

NetworkHD 110 Series



Key Features

- Supports up to 1080p @ 60Hz video content
- Support all SD and HD formats - including interlaced content
- Flexible encoding using either H.264 or H.265 encoding. Encoding is configurable between a constant bitrate or variable bitrate.
- Low bandwidth or high-quality transmission methods. Low latency ~ 80ms. High-quality ~250ms
- Compatible with NHD-250-RX Multiview receiver
- Analog audio de-embed for easy connection to external audio DSP or amplifier
- Seamless video switching – no black screens or freeze frames
- Hugely scalable I/O, utilizing multicast technology
- Live video preview streams for use with NetworkHD Touch or a custom control UI
- Zero-configuration switch setup using unicast technology
- Flexible IP address settings: AutoIP/Static/DHCP
- Customizable, IR or RS-232 control of connected devices
- Infrared signal generation via API – supports Hex Global Cache format
- Batch firmware update and batch settings functions offers a massive reduction on installation times
- Custom EDID management with import/export
- HDCP 1.4 compliant
- IEEE 802.3af PoE compliant PD
- Includes optional DC power adapter and mounting brackets
- Compatible with NHD-000-RACK4 rack mounting kit (brackets included with decoder)

In the Box

1x NHD-110-TX or NHD-100-RX
 1x IR Emitter
 1x IR Receiver
 2x 3-pin Terminal Block

2x Wall Mounting Brackets
 2x Rack Mounting Brackets

Note: Device is PoE powered, 12V 1A PSU sold separately

NetworkHD NHD-000-CTL



Key Features

- Compatible with all NetworkHD 100/200/400 and 600 components
- Instant deployment available for the NetworkHD Touch iPad control App to provide live video previews and drag and drop source selection*
- Provides automatic discovery of NetworkHD devices
- Simple, intuitive Web-based configuration of encoder and decoder settings
- Interface to major control systems through powerful drivers
- Dual Ethernet Ports for complete isolation of control and AV network traffic
- IP control via LAN (Telnet & Web GUI) and a third party controller (API)
- Unified control and configuration access for most NetworkHD components
- Compatible with configuration files from PC configurator to quickly and reliably perform matrix operations for encoders and decoders
- Web-based configuration
- Threaded DC 12V power connection
- LED Power and Status indication
- Unit reset button
- Unit label holder

* Supported on 600 Series with future firmware upgrade

In the Box

1x NHD-000-CTL Controller
 1x Mounting Brackets for Rack Kit
 1x Quickstart Guide

1x 6-pin Terminal Block
 2x Wall Mounting Brackets
 1x 12V Power Supply (US/UK/EU/AU)

Specifications

Audio and Video				
	110 Series	NHD-250-RX	400 Series	600 Series
Inputs	TX	1x 8-pin RJ-45 (Transmission from TX)	TX	TX
	1x 19-pin HDMI type A female		1x 19-pin HDMI Type A	1x DisplayPort 20-pin 1x HDMI 19-pin type A 1x 3.5mm (1/8in) TRS Stereo
	RX		RX	RX
	1x 8-pin RJ-45		1x 8-pin RJ-45	1x 8-pin RJ-45
Outputs	TX	1x 19-pin HDMI Type A 1x Audio Out: 3-pin Phoenix	TX	TX
	1x 8-pin RJ-45 female 1x Audio Out: 3-pin Phoenix		1x 19-pin HDMI Type A 1x 3.5mm (1/8in) TRS Stereo 1x 8-pin RJ-45	1x 8-pin RJ-45 1x 3.5mm (1/8in) TRS Stereo
	RX		RX	RX
	1x 19-pin HDMI Type A 1x Audio Out: 3-pin Phoenix		1x HDMI Out 19-pin type A 1x Audio Out: 5-Pin Phoenix 1x 3.5mm (1/8in) TRS Stereo (v2)	1x HDMI 19-pin type A 1x 3.5mm (1/8in) TRS Stereo
Output Video Encoding	H.264/H.265	H.264	JPEG 2000	SDVoE
Encode/Decode Data Rate	2~30Mb/s	Max: 30Mb/s per stream	850Mbps	10Gbps
Max End to End Latency	60~90 ms (Low latency mode) 250~300 ms (High quality mode)	~80ms (low latency mode) ~300ms (high quality mode)	1 video frame latency (pass-through mode) 16ms @60fps 2 video frames latency (scaler/VW mode) 33ms @60fps	Genlock Mode: Uncompressed = 30us, Compressed <120us Fast Switch Mode: 1~2 video frames = min. between 16.7 – 33.4ms @ 60fps
Audio Formats	2ch PCM	2ch LPCM 48KHz	2ch LPCM Multichannel: LPCM up to 7.1 and up to DTS:X and Dolby Atmos	2ch PCM Multichannel: LPCM and Up to Dolby Atmos and DTS-X
Max Video Resolutions	1920x1200p @60Hz 8bit	1920x1200p @60Hz 8bit	3840x2160p @60Hz 8bit 4:2:0	2160p @60Hz 12bit 4:2:2
Max Pixel Clock	165MHz	594MHz	300 MHz	595 MHz
Supported Standards			HDR10, HLG, BT.2020	HDR10 HLG BT.2020 3D Video Dolby Vision
Communication and Control				
HDMI	HDCP 1.4 CEC	HDCP 1.4 CEC	HDCP 2.2 CEC	HDCP 2.2 CEC
Ethernet	1x 8-pin RJ-45 female 10/100Base-T PoE	1x LAN (PoE): 8-pin RJ-45 ANSI/TIA-568 8P8C, 1000Base-T, PoE PD (IEEE 802.3af)	1x LAN (PoE): 8-pin RJ-45 ANSI/TIA-568 8P8C, 1000Base-T, PoE PD (IEEE 802.3af)	1x 10GbE SDVoE: 8-pin RJ-45 Female 10GBASE-T 1x LAN: 8-pin RJ-45 Female 1000BASE-T
USB	RX: 2x USB 1.1 Device: Type A TX: 1x USB 1.1 Host: Type B Power: 5v 500ma per port Data Rate: Max 115200bps	NA	NARX: 2x USB 2.0 Device: Type A TX: 1x USB 2.0 Host: Type B Power: 5v 500ma per port Data Rate: Max 9MB/s	NA
IR	1x IR TX: 3.5mm (1/8in) TS Mono 1x IR RX: 3.5mm (1/8in) TRS Stereo Bidirectional Over Ethernet 2 Way Broadcast Routed API Programmable	NA	1x IR TX: 3.5mm (1/8in) TS Mono 1x IR RX: 3.5mm (1/8in) TRS Stereo Bidirectional Over Ethernet 2 Way Broadcast Routed API Programmable	1x IR TX: 3.5mm (1/8in) TS Mono Jack 1x IR RX: 3.5mm (1/8in) TRS Stereo Jack 2 Way Broadcast Routed API Programmable
RS-232	1x RS-232: 3-pin Phoenix Routed API Programmable	2x RS-232: 4-pin Phoenix 2-Way	1x RS-232: 4-pin Phoenix 2 Way (RX only) Routed API Programmable	1x RS-232: 4-pin Phoenix Connector 2 Way Broadcast Routed API Programmable
Power				
Power Supply	12V DC 1A	12V DC 1A	12V DC 1A	12V DC 3A
PoE	IEEE 802.3af 12V 1A 12.95W	IEEE 802.3af (15.4W at PSE)	IEEE 802.3af (15.4W at PSE)	NA
Power Consumption	6W (DC adapter)	8.3W (with PSU)	8W (with PSU)	TX: 15.24W RX: 18.64W
Environmental				
Operating Temperature	0 to + 45°C (32 to + 113 °F), 10% to 90%, non-condensing			
Storage Temperature	-20 to +70°C (-4 to + 158 °F), 10% to 90%, non-condensing			
Maximum BTU	20.47 BTU/hr	31 BTU/hr	51.18 BTU/hr	63.6 BTU/hr
Regulatory				
Safety and Emission	CE FCC RoHS EAC RCM			

For all discontinued NetworkHD documentation, visit the [Discontinued webpage](#).