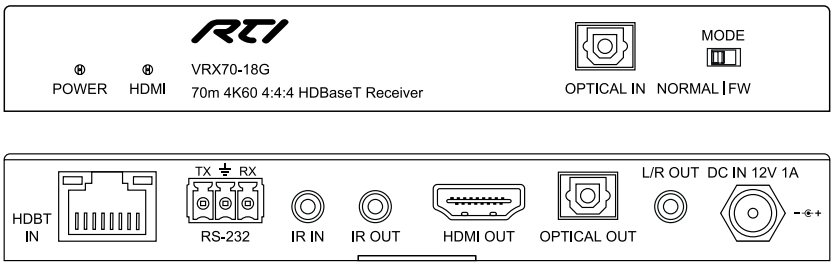
VRX70-18G

Quick Reference Guide



Introduction

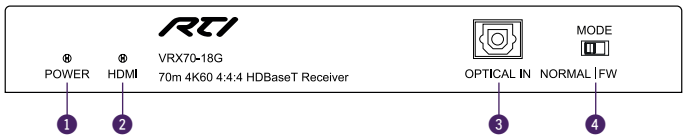
The VRX70-18G HDMI 2.0 4K60Hz 4:4:4 (18Gbps) HDCP 2.2 HDBaseT™ Receiver pairs perfectly with the VX88-18G and offers market-leading features and outstanding value, including Color Space Conversion (CSC) technology. The product extends HDMI, Bi-directional IR, and is powered by the matrix up to lengths of 70m (4K 40m).

Features

- Advanced HDBaseT™ technology enables distribution of video and audio over a single CAT cable
- Advanced Color Space Conversion (CSC) supports HDMI 2.0 18Gbps specification including HDR
- Supports all industry standard video resolutions including VGA-WUXGA and 480i-4K and all known HDMI audio formats including Dolby TrueHD®, Dolby Atmos®, Dolby Digital Plus® and DTS-HD Master Audio® transmission
- HDMI re-clocking to help solve HDMI HDCP, compatibility and handshaking issues
- Bi-directional RS-232 pass-through and IR pass-through to compatible HDBaseT™ devices
- Supports bi-directional PoC (Power over Cable) from VX88-18G
- HDCP 2.2 support

Panel Description

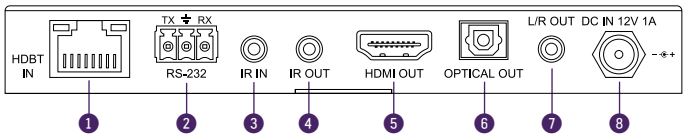
Front



1. **Power LED** - power status indicator
2. **HDMI LED** - signal link indicator
3. **Optical Audio Input** - TOSLINK audio input. Connects to the Optical output of the local display device for Audio Return Channel feature
4. **RS-232 Port Mode Selection Switch** - Firmware upgrade mode or normal operating mode

Panel Description

Back

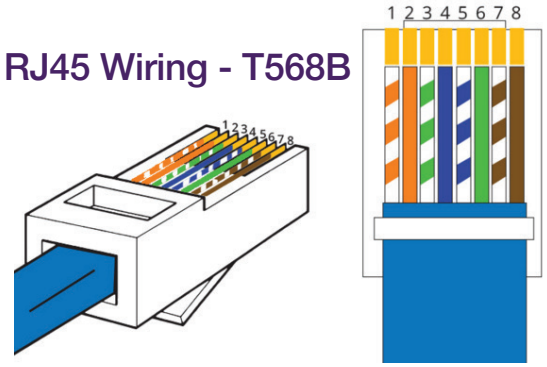


1. **HDBT IN** - HDBaseT™ input
2. **RS-232** - 3-pin Phoenix connector
3. **IR IN** - to RTI 5V 3.5mm IR Receiver
4. **IR OUT** - to RTI 5V 3.5mm IR Transmitter
5. **HDMI Output** - connect to HDMI on display
6. **Optical TOSLINK Audio Output** - Connects to local AV amplifier and allows local HDMI audio breakout
7. **Analog Audio Left/Right Output** - 3.5mm stereo jack de-embedded audio from HDMI input. Supports stereo 2ch PCM audio only
8. **12V/1A DC Power** - input screw type connector

Terminating the Interconnecting HDBaseT CAT Cable

It is important that the interconnecting CAT cable between the RTI HDBaseT products is terminated using the correct RJ45 pin configuration. The link CAT cable ***MUST*** be a 'straight' (pin-to-pin) CAT cable and it is advised that this is wired to the T568B wiring standard as this format is less prone to EMI (Electro-Magnetic Interference).

When installing CAT cables it is advised that you use the best possible CAT cable quality possible. HDMI distribution products will only work if used with CAT5e standard cable or above. RTI recommends using a CAT6 (or better) cable for your installations, especially when running over longer distances, in areas of high EMI, or for 4K signal distribution.



Understanding the HDBaseT Signal Status Lights

The RTI HDBaseT extender solutions include status LED indicators on both the Matrix/Transmitter and Receiver products to show all connections are active and to help diagnose possible problems.

Understanding the status lights:

Receiver

- The HDMI signal link light will be off when there is no connection with a display/sink
- The HDMI link light will be on when there is an active connection with a display
- The HDBaseT link light will be off when there is no CAT cable/active HDBaseT connection on the RJ45 HDBaseT input
- The HDBaseT link light will blink if there is an unstable connection between the Transmitter/Matrix and Receiver
- The HDBaseT link light will be lit when a CAT cable is connected to the HDBaseT RJ45 output on the Transmitter/Matrix and an active connection is achieved with the Receiver
- The Power link light will be off when no power is connected to the Receiver, or to the connected Transmitter unit
- The Power link light will be on when power is connected directly to the Receiver or is being received from the Transmitter unit

Matrix

- The HDMI signal link light will be off when there is no connection with a source device
- The HDMI link light will be on when there is an active connection with a source device
- The HDBaseT link light will be off when there is no CAT cable/active HDBaseT connection on the RJ45 HDBaseT output
- The HDBaseT link light will blink if there is an unstable connection between the Matrix and Receiver
- The HDBaseT link light will be lit when a CAT cable is connected to the HDBaseT RJ45 output on the Matrix and an active connection is achieved with the Receiver
- The Power link light will be off when no power is connected to the Matrix, or to the connected Receiver unit
- The Power link light will be on when power is connected directly to the Matrix or is being received from the Receiver unit

Specifications:

- **Video Input Connectors:** 1x HDBaseT™ RJ45 connector
- **Video Output Connectors:** 1x HDMI Type A, 19-pin, female
- **Audio Input Connectors:** 1x TOSLINK (S/PDIF)
- **Audio Output Connectors:** 1x TOSLINK (S/PDIF), 1x 3.5mm L/R analog audio
- **RS-232 Serial Port:** 1x 3-pin Phoenix connector
- **IR Input Ports:** 1x 3.5mm stereo jack
- **IR Output Ports:** 1x 3.5mm mono jack
- **Mounting Kit:** Included
- **Casing Dimensions (W x D x H):** 140mm x 84mm x 18mm
- **Dimensions Including Connections (W x D x H):** 5.5”” x 3.5”” x .7”” (140mm x 88mm x 18mm)
- **Shipping Weight:** 1.3lbs (0.6kg)
- **Operating Temperature:** 32°F to 104°F (-5°C to +55°C)
- **Storage Temperature:** -4°F to 140°F (-25°C to +70°C)
- **Power Supply:** 1x 12V/1A DC, screw connector

Package Contents:

- 1 x VRX70-18G
- 1 x Mounting Kit
- 1 x Quick Reference Guide (QRG)

Certifications:

FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION - changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

CANADA, INDUSTRY CANADA (IC) NOTICES

This Class B digital apparatus complies with Canadian ICES-003.
Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

CORRECT DISPOSAL OF THIS PRODUCT

This marking indicates that this product should not be disposed with other household wastes. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.