

Panasonic

NDI[®] | HX

AW-HN130W/K

NDI | HX Compatible Premium HD Integrated PTZ Camera

AW-UN70W/K

NDI | HX Compatible 4K Integrated PTZ Camera

AW-HN40HW/HK

NDI | HX Compatible HD Integrated PTZ Camera

AW-HN38HW/HK

NDI | HX Compatible Entry-level HD Integrated PTZ Camera

Built-in NDI | HX for End-to-End Video Production over the Network

NDI : Network Device Interface, a technology of NewTek, Inc.



4K
PROFESSIONAL



AW-HN130W/K



AW-UN70W/K



AW-HN40HW/HK



AW-HN38HW/HK

Complete video production, control, and creativity all over IP

NDI|HX



What is NDI?

Produce your shows in a completely new way—using sources from all over your network, not just what's physically patched into your SDI video router. NDI (Network Device Interface) by NewTek is a standard anyone can implement to connect video equipment across a network. Your production switcher, capture system, media server—any NDI-enabled device on the network—can see and access content from all other devices, allowing more sources than ever before to be used for live production.

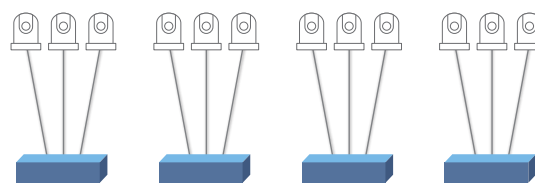
How does Panasonic support NDI?

Now, you can harness the power of NDI with Panasonic products. The Panasonic NDI capable models include a complete line-up of HN/UN series integrated robotic PTZ (Pan/Tilt/Zoom) Cameras and the AV-HLC100 Live Production Center. The integrated PTZs have built-in support of NDI via a highly efficient NDI|HX mode requiring no external conversion hardware allowing you to benefit from NDI with a Panasonic camera. The AV-HLC100 Live Production Center includes native NDI support as the premiere all-in-one live production tool. Combine the two together to enjoy end-to-end live video production from your live event to the web.

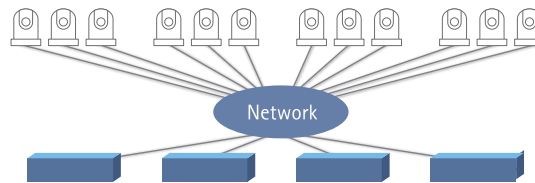
How is it useful?

NDI is video production over IP that you can use now on standard gigabit IP networks. Traditional control rooms and video productions utilized multiple paths, proprietary hardware, and distribution cores. With NDI, the network is your distribution and all video sources are available to all video destinations. No longer are you tied to physical limits of inputs and outputs, but rather the bandwidth of your network available to you.

Conventional Connection



NDI Connection



With NDI Connection, a control room or multiple control rooms are all connected. All video sources are available to all video destinations without a separate cable. Simpler to connect, easier to deploy, offering even more production creativity!

NDI Ecosystem

AV-HLC100 and other NDI capable Integrated Production Switchers

All Major I/O cards

Live Interviews

Media

Graphics

Instant Replay

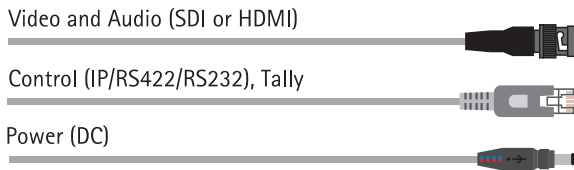
Presentation

NDI|HX Cameras
AW-UN70W/K, AW-HN130W/K etc.

NDI Utilities
NewTek IsoCorder
Studio Monitor
Scan Converter
Test Patterns
Access Manager

Single Cable IP Distribution

BEFORE



AFTER



Panasonic PTZ cameras with NDI | HX make a difference to live production



- Automatic Discovery & Ease of Use
- Built-in Support for NDI via NDI|HX
- Ultra Low Latency
- PTZ Control & Tally
- Single Cable Connectivity*3

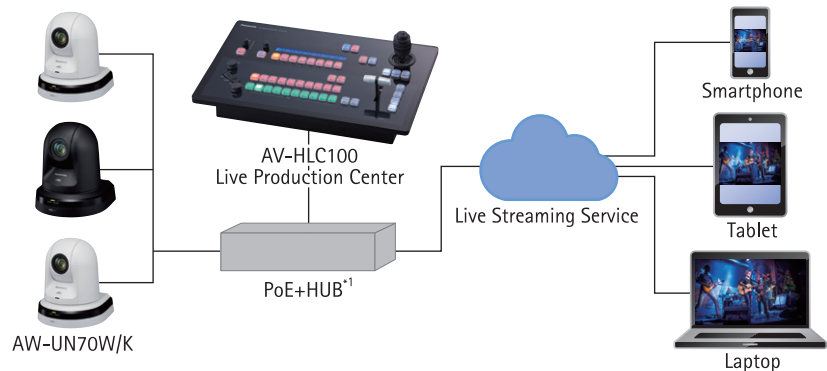


Panasonic

- Complete line-up of camera models with different sensor technology, optics, resolution, and interfacing
- Panasonic broadcast-level image quality with features like DRS*2, multi-axis color correction, and manual adjustment parameters
- The smoothest robotic and pan/tilt/zoom movement suitable for live "on-air" usage.
- Dedicated IP Controller offerings including AW-RP50 & AW-RP120 Joystick controllers, hybrid controllers, software, and available remote operating panels (ROP) for shading.
- Redundancy: Production Workflows are mission critical. Introduce redundancy to your workflow by utilizing NDI|HX and baseband video (HDMI and/or HD-SDI) simultaneously.
- Panasonic cameras with NDI|HX support multicast mode, meaning you don't utilize extra bandwidth when multiple clients access the same stream.
- Panasonic cameras feature an audio input. This means, audio can be injected and then embedded to your NDI signal.

System Configuration and Workflow

Live Event



NDI Utilities and 3rd Party Solutions

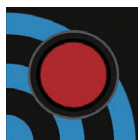
Available NDI Utilities and NDI support in numerous third party software/hardware solutions unleash the power of NDI workflow, allowing you to setup quicker and fuel a new level of creativity and quality.



NDI Transmit / Virtual Input converts an NDI Source to USB Video Class



NDI studio monitor allows for real-time monitoring and control of an NDI source



NDI IsoCorder allows you to record an NDI source to file

NDI | HX Upgrade for AW-UE/HE Models

Utilizing current generation HE/UE camera models? Great news, you can upgrade these cameras for NDI Support. Visit new.tk/ndi_panasonic to learn how to upgrade.

Upgrade Compatible Models:

- AW-HE130 Series: AW-HE130 (white/black)
- AW-UE70 Series: AW-UE70 (white/black)
- AW-HE40 Series: AW-HE40H (white/black)
- AW-HE38 Series: AW-HE38H (white/black)

- NDI|HX, a technology of NewTek, Inc.

*1: Power over Ethernet Plus, IEEE 802.3at

*2: Dynamic Range Stretch

*3: PoE is required for NDI connection.

Specifications

	ENTRY-LEVEL HD	HD w/HDMI	4K PROFESSIONAL	Premium HD
MODEL	AW-HN38H	AW-HN40H	AW-UN70	AW-HN130
Color	Black (K) or White (W)	Black (K) or White (W)	Black (K) or White (W)	Black (K) or White (W)
GENERAL				
Sensor	1/2.3" MOS	1/2.3" MOS	1/2.3" MOS	1/2.86" 3MOS
Optical Zoom	22x	30x	20x	20x
iZoom	30x	40x	30x	
Digital Zoom	16x	16x	12x	10x
FOV (Horizontal)	61.6° (W) - 2.9° (T)	61.6° (W) - 2.1° (T)	65.1° (W) - 3.2° (T)	60.2° (W) - 3.3° (T)
FOV (Vertical)	37.0° (W) - 1.6° (T)	37.0° (W) - 1.1° (T)	39.5° (W) - 1.8° (T)	36.2° (W) - 1.9° (T)
FOV (Diagonal)	68.7° (W) - 3.3° (T)	68.7° (W) - 2.4° (T)	72.4° (W) - 3.7° (T)	67.4° (W) - 3.8° (T)
Focus	Auto / Manual	Auto / Manual	Auto / Manual	Auto / Manual
Horizontal Resolution	1000 Lines	1000 Lines	1300 Lines (UHD)	1000 Lines
Minimum Illumination	0.35 lx	0.35 lx	0.35 lx	2 lx
Gain	0 dB - 48dB	0 dB - 48dB	0 dB - 48 dB	0 dB - 36 dB
Control	Serial / IP / IR	Serial / IP / IR	Serial / IP / IR	Serial / IP / IR
Power	PoE+ or AC	PoE+ or AC	PoE+ or AC	PoE+ or AC
Weight	3.30 lbs	3.30 lbs	3.30 lbs	6.83 lbs
Installation	Tripod, Wall ² , Ceiling	Tripod, Wall ² , Ceiling	Tripod, Wall ² , Ceiling	Tripod, Wall ² , Ceiling
Mount Position	Invertible	Invertible	Invertible	Invertible
Standard Warranty	1 Year	1 Year	1 Year	1 Year
PTZ				
Pan Range	±175 degrees	±175 degrees	±175 degrees	±175 degrees
Tilt Range	-30 to 90°	-30 to 90°	-30 to 90°	-30 to 210°
Pan / Tilt Speed	300°/s (Preset) 90°/s (M)	300°/s (Preset) 90°/s (M)	300°/s (Preset) 90°/s (M)	0.08°/s to 60°/s
Operation Noise	NC35 or Less	NC35 or Less	NC35 or Less	NC35 or Less
VIDEO OUTPUT				
LAN with built-in NDI HX ¹	✓	✓	✓	✓
3G-SDI	-	-	✓	✓
HD-SDI	-	-	✓	✓
SD-SDI	-	-	✓	✓
HDMI	✓	✓	✓	✓
Composite	-	-	-	✓
USB	✓	✓	✓	-
Output Format	1080/59.94p, 1080/29.97p, 1080/59.94i, 1080/29.97fs, 720/59.94p, 1080/50p, 1080/25p, 1080/50i, 1080/25fs, 720/50p	1080/59.94p, 1080/29.97p, 1080/59.94i, 1080/29.97fs, 720/59.94p, 1080/50p, 1080/25p, 1080/50i, 1080/25fs, 720/50p	2160/29.97p ³ , 1080/59.94p, 1080/29.97p, 1080/59.94i, 1080/29.97fs, 720/59.94p, 2160/25p ³ , 1080/50p, 1080/25p, 1080/50i, 1080/25fs, 720/50p	1080/59.94p, 1080/29.97p, 1080/23.98p, 1080/59.94i, 1080/29.97fs, 1080/23.98fs, 720/59.94p, 480/59.94p (I) ⁴ , 1080/50p, 1080/25p, 1080/50i, 1080/25fs, 720/50p, 576/50p (I) ⁴
CONTROL				
Browser (PC/Mac/Mobile) via IP	✓	✓	✓	✓
Live Production Center (Streaming Switcher/Controller)	AV-HLC100	AV-HLC100	AV-HLC100	AV-HLC100
Wide-Angle Tablet Control	AW-HEA10	AW-HEA10	AW-HEA10	AW-HEA10
IR Remote Control	AW-RM50	AW-RM50	AW-RM50	AW-RM50
Compact Controller	AW-RP50	AW-RP50	AW-RP50	AW-RP50
Full-Size Controller	AW-RP120	AW-RP120	AW-RP120	AW-RP120
Remote Operation Panel	AK-HRP200	AK-HRP200	AK-HRP200	AK-HRP200
Compact Live Switcher	AW-HS50N	AW-HS50N	AW-HS50N	AW-HS50N
FEATURES				
IP Live Preview	✓	✓	✓	✓
Simultaneous Multi-Stream	✓	✓	✓	✓
Image Stabilization	Electronic	Electronic	Optical, Hybrid O.I.S. (FHD)	Optical
Night Mode (for IR)	✓	✓	✓	✓
Dynamic Range Stretch (DRS)	✓	✓	✓	✓
Audio Input / Embedding	✓	✓	✓	✓
Color Temperature Adjustment	✓	✓	✓	✓
Presets	Up to 100	Up to 100	Up to 100	Up to 100
microSD Card Recording	✓	✓	✓	-
High Dynamic Range (HDR)	✓	✓	✓	-
Fanless Design	✓	✓	✓	✓
ND Filters	-	-	✓	✓
Genlock	-	-	✓	✓
Advanced Color Adjustment	✓	✓	✓	✓
Digital Noise Reduction (DNR)	✓	✓	✓	✓

*1: This product is compatible with NDI|HX technology of NewTek, Inc.

*2: With appropriate right angle wall mount, available locally

*3: HDMI output only.

*4: When either 480/59.94p(i) or 576/50p(i) is selected, the output formats are delivered as follows: P signal for HDMI output and I signal for SDI output.

For more information, please visit Panasonic web site



<http://pro-av.panasonic.net/>

* Specifications are subject to change without notice.

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Factories of AVC Networks Company have received ISO14001:2004-the Environmental Management System certification. (Except for 3rd party's peripherals.)