Nice

EL-4K-VIP-TX/RX

WORKS WITH ELAN CONTROL SYSTEMS
ELAN a Nice brand

Quick Reference Guide

Introduction

The Nice Premium Video over IP (VIP) platform enables distribution of HDMI video over a 1Gb Network switch. The EL-4K-VIP-TX and EL-4K-VIP-RX are HDCP 2.2 compliant Transmitters and Receivers that use visually lossless compression technology to deliver HDMI, Bi-directional IR, RS-232 and USB/KVM up to lengths of 100m over standard network architecture. The EL-4K-VIP-TX/RX can be powered via PoE from a Network switch or powered locally should a switch either not be used or not support PoE. With multiple configuration options available, this Video over IP solution is ideal for both commercial and residential installations.

Features

- Advanced UHD video over 1Gb Network
- Virtually unlimited system size
- Connect to any supported Layer 2 / Layer 3 Managed Switch for HDMI video distribution. Please see Integration Notes for supported Switches at **www.niceforyou.com**.
- Supports up to 4K HDR UHD video (3840 x 2160 @ 30Hz 4:4:4, 4096 x 2160 @ 24Hz 4:4:4, and 4K @ 60Hz 4:2:0)

NOTE: HDR support is dependant on video signal bandwidth. Please see table in product manual for reference.

- Supports all known HDMI audio formats including Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio transmission
- Video up-scaling and down-scaling
- Features 4 operational modes:
  - » Matrix distribution (Requires 1Gb network switch)
  - » Video wall (Requires 1Gb network switch)
  - » One-to-one HDMI extender (No network switch required)
  - » One-to-many HDMI splitter (No network switch required)
- HDCP 2.2 Compliant
- Advanced EDID management
- Analog L/R audio embedding and de-embedding on EL-4K-VIP-TX Transmitter
- Analog L/R audio breakout on EL-4K-VIP-RX Receiver
- Bi-directional RS-232 and IR pass through
- USB 2.0 connectivity (backwards compatible with USB 1.1) for KVM and other USB devices
- PoE (Power over Ethernet) to power Nice products from PoE switch
- Local 24V 1A power input should network switch not support PoE, sold separately
- Simple setup via configurator or web-GUI through the EL-4K-VIP-ACM
- HDMI audio embedding supports up to 192 Khz, EL-4K-VIP-RX analog audio output supports up to 96Khz only
- RS-232, IR and Telnet/IP integration for control of the VoIP system using Nice EL-4K-VIP-ACM

Settings

Default IP Address: 169.254.100.254 (TX & RX)

Important Note:

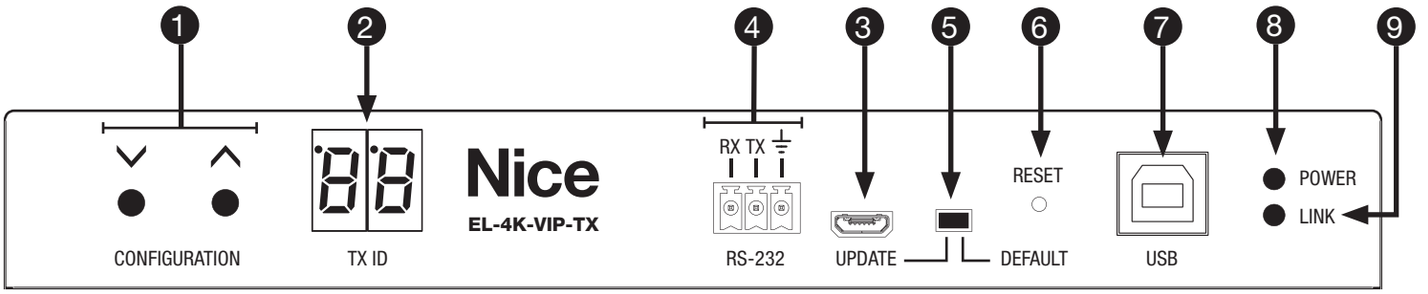
For additional details on accessing the VIP products, please contact Nice technical support.

The Nice Premium Video over IP (VIP) platform distributes HDMI video over 1GB Managed network hardware. It is required that Nice VIP products are connected on an independent network switch to prevent unnecessary interference, or reduction in signal performance due to the bandwidth requirements of other network products.

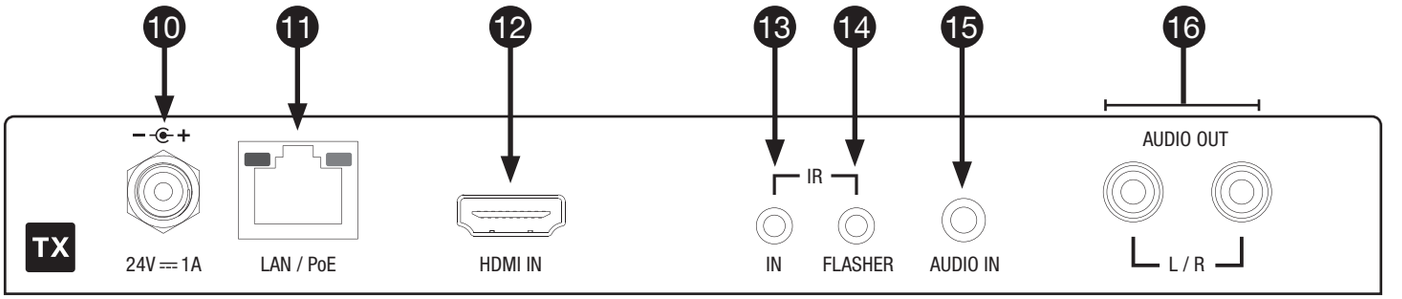
Please read the full product manual (available to download online at **www.niceforyou.com**) and ensure that the network switch is configured correctly prior to connecting any Nice VIP products. Failure to do so will result in problems with configuration of the system and/or video performance.

Panel Description - EL-4K-VIP-TX Transmitter

EL-4K-VIP-TX Front Panel



EL-4K-VIP-TX Rear Panel

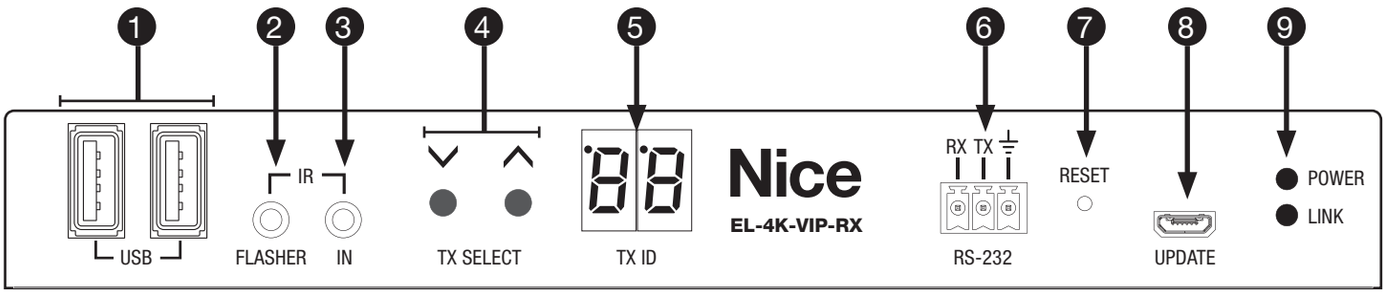


1. Configuration Up/Down	Used to configure EL-4K-VIP-TX manually and apply 'Programming mode'
2. Transmitter ID status window	Displays Tranmsitter's ID information
3. Assignable bi-directional RS-232 ports	Connect to third party control device to extend RS-232 commands to any/multiple EL-4K-VIP product's RS-232 port
4. Firmware Micro-B USB port	Used to update EL-4K-VIP-TX MCU firmware
5. MCU firmware update switch	Used to place Transmitter product into firmware update mode
6. Reset button	Press once briefly to reboot the product or press and hold for 5 seconds to factory reset
7. Type-B USB port	USB connection for USB/KVM routing within VIP system
8. Power LED indicator	Flashing status light when the unit is booting. Solid status light when finished booting
9. Link LED indicator	Flashing status light when the unit has booted and is ready. Solid status light when sending video
10. Power port	Use 24V 1A DC adaptor (sold separately) if not using a PoE network switch
11. LAN Connection (PoE)	Connect to Layer 2 / Layer 3 Managed Switch for HDMI video distribution
12. HDMI input	Connect to a HDMI source
13. IR IN (IR input)	3.5mm stereo jack. Transmits IR to any EL-4K-VIP-RX receiver currently viewing the EL-4K-VIP-TX. Please use a Nice I2V IR Receiver (sold separately). When using the Nice IR Receiver (optional) ensure cable direction is correct
14. IR Flasher (IR output)	3.5mm mono jack. Routes IR from any EL-4K-VIP-RX (IR IN) allowing source control. Use Nice 12V IR emitters (sold separately)
15. L/R analog audio line input	Used to embed analog audio onto HDMI signal

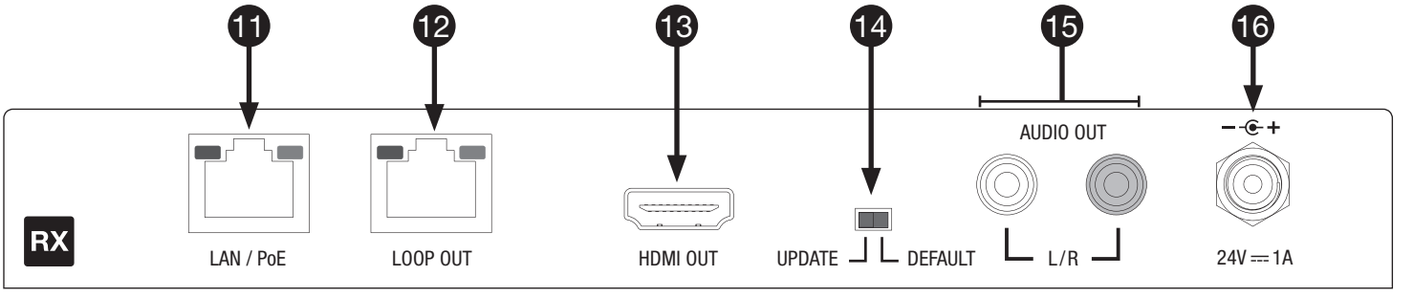
NOTE: Configuration of Nice EL-4K-VIP-TX products can be achieved manually or using the EL-4K-VIP-ACM. Please see the full product manual (available online at **www.niceforyou.com**) for further details.

Panel Description - EL-4K-VIP-RX Receiver

EL-4K-VIP-RX Front Panel



EL-4K-VIP-RX Rear Panel



1. Type-A USB ports	USB 2.0 connections for USB/KVM routing within VIP system
2. IR Flasher (IR output) - 3.5mm mono jack	Routes IR from any EL-4K-VIP-TX (IR IN) allowing local equipment control. Use Nice 12V IR emitters (sold separately)
3. IR IN (IR input)	3.5mm stereo jack. Transmits IR to currently selected EL-4K-VIP-TX transmitter allowing routed IR control of sources. Please use a Nice 12V IR Receiver (sold separately). When using the Nice IR Receiver (optional) ensure cable direction is correct
4. Transmitter Select Up/Down	Used to scroll through sources (EL-4K-VIP-TX), setup EL-4K-VIP-RX manually, and apply 'Programming mode'
5. Transmitter ID status window	Displays currently selected EL-4K-VIP-TX Transmitter ID
6. Assignable bi-directional RS-232 port	Connect to third party control device to extend RS-232 commands to any/multiple EL-4K-VIP product's RS-232 port
7. Reset Button	Press once briefly to reboot the product or press and hold for 5 seconds to factory reset
8. Firmware Micro-B USB port	Used to update EL-4K-VIP-RX MCU firmware
9. Power LED indicator	Flashing status light when the unit is booting. Solid status light when finished booting
10. Link LED indicator	Flashing status light when the unit has booted and is ready. Solid status light when receiving video
11. LAN Connection (PoE)	Connect to any supported Layer 2 / Layer 3 Managed Switch for HDMI video distribution
12. LOOP OUT	Connect to LAN connection on subsequent EL-4K-VIP-RX unit for daisy-chain of video IP stream
13. HDMI output	Connect to a HDMI display
14. MCU firmware update switch	Used to place Receiver product into firmware update mode
15. L/R analog audio line output	Used to breakout analog audio from HDMI signal **NOTE:** Source input must be PCM 2 channel audio for analog audio outputs to work. VIP products do not down-mix multi-channel audio signals. Audio outputs are fixed line level output and RX supports up to 96Khz audio formats only
16. Power port	Use 24V 1A DC adaptor (sold separately) if not using a PoE network switch **NOTE:** Configuration of Nice EL-4K-VIP-RX products can be achieved manually or using the EL-4K-VIP-ACM. Please see the full product manual (available online at **www.niceforyou.com**) for further details.

Specifications

EL-4K-VIP-TX

- **Video input:** 1 x HDMI Type A, female
- **Audio input:** 1 x 3.5mm L/R analog audio
- **Audio output:** 2 x RCA L/R analog audio
- **Video output/Ethernet port:** 1 x LAN RJ45 connector (PoE 9W)
- **USB / KVM:** 1 x USB, Type B
- **RS-232 serial port:** 1 x 3-pin Phoenix connector
- **IR input:** 1 x 3.5mm stereo jack
- **IR flasher:** 1 x 3.5mm mono jack
- **Firmware update:** 1 x USB Micro B
- **Accessories:** Mounting kit included
- **Dimensions (W x D x H):** 190mm x 114mm x 25mm
- **Shipping weight (Kit):** 0.8kg
- **Operating temperature:** 32°F to 104°F (0°C to 40°C)
- **Storage temperature:** -4°F to 140°F (-20°C to 60°C)

EL-4K-VIP-RX

- **Video output:** 1 x HDMI Type A, female
- **Audio output:** 2 x RCA L/R analog audio
- **Video input/Ethernet port:** 1 x LAN RJ45 connector (PoE 9W)
- **Video/Ethernet extension:** 1 x LAN RJ45 connector
- **USB / KVM:** 2 x USB, Type A
- **RS-232 serial port:** 1 x 3-pin Phoenix connector
- **IR input:** 1 x 3.5mm stereo jack
- **IR flasher:** 1 x 3.5mm mono jack
- **Firmware update:** 1 x USB Micro B
- **Accessories:** Mounting kit included
- **Dimensions (W x D x H):** 190mm x 114mm x 25mm
- **Shipping weight (Kit):** 0.8kg
- **Operating temperature:** 32°F to 104°F (0°C to 40°C)
- **Storage temperature:** -4°F to 140°F (-20°C to 60°C)

Package Contents

- 1 x EL-4K-VIP-TX/RX
- 1 x 3-pin Phoenix connector
- 1 x Mounting kit
- 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.

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.

Nice

Niceforyou.com

©2023 Nice North America LLC.
All rights reserved.

Technical Support:
800-421-1587
Technical Support Hours:
M – F, 6:00 a.m. – 4:00 p.m. PST

Nice North America
c/o Customer Service
5919 Sea Otter Place, Suite 100
Carlsbad, CA 92010

10023301 Rev-B