

# DT-ATSC-QAM-8V2 User Manual



8 input ATSC-8VSB / QAM-B to QAM-B  
Trans-Modulator

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## Safety Precautions



The presence of this symbol is to alert the installer and user to the presence of uninsulated dangerous voltages within the product's enclosure that may be of sufficient magnitude to produce a risk of electric shock.



TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS DEVICE TO RAIN OR MOISTURE. DO NOT OPEN THE UNIT. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

- DO NOT apply power to the unit until all connections have been made, all components have been installed and all wiring has been properly terminated.
- DO NOT terminate, change or uninstall any wiring without first disconnecting the unit's power adapter from the device.
- This device is supplied with the appropriately rated power supply. The use of any other power supply could cause damage and invalidate the manufacturer's warranty.
- DO NOT connect the power cord to the device if the power cord is damaged.
- DO NOT cut the power cord.
- DO NOT plug the power cord into an AC outlet until all cables and connections to the device have been properly connected.
- The device should be installed in an environment consistent with its operating temperature specifications. Placement next to heating devices and ducts is to be avoided as doing so may cause damage. The device should not be placed in areas of high humidity.
- DO NOT cover any of the device's ventilation openings.
- DO NOT cover or obstruct the device's fan or fan openings.
- If the device has been in a cold environment allow it to warm to room temperature for at least 2 hours before connecting to an AC outlet.

## Package Contents

- One DT-ATSC-QAM-8V2
- One Power Cable
- One Installation / Configuration Manual

### **Unpacking and Inspection**

Each unit is shipped from the factory tested. Ensure all items are removed from the container prior to discarding any packing material.

Thoroughly inspect the unit for shipping damage with particular attention to connectors and controls. If there is any sign of damage to the unit or damaged or loose connectors contact your distributor right away.

### **Installation**

System Installer must adhere to Article 820-40 of the NEC that provides guidelines for proper grounding and specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as possible.

### **Introduction to DT-ATSC-QAM-8V2: ATSC-8VSB / QAM-B to QAM-B Trans-Modulator**

The DataTronix DT-ATSC-QAM-8V2 is a high quality 8VSB /Clear QAM to QAM Trans-modulator. It was designed to allow system integrators to receive and process up to 8 individual 8VSB (ATSC) / Clear QAM channels along with up to 56 sub channels, and easily convert these signals to produce a high-quality RF QAM distribution system. The DT-ATSC-QAM-8V2 is a highly flexible system allowing integrators to quickly receive, convert, and distribute high quality Digital QAM channels to their customers.

### **Features**

- ✓ Accepts 8 RF inputs (ATSC-8VSB/QAM)
- ✓ Allows for Up to 64 Output Programs
- ✓ Allows User to “Cherry Pick” Desired Programs as Needed
- ✓ Supports STD/HRC/IRC Formats
- ✓ Supports Full Range of ATSC-8VSB/QAM Signals
- ✓ Offers 8 Fully Independent RF QAM Outputs
- ✓ Easy to Setup and Monitor with GUI
- ✓ Front Panel LED Indicators
- ✓ 3 VCN Modes Supported
- ✓ High Density 1RU Design

### **System Parsing / Response Time:**

The initial System Parsing time will range from 4-6 minutes on average as the system identifies and populates the required parameters. As the user navigates the device's menu note that a small delay may occur in populating the data on the screen as the system is constantly performing system parsing and system house-keeping functions.

Input	
<b>RF Mode (ATSC-8VSB and QAM)</b>	
<b>Connector</b>	1 x F-Type, Female
<b>Input Impedance</b>	75 ohm
<b>Modulation</b>	ATSC-8VSB ITU J.83 Annex B (64-QAM, 256-QAM)
<b>Tuning Block Freq Range</b>	55 to 861MHz (Center)
<b>Bandwidth</b>	6 MHz
<b>Numbers of Tuner</b>	8
<b>Input Level</b>	0 to 15dBmV
<b>Loop Through</b>	
<b>Connector</b>	1 x F-Type, Female, Passive

Output	
<b>QAM</b>	
<b>Connector</b>	1x "F" Female
<b>Modulation</b>	256-QAM / 64-QAM
<b>Standard</b>	J.83 Annex B
<b>Frequency Range</b>	57 to 861 MHz (Under STD Mode)8 Independent RF Frequencies
<b>Channels' Bandwidth</b>	6 MHz
<b>Output Level</b>	45 dBmV Typical
<b>Output Impedance</b>	75 ohm
<b>Level Adjustment</b>	0 to -20 dB
<b>VCN</b>	Auto (Major & Minor) Manual (Major & Minor) Manual (One Part)
<b>Carrier Suppression</b>	55 dB
<b>RF Output Return Loss</b>	10 dB Typical
<b>Signal-to-Noise Ratio(SNR)</b>	42 dB Typical
<b>MER</b>	41 dB Minimum, 44 dB Typical

Web Management	
<b>GigE</b>	
<b>Connector</b>	1 x RJ45
<b>Standard</b>	100 / 1000Base-T Ethernet, Full / Half Duplex, Auto-Negotiation
<b>HTTP</b>	Embedded

Emergency Alert System (EAS) (Optional)	
<b>GigE</b>	
<b>Connector</b>	1 x RJ45
<b>Standard</b>	100 / 1000Base-T Ethernet, Full / Half Duplex, Auto- Negotiation
<b>UDP / RTP</b>	Supported (user-selectable)
<b>Protocol</b>	SCTE-18 Supported

Alarms / Monitoring	
<b>Local Monitoring</b>	8 x NIM Status LEDs / 1 x Power LED
<b>Local Control</b>	IP Reset Button
<b>GUI Supported</b>	Firefox, Chrome
<b>Password Protected</b>	GUI: Changeable

Power	
<b>Power Supply</b>	12VDC 5.4Amp.
<b>Consumption</b>	23 W Typical
<b>Input Voltage Range</b>	100 to 240 VAC

Mechanical and Environmental	
<b>Chassis (W x D x H)</b>	19.01x 9.45x 1.74" (483 x 240 x 44.2 mm)
<b>Weight</b>	7.9lbs.
<b>Operating Temperature</b>	32 to 122°F (0 to 50°C)
<b>Storage and Transportation Temperature</b>	32 to 140°F (0 to 60°C)
<b>Language</b>	English
<b>Warranty</b>	1-Year Limited Warranty

\*\*Specifications Subject to Change Without Notice.\*\*

## Hardware Installation

1. Use properly installed terrestrial antennas. Verify for proper signal reception and signal levels.
2. Properly connect required outputs of terrestrial antennas/splitter feeds to the DT-ATSC-QAM-8V2.
3. Apply Power to the DT-ATSC-QAM-8V2.
4. Connect an Ethernet cable from Utility Port on the DT-ATSC-QAM-8V2 to a PC/MAC.

## Device Programming and Setup

### Connecting to the GUI Interface

1. Connect an Ethernet Cable directly to the Utility Port on the rear panel of the device or connect the Ethernet cable to an Ethernet switch. Connect an Ethernet cable to Your PC/Laptop
2. Modify Your PC/Laptop IPV4 address to 192.168.1.11
3. Enter Default IP Address for DT-ATSC-QAM-8V2 into Your Web Browser (Suggested browser: Firefox or Chrome)

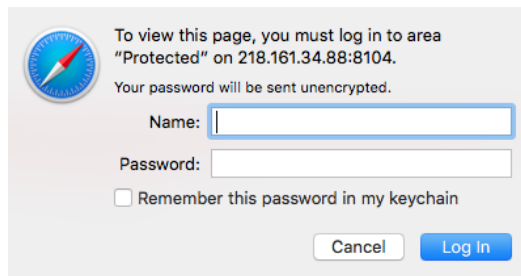
**Factory Default IP: 192.168.1.9**

### System Setup via GUI Interface

After connecting the device to the GUI interface (please see descriptions above):

1. Enter device's IP address in web browser.
2. Login: Enter unit Name/Password

Name: **admin** / Password: **Admin123**



To view this page, you must log in to area "Protected" on 218.161.34.88:8104.  
 Your password will be sent unencrypted.

Name:

Password:

Remember this password in my keychain

**Note:** To modify the system password, go to the **[Administration Page]** of the device.

## Overview Page

[Overview Page] provides an overall system status of the DT-ATSC-QAM-8V2 including: RF Input Type, Frequency, SNR, Signal Status, and Programs\*\*.



DT-ATSC-QAM-8V2 Overview							
DT-ATSC-QAM-8V2 Overview   Ingest Setup   Streaming Setup   RF Out Setup   Network Setup   System Setup   Administration							
Device Name	Model Number	Serial Number	MAC Address	Firmware Version	Net Version		
NACE319786	DT-ATSC-QAM-8V2	2118 319786	F8:0D:EA:B4:E1:2A	3.2.0	1.1.1		
Location			Description				
Ingest   RF Out   Fan							
RF Input	Standard	Frequency	Constellation	SNR	Signal	Status	Programs
1	ATSC	57.0000 MHz	8 VSB	33.0 dB		Lock	2 ⓘ
2	ATSC	177.0000 MHz	8 VSB	31.2 dB		Lock	2 ⓘ
3	ATSC	183.0000 MHz	8 VSB	31.6 dB		Lock	2 ⓘ
4	ATSC	189.0000 MHz	8 VSB	31.7 dB		Lock	2 ⓘ
5	QAM	549.0000 MHz	256 QAM	35.2 dB		Lock	8 ⓘ
6	QAM	621.0000 MHz	256 QAM	35.5 dB		Lock	8 ⓘ
7	QAM	753.0000 MHz	256 QAM	32.7 dB		Lock	8 ⓘ
8	QAM	831.0000 MHz	256 QAM	31.3 dB		Lock	8 ⓘ

\*\*Programs : If you move your cursor to “ ⓘ ” you will see the detailed information (see figure below as example) of the Programs.

Status	Programs
Lock	2 ⓘ
Lock	2 In 2 Ready / 2 Out 2 Ready
Lock	2 ⓘ

**Overview (RF Output):** RF Outputs showing the number of sub-streams/programs

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DT-ATSC-QAM-8V2 Converter of ATSC / QAM to QAM

Overview | Ingest Setup | Streaming Setup | RF Out Setup | Network Setup | System Setup | Administration

Device Name	Model Number	Serial Number	MAC Address	Firmware Version	Net Version
NACE319786	DT-ATSC-QAM-8V2	2118 319786	F8:0D:EA:B4:E1:2A	3.2.0	1.1.1

Location: \_\_\_\_\_ Description: \_\_\_\_\_

---

Ingest | **RF Out** | Fan

RF Output 1

RF Output 2

RF Output 3

RF Output 4

RF Output 5


RF Output 6

RF Output 7

RF Output 8



**Overview (Fan):** This tab shows fan status and system uptime



DataTronix Converter of ATSC / QAM to QAM
Overview
Ingest Setup
Streaming Setup
RF Out Setup
Network Setup
System Setup
Administration

Device Name	Model Number	Serial Number	MAC Address	Firmware Version	Net Version
NACE319786	DT-ATSC-QAM-8V2	2118 319786	F8:0D:EA:B4:E1:2A	3.2.0	1.1.1

Location	Description

Ingest
RF Out
Fan

**System UTC Time**

Fri, 29 Oct 2021

18:15:50

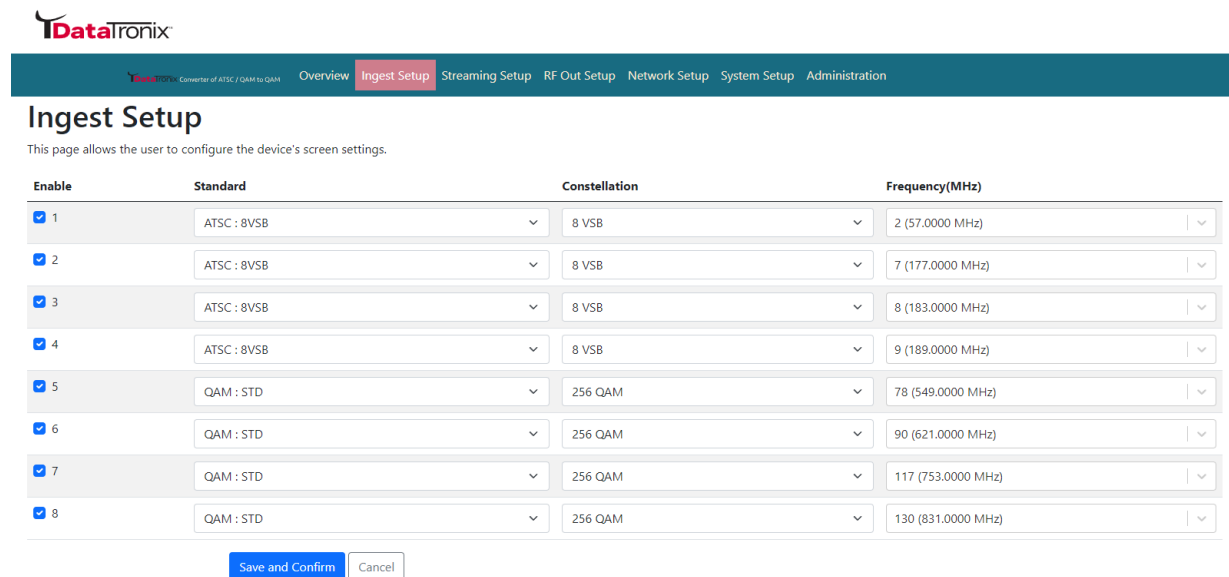
**Uptime**

102H58M49S

Fan	Fan Speed	Fan Status
1	8000 RPM	<span style="background-color: #4caf50; color: white; padding: 2px 5px; border-radius: 3px;">OK</span>
2	7906 RPM	<span style="background-color: #4caf50; color: white; padding: 2px 5px; border-radius: 3px;">OK</span>
3	7714 RPM	<span style="background-color: #4caf50; color: white; padding: 2px 5px; border-radius: 3px;">OK</span>

## Ingest Setup

Use the **[Ingest Setup]** page to configure each input. Up to 8 individual - ATSC or QAM inputs can be assigned.



**Ingest Setup**

This page allows the user to configure the device's screen settings.

Enable	Standard	Constellation	Frequency(MHz)
<input checked="" type="checkbox"/>	ATSC : 8VSB	8 VSB	2 (57.0000 MHz)
<input checked="" type="checkbox"/>	ATSC : 8VSB	8 VSB	7 (177.0000 MHz)
<input checked="" type="checkbox"/>	ATSC : 8VSB	8 VSB	8 (183.0000 MHz)
<input checked="" type="checkbox"/>	ATSC : 8VSB	8 VSB	9 (189.0000 MHz)
<input checked="" type="checkbox"/>	QAM : STD	256 QAM	78 (549.0000 MHz)
<input checked="" type="checkbox"/>	QAM : STD	256 QAM	90 (621.0000 MHz)
<input checked="" type="checkbox"/>	QAM : STD	256 QAM	117 (753.0000 MHz)
<input checked="" type="checkbox"/>	QAM : STD	256 QAM	130 (831.0000 MHz)

## Ingest Setup Procedures

1. **Select** Ingest setup tab from the top menu
2. **Select** the appropriate ingest input (1 thru 8). Enable as required
3. **Select Standard:** ATSC or QAM  
 ATSC: 8VSB / QAM: STD / QAM: HRC / QAM: IRC
4. **Select Constellation:** For QAM select 64-QAM or 256-QAM as required
5. **Select Frequency (MHz) (Input)**  
 ATSC-8VSB: UHF (CH 14 – 69) VHF (CH 2-13)  
 QAM: CH 2 – CH 135 (57 MHz to 861 MHz)
6. **Save and Confirm** to save all changes

\*\*\*\*\***Note:** Leaving any ingest setup page without saving the set parameters will cause the device to revert to the last saved settings.

## Streaming Setup

Use the [Streaming Setup] page to set the output: **SID**, Select **VCN Mode Type**, **VCN**, **Short Name**, and other parameters.

### Enable / Select / and Setup Streams

1. Enable each stream/program as required by checking the check box  
**Note:** To remove a stream/program - deselect/uncheck the stream(s) # on the left side of the table
2. **Modify SID (Services Output ID)**  
**Note 1:** If installing multiple DT-ATSC-QAM-8V2 units make sure not to duplicate SID outputs  
**Note 2:** Enter SID for a program and the followed programs will be assigned by consecutive numbers
3. **Enter** Short Name [1-7 Characters]
4. **Enter** Long Name [1-16 Characters]
5. **Select** VCN Mode:  
 VCN Mode 2-Part Auto [Example 102.1 – Set Automatically by the Device]  
 VCN Mode 2-Part Manual [102.2 – Manual Entry by User]  
 VCN Mode 1-Part Manual [102 – Manual Entry by User]  
**Note:** Only 1 VCN mode type can be selected



Navigation: Overview Ingest Setup **Streaming Setup** RF Out Setup Network Setup System Setup Administration

### Streaming Setup

This page allows the user to cherry pick and construct custom multiplexed TS and output via RF.

		Input							Output							
	Input #	PMT PID	Video PID	Audio PID	TS ID	SID	Short Name	Long Name	Bit Rate	SID	PMT PID	Video PID	Audio PID	Short Name	Long Name	
<input checked="" type="checkbox"/>	1	1	4194	4192	4193	44	1	DTV-101	ATSC-digi-TV-101	8.523	<input type="text" value="101"/>	4194	4192	4193	DTV	ATSC-DTV
<input checked="" type="checkbox"/>	2	1	4181	4179	4180	44	2	DTV-201	ATSC-digi-TV-201	8.523	<input type="text" value="102"/>	4181	4179	4180	DTV	ATSC-DTV

6. **Modify** Source ID as required  
**Note:** If installing multiple DT-ATSC-QAM-8V2 units make sure not to duplicate source ID outputs
7. **Select** RF# from 1-8 to assign programs to desired carrier  
**Note 1:** Bitrate mapping may be required based on the Mbps of the streams/programs in the RF Out  
**Note 2:** Use the streaming setup page to move program(s) as needed to allow for increased overhead of required programs
8. **Save and Confirm** all parameters

**\*\*\*\*\*Note: Leaving any Streaming Setup page without saving the set parameters will cause the device to revert to the last saved settings**

## Streaming System Parameters

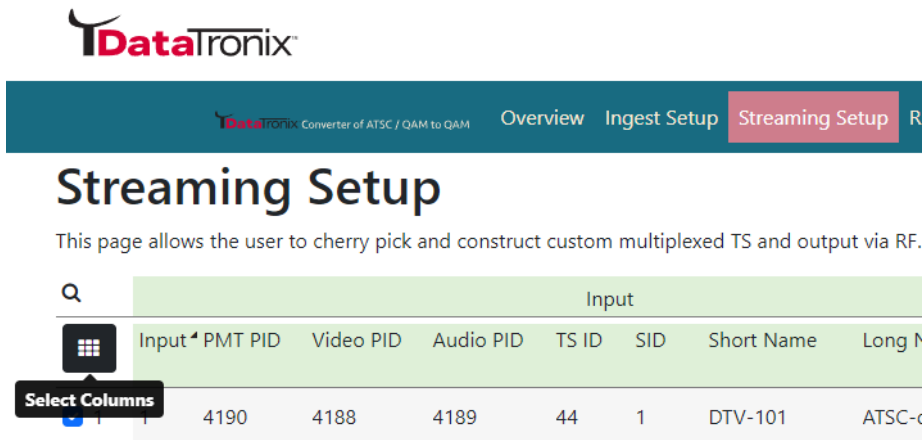
Input	
<b>Input No.</b>	Total Input Number Received by Tuner
<b>PMT PID</b>	Program Map Table PID
<b>Video PID</b>	Video Stream PID
<b>Audio PID</b>	Video Stream PID
<b>TS ID</b>	Input Transport Stream ID
<b>SID</b>	Service ID (Program ID)
<b>Short Name</b>	From Content Provider
<b>Long Name</b>	From Content Provider
<b>Bit Rate</b>	Input Bit Rate

Output	
<b>SID</b>	Service ID - Definable
<b>PMT PID</b>	Program Map Table PID
<b>Video PID</b>	Video Stream PID
<b>Audio PID</b>	Audio Stream PID
<b>Short Name</b>	Definable [1-7 Characters]
<b>Long Name</b>	Definable [1-16 Characters]
<b>VCN Mode</b>	Selectable (Auto 2-Part, Manual 2-Part, Manual 1-Part.)
<b>VCN</b>	Definable (When Using Manual VCN Modes)
<b>Source ID#</b>	Definable

## Customize the Streaming Setup View

The **[Streaming Setup]** parameters page is easily customizable for each system. To customize the parameters shown:

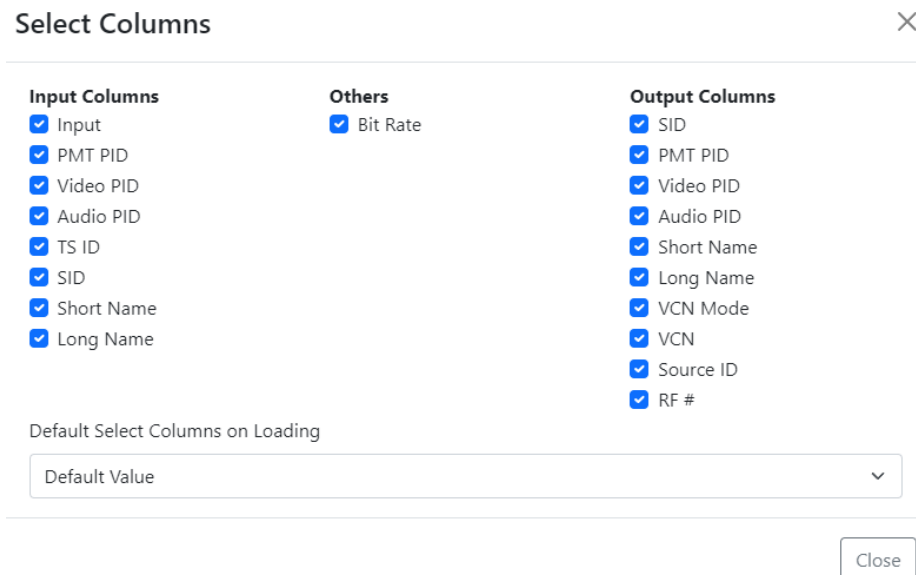
### 1. Select “Select Columns” tool



The screenshot shows the DataTronix interface for the Streaming Setup page. The page title is 'Streaming Setup' and it includes a navigation bar with 'Overview', 'Ingest Setup', and 'Streaming Setup'. Below the title, there is a search bar and a table with columns: Input, PMT PID, Video PID, Audio PID, TS ID, SID, Short Name, and Long Name. A 'Select Columns' tooltip is shown over the 'Input' column header.

Input	PMT PID	Video PID	Audio PID	TS ID	SID	Short Name	Long Name
4190	4188	4189	44	1	DTV-101	ATSC-c	

### 2. Add or remove parameter as needed by selecting or deselection



The screenshot shows the 'Select Columns' dialog box. It has a title bar with a close button (X). The dialog is divided into three sections: 'Input Columns', 'Others', and 'Output Columns'. Each section contains a list of parameters with checkboxes. Below the sections, there is a dropdown menu for 'Default Select Columns on Loading' and a 'Close' button.

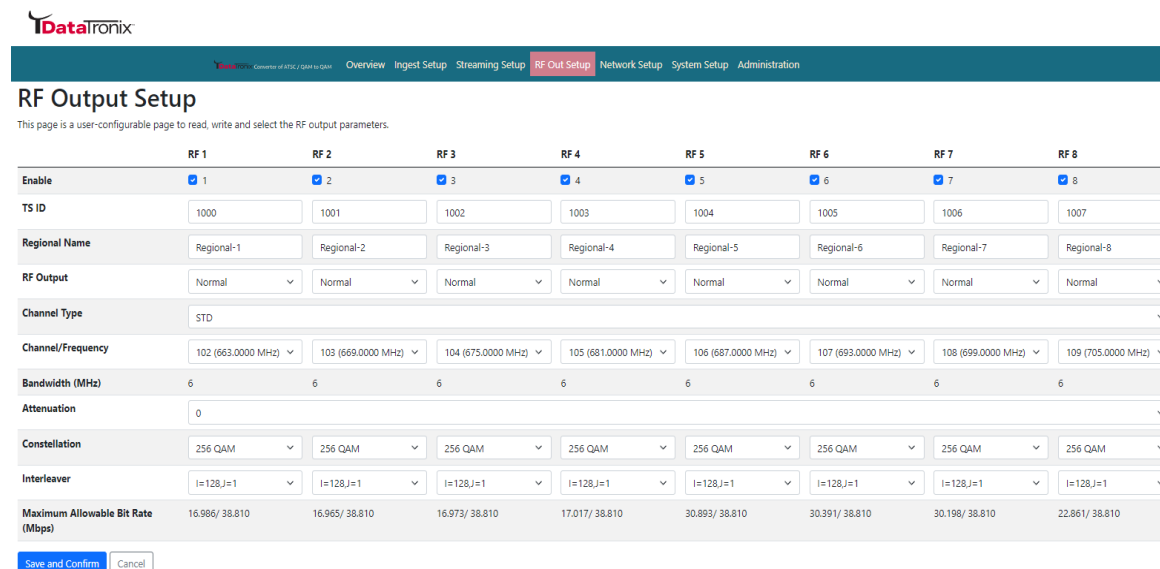
Input Columns	Others	Output Columns
<input checked="" type="checkbox"/> Input	<input checked="" type="checkbox"/> Bit Rate	<input checked="" type="checkbox"/> SID
<input checked="" type="checkbox"/> PMT PID		<input checked="" type="checkbox"/> PMT PID
<input checked="" type="checkbox"/> Video PID		<input checked="" type="checkbox"/> Video PID
<input checked="" type="checkbox"/> Audio PID		<input checked="" type="checkbox"/> Audio PID
<input checked="" type="checkbox"/> TS ID		<input checked="" type="checkbox"/> Short Name
<input checked="" type="checkbox"/> SID		<input checked="" type="checkbox"/> Long Name
<input checked="" type="checkbox"/> Short Name		<input checked="" type="checkbox"/> VCN Mode
<input checked="" type="checkbox"/> Long Name		<input checked="" type="checkbox"/> VCN
		<input checked="" type="checkbox"/> Source ID
		<input checked="" type="checkbox"/> RF #

Default Select Columns on Loading: Default Value

### 3. Close window after selecting / deselecting parameters

## RF Output Setup

Use the [RF Setup Page] to properly setup each RF output channel.



	RF 1	RF 2	RF 3	RF 4	RF 5	RF 6	RF 7	RF 8
Enable	<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5	<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8
TS ID	1000	1001	1002	1003	1004	1005	1006	1007
Regional Name	Regional-1	Regional-2	Regional-3	Regional-4	Regional-5	Regional-6	Regional-7	Regional-8
RF Output	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Channel Type	STD							
Channel/Frequency	102 (663.0000 MHz)	103 (669.0000 MHz)	104 (675.0000 MHz)	105 (681.0000 MHz)	106 (687.0000 MHz)	107 (693.0000 MHz)	108 (699.0000 MHz)	109 (705.0000 MHz)
Bandwidth (MHz)	6	6	6	6	6	6	6	6
Attenuation	0							
Constellation	256 QAM	256 QAM	256 QAM	256 QAM	256 QAM	256 QAM	256 QAM	256 QAM
Interleaver	I=128,J=1	I=128,J=1	I=128,J=1	I=128,J=1	I=128,J=1	I=128,J=1	I=128,J=1	I=128,J=1
Maximum Allowable Bit Rate (Mbps)	16.986/ 38.810	16.965/ 38.810	16.973/ 38.810	17.017/ 38.810	30.893/ 38.810	30.391/ 38.810	30.198/ 38.810	22.861/ 38.810

**Save and Confirm**

1. **Enable / Disable RF** output as required.
2. **Enter TS\_ID** (Transport Stream ID) value.
3. **Enter** regional name as required
4. **Select** RF type [Normal, Inverted, C.W.]
5. **Select** Channel type [STD, HRC, IRC]
6. **Set** CH/Freq. [CH 2 – CH 135 / Freq. 57MHz ~ 861MHz]  
**Note:** DT-ATSC-QAM-8V2 is frequency agile
7. **BW:** factory set [6MHz]
8. **Set** attenuation [ 0 ~ -20dB. 1dB Steps]
9. **Select** constellation [64-QAM , 256-QAM]
10. **Select** interleaver – change as required.[Default: I=128, J=1]
11. **Save and Confirm** all changes

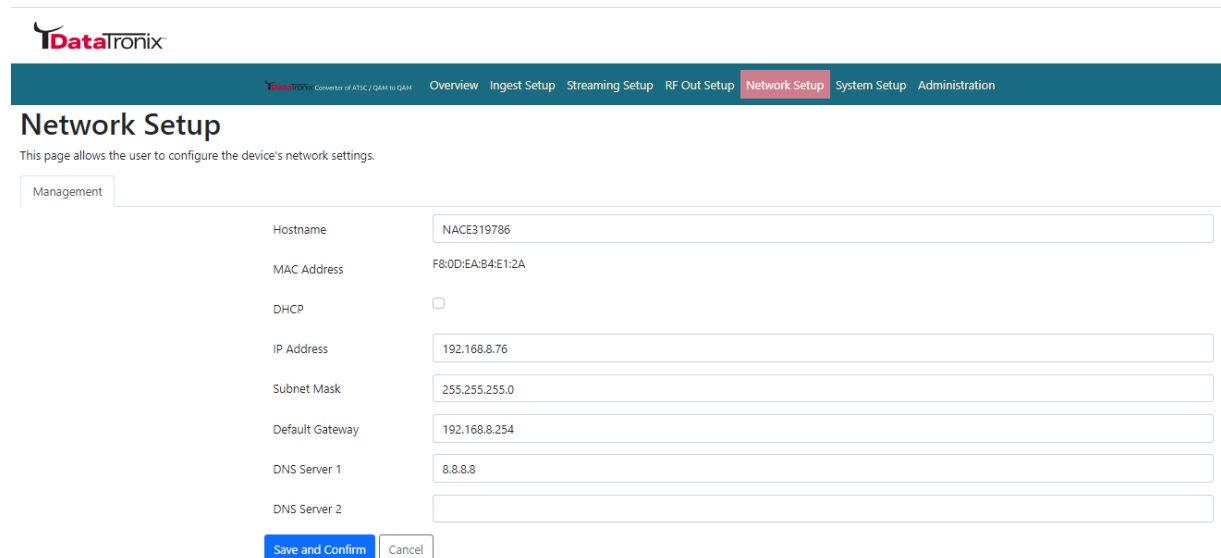
**Note 1:** Bitrate Mbps shown allows the integrator to quickly review assigned stream bitrate allocated and Capacity

**Note 2:** Bitrate mapping may be required based on the Mbps of the streams/programs in the RF Out

**Note 3:** Use the [Streaming Setup Page] to move program(s) as needed to allow for increased overhead of required programs

**Note 4:** Leaving any [RF Output Setup Page] without saving the set parameters will cause the device to revert to the last saved settings

## Network Setup



The screenshot shows the Network Setup page in the DataTronix web interface. The page title is "Network Setup" and it includes a navigation menu with options: Overview, Ingest Setup, Streaming Setup, RF Out Setup, Network Setup (highlighted), System Setup, and Administration. Below the navigation is a "Management" tab. The main content area contains a form with the following fields:

Hostname	NACE319786
MAC Address	F8:0D:EA:B4:E1:2A
DHCP	<input type="checkbox"/>
IP Address	192.168.8.76
Subnet Mask	255.255.255.0
Default Gateway	192.168.8.254
DNS Server 1	8.8.8.8
DNS Server 2	

At the bottom of the form are two buttons: "Save and Confirm" (highlighted in red) and "Cancel".

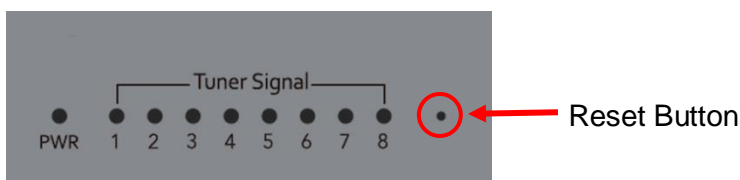
### Device IP Address Setup

1. **Select** network setup tab to manage the IP address of the device
2. **Modify** hostname as required
3. **Select** DHCP or static IP
4. **For Static IP: select static IP** and enter static IP address for device
5. **Enter** Subnet Mask
6. **Enter** Default Gateway
7. **Enter DNS Server 1** address
8. **Enter DNS Server 2** address (if required)
9. **Save and Confirm** all changes

## Forgot IP Address

You can return to the default IP address (factory default) setting from via front panel by following the steps below:

1. **Press** the Reset button from the front panel (Circled in Picture Below)



2. **Power** on the unit
3. **Release** the reset button once the power LED stops flashing and become static green
4. Unit's IP address will revert back to default IP: 192.168.1.9
5. Unit's login data will revert back to factory default

**Name:** admin / **Password:** Admin123

**Note: ONLY THE IP ADDRESS WILL REVERT BACK TO DEFAULT SETTING,- NO CHANGES WILL BE MADE TO THE CONFIGURATION**

## System Setup

Description

Use the **[System Setup Page]** to designate location and description of the DT-ATSC-QAM-8V2 unit.



DataTronix Converter of ATSC / QAM to QAM
Overview
Ingest Setup
Streaming Setup
RF Out Setup
Network Setup
System Setup
Administration

### System Setup

After changes are made, use the **Apply** button.

Description
Time

#### Device Description

Location

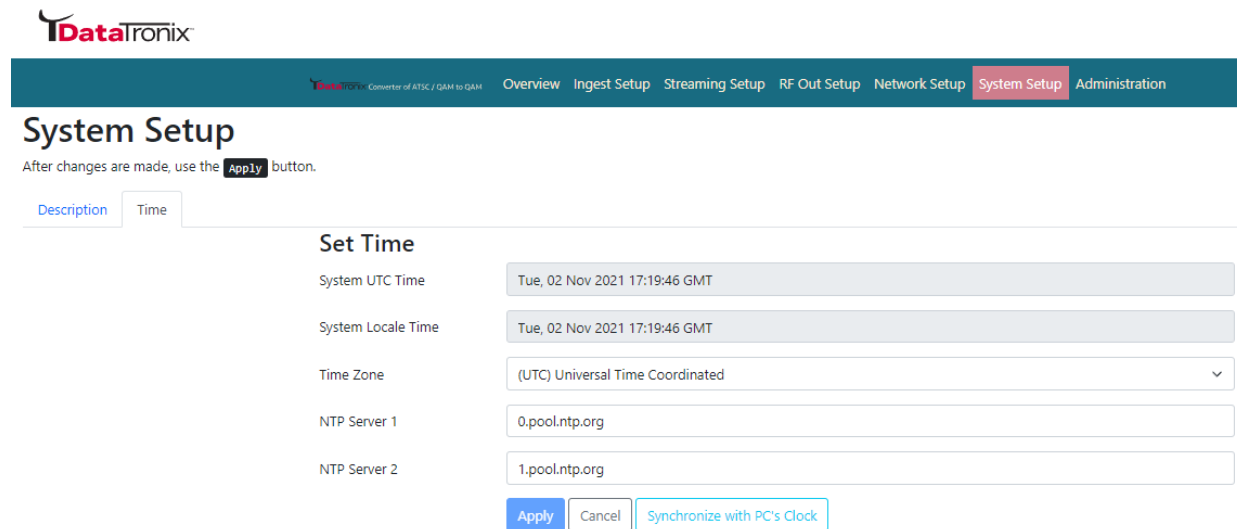
Description

Apply
Cancel



## Time / NTP Server Setup

Use the time tab to set the units system time and time zone and NTP Server.



**System Setup**  
 After changes are made, use the **Apply** button.

**Time**

**Set Time**

System UTC Time: Tue, 02 Nov 2021 17:19:46 GMT

System Locale Time: Tue, 02 Nov 2021 17:19:46 GMT

Time Zone: (UTC) Universal Time Coordinated

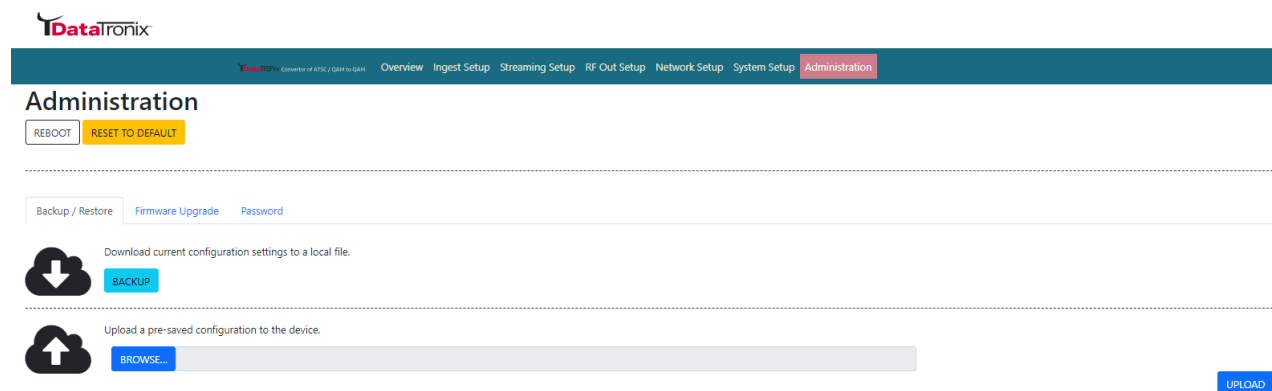
NTP Server 1: 0.pool.ntp.org

NTP Server 2: 1.pool.ntp.org

Buttons: Apply, Cancel, Synchronize with PC's Clock

1. **Select** time tab on system setup page
2. **Select** time zone from the drop-down tool
3. **Enter** NTP Server 1 / 2 addresses as required
4. **Select** synchronize system with PC clock as required
5. **Select** apply to apply all changes

## Administration



**Administration**

Buttons: REBOOT, RESET TO DEFAULT

Backup / Restore | Firmware Upgrade | Password

Download current configuration settings to a local file.  
 Button: BACKUP

Upload a pre-saved configuration to the device.  
 Button: BROWSE... | Button: UPLOAD

### Reboot

Use the **Reboot** button to reboot the device. No parameters will be changed.

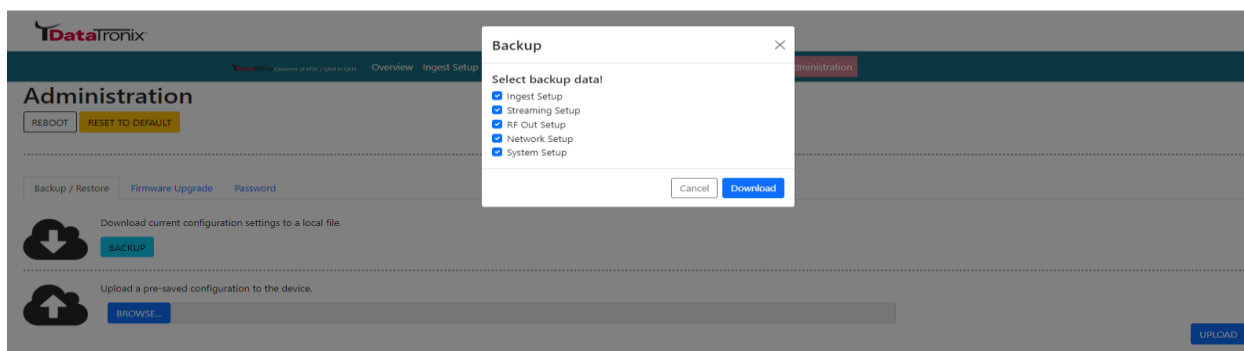
### Reset to Default

Use the **Reset to Default** button to reset all parameters to original factory settings.

## Backup

We highly recommend saving your device's setting.

1. **Select** administration tab
2. **Select** backup from the menu
3. User can choose which data required backup from the following pages: Ingest setup / Streaming Setup / RF Out Setup / Network Setup / System Setup
4. **Locate and Name** file for future use



**Note:** The backup can be imported to assist in setting up new or multiple devices onsite. Remember to Save and backup any and all changes.

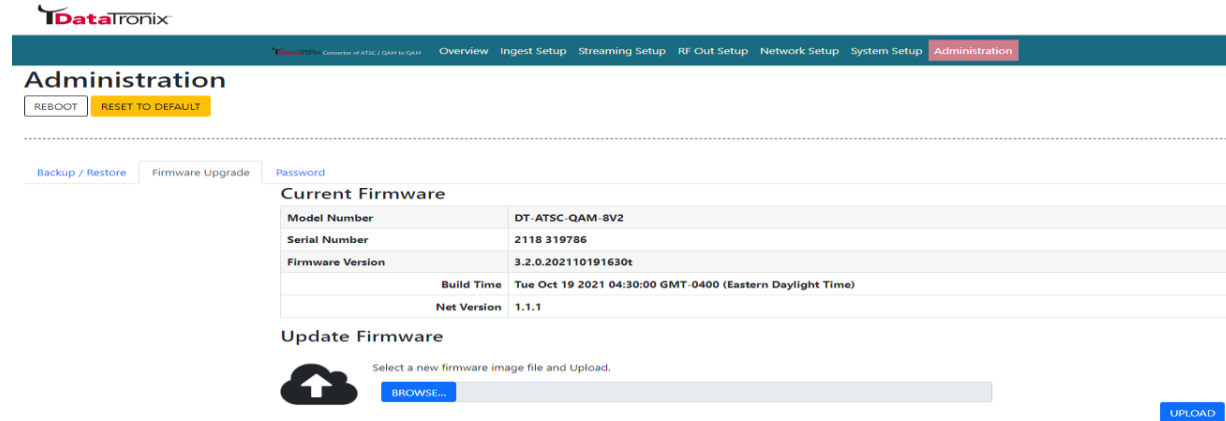
## Restore

1. **Select** administration tab
2. **Browse** the required file to be imported
3. **Select** "Upload" to import the selected file into the device

\*\*\*\*\***Note:** Do not power off the unit while importing.

## Firmware Update

Use the Firmware Upgrade section to import new FW version.



The screenshot shows the DataTronix Administration interface. The top navigation bar includes links for Overview, Ingest Setup, Streaming Setup, RF Out Setup, Network Setup, System Setup, and Administration. The Administration section is active, showing options for REBOOT and RESET TO DEFAULT. Below this, there are tabs for Backup / Restore, Firmware Upgrade, and Password. The Firmware Upgrade tab is selected, displaying the Current Firmware information in a table:

Model Number	DT-ATSC-QAM-8V2
Serial Number	2118 319786
Firmware Version	3.2.0.202110191630t
Build Time	Tue Oct 19 2021 04:30:00 GMT-0400 (Eastern Daylight Time)
Net Version	1.1.1

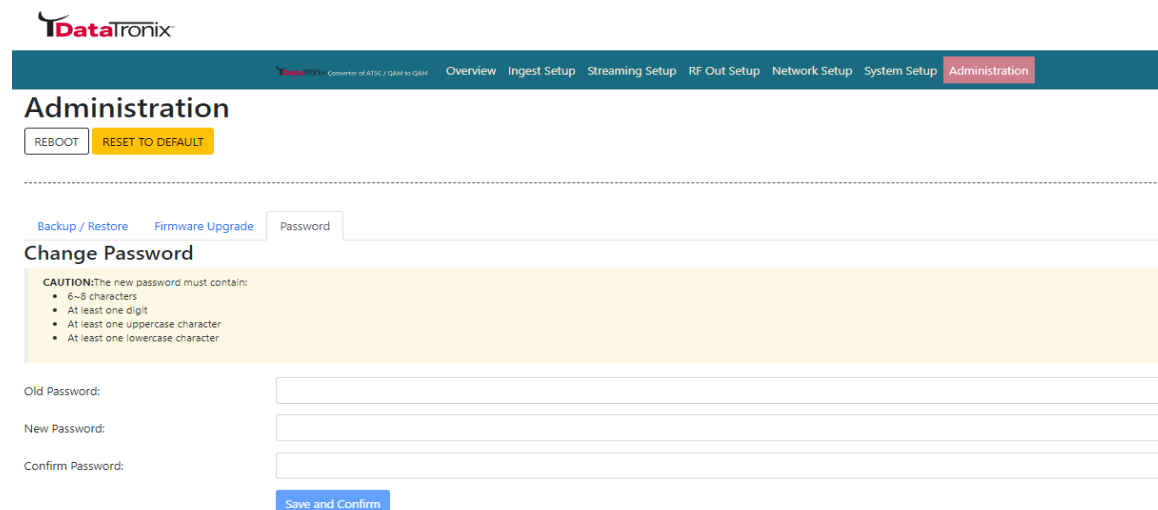
Below the table, there is an 'Update Firmware' section with a cloud icon and a 'BROWSE...' button. An 'UPLOAD' button is located to the right of the upload area.

1. **Select** administration tab
2. **Select** firmware upgrade tab
3. **Browse** to locate the required image file to be uploaded
4. **Select** "Upload" to import the selected file into the device

\*\*\*\*\***Note:** Do not power off the unit while importing.

## Change Password

Use the password section to change or modify the device's password as desired.



The screenshot shows the DataTronix Administration interface with the Password tab selected. The 'Change Password' section is highlighted in yellow and contains a CAUTION message:

**CAUTION:** The new password must contain:

- 6-8 characters
- At least one digit
- At least one uppercase character
- At least one lowercase character

Below the CAUTION message, there are three input fields for 'Old Password:', 'New Password:', and 'Confirm Password:'. A 'Save and Confirm' button is located at the bottom of the form.

1. **Select** administration tab
2. **Select** password tab
3. **Follow** listed instructions
4. **Save and Confirm** to apply new password.

### Private Address Ranges, IPv4

Private IPv4 addresses are addresses set aside by the IANA (Internet Assigned Numbers Authority) for use within networks that will not directly communicate or be seen by the internet. These private addresses cannot be used on the Internet or be used to communicate with the Internet. ISP's filter out and delete packets using private IP addresses.

Any organization that uses private IP addresses on devices that communicate with the internet must use a device that performs Network Address Translation.

Anyone can use private addresses and they are not required to seek permission to use them.

Again, networks using private IP addresses cannot communicate directly with the internet.

There are three blocks of addresses that are set aside by IANA for use in private internets and are not publicly routable on the global internet:

Private Class A Range:           10.0.0.0     -   10.255.255.255

Private Class B Range:         172.16.0.0    -   172.31.255.255

Private Class C Range: 1       92.168.0.0   -   192.168.255.255

It is important to note that only some of the 172.xx.xx.xx and the 192.xx.xx.xx address ranges are designated for private use. The remaining addresses are public and can be routable via the global Internet.

More information regarding private addresses can be found at <http://www.iana.org> and <https://www.arin.net>.



### **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.

#### **Product Notes:**

<b>Model Number:</b>	
<b>Serial Number:</b>	
<b>Purchase Date:</b>	
<b>Purchased from:</b>	
<b>Install Date:</b>	