CLEAR VIEW

CLEAR VIEW

HD168A Quad HDMI HD DVBT Encoder Modulator
U S E R   M A N U A L

Contents

CLEARVIEW

DIGITAL MODULATOR

1. GENERAL

1.1 Description

The HD168A modulator is able to generate a signal in DVB-T format (Digital Terrestrial Television) from 4 x HDMI inputs.

HD168A is MPEG-4 encoding, DVB-T modulation integrated into one device to convert 4 x HDMI signals to one DVB-T RF out.

The HD168A is HDCP Compliant and works up to 1080p resolution

CLEAR VIEW

1.2 Specifications

INPUT	
Video Input	HDMI:1080P 25/30, 1080i 50/60 Max,
Input Connectors	4 x HDMI
OUT PUT	
Frequency Range	177 -858 MHz
Output Level	105 dBuV
Channel Bandwidth	7-8 MHz
RF Level Adjustment	90 to 106dBuV
Attenuation step	1dB per step
MER	35 dB typically
MODULATION	
Video Resolution	1080P25, 1080P30,1080i,576i,480i
Video Compression	HD: H.264 AVC / HP@L4.0
Audio Compression	MPEG2, AAC
Video Bit Rate	6.66 Mbit/S Max
Audio Bit Rate	60Kbits
Editable Field	Service Name, Network ID, Original NET ID, LCN, Network Name
Carrier (OFDM Mode)	8K
Guard Intervals	1/32
Code Rate (FEC)	7/8
Constellation	64 QAM
MANAGEMENT / CONTROL	
Front panel LCD control	5 Local keys on front panel
Web Management	RJ-45 Ethernet port
GENERAL	
Power Supply	AC 100~240V 50/60Hz
Consumption	20 W
Languages	English
Dimensions	19" x 6.8" x 1.75"
Weight	1.8Kg

*Specifications subject to change without prior notice.

2. INSTALLATION

2.1 What's in the Box

One HD168A Encoder / Modulator
One power cable

2.2 Connection

The HD168A unit comes standard with 4 x HDMI inputs.

Use a quality 75Ω coaxial cable with "F" connectors from the unit's RF OUT jack to the distribution system or directly to a television.

Connect the power cord to an appropriately rated AC power outlet.

Once connected to power, the device turns on and it takes about 80 seconds to be operational. Then the message "Initial Please wait" appears on the display. After 80 seconds the message "CLEARVIEW and the Frequency Out" will be displayed.

```
CLEARVIEW
627.500MHz
```

2.2.1 DEVICE Programming and Setup

Connect an Ethernet cable directly (no Cross Over cable required) to the Ethernet Port on the rear panel of the encoder and then connect the Ethernet cable to an Ethernet switch or connect an Ethernet Cable to your PC. The default IP address is **192.168.1.138**
Make sure your PC has the same first 3 IP sections, eg. 192.168.1.xx and the 4th is different from 138.

3. OPERATING INSTRUCTIONS

3.1 Description of controls and components
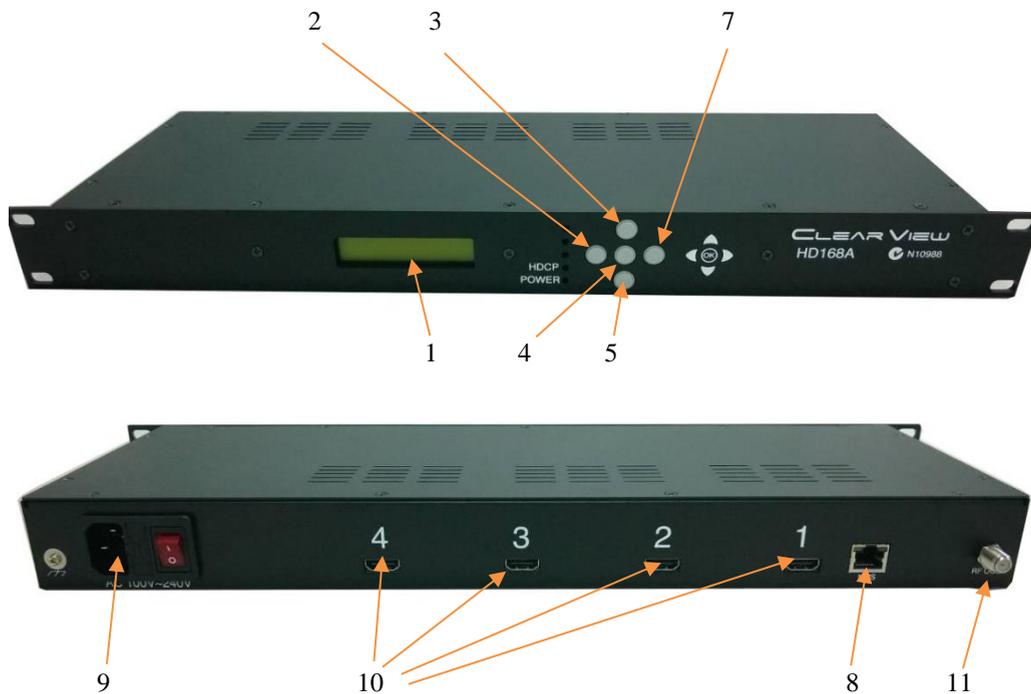
	HD168A	Description
1	LCD Display	Configuration and system status
2	Key PAD / Left	Exit from previous menu.
3	Key PAD / Up	Move between menu selections.
4	Key Centre	OK Button to select item
5	Key PAD / Down	Move between menu selections.
7	Key PAD / Right	Move between menu selections.
8	Ethernet Port	RJ-45 Chrome
9	AC input	AC 100 to 240V / 50~60Hz
10	HDMI Inputs	Up to 1080p resolution
11	RF output	"F"-Female 75Ω

ATTENTION!
FOR THIS CONFIGURATION YOU SHOULD USE OUTPUT FREQUENCIES DIFFERENT FROM THE ONES THAT YOUR TV IS CURRENTLY USING

3.2 Starting

3.2.1 Beginning Setup

DEVICE Programming and Setup
1. Apply power.
2. Connect Audio / Video source

Connecting to the GUI Interface:
1. Connect an Ethernet cable directly to the Ethernet port on the rear panel of the encoder and then connect the Ethernet cable to an Ethernet switch /router or connect an Ethernet Cable to your PC.
2. Using a Windows-based PC Select Windows Icon
3. The default IP address is **192.168.1.138** Make sure your PC has the same 3 first section IP range.

4. Key in the IP address in web browser 1 9 2 . 1 6 8 . 1 . 1 3 8

3.2.2 Step 1: Login and Adjust RF and Stream Settings

Login Password:
Default Password: 1 2 3 4

Encoder Programming and Setup via GUI Interface and click on SETUP then on SETUP/RF Out:
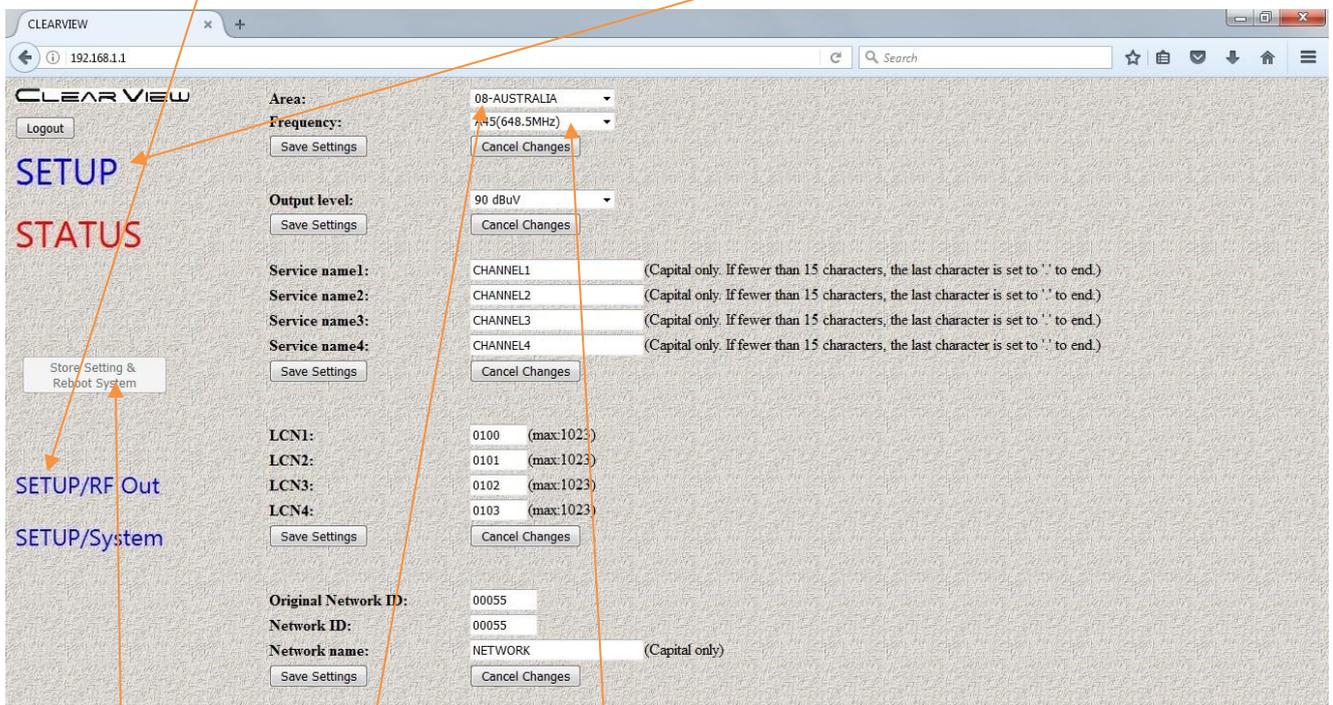
Set your Country **here** and frequency **here**. Once set press the **Save Settings** button to the left. It is the same with Output Level, Service Names, LCNs, Service IDs, Network IDs and Network Names. When setting Service names, be sure to end the name with a FULL STOP If the name contains less than 15 characters. You need to press **Save Settings** to the left of each group. After setting all these parameters, you need to press the-
Store Settings and Reboot System for them to be saved completely.

3.2.3 Step 2: Adjust System Settings

Click on SETUP then on SETUP/System:
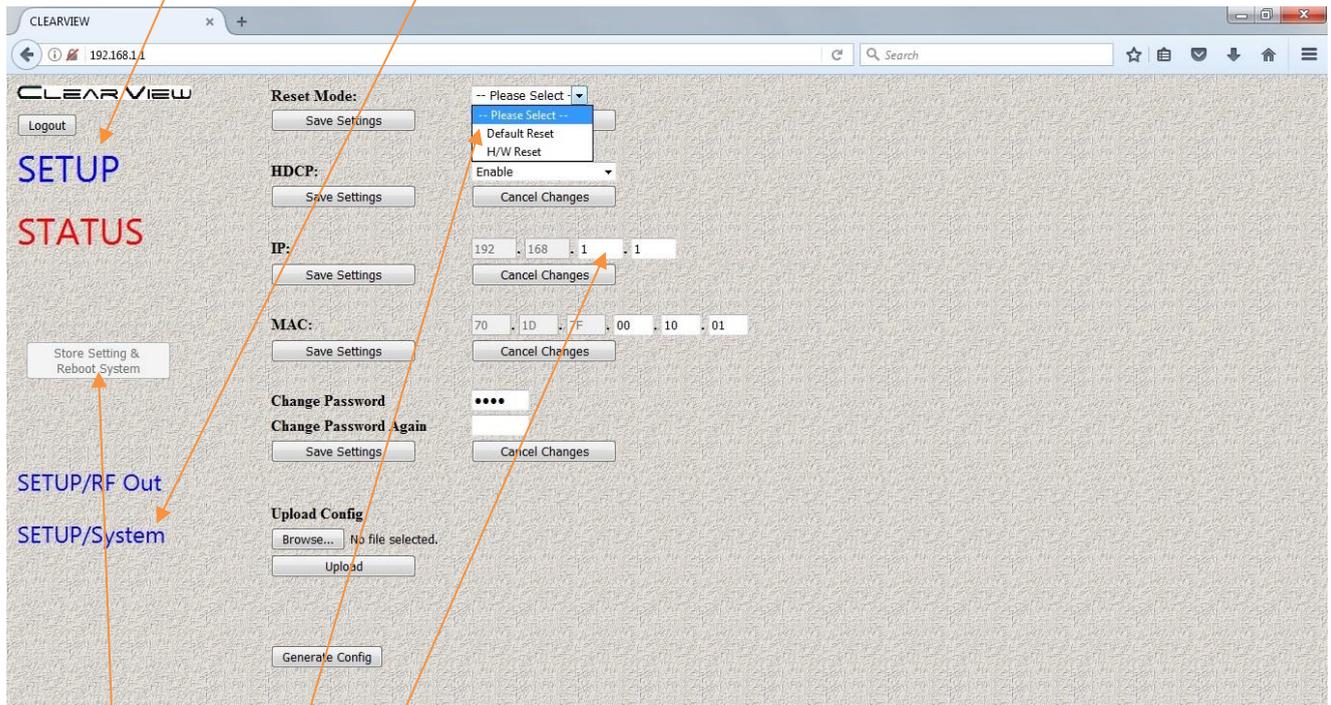
You can reset the unit to Factory Default or just Hardware Reset by clicking on this dropdown **here.** Be sure to always press the **Save Settings** to the left after selecting your option. The IP Address of the unit can be adjusted in the 192.168 range. The last 2 sections are adjustable **here**. MAC address and Password can be changed and after each change press the **Save Settings** button to the left.
After all settings have been adjusted press the-
Store Settings and Reboot System for them to be saved completely.

If the buttons turn grey while you are adjusting settings, Log out then back in again
To activate them.

The STATUS but only shows you status of the device and changes cannot be made in this menu.

4 MENU TREE

4.1 Menu Tree of Front

Button				
OK	1	System	OK	OK
			System	<System>
			Reset Mode	< Reset Mode>
			Mac Address	< Mac Address>
			Network IP	< Network IP>
			Set HDPC	< Set HDPC>
			Reset Mode	< Reset Mode>
OK		RF Out	Area	< Area>
			Network Provider	< Network Provider>
			LCN	<LCN>
			Service Name	< Service Name>
			Output Level	< Output Level>
			Frequency	< Frequency>
		< Area>		Select your Country
		< Network Provider>		ONID, NID Adjustment,
				Network Name
		<LCN>		Set LCN1,2,3 & 4
		< Service Name>		Set Service Name 1,2,3 &4
		<Output Level>		Set 90 to 105dBuV
		< Frequency>		Set Channel you prefer
		< Reset Mode>		Hard Reset
				Default Reset
		< Mac Address>		Set your MAC address
		< Network IP>		Set your IP Last 2 sections
		< Set HDPC>		HDCP ON or OFF
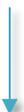
Once all settings are made press left arrow 3 times to EXIT to Save screen
When Prompted **Saving Changes & Setting Reset** arrow down until you see **y**
Then press OK