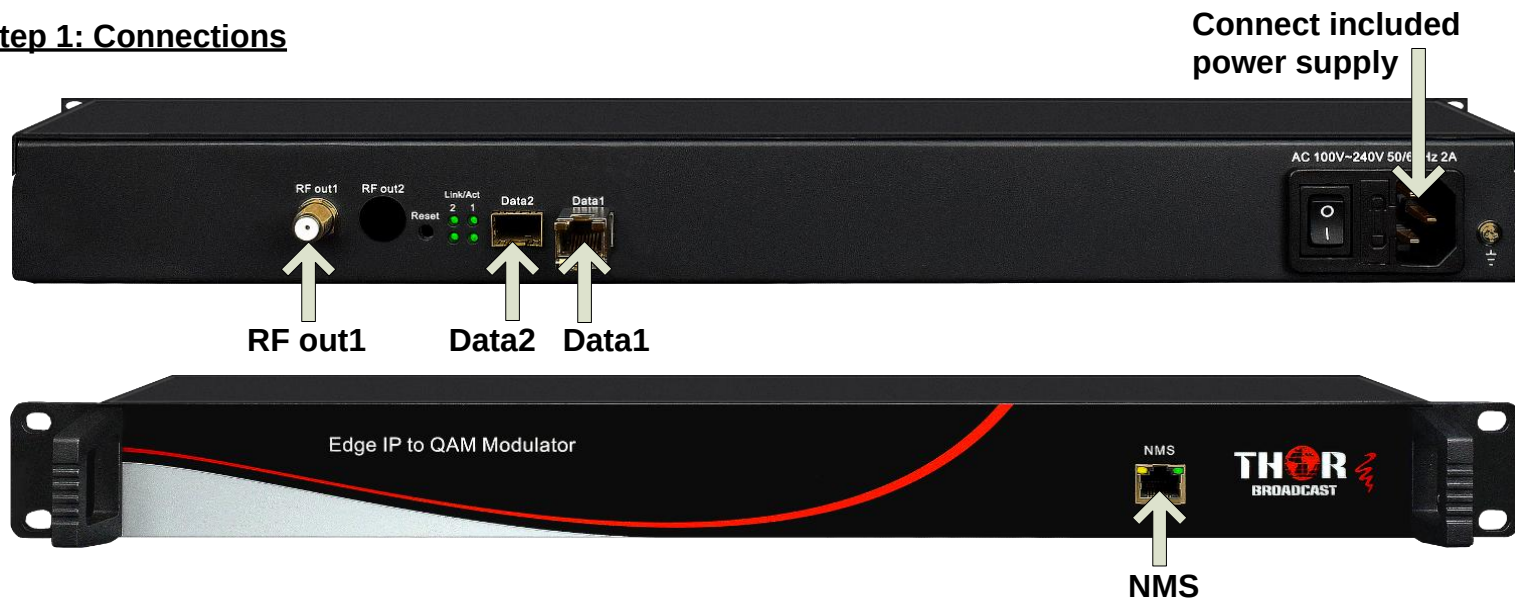


## H-IPRF-8ATSC

## Quick Setup Guide

### Step 1: Connections



### Step 2: Login to NMS

- 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: Modulator

▶ TS Config

▶ **Modulator**

▶ IP Stream

1). Select "Modulator" from the main menu

2). Status light must be green and showing active bitrate

| # | Frequency   | Gain offset | Status | Bit(Act/Max) |
|---|-------------|-------------|--------|--------------|
| 1 | 473.000 MHz | 0.0 dB      | ●      | 18.7/19.4 M  |
| 2 | 479.000 MHz | 0.0 dB      | ●      | 18.8/19.4 M  |
| 3 | 485.000 MHz | 0.0 dB      | ●      | 18.7/19.4 M  |
| 4 | 491.000 MHz | 0.0 dB      | ●      | 18.8/19.4 M  |

3). Click pencil icon to edit

Level(All Carriers):  (-20 ~ +10 dBm)

---

Channel Enable: ☒

Start Frequency:  (50 ~ 960 MHz)

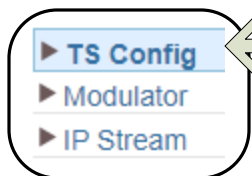
Gain offset:  (-10 ~ 0 dB)

4). Enter desired Start Frequency (See ATSC chart)

Apply

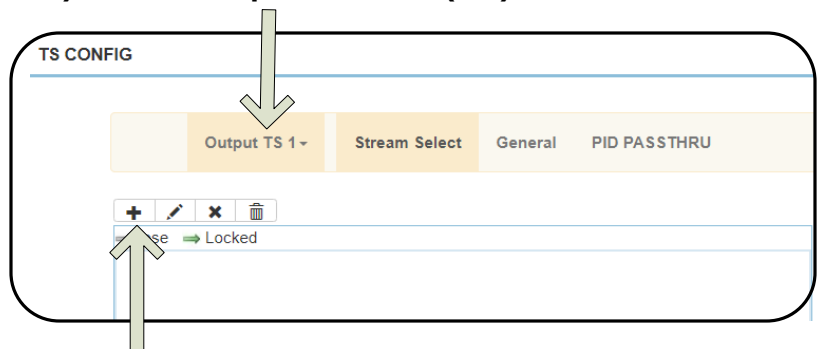
5). Click "Apply" to confirm changes

### Step 3: TS Config



1). Select  
"TS Config"  
from the  
main menu

#### 2). Select Output Channel (1-8)



3). Click "+" to add the incoming IP multicast address.

A screenshot of a form for entering IP address and port information. The fields are: 'Data Interface' (dropdown menu with 'DATA-1' selected), 'Unicast' (checkbox), 'IP Address' (text field with '224.2.2.2'), 'Port' (text field with '1001'), 'Step' (checkbox with '1'), 'End Port' (text field with '1032'), 'IGMP Snooping' (dropdown menu with 'V2' selected), and 'Protocol' (dropdown menu with 'UDP' selected). A green arrow points to the 'IP Address' field.

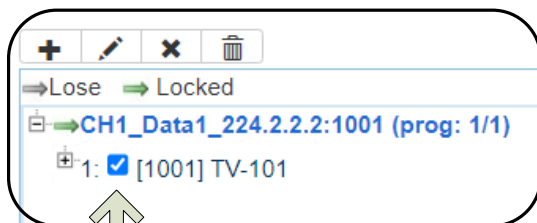
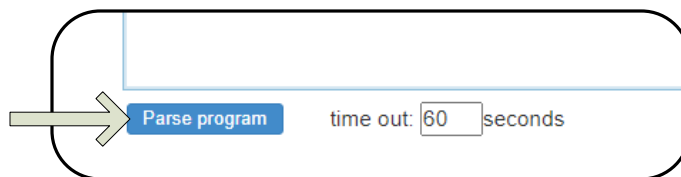
4). Enter the IP address and port number of  
the incoming stream

5). RECOMMENDED SETTING:  
IGMP Snooping = V2

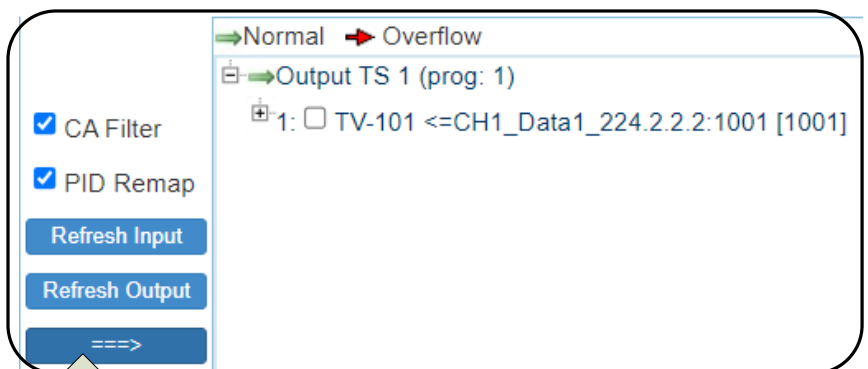


6). Click "Add"

7). Discover Inputs:  
Click "Parse Program"  
(scans IP Multicast for TS  
programs)



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

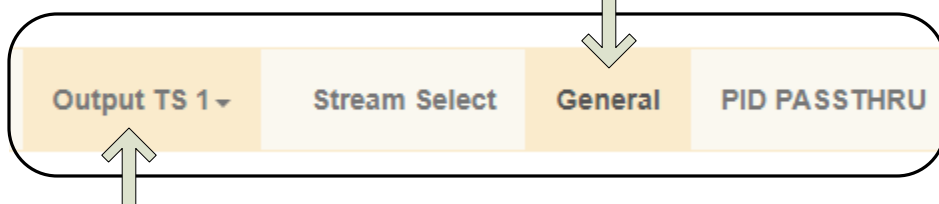
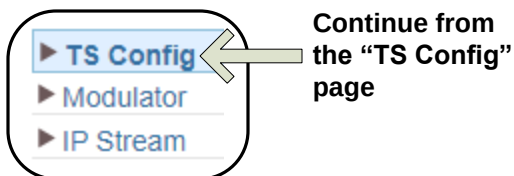


9). Press the Blue "→" button to move the  
selected program from the Input side to the  
Output side

REPEAT THE ABOVE STEPS AS NEEDED TO CONTINUE ADDING MORE PROGRAMS

#### Step 4: HOW TO ENABLE VIRTUAL CHANNELS

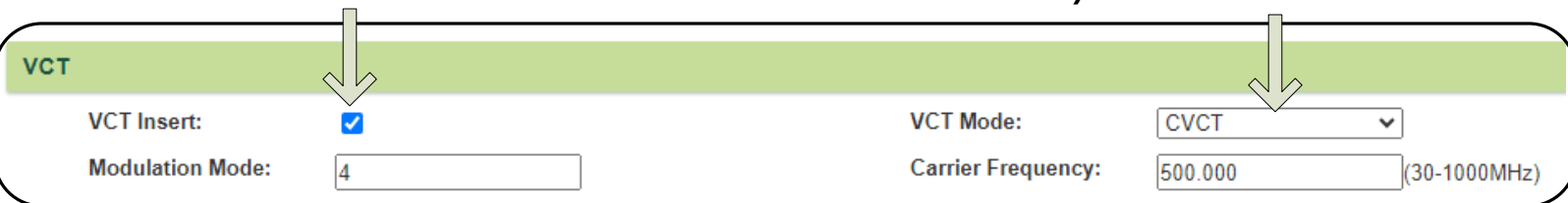
1). Select "General" Tab



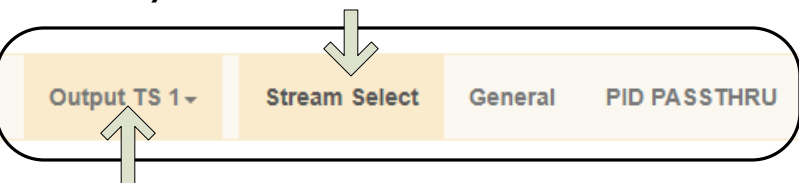
2). Select Output TS (1-8)

3). Check box to enable VCT Insert

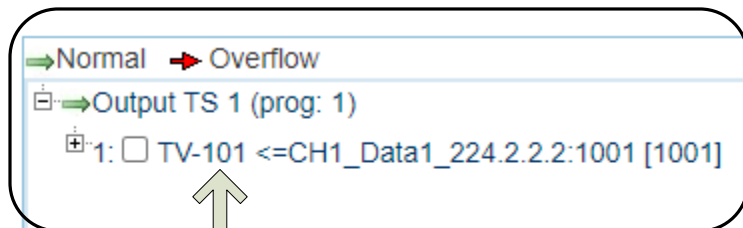
4). Set VCT Mode to "CVCT"



5). Select "Stream Select" Tab



6). Select Output TS (1-8)



7). Click on the output program name

Program Information [close]

Program From Input: CH1\_Data1\_224.2.2.2:1001 [1001]

Service Name: TV-101

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: Encoder 1

PMT Descriptor Tag: ☐ 0x00

PMT Descriptor Data: (Hex)

PMT PID: 0x0020

PCR PID: 0x0021

MPEG-2 Video PID: ☒ 0x0022

AC3 Audio PID: ☒ 0x0023

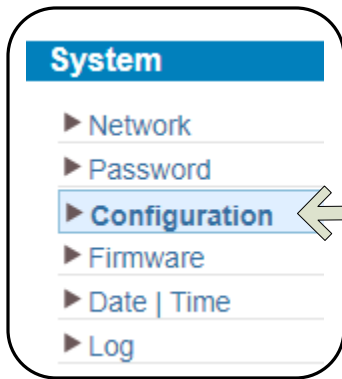
Apply

8). Major/Minor Channel Numbers may now be set to preference

9). Click "Apply" to save changes

REPEAT THE ABOVE STEPS AS NEEDED FOR ALL TS OUTPUTS

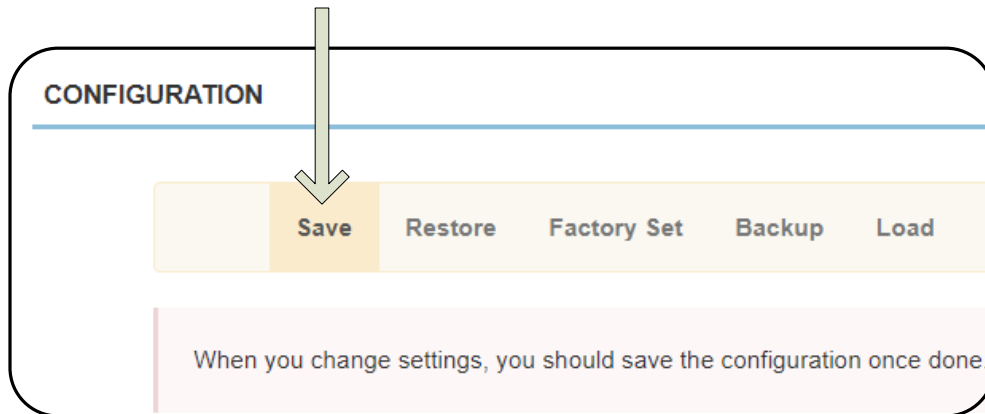
## Step 5: SAVE SETTINGS



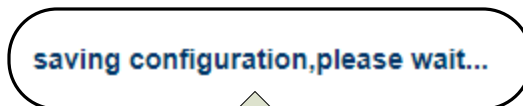
1). Select  
"Configuration"  
from the main  
menu

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

2). Click the save tab



3). Press "Save config" button



4). 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                  |         |                      |