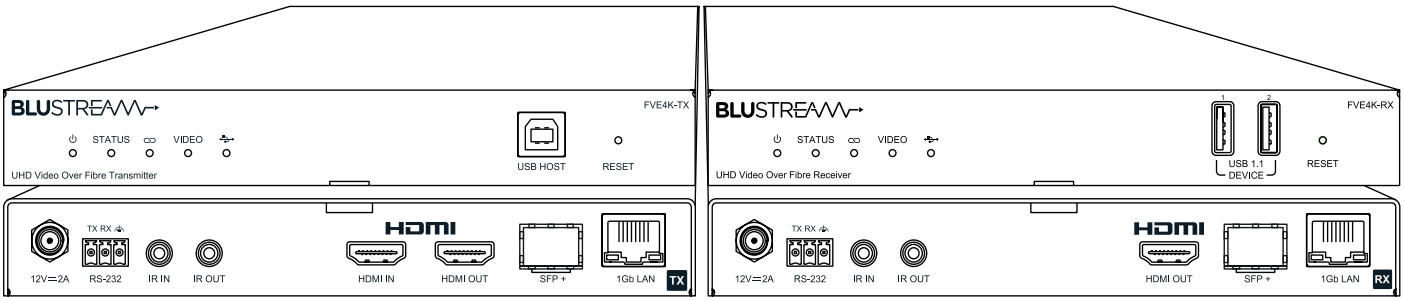
FVE4K-KIT

Quick Reference Guide



Introduction

The FVE4K-KIT is an industry leading HDMI2.0 4K 60Hz 4:4:4 HDCP 2.2 fibre extender solution utilising the latest in SDVoE technology.

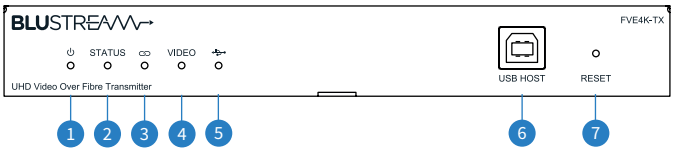
The FVE4K-KIT supports uncompromised distribution of the latest 4K resolutions including HDR / Dolby Vision LLM resulting in the ability to transmit 18Gbps signals over distances not capable of being achieved over copper cabling.

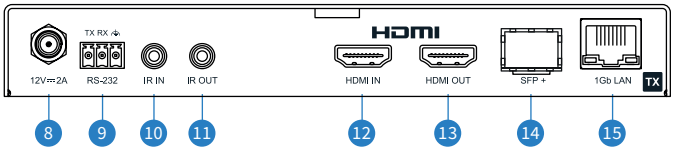
The FVE4K-KIT supports bi-directional IR, RS-232, USB1.1, and 1Gbps LAN up to distances supported by the 10Gbps SFP+ modules and fibre cable in use.

FEATURES:

- Advanced 18Gbps UHD Video over 10Gbps fibre cable with visually lossless compression and zero latency
- Supports HDMI 2.0 18Gbps specification with pass-through for up to 4K 60Hz 4:4:4 and 10/12-bit HDR sources, including Dolby Vision LLM
- Features 1x HDMI loop-out on FVE4K-TX for integrating local displays or cascading to multiple devices
- Supports all known HDMI audio formats including Dolby Atmos, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio transmission
- USB 1.1 point to point pass-through
- Bi-directional 10/100/1000BaseT Ethernet pass-through
- Supports bi-directional 5V or 12V IR pass-through
- Bi-directional RS-232 pass-through
- HDCP 2.2 compliant with advanced EDID management
- Local 12V 2A power supply required at TX & RX (supplied)

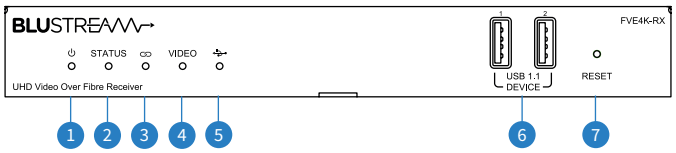
TX Panel Descriptions

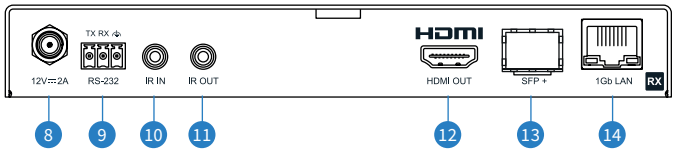




1. Power Status Indicator
2. HDMI Input Status Indicator
3. Network Link Status Indicator
4. Video Status Indicator
5. USB Status Indicator
6. USB 1.1 Type B Connection - Connect to USB host device
7. Reset Switch - Press and hold to reset device
8. 12V/2A DC Power Input Connector
9. RS-232 Port - 3-Pin Phoenix connector to pass bi-directional IR to / from the receiver
10. IR Input - Connect to Blustream 5V 3.5mm IR receiver
11. IR Output - Connect to Blustream 5V 3.5mm IR emitter
12. HDMI Input - Connect to HDMI source device
13. HDMI Output - Connect to local HDMI display
14. SFP+ Output - Connect to FVE4K-RX receiver via SFP+ module and compatible fibre cable (not included)
15. Ethernet Connection - Connect to network / device for 1Gb LAN pass-through to / from Receiver

RX Panel Descriptions





1. Power Status Indicator
2. HDMI Output Status Indicator
3. Network Link Status Indicator
4. Video Status Indicator
5. USB Status Indicator
6. USB 1.1 Type A Connections - Connect to USB peripheral devices
7. Reset Switch - Press and hold to reset device
8. 12V/2A DC Power Input Connector
9. RS-232 Port - 3-Pin Phoenix connector to pass bi-directional IR to / from the receiver
10. IR Input - Connect to Blustream 5V 3.5mm IR receiver
11. IR Output - Connect to Blustream 5V 3.5mm IR emitter
12. HDMI Output - Connect to local HDMI display
13. SFP+ Output - Connect to FVE4K-RX receiver via SFP+ module and compatible fibre cable (not included)
14. Ethernet Connection - Connect to network / device for 1Gb LAN pass-through to / from Transmiter

Ethernet / LAN Pass-through

The FVE4K-KIT features a 1Gbps LAN pass-through for bi-directional communication and distribution of data. The connections are transparent to the SFP+ connection, and the FVE4K-KIT does not act as router or DHCP server for the equipment connected either side.

USB Pass-through

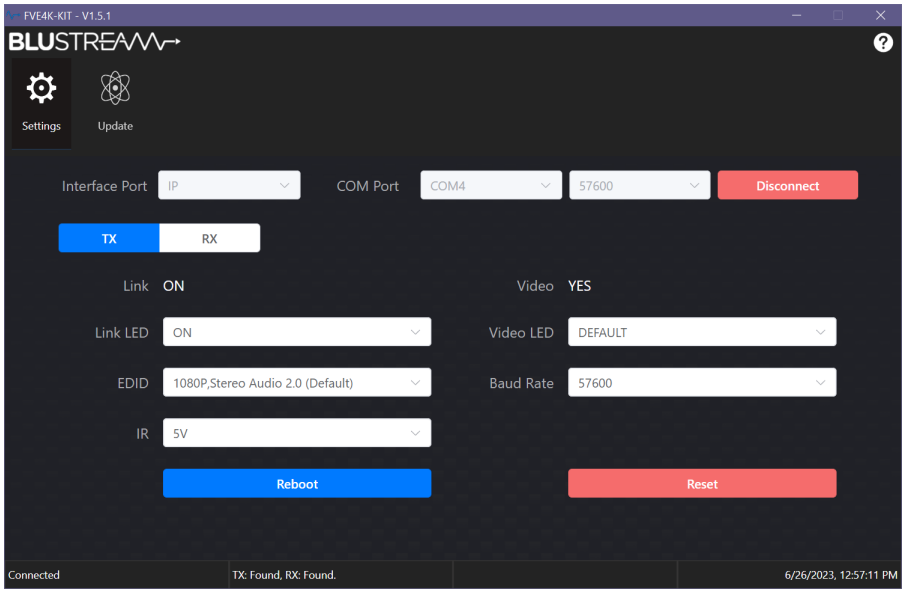
The FVE4K-KIT allows for USB 1.1 pass-through supporting connectivity of a USB Host device to USB peripheral devices over the SFP+ fibre connection. The USB link is designed for connection of HID devices such as keyboards and mice.

PC Software Configuration

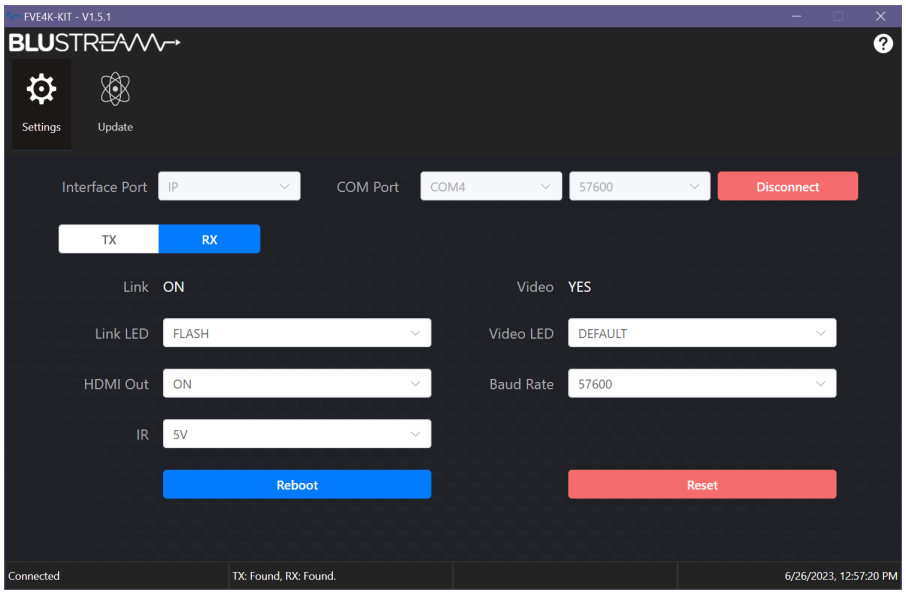
The FVE4K-KIT features PC software for configuring the device, which can be downloaded from the Blustream website. This can be configured either via RS-232 or IP using a network cable connected from your PC to the devices 1Gb LAN RJ45 port, or via a network switch.
The PC software allows for configuration of the following items:

- EDID settings
- IR voltage settings
- LED visibility settings
- RS-232 baudrate settings
- Enable or disable the HDMI video output
- Rename a device
- Firmware update the transmitter or receiver

Transmitter Page:



Receiver Page:



Specifications

FVE4K-TX

- **Video Input Connectors:** 1 x HDMI Type A, female
- **Video Output Connectors:** 1 x SFP+ module video network, 1 x HDMI Type A, female (SFP+ module not supplied)
- **Ethernet Port:** 1 x 1Gb LAN RJ45 pass-through
- **USB / KVM Port:** 1 x USB-Type B (Host)
- **5V IR Input Port:** 1 x 3.5mm stereo jack
- **5V IR Output Port:** 1 x 3.5mm mono jack
- **RS-232 Port:** 1 x 3-pin Phoenix connector
- **Power Supply:** 12V/2A DC, screw type connector

FVE4K-KIT

- **Casing Dimensions (W x D x H):** 180mm x 103mm x 24mm (TX / RX - without connections)
- **Casing Dimensions (W x D x H):** 180mm x 108mm x 24mm (TX / RX - with connections)
- **Shipping Weight:** 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)

NOTE: *Specifications are subject to change without notice. Weights and dimensions are approximate.*

FVE4K-RX

- **Video Input Connectors:** 1 x SFP+ module video network (SFP+ module not supplied)
- **Video Output Connectors:** 1 x HDMI Type A, female
- **Ethernet Port:** 1 x 1Gb LAN RJ45 pass-through
- **USB / KVM Port:** 2 x USB-Type A (Devices)
- **5V IR Input Port:** 1 x 3.5mm stereo jack
- **5V IR Output Port:** 1 x 3.5mm mono jack
- **RS-232 Port:** 1 x 3-pin Phoenix connector
- **Power Supply:** 12V/2A DC, screw type connector

Package Contents

FVE4K-KIT

- 1 x FVE4K-TX Transmitter
- 1 x FVE4K-RX Receiver
- 2 x 12V/2A DC power supply
- 1 x IRE1 Emitter (5V)
- 1 x IRR Receiver (5V)
- 2 x Mounting Bracket Sets
- 1 x Quick Reference Guide

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.

CANADA, AVIS D'INDUSTRY CANADA (IC) - Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003. Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

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.