DataTronix
Managed Data Solutions

DT-IP-ENC-4
DT-IP-ENC-8

Quick Start Guide & Full Manual

800-688-9282 | sales@nace.tv | www.nace.tv

DataTronix
Managed Data Solutions

DT-IP-ENC-4 | DT-IP-ENC-8

Quick Start Guide

HDMI to IP IPTV Encoders



DT-IP-ENC-4 · 4 HDMI inputs



DT-IP-ENC-8 · 8 HDMI inputs

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Managed Data Solutions

TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER FROM THIS UNIT. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING: TO PREVENT SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE





CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

Safety Instructions

1. Read all safety and operating instructions before you operate the modulator
2. Retain all safety and operating instructions for future reference
3. Heed all warnings on the modulator and in the safety and operating instructions
4. Follow all installation, operating and use instructions.
5. Unplug the modulator from the AC power outlet before cleaning. Use only a damp cloth for cleaning the exterior of the modulator
6. Do not use accessories or attachments not recommended by us, as they may cause hazards, and will void the warranty
7. Do not operate the modulator in high-humidity areas, or expose it to water or moisture.
8. Do not place the modulator on an unstable cart, bracket or table. The modulator may fall, causing serious personal injury and damage to the modulator. Install the modulator only in a mounting rack designed for 19” rack-mounted equipment.
9. Do not block or cover slots and openings in the modulator. These are provided for ventilation and protection from overheating. Never place the modulator near or over a radiator or heat register.
10. We strongly recommend using an outlet that contains surge suppression or ground fault protection. For added protection during a lightning storm, or when the modulator is left unattended for long periods of time, unplug it form the wall outlet or PDU and disconnect the lines between the modulator and its source. This will prevent damage caused by lightning or power line surges.
11. Do not overload wall outlets or extension cords, as this can result in a risk of fire or electrical shock.
12. Never insert objects of any kind into the modulator through openings as the objects may touch dangerous voltage and will void the warranty. Refer all servicing to authorized service personnel.
13. Unplug the modulator from the wall outlet or PDU and refer servicing to authorized service personnel whenever the following occurs:
    - The power supply cord or plug is damaged
    - Liquid has been spilled into or objects have fallen into modulator
    - The modulator has been exposed to rain or water
    - The modulator has been dropped or the chassis has been damaged
    - The modulator exhibits a distinct change in performance

When replacement parts are required, ensure that the service technician uses replacement parts specified by us.

Unpacking and Handling

Each DataTronix DT-IP-ENC Series encoder is fully assembled, factory tested, and securely packaged prior to shipment.

Package Contents

- DT-IP-ENC-4 or DT-IP-ENC-8 HDMI to IP IPTV Encoder (Qty: 1)
- Power supply and power cord (Qty: 1)
- Rack-mount brackets (Qty: 2)

Mechanical Inspection

Carefully inspect the front and rear panels for shipping damage. Verify that the equipment is clean and that all cables, connectors, and components are secure and undamaged.

Precautions

- Avoid excessive heat buildup around the unit.
- Ensure easy access to rack wiring and cable connections.
- Allow adequate space for servicing and maintenance.
- Avoid direct exposure to heating or air conditioning sources.
- Ensure the equipment rack is properly supported and structurally secure.
- Protect the unit from water exposure, condensation, and moisture.
- Never operate the encoder without its protective cover installed.
- Do not perform installation or service work during electrical storms.

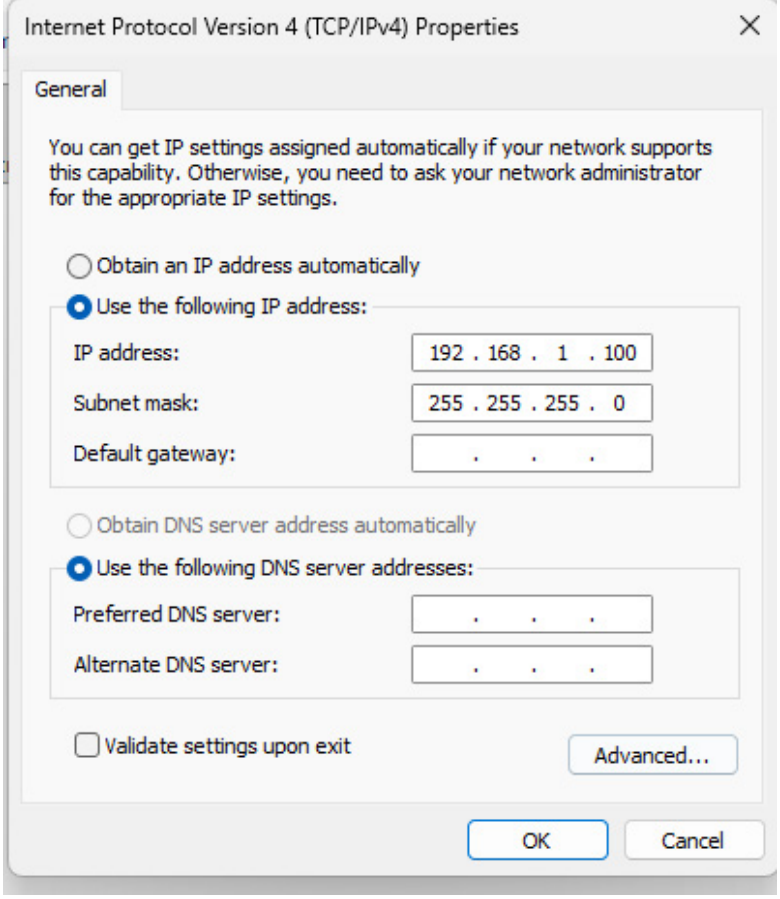
Damage in Shipment

If damage is discovered after unpacking, immediately contact DataTronix at 800-688-9282.

Set the Computer Network Adapter

Set your computer's Ethernet adapter to an address within the encoder's subnet. Use the following settings for this example:

IPv4 address: 192.168.1.100
Subnet mask: 255.255.255.0
Default gateway: Not required for configuration.

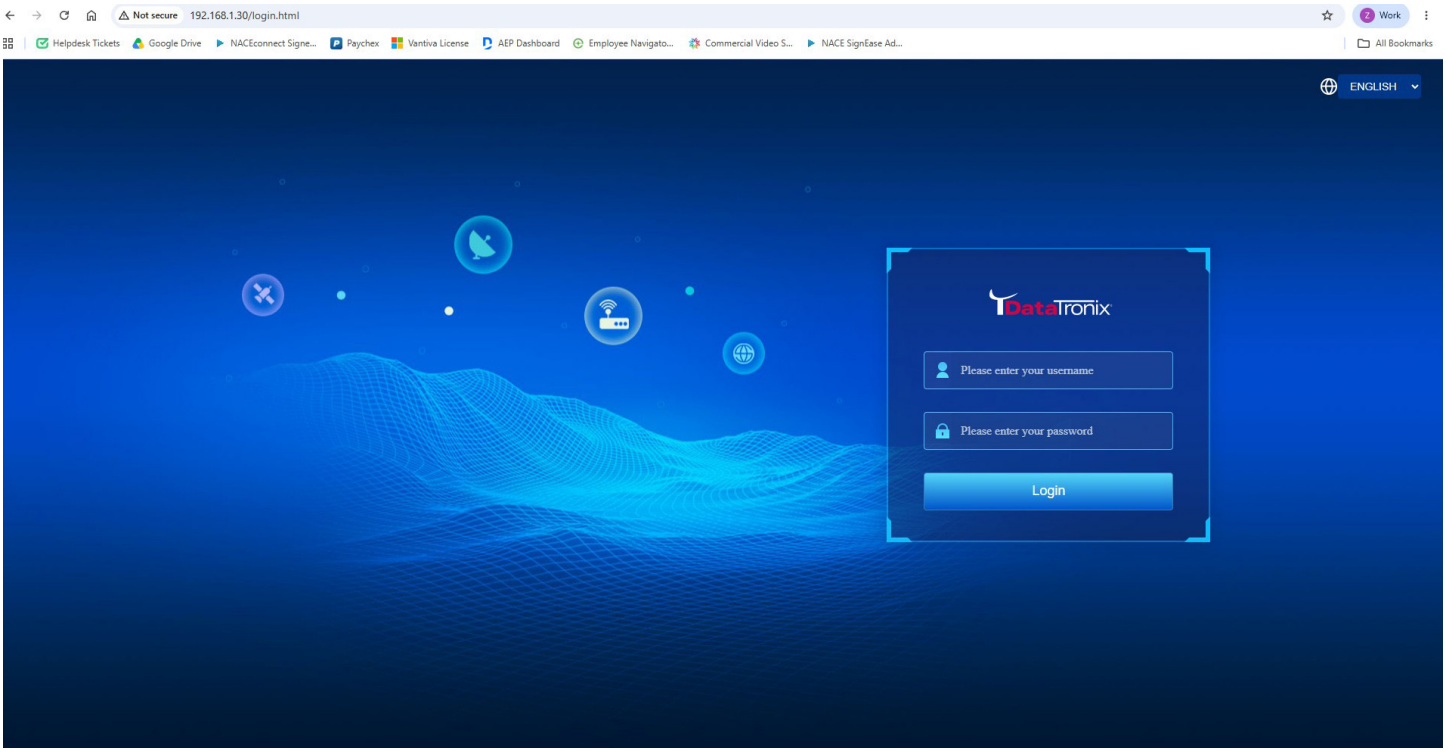


Connect your computer to the NMS port on the front of the encoder.

Open the Encoder Web Interface

Open a web browser and enter the encoder's default IP address:

http://192.168.1.30



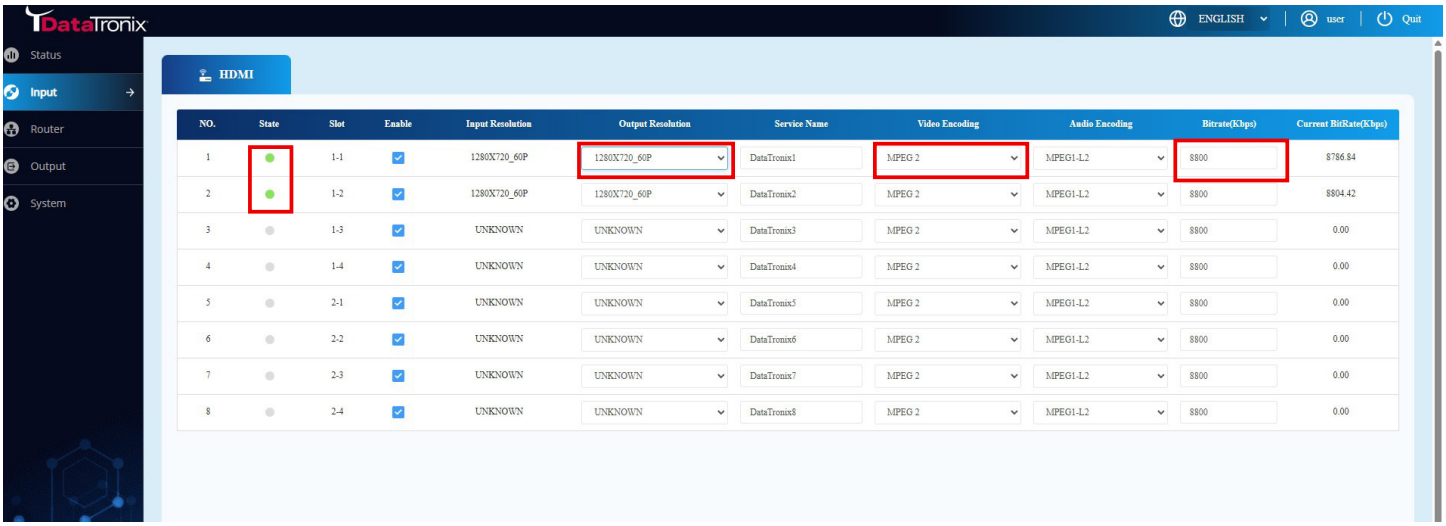
Log In

User name: user
Password: user

The user name and password are case-sensitive. After setup, change the default credentials under System > Account.

Confirm and Configure the HDMI Inputs

After logging in, open Input > HDMI. Connect your source devices to the HDMI inputs on the back of the unit. The DT-IP-ENC-4 supports four inputs; the DT-IP-ENC-8 supports eight.



The State indicator turns green when the source device is recognized. Adjust the Output Resolution, Service Name, Video Format, and Set Bit Rate as needed. The video encoding options are MPEG-2 and H.264 (MPEG4).

Choose the Output Configuration

For a multicast IPTV system, continue to the next page.
For a unicast output to a QAM4 within a COM3000, go to “Unicast: Identify Available QAM Ports” (page 11).

Multicast: Plan the IPTV Addresses

After configuring the inputs, navigate to the router tab. For an IPTV system, use multicast addresses that continue the existing lineup. The example below shows a 23-channel COM3000 lineup.

COM3000 vantiva

Commands: Overview, Discover, PairingInfo, TuneAll, Help
Display, SysInfo, HealthInfo, EPG, Troute, Syslog, Lock, ATSC, NTSC, 401, Android, QAM

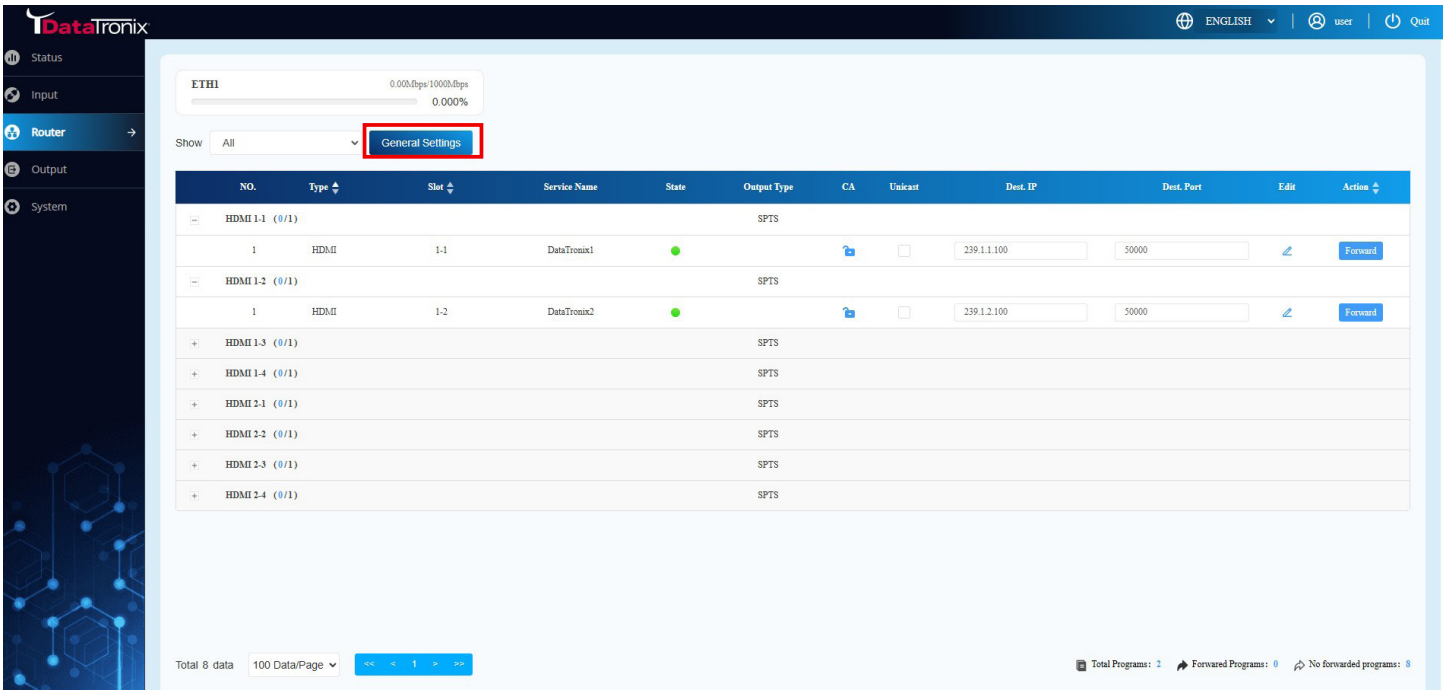
Sending MDNS
Refreshing...

Chassis	Slot	Tuner	IpAddress	Port	Channel	SNR	Strength
		1	239.255.0.1	5000	113 DTV	15	-27
		2	239.255.0.2	5000	113 DTV	15	-27
		3	239.255.0.3	5000	113 DTV	15	-27
		4	239.255.0.4	5000	113 DTV	15	-27
		5	239.255.0.5	5000	113 DTV	14	-28
		6	239.255.0.6	5000	113 DTV	14	-27
		7	239.255.0.7	5000	113 DTV	14	-28
		8	239.255.0.8	5000	113 DTV	14	-27
		9	239.255.0.9	5000	113 DTV	14	-27
		10	239.255.0.10	5000	113 DTV	14	-27
		11	239.255.0.11	5000	113 DTV	14	-27
1	1	12	239.255.0.12	5000	113 DTV	14	-27
		13	239.255.0.13	5000	113 DTV	14	-26
		14	239.255.0.14	5000	113 DTV	14	-26
		15	239.255.0.15	5000	113 DTV	14	-27
		16	239.255.0.16	5000	113 DTV	15	-26
		17	239.255.0.17	5000	113 DTV	15	-25
		18	239.255.0.18	5000	113 DTV	15	-25
		19	239.255.0.19	5000	113 DTV	15	-24
		20	239.255.0.20	5000	113 DTV	14	-24
		21	239.255.0.21	5000	113 DTV	14	-24
		22	239.255.0.22	5000	113 DTV	14	-25
		23	239.255.0.23	5000	113 DTV	14	-24

The DIRECTV lineup ends at 239.255.0.23. This example uses the next available multicast addresses, 239.255.0.24 and 239.255.0.25, for two source devices.

Multicast: Set the Range and Forward the Inputs

The encoder's default multicast address range starts at 239.1.1.100. In Router, click General Settings to adjust the range for your system.

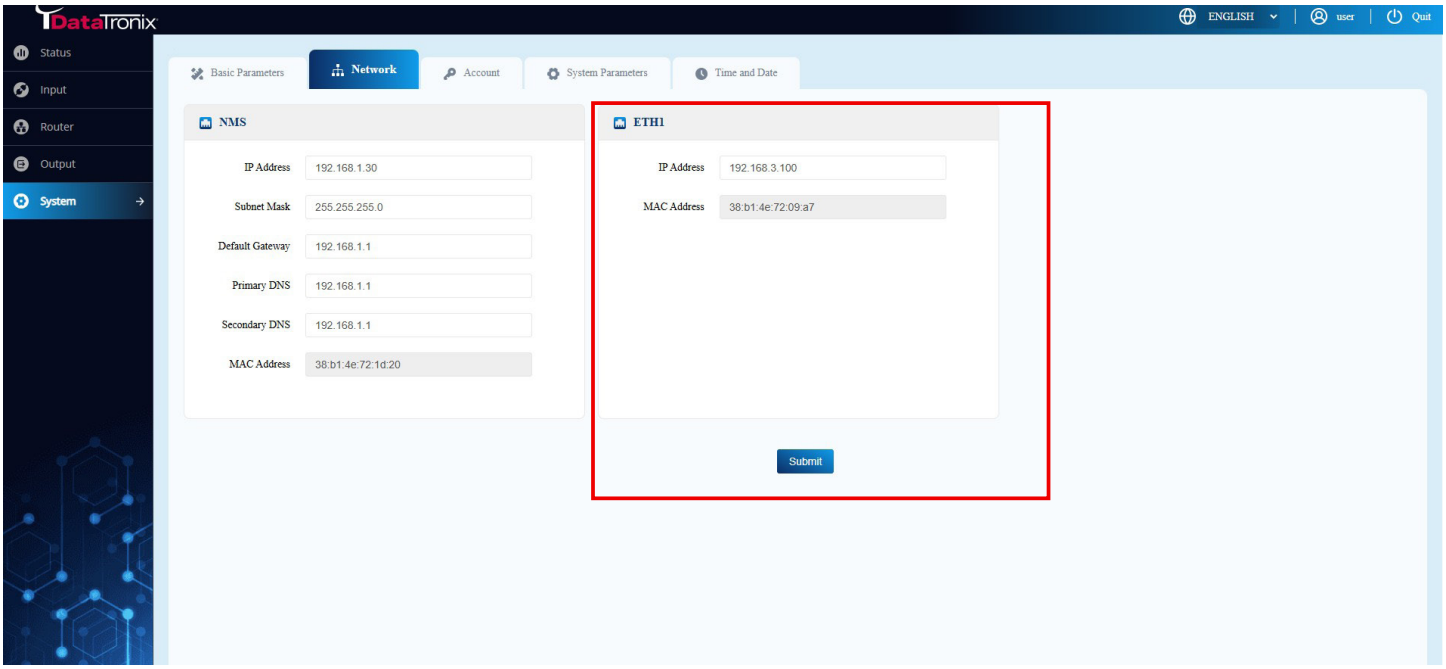


For this example, use 239.255.0.24 and 239.255.0.25 for the two configured inputs.

After setting up the inputs, select Forward to route the traffic to the output port.

Multicast: Configure ETH1 and Connect DATA OUT

Open System > Network. Set the ETH1 IP address within the COM's network range. This example uses 192.168.3.100. Click Submit to save the change.



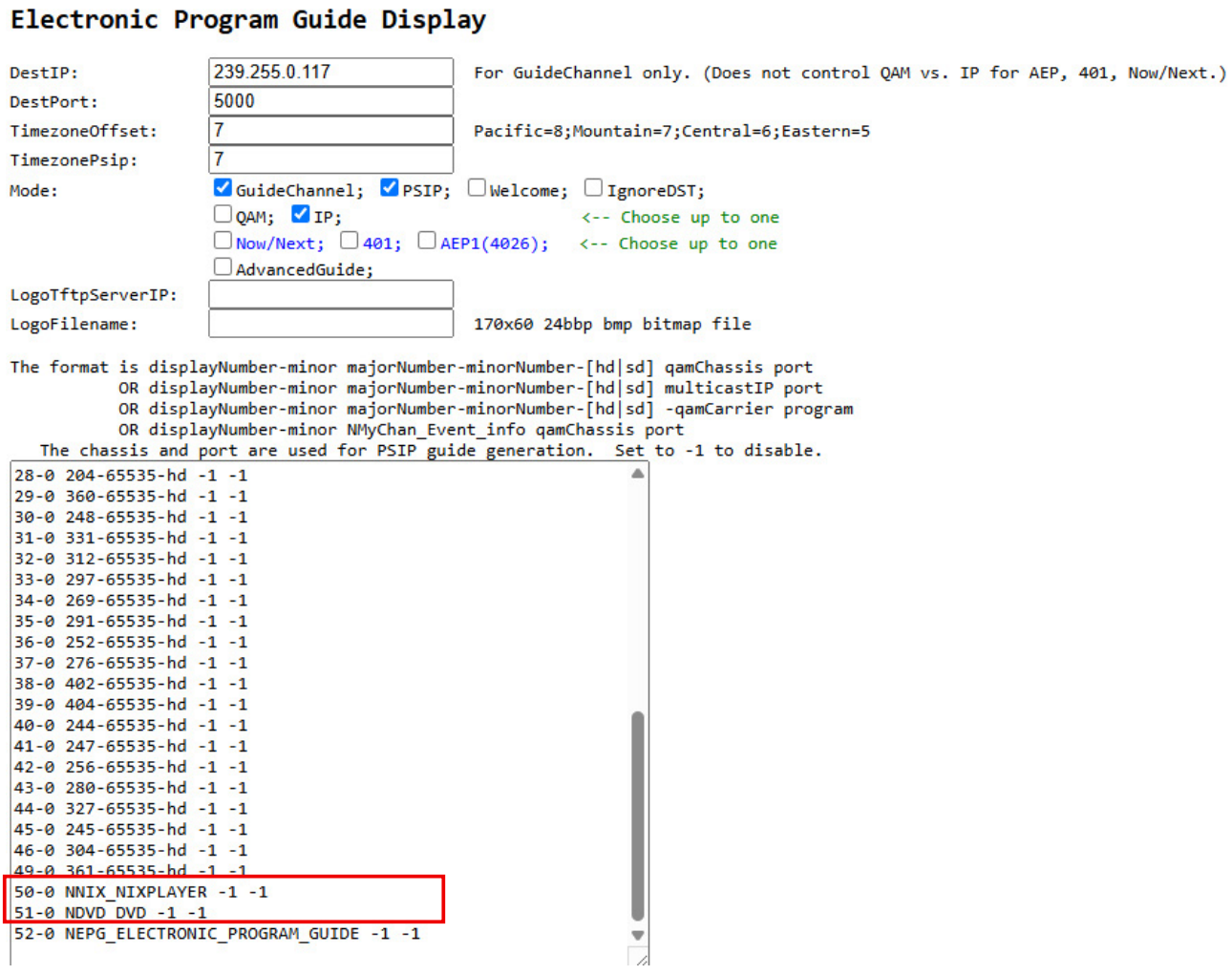
Connect the encoder's DATA OUT port to the COM. The content should now stream on the configured multicast addresses.

Use NMS for management and DATA OUT for IP streaming.

Multicast: Create the EPG

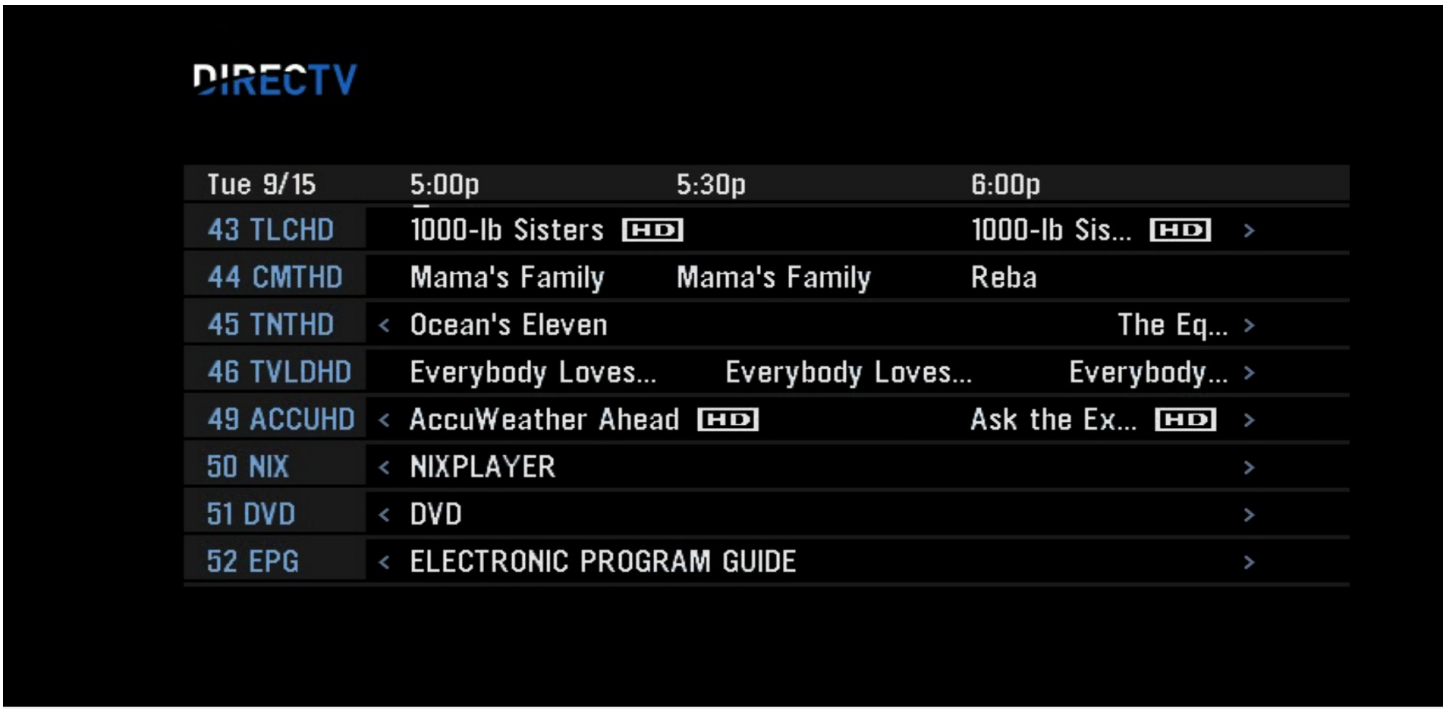
Enter the desired virtual channel number and channel name in the COM EPG configuration. Follow the format shown below, preserving the spaces and underscores:

50-0 NNIX_NIXPLAYER -1 -1
51-0 NDVD_DVD -1 -1



Multicast: Verify the Scrolling Guide

Your EPG should now display the added channels in the scrolling guide. Confirm that the channel names and virtual channel numbers match your configuration.

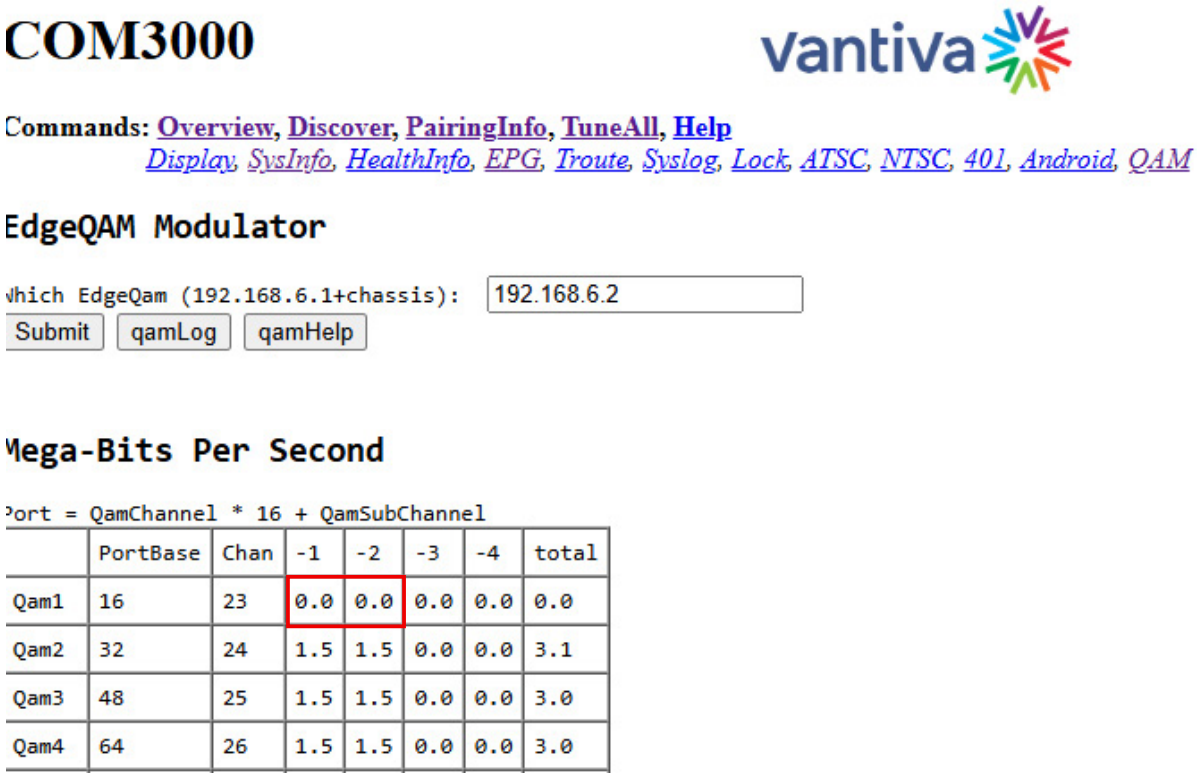


The screen shown is an example. Your lineup will reflect the channels and source devices configured for your system.

Unicast: Identify Available QAM Ports

This example sends a unicast output to the QAM4 within a COM3000. Confirm that QAM ports are available before configuring the encoder.

Example: QAM index 1, ports 17 and 18.



COM3000

vantiva

Commands: Overview, Discover, PairingInfo, TuneAll, Help
Display, SysInfo, HealthInfo, EPG, Troute, Syslog, Lock, ATSC, NTSC, 401, Android, QAM

EdgeQAM Modulator

Which EdgeQam (192.168.6.1+chassis): 192.168.6.2
Submit | qamLog | qamHelp

Mega-Bits Per Second

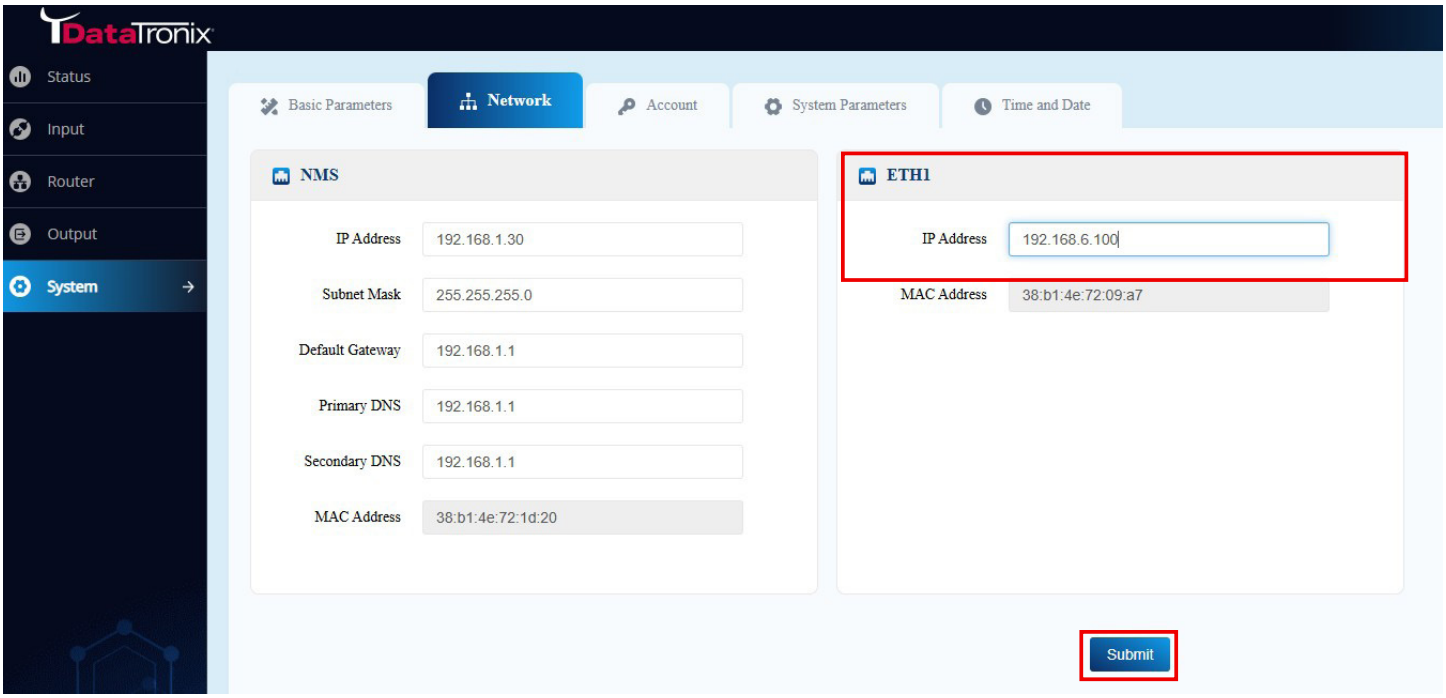
Port = QamChannel * 16 + QamSubChannel

	PortBase	Chan	-1	-2	-3	-4	total
Qam1	16	23	0.0	0.0	0.0	0.0	0.0
Qam2	32	24	1.5	1.5	0.0	0.0	3.1
Qam3	48	25	1.5	1.5	0.0	0.0	3.0
Qam4	64	26	1.5	1.5	0.0	0.0	3.0

Use the QAM IP address and available port numbers for your installation in the following steps.

Unicast: Configure the ETH1 Network

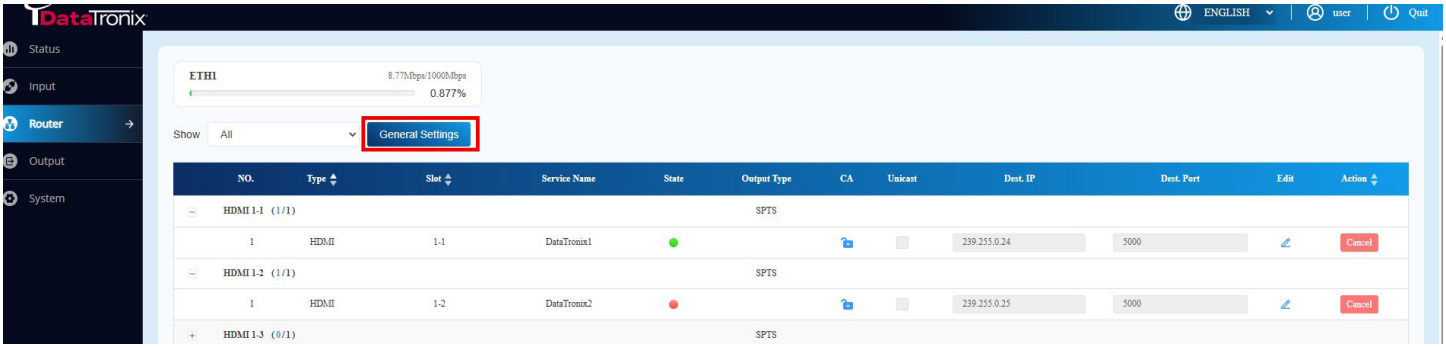
Open System > Network. Set ETH1 to an address within the QAM's network range. This example uses 192.168.6.100.



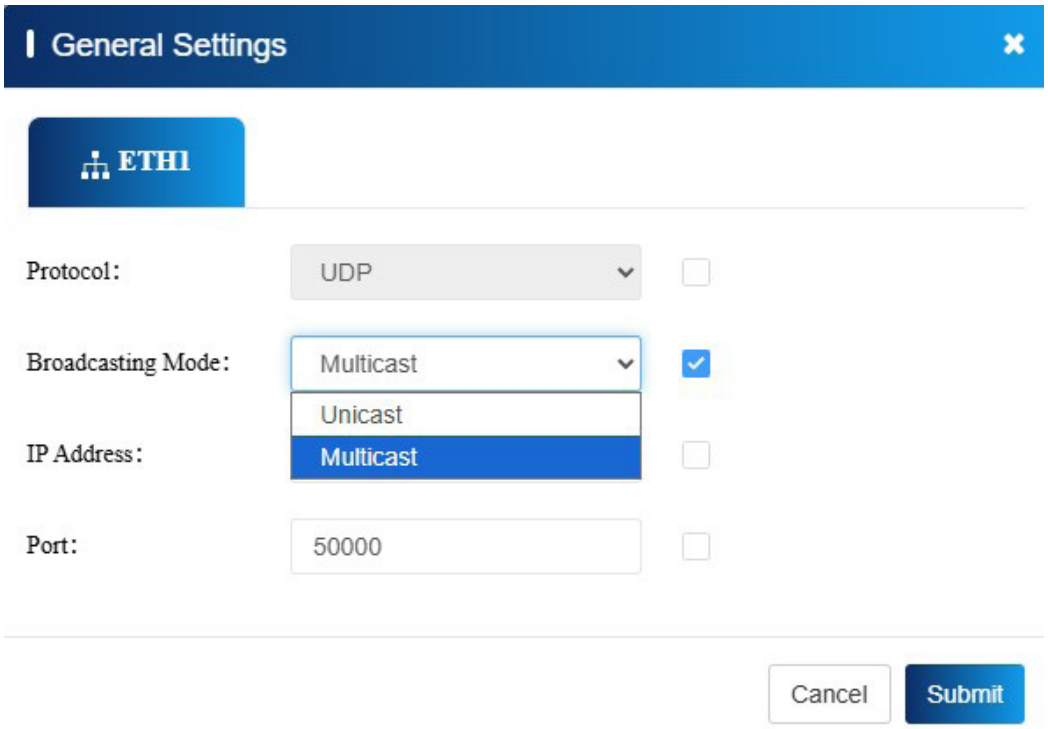
Click Submit to save the change. When the Success screen appears, click OK.

Unicast: Change the Broadcasting Mode

Return to Router. Click General Settings to set up the unicast stream for the inputs that will use the QAM ports.



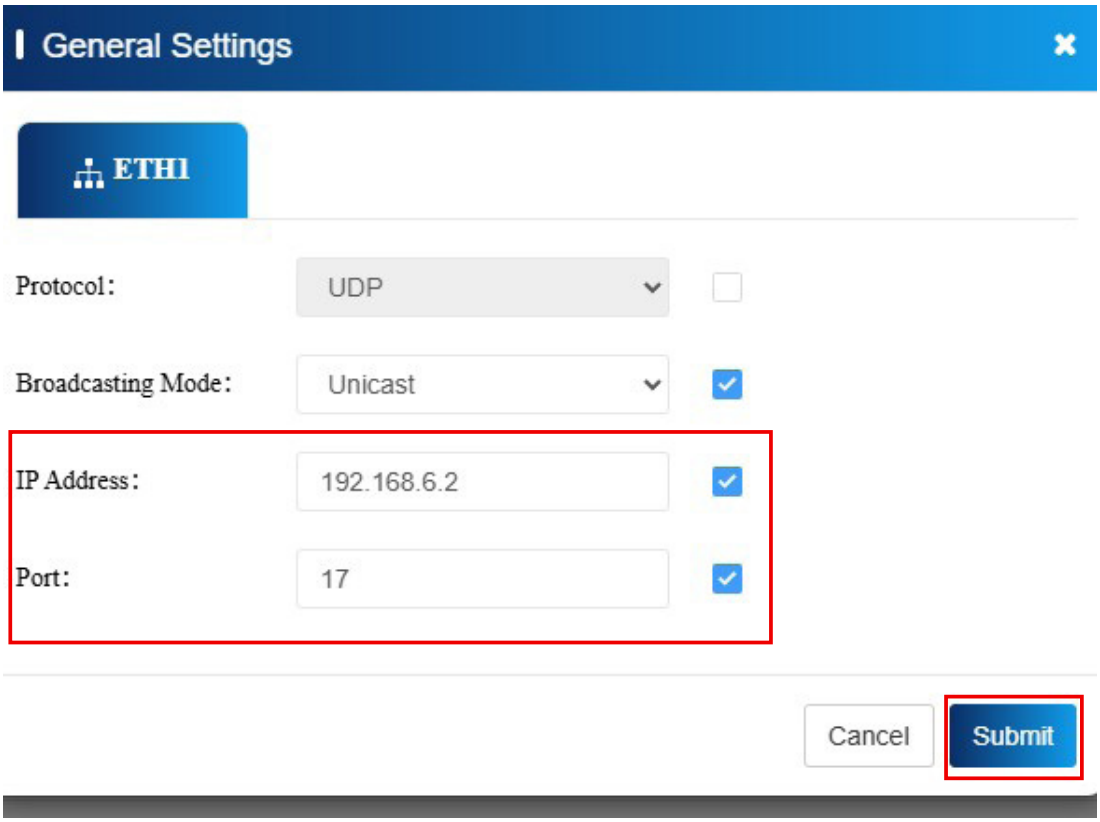
Select the checkbox beside Broadcasting Mode, then change Multicast to Unicast.



Unicast: Set the IP Address and Port

Select the checkboxes beside IP Address and Port. Enter the QAM IP address and the first available port for your configuration.

IP Address: 192.168.6.2
Port: 17

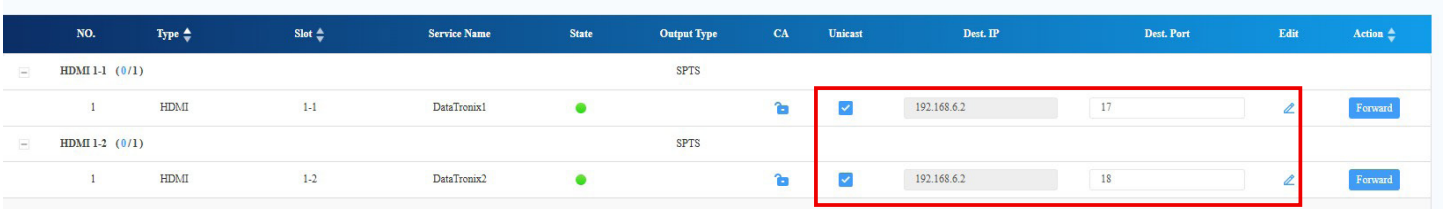


Click Submit. When the Success screen appears, click OK.

Unicast: Forward the Inputs

Set the destination for each input. Select Unicast; the destination address should populate with 192.168.6.2. Edit the port numbers to match your configuration.

This example uses port 17 for the first input and port 18 for the second input. Select Forward to start routing the content.



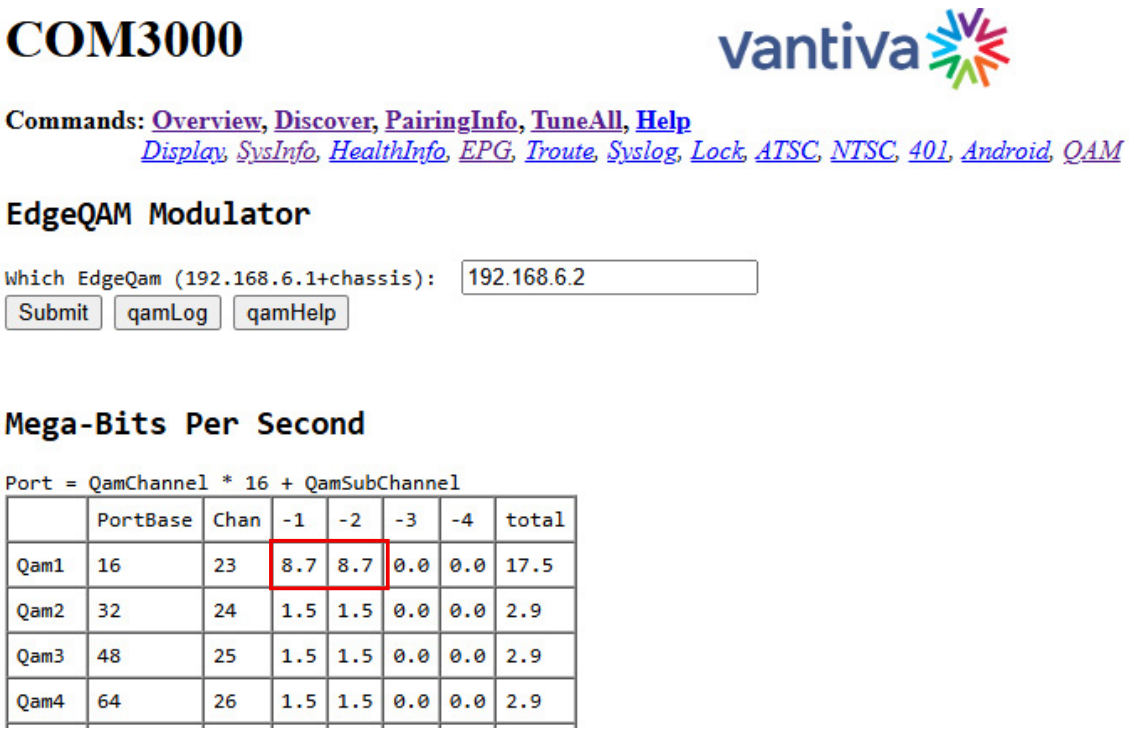
NO.	Type	Slot	Service Name	State	Output Type	CA	Unicast	Dest. IP	Dest. Port	Edit	Action
HDMI 1-1 (0/1)					SPTS						
1	HDMI	1-1	DataTronix1					192.168.6.2	17		Forward
HDMI 1-2 (0/1)					SPTS						
1	HDMI	1-2	DataTronix2					192.168.6.2	18		Forward

Connect DATA OUT

Connect the encoder's DATA OUT port to one of the COM's network ports, or to an available switch connected to the COM.

Unicast: Verify the Output and Create the EPG

Verify that bit rates are present on the expected QAM ports. In this example, content is routed to QAM index 1, ports 17 and 18.



COM3000

vantiva

Commands: Overview, Discover, PairingInfo, TuneAll, Help
Display, SysInfo, HealthInfo, EPG, Troute, Syslog, Lock, ATSC, NTSC, 401, Android, QAM

EdgeQAM Modulator

Which EdgeQam (192.168.6.1+chassis): 192.168.6.2
Submit | qamLog | qamHelp

Mega-Bits Per Second

Port = QamChannel * 16 + QamSubChannel

	PortBase	Chan	-1	-2	-3	-4	total
Qam1	16	23	8.7	8.7	0.0	0.0	17.5
Qam2	32	24	1.5	1.5	0.0	0.0	2.9
Qam3	48	25	1.5	1.5	0.0	0.0	2.9
Qam4	64	26	1.5	1.5	0.0	0.0	2.9

RF EPG Example

Use the appropriate virtual channel number, channel name, QAM index, and port in the EPG configuration:

2-0 NNIX_NIXPLAYER 1 17
3-0 NDVD_DVD 1 18

Warranty

DATATRONIX 1-Year Limited Warranty

DATATRONIX. (the “Company”) warrants to the Original Purchaser that the item purchased is free from defects in workmanship or material under normal use. This warranty starts on the date of shipment of the hardware to the Original Purchaser.

During the warranty period, the Company agrees to repair or replace, at its sole option, without charge to Original Purchaser, any defective component. To obtain service, the Original Purchaser must return the item to the Company properly packaged for shipping. All defective products must be returned to the Company within thirty (30) days of failure. Products must be returned with a description of the failure and Return Merchandise Authorization (RMA) number supplied by the Company. To receive a RMA number and a return shipping address on where to deliver the hardware, call 610-429-1821. The shipping, and insurance charges incurred in shipping to the Company will be paid by Original Purchaser, and all risk for the hardware shall remain with the Original Purchaser until such time as Company takes receipt of the hardware. Upon receipt, the Company will promptly repair or replace the defective unit, and then return said unit to Original Purchaser, shipping prepaid. The Company may use reconditioned or like-new parts or units, at its sole option, when repairing any hardware. Repaired products shall carry the same amount of outstanding warranty as from original purchase. Any claim under the warranty must include dated proof of purchase or invoice. In any event, the Company’s liability for defective hardware is limited to repairing or replacing the hardware.

This warranty is contingent upon proper use of the hardware by Original Purchaser and does not cover: if damage is due to Acts of God (including fire, flood, earthquake, storm, hurricane or other natural disaster), accident, unusual physical, electrical, or electromechanical stress, modifications, neglect, misuse, operation with media not approved by the Company, tampering with or altering of the hardware, riot, war, invasion, act of foreign enemies, hostilities (regardless of whether war is declared), civil war, rebellion, revolution, insurrection, military or usurped power or confiscation, terrorist activities, nationalization, government sanction, blockage, embargo, labor dispute, strike, lockout or interruption or failure of electricity, air conditioning, or humidity control, Internet, network, or telephone service.

The warranties given herein, together with any implied warranties covering the hardware, including any warranties of merchantability or fitness for a particular purpose, are limited in duration to one year from the date of shipment to the Original Purchaser. Jurisdictions vary with regard to the enforceability of warranty limitations, and you should check the laws of your local jurisdiction to find out whether the above limitation applies to you.

The Company shall not be liable to your for loss of data, loss of profits, lost savings, special, incidental, consequential, indirect, or other similar damages arising from breach of warranty, breach of contract, negligence, or other legal action even if the Company or its agent has been advised of

the possibility of such damages, or for any claim brought against your by another party. Jurisdictions vary with regard to the enforceability of provisions excluding or limiting liability for incidental or consequential damages. You should check the laws of your local jurisdiction to find out whether the above exclusion applies to you.

This warranty allocates risks of product failure between Original Purchaser and the Company. The Company's hardware pricing reflects this allocation of risk and the limitations of liability contained in this warranty. The warranty set forth above is in lieu of all other express warranties, whether oral or written. The agents, employees, distributors, and dealers of the Company are not authorized to make modification to this warranty, or additional warranties binding on the Company. Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by the Company and should not be relied upon.

This warranty gives you specific legal rights. You may also have other rights which vary from one jurisdiction to another.

Manual

DataTronix
Managed Data Solutions

DT-IP-ENC-4 and DT-IP-ENC-8 User Manual





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Table of Contents

1. INTRODUCTION 3
2. SPECIFICATION 3
3. PRODUCT OVERVIEW 4
4. SAFETY INSTRUCTIONS 5
5. UNPACKING AND HANDLING 6
    5.1 Mechanical Inspection 6
    5.2 Precautions 6
    5.3 Damage in Shipment 6
6. INSTALLATION 7-8
7. PROGRAMMING VIA WEB INTERFACE 9-13
    7.1 Login 9
    7.2 System Page 10
    7.3 Input Setting -- HDMI 11
    7.4 Router Setting 12
    7.5 Output 13
8. SYSTEM 14-18
    8.1 Basic Parameters 14
    8.2 Network 15
    8.3 Account 16
    8.4 System 17
    8.5 Time and Date 18
9. QUICK IP ETHERNET CONNECTION GUIDE 19-21
10. COMMON TROUBLESHOOTING 22
11. WARRANTY 23-24

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1. Introduction

Thank you for choosing the **DataTronix DT-IP-ENC Series** HDMI to IPTV Encoders. This manual covers both the **DT-IP-ENC-4 and DT-IP-ENC-8** models.

Designed for professional IPTV and commercial AV applications, the DT-IP-ENC series converts HDMI video sources into high-quality IP streams for distribution across Ethernet networks and QAM systems. Supporting MPEG-4 and MPEG-2 video encoding, along with UDP and RTP streaming protocols, these encoders provide reliable performance for 24/7 operation.

The DT-IP-ENC-4 supports up to four HDMI input channels, while the DT-IP-ENC-8 supports up to eight HDMI input channels. Both models feature web-based management, Gigabit Ethernet connectivity, multicast and unicast streaming support, and compatibility with modern IPTV infrastructures.

Ideal applications include hospitality TV systems, sports bars, corporate AV, education, healthcare, digital signage, and other professional video distribution environments.

This manual provides installation, configuration, operation, and troubleshooting information for both encoder models.

2. Specifications

Input	
Input connector (Rear panel)	4 x HDMI 1.4 or 8 x HDMI 1.4
Video Encoding	MPEG2 or H.264
Video Input Resolution	1920 x 1080_60P/_50P, 1920 x 1080_60i/_50i, 1280 x720_60P/_50P
Audio Encoding	MPEG 1 Lay II, AAC, AC3

Output	
Output connector	1 x 1000Mbps port
Transport Protocol	UDP, RTP
Output Transport Stream	SPTS
Broadcasting Mode	Unicast and Multicast

TS Processing	
Advanced PSI/SI regeneration	Yes

General	
Input voltage	90 - 264VAC, DC12V 5A
Power consumption	Less than 49.1 W
Rack space	1RU
Dimensions(WxHxD)	19.09” × 1.73” × 9.44” (485 x 44 x 240mm)
Weight	DT-IP-ENC-4: 4.60lbs. (2.08 kg), DT-IP-ENC-8: 4.70 lbs. (2.13 kg)
Warranty	1-Year Limited Warranty

3. Product Overview

DT-IP-ENC-4 & DT-IP-ENC-8 Front Panel View



1. **PWR** Power indicator LED
2. **RUN** System operation indicator
3. **CH1–CH4** HDMI input channel status indicators
   CH1–CH8 HDMI input channel status indicators
4. **DATA OUT** Gigabit IP streaming output port
5. **NMS** Network management port
   [IP:192.168.1.30; USER NAME: user ; PASSWORD: user]
6. **DEFAULT** - Press for 10 seconds to restore the encoder to the factory setting
   (The network setting and PID settings)

DT-IP-ENC-4 & DT-IP-ENC-8 Rear Panel View



7. **HD INPUT PORTS:** Feed the HDMI signals into the encoder.
   (4 HD Input on DT-IP-ENC-4/ 8 HD Input on DT-IP-ENC-8)
8. **POWER INPUT:** 12V 5A power source
9. **ON/OFF SWITCH:** Turns the unit on or off
10. **GDN:** For encoder grounding

WARNING:
For the protection of your equipment and its proper working, it is necessary to connect the DT-IP-ENC-4 / DT-IP-ENC-8 to a ground connection.

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TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER FROM THIS UNIT. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING: TO PREVENT SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE





CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

4. Safety Instructions

1. Read all safety and operating instructions before operating the encoder.
2. Retain all safety and operating instructions for future reference.
3. Follow all warnings and instructions provided on the device and in this manual.
4. Follow all installation, operating, and usage instructions carefully.
5. Unplug the encoder from the AC power outlet before cleaning. Use only a damp cloth to clean the exterior of the unit.
6. Do not use accessories or attachments not recommended by the manufacturer, as they may cause hazards and void the warranty.
7. Do not operate the encoder in high-humidity environments or expose it to water or moisture.
8. Do not place the encoder on an unstable cart, stand, bracket, or table. The unit may fall, resulting in personal injury or equipment damage. Install the encoder only in a properly ventilated 19-inch equipment rack.
9. Do not block or cover the ventilation openings of the encoder. These openings are provided to prevent overheating. Do not install the unit near radiators, heat registers, or other heat sources.
10. It is strongly recommended to use a power outlet with surge suppression or ground-fault protection. During lightning storms or when the unit will not be used for extended periods, dis connect the encoder from the power source and disconnect signal cables to prevent damage from lightning or power surges.
11. Do not overload wall outlets or extension cords, as this may result in fire or electrical shock.
12. Never insert objects into the encoder through the ventilation openings, as they may contact dangerous voltages or damage internal components. Refer all servicing to qualified service personnel.
13. Unplug the encoder from the wall outlet or PDU and refer servicing to qualified service personnel under the following conditions:
    - The power supply cord or plug is damaged
    - Liquid has been spilled into the unit
    - Objects have fallen into the unit
    - The encoder has been exposed to rain or moisture
    - The encoder has been dropped or the chassis has been damaged
    - The encoder exhibits a noticeable change in performance
14. When replacement parts are required, ensure that only manufacturer-approved replacement parts are used. Unauthorized substitutions may damage the encoder and may result in fire, electrical shock, or voiding of the warranty.

5. Unpacking and Handling

Each DataTronix DT-IP-ENC Series encoder is fully assembled, factory tested, and securely packaged prior to shipment.

Package contents include:

- DT-IP-ENC-4 or DT-IP-ENC-8 HDMI to IP IPTV Encoder (Qty: 1)
- Power supply and power cord (Qty: 1)
- Rack-mount brackets (Qty: 2)

5.1 Mechanical Inspection

Carefully inspect the front and rear panels of the unit for any signs of shipping damage. Verify that the equipment is clean and that all cables, connectors, and components are secure and undamaged.

5.2 Precautions

To ensure reliable operation and long service life, observe the following precautions:

- Avoid excessive heat buildup around the unit
- Ensure easy access to rack wiring and cable connections
- Allow adequate space for servicing and maintenance
- Avoid direct exposure to heating or air conditioning sources
- Ensure the equipment rack is properly supported and structurally secure
- Protect the unit from water exposure, condensation, and moisture
- Never operate the encoder without its protective cover installed
- Do not perform installation or service work during electrical storms

5.3 Shipping Damage

Damage in Shipment

Should any damage be discovered after unpacking the unit, immediately contact DataTronix at 800-688-9282.

6. Installation

The DataTronix DT-IP-ENC Series encoders are designed for professional IPTV and AV distribution installations. Both the DT-IP-ENC-4 and DT-IP-ENC-8 models may be installed in a standard 19-inch equipment rack.

The following diagrams illustrate proper system connections and recommended mounting methods.

6.1 System Connection Diagram

The diagram below shows a typical system installation using HDMI source devices, network connections, management access, and power connections.

- Connect HDMI source devices to the HDMI input ports
- Connect the DATA IN port to the IPTV network switch
- Connect the NMS port to a computer or management network
- Connect the supplied DC 12V power adapter
- Power on the encoder using the rear-panel power switch

6.2 Rack-Mount Installation

The encoder may be installed in a standard 19-inch equipment rack using the included rack-mount brackets.

Rack Installation Procedure

1. Attach the mounting brackets to both sides of the encoder using the supplied screws.
2. Position the encoder in the desired rack location.
3. Secure the encoder to the rack using standard rack screws (not included).
4. Verify that adequate airflow is available around the unit for proper cooling.

6.3 Installation Guidelines

- Allow at least 50 mm (2 inches) of clearance around the ventilation openings
- Do not install the encoder near strong heat sources or in direct sunlight
- Protect the unit from dust, moisture, and excessive humidity
- Ensure the encoder is properly grounded before operation
- Use only the supplied or approved DC power adapter
- Do not block the side ventilation openings

DataTronix
Managed Data Solutions

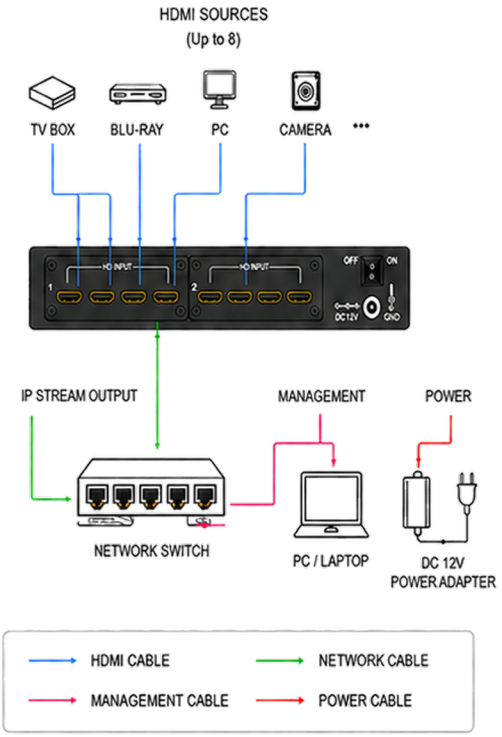
1. SYSTEM CONNECTION

FRONT PANEL (DT-IP-ENC-4)



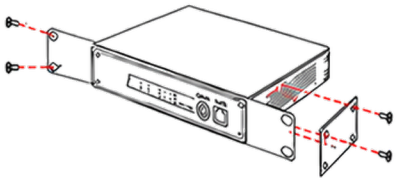
REAR PANEL (DT-IP-ENC-8)



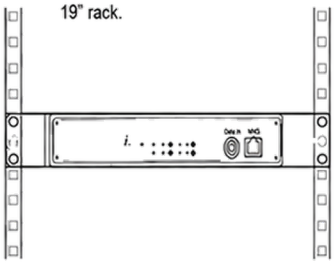


2. RACK MOUNT INSTALLATION

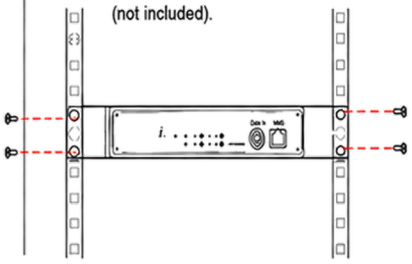
1. Attach the mounting brackets to both sides of the unit using the supplied screws.

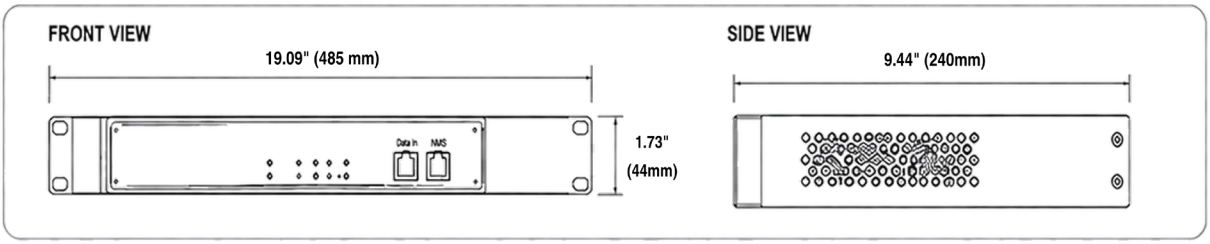


2. Position the unit in the desired location in the 19" rack.



3. Secure the unit to the rack using standard rack screws (not included).





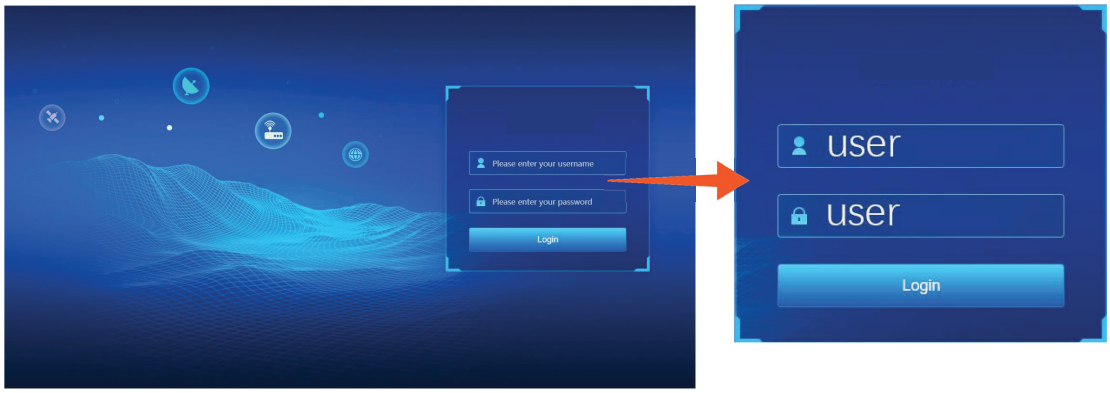
7. PROGRAMMING VIA WEB INTERFACE

7.1 Login:

1. Connect your computer to the encoder through the NMS port.
2. Configure your computer to the same IP subnet as the encoder.
3. Open a supported web browser such as Google Chrome, Mozilla Firefox, or Microsoft Edge.
4. Enter the default IP address: 192.168.1.30
5. Log in using the default credentials:

Username: user
Password: user

Note: Usernames and passwords are case-sensitive.



NOTE:

1. Before attempting to log in, verify that your computer and the encoder are configured on the same IP subnet. See page 19 for instructions on configuring your computer and encoder.

2. For security, change the default username and password after completing the initial setup.

3. Usernames and passwords are case-sensitive and may contain letters and numbers.

4. Usernames and passwords must be between 1 and 32 characters long.

7.2 System Page:

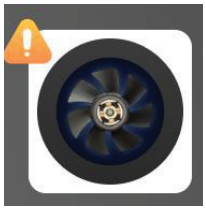
The System Page is a read-only status screen that provides an overview of the encoder's operating condition and system information. This page allows users to quickly monitor system status and assist with troubleshooting.



Serial Number: Displays the unique serial number of the encoder.
Software Version: Displays the current firmware version installed on the device. This information may be required for technical support.
Temperature: Displays the CPU operating temperature in real time.
Front Panel: Displays the status of the DATA IN (1000 Mbps) and NMS network ports.
Rear Panel: Displays the status of the HDMI input ports. Green indicates a valid input signal is detected. Gray indicates no signal or no connection.
Cooling Fans: Displays the operating status of the internal cooling fans.



The fan is working.

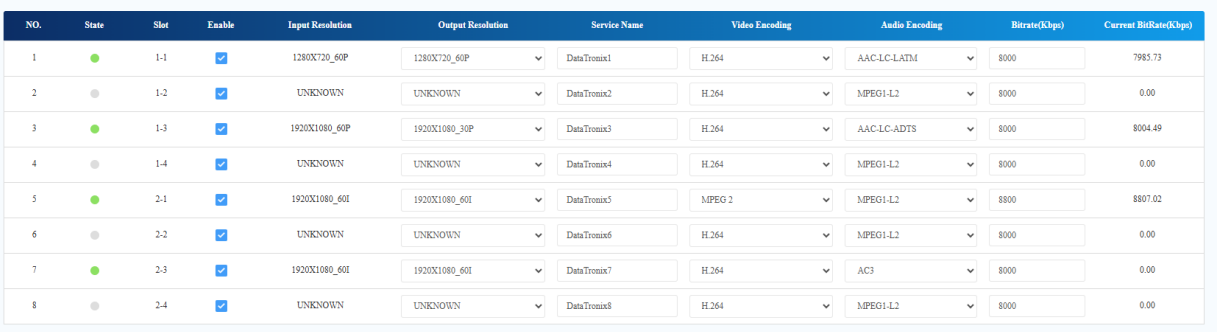


The fan is down. Please replace it.

ON-Cloud Status: Green indicates the encoder is connected to the cloud server. Gray indicates the encoder is disconnected.
Input: Opens the HDMI input configuration page.
Route: Selects and configures output streams and services.
Output: Displays all output channels and streaming parameters.
System: Provides access to Network, Account, System, Time & Date, and Cloud settings.

7.3 HDMI Input Settings:

The HDMI Input Settings page allows configuration and monitoring of all HDMI input **channels.**



NO.	State	Slot	Enable	Input Resolution	Output Resolution	Service Name	Video Encoding	Audio Encoding	Bitrate(Kbps)	Current BitRate(Kbps)
1		1-1		1280X720_60P	1280X720_60P	DataTronix1	H.264	AAC-LC-LATM	8000	7985.73
2		1-2		UNKNOWN	UNKNOWN	DataTronix2	H.264	MPEG1-L2	8000	0.00
3		1-3		1920X1080_60P	1920X1080_30P	DataTronix3	H.264	AAC-LC-ADTS	8000	8004.49
4		1-4		UNKNOWN	UNKNOWN	DataTronix4	H.264	MPEG1-L2	8000	0.00
5		2-1		1920X1080_60I	1920X1080_60I	DataTronix5	MPEG 2	MPEG1-L2	8800	8807.02
6		2-2		UNKNOWN	UNKNOWN	DataTronix6	H.264	MPEG1-L2	8000	0.00
7		2-3		1920X1080_60I	1920X1080_60I	DataTronix7	H.264	AC3	8000	0.00
8		2-4		UNKNOWN	UNKNOWN	DataTronix8	H.264	MPEG1-L2	8000	0.00

Status: Green indicates the channel is active and operating normally. Gray indicates no signal or an unused port.

Channel: Displays the slot number and HDMI input number. Example: “1-1” indicates Slot 1, HDMI Input 1.

Enable: Enables or disables the selected HDMI input channel.

Input Resolution: Displays the detected HDMI input resolution. “Unknown” indicates an unsupported or missing signal.

Output Resolution: Configures the output resolution or downscaling settings.

Service Name: Allows the user to assign a custom service name.

Video Format: Selects the video encoding format: MPEG-2 or H.264.

Audio Format: Selects the audio encoding format: MPEG-1 Layer II, AAC-LC-ADTS, AAC-LC-LATM, or AC3.

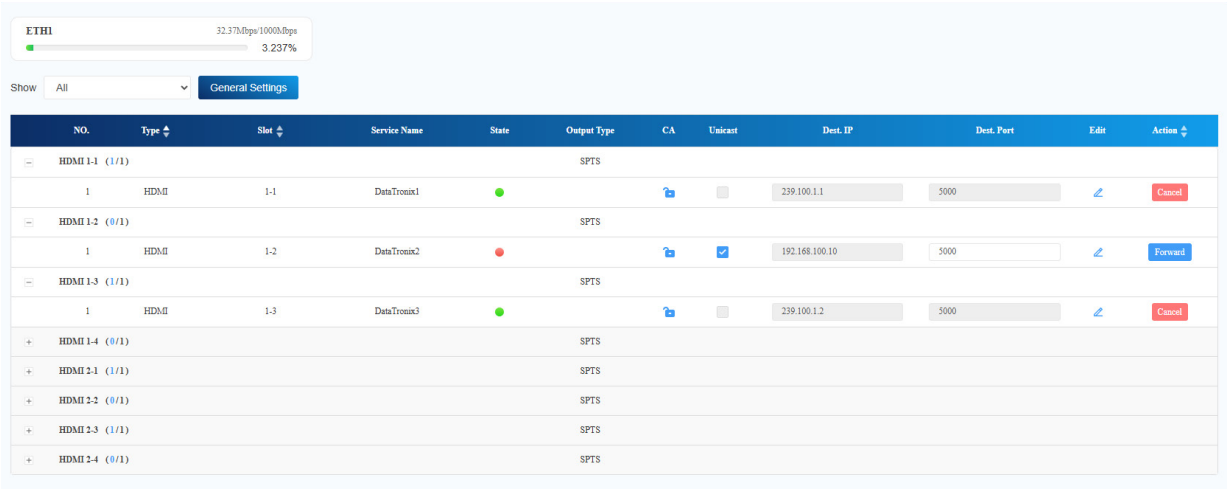
Set Bit Rate: Configures the output video bit rate. The maximum supported bit rate is 20,000 Kbps.

Real Bit Rate: Displays the current real-time output bit rate.

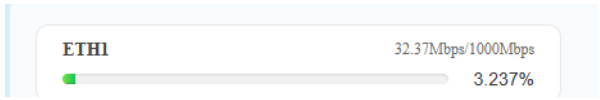
NOTE:

1. AAC-LC-ADTS is recommended for maximum compatibility with IPTV systems and set-top boxes. AAC-LC-LATM may provide more efficient bandwidth usage in some network environments.

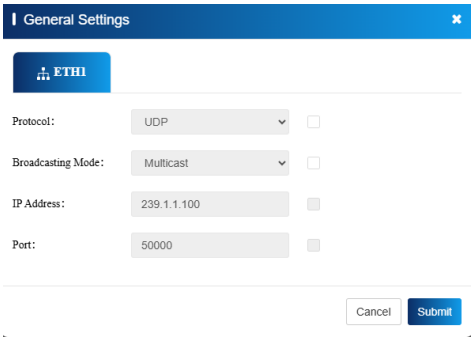
7.4 Router Settings



Checkbox: Used to quickly select or deselect multiple streams.
Type: Displays the input stream type (HDMI).
Slot: Displays the slot and HDMI input number.
Example: “1-1” indicates Slot 1, HDMI Input 1.
Service Name: Displays the assigned service name.
State: Green: Signal locked and operating normally.
Orange: PSI information changed. Red: Stream lost or unavailable.
CA: Indicates whether the service is Free-to-Air (FTA) or encrypted.
Output Type: Displays the output stream type (SPTS).
Unicast: Enables IP streaming in unicast mode.
Dest. IP: Specifies the multicast or unicast destination IP address.
Dest. Port: Specifies the output streaming port number.
Edit: Allows editing of service name and service provider information.
Action: Forward: Enables the selected stream.
Cancel: Disables the selected stream.



Displays total network bandwidth and current bandwidth usage

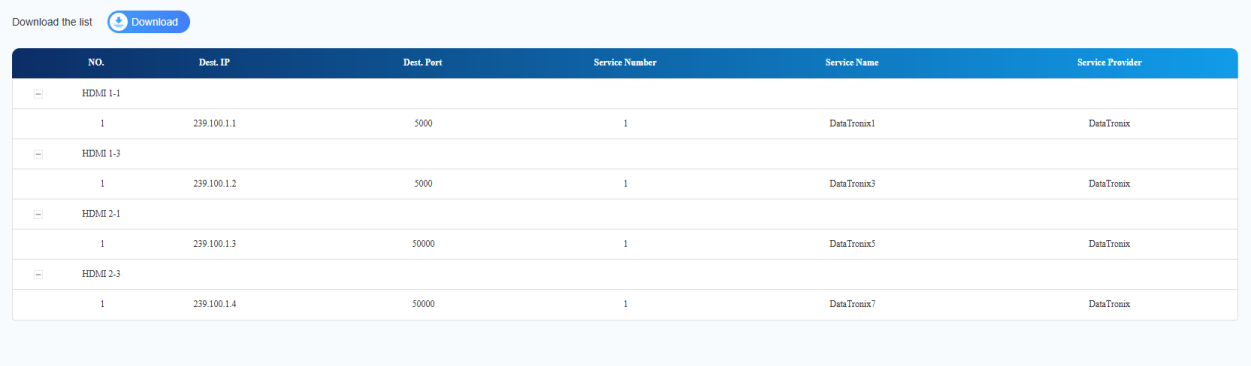


General Settings:

- Allows bulk editing of streaming parameters
- Changes made in the bulk editing interface are temporary until saved

7.5 Output

The Output page provides an overview of all active output channels and streaming information.



NO.	Dest. IP	Dest. Port	Service Number	Service Name	Service Provider
HDMI 1-1					
1	239.100.1.1	5000	1	DataTronix1	DataTronix
HDMI 1-3					
1	239.100.1.2	5000	1	DataTronix3	DataTronix
HDMI 2-1					
1	239.100.1.3	50000	1	DataTronix5	DataTronix
HDMI 2-3					
1	239.100.1.4	50000	1	DataTronix7	DataTronix

Features include:

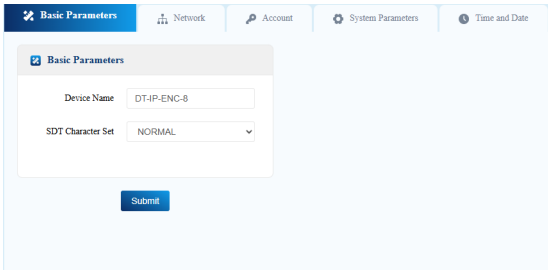
- Viewing all configured output streams
- Monitoring destination IP addresses and port assignments
- Reviewing service names and service provider information
- Exporting the output channel list to an Excel file for backup or IPTV server import

Download Function:

The Download option exports the current output channel list to an Excel file that can be saved locally and imported into compatible IPTV management systems, simplifying system deployment and reducing manual configuration time.

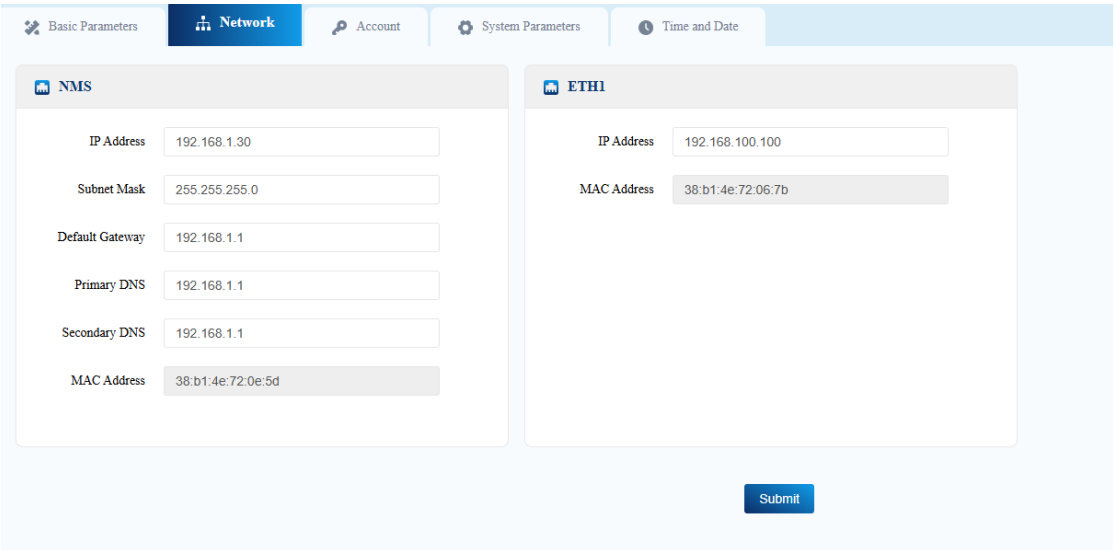
8. SYSTEM

8.1 Basic Parameters



Device Name	Allows the user to assign a custom name to the encoder.
SDT Character Set	Selects the character encoding format used by compatible IPTV set-top boxes and receivers.
Normal	Uses the default character encoding without additional identifiers.
ISO-8859-5	Character encoding designed to support Latin and Cyrillic languages.
GBK	An extended Chinese character encoding standard supporting Simplified Chinese characters.
UCS-2	Universal Character Set encoding standard using 2-byte character representation.
UTF-8	Unicode Transformation Format (8-bit). Widely used for multilingual text and electronic communication.

8.2 Network Setting



NMS (Management Port)

IP Address	Configures the management IP address of the encoder.
Subnet Mask	Configures the subnet mask for the management network.
Gateway	Configures the default gateway address.
Primary DNS	Configures the primary DNS server address.
Secondary DNS	Configures the secondary DNS server address.
MAC Address	Displays the hardware MAC address of the management port. This value is read-only and cannot be changed.

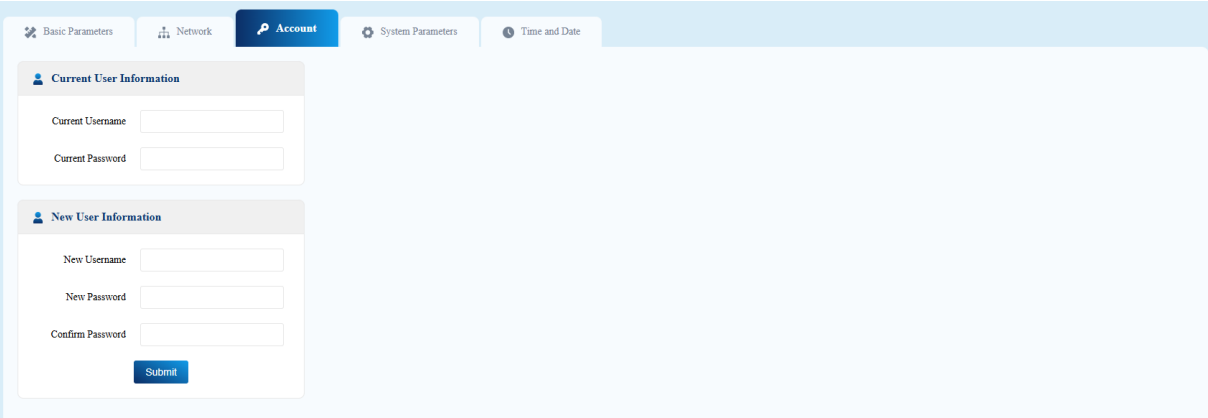
ETH1 (Data Output Port)

IP Address	Configures the IP address used for streaming output in unicast mode.
MAC Address	Displays the hardware MAC address of the data output port. This value is read-only and cannot be changed.

Important Notes:

- Changes to network settings may interrupt communication with the encoder
- Modify the management IP address only when necessary
- Ensure the encoder and management computer are on the same network subnet

8.3 Account



The Account page allows users to change the login username and password for the web management interface.

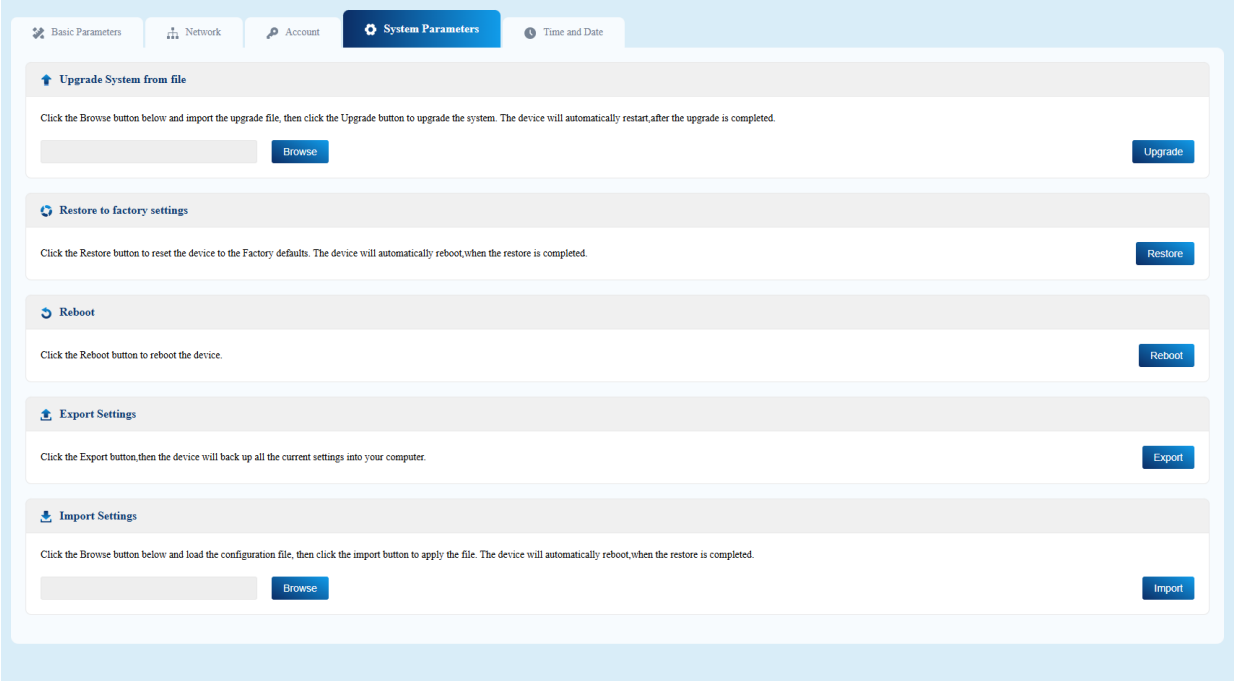
To update account information:

1. Enter the current username and password for verification
2. Enter the new username and password
3. Confirm the new password
4. Click Submit to save the changes

Important Notes:

- Usernames and passwords are case-sensitive
- Usernames and passwords may contain letters and numbers
- If login credentials are forgotten, press and hold the DEFAULT button on the front panel for 10 seconds to restore factory settings

8.4 System



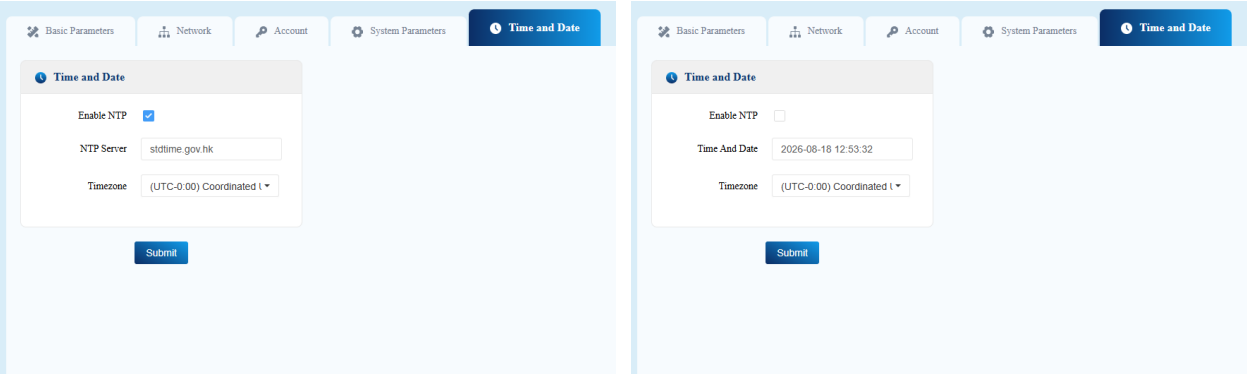
The System page provides firmware management, system maintenance, and configuration back-up functions.

Upgrade System from File	Updates the encoder firmware using a locally stored upgrade file.
Restore Factory Settings	Restores all system settings, including network and streaming parameters, to factory defaults.
Reboot	Restarts the encoder.
Export Settings	Saves the current system configuration to a file on your computer.
Import Settings	Restores previously saved configuration settings to the encoder.

Important Note:

To manually restore factory settings, press and hold the DEFAULT button on the front panel for approximately 10 seconds. The reset process is complete when the RUN indicator begins flashing.

8.5 Time and Date



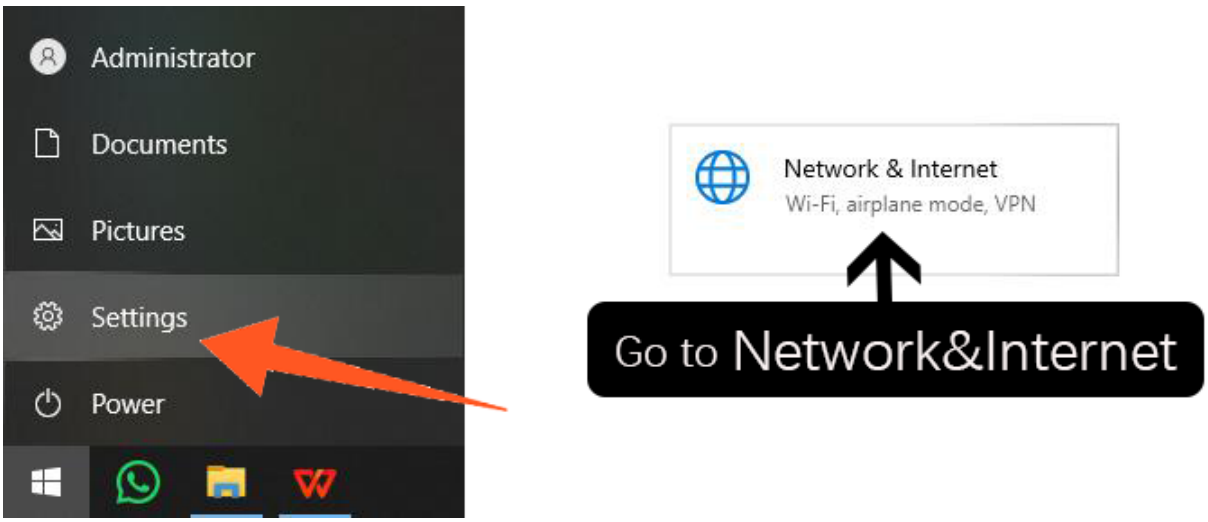
Enable NTP ☑	
NTP Server	Input the NTP server address which is best for you. Make sure the NMS port is connected with the Internet.
Local Timezone	Select a timezone
Enable NTP ☐	
Time And Date	Press the TODAY button, and the modulator will read the time and date from your computer.
Local Timezone	Select a timezone

9. QUICK IP ETHERNET CONNECTION GUIDE

NOTE:

Make sure you login your operation system as the administrator.

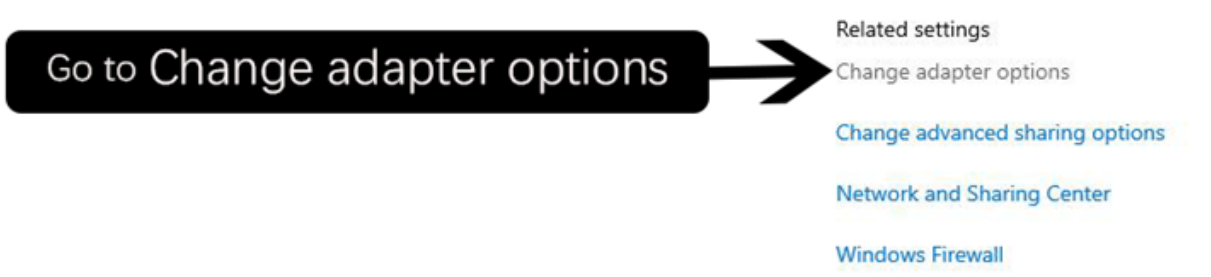
9.1. Go to " Windows Start'



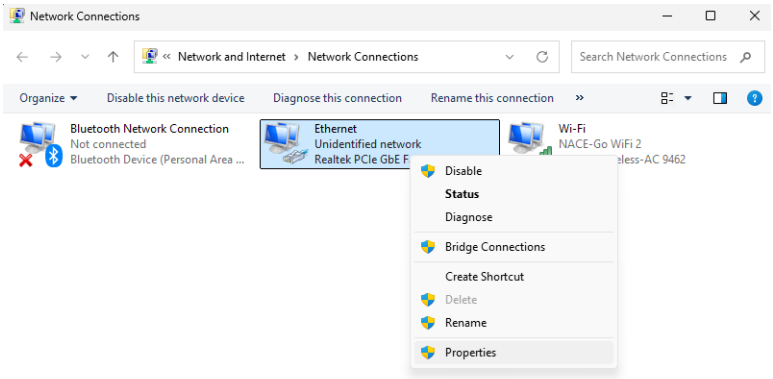
9.2. Go to Windows Settings
9.3. Go to " Network & Internet"
9.4. Go to "Ethernet" on the left side of the menu



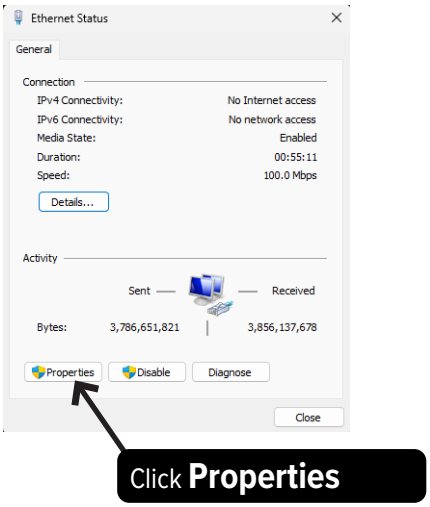
9.5. Go to " Change adapter options"



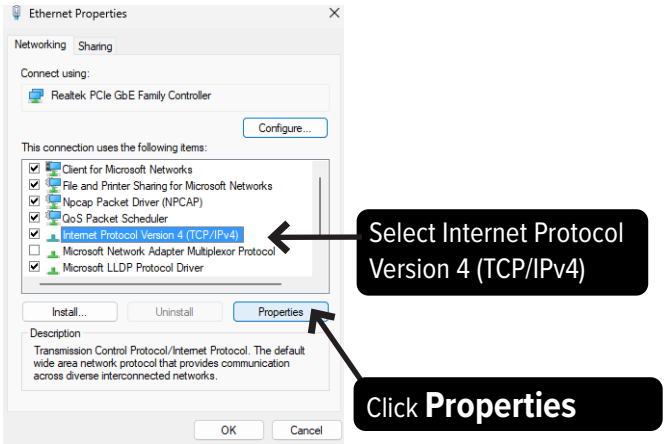
9.6. Double click on the Ethernet Source or Right Click and select “Properties”



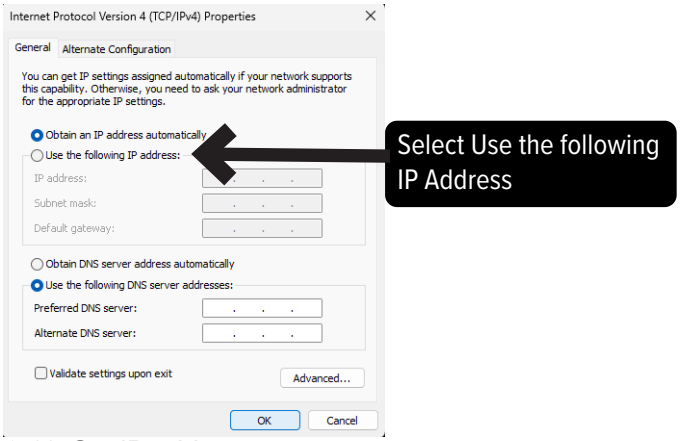
9.7. Open Properties



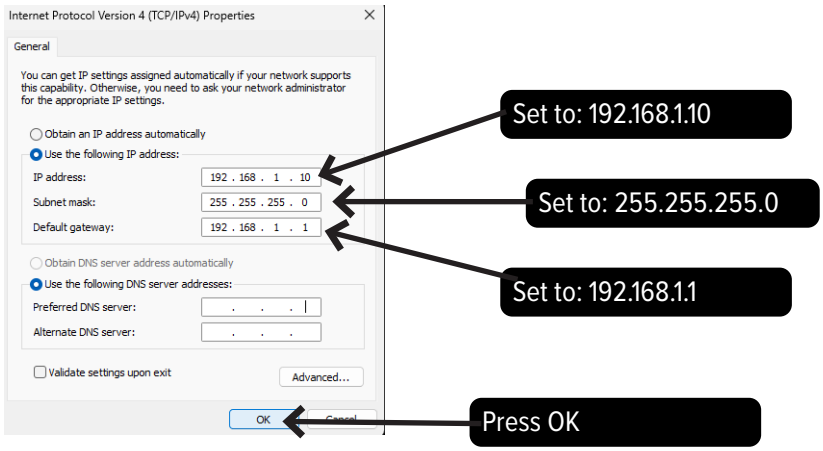
9.8. Go to “Internet Protocol Version 4 (TCP/IPv4)
9.9. Go to “Properties”



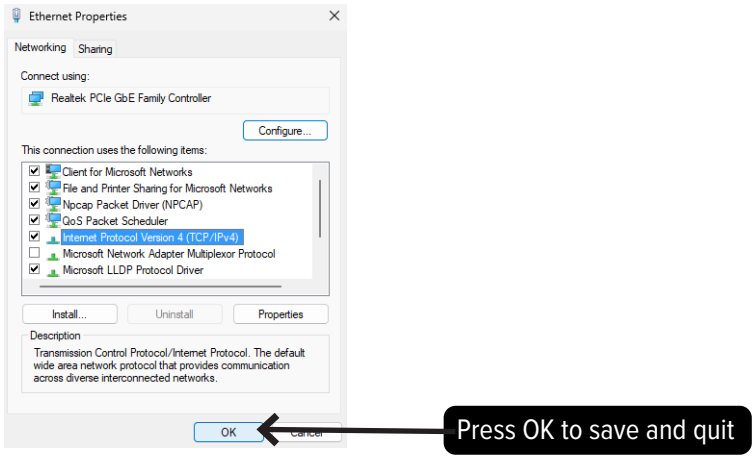
9.10. Go to “Use the following IP address”



9.11. Set IP address
Set IP address: 192.168.1.10
Set Subnet mask: 255.255.255.0
Set Default gateway: 192.168.1.1



9.12. Save all the settings.



10. COMMON TROUBLESHOOTING

Symptom	Recommended Action
Power LED is off	Verify the power adapter and power cable connections.
Unable to access the NMS interface	Verify network settings and refer to Chapter 9.
Web interface is not displaying correctly or settings cannot be saved	Clear the web browser cache and browsing data.
CH1–CH8 LEDs are off	Verify the HDMI source device is powered on. Check the HDMI cable and verify the input resolution is supported.
“Unknown” displayed under input resolution	No HDMI signal detected or unsupported input resolution.
Other issues	Contact technical support for assistance. 800-688-9282

11. WARRANTY

DATATRONIX 1-Year Limited Warranty

DATATRONIX. (the “Company”) warrants to the Original Purchaser that the item purchased is free from defects in workmanship or material under normal use. This warranty starts on the date of shipment of the hardware to the Original Purchaser.

During the warranty period, the Company agrees to repair or replace, at its sole option, without charge to Original Purchaser, any defective component. To obtain service, the Original Purchaser must return the item to the Company properly packaged for shipping. All defective products must be returned to the Company within thirty (30) days of failure. Products must be returned with a description of the failure and Return Merchandise Authorization (RMA) number supplied by the Company. To receive a RMA number and a return shipping address on where to deliver the hardware, call 610-429-1821. The shipping, and insurance charges incurred in shipping to the Company will be paid by Original Purchaser, and all risk for the hardware shall remain with the Original Purchaser until such time as Company takes receipt of the hardware. Upon receipt, the Company will promptly repair or replace the defective unit, and then return said unit to Original Purchaser, shipping prepaid. The Company may use reconditioned or like-new parts or units, at its sole option, when repairing any hardware. Repaired products shall carry the same amount of outstanding warranty as from original purchase. Any claim under the warranty must include dated proof of purchase or invoice. In any event, the Company’s liability for defective hardware is limited to repairing or replacing the hardware.

This warranty is contingent upon proper use of the hardware by Original Purchaser and does not cover: if damage is due to Acts of God (including fire, flood, earthquake, storm, hurricane or other natural disaster), accident, unusual physical, electrical, or electromechanical stress, modifications, neglect, misuse, operation with media not approved by the Company, tampering with or altering of the hardware, riot, war, invasion, act of foreign enemies, hostilities (regardless of whether war is declared), civil war, rebellion, revolution, insurrection, military or usurped power or confiscation, terrorist activities, nationalization, government sanction, blockage, embargo, labor dispute, strike, lockout or interruption or failure of electricity, air conditioning, or humidity control, Internet, network, or telephone service.

The warranties given herein, together with any implied warranties covering the hardware, including any warranties of merchantability or fitness for a particular purpose, are limited in duration to one year from the date of shipment to the Original Purchaser. Jurisdictions vary with regard to the enforceability of warranty limitations, and you should check the laws of your local jurisdiction to find out whether the above limitation applies to you.

The Company shall not be liable to your for loss of data, loss of profits, lost savings, special, incidental, consequential, indirect, or other similar damages arising from breach of warranty, breach of contract, negligence, or other legal action even if the Company or its agent has been advised of

the possibility of such damages, or for any claim brought against your by another party. Jurisdictions vary with regard to the enforceability of provisions excluding or limiting liability for incidental or consequential damages. You should check the laws of your local jurisdiction to find out whether the above exclusion applies to you.

This warranty allocates risks of product failure between Original Purchaser and the Company. The Company's hardware pricing reflects this allocation of risk and the limitations of liability contained in this warranty. The warranty set forth above is in lieu of all other express warranties, whether oral or written. The agents, employees, distributors, and dealers of the Company are not authorized to make modification to this warranty, or additional warranties binding on the Company. Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by the Company and should not be relied upon.
This warranty gives you specific legal rights. You may also have other rights which vary from one jurisdiction to another.