

# H-16ATSC-IP

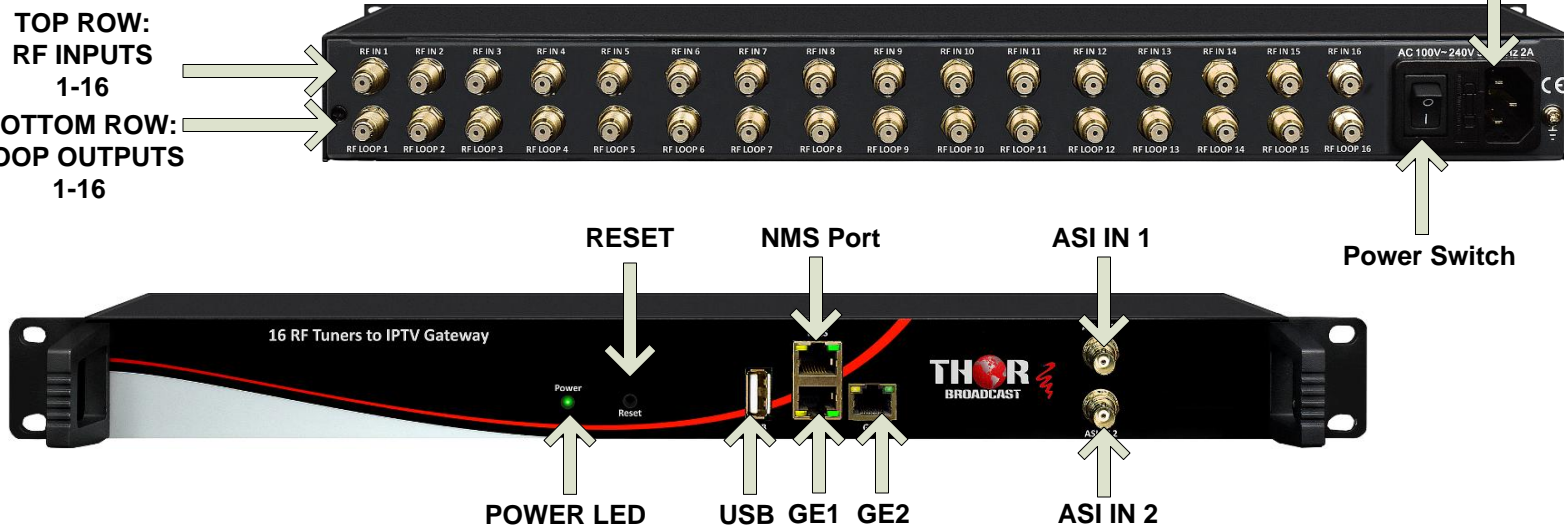
## Quick Setup Guide

### Step 1: CONNECTIONS

Connect the included power supply

TOP ROW:  
RF INPUTS  
1-16

BOTTOM ROW:  
LOOP OUTPUTS  
1-16



#### 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



### **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



- 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 Input
- ▶ ASI Input
- ▶ TS Config
- ▶ Biss
- ▶ SPTS select

SELECT "TUNER INPUT" FROM THE MAIN MENU

CLICK "EDIT"

1 Tuner ATSC    Quality :     Strength:     0.000 Mbps    Freq:750.000MHz   

### Detail Parameter

Frequency:  MHz  
Channel Name:

ENTER THE DESIRED  
FREQUENCY FOR THE  
APPROPRIATE CHANNEL  
(SEE ATSC FREQUENCY CHART)

CLICK SET TO SAVE

1 Tuner ATSC    Quality :     Strength:     7.634 Mbps    Freq:177.000MHz   

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

CLICK "SPTS SELECT"  
FROM THE MAIN MENU

### Parameters

- ▶ Tuner Input
- ▶ ASI Input
- ▶ TS Config
- ▶ Biss
- ▶ SPTS select

→ Lose	→ Locked
→1 Tuner ATSC (prog: 0)	[7.749 M]
→2 Tuner ATSC (prog: 0)	[7.749 M]
→3 Tuner ATSC (prog: 0)	[7.749 M]
→4 Tuner ATSC (prog: 0)	[7.749 M]
→5 Tuner ATSC (prog: 0)	[7.749 M]
→6 Tuner ATSC (prog: 0)	[7.749 M]
→7 Tuner ATSC (prog: 0)	[7.749 M]
→8 Tuner ATSC (prog: 0)	[7.749 M]
→9 Tuner ATSC (prog: 0)	[7.749 M]
→10 Tuner ATSC (prog: 0)	[7.749 M]
→11 Tuner ATSC (prog: 0)	[7.749 M]
→12 Tuner ATSC (prog: 0)	[7.749 M]
→13 Tuner ATSC (prog: 0)	[7.749 M]
→14 Tuner ATSC (prog: 0)	[7.749 M]
→15 Tuner ATSC (prog: 0)	[7.749 M]
→16 Tuner ATSC (prog: 0)	[7.749 M]
→17 ASI (prog: 0)	[0.000 M]
→18 ASI (prog: 0)	[0.000 M]

**IMPORTANT:**  
CONFIRM  
THAT  
CHANNELS  
ARE  
SHOWING  
BITRATE  
INFO

SELECT A CHANNEL AND  
CLICK "PARSE PROGRAM"

Parse program

time out: 60 seconds

CLICK "+" TO EXPAND  
DETECTED PROGRAMS

→ Lose	→ Locked
+ →1 Tuner ATSC (prog: 0/1)	[7.864 M]
→2 Tuner ATSC (prog: 0)	[7.864 M]
→3 Tuner ATSC (prog: 0)	[7.864 M]

CHECK THE BOX TO SELECT  
THE PROGRAM

→ Lose	→ Locked
☑ →1 Tuner ATSC (prog: 1/1)	[7.852 M]
+ 1: <input checked="" type="checkbox"/> THOR FI	
→2 Tuner ATSC (prog: 0)	[7.852 M]
→3 Tuner ATSC (prog: 0)	[7.852 M]
→4 Tuner ATSC (prog: 0)	[7.852 M]
→5 Tuner ATSC (prog: 0)	[7.852 M]
→6 Tuner ATSC (prog: 0)	[7.852 M]
→7 Tuner ATSC (prog: 0)	[7.852 M]
→8 Tuner ATSC (prog: 0)	[7.852 M]

- CA Filter
- PidRemap

Refresh Input

Refresh Output

⇒⇒⇒

→ Normal	→ Overflow
☑ → Output (prog: 1)	
+ 1: <input type="checkbox"/> THOR FI => Tuner1	

PROGRAM WILL SHOW  
UNDER OUTPUT

CLICK "⇒" BUTTON

REPEAT THESE STEPS AS NEEDED FOR THE REST OF THE CHANNELS

## Step 5: STREAMING

CONTINUE FROM "SPTS SELECT" SCREEN



CLICK THE PROGRAM NAME

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

Program Name: THOR FI

Program Number: 32

GE1 Addr: 224.2.2.2

GE1 Port: 3000

GE2 Addr: 224.2.2.2

GE2 Port: 3002

Protocol: UDP

Biss Key: ---

Service Type: 0x01

Service Provider:

PMT PID: 0x0020

PCR PID: 0x0021

MPEG-2 Video PID:  0x0022

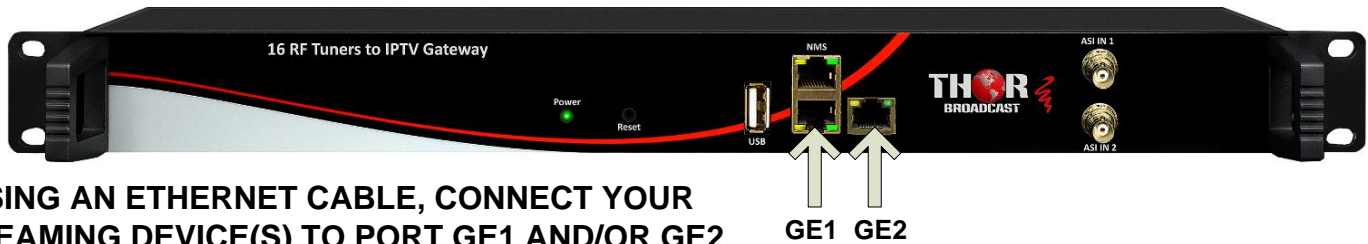
AC3 Audio PID:  0x0023

Save Close

DEFAULT  
STREAMING IP:  
**224.2.2.2**

DEFAULT PORTS:

CH#	GE1	GE2
1	3000	3002
2	3004	3006
3	3008	3010
4	3012	3014
5	3016	3018
6	3020	3022
7	3024	3026
8	3028	3030
9	3032	3034
10	3036	3038
11	3040	3042
12	3044	3046
13	3048	3050
14	3052	3054
15	3056	3058
16	3060	3062



USING AN ETHERNET CABLE, CONNECT YOUR STREAMING DEVICE(S) TO PORT GE1 AND/OR GE2

GE1 GE2

ACCESS THE STREAM USING THE APPROPRIATE IP ADDRESS & PORT NUMBER:  
FOR EXAMPLE: `udp://@224.2.2.2:3008`

## Step 6: SAVE CONFIGURATION

### **IMPORTANT:**

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

#### System

- ▶ Network
- ▶ Password
- ▶ **Save | Restore**
- ▶ Backup | Load
- ▶ Firmware

1. Click "Save | Restore" from the main menu

#### SAVE CONFIGURATION

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

Save config

2. Press "Save config" button

saving configuration, please wait...

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

Scan for more info:



ATSC - US Television Channels (MHz)					
Channel	MHz Center Frequency	Channel	MHz Center Frequency	Channel	MHz Center Frequency
2	57	27	551	52	701
3	63	28	557	53	707
4	69	29	563	54	713
5	79	30	569	55	719
6	85	31	575	56	725
7	177	32	581	57	731
8	183	33	587	58	737
9	189	34	593	59	743
10	195	35	599	60	749
11	201	36	605	61	755
12	207	37	611	62	761
13	213	38	617	63	767
14	473	39	623	64	773
15	479	40	629	65	779
16	485	41	635	66	785
17	491	42	641	67	791
18	497	43	647	68	797
19	503	44	653	69	803
20	509	45	659		
21	515	46	665		
22	521	47	671		
23	527	48	677		
24	533	49	683		
25	539	50	689		
26	545	51	695		