



User Manual



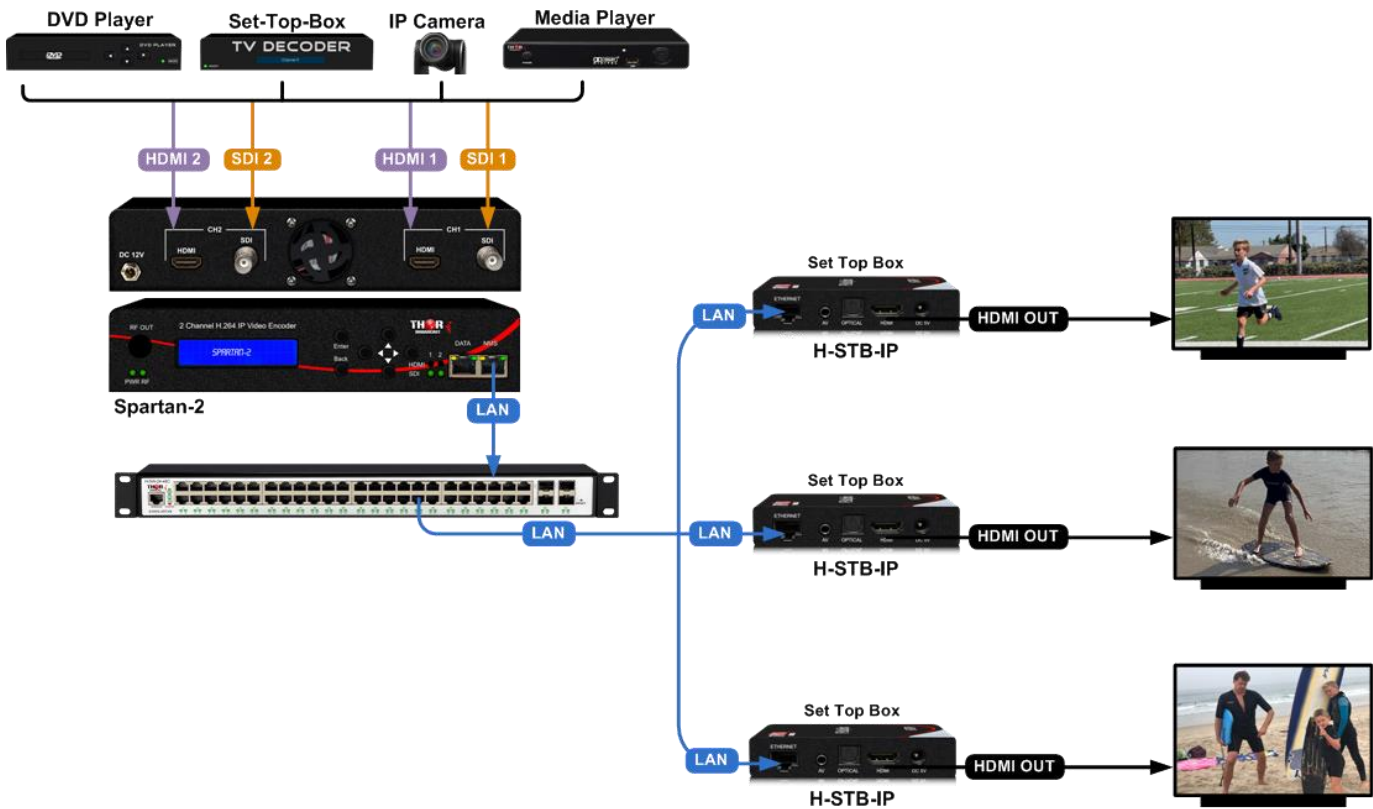
2 Channels H.264 IP Video Encoder

H-SPARTAN-2

TECHNICAL SPECIFICATIONS

Interfaces	
Input	2x HDMI, 2 x 3G-SDI
Output	1 x RJ45, 1Gbps IP Streaming, Protocols: UDP/RTP(Unicast/Multicast)/HLS,RTMP, HTTP
Control	LCD with 6 keys & 1 x RJ45 (Web NMS)
Video Encoding	
Format	H.264 AVC/HP@L4.0
Resolution	Input: 1080 50/60p, 1080 50/60i, 720 50/60p, 480i, 576i Output: up to 1080 30p
Bitrate	HDMI: 2~14Mbps SDI: 2~14Mbps
Rate Control	CBR/VBR
Chroma Sample	4:2:0, 4:2:2
GOP Structure	IBBP
Audio Encoding	
Format	Mpeg1L2, AAC
Bitrate	64 ~ 384Kbps
Sample Rate	44.1KHz, 48.0KHz
System	
Management	LCD + Control buttons/Ethernet
Language	English
Upgrade	Ethernet
General	
Power Supply	DC 12V 2A
Dimension	220 x 206 x 44mm
Weight	1000g
Environmental For Operating	Temperature: 5°C- 40°C Relative Humidity: 80% @ 30°C

Application Example - Point to Point



WEB OPERATION INSTRUCTION

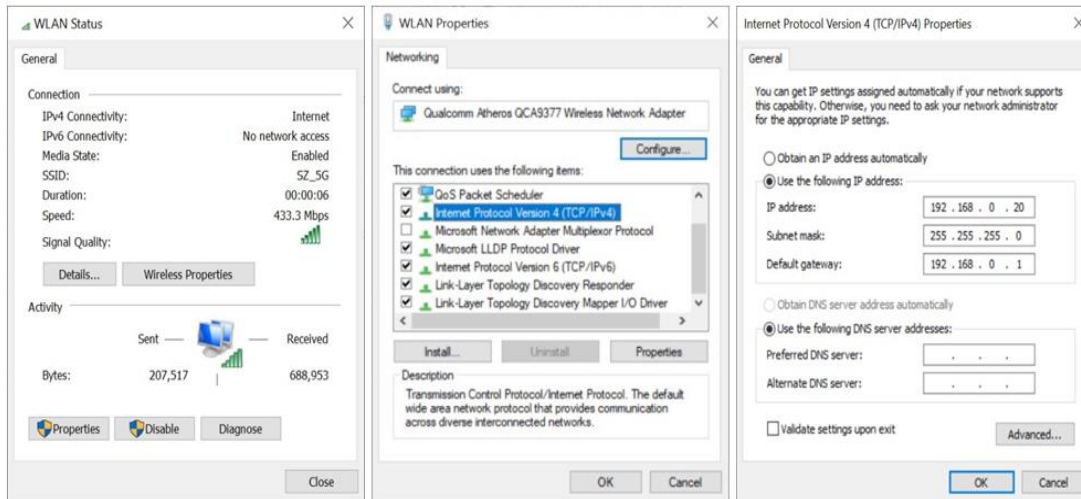
The device is configured using NMS. Access to the NMS is via the network connection

1. IP Address of Computer Setting

We must choose the static IP address according to the default gateway address. The first three numbers must be the same (192.168.0.x in the example).

System Control > Network Connections > LAN Connection > Properties > Internet Protocol Version 4 TCP/IPv4 > Properties > Use the following IP address:

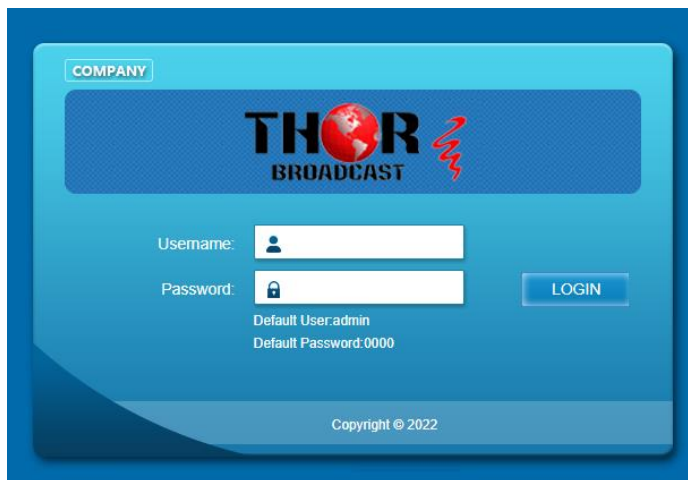
IP address Computer: 192.168.0.20 and Subnet mask: 255.255.255.0.



2. IP Address of Computer Setting

2.1 Each machine can have different username and password settings.

2.2 Please log in before operation. **Default IP is 192.168.0.168; Password: 0000**



3. NMS Home Page & Status

Contents of the home page includes: Device Information/Encoder Setup/Streaming Setup/Network/ Password/Upgrade/Configuration.

And device's Device Information details are also show on this page. Here you can know the Model Name, Serial Number, Firmware version, Boot Version, Modulator Version, Modulator Mode, MAC Address.

Streaming server

Web Management Logout 03:00

Summary

- ▶ Device Information

Parameters

- ▶ Encoder Setup
- ▶ Streaming Setup

System

- ▶ Network Setup
- ▶ Password
- ▶ Upgrade
- ▶ Configuration

Device Information

Model Name	<input type="text" value="H-SPARTAN-2"/>	Serial Number	<input type="text" value="022208006"/>
Firmware Version	<input type="text" value="220810R1222"/>	BOOT Version	<input type="text" value="220810R1222"/>
Encoder1 Version	<input type="text" value="V2.6R29"/>	Encoder2 Version	<input type="text" value="V2.6R29"/>
MAC Address	<input type="text" value="00:1E:97:6F:18:B3"/>		

4. Encoder Setup

Use the Setting Setup Page to set the Encoder setup. You can change the program name, or choose the signal source is HDMI or SDI. You can also change the Video Bitrate, Rate Mode, Audio Encoder, Audio Bitrate, PMT PID, Video PID, Audio PID, PCR PID parameters.

Streaming server

Web Management Logout 03:00

Summary

- ▶ Device Information

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System

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Encoder

	Encoder 1	Encoder 2
ON/OFF	<input type="text" value="ON"/>	<input type="text" value="ON"/>
Source	<input type="text" value="HDMI"/>	<input type="text" value="HDMI"/>
Video Bit Rate(Mbps)	<input type="text" value="8.00"/>	<input type="text" value="8.00"/>
Rate Mode	<input type="text" value="CBR"/>	<input type="text" value="CBR"/>
Audio Encode	<input type="text" value="AC3"/>	<input type="text" value="AC3"/>
Audio Bit Rate	<input type="text" value="128 Kbps"/>	<input type="text" value="128 Kbps"/>
PMT PID	<input type="text" value="100"/>	<input type="text" value="200"/>
PCR PID	<input type="text" value="101"/>	<input type="text" value="201"/>
Video PID	<input type="text" value="102"/>	<input type="text" value="202"/>
Audio PID	<input type="text" value="103"/>	<input type="text" value="203"/>
Service ID	<input type="text" value="1"/>	<input type="text" value="2"/>
TS ID	<input type="text" value="1"/>	<input type="text" value="2"/>
Service Provider	<input type="text" value="TVProvider-1"/>	<input type="text" value="TVProvider-2"/>
Service Name	<input type="text" value="HDTV-1"/>	<input type="text" value="HDTV-2"/>
Resolution	<input type="text" value="1080i60"/>	<input type="text" value="1080i60"/>
Bit Rate	<input type="text" value="8.57 Mbps"/>	<input type="text" value="8.58 Mbps"/>

5. Streaming Setup

Use the Streaming Setup Page to setup your required streaming method. You can choose up to 2xSPTS or 1xMPTS. You can choose UDP/RTP (unicast and multicast), UDP/RTP is automatic analysis.

Streaming server
Web Management Logout 03:00

Summary

- ▶ Device Information

Parameters

- ▶ Encoder Setup
- ▶ Streaming Setup

System

- ▶ Network Setup
- ▶ Password
- ▶ Upgrade
- ▶ Configuration

IP Streaming

	Protocol	Play Mode	Group IP / Destination IP / File	Port	TTL
<input checked="" type="checkbox"/> SPTS 1	UDP ▼	Multicast ▼	225.2.2.6	2234	128
<input checked="" type="checkbox"/> SPTS 2	UDP ▼	Multicast ▼	225.2.2.6	2236	128
<input type="checkbox"/> MPTS	UDP ▼	Multicast ▼	225.2.2.2	2240	128

NIT

	ON/OFF	ON ID	Network ID	Network Name	PDS	LCN
SPTS 1	OFF ▼	1	1	Network1	00000029	1
SPTS 2	OFF ▼	2	2	Network2	00000029	2
MPTS	OFF ▼	3	3	Network3	00000029	3
						4

TVCT

	ON/OFF	Major Channel	Minor Channel	Short Name
SPTS 1	OFF ▼	10	1	HDTV-1
SPTS 2	OFF ▼	10	2	HDTV-2
MPTS	OFF ▼	10	3	HDTV-3
			4	HDTV-4

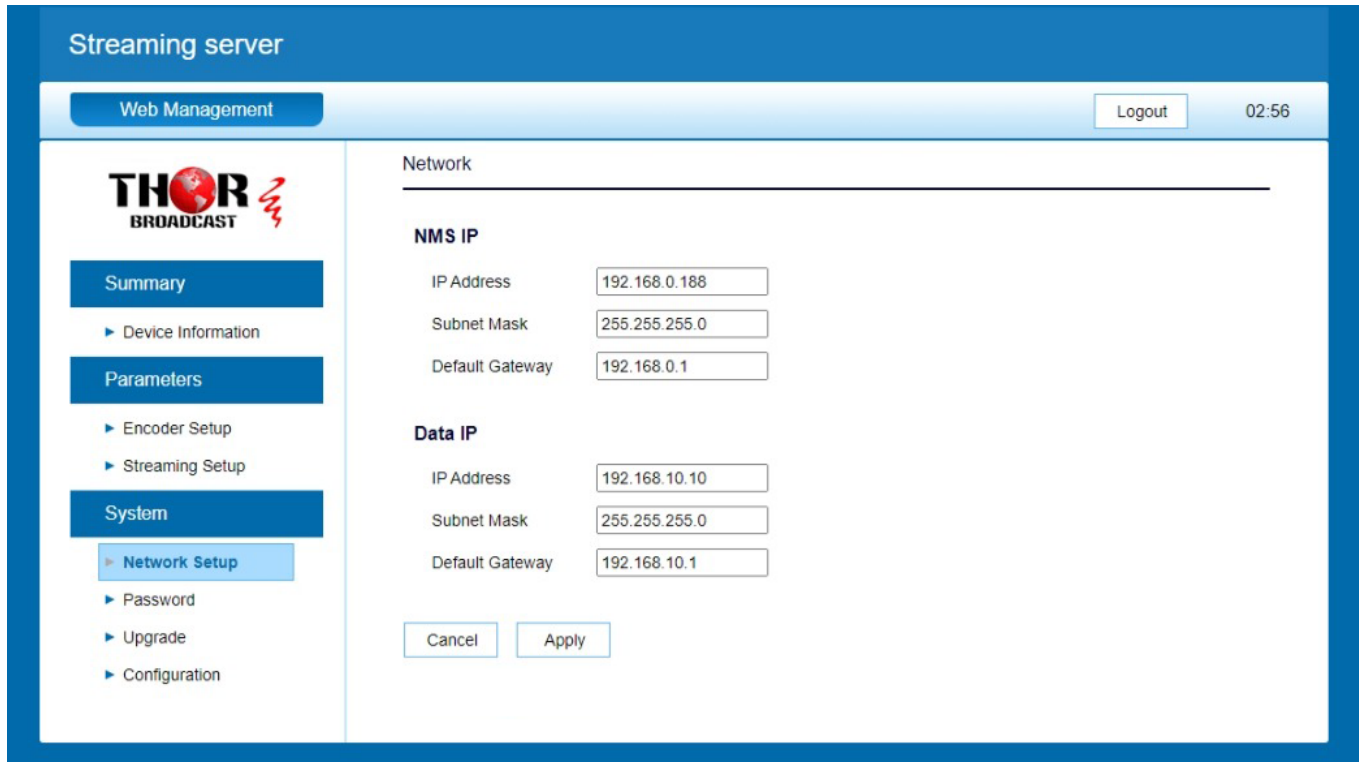
CVCT

	ON/OFF	Modulator	Major Channel	Minor Channel	Short Name
SPTS 1	OFF ▼	64QAM ▼	10	1	HDTV-1
SPTS 2	OFF ▼	64QAM ▼	10	2	HDTV-2
MPTS	OFF ▼	64QAM ▼	10	3	HDTV-3
			10	4	HDTV-4

Cancel
Apply

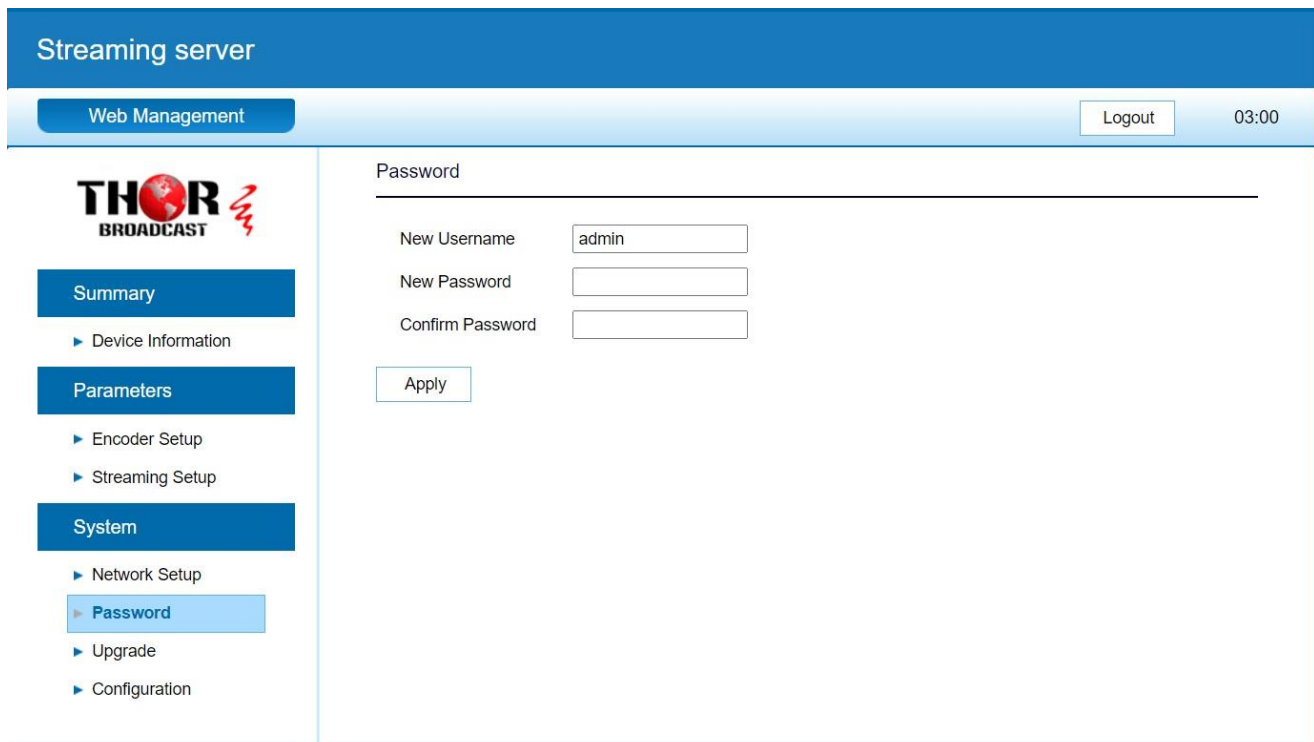
6. Network Setup

The Web Management default setting 192.168.0.168.



7. Password

You can modify the user name and password. In the New password field, enter the new password you want to change, also the same password as the new password to confirm.



8. Upgrade

Use the Upgrade page to update system firmware.

The screenshot shows the 'Upgrade' page within the 'Streaming server' web management interface. The page has a blue header with 'Streaming server' and a sub-header 'Web Management' with a 'Logout' button and '03:00' timer. On the left is a navigation menu with categories: Summary (Device Information), Parameters (Encoder Setup, Streaming Setup), and System (Network Setup, Password, Upgrade, Configuration). The main content area is titled 'Upgrade' and contains three sections: 'Firmware File', 'Encode File', and 'BOOT File'. Each section has a 'Choose' button, an 'Upgrade' button, and a text input field.

9. Configuration

Use the “Factory Reset” to reset configuration to factory default.

Use the “Download Config” to saved device setting configuration setting to PC.

Use the “Upload Config” to upload the file with pre-saved configuration settings to device.

The screenshot shows the 'Configuration' page within the 'Streaming server' web management interface. The page has a blue header with 'Streaming server' and a sub-header 'Web Management' with a 'Logout' button and '03:00' timer. On the left is a navigation menu with categories: Summary (Device Information), Parameters (Encoder Setup, Streaming Setup), and System (Network Setup, Password, Upgrade, Configuration). The main content area is titled 'Configuration' and contains three sections: 'Factory Reset' with an 'Apply' button, 'Download Config' with a 'Save' button, and 'Upload Config' with a 'Load' button.

For Further Tech Support

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