HDMI/VGA Extender

AVLINK™

WVH-EPL

WVH-EPR

USER MANUAL   V1.0
WVH-EPX

Package Contents-
- 1x WVH-EPL and WVH-EPR Unit
- 1 user manual
- 1x Power adapter DC 48V (With 1x2 Pole Captive Screw Socket)
- 4x screws
- 2x Female 1x3 Pole Captive Screw Socket
- 1x IR receiver cable
- 1x IR blaster cable (Peak Wavelength 940nm)

Anything missed, please contact with your vendor.

Features

- HDBaseT™ delivers Ultra HD (4K2K@30Hz with YCbCr 4:4:4 and 4K2K@60Hz with YCbCr 4:2:0)
- Fully compliant with HDMI 1.4, and compatible with HDMI 2.0 (4K2K 60Hz with 4:2:0 coding)
- Supports all standard formats of audio, such as Dolby Digital, DTS, Dolby TrueHD, DTS HD-Master Audio and more.
- VGA IN supports up to 1080P@60 (12bits)
- Supports Power over Cable
- HDCP 1.x,2.2 compliant.
- All frequency of IR receiver and emitter (bi-direction).
- RS-232 for upgrade firmware
- Use CAT.5/5e/6 cable to install easily.

Specifications

Function	WVH-EPL	WVH-EPR
HDMI Input Connector	1 (A-Type Female)	NONE
HDMI Output Connector	NONE	1 (A-Type Female)
VGA Input Connector	1	NONE
Source select (HDMI/VGA)	LED SW X1 (BLU/YEL)	
LINK	RJ-45 Connector x 1	
IR IN	3.5ψ Stereo Jack x 1	
IR OUT	3.5ψ Stereo Jack x 1	
Audio In	3.5ψ Stereo Jack x 1	NONE
Max. Resolution	4KX2K@60 4:2:0 (HDMI IN), 1080P@60 12bits(VGA IN)	
Power Adapter (Min.)	DC 48V 0.28A (1x2 Pole Captive Screw Socket)	NONE
Cable Distance	Cat.6@100 meters (Max.)	
RS-232 Connector	1X3 Pole Captive Screw Socket x 1	
Housing	Metal	
Weight	265g	260g
Dimensions (LxWxH)	107x92x45mm	107x92x39mm

FRONT VIEW
WVH-EPL
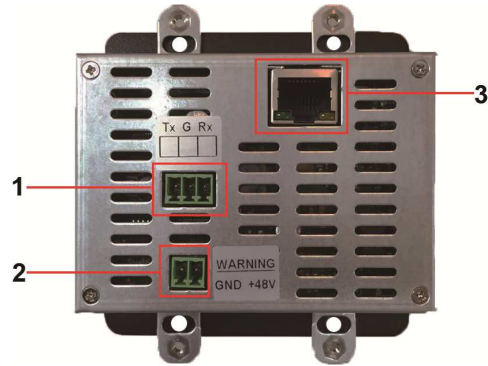

1. Source select (HDMI/VGA)
2. 1x HDMI Input Connector (A-Type Female)
3. IR Input
4. IR Output
5. VGA Input Connector
6. Audio Input

WVH-EPR

355g

1. 1x HDMI Output Connector (A-Type Female)
2. IR Input
3. IR Output

REAR VIEW
WVH-EPL

1. RS-232 Connector (1X3 Pole Captive Screw Socket)
2. DC 48V (1x2 Pole Captive Screw Socket)
3. Link (RJ-45 Connector)

WVH-EPR

1. RS-232 Connector (1X3 Pole Captive Screw Socket)
2. Link (RJ-45 Connector)

Installation
1. Turn off the HDMI source and HDMI display.
2. Connect the HDMI/VGA cable between the HDMI/VGA source and the "HDMI/VGA IN" port of WVH-EPL.
3. Connect the HDMI cable between the HDMI display and the "HDMI OUT" port of WVH-EPR.
4. Connect the CAT.5/5e/6 cables between the WVH-EPL "LINK" port and the WVH-EPR "LINK" port of extender.
5. Connect the power cord of WVH-EPL.
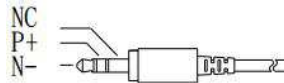5. Turn on the HDMI/VGA source and display.

IR Receiver Cable Directions:
Put it into the WVH-EPL/R "IR IN" port and place the IR Receiver Cable, so that you can point to it easily with your IR remote controller.
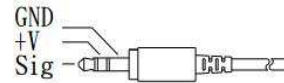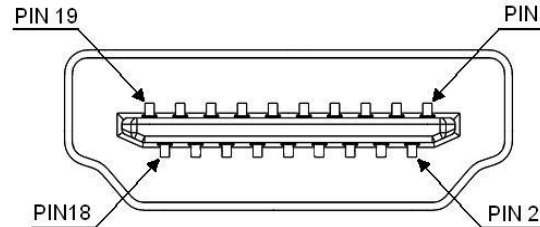

IR Blaster Cable Directions:
Plug IR blaster cable plug into WVH-EPL/R "IR OUT" port, It sits in front of the DVD receiver's IR sensor, which is located on the front-panel.
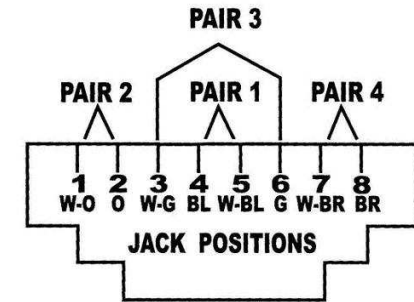

Technical Specifications Output Signal

Pin #	Signal	Pin #	Signal
1	TMDS Data 2+	11	TMDS Clock Shield
2	TMDS Data 2 Shield	12	TMDS Clock -
3	TMDS Data 2-	13	CEC
4	TMDS Data 1+	14	Reserved (N.C. on device)
5	TMDS Data 1 Shield	15	SCL
6	TMDS Data 1-	16	SDA
7	TMDS Data 0+	17	DDC/CEC Ground
8	TMDS Data 0 Shield	18	+5 Power
9	TMDS Data 0-	19	Hot Plug Detect
10	TMDS Clock+		

Wiring Information & Coding

Conductor Identification	RJ-45 Pin Assignment	Color Code for Conductor
Pair 1	5	White-Blue
Pair 1	4	Blue
Pair 2	1	White-Orange
Pair 2	2	Orange
Pair 3	3	White-Green
Pair 3	6	Green
Pair 4	7	White-Brown
Pair 4	8	Brown

TxGRx (only upgrade firmware):
Use the transmission line with RS-232 to connect the PC for upgrade firmware(local and remote).
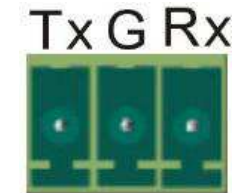
Rx /G /Tx:
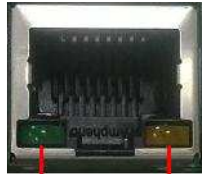   Rx: Receive RS232-level signal pin. (data in)
    G: GND
    Tx: Transmit RS232-level signal pin. (data out)

Power Connector:



GND +48 V

OUTPUT LED:

FW   LINK

FW: When blinking, this LED indicates that the unit's firmware has been loaded, and that the system is operating normally.

LINK: When lit, this LED indicates that an HDBaseT connection has been established between the TX and the RX boards over the CATx cable.

Note

However sometimes, especially in demonstrations or in a lab environment, the cable is rolled randomly in small turns for convenience. The randomly rolled UTP cable suffers additional signal impairments (compared to a straight cable) and therefore the maximal operating reach might be reduced.

Rolling a CAT5E cable around a 70cm fixed diameter plastic drum has just a minor effect on the FEXT (Far End Cross Talk) when compared to a fully stretched cable.
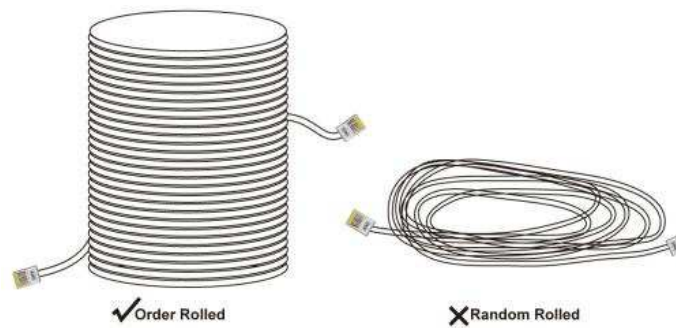
✓Order Rolled   ✗Random Rolled

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