Manuals+

Contents [hide]

◢◤ NODESTREAM

NODESTREAM FLEX Remote Operations Enablement Decoder

Please read these instructions carefully before using this product

Information for your safety

The device should only be serviced and maintained by qualified service personnel. Improper repair work can be dangerous. Do not attempt to service this product yourself. Tampering with this device may result in injury, fire, or electric shock, and will void your warranty.

Be sure to use the specified power source for the device. Connection to an improper power source may cause fire or electric shock.

Operation Safety

Before using the product, ensure all cables are not damaged and connected correctly. If you notice any damage, contact the support team immediately.

- To avoid short circuits, keep metal or static objects away from the device.
- Avoid dust, humidity, and temperature extremes. Do not place the product in any area where it may become wet.
- Operating environment temperature and humidity:
  - Temperature:
  - Operating: 0°C to 35°C
  - Storage: 0°C to 65°
  - Humidity (non-condensing):
  - Operating: 0% to 90%

- Storage: 0% to 90%
- Unplug the device from the power outlet before cleaning. Do not use liquid or aerosol cleaners.
- Contact the support team support@harvest-tech.com.au if you encounter technical problems with the product.

Symbols

- Contact and Support support@harvest-tech.com.au
- Harvest Technology Pty Ltd

  7 Turner Avenue, Technology Park Bentley, WA 6102, Australia harvest. technology

User Resources

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Warranty

- The warranty for this product can be found online at:
  https://harvest.technology/terms-and-conditions/

FCC Compliance Statement

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the user manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be

required to correct the interference at their own expense.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. To maintain compliance with compliance regulations, shielded HDMI cables must be used with this equipment

CE/UKCA Compliance Statement

Marking by the (CE) and (UKCA) symbols indicates compliance of this device with the applicable directives of the European Community and meets or exceeds the following technical standards.

- Directive 2014/30/EU – Electromagnetic Compatibility
- Directive 2011/65/EU – RoHS, restriction of the use of certain hazardous substances in electrical and electronic equipment

Warning: Operation of this equipment is not intended for a residential environment and could cause radio interference.

Getting Started

Introduction

The Nodestream Flex can facilitate any customer's Encode or Decode requirement with its comprehensive input, output, and mounting options. The Video Wall functionality enables output of all your Nodestream X streams on individual displays with the flexibility to direct what you want, where you wantt, with ease. Surface, VESA 100, and rack mounting options are available with up to 3 x devices mounted to a single 1.5RU shelf, saving precious rack space.

Key Features

General

- Compact, fanless design

- Surface, VESA, or Rackmount options
- Wide input voltage range, low power consumption
- Low bandwidth, low latency HD streaming of up to 16 video channels from 8Kbps to 5Mbps
- Multiple input types – 4 x HDMI, US,,B and network streams

Nodestream X

- Encoder or Decoder operation
- 5 x HDMI outputs with Video Wall function
- Up to 16 x simultaneous video streams
- Nodecom audio channel
- Up to 11 x data streams
- Forward decoded video streams to Nodestream Live Nodestream Live
- Up to 16 x simultaneous video streams

Typical Setup

Nodestream X
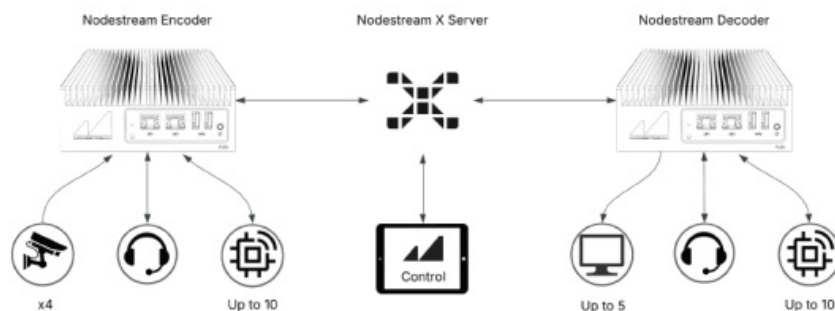
Nodestream Live
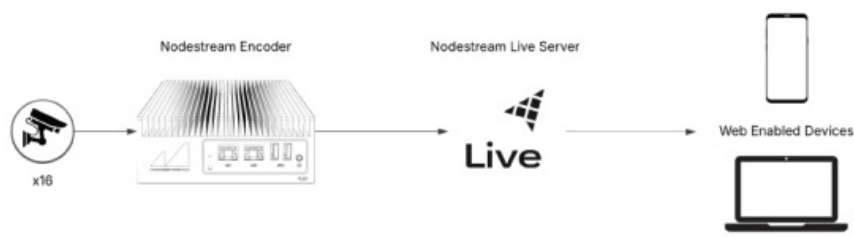
Connections
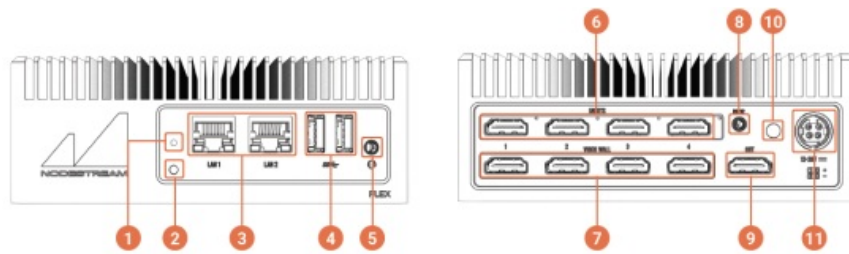
Reset button

- Reset – Press 2 sec & release Factory Reset – Press & hold

Status LED

RGB LED to indicate system status

Status LED

- RGB LED to indicate system status
- BLUE System starting
- GREEN Solid (streaming), Flashing (idle)
- RED Network issue

Ethernet

2 x Gigabit RJ45

USB

2 x Type A – Connection of peripherals

Analog Audio

3.5mm TRRS

HDMI Input x4

Connection to HDMI video sources

Video Wall HDMI Output x 4

Configurable display outputs (Decoder mode only)

RS232 Serial

3.5mm TRRS – /dev/ttyTHS0

Passthrough HDMI Output

Passive display output

Power Switch

On/off switch

Power Input

12-28VDC
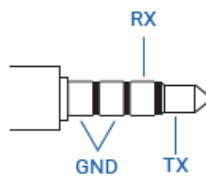
Power Redundancy

For critical operations, an optional Y split power cable can be supplied to enable the connection of 2 independent power supplies, providing power redundancy. If 1 of the power supplies fails, the other will continue to power the device without interruption to service.
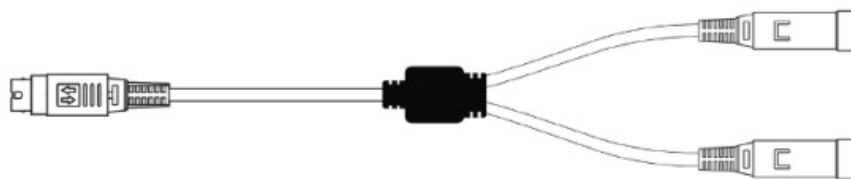
- Nodestream devices are supplied with a Quick Start Guide for installation and detailed UI functions.
- Scan the User Resources QR code on the last page for access
- The device will boot automatically when power is applied

Display Outputs

Passthrough "OUT"

This HDMI output displays the uncut/unscaled output from the device. This output should

be used for;

- Encoder modes (Video Wall outputs are disabled in Encoder modes)
- Initial device configuration
- Where a single display is connected in Decoder mode
- To view or record the entire decoded stream in Decoder mode

Video Wall

- When in Nodestream X Decoder mode, the Video Wall function of your Flex device enables output to up to 5 displays (4 x Video Wall + 1 x Passthrough). This allows users flexibility to view any or all of the 4 inputs from a connected Encoder to individual displays. When the connected Encoder is only streaming 1 input, the selected input will be displayed on all outputs.

4 x inputs from a connected Encoder

1 x input from a connected Encoder
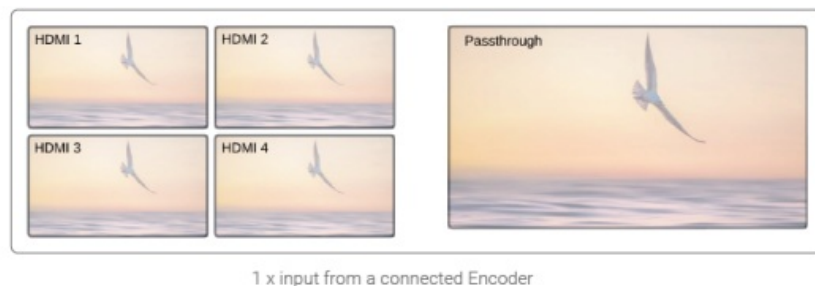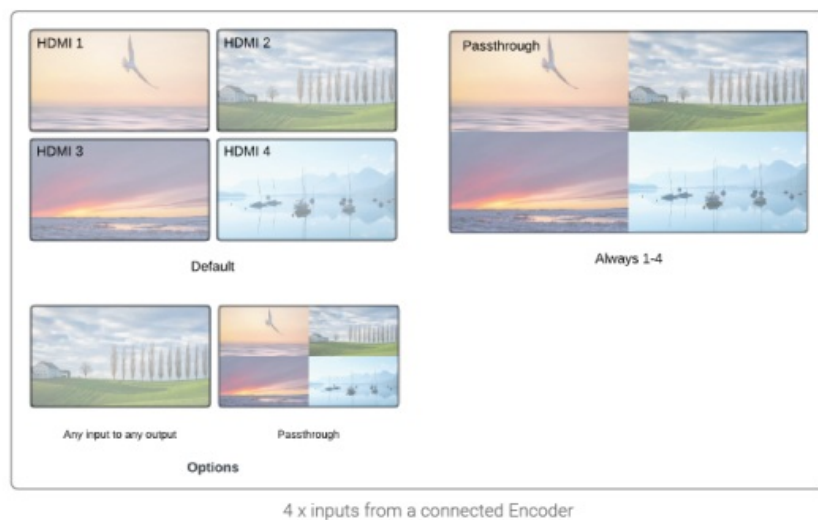
- Control of the Video Wall is performed via your Harvest Control Application.
- For specifications of display outputs, refer to "Technical Specifications" on page 19

Configuration

Overview

The Web Interface provides details and management of;

- Software version information
- Network(s)
- User login credentials
- Remote support
- System mode
- Server settings
- Updates

Access

The Web Interface can be accessed locally on your device or through a web browser on a PC connected to the same network.

- Web Interface is not available until the Nodestream software has started

Local Access

1. Connect your device to your LAN, monitor, keyboard/mouse, and power it up.
2. Wait for the software to start, and press Alt+F11n on your keyboard or right click and select configuration.
3. When prompted, enter your login details.
   - Default username = admin
   - Default password = admin
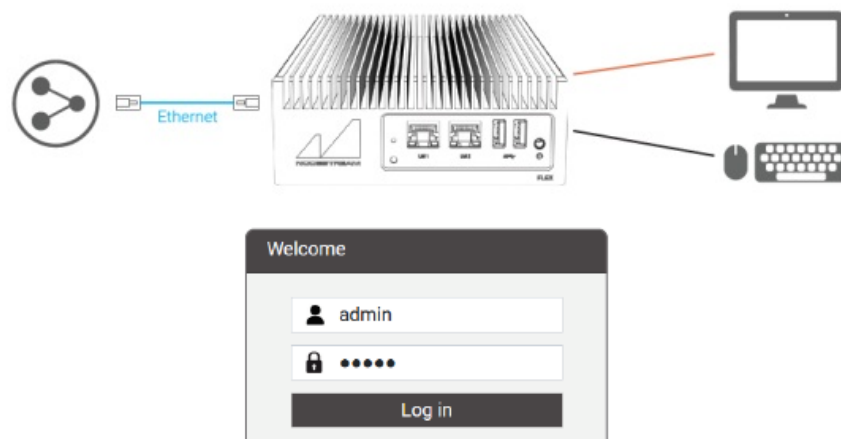
Web Access

Connect a computer to the same network as your device or directly via an Ethernet cable.
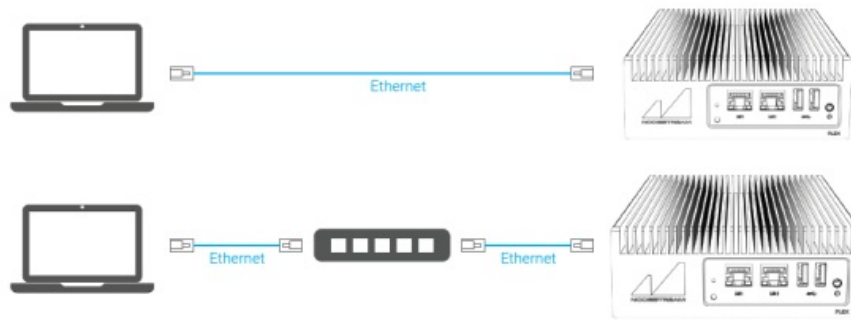
DHCP-Enabled Network

1. Connect your device to your LAN and power it up.
2. From the web browser of a computer connected to the same network, enter the device IP address or http://serialnumber.loca, e.g, http://au2518nsfx1a014.local..
3. When prompted, enter your login details.

The serial number can be found on the product label, affixed to the side of your device..

Non-DHCP Enabled Network

If your device is connected to a non-DHCP-enabled network, and its network has not been configured, it will fall back to a default IP address of 192.168.100.101.

1. Connect your device to your LAN and power it up.
2. Configure the IP settings of a computer connected to the same network to:
    - IP 192.168.100.102
    - Subnet 255.255.255.252
    - Gateway 192.168.100.100
3. From a web browser, enter 192.168.100.101 in the address bar.
4. When prompted, enter your login details.

When configuring multiple devices on a non-DHCP-enabled network, due to IP conflicts, only 1 device can be configured at a time. Once a device has been configured, it may be left connected to your network. ork

Initial Configuration

- Nodestream devices require the following to be configured before operation;
    - Network(s) refer below
    - System refers to "System Mode" on page 11
    - Server(s) ref Server Configuration" on page 11

The primary network of your Nodestream device must be configured to ensure a stable connection and prevent the device from setting its IP address to its static default. Log in to the Web Interface.

1. Once logged in, you will notice an orange prompt to configure the MAIN interface.
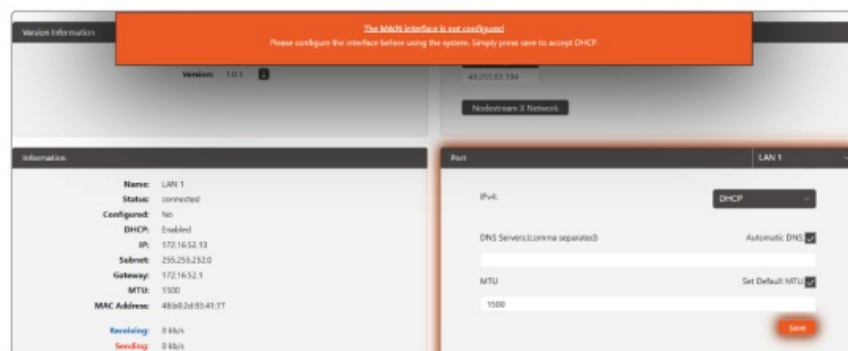
2. If connected to a toDHCP-enabled network, save in the "Port" window. Refer to "Port Configuration" on page 8 for configuration of static IP settings.

Network
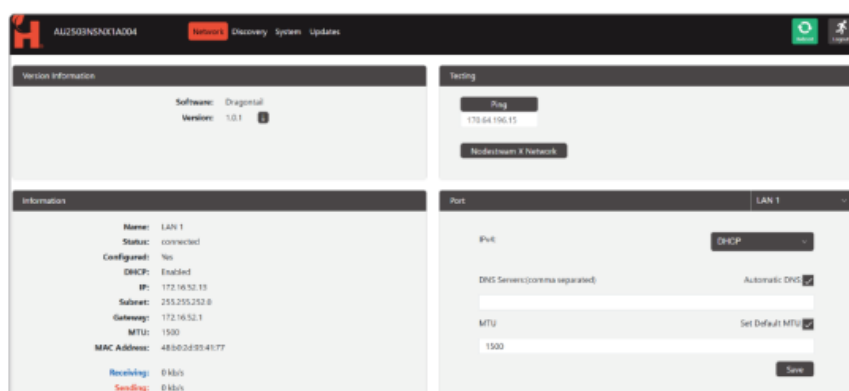
Information

Displays information related to the selected port (select from the drop-down in the "Port" section)

- Name Name of the port

- Status Connection status of the port
- Configured Shows if the port has been configured, whether DHCP is enabled or disabled
- IP IP address
- Subnet Subnet
- Gateway Gateway
- M::TU Set maximum transmission unit
- MAC Address Adapter MAC address
- Receiving Live "receiving" throughput
- Sending Live "sending" throughput
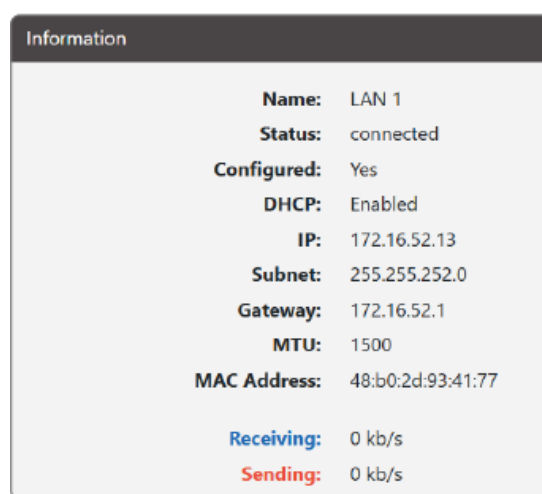
Testing

Ping

For testing connection to your Nodestream X server or other devices on your network, i.e,. IP cameras.
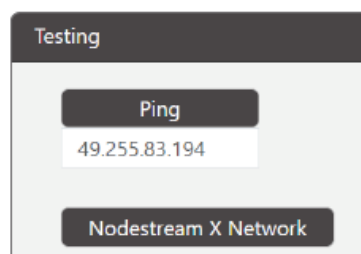
1. Enter the IP address to ping..
2. Click the Ping button. The notification will display, followed by either.
   - Ping time in ms successful
   - Could not reach the addresses.l

Nodestream X Network

This tool provides a means to test if all network requirements are in place to allow your device to function correctly when operating in Nodestream X modes. The following tests are performed on your Nodestream Server.

1. Ping test to the server
2. TCP port test
3. TCP STUN test
4. UDP port test

- Nodestream X Server configuration required, refer to "Server Configuration" on page 11
- Nodestream devices require Firewall rules to be in place. Refer to "Firewall Settings" on page 9

Port Configuration

Ethernet

Select the port you'd like to configure from the "Port " dropdown.

DHCP

1. Select "DHCP" from the "IPv4" drop-down if not already selected, then save.
2. When prompted, confirm the IP settings change.

Manual

1. Select "Manual" from the "IPv4" drop-down.
2. Enter network details as provided by your Network Administrator, then click save.
3. When prompted, confirm the IP settings change.
4. To log back into the Web Interface, enter the new IP address or http://serialnumber.local in your web browser.

WiFi

WiFi is only available if an optional USB WiFi adapter is installed. Verified compatible WiFi adapters:

- TP-Link T2U v3
- TP-Link T3U
- TP-Link T4U
  1. Select "WiFi" from the "Port dropdown.
  2. Select a t network from the list of available networks from the "Visible Network " drop-down.
  3. Select the security type and enter the password.
  4. Click save for DHCP or select "Manual", enter port details as provided by your Network Administrator, and then click save.

Disconnect

1. Select WiFi from the "Port" drop-down.
2. Click the "Disconnect" button.
   - Only IPv4 networks are supported
   - LAN 1 MUST be used for Nodestream traffic. LAN 2 is used for connecting to a

separate network stream input. If a non-default MTU is set for a port, you MUST re-enter the value when changing port settings for the value to be retained.

Firewall Settings

It is common for corporate network firewalls/gateways/anti-virus software to have strict rules in place that may require modification to allow Nodestream devices to function.

Nodestream X devices communicate with the server and each other via TCP/UDP ports; therefore, the following permanent network rules for all inbound & outbound traffic must be in place:

Ports

- TCP 8180, 8230, 45000, 55443 & 55555
- UDP 13810, 40000 & 45000 – 45200
- Server access to the IP address

Allow traffic to/from (whitelist);

- myharvest.id
- *.nodestream.live
- *.nodestream.com.au
- All port ranges are inclusive

- Contact Harvest support for further information. support@harvest-tech.com.au

Discovery

Access Nodestream Devices

Nodestream devices connected to the same network as your device will display. Click ➡ the icon next to the Device IP to open its Web Interface in a new window.

Copy Nodestream X Server Details

To copy the Nodestream X server details from another device;

1. Click the ⊤ icon of the device server details you'd like to copy
2. Confirm the action
3. Nodestream X software will restart and connect to the new server

Access Nodestream X Server

To access the Nodestream X server web interface, click ➡ the icon next to the Nodestream X Server IP.

System
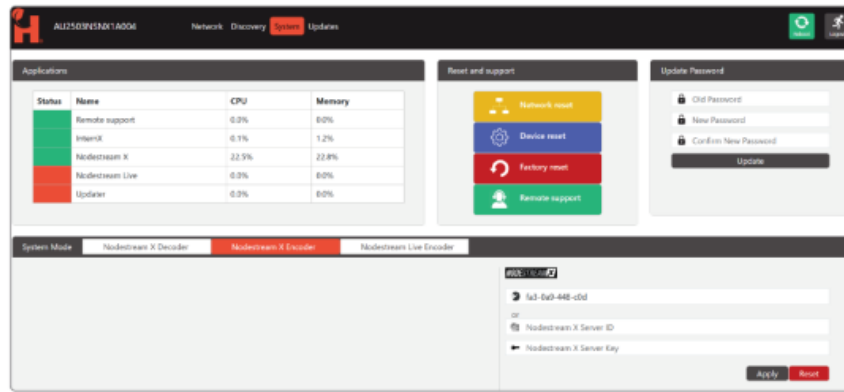
Applications

Displays information relating to software processes and their resource usage. This can be useful in diagnosing software and/or performance issues.

Reset and Support

- Network Reset Resets all network settings to default.
- Device Reset Resets all application and server settings to default
- Factory Reset Resets ALL device settings to default (alternatively, hold "ctrl+alt" and press "r" on a connected keyboard, or use the reset button, see below, to factory reset your device
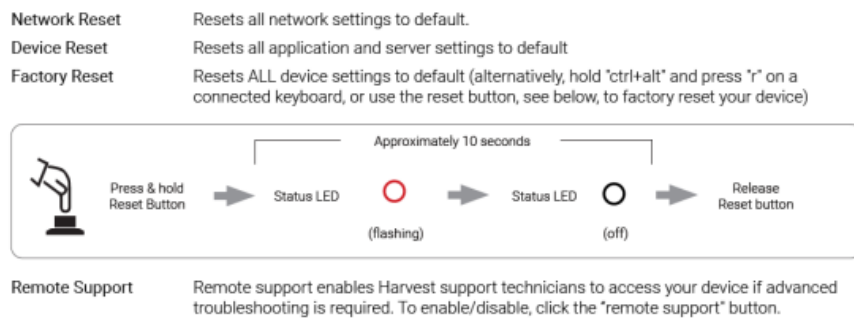
Remote support is enabled by default.t

Update Password

Allows you to change the Web Interface login password. If the password is unknown, perform a factory reset. Refer to "Reset and Support" above.

System Mode

Your Nodestream device can operate as either;

- Nodestream X Encoder
- Nodestream X Decoder
- Nodestream Live Encoder
- Active mode is highlighted in RED. To change mo, click the applicable button.

Server Configuration

All Nodestream devices require configuration on a server for connection and settings management.

Enter the "quick code" or Server ID and Key provided by your Nodestream Administrator, then click "Apply".

Once a device has been registered to a server, your Nodestream Administrator will need to add the device to a group within the server before it can be used.

When operating in Nodestream X Decoder mode, the "decoded" stream can be forwarded on to Nodestream Live. This requires registration of your device to your Live server.

To register your device in your Nodestream Live web portal and add a new device. When prompted, enter the 6-digit code shown in your device Web Interface system page or device desktop (device must be in Nodestream Live Encoder or Nodestream X Decoder mode).
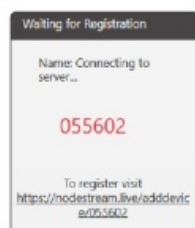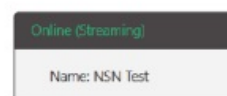
Updates

Automatic Updates

Automatic updates are disabled by default. Enabling this feature allows the device to download and install software when a newer version is available. During this process, the device may restart. If this is not desired, set to "No".

Manual Updates

When an update is available for your device, an icon will be displayed next to the "Updates" tab.

To Install the available update(s):

1. Open the Updates section of the Web Interface.
2. Select "Update (permanent install)" and accept the conditions when prompted.
3. The updated manager will proceed to download and install the update.
4. Once the update process is complete,, your device or the software may restart.
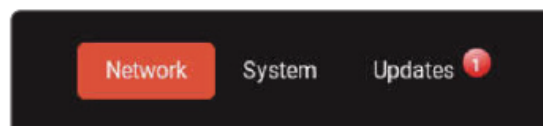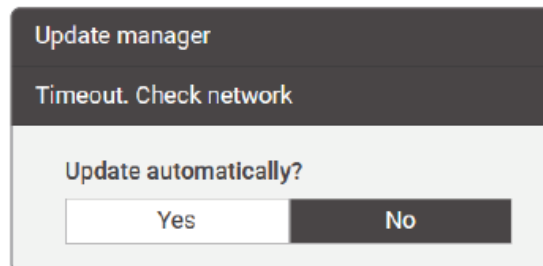
Updates are installed incrementally. When a manual update has completed, continue to refresh the update manager and install updates until your device is up to date.

Nodestream X Operation

Overview

Nodestream X is a point-to-point video, audio, and data streaming solution with ultimate control, allowing customers to meet operational requirements. A basic system comprises;

- Encoder Ingest and encode video/data/audio
  Decoder Display/output decoded streams
- Control Application:: Manage connections and settings
- Services manage device groups, users, licensing, and communicate control messages

Overlay

When operating in Nodestream X mode, and the system is in standby mode (not streaming video), an overlay displays system information. This allows the user to view the current system status and assists with diagnosing system issues.

1. Video Mode / Software Version
   Current video mode – Encoder or Decoder and Nodestream software version installed.
2. Device Serial

Serial number of the device.

3. Server IP

IP address of your Nodestream server.

4. Network Status

Displays the current status of network ports:

   1. IP address shown down (unplugged), not configured

5. Server Connection Status

Waiting for Nodestream connection. Connecting to Nodestream serv.er Server connection error

6. Frame Rate, Resolution & Bit-rates

Frame rate and resolution of video that will be streamed to a Decoder (Encoder mode only), and current transmit and receive bit-rates.

- Network connected and configured.
- Network not connected to the device.
- Network not configured – refer to "Port Configuration" on page 8
- Connected to the server, ready to connect to another device. Connecting to the server.
- There is a network issue preventing connection to the server. Refer to "Troubleshooting" on page 20

If the overlay is not displayed, it may be disabled. Enable it via your Harvest Control Application.

Video

Encoding

When your device is operating in Encoder mode, inputs can be viewed on a connected monitor. Inputs, as selected via your Harvest control application, will be displayed. This can be useful to diagnose issues with hardware and/or network stream video inputs.

Displayed video is a direct reflection of what will be sent to a connected Decoder. Changes to frame rate and resolution will be visible.

Hardware Inputs

Compatible sources connected to the device via HDMI or USB 3.0 can be selected as

inputs within your Harvest control application. For a detailed list of supported input types, refer to "Technical Specifications" on page 19.

Typical Encoder display, 4 x video sources selected and waiting for Nodestream connections

No video source connected to selected input Refer "Troubleshooting" on page 20

Video source not supported Refer "Troubleshooting" on page 20

Due to copyright restrictions, HDCP (High-bandwidth Digital Content Protection) signals, such as those from DVD players and media streamers, cannot be captured.

Test Sources

Test video sources are built into your device for use as an input to assist with troubleshooting or initial setup. These can be selected via your Harvest control application.

- Test Source Test video loop
- Test Patte: rn Simple low bandwidth loop
- Colour Bars Colour bars with a white noise section for testing colour and high bandwidth

Pro Mode

- Enable Pro Mode via your Harvest Control Application to activate the following features:
- 4K60 Video (4 x 1080/60)
- Frame Synchronous Data
- UDP data input on port 40000 is streamed, frame synchronous, with the accompanying video. This can be output to up to 4 network devices from your connected Nodestream X Decoder.
  - Pro Mode can only be activated when hours are available on your account. To purchase hours, contact sales@harvest-tech.com.au.
  - When hours have been depleted, all Pro MMode-enabled streams will fall back to 1080/60.

Network Sources

Network sources available on the same network as your device, such as those from IP cameras, can be decoded and used as inputs. Inputs are added and managed via the Harvest control application.

RTSP

Real-Time Streaming Protocol is typically used for streaming IP cameras. They are unique to camera manufacturers and can differ between models. The URI of the source must be known before it can be used as an input. If authentication is enabled on the source device, the user name and password must be known and included in the URI address.

- URI rtsp://[user]:[password]@[Host IP]:[RTSP Port]/stream
- Example URI rtsp://admin:admin@192.168.1.56:554/s0

RTP

Real-Time Transport Protocol (RTP) is a network protocol for delivering audio and video over IP networks. RTP typically runs over User Datagram Protocol (UDP). RTP differs from RTSP in that the RTP source needs to know the IP address of the receiver beforehand, as it pushes the video stream to that designated IP.

- URI rtp://[Receiver IP]:[RTP Port]
- Example URI rtp://192.168.1.56:5004

HTTP

- HTTP streaming comes in several formats: Direct HTTP, HLS, and HTTP DASH. Currently,, only Direct HTTP is supported by Nodestre, but it is not recommended.
- Example URI http://192.168.1.56:8080

Multicast

- Multicast is a one-to-one or many-to-one connection between multiple Decoders and the source. Connected routes must be multicast-enabled. The range of IP addresses reserved for multicast is 224.0.0.0 – 239.255.255.255. Multicast streaming can be delivered via RTP or UDP.

- URI [udp://[Multicast IP]:[Port]](udp://[Multicast IP]:[Port])
- Example URI udp://239.5.5.5:5000

UDP

Video data can also be transmitted and received over plain UDP. It acts similarly to RTP, where the video source will push data to the receiver, requiring in advance to know the destination before streaming can occur. Generally, it's preferable to use RTP instead of plain UDP if the user has the choice due to inbuilt mechanisms like jitter compensation in RTP.

- URI [udp://[Receiver IP]:[UDP Port]](udp://[Receiver IP]:[UDP Port])
- Example URI udp://192.168.1.56:5004

PTZ Control

- Your Nodestream device can control network PTZ cameras via the Windows Harvest Control Application.
- Cameras must be ONVIF-compliant, enabled, and configured with the exact security credentials of the associate.

RTSP stream.

Your Nodestream device can control network PTZ cameras via the Windows Harvest Control Application. Cameras must be ONVIF compliant, enabled, and configured with the exact security credentials associated with the TSPP stream.

- Set source resolution to 1080 and frame rate to 25/30 for best performance.
- Use the ping tool in the Web Interface and/or software such as VLC from a PC connected to the network to est/confirm network stream IP's and URL's.
- Direct cameras away from dynamic references where practical, i.e., water, trees. Reducing image pixel changes will decrease bandwidth requirements.

Decoding

When your device is operating in Nodestream X Decoder mode, nd connected to an Encoder, up to 4 video streams will be displayed on connected monitor(s). Refeto r

Active stream

System idle

RTP Outputs

Your device can be configured to output its decoded video streams in RTP format for viewing on another device within the connected network or integration into a 3rd party system, i.e., NVR.

1. Device Configuration (via your Harvest control application)
   - Select your device and navigate to its video settings
   - Enter the destination IP and assign a port for the outputs you wish to use, up to 4.
2. View the Stream (below are 2 examples; other methods not listed may be suitable)
   - SDP File
   - Configure an SDP file using a text editor with the following.
   - c=IN IP4 127.0.0.1
   - m=video 56000 RTP/AVP 96
   - a=rtpmap:96 H264/90000
   - a=fmtp:96 media=video; clock-rate=90000; encoding-name=H264;
   - GStreamer
     Run the following command from your terminal program. The GStreamer program must be installed.
     gst-launch-1.0 udpsrc port=56000 caps="application/x-rtp, media=video, clock-rate=90000, encoding-name=H264, payload=96" ! rtph264depay ! decodebin! videoconvert autovideosink
   - Port number, shown in red, must be the same as the RTP output you'd like to view
   - Outputs are directly related to the inputs of the encoder your device is connected to.
   - Suggested ports to use are 56000, 56010, 56020 & 56030

Nodestream Live Module

This feature allows sharing of your Nodestream X stream with external parties via Nodestream Live. Simply add your device to your Nodestream Live organisation, nd it will be available to share via a timed link or viewed by organisation members. For information on how to add your device, refer to "Server Configuration" on page 11.

- Requires an account and subscription to Nodestream Live
- Stream settings are controlled by the Nodestream X user. The Live stream is a "slaved" view.
- When your device is not connected to an Encoder, the system idle screen will be displayed in Live..

Audio

Nodestream video devices include a single Nodecom audio channel for streaming two-way audio to other Nodestream devices in your group. The following audio devices are supported:

- USB speakerphone, headset, or capture device via the USB A accessory port
- HDMI output
- Audio devices are selected and configured via your Harvest control application.

Data

Up to 10 channels of serial, TCP, or UDP data can be simultaneously streamed between connected devices. This versatile function enables: Transmission of telemetry/sensor data to/from remote sites.

- Control of remote systems
- Ability to access remote device web interfaces, e.g., IP camera, IOT device.
- Pass data from your Nodestream Decoder to a 3rd party device and/or local network device.

Application Example
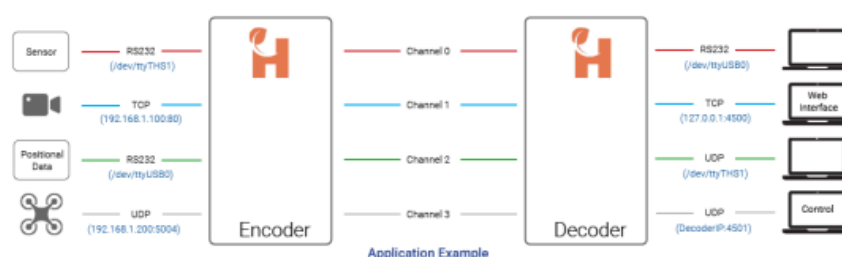
- Data channels are connected and configured via your Harvest control application.
- Streamed data should not be relied upon for critical control applications.
- Data can also be streamed in Pro Mode. Refer to "Pro Mode" on page 14

Control Applications

- Device connections and associated input/output configurations are managed via Harvest control applications. Nodester
- A control-only iOS application developed for iPad. Typically used in control applications or when a customer's Nodestream group comprises only hardware devices.
- Nodestream for Windows
- Windows Nodestream Decoder, audio, and control application.
- Nodestream for iOS & Android
- iOS and Android Nodestream Decoder, Encoder, audio, and control application.
- Nodestream Live Operation

Overview

- Nodestream Live is a point-to-cloud video and audio streaming solution that facilitates viewing of up to 16 video channels (per device) to any web-enabled device connected to the Internet. A basic system comprises;
  - Encoder Ingest and Encode video/audio
  - Server managesdevicess, inputs, organisations, and users

Encoder Inputs

Hardware

HDMI and/or USB video sources connected to your device can be selected as inputs via device settings in your Nodestream Live web portal. For a detailed list of tosupported types, refertoe "Technical Specifications" on page 19.

Network

Network sources, such as IP cameras, available on the network(s) your device is connected to,,nareused as inputs. Network inputs are configured via the "Inputs" page

within your Nodestream Live portal. A device must be in the same oorganization to be available for selection on the device settings page. For more information, refer to " toNetwork Sources" on page 15

- The number of network streams possible, before quality is affected, depends on the source resolution and frame rate. For 16 x sources, the theggested resolution is 1080 and frame rate 25; higher resolutions will affect performance.

Audio

Where audio is enabled on a configured RTSP source, the Nodestream Live Encoder will automatically detect and stream it to your web portal. Audio streams can be muted/unmutedviviahe portal.

Appendix

Technical Specifications

Physical

Physical dimensions (HxWxD)	51.5 x 140 x 254 mm (2.03" x 5.5" x 10")	
Weight	2.2kg (4.85lbs)	

Power

Input	12 to 28VDC - 4 pin DIN	
Consumption (operating)	9w (typical Encoder) 17w (typical Decoder)	

Environmental

Temperature	Operating: 0°C to 35°C	Storage: -20°C to 65°C
Humidity	Operating: 0% to 90% (non-condensing)	Storage: 0% to 90% (non-condensing)

Video

Input	4 x HDMI	Resolutions up to 1920x1080 pixels Frame rates up to 60fps 4:2:0 8-bit, 4:2:2 8-bit, 4:4:4 8-bit, 4:4:4 10-bit
	2 x USB Type A 3.0	Uncompressed YUV 4:2:0 MJPEG
Output	HDMI Passthrough	Max resolution 3840x2160 @ 60Hz
	4 x HDMI Video Wall	Fixed resolution 1920x1080 @ 60Hz

Network Streams

Supported Protocols	RTSP/RTP/HTTP/UDP (MPEG, H.264, H.265)

Other Interfaces

Ethernet	2 x 10/100/1000 - RJ45
WiFi	802.11ac 2.4GHz/5GHz (optional adapter)
Serial	RS232 - 3.5mm TRRS
Audio	Analog - 3.5mm TRRS
USB	USB 3.0 type-A port
UI	Status LED Reset button

Included Accessories

Hardware	PSU	AC/DC 12V 36w with multi country adapters
	Serial cable	3.5mm to DB9
	Mounts	Surface
Documentation	Quick start guide	

Certification

	RCM, CE, UKCA, FCC

Troubleshooting

System

Issue	Cause	Resolution
Device not powering	Supply not connected or powered	Confirm supply is connected and powered
	Supply outside of specified voltage	Confirm supply meets specifications, refer "Technical Specifications" on page 19
Unable to remotely access Web Interface	LAN port not configured	Connect to device locally and confirm network configuration correct
	Network issue	Refer "network" troubleshooting below
	Device not powered	Confirm device is powered on
Device operating in incorrect mode	Device "system mode" not set	Set desired system mode in Web Interface Refer "System Mode" on page 11
Device overheating	Inadequate space around heat-sink	Ensure adequate ventilation (refer quick start guide)
	Environmental conditions	Ensure specified operating conditions are met Refer "Technical Specifications" on page 19
Keyboard and/or mouse not responding	Faulty keyboard and mouse	Try another keyboard and mouse
	Not plugged in	Ensure device(s) or dongle correctly connected
Forgot login and/or network details	N/A	Factory reset device, refer "Reset and Support" on page 10 or Device Quick Start Guide

Network

Issue	Cause	Resolution
LAN (unplugged) message displayed	Network not connected to LAN port	Check an Ethernet cable is connected
	Incorrect/inactive port on network switch	Confirm connected port is active and configured
"Server connection error" message displayed (No connection to server)	Network issue	Check an Ethernet cable is plugged into LAN 1
		Check WiFi adapter is plugged in and connected to correct WiFi network
Status LED Red	Port not configured	Confirm port configuration is correct Refer "Port Configuration" on page 8
	Firewall settings	Ensure firewall settings are implemented and correct. Refer "Firewall Settings" on page 9
Unable to open video stream input	Associated network not connected and/or configured	Confirm network connected and configured Refer "Port Configuration" on page 8
	Stream source not connected and/or powered	Confirm stream source connected and powered
	Stream URI incorrect	Confirm URI is correct Refer "Network Sources" on page 15
	Stream not enabled and/or configured on source device	Login to source interface and confirm stream is enabled and correctly configured

Video

Issue	Cause	Resolution
No output to monitor	Monitor not connected or powered	Ensure monitor(s) connected and powered Test monitor with an alternative input
	Connected to incorrect port	Connect display to "OUT" port
	Incompatible cable or too long	Ensure HDMI cable meets or exceeds resolution and frame rate specifications, test with a shorter cable
	Device in Encoder mode	Videowall outputs are disabled in encoder mode, connect display to "OUT" port
HDMI input not displaying video	Input source not powered	Ensure source is connected and powered
	Incompatible cable or too long	Ensure HDMI cable meets or exceeds resolution and frame rate specifications, test with a shorter cable
Black screen displayed when USB source selected	USB device not supported	Confirm USB source meets specifications refer "Technical Specifications" on page 19
		Test USB source with another device
Incorrect video source displayed	Input not selected in Harvest control application	Select the correct input source via your Harvest control application
Poor video quality	Poor input source quality	Test video source with another input device (monitor)
	Insufficient network bandwidth	Increase network bandwidth or only stream 1 input
	Input settings set low in Harvest control application	Check input configuration settings in your Harvest control application
	Network stream source settings low	Login to network stream source device and adjust output settings
	Lower quality stream sub profile selected not main	Ensure main profile stream is selected in stream URI
	USB source incompatibility or USB 2.0	Confirm USB source meets specifications refer "Technical Specifications" on page 19
		Use USB 3.0 or greater device
		Contact support@harvest-tech.com.au with source details

Audio

Issue	Cause	Resolution
No audio input and/or output	Device not connected	Ensure device is connected and powered on
	Device not selected	Select correct input and/or output device in your Harvest control application
	Device muted	Confirm device is not muted
Output volume too low	Level set too low	Increase output volume at the connected device or via your Harvest control application
Input volume too low	Level set too low	Increase mic level at the connected device or via your Harvest control application
	Microphone obstructed or too far away	Ensure microphone is not obstructed Decrease distance to microphone
Poor audio quality	Poor cable connection	Check cable and connections
	Damaged device or cable	Replace device and/or cable
	Limited bandwidth	Increase available bandwidth and/or reduce bandwidth of video streams

Contact and Support support@harvest-tech.com.au

User Resources

Harvest Technology Pty Ltd

- 7 Turner Ave, Technology Park
- Bentley W, A 6102, Australia
- harvest.technology

FAQs

Q: Can I service the product myself?

A: No, it is recommended to only have qualified service personnel service the product to avoid any potential dangers.

Q: Where can I find the warranty information?

A: The warranty information can be found online at the following link: Warranty

Documents / Resources

	[NODESTREAM FLEX Remote Operations Enablement Decoder](#) [[pdf](#)] User Manual FLEX, FLEX Remote Operations Enablement Decoder, Remote Operations Enablement Decoder, Enablement Decoder

References

- [User Manual](#)

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🏷️ Enablement Decoder, FLEX, FLEX Remote Operations Enablement Decoder, NODESTREAM, Remote Operations Enablement Decoder

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