

CMP331

Common Media Platform

IP Modulator

User Guide



V1.1-W

Revision History

Date	Version	Description	Author
10/1/2018	1.0	First Draft	ZM
20/3/2024	1.1	Fix some editing errors and format errors	JS

This guide contains some symbols to call your attention.



DANGER

The DANGER symbol calls your attention to a situation that, if ignored, may cause physical harm to the user.



CAUTION

The CAUTION symbol calls your attention to a situation that, if ignored, may cause damage to Our product.



NOTE

The NOTE symbol calls your attention to important information.



TIP

The TIP symbol calls your attention to additional information that, if followed, can make procedures more efficient.



Red Arrow

The Red Arrow symbols point to important details mention the context above or below an image.



Blue Arrow

The Blue Arrow symbol indicates the motion path of an item in an operation step.



Thick Arrow

The thick Arrow symbol calls your attention to a serials of operation steps mentioned in the context.

This guide also contains the following text conventions.

Bold Italic

The bold Italic text indicates a button to click, an item in the drop-down menu to select, or a certain item in the UI.

Safety Instructions

- Read these instructions
- Keep these instructions
- Follow all instructions
- Heed all warnings
- Do not use this unit near water.
- Only use a damp cloth to clean chassis
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions
- This unit is grounded through the power cord grounding conductor. To avoid electrocution, do not remove the power cord before the outlet is switched off or unplugged. If the plug does not fit into your outlet, consult an electrician for replacement of the outlet.
- Route power cords and other cables so that they are not likely to be damaged.
- Only use attachments/accessories specified by the manufacturer.
- Do not wear hand jewelry or watch when troubleshooting high current circuits.
- Do not work on the system during periods of lightning.
- Refer all servicing to qualified service personnel. Servicing is required when this unit has been damaged in any way.
- **Damage Requiring Service:** Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - When the power-supply cord or plug is damaged.
 - If liquid has been spilled, or objects have fallen into the product.
 - If the product has been exposed to rain or water.
 - If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of the controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
 - If the product has been damaged in any way.
- **Replacement Parts:** When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer. Unauthorized part substitutions made may result in fire, electric shock or other hazards.

SAFETY PRECAUTIONS

There is always a danger present when using electronic equipment.

Unexpected high voltages can be present at unusual locations in defective equipment and signal distribution systems. Become familiar with the equipment that you are working with and observe the following safety precautions.

- Every precaution has been taken in the design of the products to ensure that it is as safe as possible. However, safe operation depends on you the operator.
- Always be sure your equipment is in good working order. Ensure that all points of connection are secure to the chassis and that protective covers are in place and secured.
- Never work alone when working in hazardous conditions. Always have another person close by in case of an accident.
- Always refer to the manual for safe operation. If you have a question about the application or operation contact the manufacturer for assistance.

Electrostatic Discharge (ESD) Caution:

- Always wear an ESD-preventive wrist or ankle strap when handling electronic components.
- Handle cards by the faceplates and edges only. Avoid touching the printed circuit board and connector pins.
- Avoid touching any electronic components while holding any module in hands.



Danger of explosion if battery is incorrectly replaced.

Contents

PART 1 CHASSIS OVERVIEW	1
1.1 FRONT PANEL	1
1.2 BACK PANEL	1
PART 2 INSTALLATION	2
2.1 RACK INSTALLATION	2
2.2 AC POWER CONNECTION	2
PART 3 WEB GUI	4
3.1 WEB GUI OVERVIEW	4
3.1.1 <i>Connecting to the Management Port</i>	4
3.1.2 <i>Logging into the Web GUI</i>	5
3.2 STATUS	5
3.3 SYSTEM SETTING	6
3.4 TSOIP INPUT	8
3.5 ADMIN	11
PART 4 MODULATION MODULE CONFIGURATION	12
4.1 MODULATION OUTPUT MODULES	12
4.1.1 <i>CM-DTMB</i>	12
4.3.2 <i>CM-OFDM</i>	16
4.3.3 <i>CM-QAMA</i>	16
PART 5 APPENDICES	17
APPENDIX A - ABBREVIATIONS	17
APPENDIX B- WARRANTY	18
APPENDIX C- AFTER-SALES SUPPORT	18

Part 1 Chassis Overview

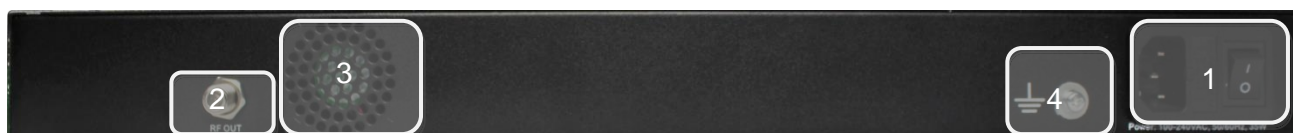
1.1 Front Panel

CMP331M series is brand of IP receiver multiplexing modulator which is specifically designed for Hotel television system with its high integration and cost effective. It supports up to 128 channels IP inputs and 4/8 channels QAM/ DTMB/OFDM modulating outputs. It is very suitable for hotels, recreation clubs, hospitals etc. in the application of IPTV and the digital television system.



1. NMS port (above) and Data port (below)
2. Status light and Power light and RESET button

1.2 Back Panel



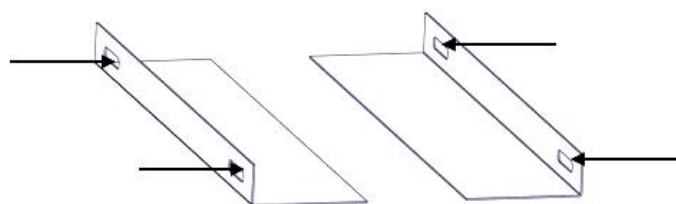
1. Power supply socket and Power switch
2. RF out tuner
3. Cooling Air intake
4. Ground connection

Part 2 Installation

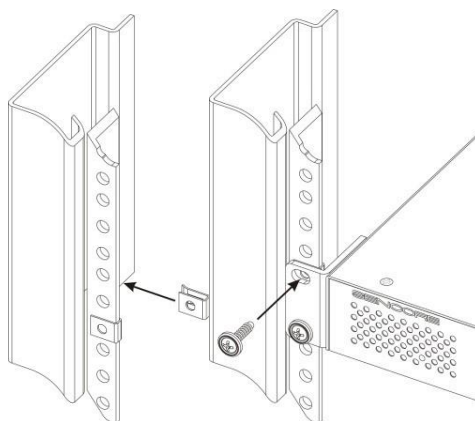
2.1 Rack Installation

The CMP331M is designed to be mounted in a standard 19" rack. It takes 1RU of rack space. To install it into a rack, please use the following steps:

1. Determine the desired position in the rack for the CMP331M. Make sure that the air intake on the back of the unit will not be blocked.
2. Install the brackets at desired position if there's no supporting plate in the rack.



3. Insert the rack mount clips into place over the mounting holes in the rack.
4. Slide the CMP331M into the position in the rack.
5. Secure the chassis to the rack by installing the four supplied screws through the front mounting holes and tightening.



2.2 AC Power Connection

Please only use the supplied 3-prong power connector or one with equal specifications. NEVER tamper with or remove the grounding pin. This could cause damage to CMP331M, personnel, or property. Make sure the power outlet is switched off before plug or unplug the power cable from the panel of CMP331M.

Power Supply Specification:

AC INPUT 100~240VAC, 50/60Hz



When you take the equipment from a cold condition into a much warmer and humid condition, the equipment should be acclimated to the warm and humidity condition for at least 30 minutes. Powering up a non-acclimated unit may lead to shortcut or other damage to electronic components.



A professional UPS system is recommended for better performance of your content distribution system.

Part3 Web GUI

3.1 Web GUI Overview

3.1.1 Connecting to the Management Port

Factory network settings of the Management Port:

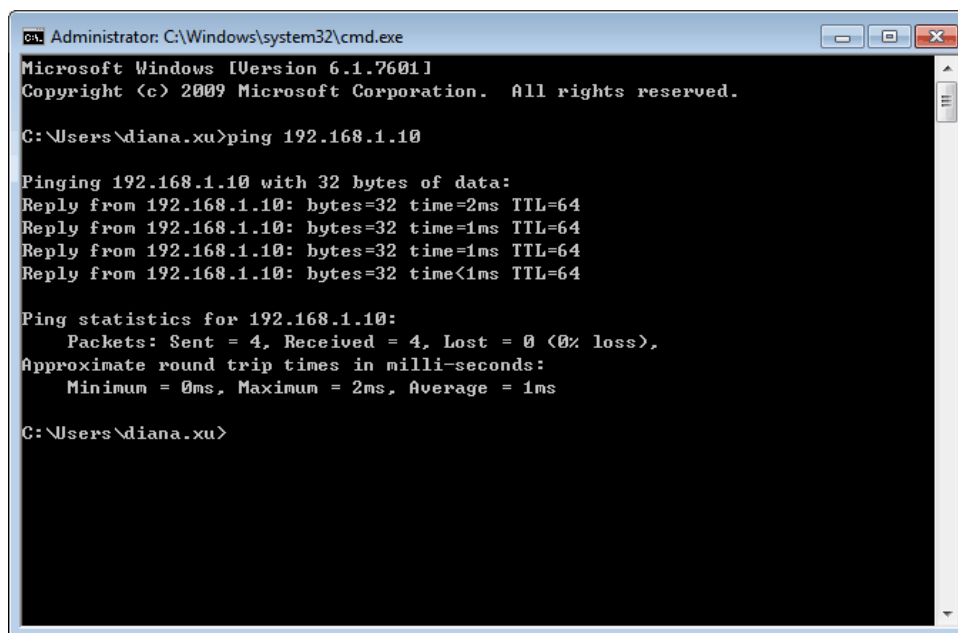
- NMS IP address 192.168.1.10
- Subnet Mask 255.255.255.0
- Gateway 192.168.1.254

Factory network settings of the Data Port:

- Data IP address 192.168.2.10
- Subnet Mask 255.255.255.0
- Gateway 192.168.2.254

Use the following step to access the Web GUI in a browser.

- Connect PC to CMP331M network port directly.
- Set the IP address of the laptop/computer in the same network segment with the CMP331M Baseboard IP address. For example, you can set the computer's IP address to 192.168.1.200.
- Check the physical connection by ping command.



```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\diana.xu>ping 192.168.1.10

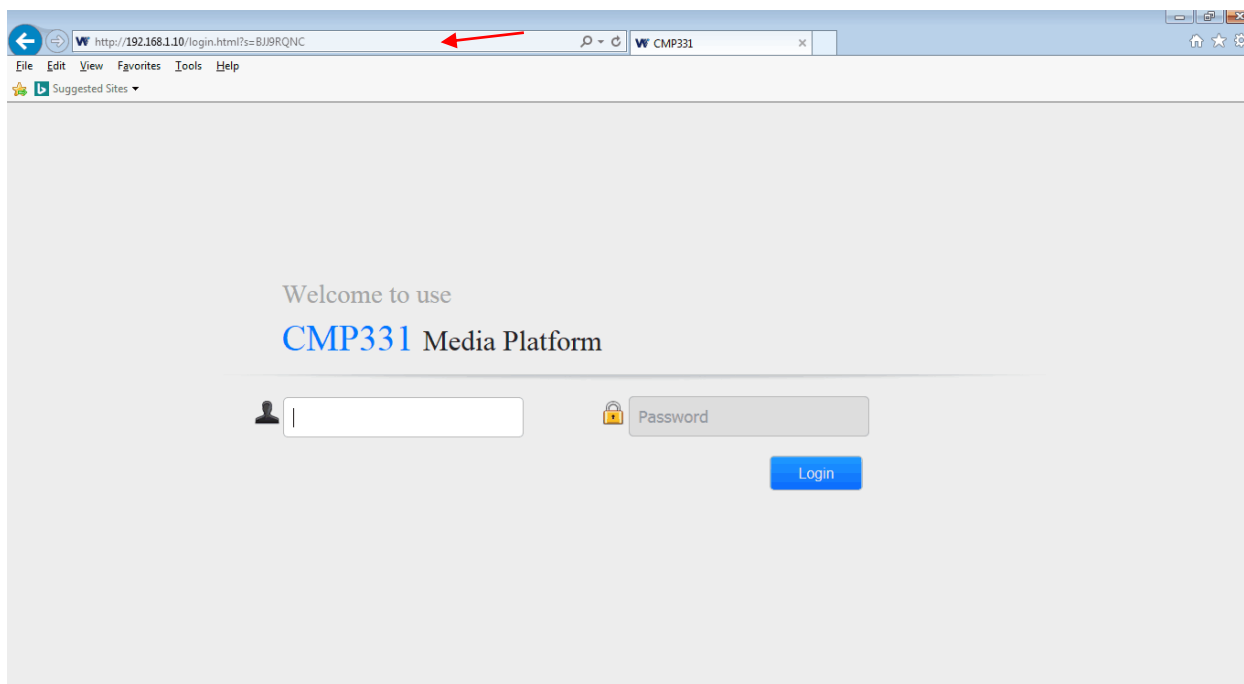
Pinging 192.168.1.10 with 32 bytes of data:
Reply from 192.168.1.10: bytes=32 time=2ms TTL=64
Reply from 192.168.1.10: bytes=32 time=1ms TTL=64
Reply from 192.168.1.10: bytes=32 time=1ms TTL=64
Reply from 192.168.1.10: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.1.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 1ms

C:\Users\diana.xu>
```

3.1.2 Logging into the Web GUI

Type the CMP331M Baseboard IP address into the URL field of any recommended browser (IE8 or above, Firefox, and Google Chrome) to access the logon page. By default, the admin user account is admin with password admin. Click **Login** or strike Enter on the keyboard to login to the GUI.

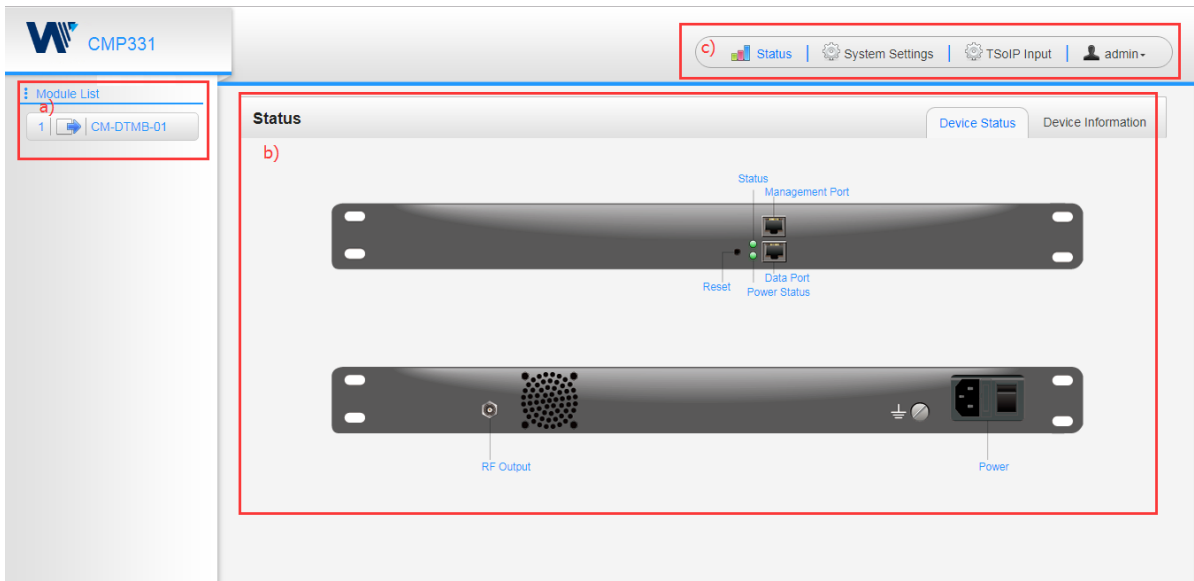



3.2 Status

Status>Device status

After a successful login, you will always enter the status overview page, where you can check the device status of:

- a) Module List: shows the embedded modulation module
- b) Device host operating status in **Device Status** options, and the **Device information** option
- c) Setting buttons



 We use only IE, Firefox and Chrome for testing procedures. If you use other browsers, like Microsoft Edge, you may encounter incomplete UI layouts, and configure setting in these browsers may lead to errors.

Status>Device Information

Device Information page shows the logical version, software version, and hardware version of modulation module.

Status			
Module	Firmware Version	Software Version	Hardware Version
CM-DTMB-01	V0.0.7	V0.0.2	V0

3.3 System Setting

Click the **System Setting** on the top right corner into system setting page where you can find **Network, System** and **Password**.

System Setting> Network

In **Network** page you can assign static IP addresses to CMP331M’s NMS port and Data port for management and the data input. Click the **Apply** button in the right side to make the change take effect.

System Settings				
	Network		System	Password
Module Name	IP Address	Subnet Mask	Default Gateway	MAC Address
1.Data	192.168.2.10	255.255.255.0	192.168.2.254	A0:69:86:00:BA:77
2.NMS	192.168.1.10	255.255.255.0	192.168.1.254	A0:69:86:00:BA:78

[Apply](#)

System Setting> System

In **System** page you can upgrade baseboard, import or export configuration, restart or reset to factory setting and export log.

System Settings		Network	System	Password
Upgrade				
Upgrade	<input type="text"/>	Browse	Upload	
Configuration				
Import Configuration	<input type="text"/>	Browse	Upload	
Export Configuration	Export			
License				
Import License	<input type="text"/>	Browse	Upload	
Export License	Export			
Other Operations				
	Reboot	Factory Settings	Log Export	

System Setting> Password

In **Password** page you can reset login password.

System Settings		Network	System	Password
Current Password	<input type="text"/>			
New Password	<input type="text"/>			
Confirm Password	<input type="text"/>			

[Apply](#)

3.4 TSoIP Input

Click the **TSoIP Input** on the top right corner into input status page where you can find **Status**, **Settings**, **Batch Setting**, and **Service Configuration**.

TSoIP Input>Status

Channel	Total Bit Rate(Mbps)	Effective Bit Rate(...)	TS Analysis	Service List
1.1	7.653	4.348	👁	☰
1.2	7.653	4.307	👁	☰
1.3	8.211	4.921	👁	☰
1.4	8.296	3.107	👁	☰
1.5	7.611	3.493	👁	☰
1.6	7.643	3.635	👁	☰
1.7	8.306	4.116	👁	☰
1.8	8.317	4.098	👁	☰
1.9	0.000	0.000	👁	☰
1.10	0.000	0.000	👁	☰
1.11	0.000	0.000	👁	☰
1.12	0.000	0.000	👁	☰

In status page you can check the Total Bitrate and Effective Bitrate. Click the icon (👁) under the **TS Analysis** to check the information of each channel TS input. Click the icon (☰) under the **Service List** to check the services of each channel TS input.

● TS Analysis

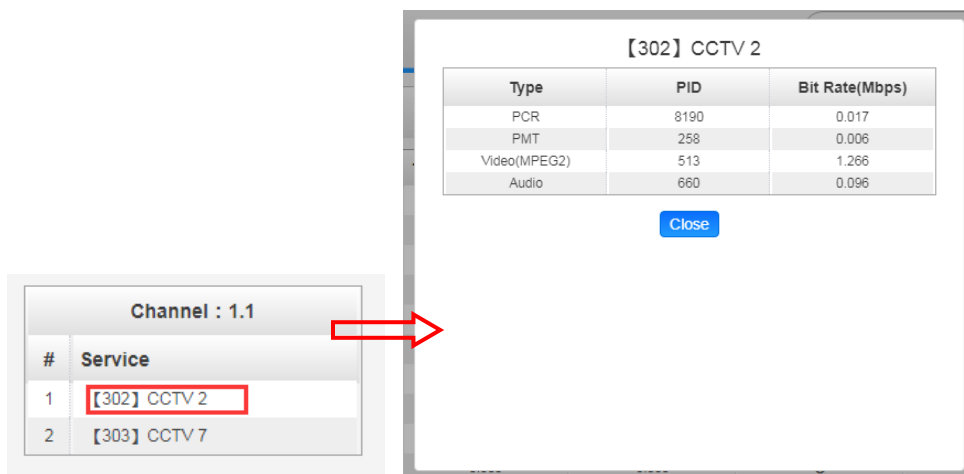
Click **Reset Counter** to reset the Continuity Count Error counter. Fill in the key words in the Search bar can help you to search the specific information which you want.

PID	Bit Rate(Mbps)	Bandwidth(%)	Continuity Count Error	Type	Service
0x0(0)	0.004	0.107	27	PAT	
0x11(17)	0.004	0.107	27	SDT	
0x102(258)	0.004	0.107	27	PMT	CCTV 2
0x103(259)	0.004	0.107	27	PMT	CCTV 7
0x201(513)	1.096	29.250	27	Video	CCTV 2
0x202(514)	0.648	17.294	27	Video	CCTV 7
0x294(660)	0.064	1.708	27	Audio	CCTV 2
0x29e(670)	0.066	1.761	27	Audio	CCTV 7

Tips:

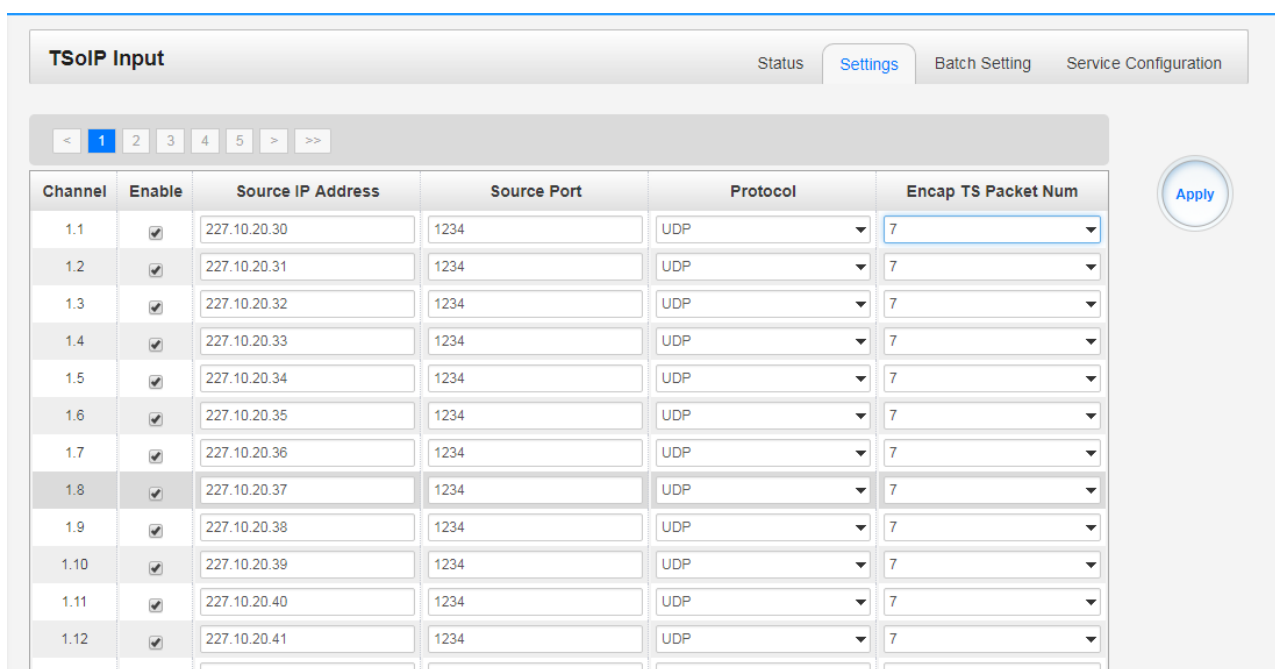
● Service List

Click each service in the list to see the details of this service.



TSolP Input>Settings

In **Settings** page you can enable IP input channel and deploy Source IP address, Source port, choose Protocol (RTP, UDP), and setting Encap TS Packet Number. Click the **Apply** button in the right side to make the change take effect.



TSolP Input>Batch Setting

In **Batch Setting** page you can batch set input ports as Enable/Disable with consecutive or same IP addresses, choose Protocol (RTP, UDP), and set Encap TS Packet Number. Click the **Apply** button in the right side to make the change take effect.

TSoIP Input Status Settings **Batch Setting** Service Configuration

Select All Start Channel-End Channel -

Enable Disable Same Same Apply

Protocol UDP

Encap TS Packet 7

Num

Channel	Enable	Source IP Address	Source Port	Protocol	Encap TS Packet Num
1.1	Enabled	227.10.20.30	1234	UDP	7
1.2	Enabled	227.10.20.31	1234	UDP	7
1.3	Enabled	227.10.20.32	1234	UDP	7
1.4	Enabled	227.10.20.33	1234	UDP	7
1.5	Enabled	227.10.20.34	1234	UDP	7
1.6	Enabled	227.10.20.35	1234	UDP	7
1.7	Enabled	227.10.20.36	1234	UDP	7
1.8	Enabled	227.10.20.37	1234	UDP	7
1.9	Enabled	227.10.20.38	1234	UDP	7
1.10	Enabled	227.10.20.39	1234	UDP	7
1.11	Enabled	227.10.20.40	1234	UDP	7
1.12	Enabled	227.10.20.41	1234	UDP	7
1.13	Enabled	227.10.20.42	1234	UDP	7

TSoIP Input>Service Configuration

In **Service Configuration** page you can set TS/program destination. Click **Clear config** button in the right side to clear all configurations. Click **Apply** button to make the setting take effect.

TSoIP Input Status Settings Batch Setting **Service Configuration**

Channel Select : Channel Scan

Service Name	Destination Settings [1.CM-DTMB-01]							
Channel 1.1	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
[302] CCTV 2	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
[303] CCTV 7	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
Channel 1.3	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
[302] CCTV 2	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
[303] CCTV 7	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
Channel 1.4	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
[302] CCTV 2	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input checked="" type="checkbox"/> 8
[303] CCTV 7	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input checked="" type="checkbox"/> 8
Channel 1.6	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input checked="" type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
[302] CCTV 2	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
[303] CCTV 7	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
Channel 1.7	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input checked="" type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
[302] CCTV 2	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
[303] CCTV 7	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
Channel 1.8	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input type="checkbox"/> 8

Apply
Clear Config

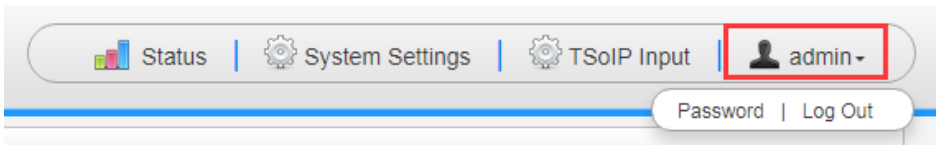
Channel Scan button is on the right corner of the page, select the channel which is newly added or modified and scan for updating the channel content. Click output channel numbers which are in the boxes under the Destination Settings list to deploy the TS/services destinations.



When you choose the boxes in the specific Channel line means to pass through the TS of this input channel to the certain destinations. When you choose the boxes in the specific program line means to multiplex the service to the certain destinations. You can select different services from different input channels to the same destination for multiplexing.

3.5 Admin

Click **Admin** you can choose to go into Password setting page or Log Out.



Part 4 Modulation Module Configuration

4.1 Modulation Output modules

4.1.1 CM-DTMB

CM-DTMB-00/01 module supports up to 4/8 adjacent frequencies modulating via 1 RF female port for output. Click the module bar under the Module list to go into the module page.

CM-DTMB-01 >Status

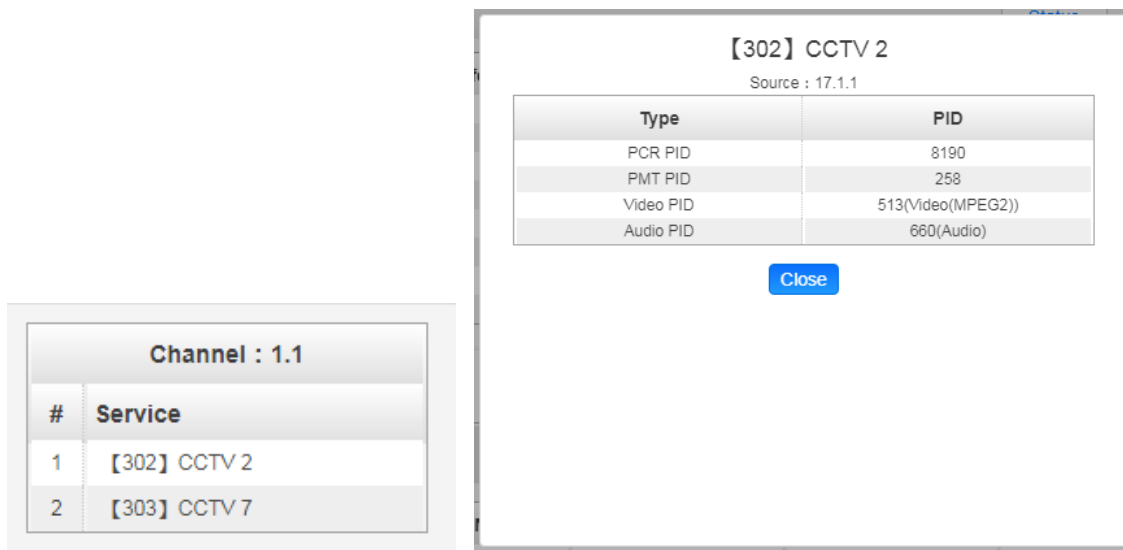
CM-DTMB-01					
Status Settings Service Configuration					
Channel	Total Bit Rate(Mbps)	Effective Bit Rate(Mb...	Bit Rate	TS Analysis	Service List
1.1	32.486	0.060	Normal	👁	☰
1.2	32.486	0.060	Normal	👁	☰
1.3	32.486	0.060	Normal	👁	☰
1.4	32.486	0.060	Normal	👁	☰
1.5	32.486	0.060	Normal	👁	☰
1.6	32.486	0.060	Normal	👁	☰
1.7	32.486	0.060	Normal	👁	☰
1.8	32.486	0.060	Normal	👁	☰

- **TS Analysis**

Channel1.1 TS Analysis					
Reset Counter					
<input type="text" value="Search"/>					
PID	Bit Rate(Mbps)	Bandwidth(%)	Continuity Count Error	Type	Service
0x0(0)	0.015	0.046	8	PAT	
0x11(17)	0.015	0.046	8	SDT	
0x102(258)	0.015	0.046	8	PMT	CCTV 2
0x103(259)	0.015	0.046	9	PMT	CCTV 7
0x201(513)	0.000	0.000	5	Video	CCTV 2
0x202(514)	0.000	0.000	4	Video	CCTV 7
0x294(660)	0.000	0.000	5	Audio	CCTV 2
0x29e(670)	0.000	0.000	5	Audio	CCTV 7

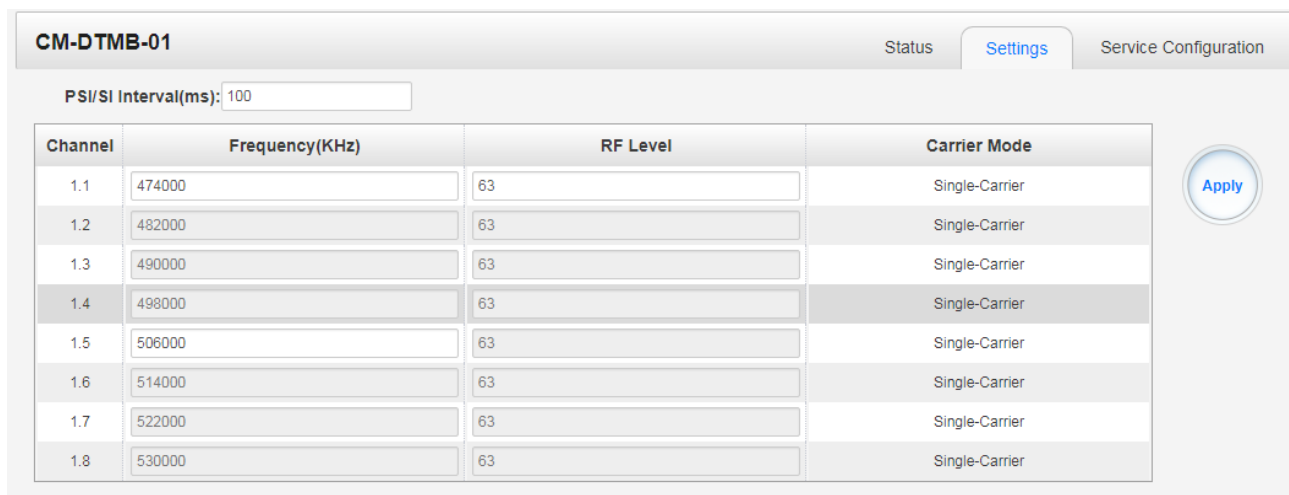
Tips:

- **Service List**



CM-DTMB-01 >Setting

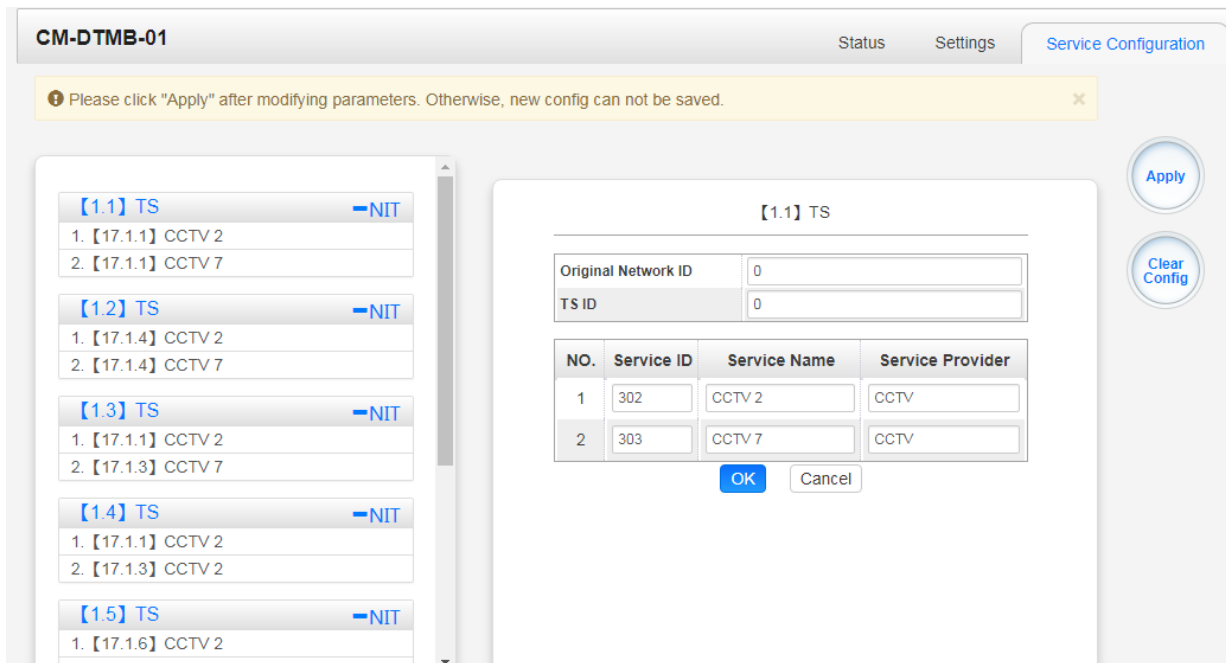
You can set modulation Frequency and RF Level.



Click the **Apply** button in the right side to make the change take effect.

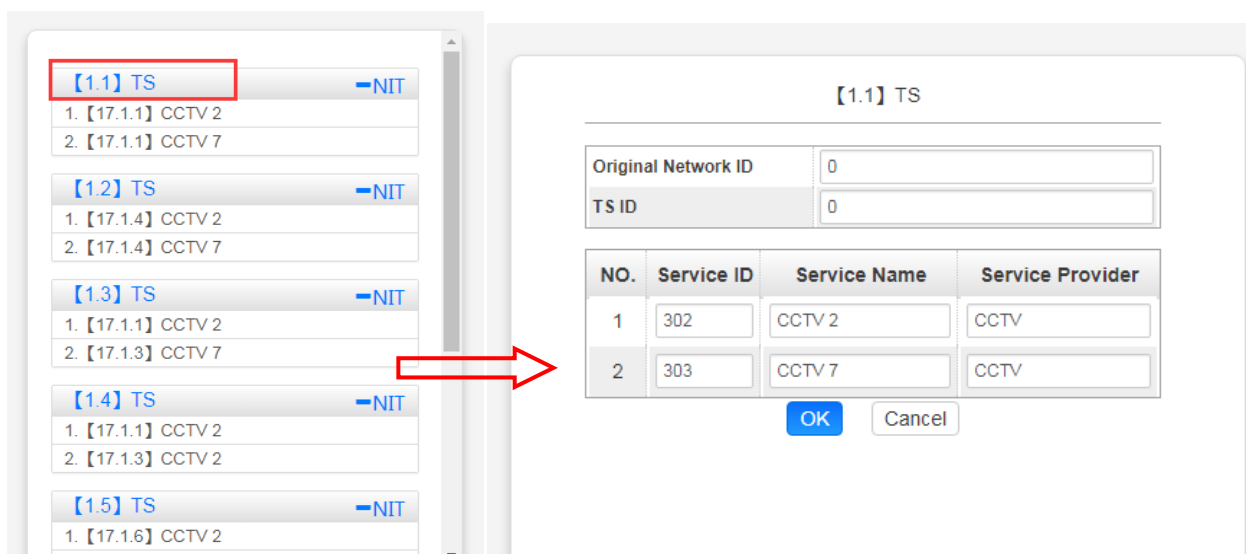
Name	Range	Name	Range
Frequency Range (MHz)	50~900	Constellation	4QAM-NR/4QAM/16QAM/32QAM/64QAM
RF Level (dBμ)	Max. 106		

CM-DTMB-01 >Service Configuration



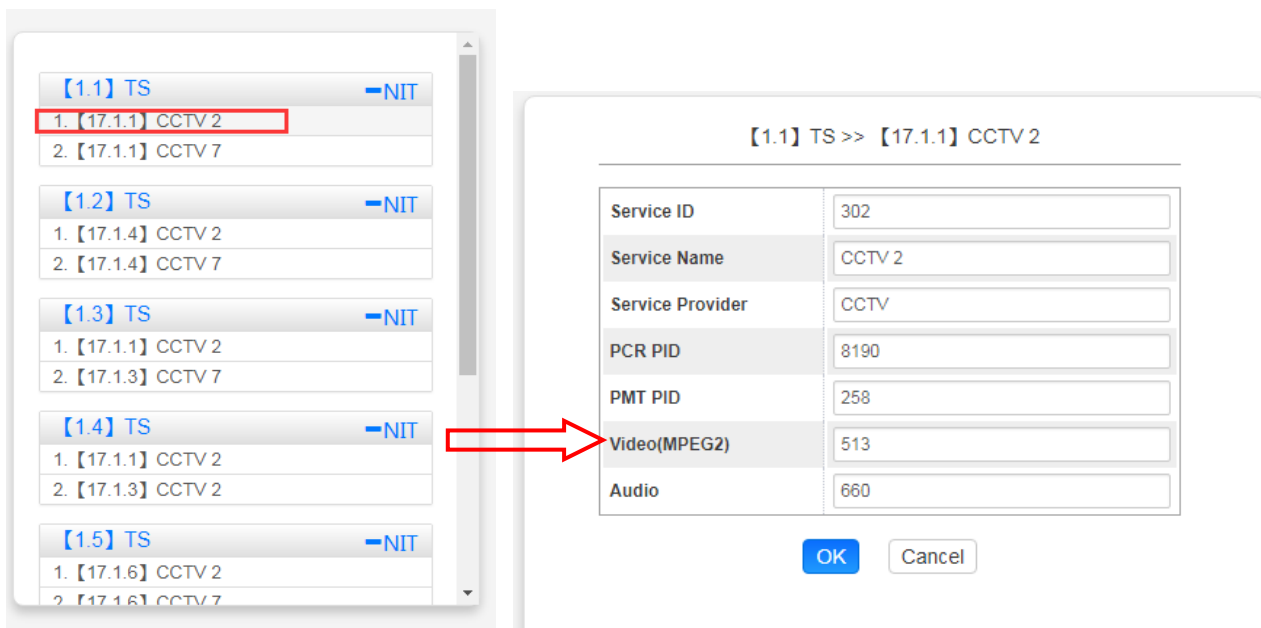
● **Edit TS information**

The channel details list on the left. Click the TS of a certain channel to open the TS edit sheet. You can edit the **Original Network ID**, **TS ID**, **Service ID**, **Service Name**, **Service Provider** in this sheet. Click the **OK** or **Cancel** button to take the change effect or cancel the operation.



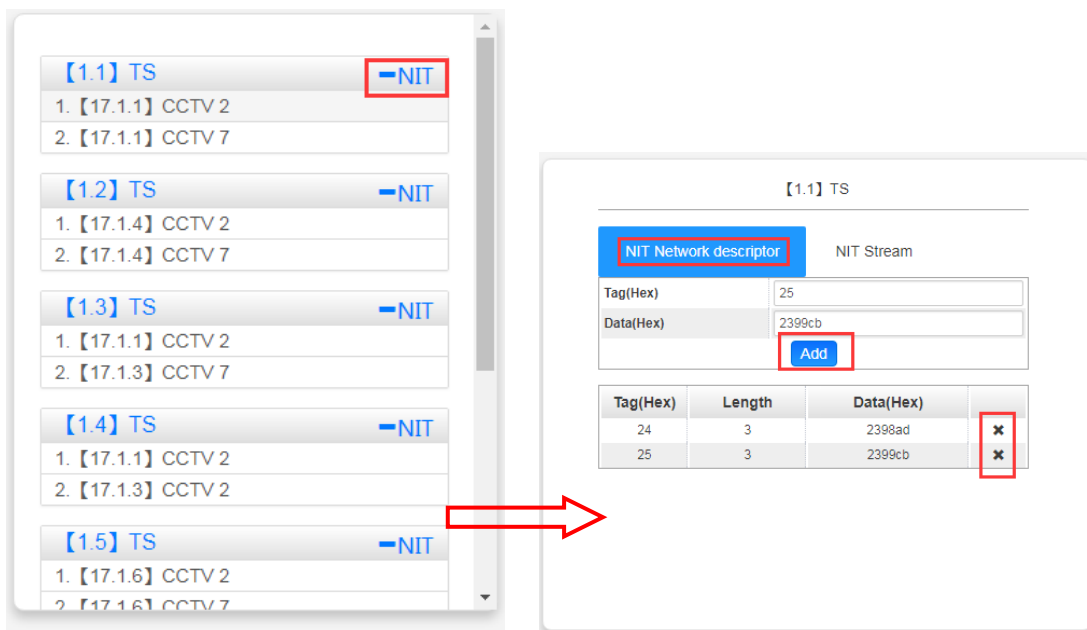
Click a specific service in the list to open the service information sheet. You can edit **Service ID**, **Service Name**, **Service Provider**, **PCR PID**, **PMT PID**, **Video PID**, **Audio PID** in this sheet. Click the **OK** or **Cancel** button to take the change effect or cancel the operation.

● **Edit Services Information**



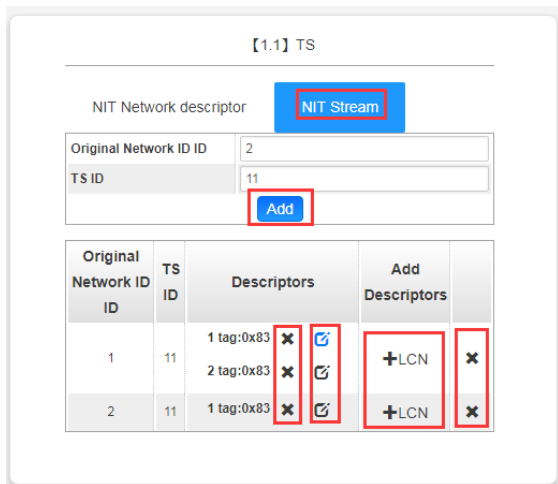
● **Edit NIT Network descriptor**

Click the **NIT** tag of a certain TS to open the NIT edit sheet of the TS. You can add/edit/delete the **Tag** and **Data** of **NIT Network descriptor**.

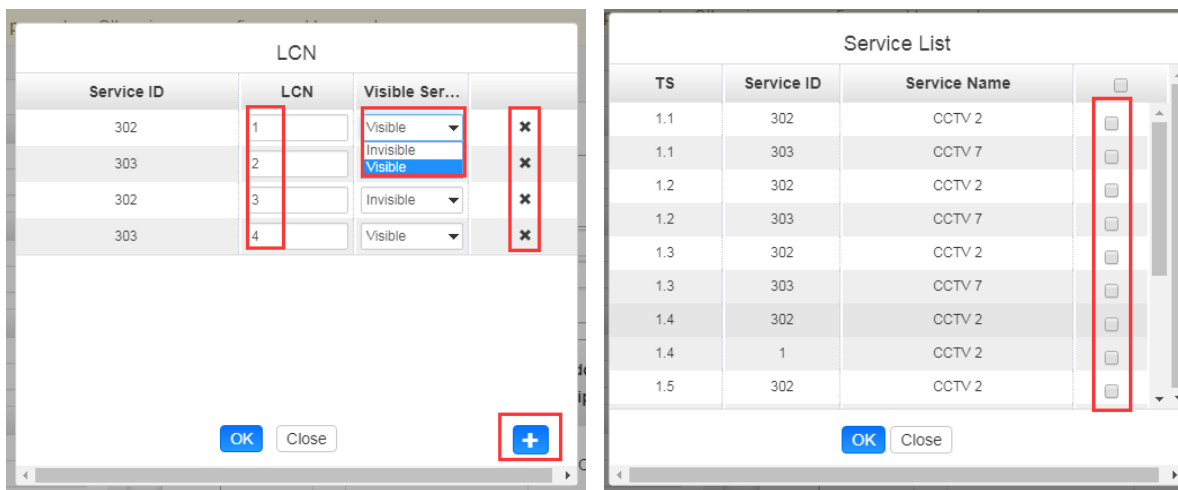


● **Edit NIT Stream**

Click the NIT Stream to go into the NIT stream sheet. You can add/edit/delete the NIT stream and add descriptors of LCN.



Add/edit/delete LCN.



4.3.2 CM-OFDM


CM-OFDM module supports up to 4/8 frequencies modulating with 1 RF female connector for output.

4.3.3 CM-QAMA

CM-QAMA module supports up to 4/8 frequencies modulating with 1 RF female connector for output.

Part 5 Appendices

Appendix A - Abbreviations

BAT	Bouquet Association Table
BER	Bit Error Ratio
Bit Rate	The rate at which the compressed bit stream is delivered
BNC	British Naval Connector
CAT	Conditional Access Table
CAT6	Category 6 – Cable standard for gigabit Ethernet
CBR	Constant Bitrate
dB	Decibel
DVB	Digital Video Broadcasting
EIT	Event Information Table
EPG	Electronic Program Guide
FEC	Forward Error Correction
HD	High Definition
	The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.
I/O	Input/output
Kbps	1000 bit per second
LCN	Logical Channel Number
LNB	Low-Noise Block
LO	Local Oscillator
Mbps	1,000,000 bits per second
MER	Modulation Error Ratio
MIB	Management Information Base
MPTS	Multi-program Transport Stream
NIT	Network Information Table

OFDM	Orthogonal Frequency-Division Multiplexing
PAT	Program Association Table
PCR	Program Clock Reference
PID	Packet Identifier
PMT	Program Map Table
PSI	Program Specific Information
PSU	Power Supply Unit
QAM	Quadrature Amplitude Modulation
QPSK	Quadrature Phase-Shift Keying
SD	Standard Definition
SDT	Service Description Table
SI	Service Information
SNMP	Simple Network Management Protocol
SNR	Signal Noise Ration
SPTS	Single Program Transport Stream
TDT	Time and Date Table
TS	Transport Stream
VBR	Variable Bitrate

Appendix B- Warranty

We warrants this instrument against defects from any cause, except acts of God and abusive use, for a period of 1 (one) year from date of purchase. During this warranty period, we will correct any covered defects without charge.

Appendix C- After-Sales Support

Please contact our sales/regional representatives for any help, product information, and troubleshooting.

Returning Products for Service

The CMP331 is a delicate piece of equipment and needs to be serviced and repaired by the manufacturer. In order to expedite this process please carefully read the following items.

- Confirm the required component

Before any product can be returned for service, the client ought to contact our sales representatives and after-sales support department by means of email to confirm the need to return the product or part of the product.

- Collect the Serial Numbers to obtain RMA Number

Serial Number (SN) is printed on a label on the chassis and modules. To create a RMA number, SN must be submitted to support department. Once the RMA number has been issued to the client, the unit/component needs to be packaged and shipped back to the manufacturer. It's best to use the original box and packaging for the product but if this not available, check with the service department for the proper packaging instructions. RMA Number should be specified in the delivery bill or written on the package.



Do not return any power cables or accessories unless instructed to do so.