

EX-EARC-100-10

NETVIO

100M (331FT) EARC EXTENDER



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Safety Information



Do not attempt to remove the product casing, as this may result in electrical shock. Repairs should not be attempted by anyone other than qualified personnel. For any service or repair needs, please contact Netvio Ltd or an authorized reseller to follow the proper service procedures. Any unauthorized repairs or the use of non-approved components will void the product warranty. For complete warranty terms and conditions, please visit: www.netvio.co.uk.

Netvio's EX-EARC-100-10 extender over category cable is a versatile solution designed to extend high-quality audio signals across long distances using standard Ethernet cables, typically Cat5e, Cat6, or higher. This device enables the transmission of eARC signals, including high-resolution audio formats, such as Dolby Atmos and DTS:X, from a source to a display or audio system. It is ideal for setups where direct HDMI connections are impractical due to distance limitations, offering a more streamlined and efficient cabling infrastructure while maintaining the integrity of the signal.

CABLE & CONNECTIONS

- **Important Notice on Cable Installation and Performance**
- Advertised cable distances are for reference only. Transmission distances can be influenced by various factors, including cable construction, quality, installation standards, patch panels, faceplates, and external elements such as electromagnetic interference (EMI).
- This product is designed to operate over unshielded twisted pair (UTP) Cat5e, Cat6, and Cat7 cables. When using shielded (STP) category cables, ensure that all drain wires and shielding are properly grounded.
- **RJ45 Termination Standards:**
- Follow the EIA/TIA-568-B termination standard. Do not simply wire pin-to-pin (e.g., Pin 1-1, Pin 2-2). The 568-B standard requires splitting the green pair between Pins 3 and 6.
- Maintain the twists in the Cat5e/Cat6/Cat7 cable pairs as close as possible to the point of termination.
- **Cable Installation Guidelines:**
- Avoid sharp bends or twists. Use gradual bends, with a minimum bend radius of 25mm wherever possible.
- Ensure that cables are not pulled too tightly or stretched. Excess tension can damage the cable. The maximum pulling force should not exceed 11kgf.
- Dress the cable with moderate to low pressure, ensuring the cable jacket is not pinched.
- Never splice, join, or bridge the cable, as this can cause significant transmission issues.
- **Electromagnetic Interference (EMI):**
- Keep category cables at least 300mm away from sources of EMI, such as electrical cables, transformers, and light fixtures. If necessary, cross electrical cables at right angles to minimize interference.
- **Testing and Certification:**
- After installation, ensure that the cable is thoroughly tested. A basic continuity check may not be sufficient to identify issues or certify performance.
- Finally, always verify compliance with local building and fire codes before installation.

IN-THE-BOX

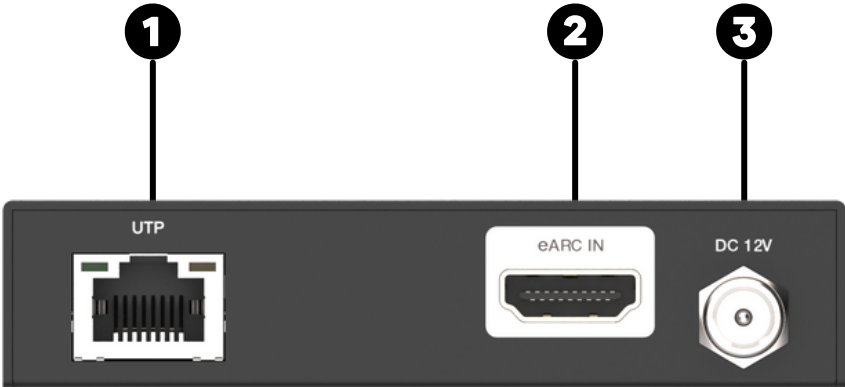
- 1 × HDMI eARC Extender Transmitter
- 1 × HDMI eARC Extender Receiver
- 1 × 12V/1A Locking Power Adapter
- 1 × Mounting hardware (4 ears, 8 screws)

WARRANTY

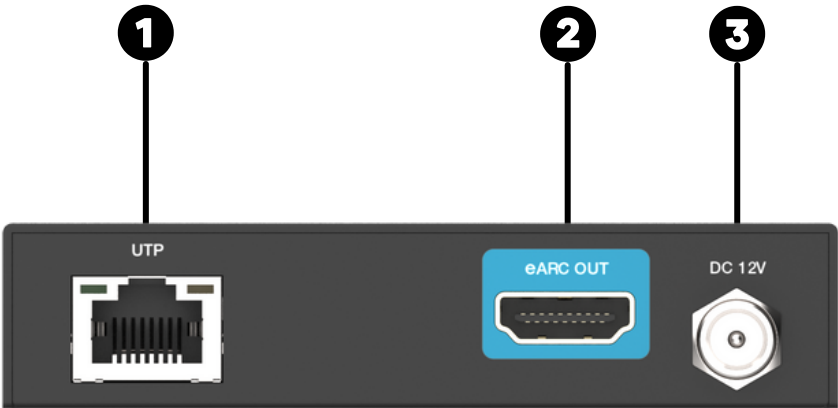
- Standard 5-Year warranty. Details available at www.netvio.co.uk/warranty

EX-EARC-100-10

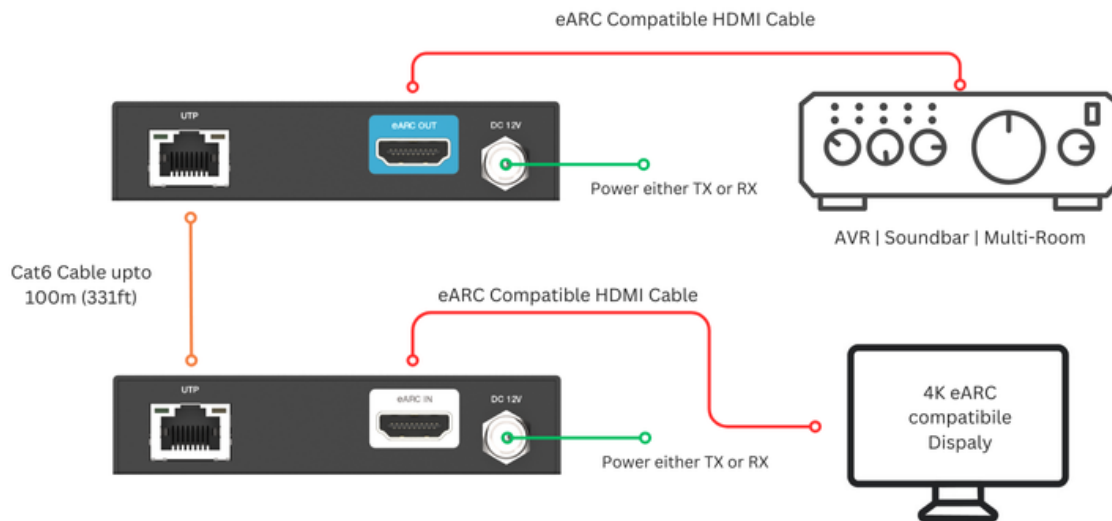
Connectivity



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|----------|--------------------------|---|
| 1 | CAT Cable Output | Cat5e/Cat6/Cat6a cable connection using standard 8-pin RJ45 connectors. |
| 2 | EARC (HDMI) Input | Connection with display ARC/eARC HDMI compatible output, using good quality HDMI cable. |
| 3 | DC 12V Power | Connection of Power Supply Unit. Connection can be made at transmitter or receiver. |



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|----------|--------------------------|---|
| 1 | CAT Cable Output | at5e/Cat6/Cat6a cable connection using standard 8-pin RJ45 connectors. |
| 2 | EARC (HDMI) Input | Connection with display ARC HDMI compatible output, using good quality HDMI cable. |
| 3 | DC 5V Power | Connection of Power Supply Unit. Connection can be made at transmitter or receiver. |



- **Connect the HDMI cables:**
 - Connect the HDMI eARC port of the display to the HDMI connector of the TX unit.
 - Connect the HDMI port of the RX unit to the HDMI eARC port of the AVR.
- **Verify connectivity:**
 - Ensure that both the TX and RX units of the extender set have a power light on.
 - Check that there are link lights on the UTP ports of both the TX and RX units.
- **Enable CEC:**
 - Enable CEC (Consumer Electronics Control) on both the display and AVR. Note that CEC may be called by different names depending on the manufacturer (e.g., BRAVIA Sync, Simplink, or Anynet+). Refer to your manufacturer's guide to enable CEC on your devices.
 - Once CEC is enabled, the devices should power on and off together. Test this function now to ensure it's working.
- **Configure Audio Output settings:**
 - On the display, navigate to the Sound or Audio Output settings and enable the eARC feature. This may be located under an ****Advanced**** or **Additional Settings** menu.
 - If eARC is already enabled, try disabling and re-enabling it to force renegotiation between the HDMI ports of the display and AVR.
 - Test whether audio is playing from the display's internal speakers before switching back to eARC audio out.
- **Check AVR compatibility:**
 - Verify that your AVR supports all the audio formats your display and source devices can generate.
 - If unsure, use Auto or passthrough modes and try disabling object-based, HD, and Master audio formats.
 - After making changes, power both devices off and on to allow renegotiation of their settings.
- **Update firmware:**
 - Ensure that both your display and eARC receiver are updated to their latest firmware versions. Some devices may not have complete CEC or eARC functionality with their factory firmware, making updates essential for resolving issues.
- **Reset HDMI ports (if issues persist):**
 - If previous steps don't work, reset the HDMI ports on both the display, AVR, and extender set by disconnecting all devices from their power sources for at least 5 minutes. Do not just place them in standby mode, as their HDMI ports may still receive power and won't fully reset.
- **Perform factory resets(as a last resort):**
 - If the problem persists, perform a factory reset on both the display and AVR, starting with the display, as it's more likely to be causing issues.
 - After resetting, reconfigure both devices for CEC and eARC operation before testing again.

Technical	
Supported Audio Formats	eARC: PCM 2.0/5.1/7.1ch, DD, DD+, DTS, Dolby TrueHD, DTS-HD MA, Dolby Atmos ARC: PCM 2.0CH, Dolby 5.1CH, DTS 5.1CH
Transmission Distance	100m/328ft
ESD Protection	Human-body Model: ±8kV (Air-gap discharge), ±4kV (Contact discharge)
Connection	
Transmitter	Input: 1 × eARC IN [HDMI Type A, 19-pin female] Output: 1 × CAT OUT [RJ45, female] Control: 1 × SERVICE
Receiver	Input: 1 × CAT IN [RJ45, female] Output: 1 × eARC OUT [HDMI Type A, 19-pin female] Control: 1 × SERVICE

Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	Transmitter/Receiver: 90mm[W] × 72mm[D] × 20mm[H]
Weight	Transmitter/Receiver: 184g
Power Supply	Input: AC 100~240V 50/60Hz Output: DC 12V/1A (US/EU standard, CE/FCC/UL certified)
Power Consumption	5.65W (Max)
Operating Temperature	0°C~40°C / 32°F~104°F
Storage Temperature	-20°C~60°C / -4°F~140°F
Relative Humidity	20%~90% RH (non-condensing)