

NetworkHD 600 Series

NHD-610-TX | NHD-610-RX



In the Box

- 1x NHD-610-TX or NHD-610-RX
- 1x IR Emitter
- 1x IR Receiver
- 2x NHD-000-RACK4 brackets
- 1x 12V DC Power Supply (US/UK/EU/AU)
- 1x 3-pin phoenix connector (for RS-232)
- 1x 5-pin phoenix connector (for analog audio)

Key Features

- Full HDMI 2.0 encoding/decoding up to 4K60 4:4:4 with Dolby Vision/HDR compatibility
- USB 2.0 connectivity for extension of USB peripheral devices
- Dante/AES67 audio output on NHD-610-TX encoder
- NHD-610-RX decoder capable of video wall and multiview processing
- Secure communications using AES, SSH and TLS protocols

NHD-600-TRX | NHD-600-TRXF



In the Box

- 1x NHD-600-TRX or NHD-600-TRXF
- 1x IR Emitter
- 1x IR Receiver
- 2x Mounting Ears
- 2x NHD-000-RACK4 brackets
- 1x 12V 2A DC Power Supply (US/UK/EU/AU)
- 1x 3-pin phoenix connector (for RS-232)
- 1x 5-pin phoenix connector (for analog audio)

Key Features

- Operates as a transceiver that can encode and decode simultaneously
- Full HDMI 2.0 encoding/decoding up to 4K60 4:4:4 with Dolby Vision/HDR compatibility
- USB 2.0 connectivity for extension of USB peripheral devices.
- Zero latency A/V transmissions using SDVoE technology
- Native video wall and multiview processing
- Secure communications using AES, SSH and TLS protocols

TRXF Additional Features

- Fiber transport supporting up to 300m distance using OM3 multimode

NetworkHD 500 Series

NHD-500-TX | NHD-500-RX



In the Box

- 1x NHD-500-TX Decoder
- 1x IR Emitter
- 1x IR Receiver
- 1x Pair of Rack Brackets
- 1x Pair of Wall Brackets
- 1x 3-pin Terminal Block
- 1x 5-pin Terminal Block

Key Features

- Full HDMI 2.0 encoding/decoding up to 4K60 4:4:4 with Dolby Vision/HDR compatibility
- Flexible output supports either Ethernet or Fiber connections (300m w/ OM3 fiber)
- USB connectivity for extension and routing of USB peripheral devices
- ARC (Audio Return Channel) capable for distributing audio from smart TVs
- NHD-500-RX decoder capable of 16x16 video wall processing, including mosaic
- Secure communications using AES, SSH and TLS protocols

NetworkHD 400 Series

NHD-400-TX | NHD-400-RX



In the Box

- 1x NHD-400-TX or NHD-400-RX
- 2x Wall Mounting Brackets
- 2x Rack Mounting Brackets
- 1x IR Emitter
- 1x IR Receiver
- 1x Quickstart Guide

Key Features

- 4K encoding up to 4K60 4:2:0 with HDR10/HLG compatibility
- USB connectivity for extension and routing of USB peripheral devices
- Ultra-low, single frame latency
- NHD-400-RX decoder capable of 16x16 video wall processing, including mosaic
- Secure communications using AES, SSH and TLS protocols

NHD-400-E-TX | NHD-400-E-RX



In the Box

- 1x NHD-400-E-TX or NHD-400-E-RX
- 1x Wall Mounting Brackets
- 1x Rack Mounting Brackets
- 1x Quickstart Guide

Key Features

- 'Lite' versions of the NHD-400-TX/RX with only essential I/O
- 4K encoding up to 4K60 4:2:0 with HDR10/HLG compatibility
- Ultra-low, single frame latency
- NHD-400-E-RX decoder capable of 16x16 video wall processing, including mosaic
- Secure communications using AES, SSH and TLS protocols

NHD-400-DNT-TX



In the Box

- 1x NHD-400-DNT-TX Encoder
- 1x 3-pin Terminal Block
- 2x Mounting Brackets for NHD-000-RACK4
- 2x Wall Mounting Brackets
- 1x IR Emitter Cable
- 1x IR Receiver Cable
- 1x Quickstart Guide

Key Features

- NHD-400-TX with added Dante/AES67 network output
- Includes additional stereo audio input
- 4K encoding up to 4K60 4:2:0 with HDR10/HLG compatibility
- Ultra-low, single frame latency
- Secure communications using AES, SSH and TLS protocols

NHD-400-TX-IW



Key Features

- 2-Gang US style wall plate
- 4K encoding up to 4K60 4:2:0 with HDR10/HLG compatibility
- USB connectivity for extension and routing of USB peripheral devices
- Ultra-low, single frame latency
- Secure communications using AES, SSH and TLS protocols

In the Box

- 1x NHD-400-TX-IW Encoder
- 1x 12V DC Power Supply (US | UK | EU)
- 1x 2-Pin Terminal Block
- 1x 3.5mm Stereo TRS Plug to 3-pin Terminal Block RS-232 Adapter
- 1x White Decorative Plate with 4 Screws
- 1x Quickstart Guide

NetworkHD NHD-250-RX



Key Features

- Multiview processor supports up to 9 unique windows
- Fully customizable multiview layouts
- 4K output scaling
- Interoperable with NHD-110-TX and NHD-140-TX
- Secure communications using AES, SSH and TLS protocols

In the Box

- 1x NHD-250-RX Decoder
- 1x 12V DC Power Supply (US | UK | EU)
- 3x 3-pin Phoenix Connectors
- 2x Rack Mounting Brackets
- 2x Wall Mounting Brackets
- 1x Quickstart Guide

NetworkHD NHD-140-TX



Key Features

- Quad encoder helps reduce amount of separate components
- Combines all four inputs into a single ethernet output
- Low bandwidth H.264 1080p60 encoding
- Interoperable with NHD-110-TX/RX
- Secure communications using AES, SSH and TLS protocols

In the Box

- 1x NHD-140-TX Encoder
- 1x 12V DC Power Supply (US | UK | EU)
- 2x Rack Mounting Brackets
- 2x Wall Mounting Brackets
- 1x Quickstart Guide

NetworkHD 110 Series



In the Box

- 1x NHD-110-TX or NHD-110-RX
- 1x IR Emitter
- 1x IR Receiver
- 2x 3-pin Terminal Block
- 2x Wall Mounting Brackets
- 2x Rack Mounting Brackets

Key Features

- Low bandwidth 1080p60 encoding
- Dual encoding options allow either H.264 or HEVC H.265
- Instant matrix switching with no freeze frames
- NHD-110-RX supports video wall processing up to 16x16
- Secure communications using AES, SSH and TLS protocols

NetworkHD NHD-000-CTL



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)

Key Features

- Provides automatic discovery of NetworkHD encoders and decoders
- Simple browser management of encoders and decoders
- Integrates with major control systems, including the NetworkHD Touch™ iPad control app
- Dual Ethernet ports for complete isolation of control and AV network traffic
- PoE or DC power options

Specifications

Audio and Video				
	NHD-610-TX	NHD-610-RX	NHD-600-TRX	NHD-600-TRXF
Inputs/Outputs	1x HDMI 2.0 Input 1x HDMI 2.0 Loop Output 1x 5-pin Balanced analog audio In/Out 1x 10GbE 8-Pin RJ45	1 x HDMI 2.0 Output 1x HDMI 2.0 Switchable Input 1x 5-pin Balanced analog audio In/Out 1x 10GbE 8-Pin RJ45	1x HDMI 2.0 Input 1x HDMI 2.0 Output 1x 5-pin Balanced Analog Audio In/Out 1x 10GbE 8-pin RJ45	1x HDMI 2.0 Input 1x HDMI 2.0 Output 1x 5-pin Balanced Analog Audio In/Out 1x 10GbE 8-pin RJ45 1x 10Gb/s SFP+ 10GBASE-SR: 300m using OM3 multi-mode 10GBASE-LR: 10Km using OM3 single-mode
Maximum Pixel Clock	600Mhz			
Output Video Encoding	SDVoE Pixel Pipeline Dante/AES67 proprietary protocols	SDVoE Pixel Pipeline	SDVoE Pixel Pipeline	SDVoE Pixel Pipeline
Encoding Data Rate	1080p@60Hz 12bit - 3.4Gbps 4K UHD@30Hz 4:4:4 8bit - 6.6Gbps 4K UHD@60Hz 4:4:4 8bit - 9Gbps (with light compression)			
Max End to End Latency	Genlock Mode: Uncompressed = 30us, Compressed <120us Fast Switch Mode: 1~2 video frames = min. between 16.7 – 33.4ms @ 60fps			
Max Video Resolutions	4096x2160p @ 60Hz 8bit 4:4:4 or RGB 3840x2160p @ 60Hz 12bit 4:2:2 Dolby Vision 3840x 2160p @ 60Hz 10bit 4:2:2 HDR10/HLG 1920x1080p @ 60Hz 12bit			
Supported Standards	RGB DCI USB			
Communication and Control				
HDMI	HDMI 2.0b HDCP 2.2 CEC EDID			
Ethernet	1x 1GbE 8-pin RJ45 (Auxiliary Lan)			
RS-232	1x 3-pin Phoenix Connector 2 Way Broadcast Routed API Programmable			
IR	1x IR TX 3.5mm TS Mono Jack API Programmable 1x IR RX 3.5mm TRS Stereo Jack API Programmable			
USB	3 x USB 2.0 Type A 1 x USB 2.0 Type B Host USB Bandwidth: 480Mbps	3 x USB 2.0 Type A 1 x USB 2.0 Type B Host USB Bandwidth: 480Mbps	3x USB 1.1 Type A 1x USB 1.1 Type B Host	3x USB 1.1 Type A 1x USB 1.1 Type B Host USB Bandwidth: 480Mbps
Power				
Power Supply	12V 2A DC PSU 802.3at PoE+ compliant	12V 2A DC PSU 802.3at PoE+ compliant	12V 2A DC PSU 802.3at PoE+ compliant	12V 2A DC PSU
Power Consumption	Max: 24w Average: 10w			
Environmental				
Operating Temperature	+32°F ~ +104°F (0°C ~ +45°C) 10% ~ 90% non-condensing			
Storage Temperature	-4°F to ~ 140°F (-20°C ~ +70°C) 10% ~ 90% non-condensing			
Maximum BTU	34 BTU/hr			
Dimensions & Weight				
Length x Width x Height	140mm x 215mm x 25mm			
Weight	1.75lbs			
Regulatory				
Safety and Emission	CE FCC RoHS RCM EAC			

Specifications

Audio and Video		
	NHD-500-TX	NHD-500-RX
Inputs/Outputs	1x HDMI In 1x 3.5mm TRS Analog In 1x 5-pin Balanced Analog Out 1x Toslink Digital Out	1x HDMI Out 1x 5-pin Balanced Analog Out 1x Toslink Digital In
Maximum Pixel Clock	600Mhz	
Max Video Resolutions	4096x2160p @ 60Hz 8bit 4:4:4 or RGB 3840x2160p @ 60Hz 12bit 4:2:2 Dolby Vision 3840x 2160p @ 60Hz 10bit 4:2:2 HDR10/HLG 1920x1080p @60Hz 12bit	
Supported Standards	RGB DCI USB	
Communication and Control		
HDMI	HDMI 2.0b HDCP 2.2 CEC EDID	
Ethernet	1x 1GbE 8-Pin RJ45 1 x SFP+ (OM3 multi-mode)	
RS-232	1x 3-Pin Phoenix Connector 2-way API Programmable	
IR	1x IR TX 3.5mm TS Mono Jack API Programmable 1x IR RX 3.5mm TRS Stereo Jack API Programmable	
USB	1x USB 2.0 Type Host	2x USB HID Type A 1x USB 2.0 Type A
Power		
Power Supply	12V DC 1A 802.3af PoE Compliant	
Power Consumption	Max: 15.4w Average: 8w	
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	51.18 BTU/hr	
Regulatory		
Safety and Emission	CE FCC RoHS EAC RCM	

Specifications

Audio and Video				
	400 Series	400-E Series	NHD-400-DNT-TX	NHD-400-TX-IW
Inputs/Outputs	TX	TX	1x HDMI Input 1x Audio In: 3.5mm (1/8in) 1x IR In: 3.5mm (1/8in) 1x Audio Out: 3.5mm (1/8in)	1x HDMI Input 1x VGA Input 1x Audio In: 3.5mm (1/8in)
	1x HDMI Input 1x HDMI Output 1x Audio In: 3.5mm (1/8in)	1x HDMI Input		
	RX	RX		
	1x HDMI Output 1x Audio Out: 5-Pin Phoenix	1x HDMI Output		
Output Video Encoding	JPEG 2000			
Encode/Decode Data Rate	Max: 850Mbps			
Max End to End Latency	1 video frame latency (pass-through mode) 16ms @60fps 2 video frames latency (scaler/VW mode)			
Max Video Resolutions	3840x2160p @ 60Hz 8bit 4:2:0 3840x 2160p @ 30Hz 8bit 4:4:4 1920x1080p @ 60Hz 12bit 4:4:4			
Supported Standards	HDR10 HLG BT.2020 BT.709 3D Video			
Audio and Video				
HDMI	HDCP 2.2 CEC			
Ethernet	1x 1GbE 8-pin RJ-45			
RS-232	1x RS-232: 4-pin Phoenix (RX only)		1x RS-232: 3-pin Phoenix	1x RS-232: 3.5mm (1/8in) TRS Stereo 2 Way
IR	1x IR TX: 3.5mm TS Mono 1x IR RX: 3.5mm TRS Stereo Bidirectional Over Ethernet	N/A	1x IR TX: 3.5mm TS Mono 1x IR RX: 3.5mm TRS Stereo Bidirectional Over Ethernet	N/A
USB	RX: 2x USB Device: USB Type A TX: 1x USB Host: USB Type B Power: 5v 500ma per port Data Rate: Max 9MB/s	N/A	N/A	1x USB Host: USB Type B Data Rate: Max 9MB/s
Power				
Power Supply	12V DC			
PoE	IEEE 802.3af			
Power Consumption	6W	8W	8W	5.7W
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	51.18 BTU/hr			19.45 BTU/hr
Regulatory				
Safety and Emission	CE FCC RoHS EAC RCM			

Specifications

Audio and Video			
	NHD-250-RX	NHD-140-TX	NHD-110 Series
Inputs/Outputs	1x HDMI Output 1x Audio Out: 3-Pin Phoenix	4x HDMI Input	TX
			1x HDMI Input 1x Audio Out: 3-Pin Phoenix
			RX
			1x HDMI Output 1x Audio Out: 3-Pin Phoenix
Output Video Encoding	H.264		H.264/H.265
Encode/Decode Data Rate	Max: 30Mbps		
Max End to End Latency	~80ms (low latency mode) ~300ms (high quality mode)		
Max Video Resolutions	3840x2160p @60Hz (Tile mode) 1920x1080p @60Hz	1920x1080p @60Hz	1920x1080p @60Hz 8bit
Audio and Video			
HDMI	HDMI 1.2 HDCP 1.4 CEC	HDMI 1.2 HDCP 1.4	HDMI 1.2 HDCP 1.4 CEC
Ethernet	1x 1GbE 8-pin RJ-45		
RS-232	1x RS-232: 3-pin Phoenix Routed API Programmable	N/A	1x RS-232: 3-pin Phoenix Routed API Programmable
IR	N/A	N/A	1x IR TX: 3.5mm TS Mono 1x IR RX: 3.5mm TRS Stereo Routed API Programmable
Power			
Power Supply	12V DC		
PoE	IEEE 802.3af	N/A	IEEE 802.3af
Power Consumption	8.3W	19.44W	6W
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	31 BTU/hr	68 BTU/hr	20.47 BTU/hr
Regulatory			
Safety and Emission	CE FCC RoHS EAC RCM		