H-4SDI-QAM-IPLL   Quick Setup Guide
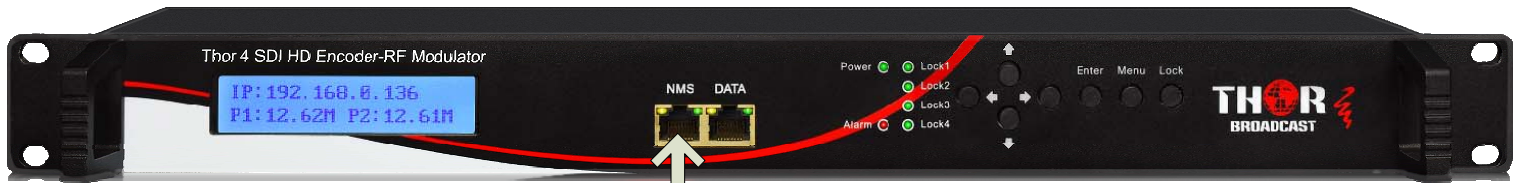
This guide also applies to models: H-2SDI-QAM-IPLL and H-1SDI-QAM-IPLL

Step 1: Connect and Login   **Connect Power Cable**

Connect SDI inputs 1-4

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: Configure Encoders

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

SELECT "Encoder 1" FROM MAIN MENU

CH 1 ▾   ← **Select Channel 1 or 2**

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

Video

| Video Format: | MPEG2 ▾ | |
| Video Bitrate: | 18.0 | Mbps (1.0 ~ 19.5 Mbps) |

Audio

| Format: | AC 3 ▾ |

IMPORTANT:
INPUT LOCK MUST BE GREEN & SHOWING BITRATE INFORMATION

Input Lock: 🟢

Bitrate: 18.737 Mbps
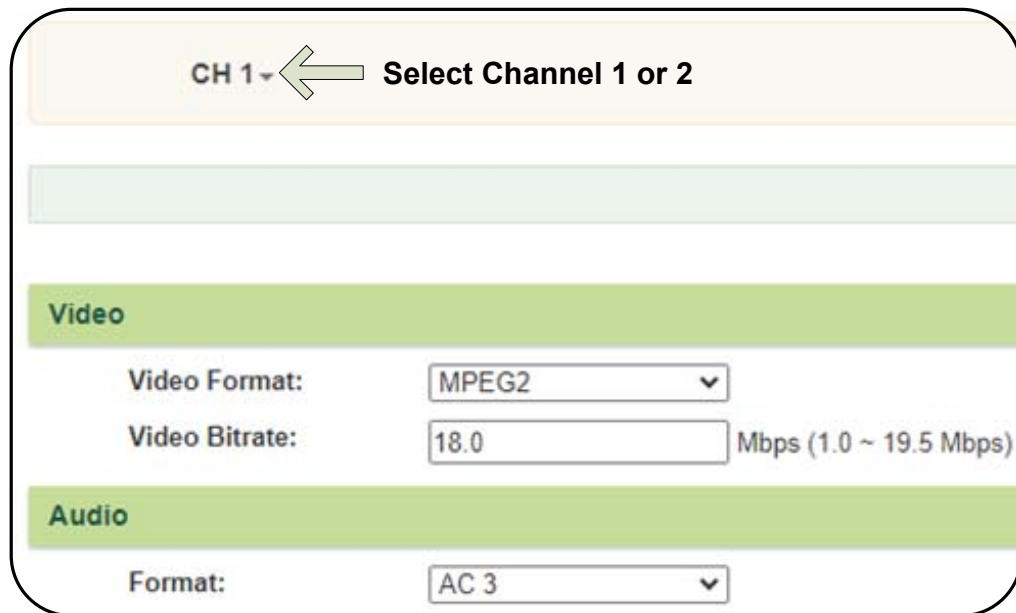
Click "Apply" to save changes   ⟶   Apply

REPEAT THESE STEPS AS NEEDED FOR ENCODER 2

Step 3: Modulator Settings

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

Select "Modulator" from the main menu

IMPORTANT:
STATUS LIGHTS ARE GREEN ONLY WHEN CHANNEL IS ENABLED

Click 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	🟢	0.0/38.8 M	✏
3	69 CH 4	256 QAM	5361 Ksps	🟢	0.0/38.8 M	✏
4	79 CH 5	256 QAM	5361 Ksps	🟢	0.0/38.8 M	✏

Click pencil icon from the same line to edit individually

Channel 1 Config.   [close]

Standard: J.83B ⌄
Level(CH Carriers): -9.0   (-20 ~ -3 dBm)

Check box to enable channel

Channel Enable: ☑
Frequency: 57 CH 2 ⌄
Constellation: 256 QAM ⌄
Symbol Rate: 5361   (3000 ~ 9000 Ksps)

Select desired frequency and channel

Apply   Close

Click "Apply" to save changes

Frequency Mode: Manual ⌄

Optional:
Choose your own frequencies by setting frequency mode to "Manual"
(See Frequency Chart on last page)

#	Frequency
1	57.000 MHz
2	63.000 MHz
3	69.000 MHz

Step 4: SELECT "TS Config" FROM MAIN MENU

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

1). Select Output TS (1-4)

Output TS 1 ▾   Stream Select   General

⟹ Not Locked ⟹ Locked
⊞ ⟹ 1: Encoder1 CH1 (prog: 0/1)   [18.7/21.9M]
⊞ ⟹ 2: Encoder1 CH2 (prog: 0/1)   [18.6/21.9M]

2). Discover Inputs: Click "Parse Program"

Parse program   time out: 60   seconds

3). Click "+" to expand

⟹ Not Locked ⟹ Locked
⊞ ⟹ **1: Encoder1 CH1 (prog: 0/1)**   **[18.7/21.9M]**
⊞ ⟹ 2: Encoder1 CH2 (prog: 0/1)   [18.7/21.9M]
⊞ ⟹ 3: Encoder2 CH1 (prog: 0/1)   [18.7/21.9M]
⊞ ⟹ 4: Encoder2 CH2 (prog: 0/1)   [14.7/17.1M]

⟹ Not Locked ⟹ Locked
⊟ ⟹ **1: Encoder1 CH1 (prog: 1/1)**
　⊞ 1: ☑ [101] TV-101

4). Assign outputs: Click the checkbox selecting the discovered TS program

☑ CA Filter

☑ PID Remap

Refresh Input

Refresh Output

==⟹

⟹ Normal ➡ Overflow
⊟ ⟹ Output (prog: 1)
　⊞ 1: ☐ TV-101 <=CH1_Encoder1 CH1 [101]

5). Press the Blue "➡" button to move the selected program from the Input side to the Output side

⟹ Normal ➡ Overflow
⊟ ⟹ Output (prog: 1)
　⊞ 1: ☐ TV-101 <=CH1_Encoder1 CH1 [101]

6). Click the name of the output program for more options

7). OPTIONAL: You may set the Major and Minor channels to your preference

Program From Input:	CH1_Encoder1 CH1 [101]
Service Name:	TV-101
SUB-CHANNEL NUMBER:	1001
Major Channel Number:	1
Minor Channel Number:	1
Source Id:	1
Short Name:	prog1
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

REPEAT THE ABOVE STEPS AS NEEDED TO CONTINUE ADDING MORE PROGRAMS

Enable VCT Insert (optional)

Output TS 1 ▾	Stream Select	General

Stream

Character Encoding: NORMAL ▾

TS ID: 1

VCT

VCT Insert: ☑

Click "General"

Check Box to enable VCT Insert

Step 5: IP Preferences

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

Select "Output Settings" from the main menu

SPTS 1	224.2.2.2	3000	UDP	7	☐	TV-101(MPTS1)	●	18.8/20.0 M	✎
SPTS 2	224.2.2.2	3002	UDP	7	☐	TV-102(MPTS2)	●	18.8/20.0 M	✎
SPTS 3	224.2.2.2	3004	UDP	7	☐	TV-201(MPTS3)	●	18.8/20.0 M	✎
SPTS 4	224.2.2.2	3006	UDP	7	☐	TV-202(MPTS4)	●	14.7/20.0 M	✎

Click the pencil icon to edit

From the popup window, you can enable and edit your IP preferences

Enable: ☑
Output Bitrate: 20.000 Mbps
IP Address: 224.2.2.2
Port: 3000
Protocol: UDP ▾
Pkt Length: 7 ▾
Null PKT Filter: ☐
Program: TV-101(MPTS1) ▾

Click "Apply" to save changes

Apply   Close
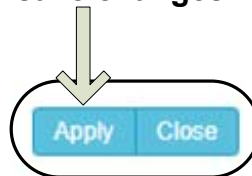
IMPORTANT:
Streams must be accessed through the DATA port

ACCESS THE STREAM USING THE APPROPRIATE IP ADDRESS & PORT NUMBER:

FOR EXAMPLE:
udp://@224.2.2.2:3000

Step 6: SAVE SETTINGS

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

System

- ▶ Network
- ▶ Password
- ▶ Configuration ← **1. Click "Configuration"**
- ▶ Firmware
- ▶ Date | Time
- ▶ Log

CONFIGURATION

2. Click the "Save" tab →

Save	Restore	Factory Set	Backup	Load

When you change settings, you should save the configuration once done.

3. Press "Save config" button → Save config

saving configuration,please wait...

↑

4). 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		

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