	s		
SET UART 1 DATA BITS N1 ←				
Set the number of data bits for RS- 232.	Available valu 0 1 2 3	es for N1 : [5 Bits] [6 Bits] [7 Bits] [8 Bits]		
GET UART 1 DATA BITS⊷				
Show the current RS-232 data bits setting.				
SET UART 1 PARITY N1 ←				
Set the parity for RS-232.	Available valu 0 1 2	es for N1 : [None] [Odd] [Even]		
GET UART 1 PARITY⊷				
Show the current RS-232 parity setting.				
SET OUT A AUTOMATION N1 MODE N	2←			
Enable or disable each automated action slot.	N1 = 1 ~ 8 Available valu ON OFF	[Slot Number] es for N2 : [Enable] [Disable]		
GET OUT A AUTOMATION N1 MODE⊷				
Show the current state of automated action slot N1.	N1 = 1 ~ 8	[Slot Number]		
SET OUT A AUTOMATION N1 COMMAND N2←				
Set the RS-232 string to send when automated action N1 is activated.	N1 = 1 ~ 8 N2 = {string}	[Slot Number] [64 Chars Max]		
GET OUT A AUTOMATION N1 COMMA	ND←			
Show the current RS-232 command string assigned to slot N1.	N1 = 1 ~ 8	[Slot Number]		



DECCRIPTION	D. D. L.		
DESCRIPTION	PARAMETERS		
SET OUT A AUTOMATION N1 EVENT N	2←		
Set the event that will activate	N1 = 1 ~ 8	[Slot Number]	
automated action slot N1.	Available values for N2 :		
	1	[All Signal Loss]	
	2	[Live Source Plug In]	
	3	[Signal Loss]	
	4	[Signal Lock]	
GET OUT A AUTOMATION N1 EVENT⊷	I		
Show the event currently assigned to automated action slot N1.	N1 = 1 ~ 8	[Slot Number]	
SET OUT A AUTOMATION N1 TRIGGER	DELAY N2←		
Set the amount of time to delay	N1 = 1 ~ 8	[Slot Number]	
before activating the automated action after the event's condition is met.	N2 = 0 ~ 300	[Delay Seconds]	
GET OUT A AUTOMATION N1 TRIGGER	L R DELAY←		
CE. CO. A AUTOMATION IN INIGOEN			
Show the current delay time assigned to automated action slot N1.	N1 = 1 ~ 8	[Slot Number]	
Show the current delay time assigned to automated action slot	N1 = 1 ~ 8	[Slot Number]	
Show the current delay time assigned to automated action slot N1.	N1 = 1 ~ 8	[Slot Number]	
Show the current delay time assigned to automated action slot N1. GET TRIGGER EVENT LIST GET TRIGGER EVENT LIST	N1 = 1 ∼ 8	[Slot Number]	
Show the current delay time assigned to automated action slot N1. GET TRIGGER EVENT LIST List all available Trigger Events.	N1 = 1 ~ 8 Available valu	es for N1 :	
Show the current delay time assigned to automated action slot N1. GET TRIGGER EVENT LIST List all available Trigger Events. SET IN 1 EDID N1 ←		es for N1 : [1080P, 2CH]	
Show the current delay time assigned to automated action slot N1. GET TRIGGER EVENT LIST ← List all available Trigger Events. SET IN 1 EDID N1 ← Set the EDID to use with the HDMI	Available valu 1 2	es for N1 : [1080P, 2CH] [4K (3G), 2CH]	
Show the current delay time assigned to automated action slot N1. GET TRIGGER EVENT LIST ← List all available Trigger Events. SET IN 1 EDID N1 ← Set the EDID to use with the HDMI	Available valu 1 2 3	es for N1 : [1080P, 2CH] [4K (3G), 2CH] [4K (6G), 2CH]	
Show the current delay time assigned to automated action slot N1. GET TRIGGER EVENT LIST ← List all available Trigger Events. SET IN 1 EDID N1 ← Set the EDID to use with the HDMI	Available valu 1 2	es for N1 : [1080P, 2CH] [4K (3G), 2CH]	

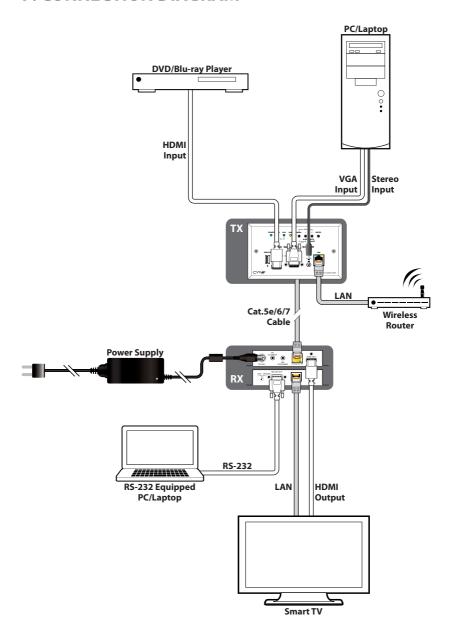


COMMAND	
DESCRIPTION	PARAMETERS
GET IN 1 EDID ←	
Show the currently selected EDID source for the HDMI input.	
GET IN EDID LIST ←	
List all available EDID sources.	

Note: Commands will not be executed unless followed by a carriage return. Commands are not case-sensitive.



7. CONNECTION DIAGRAM





8. SPECIFICATIONS

8.1 Technical Specifications

HDMI Bandwidth 600MHz/18Gbps **HDBaseT Bandwidth** 340Hz/10.2Gbps

Input Ports 1×HDMI

1×VGA

1×3.5mm (Stereo Audio)

Output Port 1×Cat.5e/6/7

Pass-through Port 1×LAN [RJ-45]

Power Supply 12V/3A DC (US/EU standards, CE/FCC/UL

certified)

ESD Protection Human Body Model:

±12kV (Air Discharge)

±8kV (Contact Discharge)

Dimensions 147mm×87.5mm×41.5mm (W×H×D)

[Case Only]

147mm×87.5mm×46.6m (W×H×D)

[All Inclusive]

Weight 250g

Chassis Material Metal
Silkscreen Colour White

Operating Temperature $0^{\circ}\text{C} - 40^{\circ}\text{C}/32^{\circ}\text{F} - 104^{\circ}\text{F}$

Storage Temperature $-20^{\circ}\text{C} - 60^{\circ}\text{C}/-4^{\circ}\text{F} - 140^{\circ}\text{F}$

Relative Humidity 20 - 90% RH (Non-condensing)

Power Consumption 26.4W



8.2 Video Specifications

		Input		Output
Supported P	C Resolutions (Hz)	HDMI	VGA	HDMI via HDBaseT
640×480	60, 72, 75, 85	✓	✓	60
720×400	85	✓	✓	
800×600	56, 60, 72, 75, 85	✓	✓	60
1024×768	60, 70, 75, 85	✓	✓	60
1152×864	75	✓	✓	
1280×720	60	✓	✓	✓
1280×768	60, 75, 85	✓	✓	60
1280×800	60	✓	✓	✓
1280×960	60	✓	✓	
1280×1024	60	✓	✓	✓
1360×768	60	✓	✓	✓
1366×768	60	✓	✓	
1400×1050	60	✓	✓	✓
1440×900	60	✓	✓	✓
1600×1200	60	✓	✓	✓
1680×1050	60	✓	✓	✓
1920×1080	60	✓	✓	✓
1920×1200	60 (RB)	✓	✓	✓
1920×1440	60	✓		✓
2048×1080	50, 60	✓		✓
2560×1440	60 (RB)	✓		✓
2560×1600	60 (RB)	✓		✓



		lnı	put	Output
Supported TV	Resolutions (Hz)	НОМІ	VGA	HDMI via HDBaseT
720×480i	59.94, 60	✓		
720×576i	50	✓		
720×480p	59.94, 60	✓	✓	60
720×576p	50	✓	✓	
1280×720p	50, 59.94, 60	✓	✓	✓
1920×1080i	50, 59.94, 60	✓		50/60
1920×1080p	50, 59.94, 60	✓	✓	
1920×1080p	23.97, 24, 25, 29.97, 30	✓	✓	24/25/30
2560×1080p	50, 60	✓		✓
3840×2160p	24, 25, 30	✓		✓
4096×2160p	24, 25, 30	✓		✓
3840×2160p (YUV 4:2:0)	50, 60	✓		
3840×2160p	50, 60	✓		

8.3 Cable Specifications

HDMI Cable	1080p		4K
Length (metre)	8-bit	12-bit	8-bit
Input	10	10	5
Output	10	10	5

Cat. Cable Length (metre)	1080p	4K
Cat.5e	100	70
Cat.6	100	70



Cat.7 100 100

Full HD Video (1080p)

- Up to 1080p@60Hz, 12-bit colour
- Data rates lower than 5.3Gbps or below 225MHz TMDS clock

Ultra HD Video (4K)

- 4K@24/25/30Hz & 4K@50/60Hz (YUV 4:2:0), 8-bit colour
- Data rates higher than 5.3Gbps or above 225MHz TMDS clock

9. ACRONYMS

ACRONYM	COMPLETE TERM
Cat.5e	Category 5 (enhanced) Cable
Cat.6	Category 6 Cable
Cat.7	Category 7 Cable
CEC	Consumer Electronics Control
DVI	Digital Visual Interface
HD	High-Definition
HDCP	High-bandwidth Digital Content Protection
НОМІ	High-Definition Multimedia Interface
LAN	Local Area Network
LPCM	Linear Pulse-Code Modulation
PD	Powered Device
РоН	Power over HDBaseT
PSE	Power Sourcing Equipment
UHD	Ultra-High-Definition
VGA	Video Graphics Array
WUXGA	Wide Ultra Extended Graphics Array

