



**DVB-ASI Over IP
Bi-Directional Gateway**

User's manual

H-1ASI-IP-B

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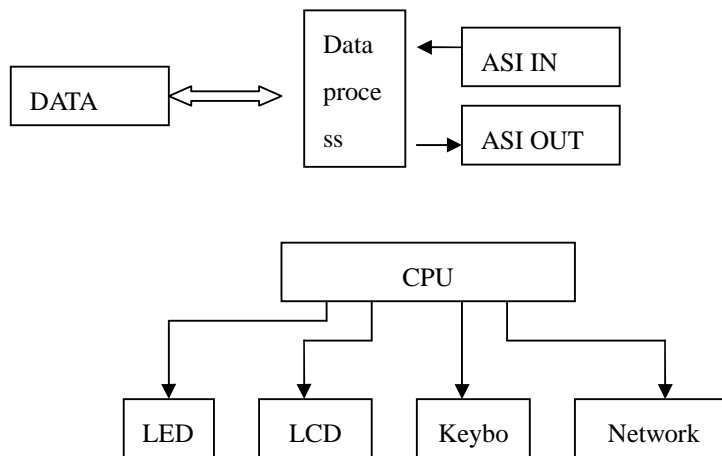
1 SAFETY INSTRUCTION

- Read manual carefully before use.
- Do not open the case and touch internal components for safety and warranty
- Pull out power plug in case of long time standby .Do not use faulty power plug or power supply to avoid fire or electric shock.
- Do not touch power supply with wet hands.
- Handle with care when pulling out power plug, no touch with the wire.
- No flammable or liquid allowed into device.
- Do not install Encoder in hot area or strong sunshine or dusty place.
- Shock-proof is a must.
- Room with good ventilation is required.
- Keep original packing material for future possible transportation.

2 System structure and principle

2.1 System structure

IP adaptor structure as below:



2.2 Working principle

The H-1ASI-IP-B unit consists of an ASI input/output module, an Ethernet IP output/input module, and a CPU module. An ASI Transport Stream that is input into the ASI module is encapsulated by the CPU and output by the Ethernet module. The opposite process takes place at the receiving end.

3 Specifications

3.1 ASI Interface

Input port: 2 routs DVB ASI port

Connector: BNC

Impedance: 75Ω

TS standard: ISO13818-1

Input effective bit rate: max 214Mbps (each route)

TS packet format: 188/204bytes (auto recognition)

TS input mode: CBR /BURST/VBR

3.2 Network port

There are two network ports on the H-1ASI-IP-B.

Data Port: The RJ-45 Port labeled “Data” is the transport port for the encapsulated ASI stream. This port carries the primary IP address for the device, and is the only port that needs to be connected for the device to function. It is important to note that the Data port IP address does not support the “ping” function. It is also important to note that when making changes to the IP configurations either via front panel or NMS it is important to use the “Save Config” option on the top menu when on the front panel, or click the “Save Config” button in the software when using NMS.

Ethernet Port: This port is for network management via the Network Management Software. It is not essential for this port to be connected for proper functioning of the device. However the Network Management Software is the most effective method for setting the devices IP address. If problems arise while attempting to set the device IP with the front panel please use the network management software.



If network management and monitoring is desired, this port can be connected to the same network as the primary Data port. Please note that these two ports have separate IP address and are configured differently.

Ethernet port: IEEE802.3 Ethernet , RJ45 port

Software protocol: UDP/IP

3.3 Power failure auto save

Enabled by default, this setting automatically saves the system parameters in the event of a power failure.

3.4 Power

Voltage	90V~250VAC
Frequency	50Hz±2%
Power	20W

3.5 Working environment

Temperature	+5°C~45°C
Storage	-25°C~+55°C
Humidity	10~75%

3.6 Mechanics

44.5mm (H, 1U) x483mm(W, 19")x410mm(D)



3.7 Weight

5kg

The above specifications are subject to change without notice.

4 Equipment connection

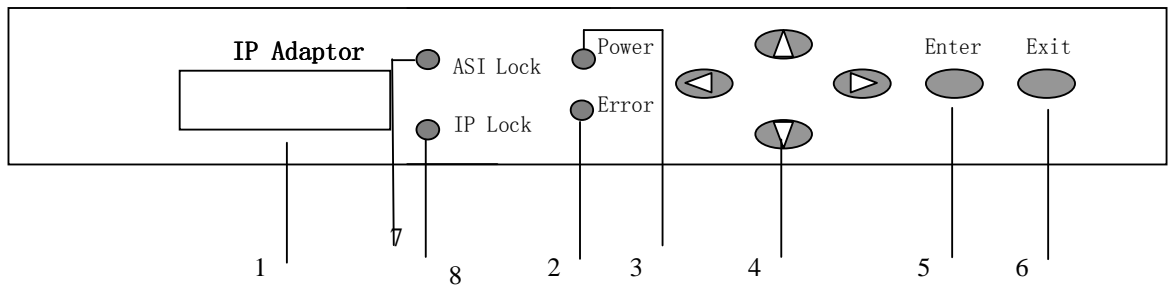
4.1 Front panel and keyboard

4.1.1 Front panel

Power indicator

Error indicator

4.2 Front panel

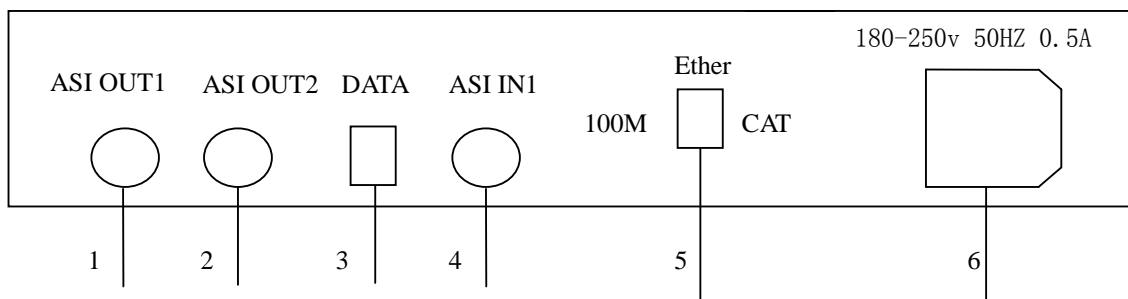


1	LCD Display
2	Error indicator
3	Power indicator

4	Direction key
5	Confirm
6	Exit
7	ASI indicator
8	IP indicator

4.3

4.4 Rear panel



1	ASI output 1
2	AS1output2
3	Ethernet data port
4	ASI Input
5	Ethernet control port
6	Power switch

5 Operations

5.1 Keyboard

The front key panel and LCD can be used to make local changes to the device configuration. The arrow keys, and enter and exit are used to make these changes. Please note that after any changes are made, you must save the changes via the "Save Config" option in the root menu. If you do not use the "Save Config" function, all changes will be lost on the next system reboot.



ENTER (ENTER): confirm and operate ;

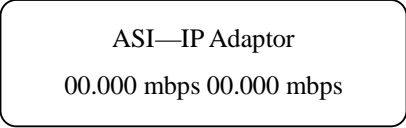
Exit (Exit): back to upper menu or cancel the setting

Note :

- A、 press ENTER and exit to unlock if device is in lock status
- B、 keyboard auto lock if standby till 60 seconds
- C、 in lock status, press “down” to see IP menu

5.2 Menu

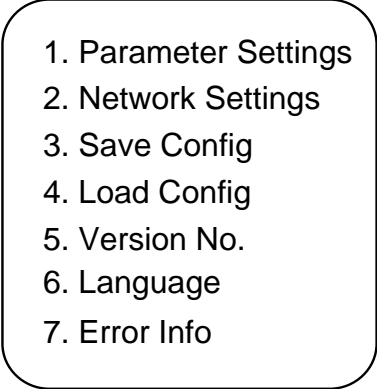
5.2.1 Lock status



ASI—IP Adaptor
00.000 mbps 00.000 mbps

5.2.2 Main Menu

After initializing, the LCD display following menu

- 
1. Parameter Settings
 2. Network Settings
 3. Save Config
 4. Load Config
 5. Version No.
 6. Language
 7. Error Info

5.2.3 Parameter Settings

The Parameter Settings menu is for setting IP addresses and parameters for the Transport Stream network port. This is the port that carries the ASI TS over the IP network. This is different from the management port, used for the network management software. Please remember that the IP address used for TS send and TS receive will not respond to the ping command.



The Parameter Settings menu has the following options

1.1. Output
1.2. Input
1.3. Local

5.2.3.1 Output

This Menu is used to enable TS Output from the unit, and to set the destination address and port of the remote unit

1.1.1.on/off
1.1.2. Destination IP
1.1.3. Destination port

5.2.3.1.1 ON/OFF

This option enables or disables Transport Stream output from the unit

1.1.1.on/off
off ◀

5.2.3.1.2 Destination IP

Use this menu to set the destination IP address for the unit receiving the ASI stream.

1.1.2. Destination IP
224.002.002.002

5.2.3.1.3 Destination port

Use this menu to set the port to be used to connect to the receiving unit

1.1.3. Destination port
1234

5.2.3.2 Input

This menu controls Transport Receiving related settings

1.2.1. on/off
1.2.2. receiving port

5.2.3.2.1 On/Off

This menu turns Transport Stream receiving on or off

1.2.1.On/off
off

5.2.3.2.2 Receiving port

This sets the port number that the transport stream will be received on

1.2.2. Receiving port
1234

5.2.3.3 Local

This menu is responsible for setting the local IP address and settings for the Transport Stream Ethernet port

1.3.1. Local IP
1.3.2.Gateway
1.3.3 Submask
1.3.4 Local MAC

5.2.3.3.1 Local IP

This sets the local IP address for the Transport Stream (TS) port

1.3.1.local IP
192.168.000.195

5.2.3.3.2 Gateway

This is used to specify a gateway when a router is in use

1.3.2.Gateway
192.168.000.001

5.2.3.3.3 Submask

This menu sets the local IP address subnet mask value

1.3.3.Submask
255.255.255.000



5.2.3.3.4 Local MAC

This menu is used to set a MAC hardware address for the Local IP TS Port

1.3.4. Local MAC
00-08-10-18-20-29

5. 2. 4 Network setting

This menu is used to set parameters for the MANAGMENT port. The managment port is a seperate Ethernet port used to remotely manage the gateway. This address will respond to the ping command.

This sets the IP address for the Network Management Software (NMS) Ethernet Port

3.1 IP address
192.168.000.254

This sets the Subnet Mask value for the NMS Port

3.2 Submask
255.255.255.000

This sets the Default Gateway for the NMS Port when a router is used

3.3 Gateway
192.168.000.001

This sets the UDP port to be used with NMS managment

3.4 UDP port
2009

This is used to change the hareware MAC address for the NMS Ethernet Port

3.5 MAC address
00-10-14-17-02-57

5. 2. 5 Save current settings

Press enter in this option to save settings



Wait.....

5. 2. 6 Load settings

In this menu, the LCD displays as below:

6.1 load settings
6.2 factory default

5. 2. 7 Version No.

Here LCD displays the software and hardware number:

Software: 1.03
Hardware: 1.02

5. 2. 8 Language setting (English)

Here you can select languages

8 Languages
English

After all settings, the system runs normally

5. 2. 9 Error info

in this menu the system will display any error information



9 Error info
Blank

6 SYSTEM FAILURE OR TROUBLE SHOOTING

6.1 INDICATOR status

2 LED Indicators work as below

1“POWER” green means power supply normal

3“ERROR” red , means device working abnormal

6.2 Trouble shooting

6.2.1 “POWER” INDICATOR OFF

Check power cable, plug and switch

6.2.2 “ERROR” ON (RED)

If the device is working abnormally, please check the device error info.

If “unlock” alarm is displayed, this means the ASI signal input is abnormal.

Please check the ASI input signal source and cable.

6.2.3 AS1 and IP indicator ON

AS1 and IP on means the device is working normally

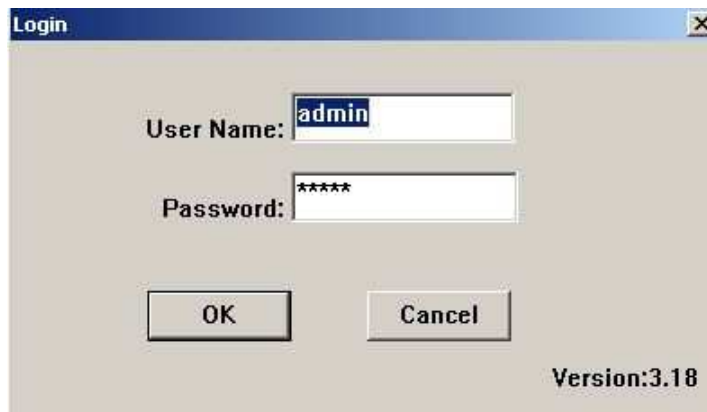


7 NMS Operation

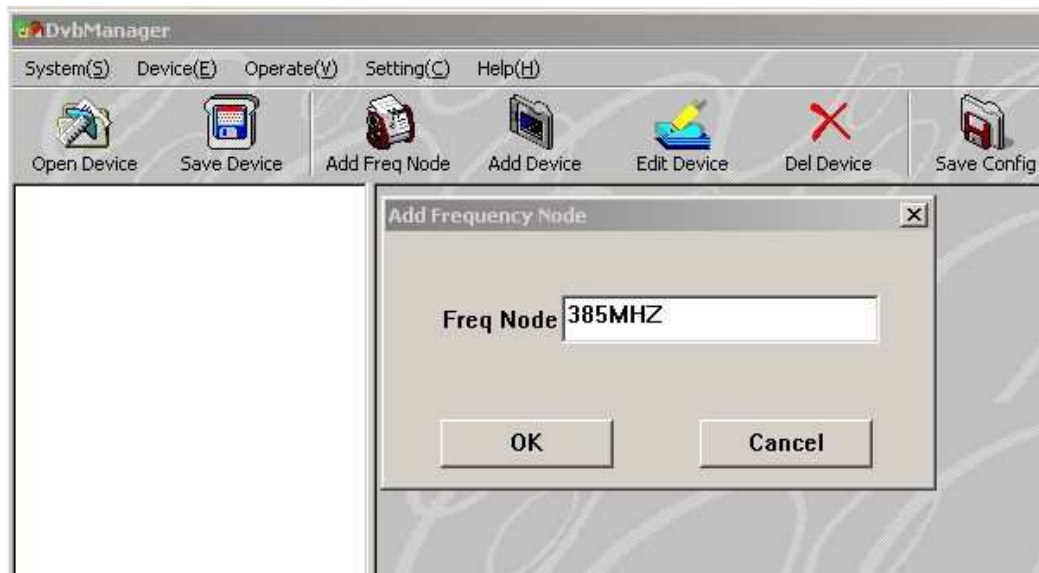
With the Network Management Software (MNS) the user can set all the parameters on a PC and transfer the data to the device. This is the recommended technique for setting parameters such as IP and Port number. To use the NMS software, connect the Ethernet port on a computer to the “Ethernet” port on the device. Determine the units “Local IP” address through the front panel. This is the IP that is found under the “Network Settings” menu, not the IP’s found under “Parameter Settings” menu. The local IP for the “Ethernet” Management port can also be changed via the “Network Settings” Menu. To change the IP, press enter while the IP is being displayed. The curser will appear, and the arrows can be used to set the new IP. Press enter to confirm the new IP. Remember to always “Save Parameters” on the home menu after making any changes. Make sure that the computer IP range is in the same range and the devices IP address to ensure proper communication.

Once the management local IP is determined or set, launch the Network Management Software (NMS). Log into the software with username “admin” and password “admin” . These can be changed from inside the software later.





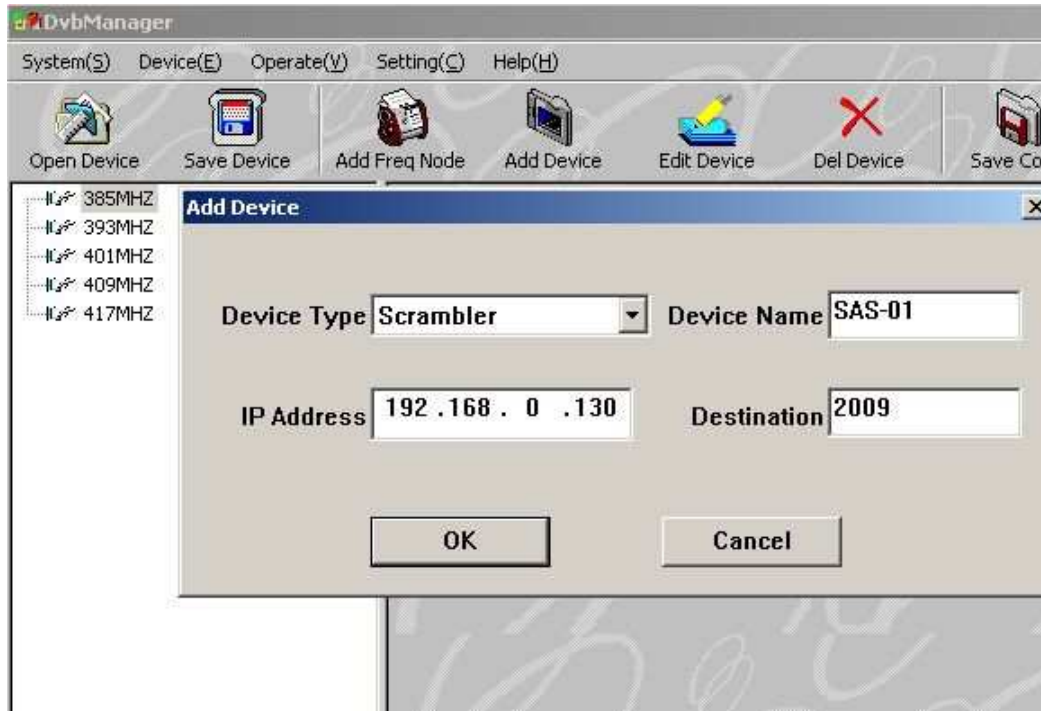
Once the main NMS menu comes up, Select “Add Freq Node” and you will see the following dialog box:



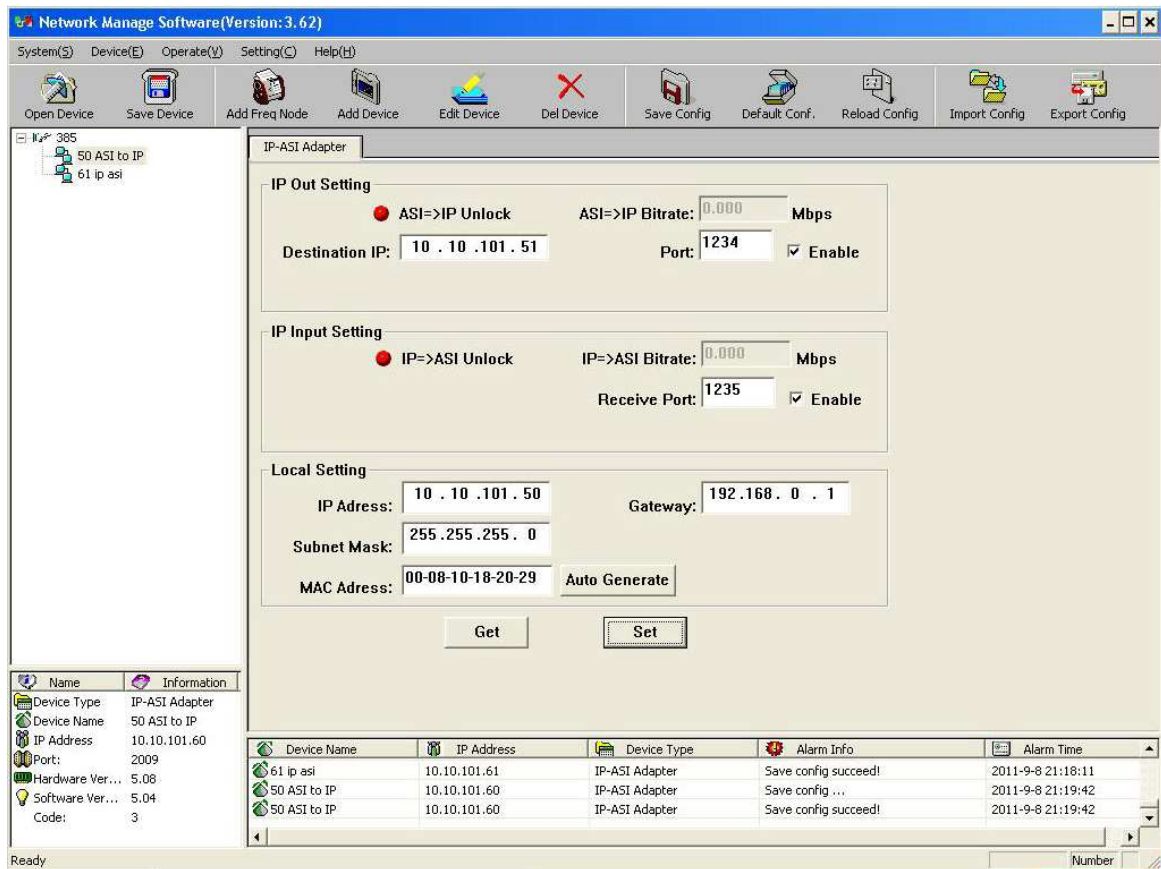
In the “Add Frequency Node” Dialog box enter 385MHZ and hit ok. You will then see the option populate in left hand menu tree.



Select the 385MHZ option and click “Add Device”. The dialog will show up. Select the “TS IP Gateway” option in the device type drop down menu and enter the Devices management IP address. Give the device a name, and select the Management Port number.



The device should now appear in the left hand menu tree. The device is now available for the “open device” button. When you click open device all the parameters for the device are now available for you to edit inside the software. You can click the “Get” button to pull all of the current parameters from the device. You can make changes then in the software and then click the “Set” button to write those parameters back to the device. Once you have set the parameters it is important to click the “Save Config” button on the top menu to make your changes permanent.



You can also save configurations with this software as well as load your saved configurations. Device status, Link Status, and ASI status are all visible from this menu. You can also read the ASI Bitrate.

IP NMS menu

