



NDI®|HX PTZ3 - Sales & Order Guide

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NDI®|HX PTZ3 - Positioning

Headline

Simple, Flexible, Uncompromising: The NewTek NDI®|HX PTZ3 Camera is the very best and easiest way to acquire live video for input into any workflow and is the world's first camera to offer NDI®|HX3 - raising the bar for PTZ Cameras everywhere.

High-level description

The NewTek NDI®|HX PTZ3 Camera is the very best and easiest way to acquire live video for input into any workflow and is the world's first camera to offer NDI®|HX3 - deliver low latency transmission with reduced bandwidth while remaining visually lossless. In addition, the all-new PTZ3 is the very first NewTek camera to offer Professional XLR audio connectivity as well as Tally, control, power, audio and video all using a single cable.

Target Buyers

Digital media producers, technology managers and system designers for:

- Corporate
- Education
- Entertainment and Gaming
- Government
- Interactive Media
- Healthcare
- Professional AV
- Surveillance and Security
- Houses of Worship

Buyer Requirements

A PTZ Camera that simply and easily fits into any workflow and doesn't compromise on video or audio quality – all without the need for significant bandwidth.

Unlike other solutions that

Require costly and complex set-ups, do not integrate with sophisticated audio devices, and don't have as tight an integration with NDI.

NDI®|HX PTZ3 - Core Messages

Positioning Statement

As an NDI® native Pan/Tilt/Zoom (PTZ) camera, the PTZ3 is the very best and easiest way to acquire live video for input into any workflow. Offering Tally, control, power, audio, and video all using a single cable, the PTZ3 also includes the latest in NDI with NDI|HX3; giving the option to deliver low latency transmission with reduced bandwidth, while maintaining the visually lossless standards NDI users' demand. PTZ3 now offers Professional XLR audio connectivity, allowing the camera to work seamlessly with equipment such as microphones, mixers, amplifiers, and soundboards.

Value Proposition Statement

The PTZ3 allows video professionals, information technology managers, and system designers to explore new ways to expand, grow, and evolve their video productions using the network, while simultaneously streamlining integration and installation by incorporating power over Ethernet. The PTZ3 offers a solution for not only video production professionals but Education, Corporate, Esports and healthcare sectors alike.

Elevator Pitch

Offering the tightest integration with NDI of any PTZ camera on the market, PTZ3 is the best and easiest way to acquire live video for input into your workflow. In addition, PTZ3 is the world's first camera to offer NDI|HX3; boasting comparable quality and low latency to full NDI without the need for significant bandwidth. Simply better, the PTZ3 uses just one cable for audio and video, PTZ control, tally and PoE for power – making cameras instantly available on the network. For the first time, NewTek offers Professional XLR audio connector allowing the camera to work seamlessly with equipment such as microphones, mixers, amplifiers, and soundboards.

Unique Selling Proposition

NewTek NDIHX PTZ3 is the world's first camera to offer NDI|HX3; boasting comparable quality and low latency to full NDI without the need for significant bandwidth. Available in both black and white body colors, the PTZ3 is the very first NewTek PTZ camera that offers Professional XLR audio connectivity.

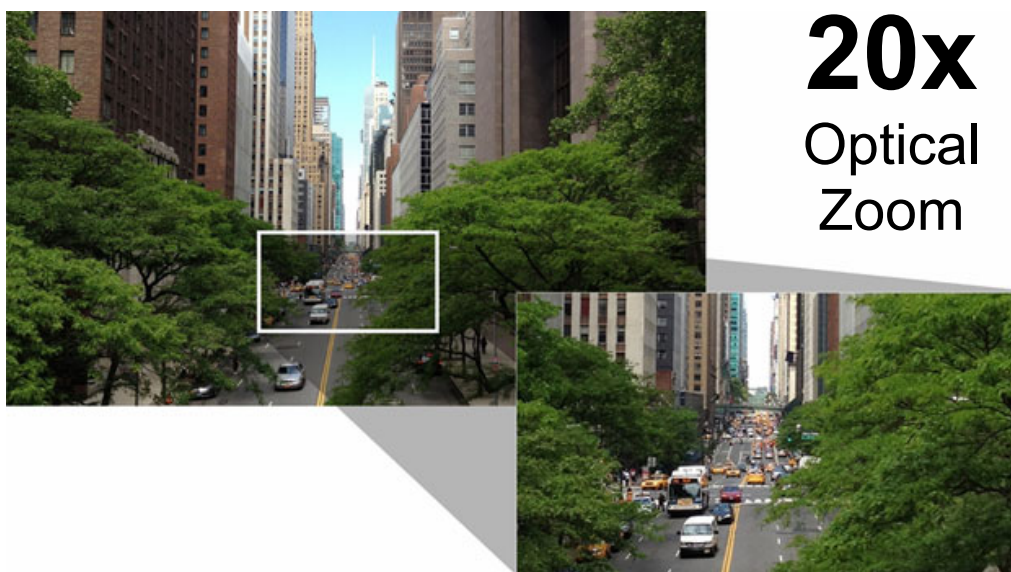
NDI®|HX PTZ3 - Product Highlights

Better in every way and easiest way to acquire live video for input into any workflow - the new NDI®|HX PTZ3 raises the bar for PTZ Cameras everywhere.

- ✓ Offers NDI®|HX3 support
- ✓ Support for sophisticated devices with Professional XLR audio connection
- ✓ Available in Black and White body colors
- ✓ One ethernet cable for audio and video, PTZ control and tally
- ✓ Compatible with NDI 5
- ✓ Native support for HD video formats up to 1080p 60
- ✓ Integrated and automatic tally support via NDI®
- ✓ Smooth, motor-driven pan-tilt-zoom operation and movement between presets
- ✓ Remote control & monitoring via Web-based user interface
- ✓ Remote control over IP via NewTek NDI® Studio Monitor
- ✓ Remote capture & recording via NewTek NDI® Studio Monitor
- ✓ Power over Ethernet via POE+ (802.3at) or included DC 12V 1A external supply
- ✓ Mounting bracket for wall and ceiling installation included
- ✓ Compatible with professional and prosumer production solutions including NewTek live production systems* and third-party video switchers, as well as software-based video tools like Livestream Studio, OBS, Streamstar SW, Telestream Gameshow and Wirecast, VidBlaster, vMix, XSplit, and all other NDI®-compatible products (NDI® version 2.0 or higher)
- ✓ Compatible with popular desktop video applications via NDI® webcam input including Google Hangouts, Microsoft Teams, Skype, WebEx, Zoom, and more.

* NewTek live production system must have NDI 4.0, e.g., TriCaster should be AE3 or later (>7-3)

NDI®|HX PTZ3 - Example Use Cases



Corporate	Turn any office or meeting room into a remote studio for executive communications, video conferencing, or online training
Education	Streamline virtual classroom production, lecture capture, and distance learning for live and on-demand teaching
Entertainment	Expand event coverage in-venue and behind the scenes for live streaming, recording, and social video
Gaming	Capture the action, emotion, and intensity of competitive gaming and esports from every angle
Government	Inform and involve citizens with real-time access to live meetings and community programming
Professional A/V	Explore virtually endless video applications, from medical and security installations to weddings and graduations
Sports	Enhance the fan experience with unique camera angles or outfit facilities for covering practices and club activities

NDI®|HX PTZ3 - Features

NDI. Better.

By simply appearing on the network automatically, NDI Cameras can be easily integrated into any workflow. The PTZ3 breaks the mold with the integration of NDI|HX3; giving the option to deliver low latency transmission with reduced bandwidth, while maintaining the visually lossless standards NDI users' demand.

Audio. Better.

Better than ever audio is now possible with the Professional XLR audio input available in the NDI|HX PTZ3 Camera. Delivering clean, professional level audio directly from the camera into the NDI network, the XLR feature offers an array of connectivity options – all with a single connection

Connectivity. Better.

No other camera on the market offers this level of simplicity and control; eliminating the need for, and the increasing cost of, long cable runs, complex setups, and management time to maintain. The NewTek PTZ3 can be added into any workflow with a single ethernet cable for HD video up to 1080/60p, audio, PTZ presets and control, tally, and PoE

PTZ. Better.

Hard stop and stop movements during camera presets which create an inferior viewing experience are a thing of the past – the PTZ3 offers synchronized preset starts and a new motion algorithm that helps create a natural look and feel to any production. The PTZ3 is also now available in both Black and White body colors and includes ceiling and wall mounts, making it perfect for any setting including studios, hospitals, corporate meeting spaces, or for live events.

NDI®|HX PTZ3 - Technical Specifications

Video Output	NDI HX, 3G-SDI, HDMI
Audio Output	NDI HX, HDMI
Video Formats	1080p: 60, 59.94, 50, 30, 29.97, 25, 24, 1080i: 59.94, 50 720p: 60, 59.94, 50, 30, 29.97, 25
Zoom	20x Optical & 2x digital zoom
Sensor	1/2.86" High Quality CMOS Sensor
Shutter Speed	1/30 to 1/10,000 sec
Panning Angle	-170° to +170°
Panning Speed	Max 120°/sec
Tilting Angle	30° to +90°
Tilting Speed	Max 80°/sec
Aperture	F1 ~ 14
Focal Length	4.9~98mm
Horizontal Angle of View	60°(Far)-3,2°(Near)
Min. Object Distance	1.5m (Wide/Tele)
Min. Illumination	1.0 lux
Encoding	H.264/H.265 NDI HX

Audio Input	Mini XLR, 3.5mm stereo audio input (line)
Embedded Audio	NDI, HDMI, SDI*
Signal	Balanced (Mini XLR), Unbalanced (Line In)
Sample Rate	48KHz
Frequency	100Hz~20KHz
Total Harmonic distortion	-90dB
Tally	Supported

*Available in PTZ3 with a hardware version of 2.0 which started shipping August 2022

NDI®|HX PTZ3 - Technical Specifications continued...

Gain Control	Auto, Manual
Control	NDI
User Interface	Web based or NewTek NDI® Studio Monitor applications for remote configuration, control, and monitoring

POE+	POE+ (IEEE 802.3 at)
Direct Power	DC12V
Power Consumption	8W
Operating Temperature	-10°C~50°C
Operating Humidity	20%~80%
Physical	Dimensions 8.66 x 7.48 x 6.41 in (220 x 190 x 173 mm) Weight: 2.97lbs (1.35 kg)
Ceiling Mount	Included
Wall Mount	Included
Adapters	MiniXLR (f) to XLR(f) adapter included
Warranty	3 Years

NDI®|HX PTZ3 - Ordering Information

NDI® HX PTZ3 Camera		
FG-003248-R001	NDIHX-PTZ3B	NDI HX – PTZ3 Camera - Black
FG-003247-R001	NDIHX-PTZ3W	NDI HX - PTZ3 Camera - White
NDI® HX PTZ3 Camera – Optional Additional Accessories		
FG-003250-R001	PTZWMBKit	Wall mount bracket + screws kit
SP-00000159	PTZ3INCMBKit	PTZ3 In-ceiling mount bracket + screw kit
SP-00000156	PTZ3PSA12V-2A	PTZ3 12V-2A Power Supply Adaptor - Includes EU cord, UK cord, and US cord
SP-00000158	PTZ3Remote	PTZ3 Remote Control
SP-00000157	PTZ3MXLRXLRA	PTZ3 Mini-XLR to XLR adapter

Note: The NDI®|HX PTZ3 Camera includes the above accessories as standard. Additional accessories can also be ordered separately using these details.

Please check the latest NewTek Price Book for demo unit options.

NDI[®]|HX PTZ3 - Reference

NewTek NDI[®]|HX PTZ3 Connections



NDI®|HX PTZ3 – Frequently Asked Questions

What devices can receive NDI|HX3?

- Decoding NDI|HX3 is built into the NDI5 drivers for Windows, macOS, and Linux so most software using NDI5 or later will be able to decode HX3 without any changes.

Note: For devices that cannot directly decode NDI|HX3, NDI Bridge can be utilized for conversion and is available as part of the free NDI 5 Tools package.

What is the HD data rate of NDI|HX3 in the NDIHX-PTZ3?

- Data rate calculations are variable based on content of captured image and specific to the NDI|HX-PTZ3 camera. Typically, full motion video at 1080p 59.94 will be ~80 Mbps.

Does NDI|HX-PTZ3 support NDI Discovery Server or NDI Groups?

- Yes, the NDIHX-PTZ3 supports both NDI Discovery Server and NDI Groups. For best performance, be sure to use Discovery Server and NDI Access Manager from NDI 5 or later.

What is the end-to-end latency?

- Less than 1/10th of a second when using direct connection to NDI Studio Monitor in lowest latency using NDI|HX3.

Does the Mini-XLR connector support phantom power?

- No, microphones that need phantom power will require an upstream phantom power injector.

Can I plug audio in both line and mic connectors simultaneously?

- While it is possible to have both audio connections populated, we strongly advise using one connection to ensure the best audio signal fidelity.

Can the mic connector (Mini-XLR) accept line level audio?

- No, we advise mic level connections on the XLR connector and line level connections on the 3.5mm mini-jack.

What mounting options are available?

- NDI|HX-PTZ3 comes with a wall and ceiling mount in the box.

Are all outputs simultaneously available?

- NDI and HDMI outputs are always available and correspond to the resolution and framerate to which the camera is configured. The SDI output will only support broadcast standard resolutions and frame rates.

What is the purpose of the USB-C connector?

- The USB-C connection supplies a plug-and-play video device for Windows. This connection is supplied for convenience. However, we strongly recommend NDI based workflows for the best experience.

What type of Power over Ethernet is required?

- POE+ (IEEE 802.3 at) at a maximum of 30 watts

Is there audio on the SDI output?

- Yes, embedded audio is supported via SDI. This is available on the PTZ3 with hardware version 2.0 – information on which hardware version is being used can be found under the 'Administration' tab in the 'Settings' menu.

Is the power supply included?

- Yes

Is there a power light?

- Yes, when power is applied to camera the LED is blue. When tally is engaged, the LED turns red for program, green for preview, and amber for simultaneous program and preview.

Is digital zoom enabled by default?

- The digital zoom setting is configured via a slider in the web user interface under Video Settings > Focus/PTZ > Range. The default value is "0", which will disallow digital zoom.

What are the RS-232 connectors for?

- The camera includes 8-pin DIN connections that respond to VISCA serial commands and pass through for RS-232 daisy chains. However, we strongly advise and officially support PTZ control via NDI.

Version Notes

February 15th, 2022
Initial release.

NDI®|HX PTZ3 Camera – One Sheet & Tech Specs

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That's not all - the PTZ3 is also now available in both Black and White body colors and includes ceiling and wall mounts, making it perfect for any setting including studios, hospitals, corporate meeting spaces, or for live events.



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Anti-Flicker	Off/50Hz/60Hz
Gain Control	Auto, Manual
Control	NDI
User Interface	Web based or NewTek NDI® Studio Monitor applications for remote configuration, control, and monitoring

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Direct Power	DC12V
Power Consumption	8W
Operating Temperature	-10°C~50°C
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