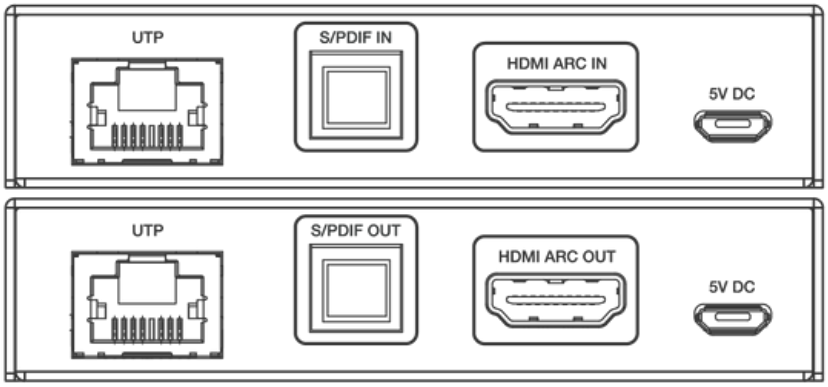
EX-ARC-150-10

NETVIO

150M ARC EXTENDER

WITH ALTERNATIVE S/PDIF CHANNEL



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Safety Information

Attempts to remove product casings could result in electrical shock. Please do not attempt to repair the device. In the event of product service requirements, please contact Netvio Ltd or an authorised reseller for service procedures. Any unauthorised attempt to repair the product or attempts to replace components with non-approved parts will invalidate the product warranty. For full warranty conditions, please visit www.netvio.co.uk

Netvio's **EX-ARC-150-10** extender over category cable is a cutting-edge solution that extends the capabilities of Audio Return Channel (ARC) over long distances, while supporting S/PDIF for unsupported displays. Designed to enhance audio connectivity in home theater systems, the EX-ARC-150-10 extender enables ARC support up to an impressive distance of 150 meters using Category cable.

With this extender, users can seamlessly transmit audio signals from their ARC-compatible display to an external audio device, such as an AV receiver or soundbar, over an extended range without compromising on audio quality.

This allows for flexible placement of audio equipment and eliminates the need for additional signal amplification or dedicated audio cables, providing a convenient and reliable solution for achieving ARC functionality in larger setups.

CABLE & CONNECTIONS

- Advertised cable distances are for guidance only. Many factors can effect transmission distances including cable construction, quality, install standards, patch panels, faceplates and external factors such as electromagnetic interference (EMI).
- This product is designed to run over unshielded twisted pair Cat5e/6/7 cable. Some consideration is required when installing shielded (STP) category cable ensuring all drain wires and shielding are correctly grounded.
- All RJ45 terminations should follow EIA/TIA-568-B terminations and not simply wired Pin 1-1, Pin 2-2.The 568-B standard involves the splitting of the green pair to pins 3 & 6.
- Maintain twists within the Cat5e/Cat6/Cat7 cores up to the point of termination.
- Maintain gradual bends when installing category cable, ensuring a minimum radius of 25mm where possible. Avoid sharp bends or twists in the cable avoiding taught or stretched cable at all times.
- When dressing the cable use moderate to low pressure, avoiding pinching of the cable jacket.
- Do not splice, join or bridge the cable at anytime, as this will undoubtedly cause transmission issues.
- Use moderate to low pressure when pulling category cable avoiding pressures in excess of 11kgf (of force).
- Keep category cable away from sources of EMI (electrical cables, transformers, light fixtures) ensuring a minimum parallel distance of 300mm, crossing at right angles if absolutely necessary.
- Ensure cable is correctly tested, understanding that a basic continuity check may not be sufficient to identify issues or to certify cable performance.
- Always check local regulations relating to building and fire codes.

IN-THE-BOX

- 1pc HDMI Audio Extender (Transmitter)
- 1pcs HDMI Audio Extender (Receiver)
- 2x USB Power Cables
- 2x 5V/1A Power Adaptors

WARRANTY

- Standard Warranty details available at www.netvio.co.uk/warranty

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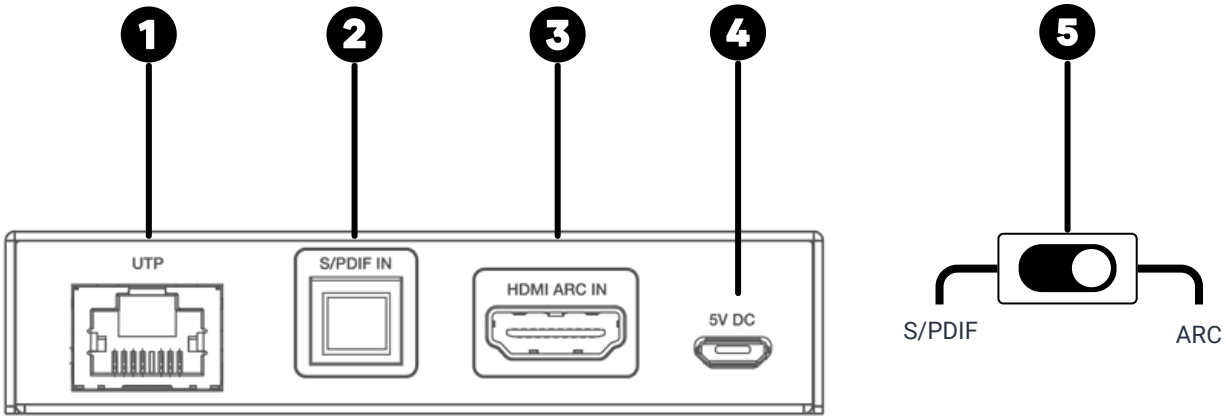
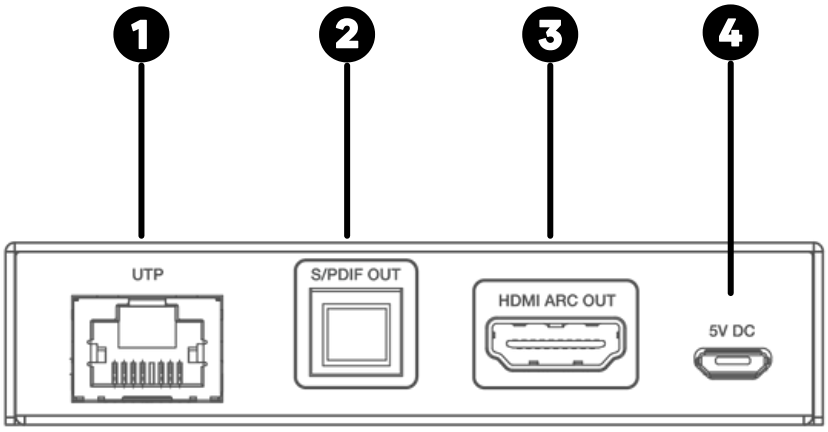


1	**CAT Cable Output**	Cat6/Cat6a cable connection using standard 8-pin RJ45 connectors. See specification table for transmission distances.
2	**S/PDIF Input**	Optical fiber audio input port for use with Optical Toslink cable.
3	**ARC (HDMI) Input**	Connection with display ARC HDMI compatible output, using good quality HDMI cable.
4	**DC 5V Power**	Connection via Micro USB power lead.
5	**S/PDIF | ARC Selector**	**Front panel** selector switch to select between HDMI ARC or S/PDIF optical connection.



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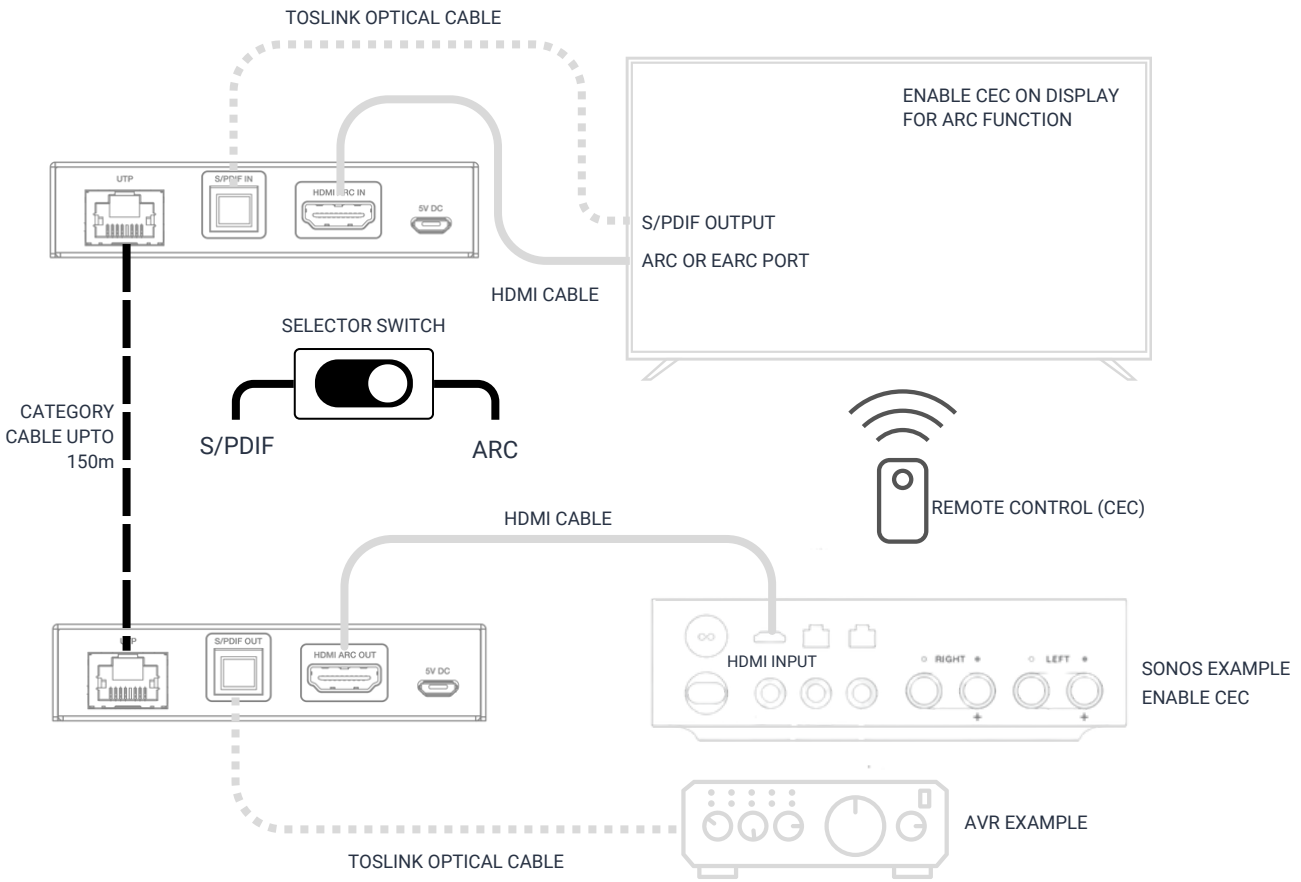

TOSLINK SET-UP GUIDENCE

1. Check that the Netvio EX-ARC-150-10 is connected to the TOSLINK ports of the display and AVR and that the AVR is set to the correct audio input and the volume is up with mute not engaged.
2. Verify that both the TX and RX units of the extender set have a power light on the front panel. Check that there are link lights on the UTP ports of the units.
3. Set the Netvio EX-ARC-150-10 TX to the TOSLINK mode using the switch on the front of the unit.
4. Configure the display's Sound or Audio Output settings to use the digital or TOSLINK output option and choose an audio output format that is compatible with your amplifier. Start with PCM/2.0 stereo audio and then try multi-channel or auto modes.
5. Put your display and amp into standby and switch back on to reset the audio connection.

HDMI ARC SET-UP GUIDENCE

1. Connect the HDMI ARC or EARC port of the display to the HDMI connector of the TX unit. Connect the HDMI port of the RX unit to an HDMI ARC or EARC port of the amp.
2. Verify that both the TX and RX units of the extender set have a power light on and that there are link lights on the UTP ports of the TX/RX units.
3. Set the Netvio EX-ARC-150-10 TX to the HDMI ARC mode using the switch on the front of the unit.
4. Enable CEC on both the display and amp. CEC may have different names depending on your manufacturer, such as BRAVIA Sync, SimpLink or Anynet+. Refer to your manufacturer's guide to find out how to enable CEC on your devices. With CEC enabled your devices should power on and off together so test this function now.
5. Configure the display's Sound or Audio Output settings. Enable the ARC feature, which may be under an Advanced or Additional Settings menu option. If it is already enabled, disable and re-enable it to force a renegotiation of the HDMI ports of the display and amp. Test if there is audio playing from the display's internal speakers before switching back to ARC audio out.
6. Configure the audio format of the display according to your Netvio extender and amplifier's capabilities. If you are not sure what formats your system can support and Auto or passthrough modes are not working, start with PCM/2.0 channel stereo and then try multichannel formats. Power on and off both devices after making these changes to allow them to renegotiate their settings.
7. Update your display and ARC receiver to their latest firmware versions. Some devices may not have a complete CEC or ARC implementation in their factory firmware versions, so updating them may resolve some issues.
8. If none of these steps work, reset their HDMI ports by disconnecting both devices from their power sources for at least 5 minutes. Do not put them in standby mode as their HDMI ports may still receive power and not reset.
9. If you still have issues, perform a factory reset of both devices. Start with resetting your display as it is more likely to be causing problems. Remember to reconfigure your display for both CEC and ARC/EARC operation before testing again.

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Technical	
Supported Audio Formats	PCM 2.0ch, Dolby 5.1ch, DTS 5.1ch
Transmission Distance and Sample Rates	**ARC audio:** 150m/495ft - 96kHz, 90m/295ft - 192kHz **S/PDIF audio:** 150m/495ft - 96kHz
ESD Protection	Human-body Model: ±8kV (Air-gap discharge), ±4kV (Contact discharge)
Connection	
Transmitter	Input port: 1 x S/PDIF IN [Optical Audio Jack] 1 x ARC IN [HDMI Type A, 19-pin female] 1 x Micro-USB Output port: 1 x CAT OUT [RJ45]
Receiver	Input port: 1 x CAT IN [RJ45] 1 x Micro-USB Output port: 1 x S/PDIF OUT [Optical Audio Jack] 1 x ARC OUT [HDMI Type A, 19-pin female]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	Transmitter/Receiver: 90mm (W) × 72mm (D) × 20mm (H)
Weight	Transmitter/Receiver: 175g
Power Supply	DC 5V/1A
Power Consumption (Max)	Transmitter: 0.35W Receiver: 0.7W
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)