H-16QAM-IP   Quick Setup Guide

Connect included power cable

Step 1: CONNECTIONS

TOP ROW: RF INPUTS 1-16

BOTTOM ROW: LOOP OUTPUTS 1-16

ASI IN 1   **NMS Port**   **POWER LED**

ASI IN 2   **DATA ports**   **USB**   **ON/OFF Power Switch**
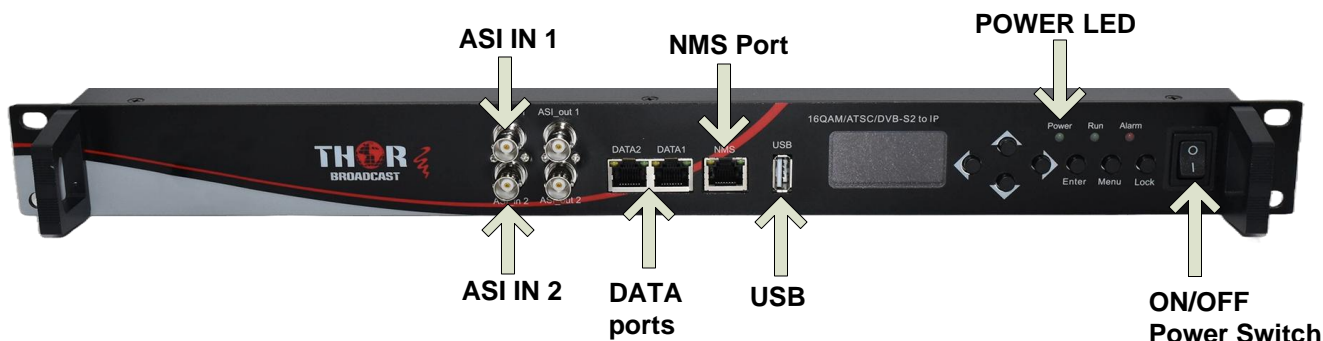
Using Loop Jumper Cables:

The unit is supplied with a set of 15 Loop Jumper Cables.

Connect the RF LOOP OUT of the previous channel to the RF IN of the next channel.

|	
RF LOOP 1 → RF IN 2	**RF LOOP 9 → RF IN 10**
RF LOOP 2 → RF IN 3	**RF LOOP 10 → RF IN 11**
RF LOOP 3 → RF IN 4	**RF LOOP 11 → RF IN 12**
RF LOOP 4 → RF IN 5	**RF LOOP 12 → RF IN 13**
RF LOOP 5 → RF IN 6	**RF LOOP 13 → RF IN 14**
RF LOOP 6 → RF IN 7	**RF LOOP 14 → RF IN 15**
RF LOOP 7 → RF IN 8	**RF LOOP 15 → RF IN 16**
RF LOOP 8 → RF IN 9	

RF SIGNAL IN

RF SIGNAL OUT

IMPORTANT:

A small amount of signal loss will occur with each consecutive loop used. A splitter may be used to create separate loops in order to reduce this signal loss.

Step 2: CONNECT TO PC
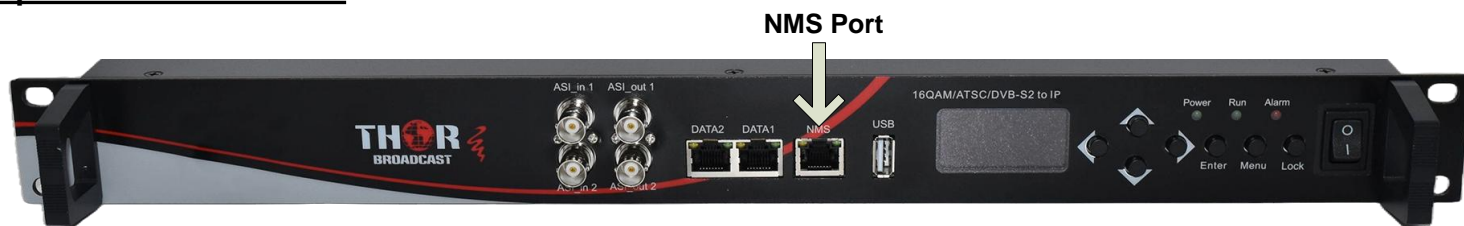
NMS Port

- **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 3: CONFIGURE INPUTS

Parameters

▶ Tuner ⟵ **SELECT "TUNER" FROM THE MAIN MENU**
▶ TS Config
▶ USB Media

CLICK "EDIT"

1	J.83B	0.000 Mbps	Quality: 0%		Frequency: 63 MHz	Edit
			Strength: 0%		Symbolrate: 5057 Ksps	
			Power: -91.5		Constellation: 64 QAM	
			C/N: 0			
			BER: 1.0E-09			

Standard: J.83B ⟵ **SELECT MODULATION STANDARD**

Frequency: 63.000 MHz ⟵ **ENTER THE DESIRED FREQUENCY FOR THE APPROPRIATE CHANNEL (SEE QAM FREQUENCY CHART)**

Constellation: 64 QAM

Symbolrate: 5057 Ksps

Apply ⟵ **CLICK "APPLY" TO SAVE**

1	J.83B	26.971 Mbps	Quality: 99%		Frequency: 63 MHz	Edit
			Strength: 86%		Symbolrate: 5057 Ksps	
			Power: -14		Constellation: 64 QAM	
			C/N: 39.25			
			BER: 0.0E+00			

You should now see signal quality/strength information, the link light will go green, and show your bitrate. Repeat these steps as needed for the rest of the channels.

Step 4: PROGRAM SELECTION

1). CLICK "TS CONFIG" FROM THE MAIN MENU

Parameters

▸ Tuner
▸ TS Config
▸ USB Media

2). Choose DATA1 or DATA2

DATA 1 ▾

DATA 1
DATA 2

⇒Lose ⇒ Locked

⇒1 Tuner DVBC (prog: 0)	[6.917 M]
⇒2 Tuner DVBC (prog: 0)	[6.917 M]
⇒3 Tuner DVBC (prog: 0)	[6.917 M]
⇒4 Tuner DVBC (prog: 0)	[6.917 M]
⇒5 Tuner DVBC (prog: 0)	[6.917 M]
⇒6 Tuner DVBC (prog: 0)	[6.917 M]
⇒7 Tuner DVBC (prog: 0)	[6.917 M]
⇒8 Tuner DVBC (prog: 0)	[6.917 M]
⇒9 Tuner DVBC (prog: 0)	[6.917 M]
⇒10 Tuner DVBC (prog: 0)	[6.917 M]
⇒11 Tuner DVBC (prog: 0)	[6.917 M]
⇒12 Tuner DVBC (prog: 0)	[6.917 M]
⇒13 Tuner DVBC (prog: 0)	[6.917 M]
⇒14 Tuner DVBC (prog: 0)	[6.917 M]
⇒15 Tuner DVBC (prog: 0)	[6.917 M]
⇒16 Tuner DVBC (prog: 0)	[6.917 M]
⇒17 ASI (prog: 0)	[0.000 M]
⇒18 ASI (prog: 0)	[0.000 M]

IMPORTANT: CONFIRM THAT CHANNELS ARE SHOWING BITRATE INFO

3). SELECT A CHANNEL AND CLICK "PARSE PROGRAM"

Parse program   time out: 60   seconds

4). CLICK "+" TO EXPAND DETECTED PROGRAMS

⇒Lose ⇒ Locked

⊞⇒1 Tuner DVBC (prog: 0/1)	[6.974 M]
⇒2 Tuner DVBC (prog: 0)	[6.974 M]
⇒3 Tuner DVBC (prog: 0)	[6.974 M]

5). CHECK THE BOX TO SELECT THE PROGRAM

⇒Lose ⇒ Locked

⊟⇒1 Tuner DVBC (prog: 1/1)	[6.318 M]
⊞1: ☑ THOR FI	
⇒2 Tuner DVBC (prog: 0)	[6.318 M]
⇒3 Tuner DVBC (prog: 0)	[6.318 M]
⇒4 Tuner DVBC (prog: 0)	[6.318 M]
⇒5 Tuner DVBC (prog: 0)	[6.318 M]
⇒6 Tuner DVBC (prog: 0)	[6.318 M]
⇒7 Tuner DVBC (prog: 0)	[6.318 M]
⇒8 Tuner DVBC (prog: 0)	[6.318 M]

☑ CA Filter
☑ PidRemap

Refresh Input
Refresh Output
===>

⇒Normal ⇒ Overflow

⊟⇒Output (prog: 1)
⊞1: ☐ THOR FI => Tuner1

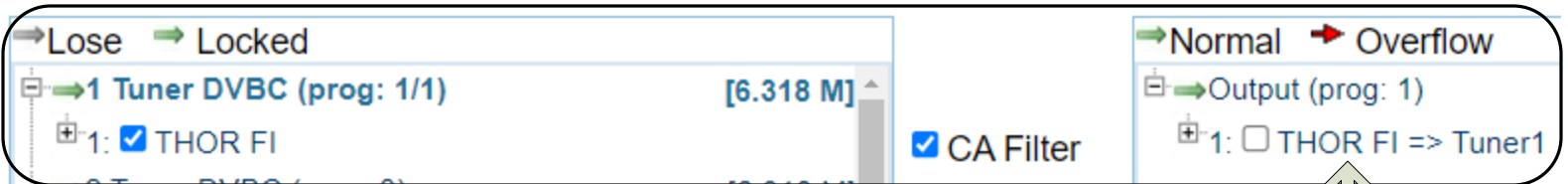**7). PROGRAM WILL SHOW UNDER OUTPUT**

6). CLICK "➡" BUTTON

REPEAT THESE STEPS AS NEEDED FOR THE REST OF THE CHANNELS

Step 5: STREAMING

CONTINUE FROM "TS CONFIG" SCREEN

→Lose → Locked   →Normal ➡ Overflow

⊟→1 Tuner DVBC (prog: 1/1)   [6.318 M]   ⊟→Output (prog: 1)
  ⊞ 1: ☑ THOR FI   ☑ CA Filter   ⊞ 1: ☐ THOR FI => Tuner1

2). A POPUP WINDOW WILL SHOW THE IP STREAMING INFORMATION FOR THAT PROGRAM

1). CLICK THE PROGRAM NAME

Program From Input:	CH1_Tuner 1 [2]
Service Name:	
Program Number:	1001
IP-Port:	224.2.2.2 : 2000
Protocol:	UDP
TS ID:	1
ON ID:	1
Logic Channel Number:	1
Biss Key:	---
Service Type:	0x00
Service Provider:	
PMT Descriptor Tag:	☐ 0x00
PMT Descriptor Data:	(Hex)
PMT PID:	0x0020
PCR PID:	0x0021
MPEG-2 Video PID:	0x0022 ☑
AC3 Audio PID:	0x0023 ☑

Apply   Close

DEFAULT STREAMING IP:
224.2.2.2

DEFAULT PORTS:

CH#	Data1	Data2
1	2000	3000
2	2002	3002
3	2004	3004
4	2006	3006
5	2008	3008
6	2010	3010
7	2012	3012
8	2014	3014
9	2016	3016
10	2018	3018
11	2020	3020
12	2022	3022
13	2024	3024
14	2026	3026
15	2028	3028
16	2030	3030
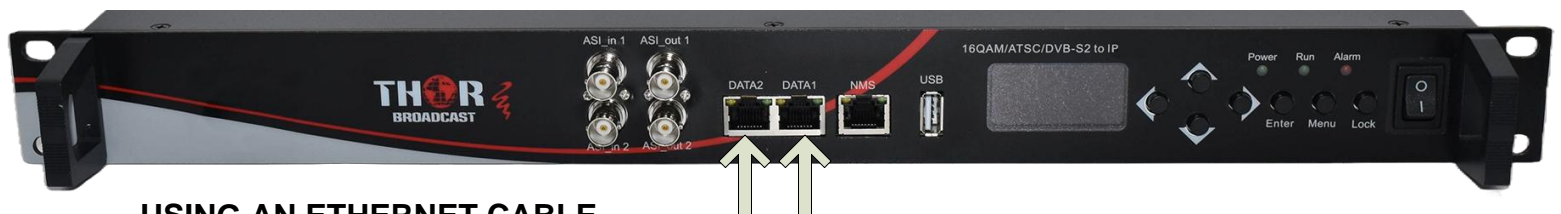
USING AN ETHERNET CABLE, CONNECT YOUR STREAMING DEVICE(S) TO PORT DATA1 AND/OR DATA2

DATA2   DATA1

ACCESS THE STREAM USING THE APPROPRIATE IP ADDRESS & PORT NUMBER: FOR EXAMPLE: udp://@224.2.2.2:2000

Step 6: SPTS Work Mode

System
- ▶ Network
- ▶ Password
- ▶ Configuration
- ▶ **Firmware**
- ▶ Log
- ▶ Reboot

1. Click "Firmware" from the main menu

2). Select "SPTS"

3). Click "Apply"

Work Mode: SPTS

Apply

NOTE: The unit can operate in two different modes: SPTS, where each TS program has its own multicast IP address, or Bypass, where all programs from each tuner share one MPTS (multi-program transport stream) IP address, and all available programs are muxed on this single IP address. In most cases, SPTS is the mode commonly used.

After update, you must reboot device manually.

Step 7: SAVE CONFIGURATION

System
- ▶ Network
- ▶ Password
- ▶ **Configuration**
- ▶ Firmware
- ▶ Log
- ▶ Reboot

1. Click "Configuration" from the main menu

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

Save	Restore	Factory Set	Backup	Load

When you change the parameter,you should save configuration ,otherwise the new configuration will lost after reboot.

2. Press "Save config" button   Save config

Scan for more info:

saving configuration,please wait...

3). Confirmation message will appear briefly until saving is complete.

CATV QAM Channel Center Frequency – 54 MHz to 860 MHz

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	119	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		

THOR BROADCAST

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