NI0316

IP ASI to DVB-C/T ISDB Modulator

User's Manual

Dear clients,

In order to give better play to the function of your device, we suggest that you take the precious time to read the user manual carefully before connecting and operating the device, so that you can master the use method and use points of the device.

Please keep this manual for future reference.

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1. Introduction

1.1 Product Overview

NI0316 is a cost-effective DVB-C/T/ ISDBT modulator It has 128*3 IP inputs. After multiplexing and modulating process, it gives Max 32 DVB-C (16 DVBT/ISDBT) non-adjacent carriers (96MHz~864MHz) output through the RF output interface. To meet customers' various requirements, this device is also equipped with data port for 8 MPTS output over UDP and RTP. This is very adaptable to newly generation DTV broadcasting system.

1.2 Key Features

- ❖ Support maximum 3*128 IP input (MPTS/SPTS) over UDP and RTP protocol
- ❖ Support 8 MPTS Output
- ❖ Support 16 channel ISDB modulating
- ❖ RF 96~864MHz Any Settings
- ❖ Support 6 Serial TS Input (Any Multiplex)
- ❖ Integrated multiplexing and modulating functions
- ❖ Support accurate PCR adjusting/PID Remapping/PSI/SI rebuilding and editing
- ❖ Web-based NMS management

1.3 Specifications

Modulation	Standard	ARIB STD-B31
	FFT mode	2K,4K,8K
	Bandwidth	6M
	Constellation	QPSK, 16QAM, 64QAM
	RF out	32/16 Channels DVB-C/T/ISDB,
	RF frequency	96~864MHz, 1kHz step
	RF output level	-35dBm~-5dBm
	MER	≥40db
	Guard Interval	1/32, 1/16, 1/8, 1/4
IP Input	3ch 128 IP(SPTS/MPTS) input over UDP and RTP, RJ45,1000M/100M, Unicast/Multicast, 6ch ASI input.	
System	LCD/Keyboard operating and web-based NMS support	
	Ethernet software upgrading	
General	Dimension (W*D*H)	440mm×300mm×45mm (Box) 482mm×340mm×45mm (Max) 525mm×375mm×85mm (Pack)
	Temperature	0~40℃(work); -20~80℃(storage)
	Power supply	AC 110V±10%, 50/60Hz AC 220V±10%, 50/60Hz

1.4 Interface



Number	Interface Overview
1	**RF out:** Frequency Output
2	**ASI IN:** Serial TS Input (Any Multiplex)
3	**NMS:** Network Management System
4	**DATA1:** 128 SPTS/MPTS IP input /8 MPTS output **DATA2:** 128 SPTS/MPTS IP input **DATA3:** 128 SPTS/MPTS IP input
5	Power Switch

2. Operation

2.1 Installation

Check the possible loss or damage of the equipment during transportation before installing the equipment; Prepare the appropriate environment, connect > to the signal line, connect > to the power line, open the device, >, check the IP address of the network manager, >, adjust the network manager server, connect > to the network manager, check or modify all parameters, and then the device will be normally used after no abnormalities are found in >.

Note 1: the power supply must meet the working requirements of the equipment, such as voltage, frequency and power supply capacity.

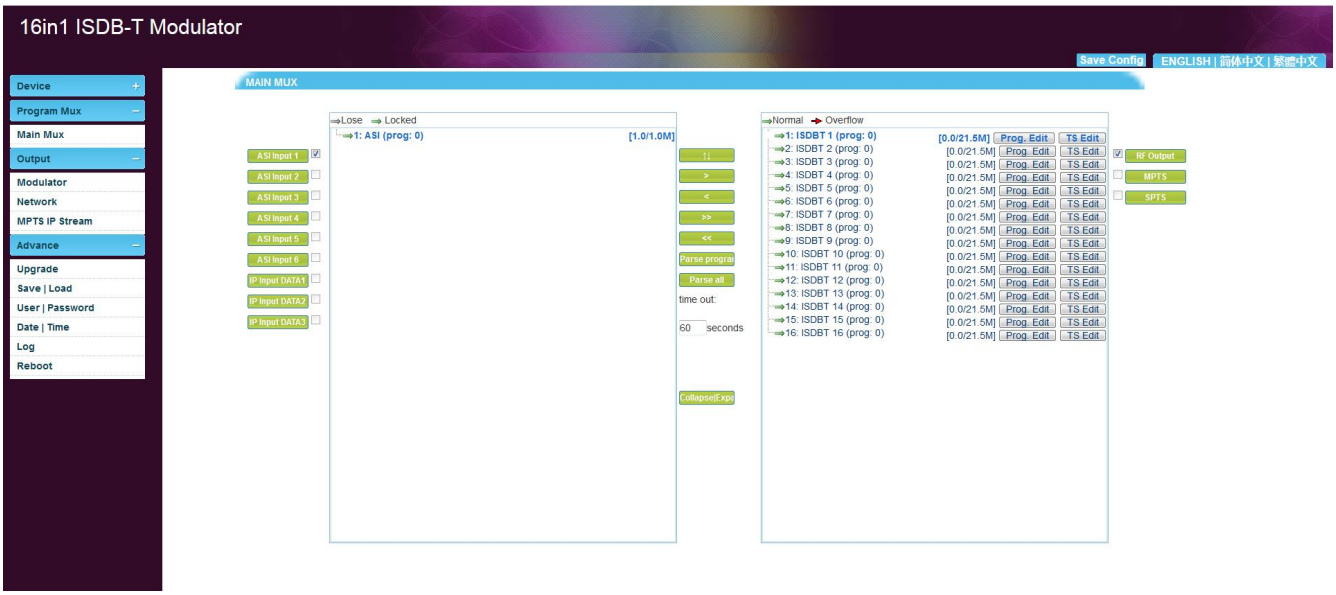
Note 2: please observe the environment before the test and pay attention to safety during the test.

2.2 Connect

- Set the computer and the device IP in the same network segment according to the device network manager address (192.168.0.136)
- The IP address of the computer cannot be the same as that of the device
- In the address bar of Firefox browser, ENTER: 192.168.0.136 and press "ENTER". ENTER the user name: admin password: admin and ENTER the configuration window of the digital TV modulator.

2.3 Parameter Settings

2.3.1 TS Multiplex Settings



The input interface is on the left and the output interface is on the right

L1-L3 corresponds to three interface boards in the back panel

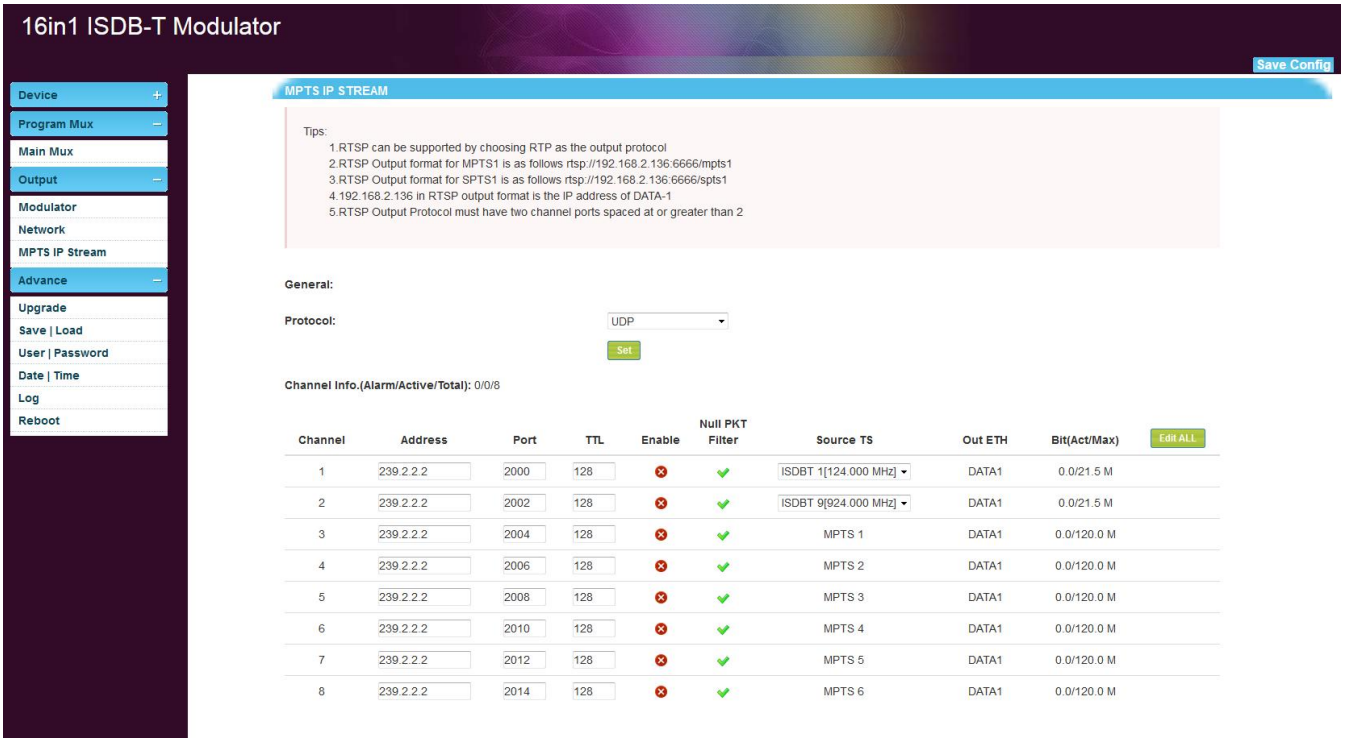
In the TS stream setting column, parameters of the output channel can be set: stream selection, general parameters, PID transparent transmission. Mainly is carries on the choice to the output program.

In this interface, you can click the "+" button and input the corresponding IP address to add the input program source.

After the program source is added into the device as required, the selected program can be output or deleted through the arrow to the right and left of ">" "<" ">>" "<<".

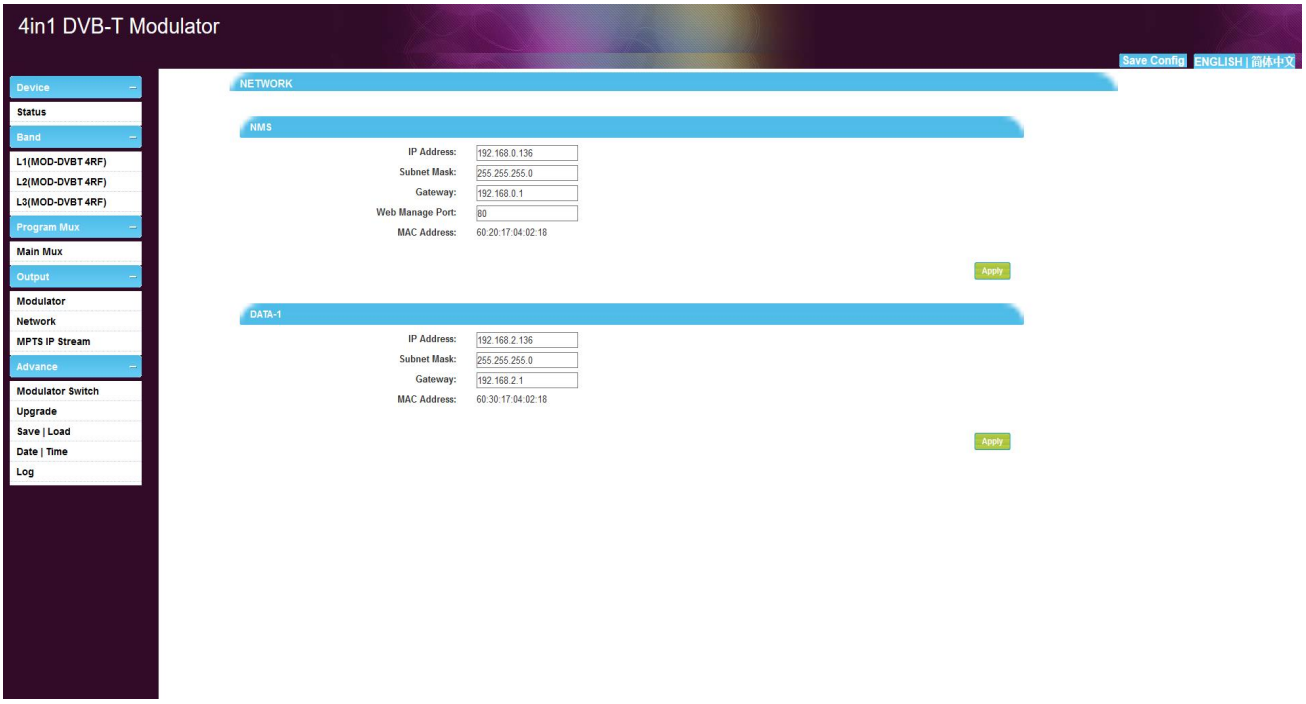
2.3.3 MPTS IP Stream

MPTS IP output channel status, parameter view, setting, etc



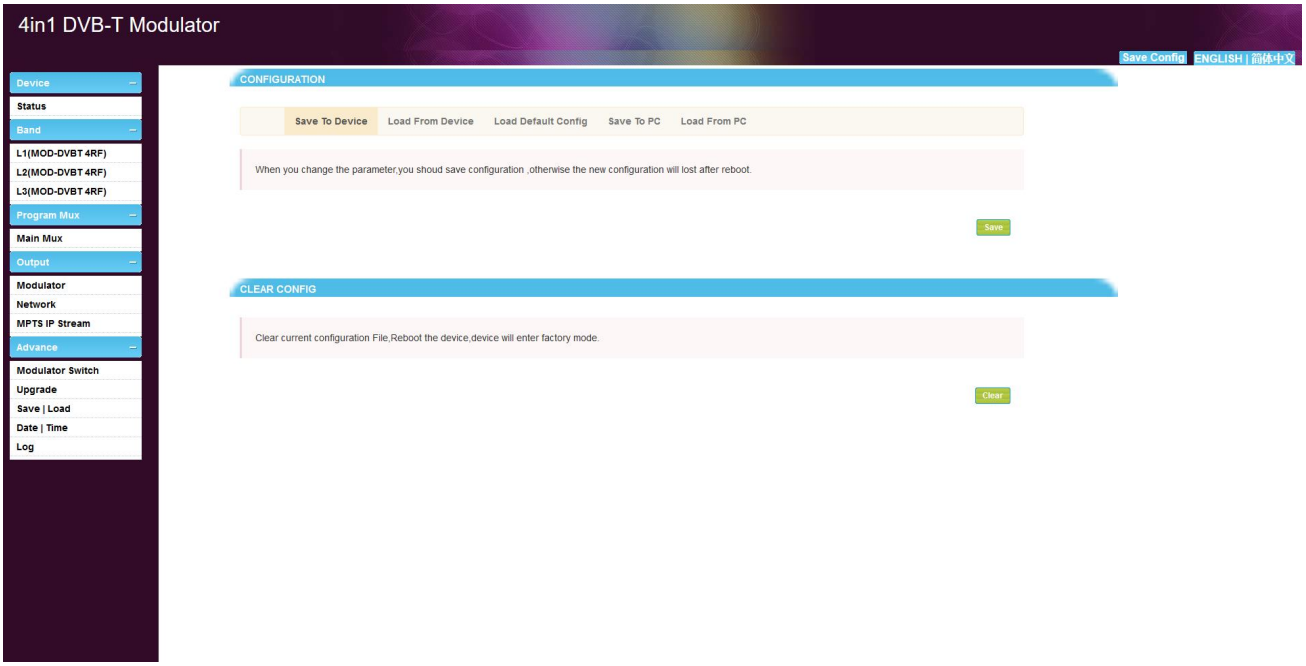
2.3.4 Network Settings

Set IPTV input IP address and other parameters

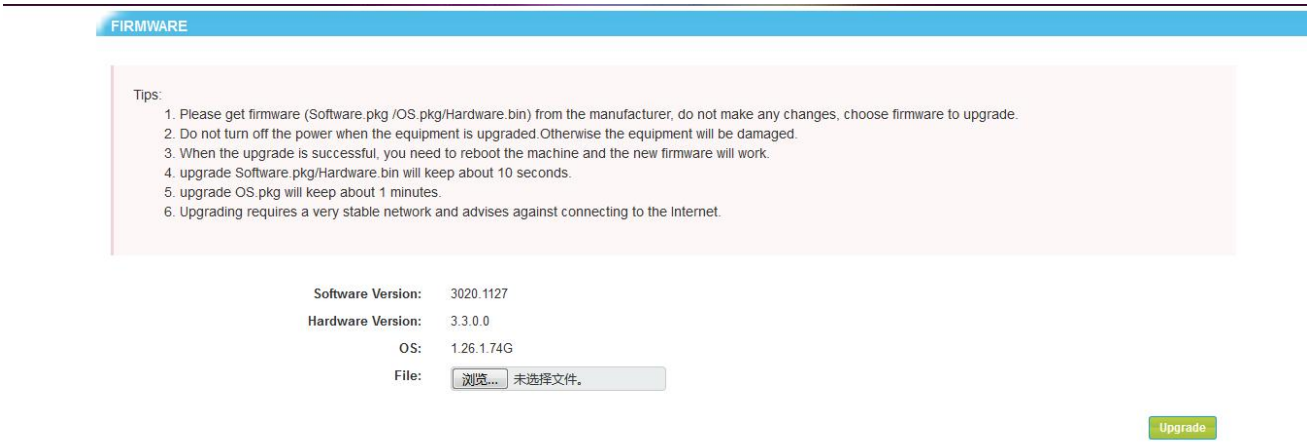


2.3.5 Configuration

Save or restore the device system configuration, or load other configuration parameters

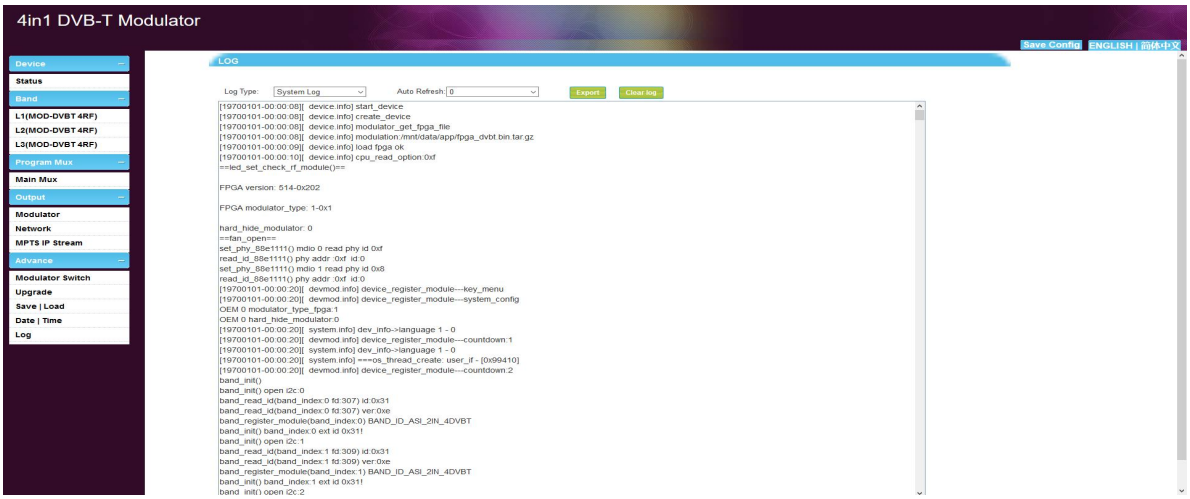


2.3.5 System Upgrade



2.3.6 LOG

Device status information



3. Trouble Removal

3.1 Prevention Measures

1) Put equipment in the environmental temperature 0 ℃ ~ 45 ℃, other conditions meet the requirements of operating range.
2) Check that the supply voltage is within the specified range and that all connections are correct.
3) Check that the supply voltage is within the specified range and that all connections are correct.
4) Please do not switch the machine frequently (switch the machine at least every 10 seconds or more).

3.2 Common Problems

Common problems	The solution
boot failure	Check that the input voltage and connection of the power supply operating range are correct
signal failure	Check whether the signal source is normal. Check that the cables are properly connected
Program Scan failure	The program name and program number of the output signal are manually added in the TS stream setting

4. Packing list

Number	Name	Count	Comment
1	NI0316 Modulator	1	
2	Power line	1	
3	ASI	1	