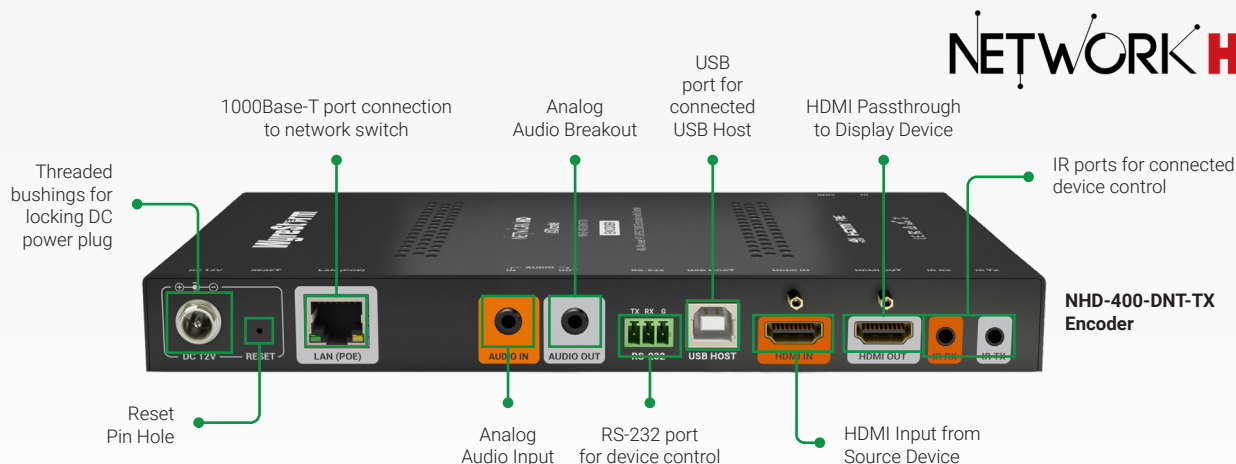


**NetworkHD™ 400 Series 4K AV over IP JPEG 2000
Encoder with Dante**
NHD-400-DNT-TX

WyreStorm®
Specification Sheet



WyreStorm - Powerful. Reliable. Simple.

Introduction

The NHD-400-DNT-TX encoder offers stunning 4K HDR video, multichannel audio support and video resolution scaling to seamlessly handle mixed resolution HDMI sources for matrix and video wall functionality. Equipped with a Dante audio encoder the 400 Series embraces the flexibility of standardised audio distribution. Featuring incredible low latency the 400 Series is the ideal AV over IP solution for systems where high quality and low delay are key requirements, making it perfect for demanding commercial applications

The NHD-400-DNT-TX JPEG 2000 encoder is intended for use with any 400 Series JPEG 2000 decoder (sold separately) to provide a complete end-to-end video distribution system. When used in conjunction with Dante compatible audio equipment the 400 Series can distribute source HDMI or analog audio throughout an installation.

Key Features

- Stunning visually lossless 4K UHD video with HDR over 1GbE / IP networks
- Ultra-low end-to-end latency – only a single video frame (16ms at 60fps)
- Dante encoder for 2ch audio from HDMI or analog - compatible with all Audinate Dante software tools
- Analog audio input for HDMI audio embedding
- Multi-channel audio including DTS:X & Dolby ATMOS supported over HDMI to decoder
- Image scaling with 400 Series decoders - use a mix of display resolutions throughout an installation
- Easy network set-up using standard Layer 2 or Layer 3 managed switches
- Hugely scalable I/O, utilizing multicast technology
- Live video unicast preview streams for use with NetworkHD Touch or a custom control UI
- Powerful audio matrix functionality - route audio separately from video to any decoder
- CEC One-Touch Play & Standby, IR or RS-232 control of connected devices using 400 Series decoder
- 400 Series supports up to 16x16 video walls with image scaling, bezel compensation and rotation
- 400 Series supports custom "No Source" idle image upload for branded down time
- Support all SD, HD and UHD video formats - including interlaced content
- Infrared signal generation direct from encoder or decoder - supports HEX IR format
- Analog audio de-embed output with volume control
- Batch firmware update and batch settings functions offers a massive reduction on installation times
- Custom EDID management with import/export
- HDCP 2.2 Compliant
- IEEE 802.3af PoE compliant PD
- Compatible with NHD-000-RACK4 rack mounting kit (brackets included with encoder)

In the Box

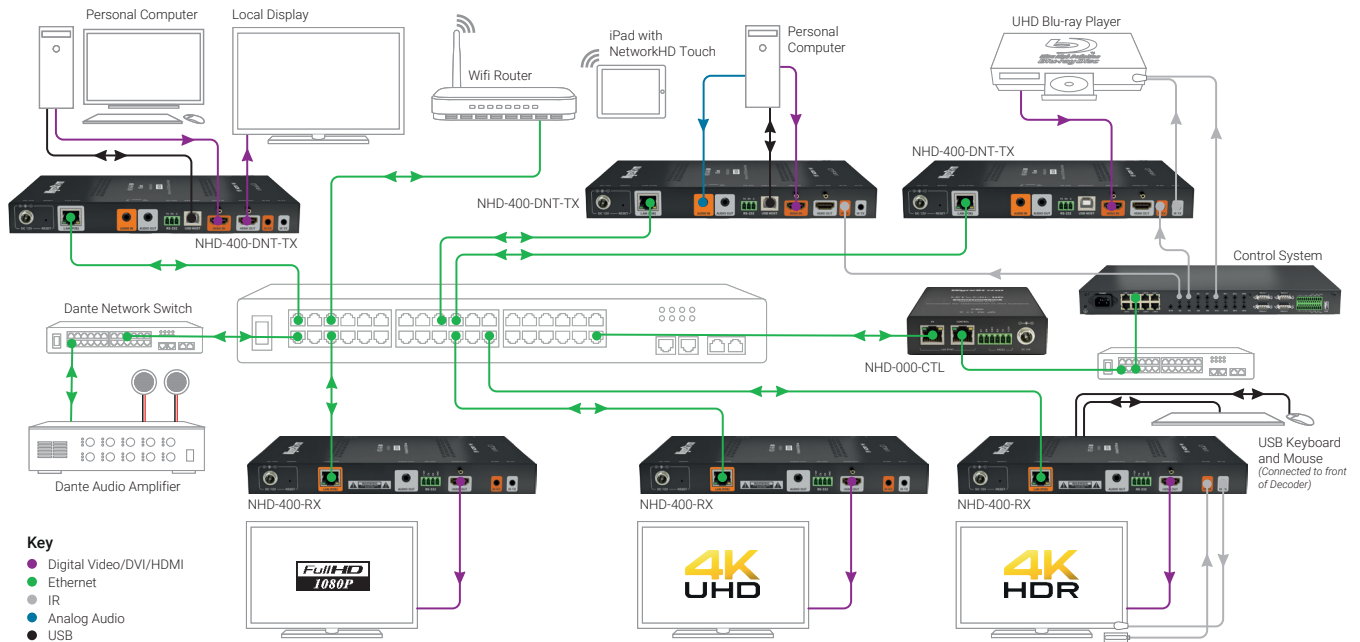
1x NHD-400-DNT-TX Encoder
1x 3-pin Terminal Block
2x Mounting Brackets for NHD-000-RACK4
2x Wall Mounting Brackets

1x IR Emitter Cable
1x IR Receiver Cable
1x Quickstart Guide

Specifications

Connectivity		
Inputs	1x HDMI In: 19-pin HDMI Type A Receptacle	1x IR RX: 3.5mm TRS Jack Socket
	1x Audio In: 3.5mm TRS Stereo Jack Socket	
Outputs	1x LAN (PoE): 8P8C "RJ45" Socket ANSI/TIA-568	1x RS-232: 3-pin Phoenix
	1x Audio Out: 3.5mm TRS Stereo Jack Socket	1x USB Host: USB 2.0 Type B Receptacle
1x IR TX: 3.5mm TS Jack Socket		
Transmission		
Transmssion Encoding	Proprietary stream encoding. Video compression based on JPEG 2000 Dante / AES67 compliant audio stream encoding	
End to End Latency	With RX, 1 video frame (Passthrough mode) 2 video frames (scaling/video wall) e.g. 16ms @ 60Hz	
Max Transmission Bit Rate	850Mb/s	
Video		
HDMI	300MHz Max.TMDS Clock	
Maximum Data Rate	8.91Gb/s HDMI	
Video Resolutions (Max)	1280x720p @50/59.94/60Hz 12bit 4:4:4/RGB	
	1920x1080i @29.97/30Hz 12bit 4:4:4/RGB	
	1920x1080p @23.98/24/25/29.97/30/50/59.94/60Hz 12bit 4:4:4/RGB	
	3840x2160p @23.98/24/25/29.97/30Hz 10/12bit 4:2:2/4:2:0 HDR10 HLG	
	3840x2160p @23.98/24/25/29.97/30Hz 8bit 4:4:4/RGB	
	3840x2160p @50/59.94/60Hz 8bit 4:2:0	
	720x480p @59.94/60Hz 12bit 4:4:4/RGB	
	720x576p @50Hz 12bit 4:4:4/RGB	
	60fps Progressive 4:4:4/RGB: 640x480 800x600 1024x768 1280x800 1280x960 1280x1024 1360x768 1366x768	
	1400x1050 1440x900 1600x1200 1680x1050 1920x1200	
Supported Standards	HDR10 HLG BT.2020 BT.709 3D Video	
Audio		
Audio Formats	PCM up to 8ch Bitstream audio formats including Dolby Atmos & DTS:X 2ch Analog Dante: Up to 2ch PCM (HDMI) 2ch Analog	
Communication and Control		
Ethernet	IEEE 802.1ab 1000BASE-T	
HDCP	HDCP 2.2 1.x	
EDID	Programmable EDID EDID Copy/Import Custom EDID	
RS-232	Programmable RS-232 Commands Custom Command Generation	
IR	Custom Command Generation	
Dante	Full compatibility with Audinate control and management software tools for Dante	
Installation & Mounting		
Compatible Rack Mount Kit	NHD-000-RACK4	
Included Accessories	Wall Mount Brackets Brackets for NHD-000-RACK4 Infrared Cables RS-232 Terminal Block	
Orientation	Observe product chassis text	
Power		
Power Over Ethernet	IEEE 802.3af (15.4W at PSE)	
External Power Supply	Optional part: PSU-12V-1A	
Nominal Power Consumption	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	
Dimensions and Weight		
Rack Units/Wall Box	<1U flat on shelf 6U in NHD-000-RACK4	
Height	25mm/1in	
Width	220mm/8.67in	
Depth	130mm/5.12in	
Weight	0.75kg/1.65lbs	
Regulatory		
Safety and Emission	CE FCC RCM CE LVD RoHS	

Right Product for the Right Application.



Note: WyreStorm reserves the right to change product specification, appearance or dimensions of this product at any time without prior notice.