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NETVIO RX-HT2-40-10 HDBaseT PoC Receiver with Ethernet User Guide

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Contents

## Quick Start Giulde

Thank you for purchasing this Netvio product. The quick-start-guide is designed to provide all required information to install your product successfully, ensuring correct installation standards, therefore guaranteeing performance in accordance with published features and specifications. Netvio therefore greatly appreciates your time in reviewing the provided information and following our recommended guidelines.

RX-HT2-40-10

4K/60 HDR HDBaseT receiver over single category cable. Capable of sending the latest bandwidth heavy sources over 40m when connected to a compatible matrix device (see specifications for compatibility).
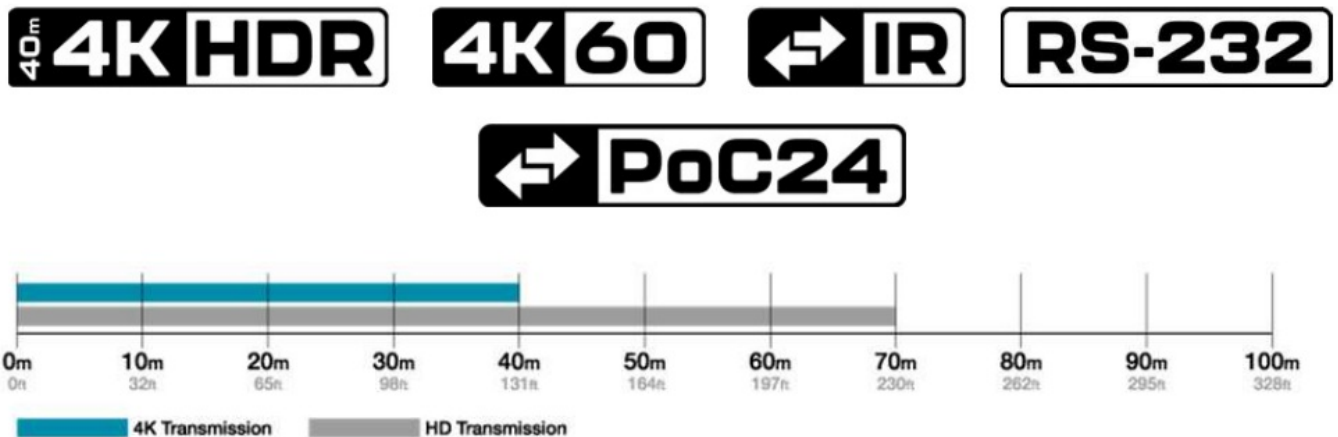
BOX CONTENTS

- Netvio HDBaseT TX & RX Device.
- 2x Wall mount brackets
- 1x Infrared receiver (capture) cables
- 1x Infrared emitter (sender) cables
- 1x 3-way screw termination connectors

WARRANTY INFORMATION

- 2-Year standard parts & labour warranty
- FREE 3-Year warranty subject to product registration.
- 5-Year & 10-Year extended warranty options available.
- Full warranty details including coverage, registration
- warranty extensions available at www.netvio.co.uk

PRODUCT SUPPORT

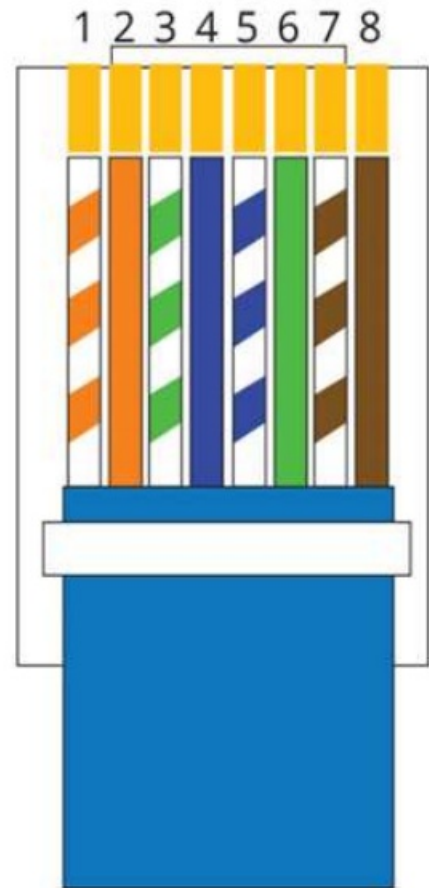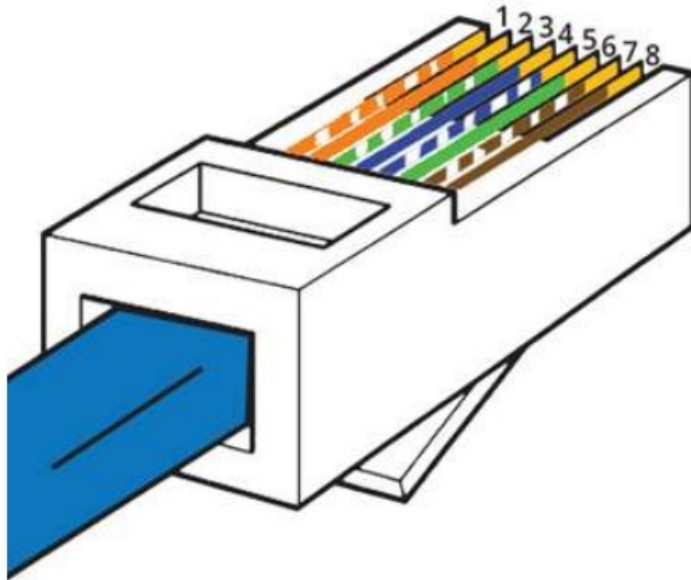Please contact your authorised Netvio reseller.

- **UK/EMEA Support** | **+44 (0) 870 488 7001**
- **US Support** | **+833 720 0637**
- **Email** | **support@netvio.co.uk**
- **Live Chat** | **www.netvio.co.uk**

Cabal and Connector Guidelines

RJ45 Pinout
T-568B

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8

1. White Orange	5. White Blue
2. Orange	6. Green
3. White Green	7. White Brown
4. Blue	8. Brown

- Advertised cable distances are there for a guidance. Many factors can effect transmission distances including cable construction, quality, install standards, patch panels, faceplates and external factors such as electrical magnetic 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 materials 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 25 lbs (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.

Installation Guidelines

- Please ensure you secure the devices especially at the display location using the brackets provided. Transmission stability will be effected if the product is not probably secured especially if connections are strained.
- The device should be installed against a clean, dry and flat surface. The receiver should be installed vertically with all product logos and descriptions facing you to ensure best airflow and cooling.
- Please ensure the device has adequate ventilation, avoiding any type of enclosure or material that will prevent airflow through the product.
- The receiver draws its power from the connected matrix, therefore local power is not required. Although some functionality will work, it

  is not advised to use with other manufacturer products as power-over-cable rating may differ and harm the product.

	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 atte mpts to replace components with non-approved parts will invalidate the product warranty. For full warranty conditions, please visit **www.netvio.co.uk**

Receiver Overview

1	Power Status LED
2	Firmware update port
A	DC 24V Power In | no local PSU required.
B	HDBaseT Input (from display)
C	HDMI Output (to display)
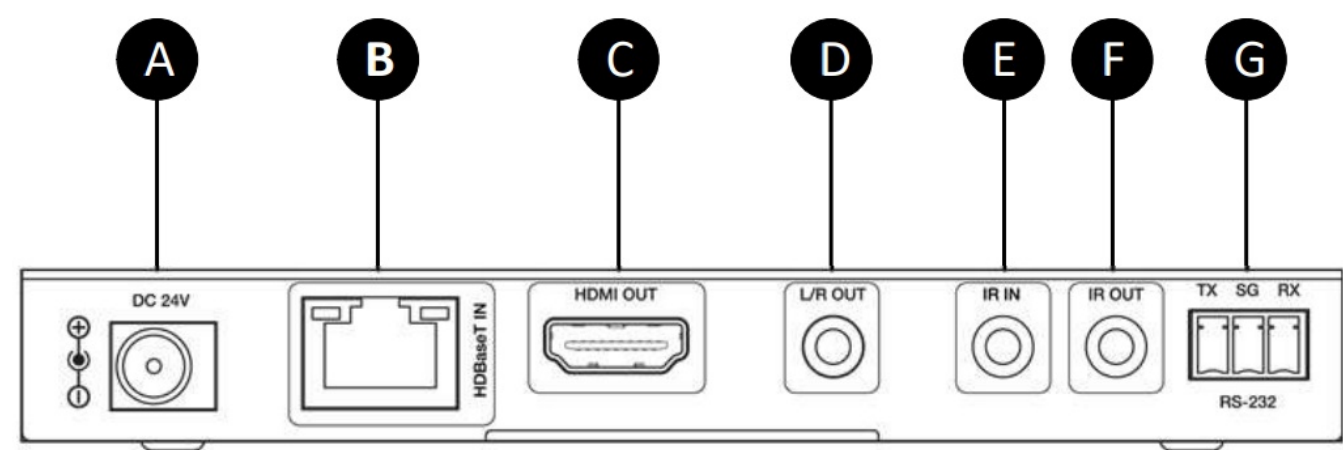
D	Stereo Audio Output
E	IR Capture Port
F	IR Sender Port
G	RS-232 Pass Through

IR Pin Outs

Each Netvio receiver comes complete with all required accessories to fully maximise product features and functionality. We recommend the use of Netvio approved IR accessories to ensure guaranteed performance and compatibility. In perfect conditions, IR performance is rated at 8m from display to remote control, but understanding this will vary in differing light conditions. It may be necessary to adjust both the capture, sender

device positions to achieve best performance, ensuring that remote batteries are in good condition. Should IR ports require connections to a 3rd party device, the following wiring diagrams are provided to ensure successful signal transfer.

IR Receiver (Remote Signal Capture)
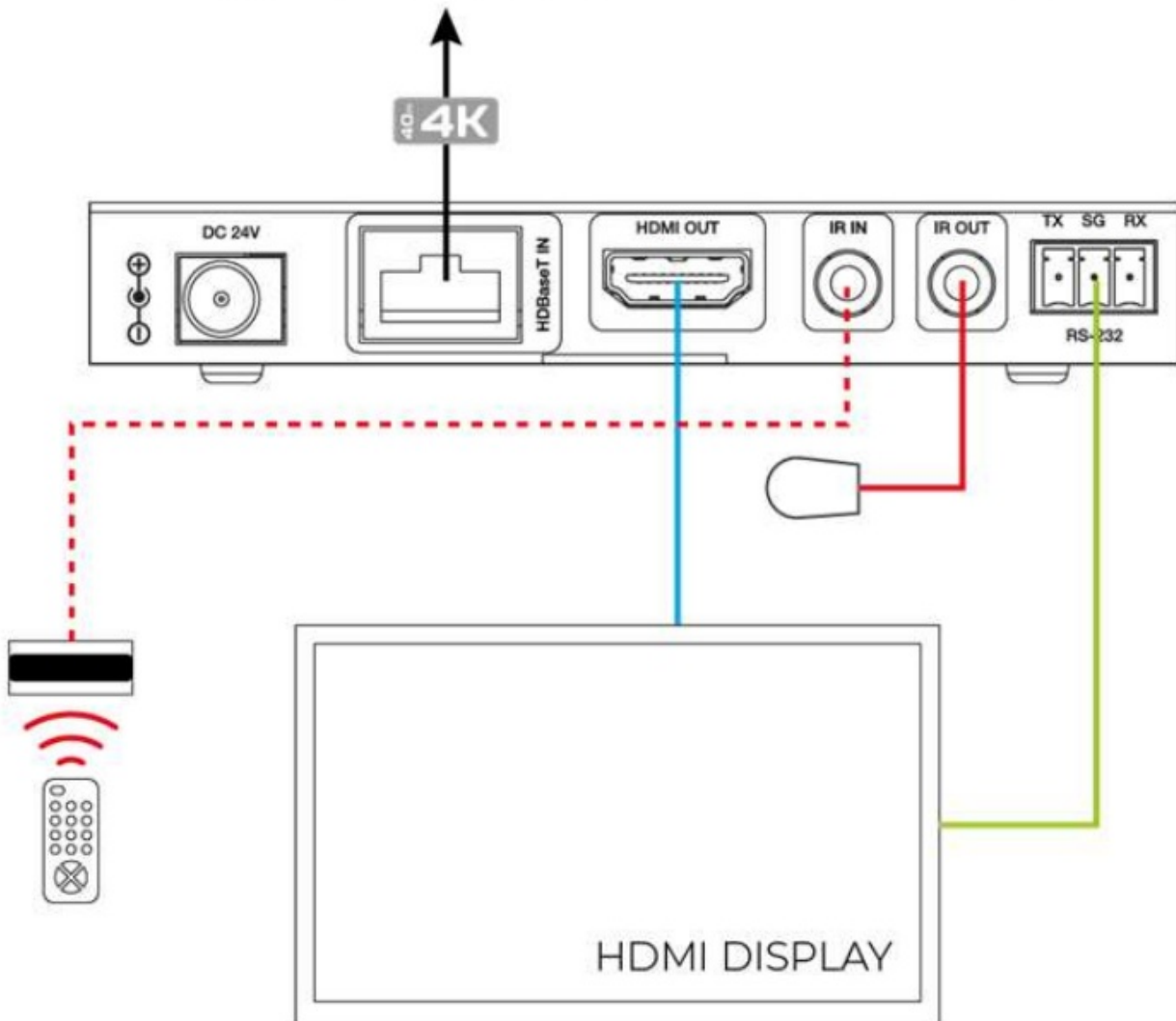
Ground

Power

IR Signal

IR Emitter (Remote Signal Sender)
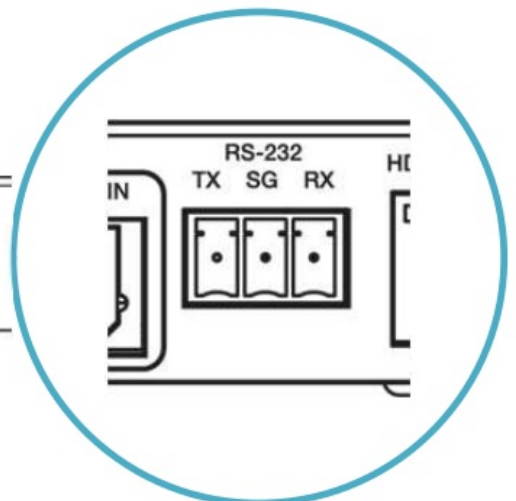
Anode

Cathode
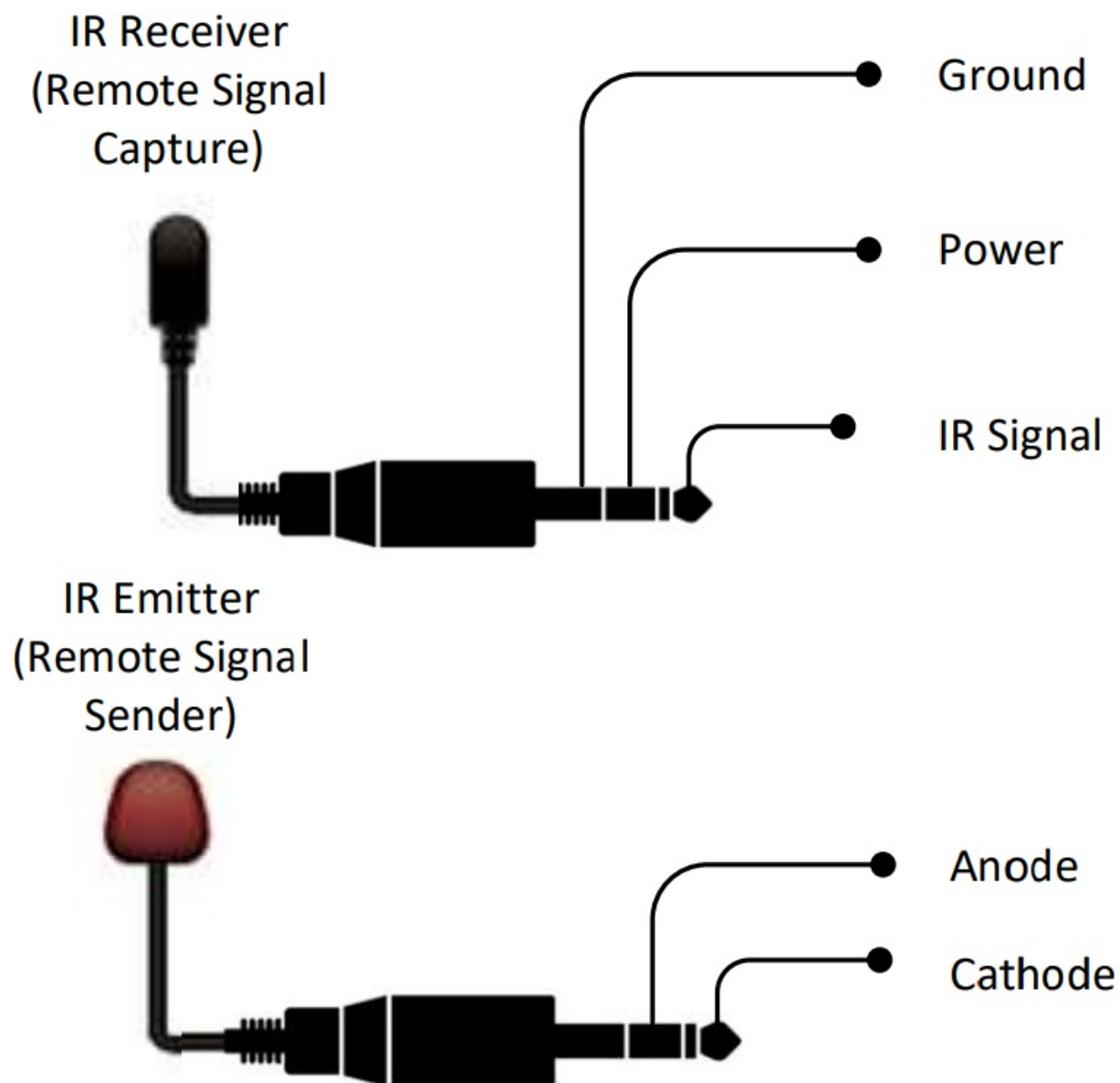
Wiring Schematic

TO MATRIX

MX-HT2-0404-10
MX-HT2-0806-10
MX-HT2-0808-10

IR (Out)
IR (In)
Cat5e/6/6a/7
HDMI
RS-232

4K

DC 24V | HDBaseT IN | HDMI OUT | IR IN | IR OUT | TX SG RX | RS-232

HDMI DISPLAY

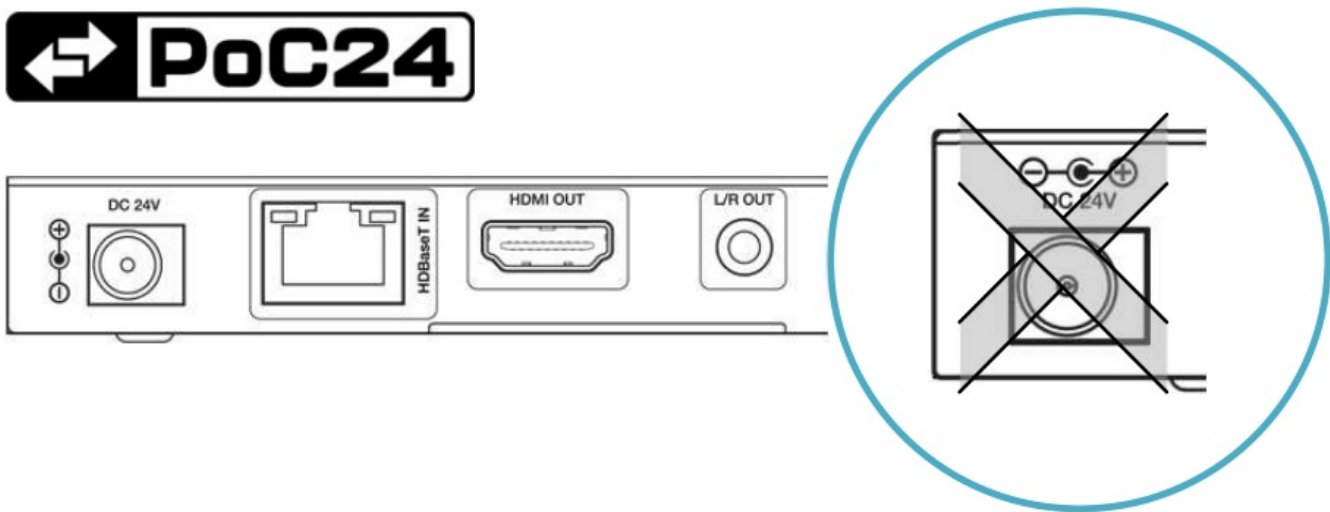# RS-232

DC 24V | HDBaseT IN | HDMI OUT | L/R OUT

RS-232
TX SG RX
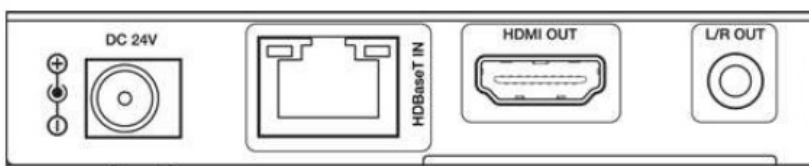
Connect TX to RX, RX to TX and SG to ground when connecting to 3rd party devices.

Secure hardwired bi-directional serial control between source and display. Receiver comes complete with 3-Pin screw type connectors for ease of install.

The receiver is powered from the Netvio matrix device over the category cable. A local power supply is not required.
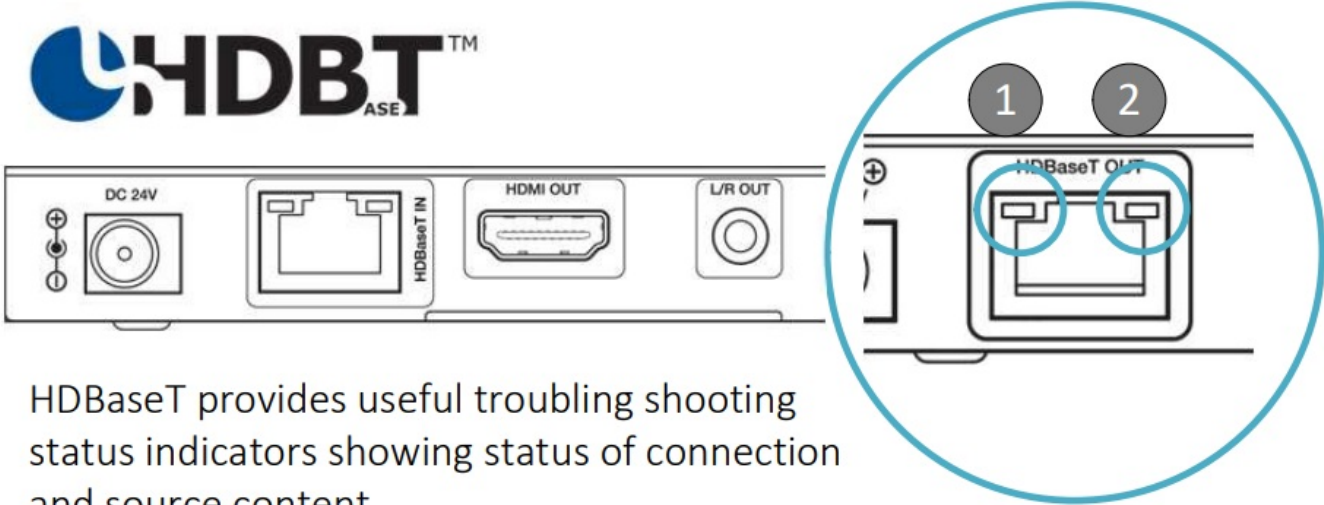
HDBaseT provides useful troubling shooting status indicators showing status of connection and source content.

1	2
Solid	Good Connection	**Solid**	HDMI with HDCP
Flashing	Poor Connection	**Flashing**	HDMI no HDCP
Dark	No Connection	**Dark**	No Connection

Basic Specifications

Transmission Distances	4K/60 HDR @ 40m | 1080p @ 70m
Encoding Data Rates	HDMI 17.82 Gbp | HDBaseT 10.2Gbs | Visually lossless compression > 10.Gbs
Video Resolutions (Max)	3840×2160 60fps HDR over 40m Cat5e/6/7 cable (1080P @ 70M)
Max Pixel Clock	600MHz
HDR	HDR10, HDR10+, Hybrid Log-Gamma, Dolby Vision
HDCP	Inclusive up to 2.2
Audio Formats	LPCM 2ch, LPCM 5.1, LPCM 7.1, Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS,
	DTS Master, Dolby Atmos, DTS:X.
CEC	Pass-thru subject to source and display compatibility
Storage	-20°C / +60°C | 20% – 90% RH
Operating	0°C / 40°C | 20% – 90% RH
Power	24v PoC power over HDBaseT.
Weight | Dimensions	160g| H: 20mm | W: 140mm | D: 65mm
Regulations	CE | UKCA | FCC | RoHS
Warranty	2-Yr Standard, 3-Yr with registration, 5-Yr & 10-Yr extended warranty available.

Matrix Compatibility	MX-HT2-0404-10 | MX-HT2-0806-10 | MX-HT2-0808-10
Alternative Receiver Models	RX-HT2-40-20 | Addition of ARC function
	RX-HT2-70-10 | 70m 4K/60 HDR, ARC, Ethernet

Cost effective 5-yr (for 5%) and 10-yr (for 10%) extended warranties available at **www.netvio.co.uk/safeguar**

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Documents / Resources

NETVIO RX-HT2-40-10 HDBaseT PoC Receiver with Ethernet [pdf] User Guide
RX-HT2-40-10 HDBaseT PoC Receiver with Ethernet, RX-HT2-40-10, HDBaseT PoC Receiver with Ethernet, PoC Receiver with Ethernet, Ethernet, PoC Receiver, Receiver

References

- ᴺᵛ **Netvio | AVoIP, HDBaseT, HDMI Distribution - Audio, Video & Software Solutions**
- ᴺᵛ **Netvio | SafeGuard | Enhanced Product Protection**