

User Manual



4 / 8 / 16 / 24 HDMI IPTV Streaming H.264 Encoder UDP, RTP/RTSP - SPTS & MPTS Multicast & Unicast

H-HDPerformux-4/8/16/24

A Note from Thor Broadcast about this Manual

Intended Audience

This user manual has been written to help people who have to use, integrate and to install the product. Some chapters require some prerequisite knowledge in electronics and especially in broadcast technologies and standards.

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DIRECTORY

CHAPTER 1 PRODUCT INTRODUCTION	4
1.1 OUTLINE	4
1.2 MAIN FEATURES	4
1.3 FLOW CHART	5
1.4 TECH SPECS	5
1.5 PART NUMBERS	6
1.6 APPEARANCE AND PICS	6
CHAPTER 2 INSTALLATION GUIDE	8
2.1 WHAT'S IN THE BOX	8
2.2 INSTALLATION PREP	8
CHAPTER 3 WEB NMS OPERATION	10
3.1 LOGIN	10
3.2 OPERATION	10
CHAPTER 4 TROUBLESHOOTING	26
CHAPTER 5 PACKING LIST	27
QUICK INSTALL GUIDE	27

Chapter 1 Product Introduction

1.1 Outline

The Thor Broadcast HDMI HD-Performux network encoder is a unique solution for IP Broadcasting in high density. This unit can be ordered with 4/8/16/24 HDMI inputs with MPEG-4 AC/H264 video encoding and LC-AAC or HE-AAC or AC3 Passthrough audio encoding. Audio Multi-Channel encoder is a professional HD/SD audio & video encoding device that can intake up to 24 HDMI sources like an STB, PC, Game Console, DVD/BluRay or any HDMI source within the resolution scope. It can transfer the Live programs through the internet/LAN and outputs IP out over UDP/RTP in Unciast/Multicast. The new generation model includes QR Code insertion, 1 ASI input, 1 USB input and 32 IP inputs via the GE port and supports 1MPTS and 16/24 SPTS output, 1 ASI out as mirror of the MPTS.

1.2 Main Features

- Up to 24 HDMI inputs
- 1 ASI input for re-mux
- 1 USB Player (Insert the USB Flash drive with "xxx.ts" videos in H-HDPerformux-4/8/16/24 and play back the content in an easy way; file system FAT 32.)
- 32 IP inputs over UDP and RTP via GE port
- MPEG4 AVC/H.264 video encoding format
- MPEG1 Layer II, LC-AAC, HE-AAC audio encoding format and AC3 Pass Through, and audio gain adjustment
- 1 MPTS and 16/24 SPTS output over UDP and RTP/RTSP protocol
- 1 ASI out as mirror of the MPTS
- QR code, LOGO, caption insertion
- "Null PKT Filter" function
- Control via web management, and easy updates via web



1.4 Tech Specs

	4/8/16/24 HDMI inputs					
Input	1 USB Player input for re-mux					
	32 IP input over UDP and RTP. GE port. RI45					
				1920×1080_60P, 1920×1080_60i,		
		input		1920×1080_50P, 1920×1080_50i,		
		mput		1280×720_60P, 1280×720_50P,		
	Resolution			720 x 576_50i,720 x 480_60i		
				1920×1080_30P, 1920×1080_25P,		
Video		Output		1280×720_30P, 1280×720_25P,		
				/20 x 5/6_25P, /20 x 480_30P		
	Encoding			MPEG-4 AVC/H.264		
	Bit-rate			1~13Mbps each channel		
	Rate Control			CBR/VBR		
	GOP Structure			IPP (P Frame adjustment, without B Frame)		
	Encoding			MPEG-1 Layer 2, LC-AAC, HE-AAC and AC3		
				Pass through		
	Sampling rate			48KHz		
	Resolution			24-bit		
Audio	Audio Gain			0-255 Adjustable		
	MPEG-1 Layer 2 Bit-rate			48/50/64/80/96/112/128/160/192/224/256/320/584 kbps		
	LC-AAC Bit-rate			48/56/64/80/96/112/128/160/192/224/256/320/384		
				kbps		
	HE-AAC Bit-rate		<u> </u>	48/56/64/80/96/112/128 kbps		
Gi i i	IP output(1 MPTS and 16/24 SPTS) through DATA (GE) over UDP and RTP/RTSP					
Stream output	protocol					
	1 ASI output as mirror of the MP15					
System	Network management (WEB)					
function	English					
	Ethernet software upgrade		;	224		
	Dimension(W:	×L×H)	440	mm×324mm×44mm		
Miscellaneous	Environment 0~4		0~4	45°C(work); -20~80°C (Storage)		
	Power requirements AC		AC	± 110V± 10%, 50/60Hz, AC 220 ± 10%, 50/60Hz		

1.5 Part Numbers

P/N	Configuration
H-HDPerformux-4	4 HDMI inputs
H-HDPerformux-8	8 HDMI inputs
H-HDPerformux-16	16 HDMI inputs
H-HDPerformux-24	24 HDMI inputs

1.6 Appearance and Pics

Front Panel Illustration:

1U chassis (H-HDPerformux-4/8/16/24) illustration :



Rear Panel Illustration:

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1	Grounding
2	Power Switch and socket
3	HDMI 1-8
4	HDMI 9-16
5	HDMI 17-24

H-HDPerformux-4/8/16/24

Chapter 2 Installation Guide

2.1 What's in the Box

Thor Broadcast will deliver the unit with the following items:

- H-HDPerformux-4/8/16/24 Multi-Channel Encoder
- Power Cord
- Ground lead
- HDMI cables

If any item is missing or mismatching with the list above, please contact local dealer.

2.2 Installation Prep

When you install the encoder, please follow the steps below. You need to check the device for any potential damage and missing pieces during transportation.

- Preparing relevant environment for installation (rack room or Headend)
- Installing Encoder
- Connecting cables
- Connecting communication port

2.2.1 Device's Flow Chart is as following :



THUR 2.2.2 Rack Room

Item	Requirement
Machine Hall Space	When installing unit on rack, the distance between 2 rows of machine frames should be 1.2~1.5m and the distance against wall should be no less than 0.8m
Environment Temperature	5~40°C(sustainable), 0~45°C(short time), installing air-conditioning is recommended
Relative Temperature	20%~80% sustainable 10%~90% short time
Pressure	86~105KPa
Power	Device power, HVAC and lighting should be independent to each other. Device power requires AC 110V±10%, 50/60Hz or AC 220V±10%, 50/60Hz. Please carefully check before running.

2.2.3 Grounding Requirement

- Must be operated and maintained in an area free of dust and debris.
- The cover should be securely fastened, do not open the cover of the chassis when the power is on. This will also void Thor's manufacturer's warranty.
- After installation, securely stow away all loose cables, external antenna, and others.
- Be careful when connecting a power source to the device.
- Do not operate in wet or damp areas. Make sure the extension cable is in good condition
- Make sure the power switch is off before you start to install the device
- It is important to keep this device grounded to ensure all of the modules function correctly. Correctly grounding the device will also help prevent any electrical interference, lightening. Etc. Also it helps reject minor interference that may disrupt the devices ability to function smoothly. General rule of them, make sure the device is grounded when installing anywhere.
- Always use copper wire. When applied correctly the ground must be wrapped well to ensure maximum conduction so it can reduce any high frequencies. The copper ground wire should also be as short and thick as possible
- Installer must make sure that the two ends of the ground are well conducted and have appropriate anti-rust properties.
- It is prohibited to use any other device as part of the grounding electric circuit.

Chapter 3 WEB NMS Operation

The Thor Broadcast HD Performux Encoder series does not support front D-pad buttons or an LCD screen, you can only control and set the configuration by connecting the Encoder to a PC to web NMS Port. Make sure that the computer's IP address is different from the Encoder's IP address otherwise it would cause an IP conflict and you will not be able to login.

3.1 Login

The default IP address of H-HDPerformux-4/8/16/24 is 192.168.0.136

Connect the PC (Personal Computer) and the encoder with ethernet cable, and use ping command to confirm they are on the same network segment (subnet).

I.G. the PC IP address is 192.168.99.252, we then change the device IP to 192.168.99.xxx (xxx can be 0 to

255 except 252 to avoid IP conflict).

Use any web browser to connect the device with the PC by inputting the Encoder's IP address in the browser's address bar and press Enter. (our units usually work better on Mozilla and IE, not Chrome) It will display the Login interface as Figure-1. Input the Username and Password (Both the default

Username and Password are "admin".) and then click "LOGIN" to start the device setting.

	×
?	"Webserver"
login:	admin
Password:	•••••
	Apply

Figure-1

3.2 Operation

When we confirm the login, it will display the WELCOME interface as Figure-2.



Parameters \rightarrow **Encoder**(01-08)

From the menu on left side of the webpage, clicking "Encoder(01-08)", it displays the information of each encoding channel from the encoder as Figure-3.



Encoder (01-08) \rightarrow OSD:

Click "OSD", it displays the interface as Figure-4/5/6 where to set Logo/ Caption/ QR Code parameters.



Figure-4







Parameters \rightarrow **Encoder** (09-16)

From the menu on left side of the webpage, clicking "Encoder (09-16)", it displays the information of each encoding channel from the encoder as Figure-7.



THOR Encoder (09-16) \rightarrow OSD

14

OSD setting is same as the one in the encoder (01-08).

loodel	
welcor	
summary	Encoder Module
Status	
Parameters	
Encoder (01-08)	Encoder- OSD System Firmware
Encoder (09-16)	
Encoder (17-24)	current browser version is 46 please update to version 47+.
IS Contig IP Stream	
► USB Media	
System	Logo Gaption QRGode Enc CH 10 Enc CH 11 Enc CH 12 Enc CH 13 Enc CH 14 Enc CH 15 Enc CH 16 ALL
Naturali	Video Format unknown
Cloud Platform	Logo Size 0x0
▶ Password	Logo (X, Y): (0,0)
▶ Configuration	Alpha (0-128) 128
Firmware	Layer (1~6) 1 Empty
Date lime	Move Direct Static •
	Move Start Pos 0
	Slide Interval(s) 3
	Browse Create
	No image here!
	date Refresh Delete Apply DelAll

Figure-8

Encoder (09-16) \rightarrow System

Under System page, you can check the software version information of the encoder module, save, restore or load factory set the module configuration.

Encoder			
me to use Web Management			
Summary	Encoder Module		
Parameters Encoder (01-08)	Encoder -	OSD System Firmware	
Encoder (09-16) Encoder (17-24)	Hadula Infe	kannan and a second sec	
TS Config	Software Version	: 01.01.42 Build 153.00 Hardware Version:	20.01.40
►USB Media	System Version:	2.02.20.62 Module ID:	1
System	Module Configuration	н	
Network Cloud Platform Password			Save config Sentore Factory ant
 Firmware 	DATA		
► Date Time ► Log	IP Address: Gateway:	192.168.0.137 Subnet Mask: 192.168.0.1 MAC Address:	255.255.255.0 20:20:12:34:56:79
			App1y
		Figure-9	
	Tel: (800) 521-8467	Email: <u>sales@thorfiber.com</u>	http://www.thorbroadcast.com
	· ·		

TH[⊕]R H-HDPerformux-4/8/16/24 Encoder (09-16) → Firmware

Under the Firmware page, you can update the software for the encoder module.

Encoder		
Web Management		
Summary Status	Encoder Module	
Encoder (01-08)	Encoder- OSD System Firmware	
Encoder (17-24) TS Config PiP Stream USB Media System	Warning: 1. Upgrade firmware(software and hardware) to get new function, please choose the right firmware to upgrade. If you use a wrong file, the device may not work. 2. Upgrade will keep a long time, please do not turn off the power, otherwise the device will not work. 3. After upgrade.you must reboot device manually.	
Network Cloud Platform Password Configuration Firmware Date Time	Current Software Version: 01.01.42 d01 Build 153.00 Jun 25 2021-08:01:10 Current Hardware Version: 20.01.40 Bzowse	
Log		Upgrade

Figure-10

Parameters \rightarrow **Encoder** (17-24)

Encoder (17-24) shares the same configuration steps with encoder (09-16).

Encoder						
me to use Web Managemei						
Summary	Encoder Mor	tulo				
► Status	Elicodel Mot	Juie				
Parameters						
Encoder (01-08)		Encoder-Enc CH	17 • OSD System Firmw	rare		
Encoder (09-16)		Video				
TS Config		Pate Made		Ditester		
USB Media		H 264 Profile:	Baseline Profile -	Gop Size:	4.00	(1 ~ 13 https) (28.80)
System		Out Resolution:	Auto 🗸			les sat
▶ Network		Audio				
Cloud Platform Password		Format	MPEG1 Layer2 👻	Bitrate:	128 Kbps	-
Configuration		Audio Gain:	128 (0 ~ 255)	Audio Samplerate:	Auto	•
 Firmware Date Time 		Audio Delay Mode:	Mode 1 👻			
► Log		Program				
		Program Output:		Service Name:	TV-101	
		Service Provider:	TV-Provider	Program Number:	101	
		PMT PID: Video PID:	0x0064	PCR PID: Audio PID:	0x0067	
		Character Encoding:	GBK -	Share PCR PID:		
		Status				
		Encoder Chip Version:	11.07.12	Input Lock:	•	
		Input Information:	unknown	Bitrate:	0.000 Mbps	
		Bitrate: 0.000Mb	D5			
		6.000M				
		5.400M 4.800M				
		4.200M				
		3.0004				
		2.400M				
		1.800M				
		0.600M				
		0.000M				
						Apply.

Figure-11

Parameters → **TS Config:**

From the menu on left side of the webpage, click "TS Config", it displays the interface where you can configure the TS output parameters.

TH��R ≻ TS Config→MPTS:

Clicking "Stream select", it displays the interface where users can select program(s) to multiplex out and

modify program info. (Figure-12)





Configure 'Input Area' and 'Output Area' with buttons in 'Operation Area'. Instructions are as below: →Lose → Locked : To check source streams locked or not, green means current source streams locked →Normal → Overflow : To check current TS overflowing or not, red color means current TS overflowing, need reduce program

H-HDPerformux-4/8/16/24

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CA Filter : To filter/not filter the source CA information

[☑]PidRemap</sup> : To enable/disable the PID remapping

Refresh Input To refresh the input program information

Refresh Output To refresh the output program information

Select one input program first and click this button to transfer the selected program to the right

box to output.

Similarly, user can cancel the multiplexed programs from the right box.

All Input To select all the input programs

All Output To select all the output programs

Program Modification:

The multiplexed program information can be modified by clicking the program in the 'output' area. For

example, when clicking TV-101 <=CH1_Encoder (01-08) [101], it triggers a dialog box (Figure-14) where users can

input new information.

	0114 5 1 104	
Program From Input:	CH1_Encoder (01	-08) [101]
Service Name:	TV-101	
Major Channel Number:	1	
Minor Channel Number:	1	
Source Id:	1	
Short Name:	prog1	
Program Number:	1001	
Logic Channel Number:	1	
Service Type:	0x01	
Service Provider:	TV-Provider	
PMT Descriptor Tag:	0×00	
PMT Descriptor Data:		(Hex)
PMT PID:	0×0020	
PCR PID:	0x0021	
MPEG-4 Video PID: 🗵	0×0022	
MPEG-1 Audio PID: 🗵	0x0023	

Figure-14



➤ TS Config→General:

From the TS Config menu on up side of the webpage, clicking "General", it displays the interface where users can enable PSI/SI table out and insert NIT etc. (Figure-15)

Apply

Figure-15

> TS Config → PID Bypass:

You can bypass the wanted PIDs here.

Encoder				
welcome to use W€				
Summary	TS Config			
Parameters Encoder (01-08) Encoder (09-16) Encoder (17-24)	MPT	S1- Stream Select General PID Bypass		
Encoder (09-16) Encoder (17-24) TS Config	Index	Input Channel Input PID(0x) Output PID(0x) +		
► IP Stream ► USB Media				Set Del-Al
System Network Cloud Platform Password Configuration Firmware Date Time Log				
		Figure-16		
	Tel: (800) 521-8467	Email: sales@thorfiber.com	http://www.thorbroadcast.com	

➤ TS Config→SPTS:

You can enter this Web page to edit the program information in SPTS out as Figure-17.

Encoder							
welcome to use V							
Summary	TC Config						
► Status	i s coniig						
Parameters	CDTC	Stroam Select					
 Encoder (01-08) Encoder (09-16) 	2612*	Stream Select					
Encoder (17-24)	⇒Lose ⇒ Locked			E	→Normal → Overflow		
► IS Config ► IP Stream	→CH1_Encoder (01- ⊕ 1: ♥ [101] TV-101	08) (prog: 8/8)	[0.4/0.4M]		SPTS (prog: 24) 1: TV-101 <= Encode	er (01-08) SPTS:1 [101]	Â
► USB Media	🖲 2: 🗹 [102] TV-102			PID Remap	[⊕] 2:	er (01-08) SPTS:2 [102]	
System	* 3: V [103] TV-103			Refresh Input	* 3: TV-103 <=Encode	er (01-08) SPTS:3 [103]	
Cloud Platform	·● 5: ☑ [105] TV-105			Refresh Output		er (01-08) SPTS:5 [105]	E
Password Configuration	€ 6: ▼ [106] TV-106			<===>	● 6: ■ TV-106 <=Encode	er (01-08) SPTS:6 [106]	
Firmware	₩8: ₩ [108] TV-108				**************************************	er (01-08) SPTS:8 [108]	
Log	⊕ →CH2_Encoder (09-1) ⊕ →CH3 Encoder (17-2)	6) (prog: 8/8) 4) (prog: 8/8)	[0.5/50.0M] [0.5/50.0M]		9: TV-101 <=Encode	er (09-16) SPTS:9 [101]	
		,,		All Input	" " 10: IV-102 <=Encod " " 11: IV-103 <=Encod	der (09-16) SPTS:10 [102] der (09-16) SPTS:11 [103]	
				All Output	* 12: TV-104 <=Encod	der (09-16) SPTS:12 [104]	
						der (09-16) SPTS:13 [105] der (09-16) SPTS:14 [106]	
						der (09-16) SPTS 15 [107]	-
	Stream Select				[close]		
⇒Lose ⇒ Locked					(energy)		
	Program	From Input: E	Encoder (01-08) SF	PTS:1 [101]	-08)		2
	Ser	vice Name:	TV-101		-06)		
	Progra	m Number:	2017		-08)		
	Se	rvice Type:	0x01		00		
	Servic	e Provider:	IV-Provider		-08		
	PMT Des	criptor Tag:	0x00		-08		
	PMT Desc	riptor Data:		(Hex)	-08)		
	6	PMT PID: (Jx0060		-16)		
		PCR PID: (JXUU61		9-11		
	MPEG-4 Vid	eo PID: 💌 🛛	JX0062	_	9-18		
	MPEG-1 Aud		1X0003		2-31		
					8-14		
					Apply Close		-
	out 60 seconds						

Figure-17

$Parameters \rightarrow IP \; Stream$

H-HDPerformux-4/8/16/24 has 1MPTS output and 4/8/16/24 SPTS output through the DATA port.

When you click "IP Stream", it will display the interface as Figure-18 where to set IP out parameters.

anageme									
_	Channel Info.(Alarm/	Active/Total): 0/0/25							
		ID Address	Port	Protocol	Pkt Length	Null PKT Filter	Statue	Bit(Act/Max)	
	MPTS1	224.2.2.2	2001	linp	7	m	-	0.2/120.04	
	MP131	224.2.2.2	2001	UDP	,			0.2/20.9 m	
	38131	224.2.2.2	2002	ODP	,			0 30.0 M	
	SPTS2	224.2.2.2	2003	UDP	7		•	0.1/30.0 M	
	SPTS3	224.2.2.2	2004	UDP	7		•	0.1/30.0 M	
	SPTS4	224.2.2.2	2005	UDP	7		•/	0.1/30.0 M	
	SPTS5	224.2.2.2	2006	UDP	7			0.1/30.0 M	
	SPTS6	224.2.2.2	2007	UDP	7			0.1/30.0 M	
	SPTS7	224.2.2.2	2008	UDP	7		•	0.1/30.0 M	
	SPTS8	224.2.2.2	2009	UDP	7			0.1/30.0 M	
	SPTS9	224.2.2.2	2010	UDP	7			0.1/30.0 M	
	SPTS10	224.2.2.2	2011	UDP	7			0.0/30.0 M	
	SPTS11	224.2.2.2	2012	UDP	7			0.0/30.0 M	
	SPTS12	224.2.2.2	2013	UDP	7			0.1/30.0 M	
	SPTS13	224.2.2.2	2014	UDP	7			0.1/30.0 M	
	SPTS14	224.2.2.2	2015	UDP	7			0.1/30.1M	
	CDTC15	224.2.2.2	2016	UDP				0.1/0.0.1/	
	CETC16	224.2.2.2	2017	UDP				1/20.0 M	
	077047	204.0.0.0	2010	100					
	581517	224.2.2.2	2010	UDP				0.1/30.0 M	
	SPIS18	224.2.2.2	2019	400	7			0.1/30.0 M	
	SPTS19	224.2.2.2	2020	UDP	7		•	0.0/30.0 M	
	SPTS20	224.2.2.2	2021	UPP	7		• /	0.0/30.0 M	
	SPTS21	224.2.2.2	2022	UDP	7		• /	0.1/30.0 M	
	SPTS22	224.2.2.2	2023	UDP	7		•/	0.1/30.0 M	
	SPTS23	224.2.2.2	2024	UDP	7			0.1/30.0 M	
	SPTS24	224.2.2.2	2025	UDP	7			0.1/30.0 M	

Figure-18

When you click "pen" button, it triggers a dialog box (Figure-19) where you can set the parameters of the corresponding IP output streams. The setting in Quickly Config will take effect for all IP outputs, and the setting in Channel X Config will take effect for the correspondingly individual IP output stream only.

Enable: IP Address: Port: Step: Bitrate(Mbps):	224.2.2.2 2001 1 20.0	Enable: IP Address: Port: Bitrate(Mbps): Protocol:	224.2.2.2 2001 120.0 UDP	
Protocol: Pkt Length: Null PKT Filter:	7 7	Pkt Length: Null PKT Filter:	7 🔹	

Figure-19

Parameters → **USB** Media:

Under USB Media page, user can play the TS files from the USB disk. Play Mode is selectable as the below list shows. After playing the files, the programs in the .ts files can be multiplexed out in TS Config page.

ncoder			
welcome to i			
Summary ▶ Status	USB Media		
Parameters	Dimy TC		
Encoder (01-08)	riey to	Blay Made Classic Lass	
Encoder (09-16)		File Select	
TS Config		Auto Play:	
IP Stream USB Media			
System			Start Apply
▶ Network			
Cloud Platform	Status		
Password Configuration		Disk Usage:0.00/0.00 GB	
Firmware		Play Status	
Log			Remove Device
Play Mode: Single Io	op		
Eile Salest Single file	E CONTRACTOR OF		
File Gelect: Shight he			
Auto Play:	2K		
Play all			
Loop all			

Figure-20

Detailed Explanation:

Play Mode: Youcan select a play mode for the *.ts files as needed before playing the *.ts file and specify a video under 'Single file' / 'Single loop' mode and press "Apply" and "Start" button to start play. While under 'Play all' / 'Loop all' mode, it automatically plays files from first to end. Loop means that it will pay the selected files round.

Auto Play: If ticked, the device will automatically play the .ts files as per the saved setting after reboot.

The .ts files can also be generated by our TS Creator software. If needed, users can contact our technician to get the software.



USB Flash Drive Specifications Required: High Speed 2.0; File System FAT32

H-HDPerformux-4/8/16/24

System→ Network:

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Clicking "Network", it will display the interface as Figure-21 where to set NMS and DATA parameters.

Encoder								
Web Management								
Summary ▶ Status	Network							
Parameters	NMS							
Encoder (01-08)		IP Address:	192.168.200.71					
Encoder (09-16)		Subnet Mask:	255.255.255.0					
Encoder (17-24) TS Config		Gateway:	192.168.200.1					
► P Stream		Web Manage Port:	80					
USB Media		MAC Address:	20:10:12:34:58:88					
System		DNS Address:	114.114.114.114					
▶ Network								
Cloud Platform								Apply
Configuration								
► Firmware	DATA							
Date Time		# IP Address	Subnet Mask	Gateway	MAC Address	1		
Log		GE_DATA1 192.168.2.138	255.255.255.0	192.168.2.1	20:20:12:34:50:00	Apply		

Figure-21

System→ Cloud Platform:

WE ARE STRICTLY TESTING THIS FOR NOW; NOT AVAILABLE WITH HARDWARE.

Figure-22

System → Password:

Clicking "Account", it will display the screen as Figure-23 where to set the login account and password

for the web NMS. Both the current username and password are "admin".

Encoder			
welcome to use Web			
Summary Status Parameters Encoder (01-08)	Password	Modify the login name and password to make the de	vice safely. If forget the name or password you can reset it by keyboard The default login name and password is "admin" Alao please note the capital character and lowercase character.
► Encoder (09-16) ► Encoder (17-24) ► TS Config ► P Stream ► USB Media		Current UserName: Current Password: New UserName:	admin
System Network Cloud Platform		New Password: Confirm New Password:	
Password Configuration			Apply
► Comparation ► Firmware ► Date Time ► Log			

Figure-23

TH System → Configuration:

H-HDPerformux-4/8/16/24

Clicking "Configuration", it will display the screen as Figure-24 where to save/ restore/factory set/

backup/ load your configurations.

Enserting	
Encoder	
come to use Web Managem	
Summary Status	Configuration
Parameters	Sua Davfora Earton Eat Backun Loud
 Encoder (01-08) Encoder (09-16) 	Save Restore Pactory Set backup Load
 Encoder (17-24) TS Config 	When you change the parameter, you shoud save configuration , otherwise the new configuration will lost after reboot.
 P Stream USB Media 	
System	Secure 2
Network Cloud Platform	
Password Configuration	
Date Time	
Log	
Encoder	
Encoder	
ement	
Summary Status	Configuration
Parameters	for Destroy Endow Endow Land
 Encoder (01-08) Encoder (09-16) 	serve nessure ractory set backup Loss
 Encoder (17-24) TS Config 	Load latest saved configuration, after cick the "Restore" then please cick the "Save config" button, otherwise the "Restore" parameter will tost after reboot.
► IP Stream ► USB Media	
System	Rev.
Network Cloud Platform	
Configuration Eigenvision	
Date Time	
P LOg	
Francis	
Encoder	
Management	
Summary Status	Configuration
Parameters	Sun Barbon Esterna Berkun Lond
 Encoder (01-08) Encoder (09-16) 	Save restore ractory set backup Load
 Encoder (17-24) TS Config 	Set all configuration back to default, after click the "Factory Set" then please click the "Save config" button, otherwise the default parameter will lost after reboot.
USB Media	
System	Fadoy ad
Cloud Platform Reserved	
Configuration	
Date Time Log	
Encoder	
tome to use Web Manager	
Summary	
▶ Status	Configuration
Parameters	Save Restore Factory Set Backup Load
Encoder (01-08) Encoder (09-16) Encoder (47-24)	
TS Config P Stream	Backup current configuration to the local file, we suggest do this before set the configuration or update firmware.
► USB Media	Basic cella
System Network	
Cloud Platform	
Configuration	
Date Time Log	
	Figure-24

THOR

System → Firmware:

Clicking "Firmware", it will display the screen as Figure-25 where to update firmware for the encoder.

Encoder		
welcome to		
Summary	Firmware	
Parameters ▶ Encoder (01-08) ▶ Encoder (08-16) ▶ Encoder (17-24) ▶ TS Confg ▶ P Stream ▶	Warning: 1. Update the firmware in order to improve the functionality of the device. Rease make sure to use the correct firmware file. 2. The update process may take score time, please do not turn of the power during the upgrade. 3. After the upgrade has completed, please manually rebot the device.	
► USB Media System ► Network ► Cloud Platform ► Password	Current Bothware Version: 02.00.12 Build 100.00 Jul 22.2021 Current Hardware Version: 02.80.31 Bzover	
Configuration Firmware Date Time Log	Stepso -	



System → Date/Time:

Clicking "Date/Time", it will display the screen as Figure-26 where to set date and time for the device.

Encoder		
welcome t		
Summary Status	Date Time	
Parameters Finder (01-08) Finder (09-16) Finder (17-34) FTS Config FD Stream FUSB Media System	Time zone: NTP Server 1: NTP Server 2: NTP Server 4: NTP Server 4: NTP Server 4:	1970-01-01 00 20 28 (19347) Greenwich Mean Time, Dublin, Editiou
Network Cloud Platform Password Configuration Frimware Date Time Lgg		Set 17mg/set Set 177 (Spice Sectorise

Figure-26

System → Log:

Clicking "Log", it will display the log interface as Figure-27 where to check or export the Kernel/System log.

Encoder		
to use Web Management		
Summary > Status	Log	
Parameters Finder (10-03) Finder (10-16) Finder (17-24) FitS Confg P D'Brain VidB Meda System VidB Meda System Confgration Finder Confgration Finder P Data Time Fin	Log Type: Kernel Log Auto Referent: 0 Counce 0.00000000000000000000000000000000000	

Figure-27

Chapter 4 Troubleshooting

Thor quality assurance system has been approved by CQC organization. For guarantee the products' quality, reliability and stability. All Thor products have been passed the testing and inspection before ship out factory. The testing and inspection scheme already covers all the Optical, Electronic and Mechanical criteria which have been published by Thor. To prevent potential hazard, please strictly follow the operation conditions.

Prevention Measure

- Installing the device at the place in which environment temperature between 0 to 45 °C
- Making sure good ventilation for the heat-sink on the rear panel and other heat-sink bores if necessary
- Checking the input AC within the power supply working range and the connection is correct before switching on device
- Checking the RF output level varies within tolerant range if it is necessary
- Checking all signal cables have been properly connected
- Frequently switching on/off device is prohibited; the interval between every switching on/off must greater than 10 seconds.

Conditions need to unplug power cord

- Power cord or socket damaged.
- Any liquid flowed into device.
- Any stuff causes circuit short
- Device in damp environment
- Device was suffered from physical damage
- Longtime idle.
- After switching on and restoring to factory setting, device still cannot work properly.
- Maintenance needed

H-HDPerformux-4/8/16/24

Chapter 5 Packing list

- H-HDPerformux-4/8/16/24 Multi-Channel Encoder
- HDMI cables
- Power cord

TH�R

• Ground lead

4/8/16/24 pcs as per HDMI model

1pc

1pc

1pc

For Further Tech Support 1-800-521-Thor(8467) support@thorfiber.com

Quick Install Guide

Tel: (800) 521-8467 Email: sales@thorfiber.com http://www.thorbroadcast.com

Quick configuration Guide for H-HDPerformux- 8/16/24

Login instructions:

In order to log in to the Modulator NMS port, please set your PC's NIC Ethernet card to the following IP address: 192.168.0.100.

Access Modulator GUI by typing derail IP address <u>192.168.0.136</u> in to the browser Login /password – admin/admin



TS Config

Program Information setting

This page controls which HDMI Input CH 1-24 or ASI or USB (in MPTS) are selected and moved to the IPTV outputs

By default all 24 channels are selected





Summary	Channer in	0. Ananin Active	a rotarj. c	10/25					
▶ Status	#	IP Address	Port	Protocol I	Pkt Length	Null PKT Filter	Status	Bit(Act/Max)	1
arameters	MPTS1	224.2.2.2	2001	UDP	7	0		0.0/120.0 M	1
Encoder (01-08) Encoder (09-16)	SPTS1	224.2.2.2	2002	UDP	7		٠	0.1/30.0 M	1
Encoder (17-24)	SPTS2	224.2.2.2	2003	UDP	7		٠	0.1/30.0 M	1
IP Stream	SPTS3	224.2.2.2	2004	UDP	7			0.1/30.0 M	1
USB Media	SPTS4	224.2.2.2	2005	UDP	7			0.1/30.0 M	1
stem	SPTS5	224.2.2.2	2006	UDP	7			0.1/30.0 M	1
Cloud Platform	SPTS6	224.2.2.2	2007	UDP	7			0.1/30.0 M	.1
Password	SPTS7	224.2.2.2	2008	UDP	7			0.1/30.0 M	
Firmware	SPTS8	224.2.2.2	2009	ם חו ו	7		• -	0.1/30.0 M	
Date Time	SPTS9	224.2.2.2	2010	Quickly Confi	g.			0.1/30.0 M	
VLC media player edia Playback Audio Video Subtitle Tools View Help A Open Media				Enat	ole: 🛛 🖬	2.2.2	Multio	cast or unicast IP add	tress
				Post	ort: 200 ep: 1	2001 -		Port number Total Bit rate – need to	
	🗈 File 🛛 😔 D	isc 💾 Networ	k	Bitrate(Mbp	s): 20.0			or RTP or RTSP selec	tion
	Network Protoco	etwork URL:		Pkt Leng	ith: 7	~	Null	Packet ON/OFF Func	tion
	Lude Up 224 2			Null PKT Filt	ier:			Apply	

IP Stream Setup

IPTV streaming is sent out from the data port and can be tested using VLC player.

UDP syntax example is udp://@224.2.2.2:2001 RTP syntax example is rtp://@224.2.2.2:2001 RTSP syntax example is rtsp://(DATA IP ADRESS):5000/1-4

- 1. Click the pencil icon for MPTS's or SPTS's section. Drop box will open to configure channel 1
- 2. Enable and edit your IP preferences
- 3. Press apply

Configuration Saving / Backup / Restore

- 1. Click the configuration tab on the left hand side
- 2. Click the save tab
- Press save config –

YOU MUST SAVE OR ALL CHANGES WILL BE LOST AFTER RESTART!



shoud save configuration ,otherwise the new of

https://thorbroadcast.com

800-521-8467

sales@thorfiber.com

► Log

Configuration

When you change the para

DATA	
IP Address:	192.168.2.136
Subnet Mask:	255.255.255.0
Gateway:	192.168.2.1
MAC Address:	22:d5:12:2a:04:59

SAVE Backup to PC Restore

Save Restore Factory Set Backup Load





H-4ADHD-QAM-IPLL

welcome to use Web I