



IGUANA

NPVW4k

4K H.264/H.265 Decoder

User Manual

Version: V1.0.0

Important Safety Instructions



1. Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.



6. Clean this apparatus only with dry cloth.



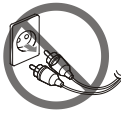
2. Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure the unit is well ventilated.



7. Unplug this apparatus during lightning storms or when unused for long periods of time.



3. To prevent risk of electric shock or fire hazard due to overheating, do not obstruct the unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.



8. Protect the power cord from being walked on or pinched particularly at plugs.



4. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



9. Only use attachments / accessories specified by the manufacturer.



5. Do not place sources of naked flames, such as lighted candles, on the unit.



10. Refer all servicing to qualified service personnel.

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Introduction

The decoder is designed to work with an H.264/H.265 encoder to provide complete end-to-end streaming systems. Video, audio, IR and RS232 signals can be routed together or separately throughout the matrix system.

It supports PoE. It can be controlled by NPCTL4k controller (Web UI & Telnet API). It is ideal for applications of conference rooms, shopping malls, hotels, monitoring centers, schools and corporate training environments, etc.

Recommended Software Versions

The H.264/H.265 IP encoders and decoders work together to distribute and switch IP streams throughout the matrix system by using specific software versions of operation tools. We would recommend that you use the following versions to deploy network.

Device/Operation Tool	Software Versions
NPTX4k	V1.0.29 or above
NPVW4k	V1.0.29 or above
NPCTL4k	V1.3.17:TTV_1.0 or above

Features

- Streams video/audio/RS232/IR signals over IP networks.
- Supports resolutions up to 3840 x 2160@30Hz.
- Supports audio de-embedding output.
- Supports RS232 pass-through between encoder and decoder, or between encoder and IP controller.
- Supports IR pass-through between encoder and decoder, as well as from IP controller to decoder in Pronto IR format.

- Supports HDCP 2.2.
- Provides configuration of video display mode between low latency and high quality.
- Supports EDID export from display to the decoder.
- Supports CEC commands of one-touch-play and standby to power on and off the display.
- Supports fast and seamless switching.
- Supports video rotation of 90°/180°/270°.
- Controlled by IP controller.
- Supports PoE.
- Supports Auto IP (zeroconf) – automatically generates a dynamic IP address at startup in the absence of a DHCP server.
- Supports communications protocols such as HTTP, HTTPS, SSH, LDAP, 802.1X, TCP/IP, Telnet, UDP, and IGMP.
- Supports AES-128 decryption of video and audio.

Package Contents

- 1 x Decoder
- 1 x IR Emitter (1.2m)
- 1 x Broadband IR Receiver (1.2m, 30-50KHz)
- 2 x Phoenix Male Connectors (3.5 mm, 3 Pins)
- 4 x Wall Mount Brackets
- 2 x Rack Mount Brackets
- 4 x M2.5*L5 Screws

Specifications

Video	
Input Video Port	1 x LAN
Input Video Type	H.264/H.265
Input Resolution	From 480p@60Hz to 3840x2160p@30Hz
Output Video Port	1 x HDMI
Output Video Type	HDMI 1.4, HDCP 2.2
Output Resolution	480p@60Hz, 576P@50Hz, 800x600@60Hz, 1024x768@60Hz, 720p@50Hz, 720p@60Hz, 1280x800@60Hz, 1280x1024@60Hz, 1366x768@60Hz, 1440x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1080p@24/25/30/50/60Hz, 3840x2160p@24/25/30Hz
Video Impedance	100 Ω
End-to-End Time Latency	<ul style="list-style-type: none"> • Approx. 150 ms (Low latency mode, from TX to RX) • Approx. 300 ms (High quality mode, from TX to RX)
Audio	
Input Audio Port	1 x LAN
Input Audio Format	PCM, Stereo, 16-bit, 32/44.1/48KHz sample
Output Audio Port	1 x HDMI
Output Audio Format	PCM/AAC, Stereo
Control	
Control Method	Front panel button, IP Controller

General	
Operating Temperature	32°F ~ 113°F (0°C ~ 45°C) 10% ~ 90%, non-condensing
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C) 10% ~ 90%, non-condensing
ESD Protection	Human body model: ±8kV (air-gap discharge) / ±4kV (contact discharge)
Power Supply	DC 12V 1A / PoE
Power Consumption	DC 12V: 3.5W PoE: 4.1W (Max.)
Product Dimensions (W x H x D)	175 mm x 25 mm x 100.2 mm / 6.9" x 0.98" x 3.94"
Net Weight	0.50kg / 1.1lbs

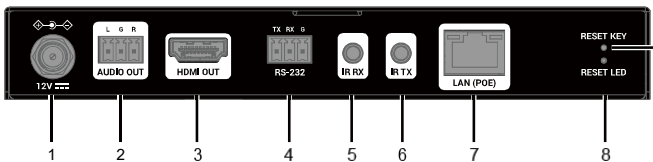
Panel Description

Front Panel



#	Name	Description
1	POWER LED	<ul style="list-style-type: none"> On: The device is powered on. Off: The device is powered off.
2	STATUS LED	<ul style="list-style-type: none"> On: The device is receiving IP stream. Blinking: The device doesn't receive any IP stream. Off: The device is powered off. / The device is booting.
3	ID KEY	<ul style="list-style-type: none"> Short press the ID key to show the information of encoder and decoder (e.g. device's IP mode, IP address and MAC address) on the display. Press and hold the key for more than 2 seconds to switch to the next encoder with a greater MAC address in turn.

Rear Panel



#	Name	Description
1	DC 12V	Connect to the power adapter.
2	Audio Out	Connect to an audio receiver such as an amplifier for audio de-embedding output from the HDMI source.
3	HDMI Out	Connect to an HDMI display device.
4	RS232	Connect this port to an RS232 device such as a computer to bi-directionally communicate with an RS232 device at the IP controller or decoder side.
5	IR RX	Connect to the broadband IR receiver cable.

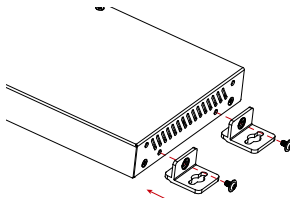
#	Name	Description
6	IR TX	Connect to the IR emitter cable.
7	LAN (PoE)	Connect to a network switch for IP stream input and control of the device. Note: This decoder can be powered by either a PoE-enabled network switch via this port or a power adapter.
8	Reset LED	The Reset key is used to reset the device.
9	Reset Key	Use a pointed stylus to press and hold this key for more than five seconds until the Reset LED lights up, release this key, the device reboots and restores to its factory default.

Installation

Note: Before installation, ensure all devices are disconnected from the power source.

To install the device on a suitable location:

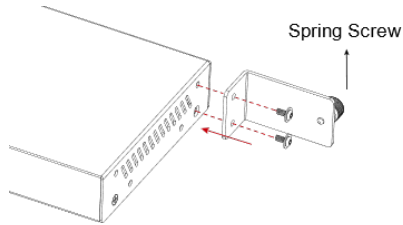
1. Attach the mounting brackets to the panels of both sides using the screws (two on each side) provided in the package.



2. Screw the brackets to the position as desired (screws in this step are not included in the package).

To install the device on a rack:

1. Attach the rack mount bracket to the side panel using the mounting screws provided in the package, see following:



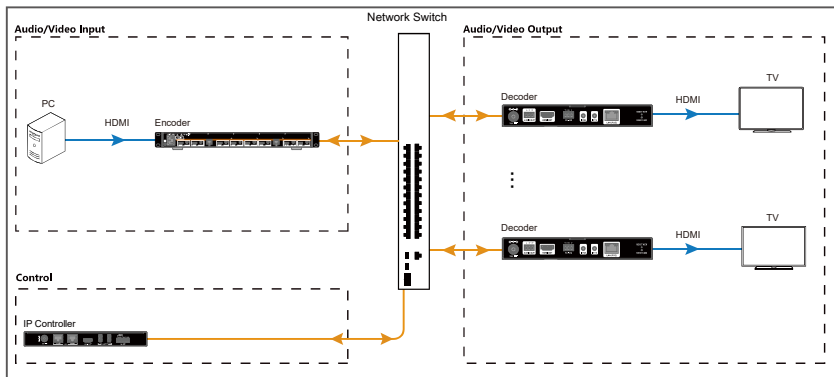
2. Repeat the above step for the other side of the device.
3. Screw down the spring screw of the rack mount bracket to affix the device to the rack.

Applications

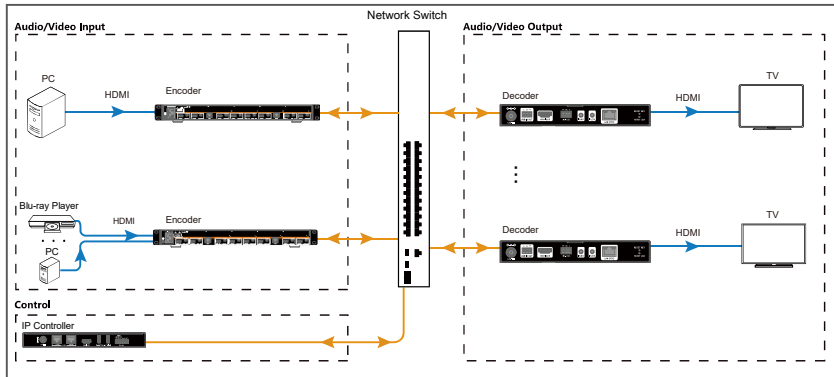
Note:

- Before the installation, disconnect the power supplies from all devices.
- If the switch doesn't support PoE or is unable to provide enough power, connect the codecs to power supplies.

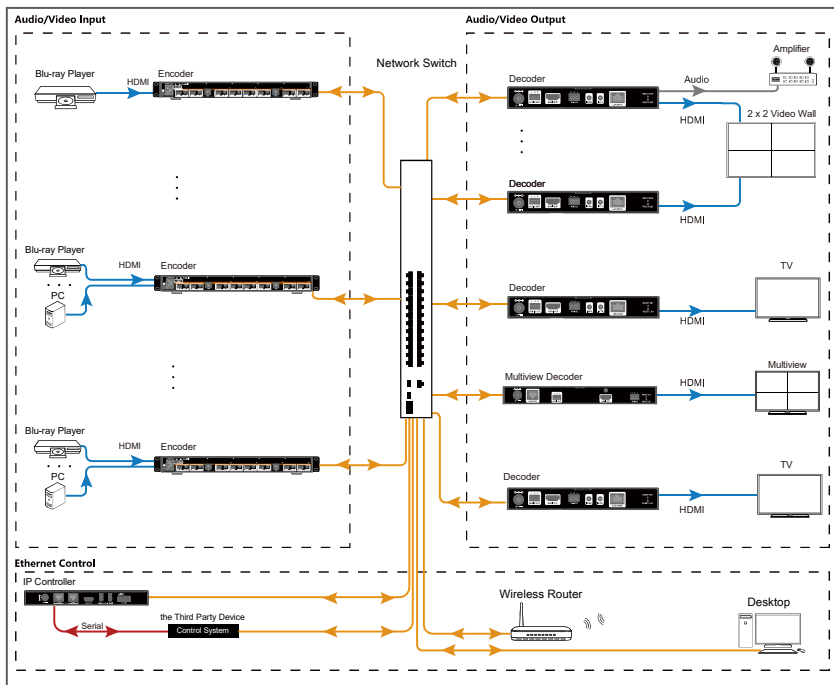
(1) IP-based HDMI Splitter



(2) IP-based HDMI Matrix



(3) Interoperate with other H.264/H.265 Codecs



Device Control

The device can be controlled through the NPCTL4k controller.

By default, the audio, video and RS232 signals of the device are routed together through the controller, and can be routed separately via API commands, for more information, see the user guide of the controller.

Contact Neopro Support

Got a question about our product, or need some help? We have a couple of options:

Contact Neopro at:

Phone Support: 754 222-8520

Email Support: support@neoprointegrator.com

