



H-THUNDER-2 DIGITAL MODULATOR

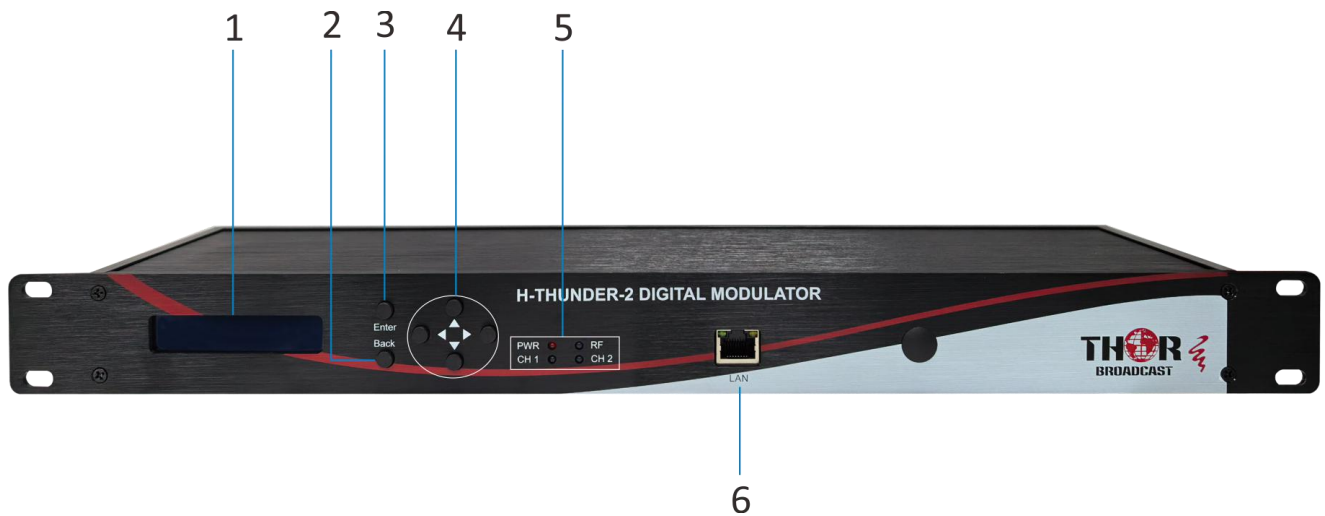
USER MANAUL



TECHNICAL SPECIFICATIONS

Encoding Section-Video		
Encoding	MPEG2	
Interface	2×HDMI	
Resolution	Input	Output
	480i, 576i 720@50p,720@60p 1080@50i/p,1080@60i/p	Max.1080@30p
Bit rate	5-19 Mbps Default: 12 Mbps (J.83b)	
Encoding Section-Audio		
Encoding	MPEG-1 Layer2, AAC, AC3	
Sample rate	48KHz	
Modulator Section		
MER	Typ. 35dB	
RF range	50~950MHz, 1KHz step	
RF output level	100dBμV(30dB Attenuation)	
Standard	ATSC	
Constellation	8VSB	
Standard	QAM J.83B	
Constellation	64QAM, 256QAM	
System		
Management	LCD + Control buttons/Ethernet	
Language	English	
Upgrade	Ethernet	
General		
Power supply	AC 100-240V 50/60Hz	
Dimensions	484×135×44mm	
Weight	1000g	

APPEARANCE INTRODUCE



- 1. LCD Screen
- 2. Back(Cancel/Return)
- 3. Enter Key

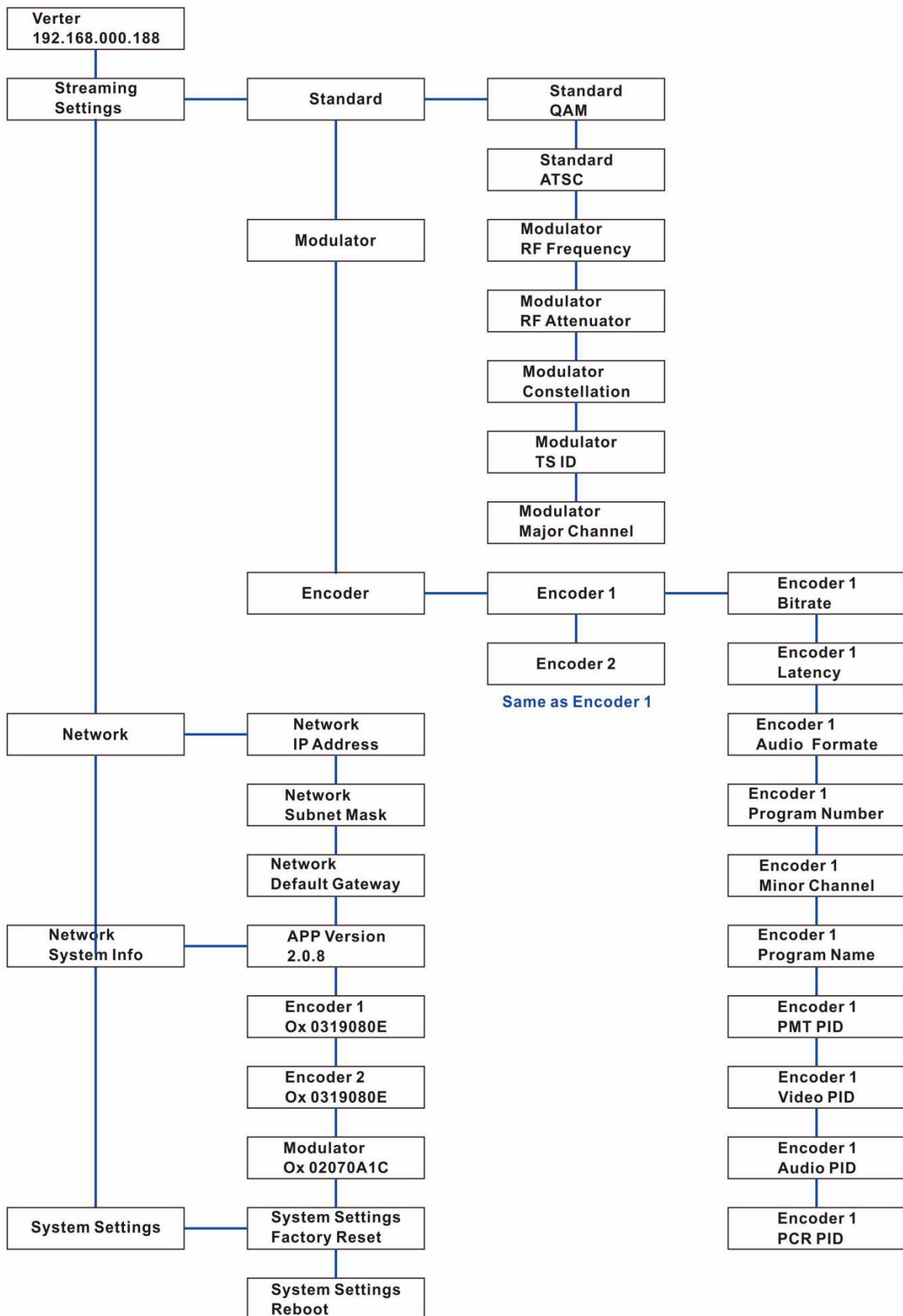
- 4. Directional keys(up,down,left,right)
- 5. Status LED
- 6. NMS Control



- 1. Power Supply Input
- 2. Power Switch

- 3. RF Output
- 4. HDMI Input*2

LCD CONTROL FLOW



LED LAMP

POWER: Red RF: Blue HDMI-1: Blue HDMI-2: Blue



Red LED On : Power present

Blue LED On : RF output present.

Blue LED On : Source Link

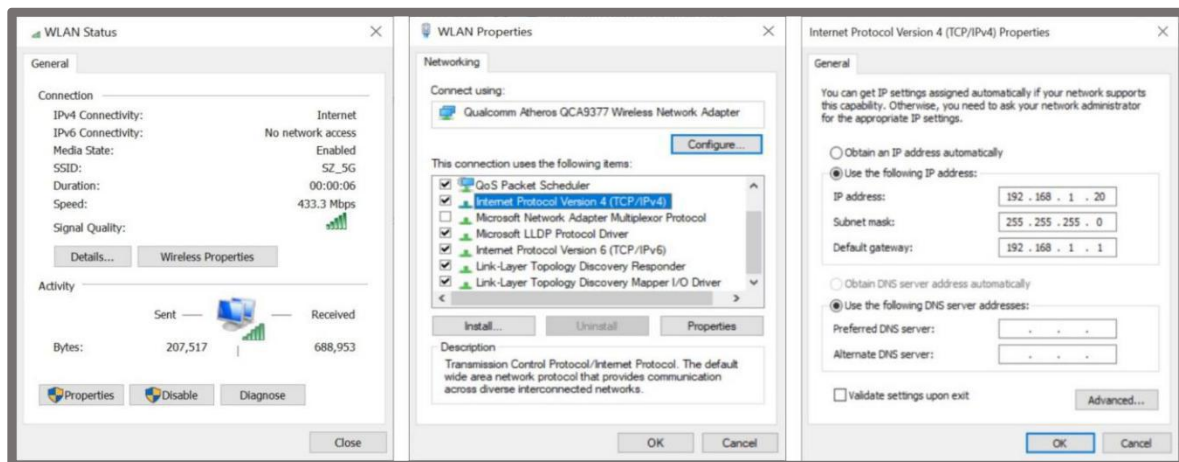
WEB OPERATION INSTRUCTION

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 (192.168.1.x in the example).

System Control> Network Connections> LAN Connection> Properties> Internet Protocol Version 4 TCP/IPv4 (or Version6 TCP/IPv6)> Properties> Use the following IP address:
IP address Computer: 192.168.1.20 and Subnet mask: 255.255.255.0.

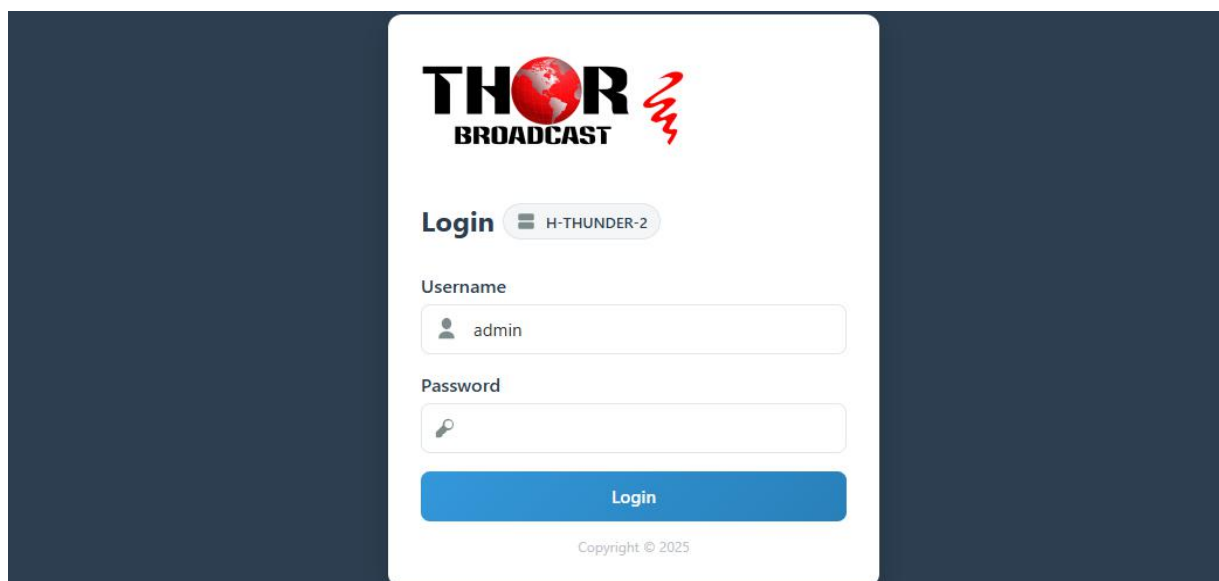


2. Login

2.1 Please open your computer's browser. (e.g.: Chrome, Edge)

2.2 Please log in before operation.

Default IP is **192.168.0.188**; Username: **admin** Password: **admin**



3. System information

The System Information page provides key system information and configuration options:

1. Software Version & Signal Source

Displays the current system software version.

Shows the status of the signal source, including whether it is connected and its resolution.

2. Network Settings

Under the Network tab, you can modify the IP address and related network parameters.

System Information

DEVICE

Model Name: H-THUNDER-2

Serial Number: 222510001

MAC Address: 00:1E:97:6F:1D:2E

VERSION

Application: 1.1.1

Encoder 1: 0x0319080E

Encoder 2: 0x0319080E

Modulator: 0x02070A1C

NETWORK [Edit](#)

IP Address: 192.168.0.188

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.0.1

Status

HDMI 1 Input

Video: N/A

Aspect: N/A

Audio: N/A

Disconnected

Encoder 1 Transcode

Mux bitrate: 11597 Kbps

Video bitrate: 2163 Kbps

Running

HDMI 2 Input

Video: N/A

Aspect: N/A

Audio: N/A

Disconnected

Encoder 2 Transcode

Mux bitrate: 11575 Kbps

Video bitrate: 2164 Kbps

Running

Muxer Combine

Running

Modulator Output

Mux bitrate: 26306 Kbps

Video bitrate: 23471 Kbps

Running

4.Streaming Settings

Allows configuration of **Encoder1 / Encoder2** input encoding parameters.

Allows configuration of **RF** output parameters.

ATSC

Streaming Settings

Broadcast Standard: **ATSC** J83B

ENCODER 1

Bitrate (Mbps): 9

Latency: 500

Audio format: AC3

Program Number: 1

Minor Channel: 1

Program Name: CH-1

PMT PID: 64

Video PID: 66

Audio PID: 67

PCR PID: 65

ENCODER 2

Bitrate (Mbps): 9

Latency: 500

Audio format: AC3

Program Number: 2

Minor Channel: 2

Program Name: CH-2

PMT PID: 74

Video PID: 76

Audio PID: 77

PCR PID: 75

MODULATOR

RF Frequency: CH-14 473MHz

RF Attenuator (dB): 0

Constellation: 8VSB

TS ID: 1

Major Channel: 14

J.83B

THOR
BROADCAST

SUMMARY

SYSTEM

Streaming Settings

Upgrade

System Settings

Streaming Settings

Broadcast Standard

ATSC

J83B

ENCODER 1

Bitrate (Mbps)

12

Latency

500

Audio format

AC3

Program Number

1

Minor Channel

1

Program Name

CH-1

PMT PID

84

Video PID

86

Audio PID

87

PCR PID

85

ENCODER 2

Bitrate (Mbps)

12

Latency

500

Audio format

AC3

Program Number

2

Minor Channel

2

Program Name

CH-2

PMT PID

94

Video PID

96

Audio PID

97

PCR PID

95

MODULATOR

RF Frequency

CH-02 57MHz

RF Attenuator (dB)

0

Constellation

64QAM

TS ID

1

Major Channel

2

5.Upgrade

Provides system upgrade functions, allowing updates for: Firmware, BOOT, Encoder, Modulator

THOR
BROADCAST

SUMMARY

SYSTEM

Streaming Settings

Upgrade

System Settings

Upgrade Firmware

Firmware File (.ub)

Choose

Upgrade

BOOT File (.bin)

Choose

Upgrade

Encoder File (.v2img)

Choose

Upgrade

Modulator File (.v2img)

Choose

Upgrade

6.System Settings

This page supports factory reset, reboot, Configuration export, Configuration import, and changing password.

Factory reset: Restore to factory default settings

1.Reboot: Reboot without changing any parameters

2.Configuration export: The parameter export function allows the current system settings to be saved as a file for backup or future import.

3.Configuration import: The parameter import function allows previously exported system configuration files to be reloaded into the device, enabling quick restoration or duplication of settings.

4.Changing password: Changing the login password

