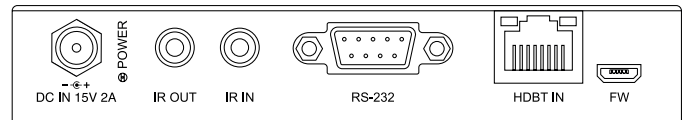
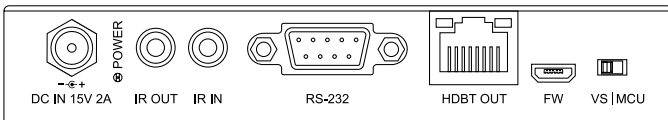
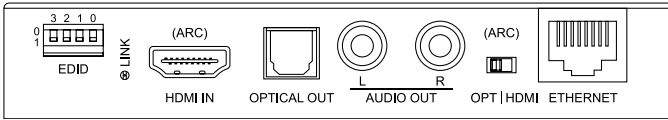


VEX100-18G-KIT

Quick Reference Guide



Introduction

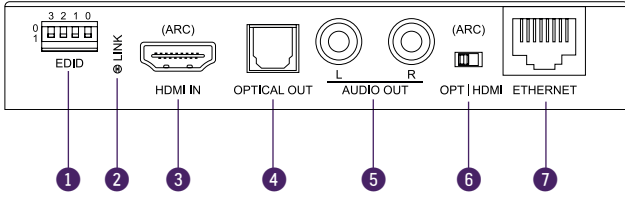
The VEX100-18G-KIT offers the very best in extender performance and flexibility. This industry-leading 4K HDBaseT™ solution delivers HDMI with HDCP 2.2 support, Bi-directional IR, RS-232 and PoC up to lengths of 100m over a single CAT cable. The VEX100-18G-KIT also provides installers the ability to extend the control network without the need for additional cables.

Features

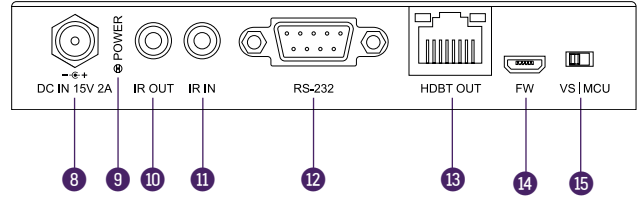
- Advanced HDBaseT™ technology offering uncompressed video and audio with zero latency
- Supports 4K UHD video up to 70m (Full 3840 x 2160 @50/60Hz 4:4:4 resolution) and 1080p up to a distance of 100m over single CAT cable
- Supports ARC (Audio Return Channel) from connected display via HDMI or optical digital inputs
- Supports Bi-directional IR from all input and output locations and Bi-directional RS-232 pass through
- Supports all known HDMI audio formats including Dolby TrueHD®, Dolby Atmos®, Dolby Digital Plus® and DTS-HD Master Audio® transmission
- Extend your control network with an integrated Ethernet port (LAN Pass-through)
- Supports bi-directional PoC (Power over Cable) to power extender from either Transmitter or Receiver end
- HDCP 2.2 support

Panel Description

VEX100-18G-TX

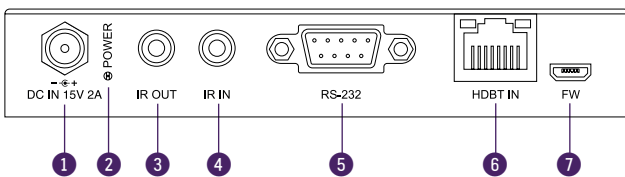


- 1 **EDID Management** - Used to manage the video and audio resolution output by the connected source device
- 2 **HDMI Link LED** - LED will be lit when an active HDMI connection is detected
- 3 **HDMI Input** - Connect to the HDMI output of the local source device
- 4 **Optical Audio Output** - TOSLINK audio output. Connects to local AV amplifier when using Audio Return Channel (ARC) feature
- 5 **Analog Audio 2ch L/R Output** - Connects to third party audio amplifier for audio breakout of either local HDMI or Audio Return Channel from VEX100-18G-RX. **NOTE:** Audio format must be 2ch PCM
- 6 **Audio Output Selection Switch** - Select ARC output from HDBT receiver as either HDMI or audio breakout via optical output and analog L/R audio
- 7 **Ethernet Port** - RJ45 Connector. Connect to a local network switch to extend 10/100 network to HDBaseT Receiver ethernet port

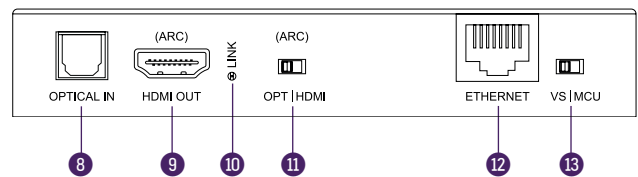


- 8 **Power Port** - Connect RTI 15V DC power supply only. **NOTE:** HDBaseT extender kit can be powered from either the Transmitter or Receiver by using the Power over Cable (PoC) feature
- 9 **Power LED Indicator**
- 10 **IR OUT Port** - Connect to RTI 12V Transmitter. Connection is used to control the local source device from RTI IR Receiver connected at the VEX100-18G-RX
- 11 **IR IN Port** - Connect to RTI 12V IR Receiver. Connection is used to extend IR over the HDBaseT signal to control devices located at the VEX100-18G-RX end
- 12 **RS-232 Port** - Bi-directional RS-232 with VEX100-18G-RX, RS-232 port
- 13 **HDBaseT Output** - RJ45 Connector. Connect to HDBaseT input on VEX100-18G-RX
- 14 **Firmware Port** - Used for firmware upgrade
- 15 **Hardware upgrade selection switch**

VEX100-18G-RX



- 1 **Power Port** - Connect RTI 15V DC power supply only. **NOTE:** HDBaseT extender kit can be powered from either the Transmitter or Receiver by using the Power over Cable (PoC) feature
- 2 **Power LED Indicator**
- 3 **IR OUT Port** - Connect to RTI 12V Transmitter. Connection is used to control the local source or display device from RTI IR Receiver connected at the VEX100-18G-TX
- 4 **IR IN Port** - Connect to RTI 12V IR Receiver. Connection is used to extend IR over the HDBaseT signal to control devices located at the VEX100-18G-TX end
- 5 **RS-232 Port** - Bi-directional RS-232 with VEX100-18G-TX, RS-232 port



- 6 **HDBaseT Input** - RJ45 Connector. Connect to HDBaseT output on VEX100-18G-TX
- 7 **Firmware Port** - Used for firmware upgrade
- 8 **Optical Audio Input** - TOSLINK audio input
- 9 **HDMI Output** - Connect to the HDMI input on local display device
- 10 **HDMI Link LED** - LED will be lit when an active HDMI connection is detected
- 11 **Audio Return Selection Switch** - Switch between OPT and HDMI when using Audio Return feature
- 12 **Ethernet Port** - Connect to local network products to extend 10/100 network from HDBaseT Transmitter
- 13 **Hardware upgrade selection switch**

Understanding the VEX100-18G-KIT HDBaseT Status Lights

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

Understanding the status lights:

VEX100-18G-TX

- The Yellow HDBaseT status link light will be off when the output has been turned off or there is a problem with the HDBaseT output
- The Yellow HDBaseT status link light will blink when the output is on and working
- The Green HDBaseT link light will blink if there is an unstable connection between the RTI HDBaseT Transmitter and HDBaseT Receiver
- The Green HDBaseT link light will be lit when a there is an active HDBaseT Receiver connected to the Transmitter
- The Green HDBaseT link light will be off when a there is no connection with a HDBaseT Receiver
- The HDMI 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

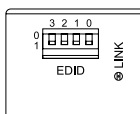
VEX100-18G-RX

- The HDMI link light will be off when there is no connection with a display
- 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 RTI Transmitter and HDBaseT Receiver
- The HDBaseT link light will be lit when a CAT cable is connected to the HDBaseT RJ45 output on the Transmitter and an active connection is achieved with the RTI HDBaseT Receiver

Adjusting The EDID Settings

The EDID configuration can be altered using the dip-switches located on the rear panel. Please see table below for EDID settings. **NOTE:** You must power-cycle the unit kit after changes have been made in order for the EDID settings to update.

EDID Dip-switches



- [DIP]=0000: HDMI 1080p@60Hz, Audio 2ch PCM
- [DIP]=0001: HDMI 1080p@60Hz, Audio 5.1ch PCM/DTS/DOLBY
- [DIP]=0010: HDMI 1080p@60Hz, Audio 7.1ch PCM/DTS/DOLBY/HD
- [DIP]=0011: HDMI 1080i@60Hz, Audio 2ch PCM
- [DIP]=0100: HDMI 1080i@60Hz, Audio 5.1ch PCM/DTS/DOLBY
- [DIP]=0101: HDMI 1080i@60Hz, Audio 7.1ch PCM/DTS/DOLBY/HD
- [DIP]=0110: HDMI 4K@60Hz 4:2:0 + 4K@30Hz 4:4:4, Audio 2ch PCM
- [DIP]=0111: HDMI 4K@60Hz 4:2:0 + 4K@30Hz 4:4:4, Audio 5.1ch PCM/DTS/DOLBY
- [DIP]=1000: HDMI 4K@60Hz 4:2:0 + 4K@30Hz 4:4:4, Audio 7.1ch PCM/DTS/DOLBY/HD
- [DIP]=1001: HDMI 4K@60Hz 4:4:4, Audio 2ch PCM
- [DIP]=1010: HDMI 4K@60Hz 4:4:4, Audio 5.1ch PCM/DTS/DOLBY
- [DIP]=1011: HDMI 4K@60Hz 4:4:4, Audio 7.1ch PCM/DTS/DOLBY/HD
- [DIP]=1100: DVI 1280x1024@60Hz, Audio None
- [DIP]=1101: DVI 1920x1080@60Hz, Audio None
- [DIP]=1110: DVI 1920x1200@60Hz, Audio None
- [DIP]=1111: Copy EDID from output

Specifications:

VEX100-18G-TX

- **Video Input Connectors:** 1x HDMI Type A, female
- **Video Output Connectors:** 1x HDBaseT™ RJ45 connector
- **Audio Output Connectors:** 2x RCA (L/R), 1x Optical (SPDIF)
- **Ethernet Port:** 1x RJ45 connector,
- **RS-232 Serial Port:** 1x DB-9 female
- **IR Input Ports:** 1x 3.5mm stereo jack
- **IR Output Ports:** 1x 3.5mm mono jack

VEX100-18G-RX

- **Video Input Connectors:** 1x HDBaseT™ RJ45 connector
- **Video Output Connectors:** 1x HDMI Type A, female
- **Audio Input Connectors:** 1x Toslink
- **Ethernet Port:** 1x RJ-45 connector
- **RS-232 Serial Port:** 1x DB-9 female
- **IR Input Ports:** 1x 3.5mm stereo jack
- **IR Output Ports:** 1x 3.5mm mono jack
- **Casing Dimensions (without connectors or feet):** 5.3" x 5.1" x .9" (134mm x 129mm x 22mm)
- **Casing Dimensions (with connectors and feet):** 5.8" x 5.1" x .9" (148mm x 129mm x 22mm)
- **Shipping Weight (Kit):** 3.5lbs (1.6kg)
- **Operating Temperature:** 32°F to 104°F (0°C to 40°C)
- **Storage Temperature:** -4°F to 140°F (-20°C to 60°C)
- **Power Supply:** 1x 15V/2A DC, screw connector

Package Contents:

- 1 x VEX100-18G-TX
- 1 x VEX100-18G-RX
- 1 x IR Receiver
- 1 x IR Transmitter
- 1 x 15V/2A DC power supply (Type A, C, G & I Adaptors included)
- 2 x Mounting Brackets
- 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.