

# **DT-HDIPCOM**

**HD IP Streaming Server** 



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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 12VDC power supply with the center pin positive. The use of any other power supply could cause damage and invalidate the manufacturer's warranty.
- DO NOT power on the unit 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.
- If the device has been in a cold environment allow it to warm to room temperature for at least 2 hours before connecting power.



### **Package Contents**

This package contains:

- One DT-HDIPCOM IP Streaming Server
- One Adaptor
- One installation / configuration manual (An eManual will be supplied)

Inspect the package before starting installation to ensure there is no damage and all supplied contents are present. Contact your distributor or dealer should the device be damaged or package contents are incomplete.

#### **Product Description**

**Data-Tronix**'s DT-HDIPCOM HD IP Streamer allows the user to stream any one audio/video source over an IP Network to up to anyTV's or connected computers within the IP Network. The IP Streamer accepts a HDMI, component, or composite video input and the unit is designed to deliver a rich HD/SD streaming experience for its users deploying MPEG-2 or MPEG-4 standards.

Combine any sources and stream them over the network for multiple sources. The DT-HDIPCOM HD streaming server enables high-definition streaming with resolutions up to 1080p, providing a high quality viewing experience for your customer. The unit is MPEG2 or MPEG4 switchable and supports UDP/RTP Streaming. The compact design saves space and is easily controlled via a GUI for rapid deployment.

#### The DT-HDIPCOM features:

- ✓ Dual Mode H.264 / MPEG-2 selectable output
- ✓ Video resolution: Up to 1080p (H.264 only)
- ✓ HDMI, component, composite inputs with auto detection
- ✓ UDP/RTP/ Unicast/Multicast, DLNA Compatible, TCP
- ✓ Variable Bit Rate control
- ✓ Closed Captioning support
- Audio format: MPEG-1-Layer2(MP2), AAC, Dolby Stereo Creator (AC3)
   \*Dolby is a trademark of Dolby Laboratories.
- ✓ GigE output port
- ✓ GUI for setup and control
- Front panel LED Status Display
- ✓ Easy installation and use



# Specifications

Interfaces	Ethernet (output)	Combined IP Output Port (1Gbps)/Management Port 10Mbps)
	USB (optional)	USB 2.0
	Video Input	HDMI, YPbPr, CVBS
	Audio Input	Analog, Coaxial, Optical
Encoding	Video Format	MPEG-2, AVC
	Audio Format	MPEG-1 Layer 2(MP2), AAC, AC-3
	Resolution	480i, 480p, 576i, 576p, 720p, 1080i, 1080p
	Video Bitrate	MPEG-2HD: 10-20 Mbps, MPEG-2 SD: 2-8 Mbps, AVC HD: 2-10 Mbps, AVC SD: 1-4 Mbps
	Audio Bitrate	128, 256, 384 Kbps
	Streaming Protocols	HTTP Server (DLNA), UDP/RTP multicast, UDP/RTP unicast, TCP unicast
MISC	Digital Living Network Alliance (DLNA)	MediaServer 1.5
	Closed Caption	Yes
	Power Supply	12VDC 1.5AMP
	Consumption	500mA
	Operating Temperature	+32°F to +113°F ( 0°C to +45°C)
	Storage Temperature	+14°F to +140°F ( -10°C to +60°C)
	Dimension	9.29" x 6.10" x 1.37" (236mm x 155mm x 35mm)
	Weight	2 lbs. and 1.1575 oz. (940g)

Manufactured under license of Dolby Laboratories \*Specifications subject to change without prior notice



### 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.

#### Unpacking and Inspection

Each unit is shipped 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 immediately. Do not put the equipment into service if there is any indication of defect or damage.

#### Hardware Installation and Connections

It is highly recommended that quality cables and connectors be used for all video and audio source connections

- 1. Connect the media source (Satellite STB, Media player, or other media device) to the HDIP streaming server by HDMI, YPbPr, or CVBS cables.
- 2. Connect the HDIP streaming server to local area network (LAN).
- 3. Plug the power adapter to the device and power up
- 4. In the same network segment, find the HDIP streaming server from Windows XP/7 "My Network Places" \*\* Note: For Windows XP enable UpnP.
- 5. Open the device's GUI by double-clicking the device icon(XP)

#### Limitations:

- 1. All UPnP/DLNA devices, including the HDIP streaming server (media-server), media-players, the SmartTV, the set-top-box, and the controlling PC, should be located within same network segment/LAN.
- 2. If a DHCP server is present in the private network, the DT-HDIPCOM will use the IP address assigned by the DHCP server.
- 3. If no DHCP server is present, the DT-HDIPCOM will use an assigned IP address (169.254.xxx.x).

There are three (3) use cases supported by HDIP streamer: DLNA media server, UDP/RTP multicasting, and TCP/UDP/RTP unicasting.

# **Front-Panel**

For recording IP

	Buttons/LEDs	Description
	Reboot button	Reboots the device (unsaved settings will be lost)
PWR • CFG • USB •	RST / UPG button	To reset all the settings of the device to factory default: 1.Press and hold the RST/UPG button and then connect power to the device while pressing in the RST/UPG button. 2.Hold the button until CFG led to flashes 10 times (about 10 seconds) 3. After the CFG led stops flashing -release the button
Video H.264 Video Encode Audio Encode Dolby Digital Audio Encode Dolby Digital Data-TRONIX DT-HDIPCOM		<ul> <li>To upgrade firmware using the USB port:</li> <li>1.Plug-in the USB drive with the upgraded firmware image ("hdip_upg.img")</li> <li>2.Press and hold the RST/UPG button and boot-up the device</li> <li>3.USB led will flash while copying the image from USB drive (about 3~5 seconds)</li> <li>4.Wait until the CFG led stop flashing</li> <li>5.Release the RST/CFG button and wait for the device to reboot and upgrade the firmware (about 1 minutes)</li> </ul>
HD IP Streaming Server	PWR	Power is ON
Jerver	CFG	Indicates device is in configuration mode
	USB	Indicates USB drive is mounted
	MPEG-2	Indicates device is encoding video using MPEG-2
PST/LIPG	H.264	Indicates device is encoding video using H.264
•	MP2	Indicates device is encoding audio using MPEG-1 Layer 2
Reboot	AAC	Indicates device is encoding audio using AAC
	Dolby Digital	Indicates device is encoding audio using Dolby Digital

#### Procedure to connect to the Streaming Server via the Network port

The following procedure will allow the installer to setup the Streaming Server via the GUI

- **1.** Connect a standard CAT5e cable from HDIP Network port to a switch or directly to a PC or laptop.
- 2. Using a PC go to the Control Panel to "Network and Internet"

🕞 🦉 👻 Control Panel 👻	👻 🚱 Search Control Panel
Adjust your computer's settings	View by: Category 🔻
System and Security Review your computer's status Back up your computer Find and fix problems	User Accounts and Family Safety Add or remove user accounts Set up parental controls for any user
Network and Internet Connect to the Internet View network status and tasks Chrose Homewroar and sharing options	Appearance and Personalization Change the theme Change desktop background Adjust screen resolution
Hardware and Sound View devices and printers Add a device Connect to a projector Adjust commonly used mobility settings	Clock, Language, and Region Change keyboards or other input methods Change display language Ease of Access Let Windows suggest settings
Programs Uninstall a program	Optimize visual display

**3. Select** 'Change Adapter Settings' from the left plane



4. Select Local Area Connection Icon

# Then Right Click – Select Properties

Internet Protocol Version 4(TCP/IPv4) Properties

Select Properties	×			
Networking Sharing				
Connect using:				
Broadcom NetLink (TM) Gigabit Ethernet				
Configure	]			
This connection uses the following items:				
<ul> <li>Client for Microsoft Networks</li> <li>Virtual PC Network Filter Driver</li> <li>QoS Packet Scheduler</li> <li>File and Printer Sharing for Microsoft Networks</li> <li>Internet Protocol Version 6 (TCP/IPv6)</li> <li>Internet Protocol Version 4 (TCP/IPv4)</li> <li>Link-Layer Topology Discovery Mapper I/O Driver</li> <li>Link-Layer Topology Discovery Responder</li> </ul>				
Install Uninstall Properties				
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.				
OK Cance				

5. Change "Obtain an IP address automatically" to "Use the following IP address"

Internet Protocol Version 4 (TCP/)	IPv4) Properties	? ×				
General Alternate Configuration						
		. [				
this capability. Otherwise, you need	tomatically if your network sup to ask your network administr	ports rator				
for the appropriate IP settings.						
Obtain an IP address automat	ically					
O Use the following IP address:	iccity					
The addresses						
IP address;						
Subnet mask:	and the second second					
Default gateway:	· · · · ·					
		[]				
Obtain DNS server address au	utomatically					
$\square^{\bigcirc}$ Use the following DNS server (	addresses:					
Preferred DNS server:	and the second second					
Alternate DN5 server:						
	,					
Validate settings upon exit	Advanc	ed				
	Havan					
		Capital				

6. Set your LAN IP address to 192.168.1.2, with a subnet mask of 255.255.255.0.

7. Once your LAN IP address has been set, access the DT-HDIPCOM unit using your web browser and entering "192.168.1.9" into your address bar.



#### Overview Welcome page will be displayed



Overview Encoder Setup Streaming Setup Network Setup Administration

2019-08-05 13:48:31 GMT+0800 (CST) Up 13 minutes

# Welcome! •

Device Name:	DT-102854		Streaming:	Multicast
Program Name:	DEMO-TV			
Model Number:	DT-HDIPCOM			
Serial Number:	1514 102854			
MAC Address:	F8:0D:EA:51:91:C6			
Firmware Version:	201907221029			
		Video		Audio
Input Source		NONE / ??		Analog
Input Source Output Format		NONE / ?? H.264 CBR / 480p30		Analog MP2 / 48.0 KHz
Input Source Output Format Output Bitrate		NONE / ?? H.264 CBR / 480p30 4.000 Mbps		Analog MP2 / 48.0 KHz 128 Kbps
Input Source Output Format Output Bitrate Actual Output		NONE / ?? H.264 CBR / 480p30 4.000 Mbps 4.471 Mbps		Analog MP2 / 48.0 KHz 128 Kbps
Input Source Output Format Output Bitrate Actual Output Encoder Status		NONE / ?? H.264 CBR / 480p30 4.000 Mbps 4.471 Mbps Freerun		Analog MP2 / 48.0 KHz 128 Kbps
Input Source Output Format Output Bitrate Actual Output Encoder Status Clients		NONE / ?? H.264 CBR / 480p30 4.000 Mbps 4.471 Mbps Freerun 1		Analog MP2 / 48.0 KHz 128 Kbps
Input Source Output Format Output Bitrate Actual Output Encoder Status Clients		NONE / ?? H.264 CBR / 480p30 4.000 Mbps 4.471 Mbps Freerun 1		Analog MP2 / 48.0 KHz 128 Kbps

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#### Login User and Password

Once the Welcome Page is displayed **Select** the **Encoder Setup** tab and the below Login "Authentication Required" screen will be presented. Enter the User Name and Password then click Login.

	To view this "Protected"	page, you must log in to area on 192.168.1.9:80. d will be sent unencrypted			
CALLAND .	rour password will be sent unencrypted.				
	Name:	admin			
	Password:				
	Remembe	er this password in my keychain			
		Cancel Log In			

User Name: admin Default Password: Admin123

Note: User Password can be changed – See Administration Page

On the Welcome Screen, we have added a tool to help the installer locate a unit in a rack or headend. **Press/Click** the LED ON button (shown below). This will cause the CFG LED light to flash continuously for the installer to identify and locate the HDIP in the Headend.

To turn off, simply press the LED tool again.

	DATA-TRO	<b>NIX</b> °		2019-08-05 14:07:55 GMT+0800 (CST) Up 10 minutes
	Overview Encoder Setup S	Streaming Setup Network Setup Administration		
PWR CFG USB USB	Welcome! • ◄	Click Here to Enable/Disable	Streaming:	Multicast
MPEG-2 🔭 Video	Program Name: Model Number:	DEMO-TV DT-HDIPCOM		
H.264 Encode	Serial Number:	1514 102854		
MP2 Audio AAC Encode	MAC Address: Firmware Version:	F8:0D:EA:51:91:C6		
Dolby Digital		Video		Audio
	Input Source	HDMI / 1080p60		HDMI
DATA-TRONIX	Output Format	H.264 CBR / 1080p60		MP2 / 48.0 KHz
DI-HDIPCOM	Output Bitrate	4.000 Mbps		128 Kbps
нр	Actual Output	4.817 Mbps		
IP Streaming	Encoder Status	ок		
Server	Clients	1		
STEREO CAREADE		Copyright © 2019 Zy	Cast Technology Inc.	
RST/UPG				
Reboot •				



**Overview Page** 



Overview Encoder Setup Streaming Setup Network Setup Administrati

# Welcome! •

Device Name:	DT-102854	Streaming:	Multicast
Program Name:	DEMO-TV		
Model Number:	DT-HDIPCOM		
Serial Number:	1514 102854		
MAC Address:	F8:0D:EA:51:91:C6		
Firmware Version:	201907221029		
	Video		Audio
	video		Audio
Input Source	HDMI / 1080p60		HDMI
Input Source Output Format	HDMI / 1080p60 H.264 CBR / 1080p60		HDMI MP2 / 48.0 KHz
Input Source Output Format Output Bitrate	HDMI / 1080p60 H.264 CBR / 1080p60 4.000 Mbps		HDMI MP2 / 48.0 KHz 128 Kbps
Input Source Output Format Output Bitrate Actual Output	HDMI / 1080p60 H.264 CBR / 1080p60 4.000 Mbps 4.441 Mbps		HDMI MP2 / 48.0 KHz 128 Kbps
Input Source Output Format Output Bitrate Actual Output Encoder Status	HDMI / 1080p60 H.264 CBR / 1080p60 4.000 Mbps 4.441 Mbps OK		HDMI MP2 / 48.0 KHz 128 Kbps
Input Source Output Format Output Bitrate Actual Output Encoder Status Clients	HDMI / 1080p60 H.264 CBR / 1080p60 4.000 Mbps 4.441 Mbps OK 1		HDMI MP2 / 48.0 KHz 128 Kbps
Input Source Output Format Output Bitrate Actual Output Encoder Status Clients	HDMI / 1080p60 H.264 CBR / 1080p60 4.000 Mbps 4.441 Mbps OK 1		HDMI MP2 / 48.0 KHz 128 Kbps

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**Overview / Welcome page** displays current status of the encoder including Input type, Output format type, Output Bitrate, Actual Output, Encoder Status, and # of connected Clients.



#### **Encoder Setup**

DAT	A <b>-T</b> R	ONIX®			2019-08-05 15:04:37 GMT+0800 (CST) <b>Up</b> 1 hour 7 minutes
Overview	Encoder Setup	Streaming Setup	Network Setup	Administration	

# Encoder Setup

This page allows the user to configure the encoder's settings. After changes are made use the Save and Confirm button. The encoder will reboot and apply the new settings.

Channel		
Decorport Name	1510 T/	
Program Name:	DEMO-1V	
Video Control		
Video Input:	Auto detect	
Video Output:	H.264 CBR	
H.264 Profile:	Default 🗸	
H.264 Level:	Default	
HD Bitrate:	4 (A)	Mbps (2~10)
SD Bitrate:	4	Mbps (1~4)
Aspect Ratio:	16:9	
Audio Control		
Audio Input:	Auto detect	
Audio Output:	MPEG1 Layer2 (MP2)	
Audio Bitrate:	128 Kbps	
Color Control		
Brightness:	128	
Contrast:	128	
Saturation:	128	
Hue:	128	
MISC		
MISC		
HDCP(test mode):		
Closed Caption:	V	
Save and Confirm Cancel		
	Copyright © 2019 ZyCast Technology Inc.	

The DT-HDIPCOM provides the user with a variety of parameter settings. Many of the default settings will allow the user to quickly start streaming video. Only some of the settings shown will require any change.

### Video Control

#### Select Video Input

Setting the device to Auto Detect allows the Encoder to automatically recognize which video source the user is using.

Video Input:	Auto detect	•
	Auto detect	
Video Output:	Composite	
	Component	
H.264 Profile:	HDMI	

Selecting HDMI, Component, or Composite "locks" the encoder to detect only the input type selected. *Note: We recommend using the Factory default 'Auto Detect'* 

#### Set Video Output Format

Video Output:	H.264 CBR	•
	MPEG-2	
H.264 Profile:	MPEG-2 CBR	
	H.264	
H.264 Level:	H.264 CBR	

The DT-HDIPCOM can output High Quality HD/SD video streams in either MPEG-2, MPEG-2 CBR (Constant Bit Rate), H.264, H.264 CBR. Select the desired Video Output Format Factory Default: H.264 CBR

### Select H.264 Profile (Only for H.264/H.264 CBR)

Selecting H.264 or H.264 CBR allows the user to define / set the H.264 Profile required

H.264 Profile:	Default	•
	Default	
H.264 Level:	BASE	
	MAIN	
HD Bitrate:	HIGH	

#### Select H.264 Levels (Only for H.264/H.264 CBR)

Selecting H.264 or H.264 CBR allows the user to define / set the H.264 Levels required

H.264 Level:	Default	•
	Default	
HD Bitrate:	Level 1	
CD Riterates	Level 2	
SD Bitrate:	Level 3	
Aspect Patio	Level 4	
Азресскано.	Level 5	
	Level 3-1	
	Level 3-2	
	Level 4-1	
	Level 4-2	
Audio Input:	Level 5-1	

#### Setting the Video Bitrate: HD / SD MPEG-2 Video Bitrates

HD: 10~20 Mbps (default- 10 Mbps) SD: 2~8 Mbps (default- 4 Mbps)

HD Bitrate:	10		Mbps (10~20)
SD Bitrate:	4	× •	Mbps (2~8)

#### **H.264 Video Bitrates**

HD: 2 SD: 1	2~10 Mbps (defa ~4 Mbps (defa	ault- 10 Mbps) ault- 4 Mbps)		
	HD Bitrate:	10	×	Mbps (2~10)
	SD Bitrate:	4	<b>*</b>	Mbps (1~4)

The DT-HDIPCOM allows the user to Set the Video Bitrate desired within the defined parameters offered. Set or use the default settings as required.

#### **Select Aspect ratio**

Aspect Ratio:	16:9	-
	4:3	
	16:9	

Select :16:9 (default) or 4:3

### Audio Control

### Select Audio Input

Setting the device to **Auto detect** allows the Encoder to automatically recognize which Audio Input source the user is using.

Selecting Analog, Coaxial SPDIF (Digital Coax), or Optical SPDIF (Toslink) "locks" the encoder to detect only this type of Audio Input.

Audio Input:	Auto detect	•
	Auto detect	
Audio Output:	Analog	
	Coaxial SPDIF	
Audio Bitrate:	Optical SPDIF	

### Note: We recommend using the Factory default 'Auto Detect'

#### **Application Note:**

If your Video Source is HDMI and you require an alternate Audio Source – **Select Analog.** This will force the DT-HDIPCOM to use the L/R RCA Audio Inputs as the Audio Source.

### Select Audio Output Type

Audio Output:	MPEG1 Layer2 (MP2)	·
	MPEG1 Layer2 (MP2)	
Audio Bitrate:	MPEG-2 AAC	
	MPEG-4 AAC	
	AC-3	

Use the drop-down tool to Select the Audio Format required. **Note:** AC-3 Dolby Audio is not available on all HDIP Series Encoders

#### Select Audio BitRate

Audio Bitrate:	128 Kbps
	96 Kbps
	128 Kbps
	192 Kbps
	256 Kbps
Brightness:	384 Kbps

Use the drop-down tool to Select the Audio Bitrate required

# Color Control Modify Brightness/Contrast/Saturation/Hue

Brightness:	128	•
Contrast:	128	•
Saturation:	128	•
Hue:	128	•

Change the above settings as required on the Encoder. *Note:* We recommend using the Factory default. *Factory Default: 128* 

# Saving Changes

Save all/any changes made on the Encoder Page. Leaving the Encoder page without using the 'Save and Confirm' button will cause the encoder to keep the previous saved settings.

# Enable Closed Captioning

# Steps to Enable Closed Caption:

- 1. Connect Video source to HDMI or YPbPr port.
- 2. Connect Video with supporting Closed Caption source to CVBS port.
- **3.** A supporting Closed Caption Player/TV must be used for this function.

# Insert Closed Caption Support device into the CVBS (Composite) Port

**V** 

Closed Caption:

Enable/Disable Closed Caption Functionality by checking the Checkbox as shown above.

**Note:** Even with Closed Captioning enabled in the encoder- no closed captioning support will be available unless the Closed Captioning Source is connected.

**'Save and Confirm'** the changes made on the Encoder Page. **Note:** To reset all changes made or saved go to the Administration Page and select **'Reset to Default'** 

After pressing the 'Save and Confirm' button- the user will be brought back to the Overview page. If you leave the encoder page without saving your changes the encoder will use the previous settings saved. USB

### **Streaming Setup**

The DT-HDIPCOM can be setup to stream via HTTP (DLNA) directly from the network to the DLNA application on a DLNA compliant Smartv, using Multicast (UDP/RTP) direct to a PC or by using a compatible set top box, or by Unicasting (UDP/RTP). The DT-HDIPCOM can stream via HTTP and Multicast simultaneously.

### Stream Server

#### Н

Enable HTTP:	
DSCP	Class 0: Rost offert
boer.	
	Class 0: Best effort
	Class 1
	AF11
	AF12
Protocol:	AF13
	Class 2
Destination IP:	AF21
	AF22
Destination Port:	AF23
	Class 3
Multicast TTL:	AF31
	AF32
DSCP:	AF33
	Class 4
	AF41
	AF42
Streaming List:	AF43
	Class 5
	Evoluted forwarding (FE)
	Class 6

The DT-HDIPCOM is DLNA Compliant and can create a stream that will be detected and displayed to any Smartv that is DLNA Compliant.

Enable HTTP as shown above and select the desired DSCP.

**\*\*\*SAVE AND CONFIRM** all changes made on the Streaming Setup page

Ξ

# Broadcasting

Protocol:	UDP Multicasting	-
Destination IP:	UDP Multicasting	
	RTP Multicasting	
Destination Port:	UDP Unicasting	
	RTP Unicasting	
Multicast TTL:	ТСР	

### Select the Broadcasting Protocol as above drop-down list. The Broadcasting is Default: UDP Multicasting

Protocol:	UDP Multicasting	•
Destination IP:		
Destination Port:	1234	-
Multicast TTL:	4	Ť
DSCP:	Class 0: Best effort	•
	Add	

Enter Multicast Destination IP Address and Destination Port.

Multicast TTL (Time to Live) default is 4.

Select the desired DSCP from the drop-down list. Default is Class 0: Best effort.

Press Add after setting, the IP will be shown in the Streaming List.

**\*\*\*SAVE AND CONFIRM** all changes made on the Streaming Setup page

#### **Unicasting Setup**

Protocol:	UDP Unicasting	-
Destination IP:		
Destination Port:	1234	×
Multicast TTL:	63	×
DSCP:	Class 0: Best effort	-
	Add	

### Unicast via UDP/RTP/TCP by using the drop-down tool to select the desired method

**Enter** '*Destination IP*', '*Destination Port*', and select the desired DSCP from the drop-down list. Default is Class 0: Best effort.

Press Add after setting, the IP will be shown in the Streaming List.

### To remove a Destination IP – simply select the IP address and Click 'Remove'.

**Note:** Add up to 16 Destinations to the Streaming List.

**\*\*\*SAVE AND CONFIRM** all changes made on the Streaming Setup page

### **Network Configuration**

Data-Tronix°		2019-08-05 15:03:23 GMT+0800 (CST) Up 1 hour 6 minutes
Overview Encoder Setup Streaming Setup Network Set	Administration	
Network Setup This page allows the user to configure the encoder's network settings.		
CAUTION: Incorrect settings may cause the en	coder to lose network connectivity. Recovery options will be provided on the next page.	
Device Network		
Hostname:	DT-102854	
Enable DHCP:		
IP Address:	192.168.9.15	_
Default Gateway:	192.168.9.254	
DNS Server:	192.168.9.254	
NTP Server:	time.stdtime.gov.tw	
Time Zone:	(GMT+08:00) Taipei	<u> </u>
Speed & Duplex:	Auto	•
DLNA Settings		
Device Name:	DT-102854	
HTTP/SOAP Port:	8889	<b>4</b>
Save and Confirm Cancel		
	Copyright © 2019 ZyCast Technology Inc.	

# **Device Network**

# Host Name

User definable. If required enter a new Host Name.

# Setting a Static IP

To set a Static IP - **Uncheck** ' *Enable DHCP*'. *Enter* IP Address, Subnet Mask, Default Gateway, and DNS Server. **Default:** DHCP Enabled.

### **NTP Server**

To set NTP Server- Uncheck 'Enable DHCP'

# Time Zone

**Select** required Time Zone as required.

# Speed & Duplex

If required- **Select** using the drop-down tool the required Speed/Duplex parameter.

### **DLNA Settings**

DLNA settings allow users to stream DataTronix Streamers directly to Smartv's that are DLNA Compliant from the network.

#### **Device Name**

User Definable Name which will be displayed on Welcome Page.

#### **HTTP/SOAP PORT**

Modify SOAP Port as required. Note: SOAP Port is used as part of the unit's IP address when entering into a browser Example: IP\_Address\_of\_Unit: SOAPPORT or 169.254.200.128:8888 User MUST enter PORT ID as part of the IP address to Open GUI of device. Default SOAP Port: 8888

\*\*\* SAVE AND CONFIRM ALL CHANGES MADE ON THE NETWORK SETUP PAGE



#### Administration

DATA-TRONIZ	×®		2019-08-05 15:06:10 GMT+0800 (CST) Up 1 hour 8 minutes
Overview Encoder Setup Streaming S	Setup Network Setup Administration		
Administration Reboot Device Reset to default			
Maintain Channel List			
Channel List:	Download	Download current channel list from this device to a local file.	_
Upload:	Choose file Upload list	Upload the prepared channel list to device. NOTE: The channel list will be cleared when the firmware is upgraded.	
Backup and Restore Configur Configurations:	Backup	Backup and download current configuration settings to a local file.	
Restore:	Choose file	Upload the pre-saved configuration settings to device.	
Firmware Upgrade			
Model Number:	DT-HDIPCOM		
Serial No.:	1514 102854		
Firmware Ver.:	201907221029		
Firmware Image:	⇐ Choose file       Upload image	To upgrade the device's firmware, select the required firmware image file upload it to the device.	then
Change Password			
CAUTION: The new password must • 6~8 characters • At least one digit • At least one uppercase character • At least one lowercase character	t contain: er r		
Old Password:			
New Password:			
Retype New Password:	Save and Confirm		
After changing the password use the Save and C user to use the new password.	Confirm button. The browser will redirect to the O	verview page allowing the	

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Use the Administration Page to reboot, reset to factory default settings, backup and upload configuration files, and perform Firmware Upgrades.

### **Backup and Restore Configuration**

### Saving your configuration files

We highly recommend you save your encoder configuration files. Simply **Click** the **"Backup"** button and the config files will be saved to your computer.

To upload a previously backed up configuration file- simply click **"Choose File"** then locate the file you want to upload. Click **"Upload Settings**" to install the configuration files.

This function is helpful to the installer when installing a large number of encoders in a single system.

A "**config.cfg**" file will be created. Locate the file My Computer> C Directory > Documents and Settings> User>My Documents>Downloads>configs.cfg.

### **Change Password**

Ch	ange	e Pass	sword
-			

CAUTION: The new password must contain:

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

Old Password:	
New Password:	
Retype New Password:	
	Save and Confirm

After changing the password use the Save and Confirm button. The browser will redirect to the Overview page allowing the user to use the new password.

Remember to **Click** 'Save and Confirm' button to save new password.

#### **Streaming Methods Case**

#### COM2000 LCI (Local Channel Insertion)

### Inserting HD/SD Local Content with the COM2000 System

The Technicolor COM2000 system has the ability to accept and insert Local Content into the COM2000 system using the DT-HDIPCOM Streamer and the Technicolor QAM. The Local Content is inserted into the HD IP Streamer which can output either a Unicast or Multicast formatted stream that is then inserted into the COM2000 System. The Technicolor QAM is used to assign a QAM channel to the IP stream and incorporates the local channel into the system.

The content source (a media player or other source) is connected to the DT-HDIPCOM streamer via a Composite, Component, or HDMI connection. Using the HD IP Streamer, a MPEG-2 SPTS (Single Program Transport Stream) is created and is output via a 1Gbe port. The HD IP Streamer encodes the Audio and Video content. The Integrator sets up a Unicast or Multicast Stream via the Web management pages of the encoder.

The DataTronix DT-HDIPCOM Streamer offers a Composite, Component, and HDMI Input. By connecting the HD IP Streamer either with a Component, HDMI, or Composite cable to the source (i.e. Digital Signage Media Player). The Streamer can be setup to output a MPEG-2 CBR SPTS stream in either a Multicast or Unicast format. An ethernet cable from the Streamer is connected to the GbE1 or GbE2 port on the COM360. (*Note: If both GbE ports are in use the Integrator will need to introduce a 1Gbe Ethernet Switch into the design/setup*).

#### Network Setup Example:



### Step 1: Select Encoder Parameters on Encoder Setup Page

Video Control				
Video Input:	Auto detect	•		
Video Output:	MPEG-2 CBR			
H.264 Profile:	Default	<b>*</b>		
H.264 Level:	Default	<b>v</b>		
HD Bitrate:	10	≜Mbps (10~20)		
SD Bitrate:	4	≜Mbps (2~8)		
Aspect Ratio:	16:9	•		
Audio Control				
Audio Territ				
	Auto detect			
	AC-3			
Audio Bitrate:	128 Kbps			
Tep 4: Select Streaming Setup Tab Stream Server Enable HTTP:				
Broadcasting				
Proto	col: UDP Unicasting			
Destination	IP:			
Destination P	ort: 1234			
Multicast	TL: 63	y .		
US	Class 0: Best effort			
Streaming I	ist: udp://224.1.1.1:1234			
	Remove 1/16			

**Step 5:** Uncheck 'Enable HTTP' and Select Protocol UDP Unicasting

**Step 6:** Enter Destination IP of the COM2000 QAM.

**Step 7:** Enter Destination Port of the QAM Channel.

Step 8: Click 'Add'.

**Step 9:** 'Save and Confirm' all changes.

Step 10: Select Network Setup.

# Device Network

Hostname:	DT-102854
MAC Address:	F8:0D:EA:51:91:C6
Enable DHCP:	
IP Address:	192.168.9.15
Subnet Mask:	255.255.2
Default Gateway:	192.168.9.254
DNS Server:	192.168.9.254
NTP Server:	time.stdtime.gov.tw
Time Zone:	(GMT+08:00) Taipei
Speed & Duplex:	Auto

**Step 11:** Uncheck '*Enable DHCP*' to set Static IP address.

Step 12: Enter an IP address in the same IP scheme as the COM2000 system.

Step 13: Enter Subnet Mask.

Step 14: Enter Default Gateway (if required).

Step 15: Set NTP Server (if required).

Step 16: Select Time Zone (as required).

**Step 17:** \*\*\*Save and Confirm\*\*\* all changes on Network page.

**Note:** Installer will lose connectivity after changing the IP address and saving the new settings.

Remember to set the PC in the same IP Scheme as newly configured IP address of the device.

The SOAP Port of the device is used as part of the IP address entered into the browser to manage the device (192.168.3.3:8888)

**Step 18:** Once all the settings are made- connect an Ethernet cable from the Streamer to the 1Gbe or 2Gbe port on the COM360.

Step 19: Continue setting up COM2000 as usual.

**Note:** We highly recommended backing up your config files for the streamer. See Administration Tab for Backup and Restore Functions.

For more detailed step by step instructions see:

http://www.technicolor.com/en/solutions-services/connected-home/commercial-video-solutions/library See: Inserting HD/SD Local Content with the COM2000 System



# **HDIP Streaming Server Notes**

PRODUCT NOTES:

ITEM	VALUE
USER NAME / PASSWORD	
SERIAL NUMBER	
INSTALLATION DATE	
PURCHASE DATE	
DEVICE NAME	
FIRMWARE VERSION	
STREAMING METHOD	

Distributed by: