



NPRX4k

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.



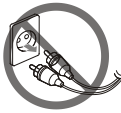
2. Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure the unit is well ventilated.



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

This H.264/H.265 decoder is designed to work with NPTX4k encoders and the NPCTL4k controller together to provide complete end-to-end streaming systems. They are 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
NPRX4k	V1.0.23 or above
NPCTL4k	V1.3.17:TTV_1.0 or above

Features

- Includes auto scaler with output resolutions supported from 480p@60Hz to 3840 x 2160@30Hz scaling based on the EDID of display.
- 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 HDCP 2.2.
- Supports PoE.
- Supports fast and seamless switching.
- Supports video rotation at 90°/180°/270°.

- Provides configuration of video display mode between low latency mode and high quality mode.
- Displays the idle image in the size of 1920x1080.
- Allows for uploading an image to overlay on the video with a maximum size of 1920x1080.
- 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, TCP/IP, Telnet, UDP and IGMP.

Package Contents

- 1 x Decoder
- 4 x Mounting Brackets
- 4 x Mounting Screws (M2.5*L5)

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, 1680x1050@60Hz, 1080p@24Hz, 1080p@25Hz, 1080p@30Hz, 1080p@50Hz, 1080p@60Hz, 3840x2160p@30Hz
Video Impedance	100 Ω
End-to-End Time Latency	When works with NPTX4k encoder: <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: <ul style="list-style-type: none"> • ±8kV (air-gap discharge) • ±4kV (contact discharge)
Power Supply	12 V 1 A DC; POE
Power Consumption	4.5W (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

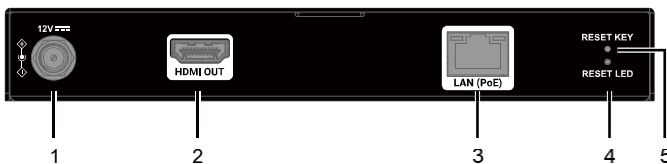
Panel Description

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	12V	Connect to a DC 12V power adapter.
2	HDMI OUT	Connect to an HDMI display device.
3	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.

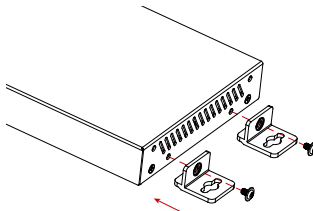
#	Name	Description
4	RESET LED	Use a pointed stylus to press and hold this key for more than five seconds until the Reset LED lights up, then release this key, the device will reboot and restore to its factory default.
5	RESET KEY	

Installation

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

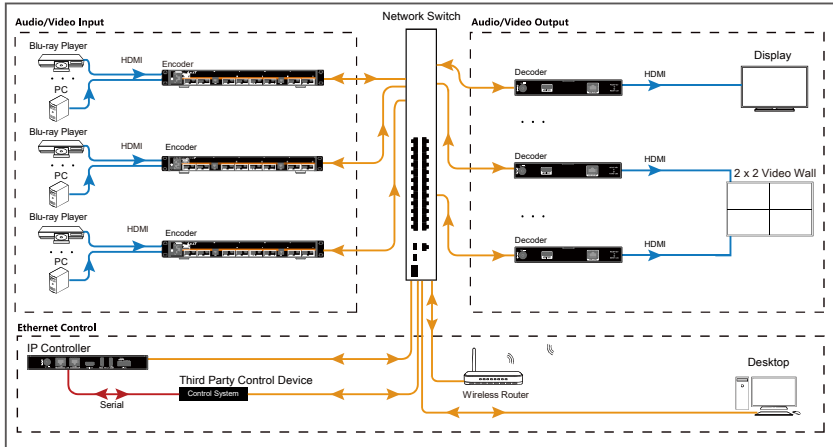
To install the device on a suitable location:

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



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

Application



Note: Before installation, disconnect the power supplies from all the devices.

Device Control

This device can be controlled through the IP controller. For more information, see its user guide.

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

