H-4K-UHD-QAM-IP
Quick Setup Guide

Step 1: Connections

HDMI
IN1   IN2   OUT

RF OUT

Connect included Power Supply

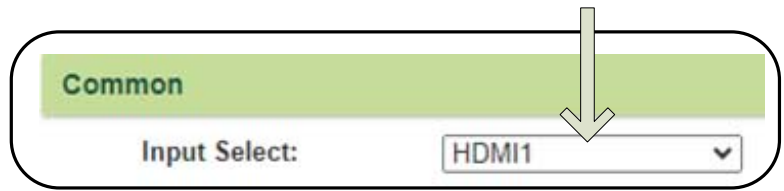**NMS   DATA**
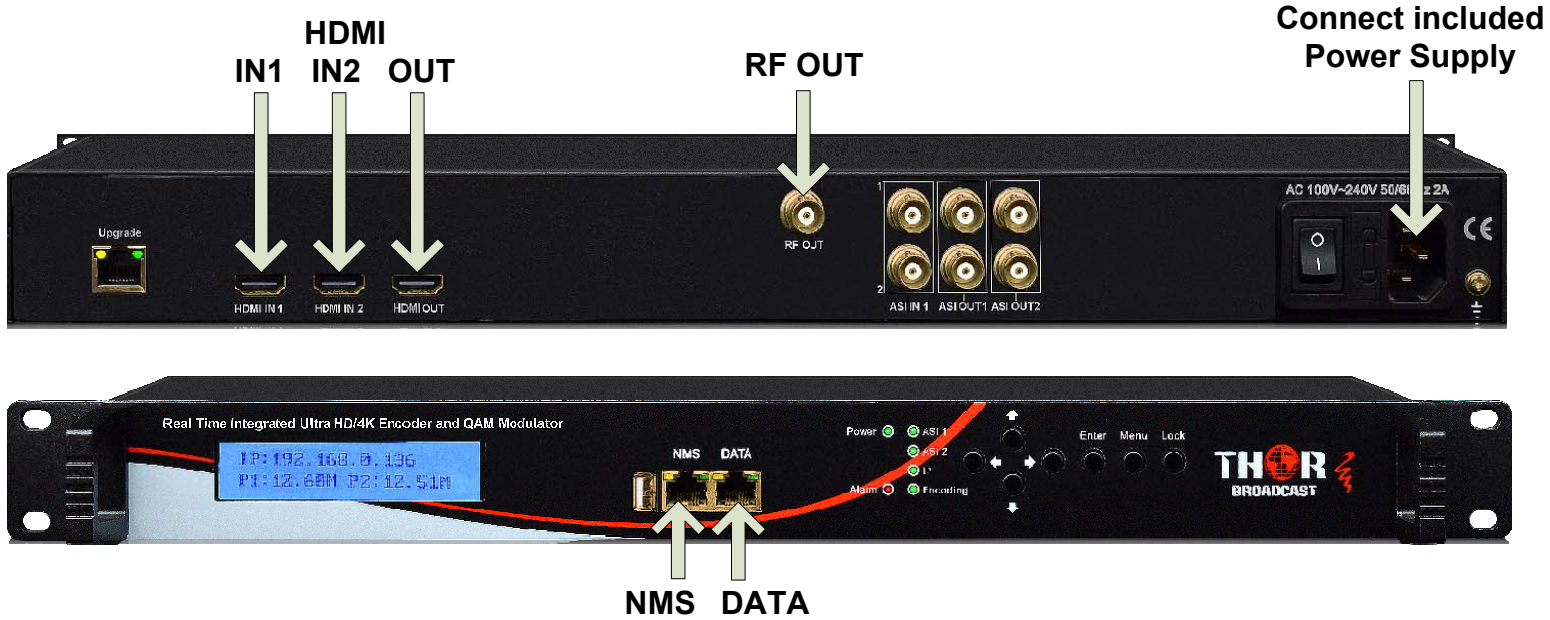
- **Connect the NMS port to your PC using an ethernet cable**
- **Open web browser and go to http://192.168.0.136**
- **Login/Password: admin/admin**

Step 2: Encoder

2). Choose Input

Parameters
- ▶ Encoder
- ▶ TS Config
- ▶ Modulator
- ▶ IP Stream
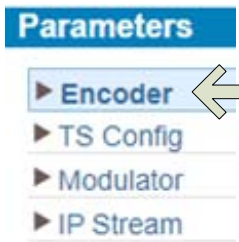
1). Select "Encoder" from the main menu

Common

Input Select: HDMI1

Apply

3). Click "Apply" to save changes

HDMI Link indicators must be green

"Input Lock" must be green

HDMI1:	🟢	Input Lock: 🟢
HDMI2:	🟢	Encoder Chip Status: 🟢
Input Information:	hdmi1:1920 x 1080 59.940 P YCbCr444 BT.709 8bit 2CH HDCP	Bitrate(Act/Max): 23.83/24.99 Mbps

Step 3: TS Config

Parameters

- ▶ Encoder
- ▶ TS Config ⟵ **1). Select "TS Config"**
- ▶ Modulator
- ▶ IP Stream

Stream Select | General | PID Bypass

⟹ Lose ⟹ Locked

⟹1: ASI 1 (prog: 0) [0.0/0.0M]
⟹2: ASI 2 (prog: 0) [0.0/0.0M]
⟹3: Encoder (prog: 1/1) [23.8/25.0M]
  ⊞1: ☑ [1]

3). Check the box to select detected program

☑ CA Filter
☑ PID Remap

Refresh Input
Refresh Output
===>
<===
All Input
All Output

4). Click "➜" to assign selected program to Output

⟹ Normal ➡ Overflow

⊟⟹Output TS (prog: 1) [23.8/27.0M]
  ⊞1: ☐ program1001 <=CH3_Encoder [1]

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

Parse program   time out: 60 seconds

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

Program Information[close]

Program From Input:	CH3_Encoder [1]
Service Name:	program1001
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:	
PMT Descriptor Tag:	☐ 0x00
PMT Descriptor Data:	(Hex)
PMT PID:	0x0020
PCR PID:	0x0021
HEVC Video PID:	0x0022
MPEG-1 Audio PID:	0x0023

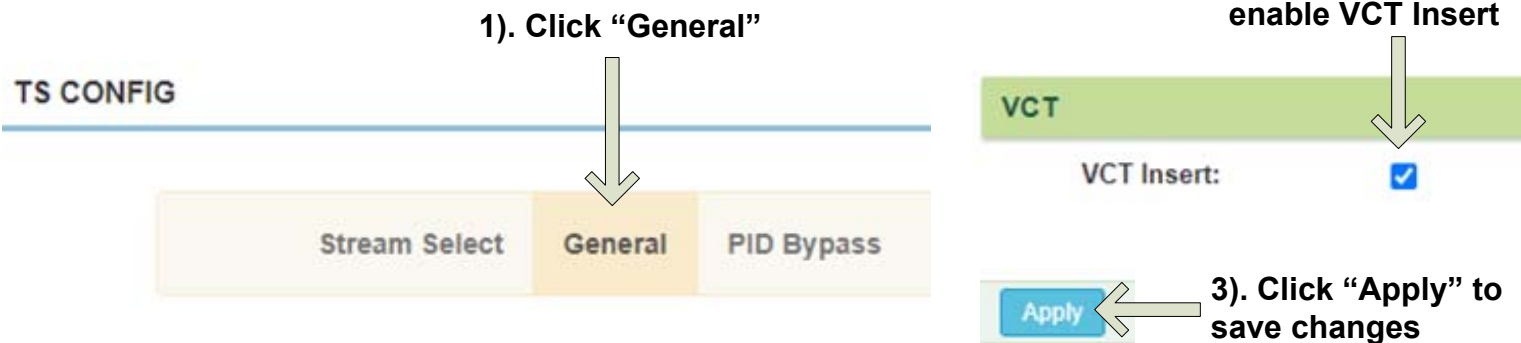**6). OPTIONAL: Major and Minor Channel Numbers may be changed to preference. (VCT must be enabled)**

Apply

7). Click "Apply" to save changes

Step 3: TS Config Continued (Enabling VCT)

2). Check box to enable VCT Insert

1). Click "General"

TS CONFIG

Stream Select	General	PID Bypass

VCT

VCT Insert: ☑

Apply

3). Click "Apply" to save changes

Step 4: Modulator

Parameters

▶ Encoder
▶ TS Config
▶ Modulator
▶ IP Stream

1). Select "Modulator" from the main menu

2). Select Pencil icon to edit

Center Frequency: 57.000 MHz   Standard: J.83B
Level(All Carriers): -1.0 dBm   Channel Info.(Alarm/Active/Total): 0/1/1

#	Frequency	Constellation	Symbol Rate	Channel Level	Status	Bit(Act/Max)	
1	57.000 MHz	64 QAM	5057 Ksps	-1.0 dB	🟢	23.8/27.0 M	✎

IMPORTANT: Status must be green

Channel Config.   [close

Standard:	J.83B ▼
Channel Level:	-1.0 (-25 ~ -1 dBm)

Channel Enable: ☑

Frequency: 57.000   (50 ~ 960 MHz)

Constellation: 64 QAM ▼

Symbol Rate: 5057   (5000 ~ 7000 Ksps)

Apply   Close

3). Check box to enable channel

4). Select desired frequency (See QAM frequency chart)

5). Click "Apply" to save changes

Step 5: IP Stream

Parameters

- ▶ Encoder
- ▶ TS Config
- ▶ Modulator
- ▶ **IP Stream**

1). Select "IP Stream" from the main menu

2). Select Pencil icon to edit

Channel Info.(Alarm/Active/Total): 0/1/1

#	IP Address	Port	Protocol	Pkt Length	Null PKT Filter	Status	Bit(Act/Max)	
1	224.2.2.2	2001	UDP	7	☐	🟢	23.8/27.0 M	✏

IMPORTANT: Status must be green

3). Check Box to Enable Channel

Channel Config.   [close]

Enable:	☑
IP Address:	224.2.2.2
Port:	2001
Protocol:	UDP
Pkt Length:	7
Null PKT Filter:	☐

Apply   Close

4). IP address and Port Number may be modified

5). Click "Apply" to save changes

IMPORTANT:

Streams are accessed via the DATA port.

Connect to the stream using the appropriate IP address and port number:

FOR EXAMPLE:

udp://@224.2.2.2:2001

Step 6: Save Configuration

System
- Network
- Password
- **Configuration** ← 1). Select "Configuration" from the main menu
- Firmware
- Date | Time
- Log

IMPORTANT:

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

| Save | Restore | Factory Set | Backup | Load |

↑
2). Select the "Save" tab

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		