

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



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

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

NetworkHD NHD-250-RX



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

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

NetworkHD NHD-140-TX



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

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

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 | | |