It's Under Control®

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device. 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 the 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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.

Industry Canada Compliance Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.
Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes:
1. Ce dispositif ne peut causer des interférences nuisibles.
2. Cet appareil doit accepter toute interférence reçue y compris des interférences qui peuvent provoquer un fonctionnement indésirable.

DECLARATION OF CONFORMITY (DOC)
The Declaration of Conformity for this product can be found on the RTI website. (www.rticorp.com/declaration)

Safety Suggestions

Read and Follow Instructions. Read all safety and operating instructions before operating the unit.
Retain Instructions. Keep the safety and operating instructions for future reference.
Heed Warnings. Adhere to all warnings on the unit and in the operating instructions.
Heat. Keep the unit away from heat sources such as radiators, heat registers, stoves, etc., including amplifiers that produce heat.
Power Sources. Use only power sources of the type described in the operating instructions, or as marked on the unit.
Water and Moisture. Do not use the unit near water—for example, near a sink, in a wet basement, near a swimming pool, near an open window, etc.
Object and Liquid Entry. Do not allow objects to fall or liquids to be spilled into the enclosure through openings.
Servicing. Do not attempt any service beyond that described in the operating instructions. Refer all other service needs to qualified service personnel.
Damage Requiring Service. The unit should be serviced by qualified service personnel when:

- Objects have fallen or liquid has been spilled into the unit.
- The unit has been exposed to rain.
- The unit does not appear to operate normally or exhibits a marked change in performance.
- The unit has been dropped or the enclosure has been damaged.

Limited Warranty

RTI warrants new products for a period of three (3) years from the date of purchase by the original purchaser (end user) directly from RTI / Pro Control (herein referred to as "RTI"), or an authorized RTI dealer. Warranty claims may be initiated by an authorized RTI dealer using the original dated sales receipt or other proof of warranty coverage. In the absence of the receipt of purchase from the original dealer, RTI will provide warranty coverage extension of six (6) months from the date code of the product. Note: RTI warranty is limited to the provisions set forth in this policy and does not preclude any other warranties offered by third parties who are solely responsible for those other warranties.
Except as specified below, this warranty covers defects in product material and workmanship. The following are not covered by the warranty:

- Damages caused by accident, misuse, abuse, neglect or acts of God.
- Cosmetic damage, including, but not limited to, scratches, dents and normal wear and tear.
- Failure to follow instructions contained in the Product Installation Guide.
- Damages due to products used in an application or environment other than that for which it was intended, improper installation procedures or adverse environmental factors such as incorrect line voltages, improper wiring, or insufficient ventilation.
- Repair or attempted repair by anyone other than RTI and Pro Control or authorized service partners.
- Failure to perform recommended periodic maintenance.
- Causes other than product defects, including lack of skill, competence or experience of user.
- Damage due to shipment of this product (claims must be made to the carrier).
- Altered unit or altered serial number: defaced, modified or removed.

RTI is also not liable for:

- Damages caused by its products or for failure of its products to perform, including any labor costs, lost profits, lost savings, incidental damages, or consequential damages.
- Damages based upon inconvenience, loss of use of the product, loss of time, interrupted operation, commercial loss, any claim made by a third party or made on behalf of a third party.
- Loss of, or damage to, data, computer systems or computer programs.

RTI's liability for any defective product is limited to repair or replacement of the product, at the sole discretion of RTI.
In cases where the warranty policy conflicts with local laws, the local laws will be adopted.

Contacting RTI

For news about the latest updates, new product information, and new accessories, please visit our web site at: www.rticorp.com

For general information, contact RTI at:
Remote Technologies Incorporated
5775 12th Ave. E Suite 180
Shakopee, MN 55379
Tel. (952) 253-3100
Fax (952) 253-3131
info@rticorp.com

Service & Support

If you are encountering any problems or have a question about your RTI product, please contact RTI Technical Support for assistance (see the Contacting RTI section of this guide for contact details).
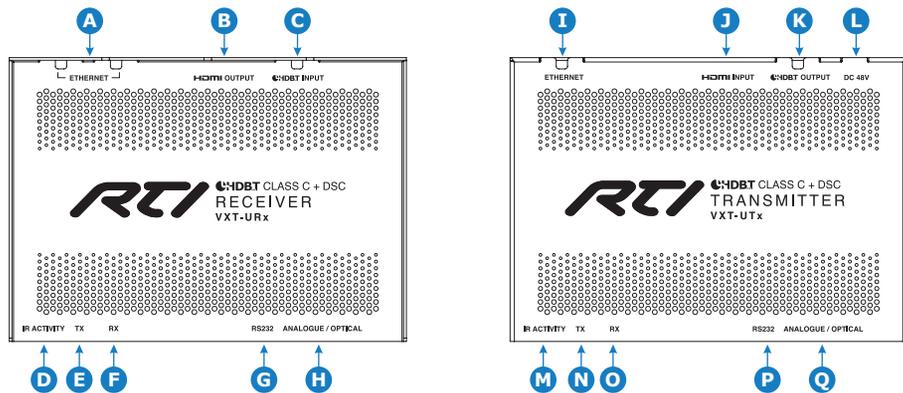RTI provides technical support by telephone or e-mail. For the highest quality service, please have the following information ready, or provide it in your e-mail.

- Your Name
- Company Name
- Telephone Number
- E-mail Address
- Product model and serial number (if applicable)

If you are having a problem with hardware, please note the equipment in your system, a description of the problem, and any troubleshooting you have already tried.
Please do not return products to RTI without a return authorization.

VXT-Ux
HDBaseT Class C + DSC Extender Set

Reference Guide

The VXT-UTx HDBaseT Transmitter delivers visually lossless HDMI 1080p video signal over a single Cat5e/6/7 cable up to 492ft (150m) and a 4K signal up to 328ft (100m) to the VXT-URx HDBaseT Receiver using Display Stream Compression. The VXT-UTx powers the VXT-URx through the Category cable using PoH (Power over HDBaseT) in addition to delivering IR, RS-232 and Ethernet through the same cable.

Key Features

The VXT-Ux provides superior quality and reliability as well as these specific features:

- Extends HDMI 1080p video up to 492ft (150m) and 4K up to 328ft (100m) over a single Cat5e cable or greater.
- DSC support - for HDR and 4K/60 4:4:4 over HDBaseT
- Supports UltraHD 4K transmission, 1080p@60Hz/36-bit, 720p and VGA-WUXGA formats.
- Audio return channel (ARC) allows audio from a smartTV to be delivered back to an audio system.
- Automatic EDID support.
- Ethernet, RS-232 and Bi-directional IR transmission to Receiver.
- HDCP 2.2 compliant.
- Wall mountable (mounts sold separately).
- Power supply included (transmitter) with Power over HDBaseT (PoH) to Receiver.

Installation & Operation

VXT-URx DESCRIPTION

No.	Name	Function
A	Ethernet Ports (x2)	10/100 Ethernet connection for remote devices (e.g. SmartTV).
B	HDMI Output	Connect an HDMI cable between this port and the display.
C	HDBaseT Input	Connect category (Cat5e/6/7) cable between this port and the Transmitter.
D	IR Activity Indicator	LED will illuminate when infrared signal is detected.
E	Infrared TX	Connect IR emitter* for control of display. *See Infrared Control*
F	Infrared RX	Connect IR receiver.
G	RS-232 Port	RS-232 Port: 3.5mm stereo pinout: Tip=TX, Ring=RX, Sleeve=GND Connect serial cable via adapter (not included) for control of remote device.
H	Analogue/Optical	Connect Mini-Toslink (adapter not included) audio cable from TV.

VXT-UTx DESCRIPTION

No.	Name	Function
I	Ethernet	10/100 Ethernet for connection to LAN.
J	HDMI Input	Connect an HDMI cable between this port and the source device.
K	HDBaseT Output	Connect category (Cat5e/6/7) cable between this port and the Receiver.
L	Power	Connect the supplied power cable.
M	IR Activity	LED will illuminate when infrared signal is detected.
N	Infrared TX	Connect IR Emitter* for control of video source. *See Infrared Control*
O	Infrared RX	IR input from IR receiver or control system. For IR control of remote devices (e.g. Display) from a control system, connect to IR output of control processor. NOTE: Requires OPT-1x IR Adapter Cable (sold separately) with stereo end (black connector) plugged into VXT-UTx.
P	RS-232 Port	RS-232 Port: 3.5mm stereo pinout: Tip=TX, Ring=RX, Sleeve=GND Connect serial cable via adapter (not included) from control system.
Q	Analogue/Optical	Connect Mini-Toslink (adapter not included) cable to audio system.

INFRARED CONTROL

The VXT-URx and VXT-UTx provide bi-directional infrared transmission for control of the video source and display. The infrared commands received by at an RX input will be delivered over the HDBaseT cable to the TX output of the other device, where an emitter can be connected and installed on the device being controlled.

Video Source IR Control
An RTI control system may be used for control of the video source directly. Alternatively, IR control of the video source may be sent to an infrared receiver and passed through the VXT-URx to the VXT-UTx. Plug the IR emitter to the TX Out and install the emitter over the source's IR sensor.
NOTE: The IR receiver should be mounted underneath the display (TV) with the smallest end forward and the sticky pad affixed upwards. (NOTE: IR Receiver is square with a shiny surface).

Display IR Control
An RTI control system may be used for control of the display directly. Alternatively, IR control of the video source may be passed through the VXT-UTx to the VXT-URx. For IR control of remote devices (e.g. Display) from a control system, connect to IR output of control processor. Plug the IR emitter into the VXT-URx TX Out and install the emitter over the display's IR sensor.

IMPORTANT NOTES:
* Must use included IR emitters. RTI vIRsa Mouse IR emitters and third-party IR emitters will not work.
** IR pass-through from an RTI control processor requires a OPT-1x Opto-coupling IR Adapter Cable (sold separately).

INITIAL SETUP

- Connect a single CAT5e/6/7 cable between the Receiver and Transmitter using the HDBaseT ports.
- Connect HDMI cable between the Transmitter's HDMI Input and source device (e.g. blu-ray player).
- Connect HDMI cable between the Receiver's HDMI Output and the display device (e.g. TV).
- Connect IR cabling and emitter* for control of video source. *See Infrared Control*
- Connect IR cabling and emitter* for control of display. *See Infrared Control*
- Connect RS-232 cables. NOTE: Connect before applying power to the extender set or damage to the device may result.
- Connect Ethernet cables to Ethernet network and remote devices.
- Connect audio cables to TV and audio system.
- Connect power supply to the VXT-UTx Transmitter.
- Check the LEDs on the HDBaseT ports to ensure correct installation and connection:
  - The Yellow LED will illuminate when connected to a video link
  - The Green LED will illuminate when the device is connected to the power supply
- Check the IR activity on the IR Indicator LEDs (A):
  - The Receiver's LED will flash Green when IR signals are being received
  - The Transmitter's LED will flash Red when IR signals are being sent

Connection Diagram

Product Contents

Contents within the box include the following items:
- VXT-URx HDBaseT Class C + DSC Receiver
- VXT-UTx HDBaseT Class C + DSC Transmitter
- Infrared Blaster Cable Pack (TX/RX Pack)
  Not included when VXT-UTx transmitter is purchased individually
- 48V/0.5A Power Supply
- Reference Guide