

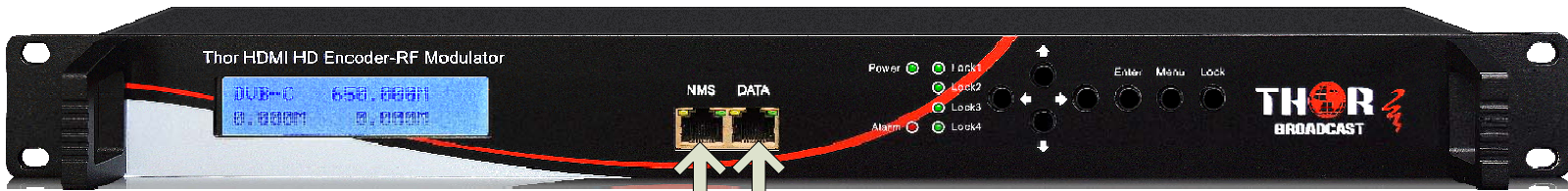
# H-2HDMI-QAM-IPLL

## Quick Setup Guide

This guide also applies to model: H-1HDMI-QAM-IPLL

### Step 1: CONNECT AND LOGIN

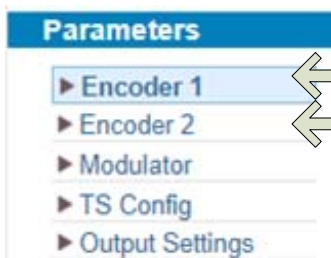
Connect Power Supply



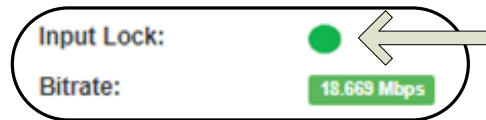
NMS DATA

- Connect the NMS port to your PC using an ethernet cable
- Open web browser and go to <http://192.168.0.136>
- Login/Password: admin/admin

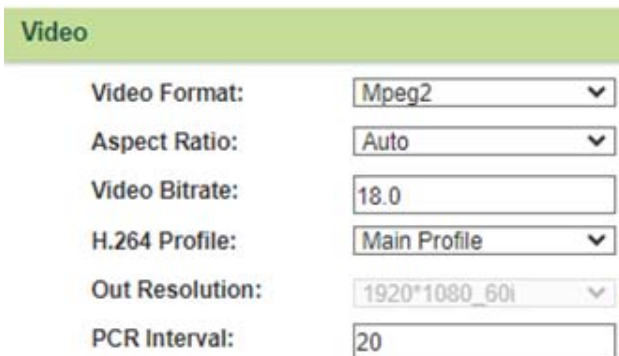
### Step 2: Encoders (Video/Audio Bitrate and format settings)



- ← Select "Encoder 1" for HDMI input 1
- ← Select "Encoder 2" for HDMI input 2



Green light indicates proper input connection



- Recommended Settings:**
- Video Format: MPEG2
  - Video Bitrate: 18.0
  - Audio Format: AC3



← Click "Apply" to save changes

### Step 3: Modulator Settings (Channels and Frequencies Selection)

**Parameters**

- ▶ Encoder 1
- ▶ Encoder 2
- ▶ **Modulator**
- ▶ TS Config
- ▶ Output Settings

Select "Modulator" from the main menu

Select top Pencil icon to edit all

#	Frequency	Constellation	Symbol Rate	Status	Bit(Act/Max)	
1	57 CH 2	256 QAM	5361 Ksps	●	18.8/38.8 M	
2	63 CH 3	256 QAM	5361 Ksps	●	18.8/38.8 M	
3	69 CH 4	256 QAM	5361 Ksps	●	18.8/38.8 M	
4	79 CH 5	256 QAM	5361 Ksps	●	18.8/38.8 M	

Status lights must be green

Select Pencil icon on the same line to edit individually

Quickly Config. [ close ]

Standard: J.83B

Level(CH Carriers): 0.0 (-20 ~ +3 dBm)

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Channel Enable:

Start Frequency: 57 CH 2

Constellation: 256 QAM

Symbol Rate: 5361 (3000 ~ 9000 Ksps)

Click "Apply" to save changes

Apply Close

Check box to enable channel

Select desired frequency and channel

Frequency Mode: Manual

#	Frequency
1	57.000 MHz
2	63.000 MHz
3	69.000 MHz
4	79.000 MHz

**OPTIONAL:** Choose your own frequencies by setting frequency mode to "Manual" (See QAM frequency chart)

## Step 4: TS Config (Transport Stream Selection)

- ▶ Modulator
- ▶ **TS Config**
- ▶ Output Settings

Select "TS Config" from the main menu

Click "Parse program". Detected programs will appear in the left pane.

Parse program

Select Output (1-4)

Output TS 1 ▾ Stream Select General

Not Locked Locked

1: Encoder 1 (prog: 1/1) [0.0/0.0M]

1:  [101] TV-101

2: Encoder 2 (prog: 0/1) [0.0/0.0M]

CA Filter

PID Remap

Refresh Input

Refresh Output

⇒

Check the box to select program

Click "⇒" to assign selected program to Output

Normal Overflow

Output (prog: 1)

1:  TV-101 <=CH1\_Encoder 1 [101]

Programs assigned to output will appear in right pane. Click program name for more options

### Program Information

[close]

Program From Input: CH1\_Encoder 1 [101]

Service Name: TV-101

Service Name can be changed

SUB-CHANNEL NUMBER: 1

Major Channel Number: 2

Minor Channel Number: 1

Major/Minor channels may be adjusted (VCT must be enabled)

Source Id: 1

Short Name:

Logic Channel Number: 1

Service Type: 0x01

Service Provider: Encoder 1

PMT PID: 0x0020

PCR PID: 0x0021

MPEG-2 Video PID: 0x0022

AC3 Audio PID: 0x0023

Click "Apply" to save changes

Apply Close

**Step 4: TS Config (Virtual Channel Table)**

Click "General" tab



Output TS 1 ▾ Stream Select **General**

**Stream**

Character Encoding: NORMAL ▾  
 TS ID: 1

**NIT**

NIT Insert: Not insert ▾

**VCT**

VCT Insert:    
 VCT Mode: CVCT ▾

Check the box to enable VCT

Click "Apply" to save changes

Apply

**If VCT is ENABLED:**  
 The virtual channel numbers will override the physical channel number. The TV will display the values set in the Program Information settings as the major channel number / minor channel number

Service Name: TV-101  
 SUB-CHANNEL NUMBER: 1  
 Major Channel Number: 2  
 Minor Channel Number: 1  
 Source Id: 1  
 Short Name:  
 Logic Channel Number: 1  
 Service Type: 0x01  
 Service Provider: Encoder 1  
 PMT PID: 0x0020  
 PCR PID: 0x0021  
 MPEG-2 Video PID: 0x0022  
 AC3 Audio PID: 0x0023

TV will display VCT channel 2-1

**If VCT is DISABLED:**

The TV will display the physical channel number according to the modulator frequency. For example, 57 MHz (Channel 2) will show as the major channel number, and the Sub-channel Number will be shown as the minor channel number.

Frequency Mode: Manual ▾

#	Frequency
1	57.000 MHz
2	63.000 MHz
3	69.000 MHz
4	79.000 MHz

CH 2 Major

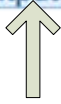
Program From Input: CH1\_Encoder 1 [101]  
 Service Name: TV-101  
 SUB-CHANNEL NUMBER: 1  
 Major Channel Number: 2  
 Minor Channel Number: 1  
 Source Id: 1  
 Short Name:  
 Logic Channel Number: 1  
 Service Type: 0x01  
 Service Provider: Encoder 1  
 PMT PID: 0x0020  
 PCR PID: 0x0021  
 MPEG-2 Video PID: 0x0022  
 AC3 Audio PID: 0x0023

Sub-Channel 1 Minor

TV will display physical channel 2-1

## Step 5: OUTPUT SETTINGS (IP Stream Configuration)

- ▶ TS Config
- ▶ **Output Settings**



Select "Output Settings" from the main menu

#	IP Address	Port	Protocol	Pkt Length	Filter	Program	Status	Bit(Act/Max)	
MPTS 1	224.2.2.2	2001	UDP	7	<input type="checkbox"/>		●	29.3/38.8 M	
MPTS 2	224.2.2.2	2002	UDP	7	<input type="checkbox"/>		●	0.0/38.8 M	
MPTS 3	224.2.2.2	2003	UDP	7	<input type="checkbox"/>		●	0.0/38.8 M	
MPTS 4	224.2.2.2	2004	UDP	7	<input type="checkbox"/>		●	0.0/38.8 M	
SPTS 1	224.2.2.2	2005	UDP	7	<input type="checkbox"/>	TV-101(MPTS1)	●	14.7/20.0 M	
SPTS 2	224.2.2.2	2006	UDP	7	<input type="checkbox"/>	TV-201(MPTS1)	●	14.7/20.0 M	



Click the pencil icon to edit

Enable:

Output Bitrate:  Mbps

IP Address:

Port:

Protocol:

Pkt Length:

Null PKT Filter:

Program:

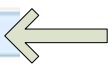
Check box to enable channel

Select program

**IMPORTANT:**  
Streams are accessed via the DATA port.  
Connect to the stream using the appropriate IP address and port number:  
  
**FOR EXAMPLE:**  
`udp://@224.2.2.2:2005`

## Step 6: SAVE CONFIGURATION

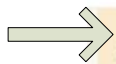
- System
- ▶ Network
- ▶ Password
- ▶ **Configuration**
- ▶ Firmware
- ▶ Date | Time



Click "Configuration" on the Main Menu

**IMPORTANT:**  
**YOU MUST SAVE CONFIGURATION OR ALL CHANGES WILL BE LOST AFTER RESTART!**

Click the "Save" tab



- Save
- Restore
- Factory Set
- Backup
- Load

Press "Save config" button



Save config

saving configuration, please wait...



Confirmation message will appear briefly until saving is complete.

Scan for more info:



# CATV QAM Channel Center Frequency - 54 MHz to 860 MHz (J.83B)

QAM 256 / Symbol Rate 5.361Msps , QAM 64 / Symbol Rate 5.057Msps

EIA CH.	MHz Center Frequency	EIA CH.	MHz Center Frequency	EIA CH.	MHz Center Frequency
2	57	42	333	87	603
3	63	43	339	88	609
4	69	44	345	89	615
5	79	45	351	90	621
6	85	46	357	91	627
95	93	47	363	92	633
96	99	48	369	93	639
97	105	49	375	94	645
98	111	50	381	100	651
99	117	51	387	101	657
14	123	52	393	102	663
15	129	53	399	103	669
16	135	54	405	104	675
17	141	55	411	105	681
18	147	56	417	106	687
19	153	57	423	107	693
20	159	58	429	108	699
21	165	59	435	109	705
22	171	60	441	110	711
7	177	61	447	111	717
8	183	62	453	112	723
9	189	63	459	113	729
10	195	64	465	114	735
11	201	65	471	115	741
12	207	66	477	116	747
13	213	67	483	117	753
23	219	68	489	118	759
24	225	69	495	119	765
25	231	70	501	120	771
26	237	71	507	121	777
27	243	72	513	122	783
28	249	73	519	123	789
29	255	74	525	124	795
30	261	75	531	125	801
31	267	76	537	126	807
32	273	77	543	127	813
33	279	78	549	128	819
34	285	79	555	129	825
35	291	80	561	130	831
36	297	81	567	131	837
37	303	82	573	132	843
38	309	83	579	133	849
39	315	84	585	134	855
40	321	85	591	135	861
41	327	86	597		