

Quick configuration Guide for H-IRD-V3-ATSC / H-IRD-V3S

Login instructions:

In order to log in to the Modulator NMS port, please set your PC's NIC Ethernet card to the following IP address: 192.168.0.100.

Access Modulator GUI by typing derail IP address **192.168.0.136** in to the browser

Login /password – admin/admin

The IRD has 3 Different inputs: RF , IP and DVB-ASI

The unit has several outputs: SDI / HDMI CVBS /ASI / IP (UDP Unicast multicast)

Inputs:

It can take in different types of signals:

ATSC RF:

DVB-S/S2 RF

QAM RF:.

IP UDP Multicast / Unicast:

DVB-ASI:

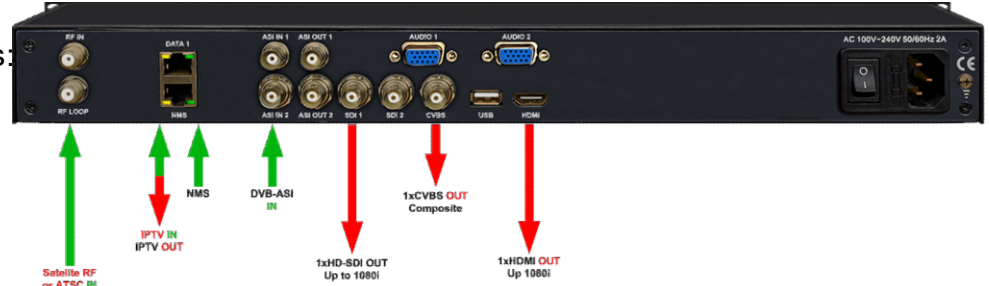
Outputs:

It can send out signals in various ways:

ASI: For distributing MPEG transport streams.

IP: Sending content over computer networks.

Decoder Video: It can provide video in different formats such as SDI, HDMI, YPbPr (component video), and CVBS (composite video).



Applications and Conversions:

Decode (SATT DVB-S/S2 RF) to SDI, HDMI, CVBS, YPbPr Video and Audio

Decode (Tersial ATSC RF) to SDI, HDMI, CVBS, YPbPr Video and Audio

Decode (CABLE TV QAM RF or ISDB-T) to SDI, HDMI, CVBS, YPbPr Video and Audio

Satellite DVB-S/S2 RF to IP - UDP

Off Air ATSC RF to IP

Cable QAM RF to IP

Satellite DVB-S/S2 RF to DVB-ASI

Off Air ATSC RF to DVB-ASI

Cable QAM RF to DVB-ASI

IP-ASI It can change IP input streams into two ASI streams.

ASI-IP It can convert ASI input as IP output.

You can merge two ASI streams into one.

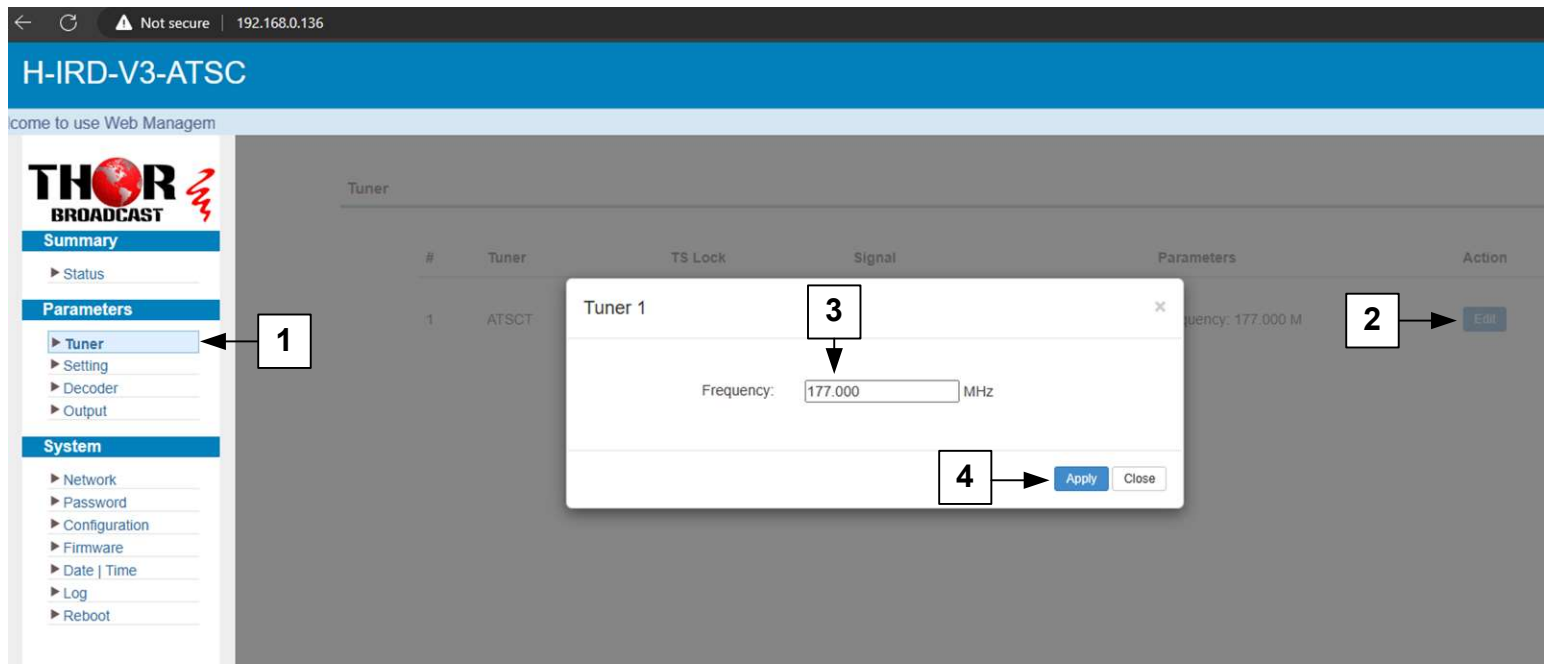
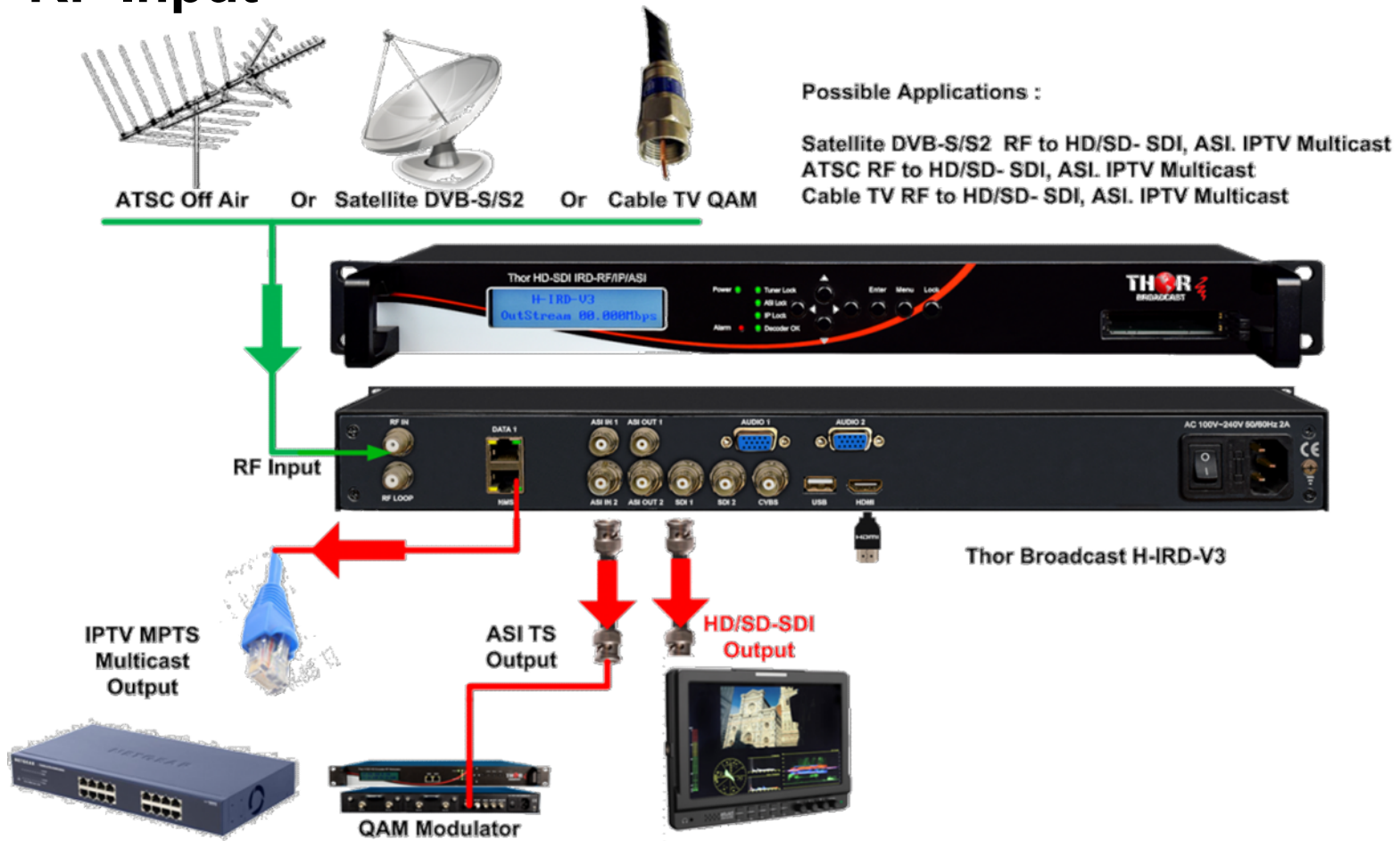
It supports IP streaming with one MPTS and eight SPTS streams over UDP and RTP/RTSP, with ASI output.

IP to VIDEO/AUDIO - It can convert IP streams to video formats like SDI, HDMI, CVBS, and YPbPr.

ASI to VIDEO/AUDIO ASI streams can be converted to video formats too, like SDI, HDMI, CVBS, and YPbPr.

In simple terms, this IRD is like a translator for different types of TV signals. It can take in signals from antennas, satellites, cables, the internet, and other sources, and then it can change them into different types of signals or video formats, so you can watch them on your TV or send them over the internet.

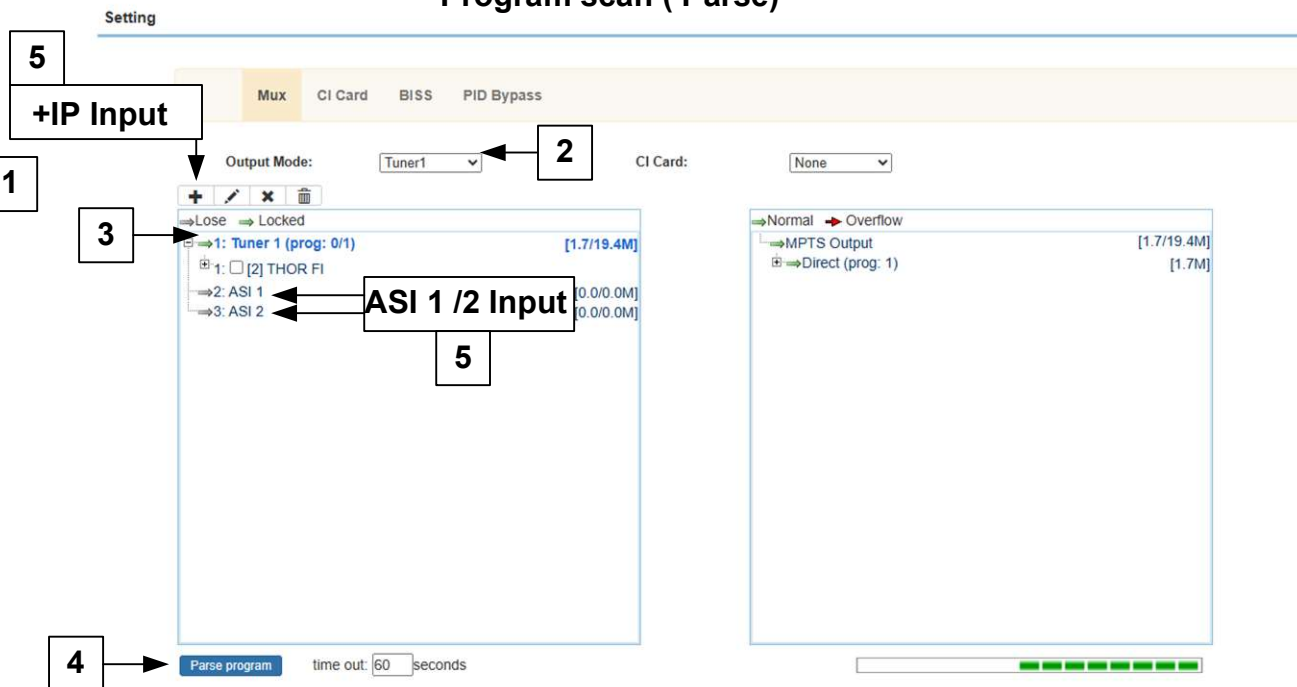
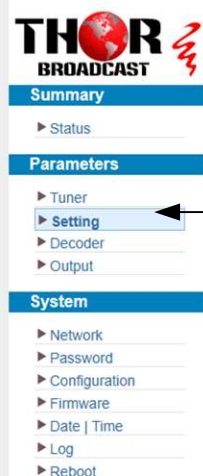
RF Input



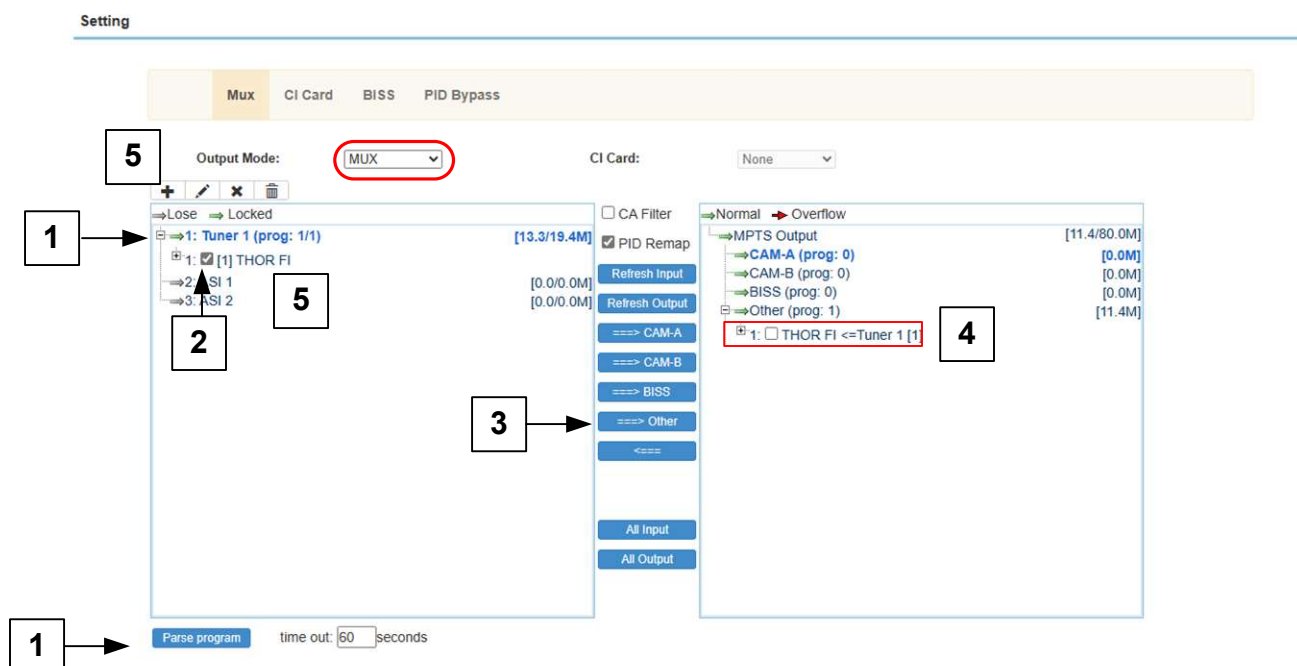
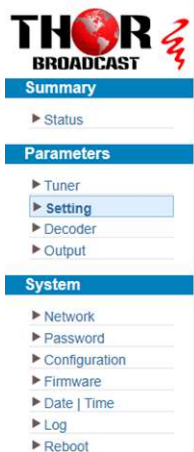
Once you have logged into the NMS, you will need input your RF frequency information

1. First you will click the Tuner tab on the right column of the GUI
2. Click the edit button to bring up the tuner input window.
3. Enter the tuner center frequency to the corresponding channel
4. Hit apply

Selecting Program from the ATSC or DVBS 2 tuner or ASI or IP Input – Program scan (Parse)



1. Click setting tab in the left column
2. Go to output mode, then click Tuner 1 (If on MUX output mode, follow steps below)
3. Click the words tuner 1
4. Click parse program at the bottom of the screen
5. The same process can be done with ASI 1, 2 inputs and IP input by selecting “+” sign



If output mode is on MUX, follow these step.

1. Click tuner 1, then parse it.
2. Click the plus sign on Tuner 1 to expand the program then check the box next to the program name.
3. Once checked click the “Other” button in the middle to assign the output
4. Make sure you see your program (EX: THOR F1) on the Normal – Overflow table
5. The same proces can be done with ASI 1, 2 inputs and IP input by selecting “+” sign

Decoder

Video Format: 1080I@60
 Program Select: THOR FI
 Brightness: NULL
 Saturation: 50
 Contrast: 50
 Volume: 100
 Audio1 Mode: Stereo
 Audio1 Select: Track 1 - eng
 Audio2 Mode: Stereo
 Audio2 Select: Track 1 - eng
 CC 608: Disable
 CC 708: Disable
 AFD: Disable
 TeletextLine: Disable
 AC3 Pass: Disable
 Rom Version: 00.02.02.04
 Decoder Version: 08.12
 Decoder Status: ●

Update Decoder from USB Default Apply

1. Click decoder tab in the left column
2. Choose resolution from the video format drop down menu
3. Choose program from program select drop down menu
4. Click apply

IP Output from TS from RF Tuner, ASI or IP

IP Output

#	Output Enable	IP Address	Port	Protocol	Null_PKT Filter	Program	Output Bitrate	Status	Bit(Act/Max)
MPTS	<input checked="" type="checkbox"/>	224.2.2.2	2222	UDP	<input type="checkbox"/>			●	12.9/80.0 M
SPTS-1	<input type="checkbox"/>	224.2.2.2	3002	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-2	<input type="checkbox"/>	224.2.2.2	3004	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-3	<input type="checkbox"/>	224.2.2.2	3006	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-4	<input type="checkbox"/>	224.2.2.2	3008	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M

1. Click Output tab in the left column
2. Turn off Output enable for MPTS

Set Unicast or multicast SPTS streams IP address's output

IP Output

#	Output Enable	IP Address	Port	Protocol	Null_PKT Filter	Program	Output Bitrate	Status	Bit(Act/Max)
MPTS	<input type="checkbox"/>	224.2.2.2	2222	UDP	<input type="checkbox"/>			●	0.0/80.0 M
SPTS-1	<input checked="" type="checkbox"/>	224.2.2.2	3002	UDP	<input type="checkbox"/>	THOR FI	20	●	10.1/20.0 M
SPTS-2	<input type="checkbox"/>	224.2.2.2	3004	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-3	<input type="checkbox"/>	224.2.2.2	3006	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-4	<input type="checkbox"/>	224.2.2.2	3008	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-5	<input type="checkbox"/>	224.2.2.2	3010	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-6	<input type="checkbox"/>	224.2.2.2	3012	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-7	<input type="checkbox"/>	224.2.2.2	3014	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-8	<input type="checkbox"/>	224.2.2.2	3016	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-9	<input type="checkbox"/>	224.2.2.2	3018	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-10	<input type="checkbox"/>	224.2.2.2	3020	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-11	<input type="checkbox"/>	224.2.2.2	3022	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-12	<input type="checkbox"/>	224.2.2.2	3024	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-13	<input type="checkbox"/>	224.2.2.2	3026	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-14	<input type="checkbox"/>	224.2.2.2	3028	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-15	<input type="checkbox"/>	224.2.2.2	3030	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M
SPTS-16	<input type="checkbox"/>	224.2.2.2	3032	UDP	<input type="checkbox"/>	NULL	20	●	0.0/20.0 M

Apply

1. Turn on Output Enable for SPTS-1
2. Change the program from NULL to your program name discovered via parse from RF, ASI or IP
3. Apply

To find out what channel frequencies are available from an antenna in your area,
please search for your zip code on nocable.org

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