

VEO-XPS47

HDMI® EXTENDERS
4K 18Gbps HDMI® Extender Kit with Audio Extraction



USER MANUAL

PRECAUTIONS

WARRANTY & ENVIRONMENT

CONTENTS

DESCRIPTION & FEATURES

PANEL



TABLE OF CONTENTS

1.	PRECAUTIONS	3
	1.1 Important Notice	3
	1.2 Key Safety Directions	4
	1.3 Cleaning Directions	4
2.	WARRANTY & ENVIRONMENT	5
3.	PACKAGE CONTENTS	5
4.	DESCRIPTION & FEATURES	6
	4.1 Main Features	6
5.	PANEL FUNCTIONS	7
	5.1 Transmitter Front and Rear Panel	7
	5.2 Receiver Front and Rear Panel	8
6.	INSTALL & CONNECT	9
7.	TECHNICAL DATA	11
	7.1 Technical Specifications	11
	7.2 Mechanical Diagram	13
	7.2.1 Transmitter	13
		4.0



1. PRECAUTIONS

1.1 Important Notice







WARNING: SHOCK HAZARD - DO NOT OPEN
AVIS: RISQUE DE CHOC ÉLECTRIQUE - NE PAS OUVRIR



The flashing light with an arrowhead symbol inside an equilateral triangle on it is intended to alert the user of the presence of non-insulated "dangerous voltage" within the enclosure, which might be of sufficient magnitude to pose a risk of electric shock to users.



The exclamation mark within an equilateral triangle is intended to alert the user of the requirement for important operating and maintenance (servicing), for which instructions may be found in the literature accompanying the appliance.

WARNING (If applicable): Terminals marked with symbol "Z" may be of sufficient magnitude to pose a risk of electric shock. The external wiring connected to terminals requires installation by a technician, or the use of ready-made leads or cords.

WARNING: To prevent fire or shock hazard, do not expose this equipment to rain or humidity.

WARNING: A device with Class I manufacturing ought to be connected to a mains socket outlet with a protective earthing connection.



WARNING: Ecler products have a long lifetime of more than 10 years. This product must never be discarded as unsorted urban waste, but must be taken to the nearest electrical and electronic waste treatment centre.

1.2 Key Safety Directions

- 1. Read the following directions.
- 2. Keep the following directions.
- 3. Heed all warnings.
- 4. Follow all directions.
- **5.** Do not use this device in proximity to water.
- 6. Clean only with a dry cloth.
- **7.** Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that may release heat.
- 9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades, being one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, contact a qualified electrician for a replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched, particularly at the plugs, convenience receptacles, and at the point of exit from the device.

- **11.** Only use attachments/accessories specified by the manufacturer.
- **12.** Unplug the device during lightening sorts or when unused for long periods of time.
- 13. Refer all servicing to qualified personnel. Servicing is required when the device has been damaged in any way, such as power supply cord or plug damage, liquid spillage or objects onto the device, the device has been exposed to rain or humidity, does not operate normally, or has been dropped.
- 14. Disconnecting from mains: When switching off the POWER switch, all the functions and light indicators of the unit will be stopped, but fully disconnecting the device from mains is done by unplugging the power cable from the mains input socket, therefore, it should always remain easily accessible
- **15.** Equipment is connected to a socketoutlet with an earthing connection by means of a power cord.
- **16.** The marking information is located at the bottom / rear of the unit.
- 17. The device shall not be exposed to dripping or splashing liquids, and no liquid-filled objects, such as a filled up glass, shall be placed on top of the device.

1.3 Cleaning Directions

Clean the unit with a soft, dry clean cloth or slightly wet with water and neutral liquid soap only, then dry it with a clean cloth. Be careful that water never gets into the unit through any hole. Never use alcohol, benzine, solvents or abrasive substances to clean this unit.

NEEC AUDIO BARCELONA, S.L. accepts no liability for any damage that may be caused to people, animal, or objects due to failure to comply with the warnings above.

2. WARRANTY & ENVIRONMENT

Thank you for choosing our Ecler VEO-XPS47! We greatly value your trust.

It is VERY IMPORTANT to carefully read this manual and to fully understand its contents before any connecting takes place in order to make the best use of this equipment, as well as to get the best performance from it.

To ensure optimal operation of this device, we strongly recommend that its maintenance be carried out by our authorised Technical Services.

All ECLER products are covered by warranty, please refer to www.ecler.com or the warranty card included with this product for the period of validity and conditions.



Ecler is truly committed with the environment and planet sustainability, energy saving and CO₂ emission reduction. Recycling materials and using non-contaminant components are also top priorities in our green crusade.

Ecler has deeply evaluated and analyzed the environmental impacts of all the processes involved in the production of this product, including packaging, and has alleviated, reduced and/or compensated for them.

3. PACKAGE CONTENTS

- 1 x VFO-XPS47 Transmitter Unit
- 1 x VFO-XPS47 Receiver Unit
- 1 x 12VDC 1A International Power Supply (One PSU for both units).
- 1 x IR Receiver unit.
- 1 x IR Blaster unit.
- 4 x Mounting ears.
- 8 x Mounting screws.
- 1 x USB 2.0 Cable.
- 2 x Euroblock plugs for RS-232 and audio cable termination.
- 1 x Firmware Update USB Adapter for Firmware update (<u>if help is needed to update the Firmware</u>, please contact our Tech. Support department).
- First Steps Guide.
- Warranty card.



4. DESCRIPTION & FEATURES

VEO-XPS47 is an HDMI® 18Gbps extender kit that enables 4K 50Hz 4:4:4 video signals to be extended up to 70 meters with zero latency over a single Cat 5e or higher cable. It features stereo unbalanced audio extraction via Euroblock connectors on both the transmitter and receiver, as well as EDID management, IR signal pass-through, and bidirectional PoC support, making it a simple and cost-effective solution for professional extension applications.

4.1 Main Features

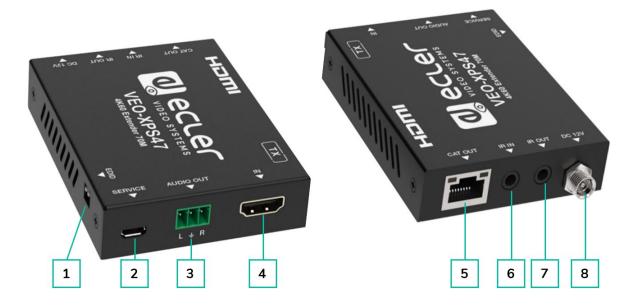
- Transmitter and receiver set for signal extension over a single Cat 5e or higher cable.
- Support for HDMI[®] 18Gbps 4K 60Hz 4:4:4 as specified in HDMI[®] 2.0b.
- Transmission distance for 4K/50Hz up to 70 meters and 4K/60Hz up to 30 meters.
- Stereo unbalanced audio extraction via Euroblock connectors on both the transmitter and receiver.

- Support for HDR10, HDR10+, Dolby Vision, and HLG.
- Support for audio formats LPCM 7.1, Dolby True HD, DTS HD Master.
- Bidirectional IR control extension.
- EDID management.
- HDCP 2.2 compliant.
- Bidirectional PoC function.



5. PANEL FUNCTIONS

5.1 Transmitter: Front and Rear Panel



- 1. EDID: The switch is used for selecting EDID. In the right position, the extender will copy the HDMI® loop out display EDID information to the source; In the left position the extender will copy the receiver display EDID to the source.
- **2. SERVICE:** Micro-USB port for firmware upgrade and user-defined EDID upload.
- **3. AUDIO OUT:** Stereo unbalanced audio extraction.
- 4. IN: HDMI® input connector

- 5. CAT OUT: Connect it to the receiver input port using a Cat 5e or higher cable. Only point-to-point connections are allowed.
- **6. IR IN:** 3.5mm jack to connect the IR receiver for IR pass-through.
- **7. IR OUT:** 3.5mm jack to connect to the IR Blaster for extending an IR signal from the display to the source.
- **8. DC 12V:** Connect this port to the 12Vdc included power supply.



5.2 Receiver: Front and Rear Panel



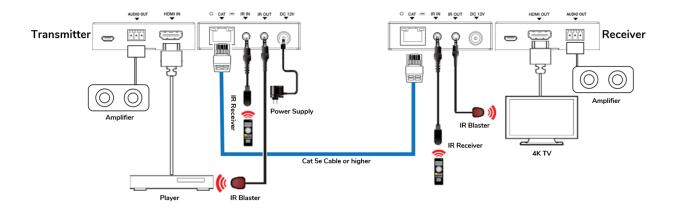


- **1. SERVICE:** Micro-USB port for firmware upgrade and user-defined EDID upload.
- **2. OUT:** HDMI[®] output. Connect it to the end device (e.g. 4K TV screen).
- **3. AUDIO OUT:** Stereo unbalanced audio extraction.
- 4. CAT IN: Connect it to the transmitter input port using a Cat 5e or higher cable. Only point to point connections are allowed.

- **5. IR IN:** Connect it to the included IR Receiver for extending an IR signal from the display to the source.
- **6. IR OUT:** 3.5mm jack to connect the IR receiver for IR pass-through.
- **7. DC 12V:** Connect this port to the 12Vdc included power supply.



6. INSTALL & CONNECT

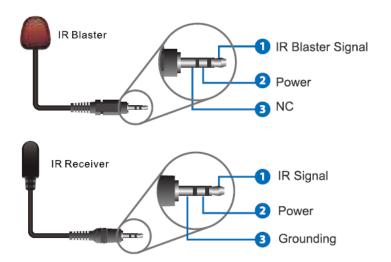


Good quality standard Ethernet Cat 5e cables (or higher) are required to connect transmitter and receiver in order to avoid connection issues and malfunctioning. Shielded cables and shielded connectors are mandatory to ensure a good ground signal reference to the receiver and avoid electromagnetic interferences along the cable.



Please insert/extract the HDMI® cables gently.

- 1. HDMI[®] signal sources such as Blu-Ray Player, STB, etc: connect devices to the HDMI[®] input of VEO-XPS47 transmitter.
- 2. HDMI[®] Display devices such as a 4K or 1080p display or projector: connect devices to the HDMI[®] port of VEO-XPS47 receiver.
- 3. IR Blaster: connect it to the IR-Out port of VEO-XPS47 transmitter and/or receiver
- 4. IR Receiver: connect it to the IR-In port of VEO-XPS47 transmitter and/or receiver.



5. Amplifiers or Audio devices: connect to Audio ports of VEO-XPS47 transmitter and/or receiver.



PRECAUTIONS

WARRANTY & ENVIRONMENT

PACKAGE CONTENTS

DESCRIPTION & FEATURES

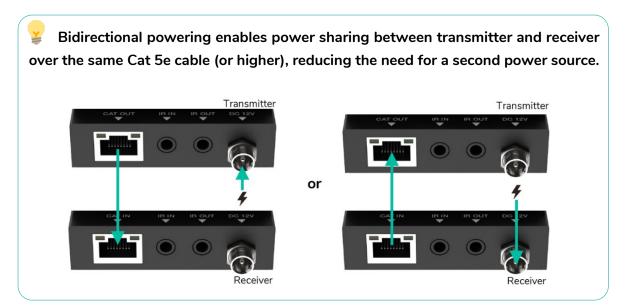
PANEL FUNCTIONS

INSTALL & CONNECT

> TECHNICAL DATA



- **6.** Connecting Transmitter & Receiver: connect a Cat 5e or higher cable from RJ-45 output of transmitter to RJ-45 input of receiver
- 7. Power on: connect the 12VDC power supply to the VEO-XPS47 transmitter or receiver. Please note that only one of them needs to be plugged into the mains socket and both will work.





PRECAUTIONS

WARRANTY & ENVIRONMENT

PACKAGE CONTENTS

DESCRIPTION & FEATURES

ECLECVIDEO SYSTEMS

7. TECHNICAL DATA

7.1 Technical Specifications

VEO-XPS47

Video Performances	
Video Input Connectors	Transmitter: 1 x HDMI® Type A Female, 2.0, 18Gbps;
	1 x RJ-45 Female
Video Output connectors	Receiver: 1 x HDMI® Type A Female, 2.0, 18Gbps;
·	1 x RJ-45 Female
Video Input Resolutions	480i, 480p, 720i, 720p, 1080i, 1080p up to 60Hz, 4K up to 60Hz
Video Output Resolutions	480i, 480p, 720i, 720p, 1080i, 1080p up to 60Hz, 4K up to 60Hz
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0
Colour Depth	8-bit (4K 60Hz 4:4:4), 10-bit / 12-bit (4K 60Hz 4:2:2 – 4:2:0)
Colour Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
HDCP	HDCP 2.2
HDR	HDR10, HDR10+, Dolby Vision, HLG
HDMI® Distance	Up to 4K/60Hz: 5m with IN/OUT HDMI® Cable
Audio Performances	
Audio Formats	LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD,
	Dolby Digital Plus(DD+), DTS-ES, DTS HD Master, DTS
	HD-HRA, DTS-X
Sample Rate	48 KHz, 96 KHz, 192 KHz
Bit Depth	Up to 24-bit
Frequency Response	20Hz-20KHz (±3dB)
Device Control	4. 818.0 %
Control Connectors	1 x DIP Switch
EDID Management	EDID Copy, EDID Setting
Status Indicators	Link Status LEDs
Pass-Through Control Pass-through Connectors	1 x Jack 3,5mm
Pass-through Protocols	IR
Connection Specification	IN
HDMI® extension	Point-to-Point extension with zero latency
Transmission Distance	4K/50Hz up to 70m with Cat 5e or higher
Transmission Distance	4K/30Hz up to 30m with Cat 5e or higher
Electrical	114 con 12 up to com with out oc of migner
Power Supply	PoC bidirectional; External:Input 100-240VAC 50/60Hz 0.3A,
,	Output DC 12VDC-1A
AC Mains Connector	External PSU. Included 4 region power blades (UK,US,AU,EU)
DC Mains Connector	DC Locking
Power Consumption	3.36W
Physical	
Operating Temperature	Min: 0°C; 32°F
	Max: 40°C; 104°F
Operating Humidity	20 - 80% RH, non-condensing
Storage temperature	Min: -20°C ; -4°F
	Max: 60°C ; 140°F
Storage humidity	10% - 90% RH, non-condensing
Installation options	Mounting ears for table, wall or screwed

Included Accessories 1 x IR Receiver cable (1.5 meters), 1 x IR Blaster cable (1.5 meters), 2

 \times 3-pin 3.5mm Euroblock connector, 4 x Mounting ears, 8 x Mounting screw, 1 x USB 2.0 Cable, 1 x Firmware Update USB Adapter, 1 x

PSU 12V/1A

Dimensions (WxHxD) Transmitter/ Receiver: $90 \times 18 \times 68$ mm / $3.54 \times 0.71 \times 2.68$ in

Shipping Dimensions (WxHxD) $215 \times 75 \times 135$ mm / $8.47 \times 2.95 \times 5.31$ in

Weight Transmitter: 0.160 Kg / 0.35 lb

Receiver: 0.155 Kg / 0.34 lb

Shipping Weight Chassis Material Finished Colour 0.7kg / 1.54 lb Metal

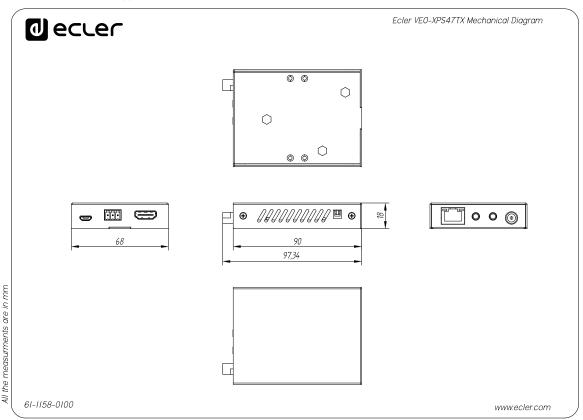
Black



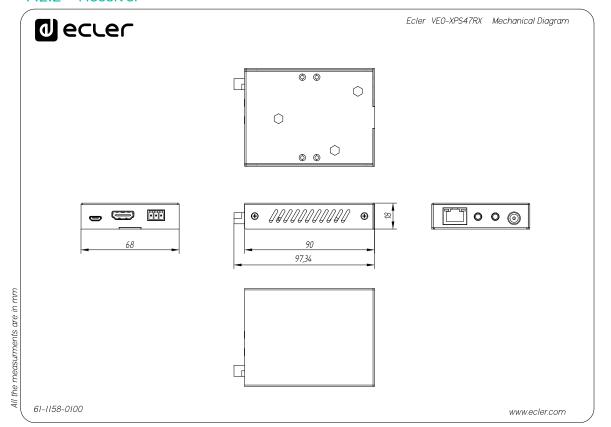
7.2 Mechanical Diagram

All measurements are in mm.

7.2.1 Transmitter



7.2.2 Receiver



1

PRECAUTIONS

WARRANTY & ENVIRONMENT

PACKAGE CONTENTS

DESCRIPTION & FEATURES

PANEL ONCTIONS

CONNECT

DATA





PRECAUTIONS

WARRANTY & ENVIRONMENT

PACKAGE CONTENTS

DESCRIPTION & FEATURES

PANEL

TECHNICAL DATA



All product characteristics are subject to variation due to production tolerances. **NEEC AUDIO BARCELONA S.L.** reserves the right to make changes or improvements in the design or manufacturing that may affect these product specifications.

For technical queries contact your supplier, distributor or complete the contact form on our website, in <u>Support / Technical requests.</u>

Motors, 166-168 | 08038 Barcelona, Spain | Tel. (+34) 932238403 | information@ecler.com | www.ecler.com