

PRODUCT MODEL NUMBER: TL-9596S DVB-C Encoder Modulator



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CHAPTER 1

INTRODUCTION

1.1 PRODUCT OVERVIEW

TL-9596S is a professional high integration device which includes encoding, multiplexing, and modulation. It supports 8/16/24 HDMI inputs, 1 ASI input, 1 USB payer input and 128 IP inputs via the GE port. It also supports DVB-C RF out with 12 non-adjacent carriers, and supports 12 MPTS as mirror of 12 carriers through the GE port and 1 ASI out (optional) as mirror of one of the carriers. This full function device makes it ideal for small CATV head end system, and it's a smart choice for hotel TV system, entertainment system in sports bar, hospital, apartment, etc.

1.2 KEY FEATURES

- 8/16/24 HDMI inputs, MPEG-4 AVC/H.264 Video encoding
- 1 ASI input for re-mux
- 1 USB Player (Insert the USB Flash drive with “xxx.ts” videos in TL-9596S and play back the content in an easy way; file system FAT 32.)
- 128 IP input over UDP and RTP via GE port
- Each carrier out channel processes maximum 32 IP inputs from the GE port(UDP&RTP protocol)
- MPEG1 Layer II, LC-AAC and HE-AAC Audio encoding, AC3 Pass Through and audio gain adjustment
- Support 12 groups multiplexing/DVB-C modulating
- Support 1 ASI out as mirror of one of RF output carriers---Optional
- Support 12 MPTS IP output over UDP, RTP/RTSP
- Support LOGO, Caption and QR code insertion(Language Supported: 中文, English, العربية, русский, اردو, for more languages please consult us...)

- Support PID remapping/ accurate PCR adjusting/PSI/SI editing and inserting
- Control via web management, and easy updates via web

1.3 SPECIFICATIONS

Input	
8/16/24 HDMI inputs for option	
1 ASI in for re-mux	
1 USB Player input for re-mux	
128 IP input over UDP and RTP, GE port, RJ45—DVB-C RF out	
128 IP input over UDP and RTP, GE port, RJ45—DVB-T/ATSC RF out	
128 IP input over UDP and RTP, GE port, RJ45—ISDBT RF out	
Video	
Input Resolution	1920×1080_60P, 1920×1080_60i, 1920×1080_50P, 1920×1080_50i, 1280×720_60P, 1280×720_50P, 720×576_50i,720×480_60i,
Output Resolution	1920×1080_30P, 1920×1080_25P, 1280×720_30P, 1280×720_25P, 720×576_25P,720×480_30P,
Encoding	MPEG-4 AVC/H.264
Bit-rate	1Mbps~13Mbps each channel
Rate Control	CBR/VBR
GOP Structure	IP...P (P Frame adjustment, without B Frame)
Audio	
Encoding	MPEG-1 Layer 2, LC-AAC, HE-AAC and AC3 Pass through
Sampling rate	48KHz
Resolution	24-bit

Audio Gain	0-255 Adjustable	
MPEG-1 Layer 2 Bit-rate	48/56/64/80/96/112/128/160/192/224/256/320/384 kbps	
LC-AAC Bit-rate	48/56/64/80/96/112/128/160/192/224/256/320/384 kbps	
HE-AAC Bit-rate	48/56/64/80/96/112/128 kbps	
Multiplexing		
Maximum PID Remapping	255 input per channel	
Function	PID remapping (automatically or manually)	
	Accurate PCR adjusting	
	Generate PSI/ SI table automatically	
DVBC Modulator Section		
QAM Channel	12 non-adjacent carriers output (maximum bandwidth 192MHz)	
Standard	EN300 429/ITU-T J.83A/B	
MER	≥40db	
RF frequency	50~960MHz, 1KHz step	
RF output level	-20~+3dbm, 0.1db step	
Symbol Rate	5.0Msps~7.0Msps, 1ksps stepping	
	J.83A	J.83B
Constellation	16/32/64/128/256QAM	64/256 QAM
Bandwidth	8M	6M
DVB-T Modulator Section		
Standard	EN300744	
FFT mode	2K,4K, 8K	
Bandwidth	6M, 7M, 8M	
Constellation	QPSK, 16QAM, 64QAM	
Guard Interval	1/4, 1/8, 1/16, 1/32	
FEC	1/2, 2/3, 3/4, 5/6, 7/8	

MER	≥42 dB
RF frequency	50~960MHz, 1KHz step
RF out	8 non-adjacent carriers' output (maximum bandwidth 192MHz)
RF output level	-20~ +3dBm, 0.1db step
ATSC Modulator Section	
Standard	ATSC A/53
Bandwidth	6M
Constellation	8VSB
FEC	RS(208 188)+Trellis
MER	≥40dB
ACL	-55 dBc
RF frequency	50~960MHz, 1KHz step
RF out	8 non-adjacent carriers' output (maximum bandwidth 192MHz)
RF output level	-20~+3dbm (for all carriers), 0.5db stepping
ISDB-T Modulator Section	
Standard	ARIB STD-B31
Bandwidth	6M
Constellation	QPSK, 16QAM, 64QAM
Guard Interval	1/32, 1/16, 1/8, 1/4
Transmission Mode	2K, 4K, 8K
Code rate	1/2, 2/3, 3/4, 5/6, 7/8
MER	≥40dB
RF frequency	50~960MHz, 1KHz step
RF out	6 (or 16) non-adjacent carriers' output (maximum bandwidth 192MHz)
RF output level	-20dBm~+3dBm, 0.1 dB stepping

Stream Output

- 1 ASI output as mirror of one of RF output carriers (Optional)
- 12 MPTS output over UDP and RTP/RTSP as mirror of 12 DVB-C carriers,
- 8 MPTS output over UDP and RTP/RTSP as mirror of 8 DVB-T/ATSC carriers (Optional)
- 6 MPTS output over UDP and RTP/RTSP as mirror of 6 ISDB-T carriers (Optional)
- 16 MPTS output over UDP and RTP/RTSP as mirror of 16 ISDB-T carriers (Optional)
- 1*1000M Base-T Ethernet interface, GE port

System Function

Network management (WEB)

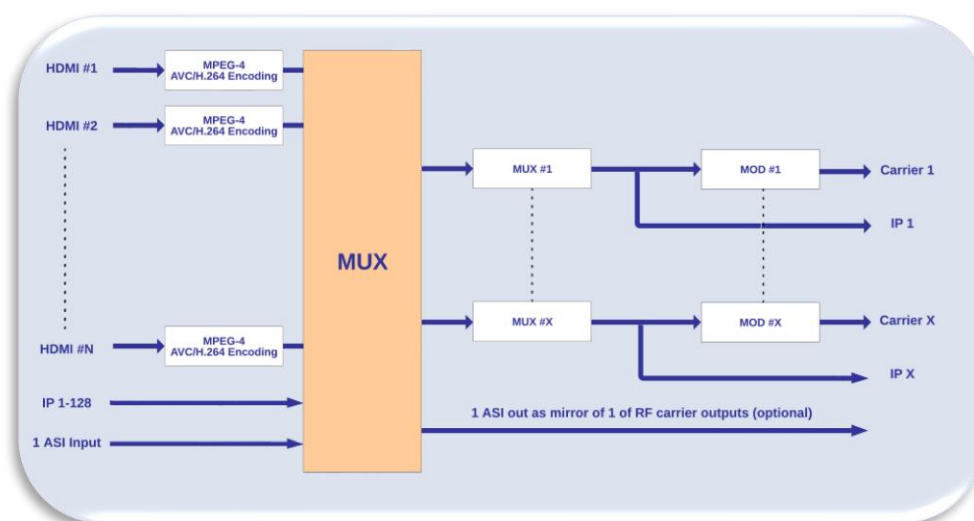
Chinese and English language

Ethernet software upgrade

General Information

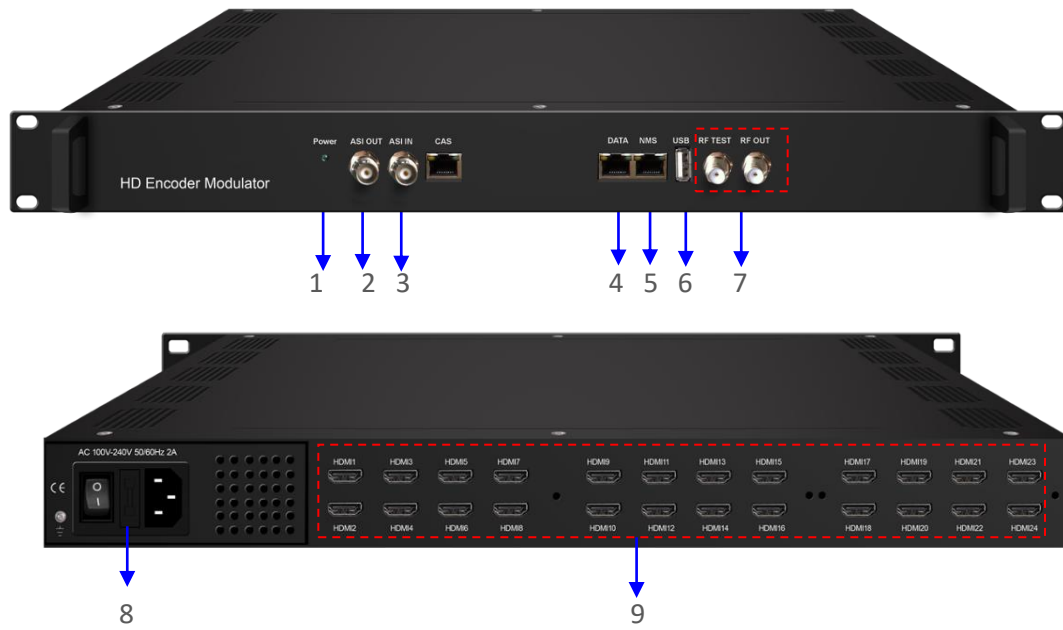
Dimension (W×L×H)	482mm×328mm×44mm
Environment	0~45°C(work) ; -20~80°C (Storage)
Power requirements	AC 110V± 10%, 50/60Hz, AC 220 ± 10%, 50/60Hz

1.4 PRINCIPLE CHART



1.5 APPEARANCE AND DESCRIPTION

Front and Rear Panel Illustration



1	Power Indicator
2	ASI out (Optional)
3	ASI in
4	DATA: IP input and output port (GE)
5	NMS (Network management port)
6	USB Port (TS playing)
7	RF test and RF out port
8	Power supply and Grounding Pole
9	HDMI inputs

CHAPTER 2

INSTALLATION GUIDE

This section is to explain the cautions the users must know in some case that possibly injure may bring to users when it's used or installed. For this reason, please read all details here and make in mind before installing or using the product.

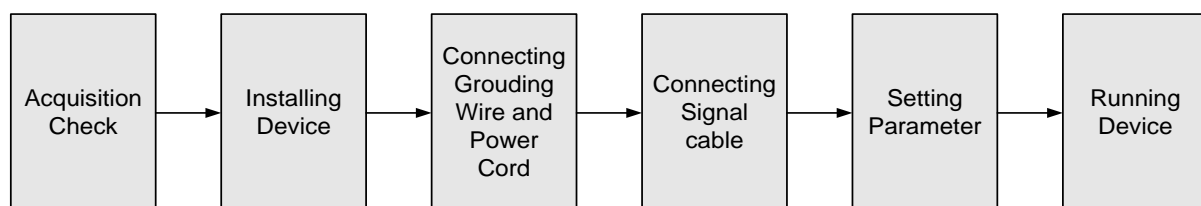
2.1 GENERAL PRECAUTIONS

- Must be operated and maintained free of dust or dirty.
- The cover should be securely fastened, do not open the cover of the products when the power is on.
- After use, securely stow away all loose cables, external antenna, and others.

2.2 POWER PRECAUTIONS

- When you connect the power source, make sure if it may cause overload.
- Avoid operating on a wet floor in the open. Make sure the extension cable is in good condition
- Make sure the power switch is off before you start to install the device

2.3 DEVICE'S INSTALLATION FLOW CHART ILLUSTRATED AS FOLLOWING



2.4 ENVIRONMENT REQUIREMENT

Item	Requirement
Machine Hall Space	When user installs machine frame array in one machine hall, the distance between 2 rows of machine frames should be 1.2~1.5m and the distance against wall should be no less than 0.8m.
Machine Hall Floor	Electric Isolation, Dust Free Volume resistivity of ground anti-static material: $1 \times 10^7 \sim 1 \times 10^{10} \Omega$, Grounding current limiting resistance: $1 M\Omega$ (Floor bearing should be greater than 450 Kg/m^2)
Environment Temperature	$5 \sim 40^\circ\text{C}$ (sustainable), $0 \sim 45^\circ\text{C}$ (short time) installing air-conditioning is recommended
Relative Humidity	20%~80% sustainable 10%~90% short time
Pressure	$86 \sim 105 \text{ KPa}$
Door & Window	Installing rubber strip for sealing door-gaps and dual level glasses for window
Wall	It can be covered with wallpaper, or brightness less paint.
Fire Protection	Fire alarm system and extinguisher
Power	Requiring device power, air-conditioning power and lighting power are independent to each other. Device power requires AC $110\text{V} \pm 10\%$, 50/60Hz or AC $220\text{V} \pm 10\%$, 50/60Hz. Please carefully check before running.

2.5 GROUNDING REQUIREMENT

- All function modules' good grounding is the basis of reliability and stability of devices. Also, they are the most important guarantee of lightning arresting and interference rejection. Therefore, the system must follow this rule.
- Grounding conductor must adopt copper conductor in order to reduce high frequency impedance, and the grounding wire must be as thick and short as possible.
- Users should make sure the 2 ends of grounding wire well electric conducted and be antirust.

- It is prohibited to use any other device as part of grounding electric circuit
- The area of the conduction between grounding wire and device's frame should be no less than 25mm².

CHAPTER 3

WEB NMS OPERATION

Users can only control and set the configuration in computer by connecting the device to web NMS Port. User should ensure that the computer's IP address is different from this device's IP address; otherwise, it would cause IP conflict.

3.1 LOGIN

The default IP address of this device is 192.168.0.136.

Connect the PC (Personal Computer) and the device with net cable, and use ping command to confirm they are on the same network segment.

I.G. the PC IP address is 192.168.99.252, we then change the device IP to 192.168.99.xxx (xxx can be 1 to 254 except 252 to avoid IP conflict).

Use web browser to connect the device with PC by inputting the Encoder & Modulator's IP address in the browser's address bar and press Enter.

It displays the Login interface as Figure-1. Input the Username and Password (Both the default Username and Password are "admin".) and then click "LOGIN" to start the device setting.

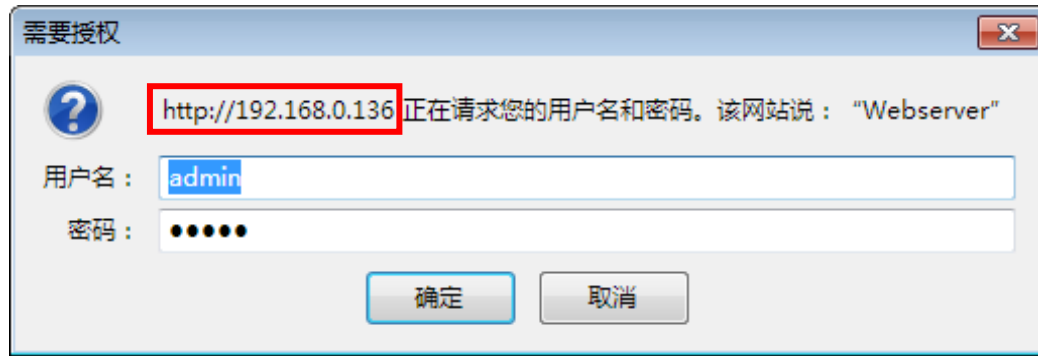


Figure-1

3.2 OPERATION

1) Summary → Status

When we login into encoder modulator, it displays the status interface as Figure-2.

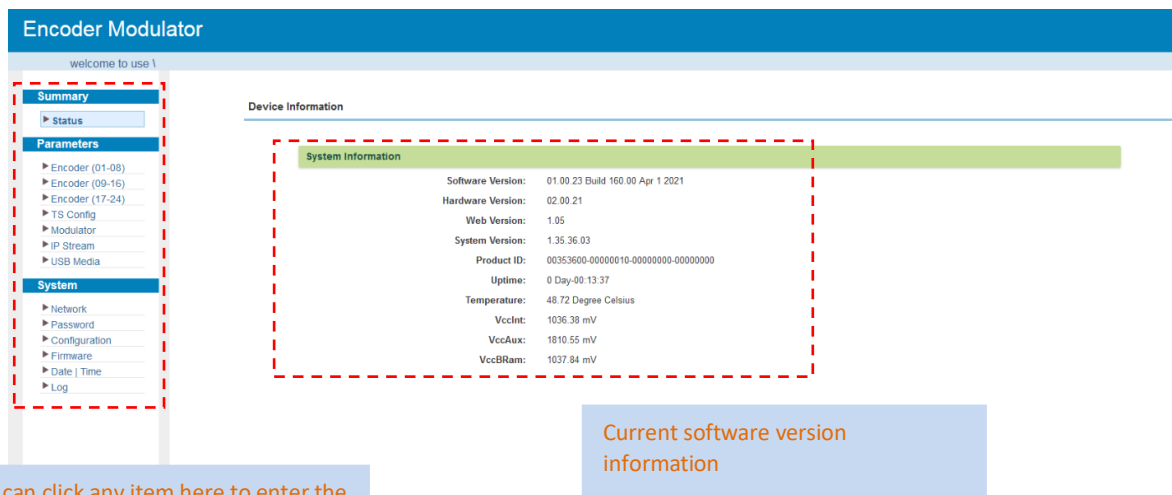
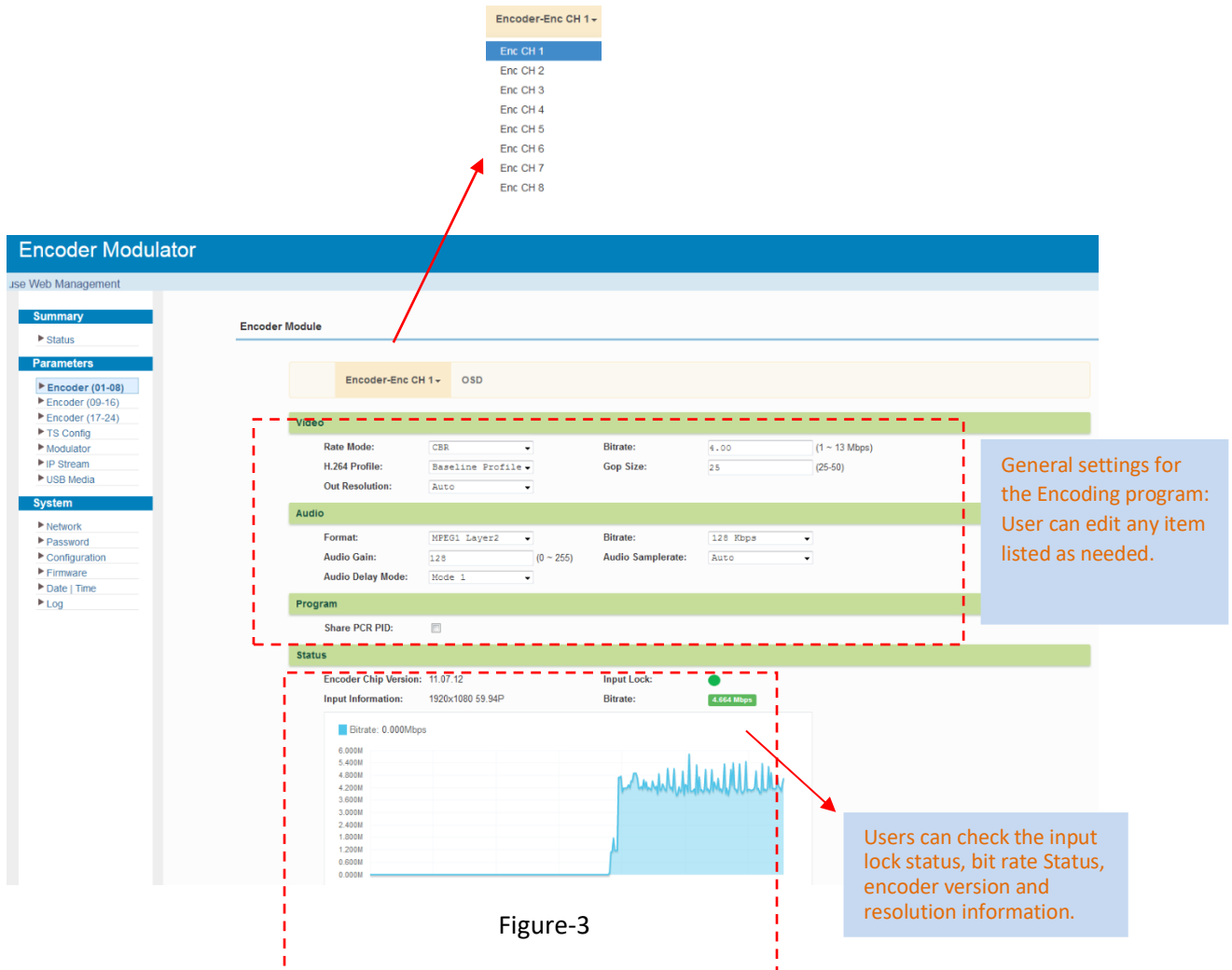


Figure-2

Parameters → Encoder (01-08)

From the menu on left side of the webpage, clicking "Encoder(01-08)", it displays the information of each encoding channel from the encoder as Figure-3.



Encoder(01-08) → OSD:

Clicking “OSD”, it displays the interface as Figure-4/5/6 where to set Logo/ Caption/ QRCode parameters.

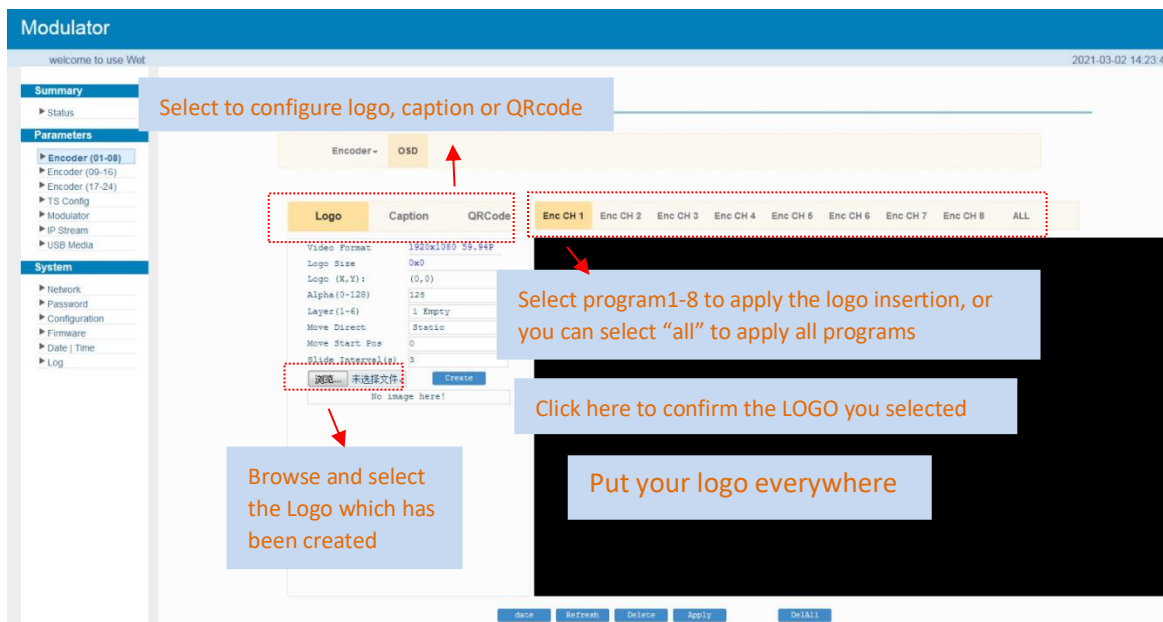


Figure-4

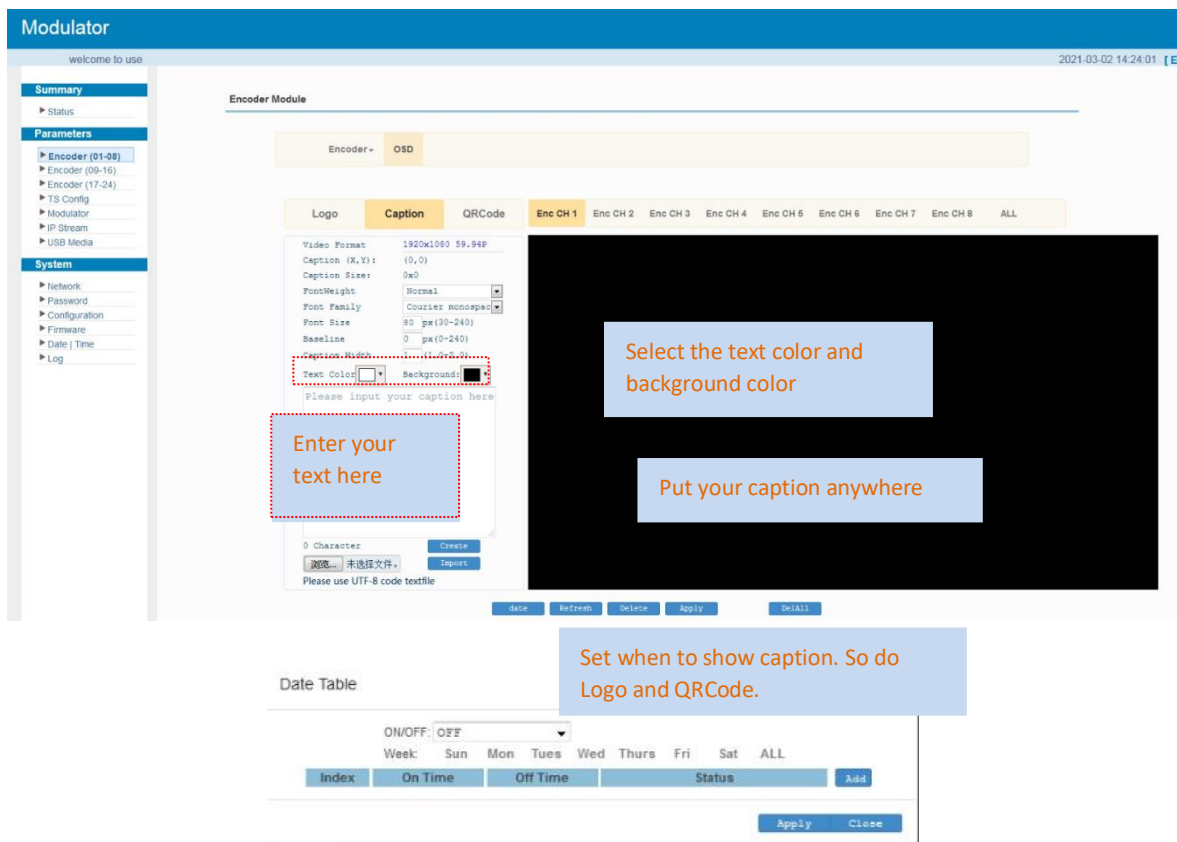


Figure-5

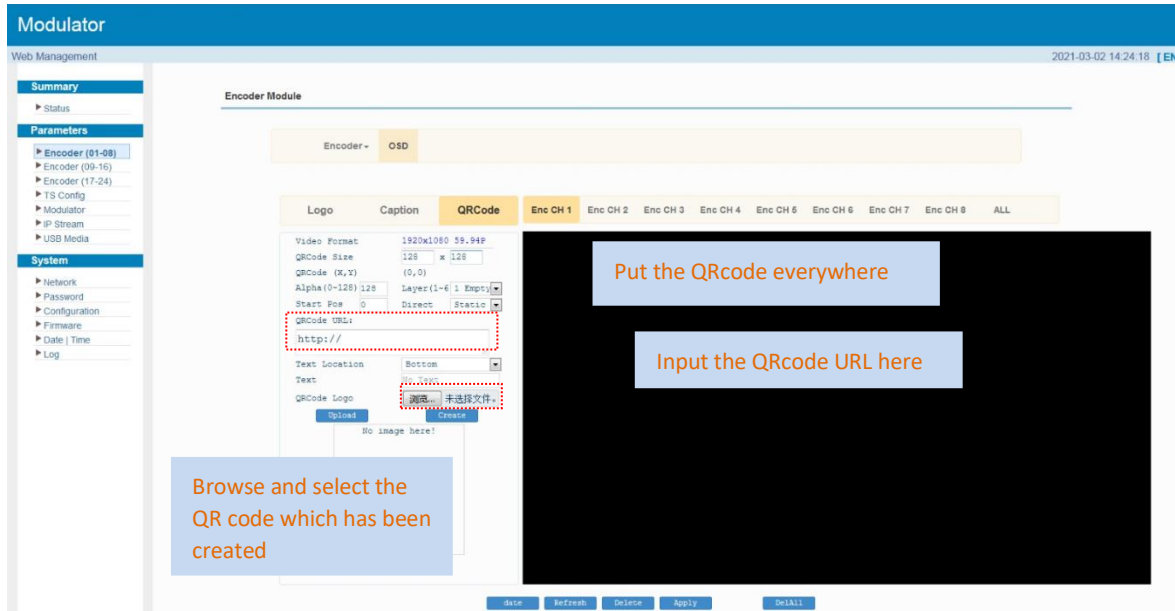


Figure-6

Parameters → Encoder (09-16)

From the menu on left side of the webpage, clicking “Encoder(09-16)”, it displays the information of each encoding channel from the encoder as Figure-7.

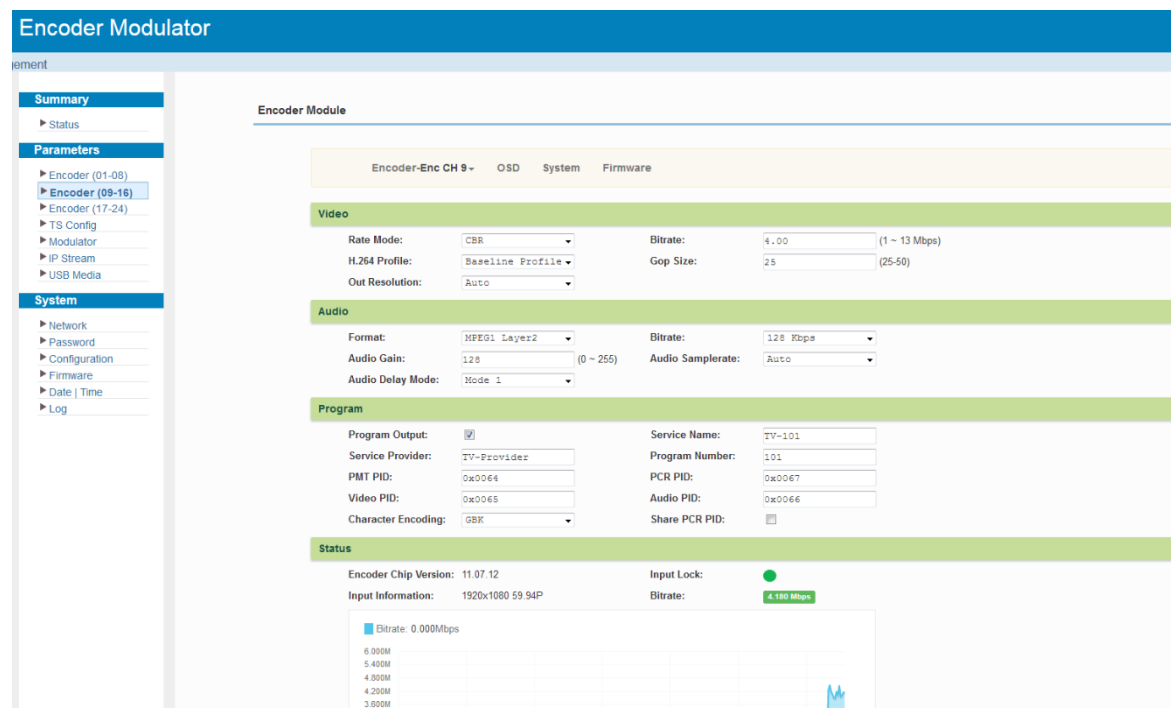


Figure-7

Encoder (09-16) → OSD

OSD setting is same as the one in the encoder(01-08).

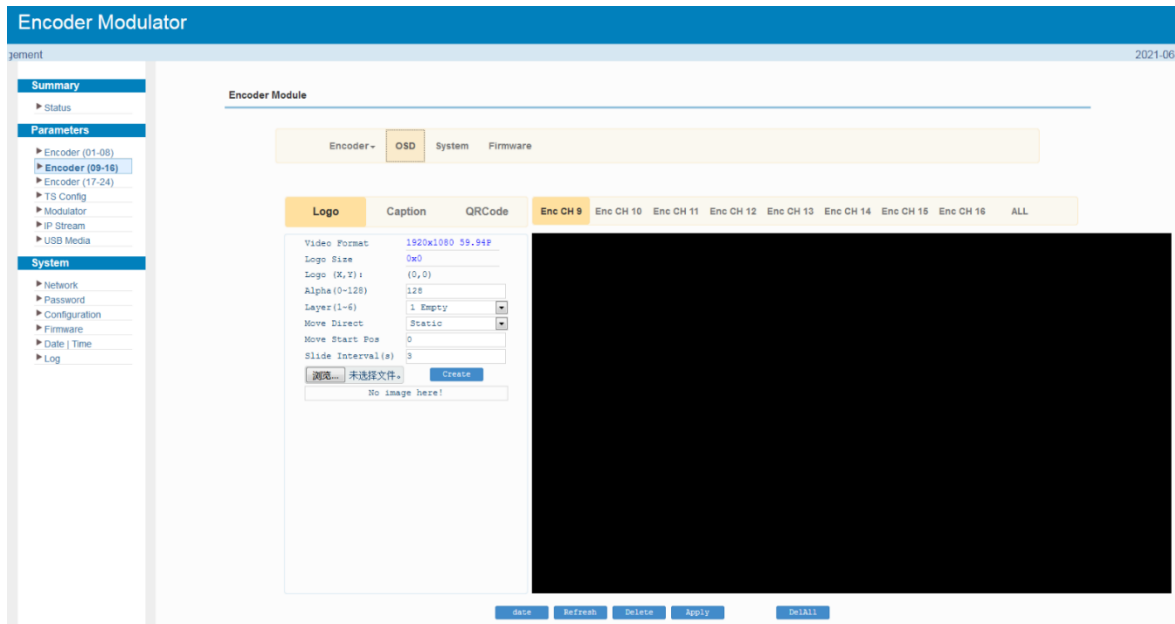


Figure-8

Encoder (09-16) → System

Under System page, users can check the software version information of the encoder module, save, restore or load factory set the module configuration.

Encoder Modulator

Summary

Status

Parameters

Encoder (01-08)

Encoder (09-16)

Encoder (17-24)

TS Config

Modulator

IP Stream

USB Media

System

Network

Password

Configuration

Firmware

Date | Time

Log

Encoder Module

Encoder

OSD

System

Firmware

Module Info.

Software Version:

 01.01.25 Build 153.00

Hardware Version:

 00.01.37

System Version:

 2.02.1.62

Module ID:

 1

Module Configuration

Save config

Reboot

Factory set

DATA

IP Address:

 192.168.0.137

Subnet Mask:

 255.255.255.0

Gateway:

 192.168.0.1

MAC Address:

 20:20:12:04:56:79

Apply

Figure-9

Encoder (09-16) → Firmware

Under the Firmware page, users can update the software for the encoder module.

Encoder Modulator

Management

Summary

Status

Parameters

Encoder (01-08)

Encoder (09-16)

Encoder (17-24)

TS Config

Modulator

IP Stream

USB Media

System

Network

Password

Configuration

Firmware

Date | Time

Log

Encoder Module

Encoder

OSD

System

Firmware

Warning:

1. Upgrade firmware(software and hardware) to get new function,please choose the right firmware to upgrade.If you use a wrong file,the device may not work.

2. Upgrade will keep a long time,please do not turn off the power, otherwise the device will not work.

3. After upgrade,you must reboot device manually.

Current Software Version:

 01.01.25 401 Build 153.00 Mar 26 2021-13:27:03

Current Hardware Version:

 00.01.37

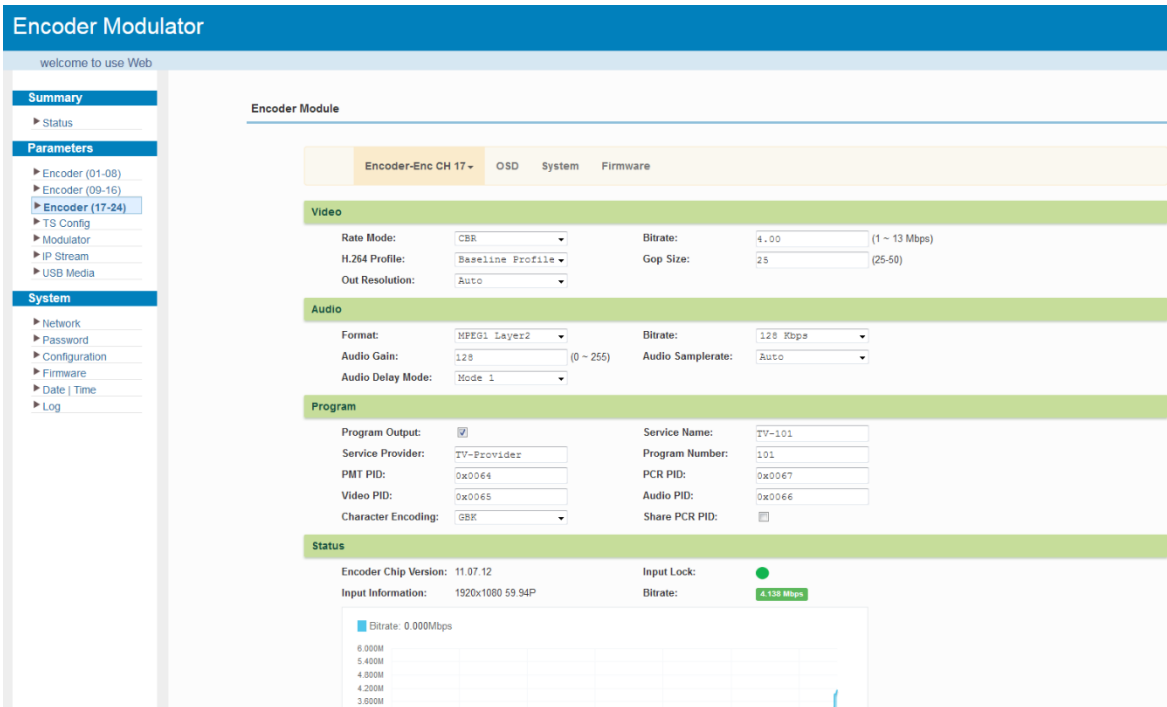
浏览... 未选择文件

Upgrade

Figure-10

Parameters → Encoder(17-24)

Encoder (17-24) shares the same configuration steps with encoder (09-16).



The screenshot shows the 'Encoder Modulator' web interface. The left sidebar contains a menu with 'Summary', 'Parameters', and 'System'. Under 'Parameters', 'Encoder (17-24)' is selected. The main content area is titled 'Encoder Module' and has tabs for 'Encoder-Enc CH 17', 'OSD', 'System', and 'Firmware'. The 'Encoder-Enc CH 17' tab is active, showing configuration sections for Video, Audio, Program, and Status.

Video

Rate Mode:	CBR	Bitrate:	4.00	(1 ~ 13 Mbps)
H.264 Profile:	Baseline Profile	Gop Size:	25	(25-50)
Out Resolution:	Auto			

Audio

Format:	MPEG1 Layer2	Bitrate:	128 Kbps
Audio Gain:	128	Audio Samplerate:	Auto
Audio Delay Mode:	Mode 1		

Program

Program Output:	<input checked="" type="checkbox"/>	Service Name:	TV-101
Service Provider:	TV-Provider	Program Number:	101
PMT PID:	0x0064	PCR PID:	0x0067
Video PID:	0x0065	Audio PID:	0x0066
Character Encoding:	GBK	Share PCR PID:	<input type="checkbox"/>

Status

Encoder Chip Version:	11.07.12	Input Lock:	●
Input Information:	1920x1080 59.94P	Bitrate:	4.138 Mbps

Below the status section, there is a table showing bitrate information:

Bitrate: 0.000Mbps					
6.000M					
5.400M					
4.800M					
4.200M					
3.600M					
.....					

Figure-11

Parameters → TS Config:

From the menu on left side of the webpage, clicking “TS Config”, it displays the interface where users can configure the TS output parameters.

➤ TS Config→Output TS X:

Clicking “Output TS X”, it displays the interface where users can select the TS output carrier (Figure-12)

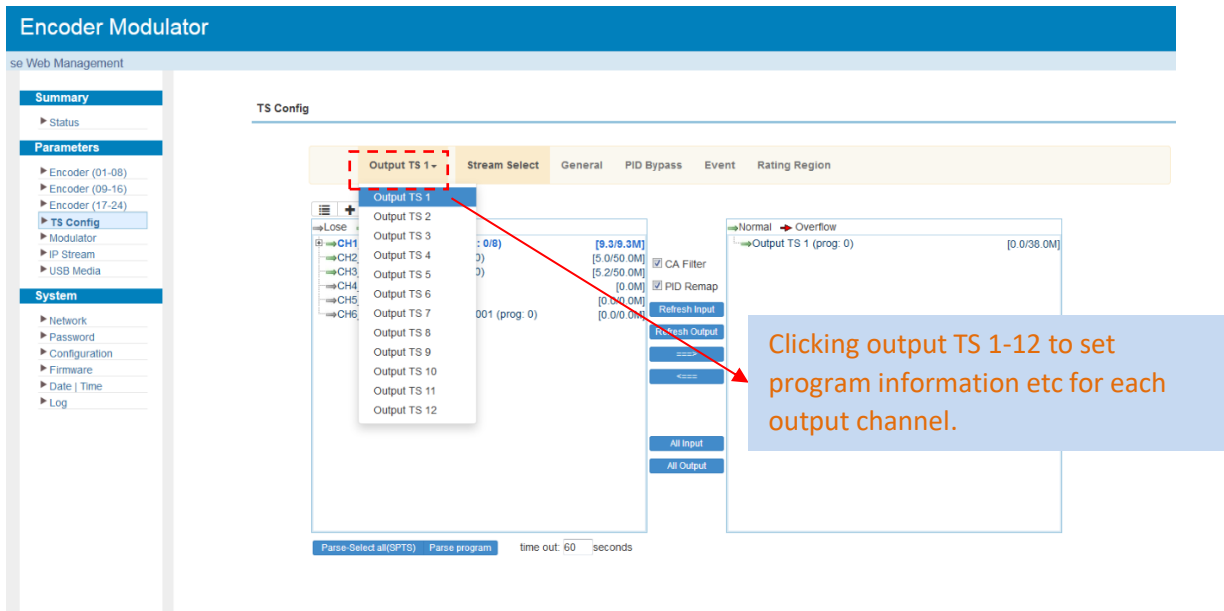


Figure-12

➤ TS Config→Stream select:

Clicking “Stream select”, it displays the interface where users can select program(s) to multiplex out and modify program info. (Figure-13)



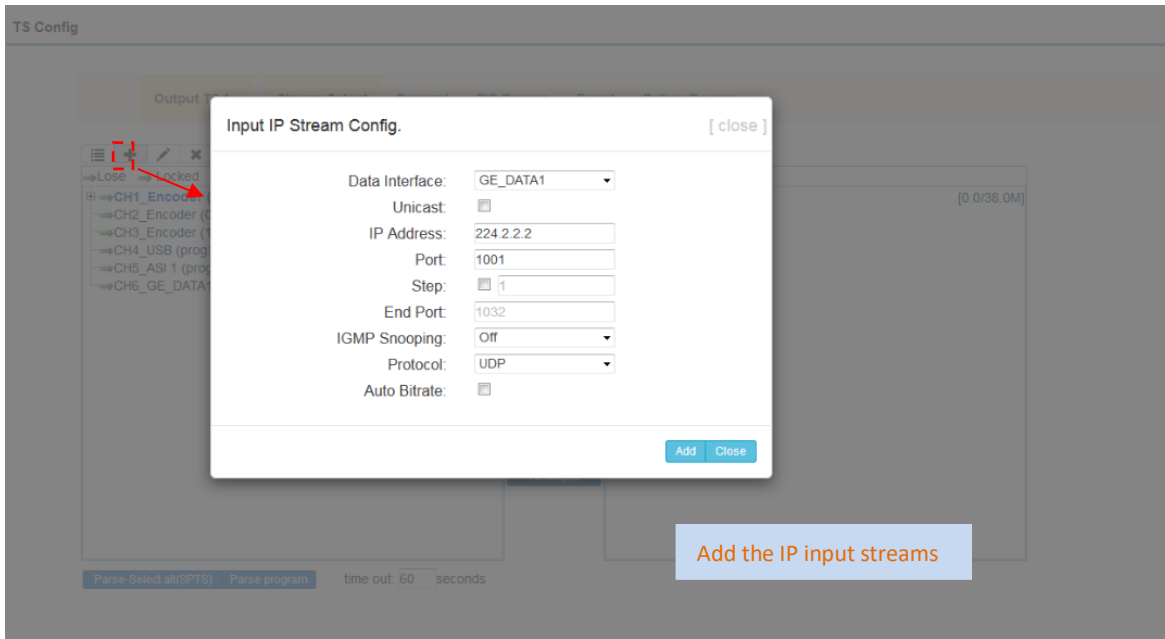


Figure-13

Configure 'Input Area' and 'Output Area' with buttons in 'Operation Area'. Instructions are as below:

→ Lose → Locked : To check source streams locked or not, green means current source streams locked

→ Normal → Overflow : To check current TS overflowing or not, red color means current TS overflowing, need reduce program

☒ CA Filter : To filter/not filter the source CA information

☒ PidRemap : To enable/disable the PID remapping

To refresh the input program information

To refresh the output program information

Select one input program first and click this button to transfer the selected program to the right box to output.

Similarly, user can cancel the multiplexed programs from the right box.

To select all the input programs

[All Output](#) To select all the output programs

➤ Program Modification:

The multiplexed program information can be modified by clicking the program in the 'output' area. For example, when clicking [TV-101 <=CH1_Encoder \(01-08\) \[101\]](#), it triggers a dialog box (Figure-14) where users can input new information.

Program Information

[close]

Program From Input:

CH1_Encoder (01-08) [101]

Service Name:

TV-101

Major Channel Number:

1

Minor Channel Number:

1

Source Id:

1

Short Name:

prog1

Program Number:

1001

Logic Channel Number:

1

Service Type:

0x01

Service Provider:

TV-Provider

PMT Descriptor Tag:

☐ 0x00

PMT Descriptor Data:

(Hex)

PMT PID:

0x0020

PCR PID:

0x0021

MPEG-4 Video PID:

☒ 0x0022

MPEG-1 Audio PID:

☒ 0x0023

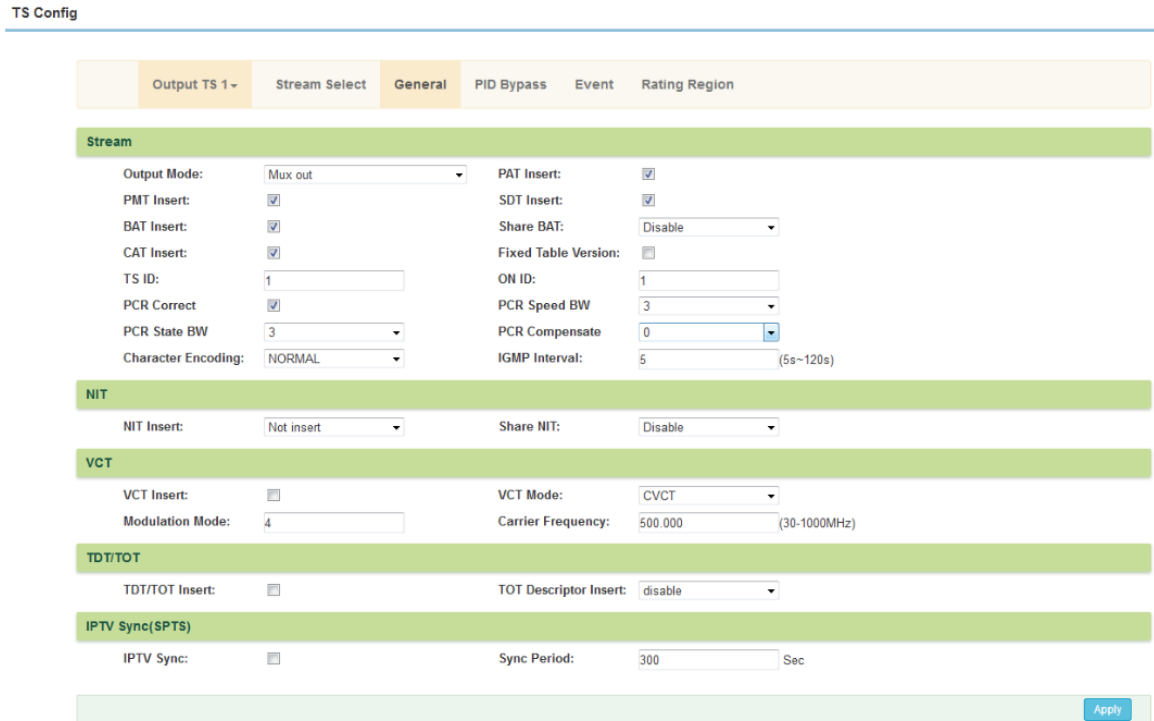
Apply

Close

Figure-14

➤ TS Config→General:

From the TS Config menu on up side of the webpage, clicking “General”, it displays the interface where users can enable PSI/SI table out and insert NIT etc. (Figure-15)



The screenshot shows the 'TS Config' interface with the 'General' tab selected. The interface is divided into several sections: Stream, NIT, VCT, TDT/TOT, and IPTV Sync(SPTS). Each section contains various configuration options with checkboxes, dropdown menus, and input fields.

Section	Parameter	Value
Stream	Output Mode:	Mux out
	PMT Insert:	<input checked="" type="checkbox"/>
	BAT Insert:	<input checked="" type="checkbox"/>
	CAT Insert:	<input checked="" type="checkbox"/>
	TS ID:	1
	PCR Correct:	<input checked="" type="checkbox"/>
	PCR State BW:	3
	Character Encoding:	NORMAL
	PAT Insert:	<input checked="" type="checkbox"/>
	SDT Insert:	<input checked="" type="checkbox"/>
NIT	NIT Insert:	Not insert
	Share NIT:	Disable
VCT	VCT Insert:	<input type="checkbox"/>
	VCT Mode:	CVCT
TDT/TOT	TDT/TOT Insert:	<input type="checkbox"/>
	TOT Descriptor Insert:	disable
IPTV Sync(SPTS)	IPTV Sync:	<input type="checkbox"/>
	Sync Period:	300 Sec

An 'Apply' button is located at the bottom right of the configuration area.

Figure-15

➤ TS Config → PID Bypass:

Users can bypass the wanted PIDs here



The screenshot shows the 'TS Config' interface with the 'PID Bypass' tab selected. The interface includes a table with columns for 'Index', 'Input Channel', 'Input PID(0x)', and 'Output PID(0x)'. There is a '+' button to add new entries. At the bottom, there are 'Set' and 'Del-All' buttons.

Index	Input Channel	Input PID(0x)	Output PID(0x)
+			

'Set' and 'Del-All' buttons are located at the bottom right.

Figure-16

➤ TS Config → Event:

Users can edit the event information for the selected information as the below picture shows.

TS Config

Output TS 1 ▾
Stream Select
General
PID Bypass
Event
Rating Region

Select Prg.: 1:TV-101 ▾

+
-

Index	Event ID	Start Time	Duration(sec)	Title		
1	0x0001	2021/6/3-15:31:40	3600			

Figure-17

Output TS 1 ▾ Stream Select General PID Bypass **Event** Rating Region

Select Prg.: 1:TV-101 ▾

+
-

Index	Event ID	Start Time	Duration(sec)	Title		
1	0x0001	2021/6/3-15:31:40	3600			

Configuration [close]

Event ID: 0x0002
Start Time: 2021/06/03-15:32:25
Duration(sec): 3600
Title:

Index: 1
Dimension Name: EntireAudience ▾
Value: None ▾

+
-

Set Del-All

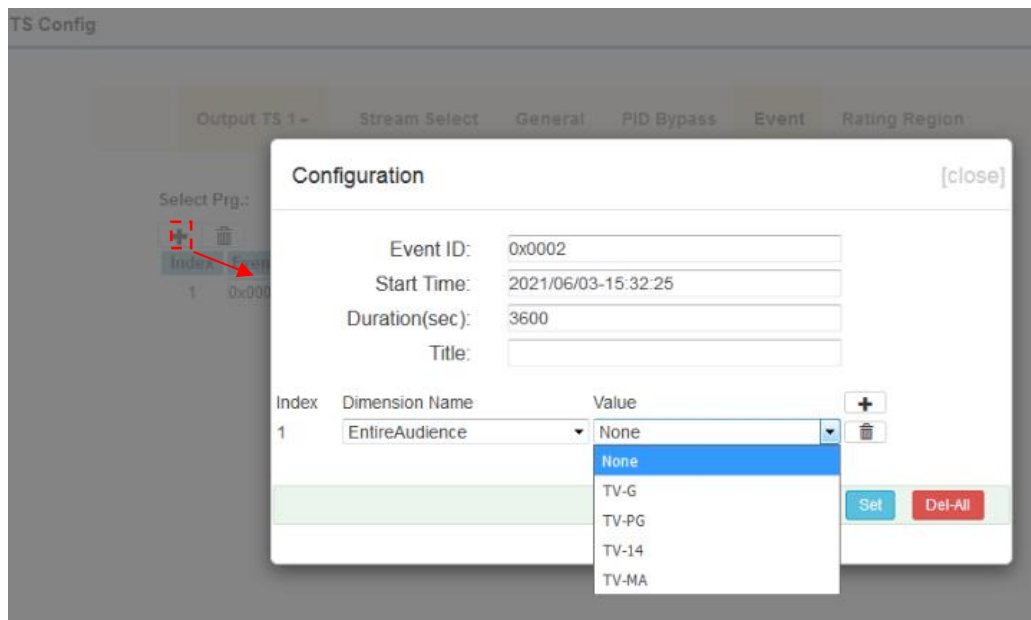


Figure-18

➤ TS Config → Rating Region:

Users can edit the Rating Region options for Event as the below picture shows.

TS Config

Output TS 1 ▾	Stream Select	General	PID Bypass	Event	Rating Region
---------------	---------------	---------	------------	-------	---------------

Index	Dimension Name	Graduated Scale	Rating Num		
1	EntireAudience	1	6		
2	Dialogue	0	2		
3	Language	0	2		
4	Sex	0	2		
5	Violence	0	2		
6	Children	1	3		
7	FantasyViolence	0	2		
8	MPAA	1	9		

Figure-19

➤ Parameters → Modulator:

Clicking “Modulator”, it displays the Modulator Configuration screen as Figure-20. TL-9596S supports 12 DVB-C frequencies out. Here user can set modulation parameters, such as level and frequency etc.

Encoder Modulator

welcome to use Web M

- Summary
 - Status
- Parameters
 - Encoder (01-08)
 - Encoder (09-16)
 - Encoder (17-24)
 - TS Config
 - Modulator**
 - IP Stream
 - USB Media
- System
 - Network
 - Password
 - Configuration
 - Firmware
 - Date | Time
 - Log

Modulator

Center Frequency: 694.000 MHz Standard: J.83A(DVB-C)
Level(All Carriers): 0.0 dBm Channel Info.(Alarm/Active/Total): 0/12/12

#	Frequency	Constellation	Symbol Rate	Gain offset	Status	Bit(Act/Max)	
1	650.000 MHz	64 QAM	6875 Ksps	0.0 dB	●	17.2/38.0 M	✎
2	658.000 MHz	64 QAM	6875 Ksps	0.0 dB	●	0.0/38.0 M	✎
3	666.000 MHz	64 QAM	6875 Ksps	0.0 dB	●	0.0/38.0 M	✎
4	674.000 MHz	64 QAM	6875 Ksps	0.0 dB	●	0.0/38.0 M	✎
5	682.000 MHz	64 QAM	6875 Ksps	0.0 dB	●	0.0/38.0 M	✎
6	690.000 MHz	64 QAM	6875 Ksps	0.0 dB	●	0.0/38.0 M	✎
7	698.000 MHz	64 QAM	6875 Ksps	0.0 dB	●	0.0/38.0 M	✎
8	706.000 MHz	64 QAM	6875 Ksps	0.0 dB	●	0.0/38.0 M	✎
9	714.000 MHz	64 QAM	6875 Ksps	0.0 dB	●	0.0/38.0 M	✎
10	722.000 MHz	64 QAM	6875 Ksps	0.0 dB	●	0.0/38.0 M	✎
11	730.000 MHz	64 QAM	6875 Ksps	0.0 dB	●	0.0/38.0 M	✎
12	738.000 MHz	64 QAM	6875 Ksps	0.0 dB	●	0.0/38.0 M	✎

Quickly Config

Channel Config

Quickly Config.

[close]

Standard: J.83A(DVB-C) ▼

Level(All Carriers): 0.0 (-20 ~ +3 dBm)

Channel Enable: ☒

Start Frequency: 650.000 (50 ~ 960 MHz)

Bandwidth: 8.000 MHz

Constellation: 64 QAM ▼

Symbol Rate: 6875 (5000 ~ 7000 Ksps)

Apply

Close

Channel 1 Config.
[close]

Standard: J.83A(DVB-C)
Level(All Carriers): 0.0 (-20 ~ +3 dBm)

Channel Enable: ☒
Frequency: 650.000 (50 ~ 960 MHz)
Constellation: 64 QAM
Symbol Rate: 6875 (5000 ~ 7000 Ksps)
Gain offset: 0.0 (-10 ~ 0 dB)

Apply Close

Figure-20

➤ Parameters → IP Stream:

TL-9596S supports 12 TS to output in IP format through the DATA port under DVB-C modulation.

Clicking “IP Stream”, it displays the interface where to set IP out parameters (Figure-21).

Encoder Modulator

welcome to use Web

Summary

- Status

Parameters

- Encoder (01-08)
- Encoder (09-16)
- Encoder (17-24)
- TS Config
- Modulator
- IP Stream**
- USB Media

System

- Network
- Password
- Configuration
- Firmware
- Date | Time
- Log

IP Stream(GE_DATA1)

Channel Info.(Alarm/Active/Total): 0/1/12

#	IP Address	Port	Protocol	Pkt Length	Null PKT Filter	Status	Bit(Act/Max)	
1	224.2.2.2	2001	UDP	7	<input type="checkbox"/>	●	19.5/38.0 M	
2	224.2.2.2	2002	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
3	224.2.2.2	2003	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
4	224.2.2.2	2004	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
5	224.2.2.2	2005	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
6	224.2.2.2	2006	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
7	224.2.2.2	2007	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
8	224.2.2.2	2008	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
9	224.2.2.2	2009	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
10	224.2.2.2	2010	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
11	224.2.2.2	2011	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
12	224.2.2.2	2012	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	

Quickly Config

Channel Config

ASI OUT(OPTION)

ASI Out: Output TS1

Figure-21

When users click “pen” button, it triggers a dialog box (Figure-22) where users can set the parameters of the corresponding IP output streams.

Quickly Config.

[close]

Enable:

☒

IP Address:

224.2.2.2

Port:

2001

Step:

1

Protocol:

UDP

Pkt Length:

7

Null PKT Filter:

☐

Apply

Close

Channel 1 Config.

[close]

Enable:

☒

IP Address:

224.2.2.2

Port:

2001

Protocol:

UDP

Pkt Length:

7

Null PKT Filter:

☐

Apply

Close

Figure-22

When users click “ASI Out” list, users can set one TS out from MPTS 1 to MPTS 12 as the ASI out (ASI out is optional as per the order).

Encoder Modulator

Summary

Status

Parameters

Encoder (01-08)

Encoder (09-16)

Encoder (17-24)

TS Config

Modulator

IP Stream

USB Media

System

Network

Password

Configuration

Firmware

Date | Time

Log

IP Stream(GE_DATA1)

Channel Info.(Alarm/Active/Total): 0/1/12

#	IP Address	Port	Protocol	Pkt Length	Null PKT Filter	Status	Bit(Act/Max)	
1	224.2.2.2	2001	UDP	7	<input type="checkbox"/>	●	17.9/38.0 M	
2	224.2.2.2	2002	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
3	224.2.2.2	2003	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
4	224.2.2.2	2004	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
5	224.2.2.2	2005	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
6	224.2.2.2	2006	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
7	224.2.2.2	2007	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
8	224.2.2.2	Output TS1	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
9	224.2.2.2	Output TS2	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
10	224.2.2.2	Output TS3	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
11	224.2.2.2	Output TS4	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
12	224.2.2.2	Output TS5	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
		Output TS6	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
		Output TS7	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
		Output TS8	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
		Output TS9	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
		Output TS10	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
		Output TS11	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	
		Output TS12	UDP	7	<input type="checkbox"/>	●	0.0/38.0 M	

ASI OUT(OPTION)

ASI Out: Output TS1

Figure-23

Parameters → USB Media:

Under USB Media page, user can play the TS files from the USB disk. Play Mode is select-able as the below list shows. After playing the files, the programs in the .ts files can be multiplexed out in TS Config page.

Encoder Modulator

Summary

Status

Parameters

Encoder (01-08)

Encoder (09-16)

Encoder (17-24)

TS Config

Modulator

IP Stream

USB Media

System

Network

Password

Configuration

Firmware

Date | Time

Log

USB Media

Play TS

Play Mode: Single loop

File Select:

Auto Play: ☐

Start

Apply

Status

Disk Usage: 0.00/0.00 GB

Play Status: ●

Remove Device



Figure-24

Detailed Explanation:

Play Mode: User can select a play mode for the *.ts files as needed before playing the *.ts file and specify a video under 'Single file' / 'Single loop' mode and press "Apply" and "Start" button to start play. While under 'Play all' / 'Loop all' mode, it automatically plays files from first to end. Loop means that it will play the selected files round.

Auto Play: If ticked, the device will automatically play the .ts files as per the saved setting after reboot.

The .ts files can also be generated by our TS Creator software. If needed, users can contact our technician to get the software.



*.ts Video Creation Software:

Users can also create *.ts videos containing pictures, videos and music with our creator software on a PC and save them into the USB flash drive.

- Drag the files to "Creator" application.
Formats supported include:
Image: JPG, PNG, BMP, GIF
Audio: MP3, WAV
Video: WMV, MPG, MP4, TS, AVI...

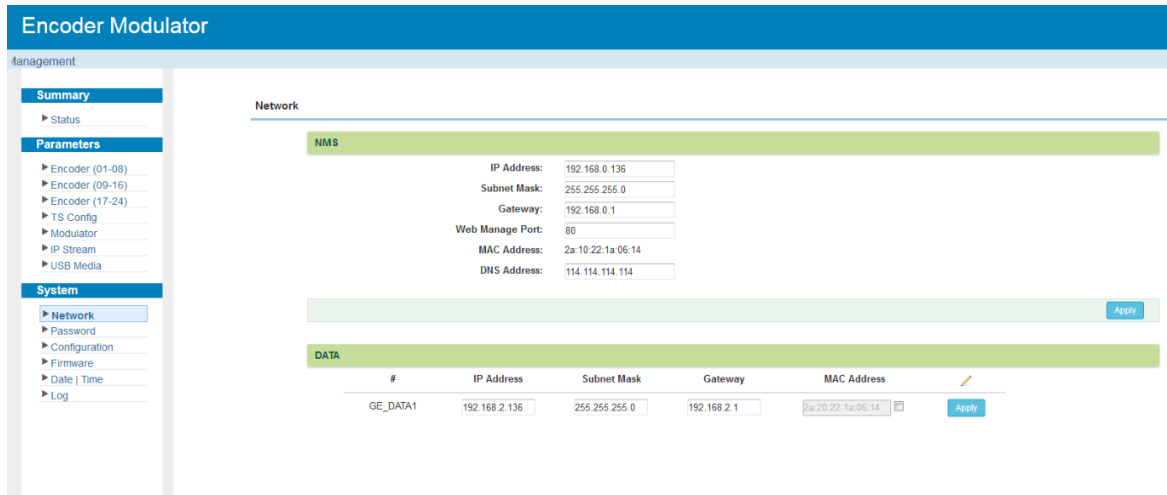
- Start the conversion process to generate *.ts videos



USB Flash Drive Specifications Required: High Speed 2.0; File System FAT32

System → Network:

Clicking “Network”, it displays the interface as Figure-25 where to set network parameters.



#	IP Address	Subnet Mask	Gateway	MAC Address
GE_DATA1	192.168.2.136	255.255.255.0	192.168.2.1	2a:20:22:1a:06:14

Figure-25

System → Password:

Clicking “Password”, it displays the screen as Figure-26 where to set the login account and password for the web NMS. Both the current username and password are “admin”.

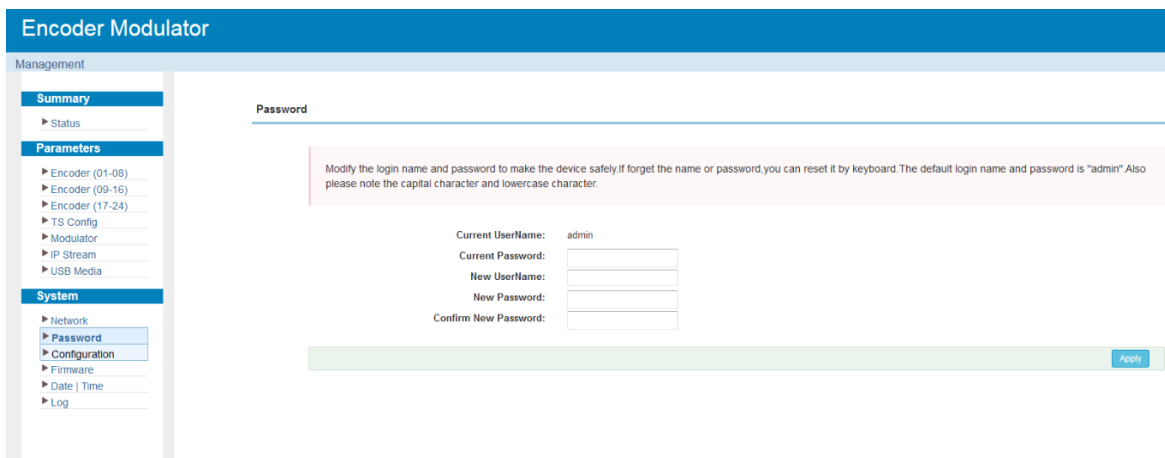
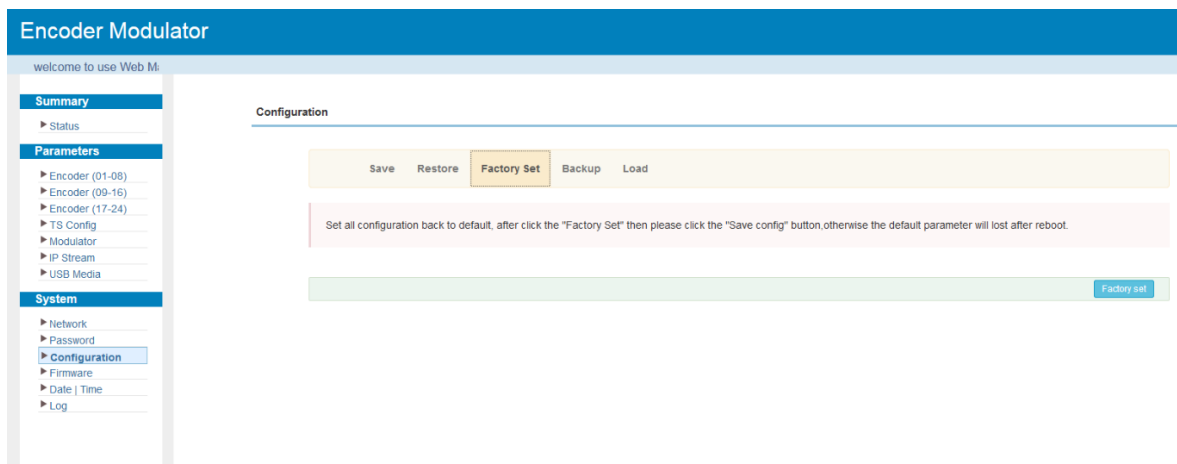
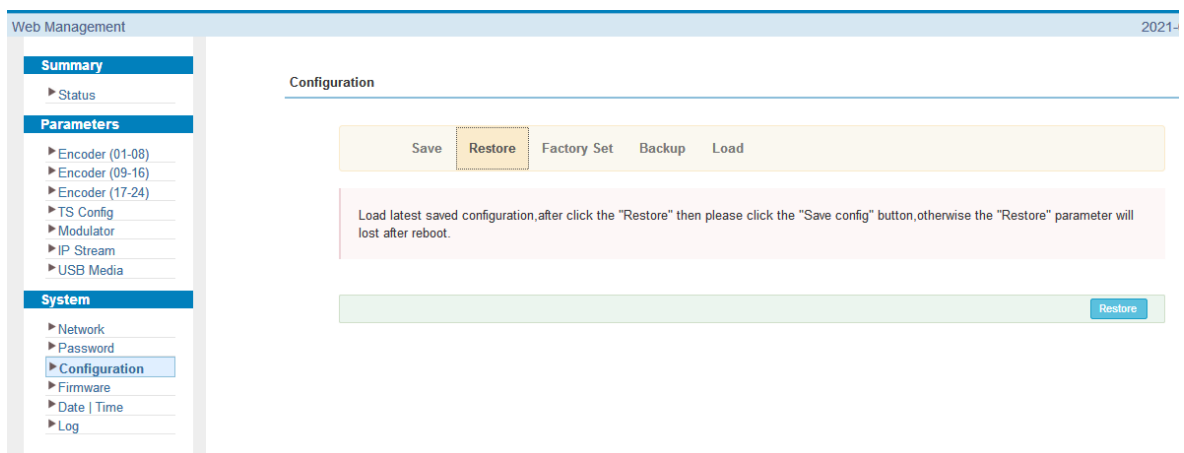
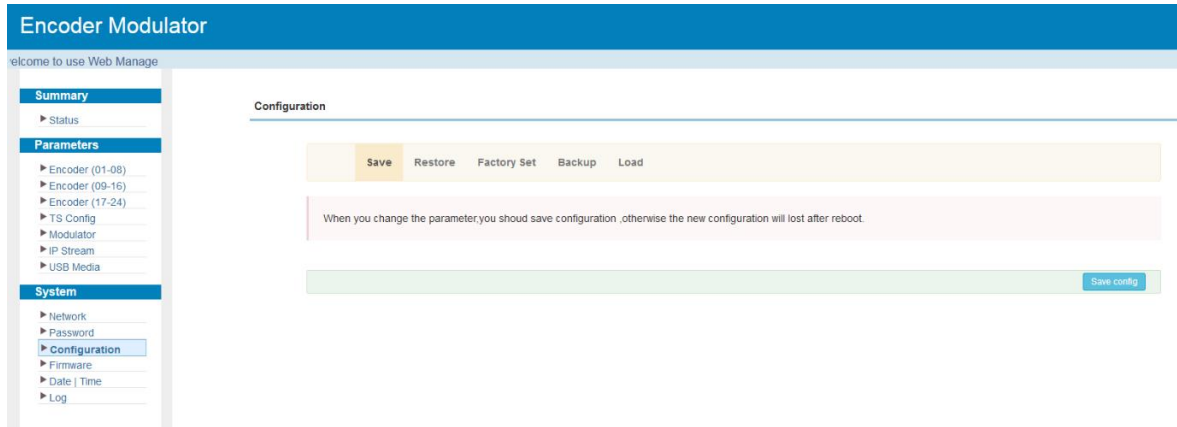


Figure-26

System → Configuration:

Clicking “Configuration”, it displays the screen as Figure-27 where to save/ restore/factory setting/ backup/ load your configurations.



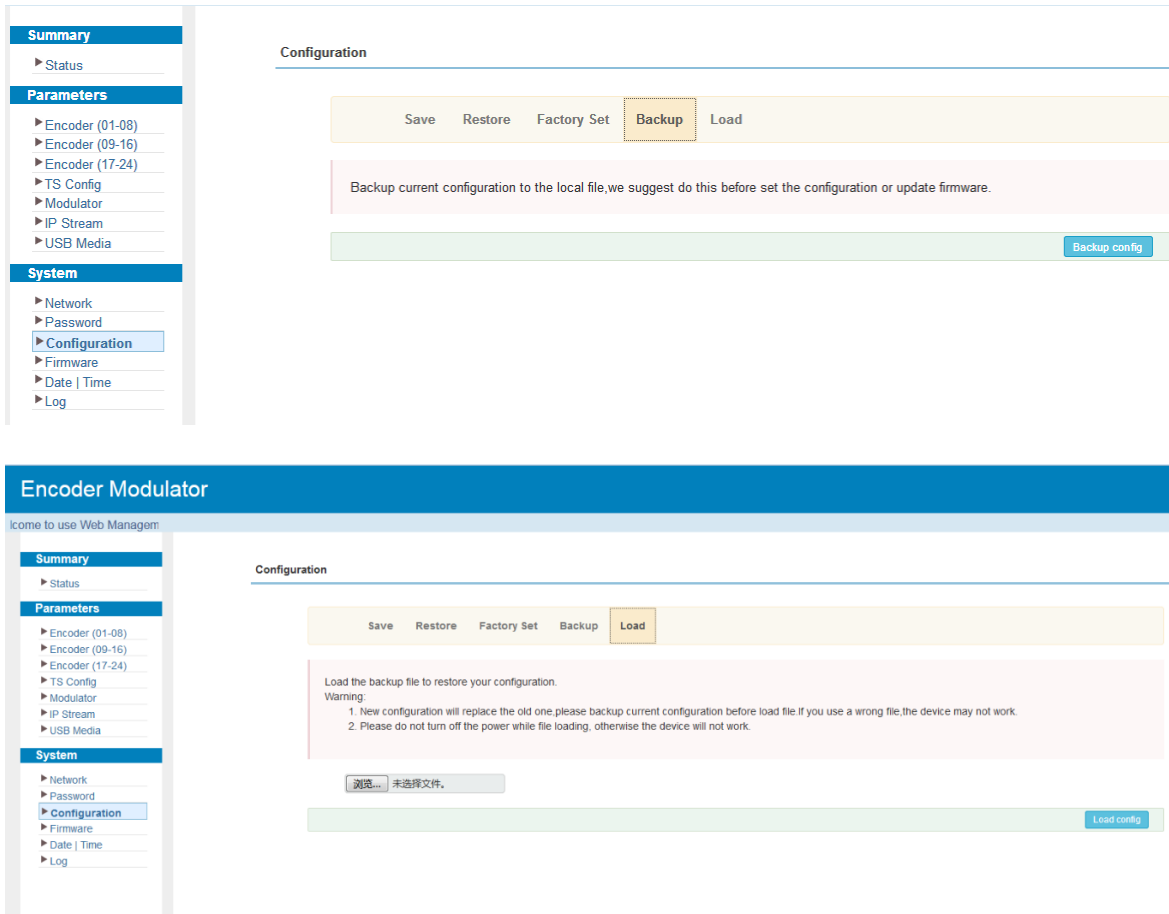


Figure-27

System → Firmware:

Clicking “Firmware”, it displays the screen as Figure-28 where to update firmware for the modulator.

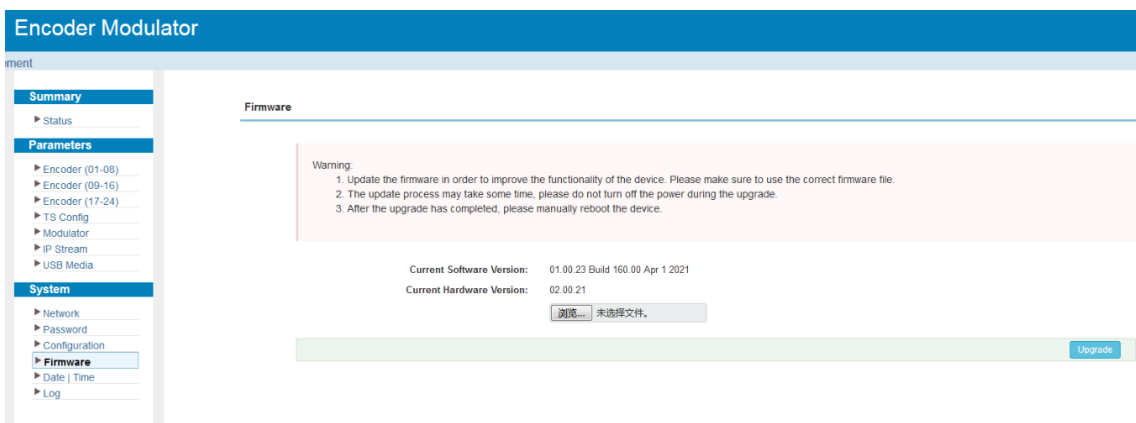


Figure-28

System→ Date/Time:

From the menu on left side of the webpage, clicking “Date/Time”, it will display the screen as Figure-29 where to set date and time for the device.

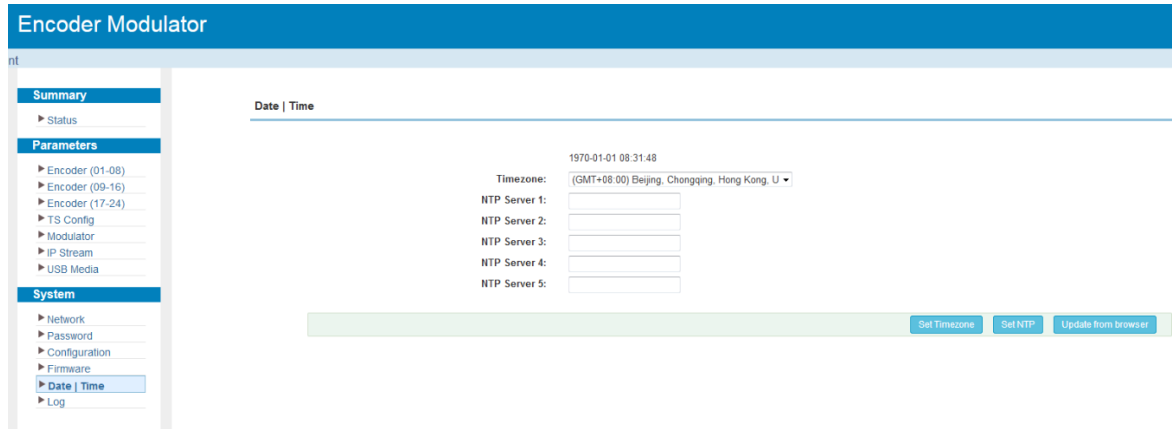


Figure-29

System→ Log:

Clicking “Log”, it displays the log interface as Figure-30 where to check or export the Kernel/System log.

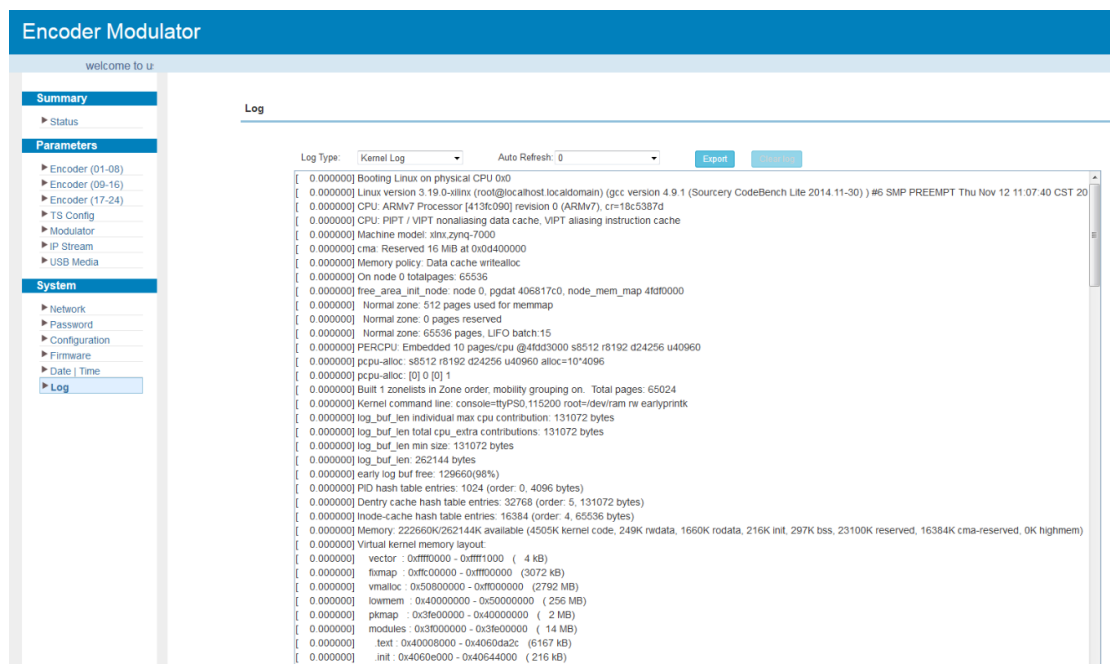


Figure-30

CHAPTER 4

TROUBLESHOOTING

All TRANSLITE products have been passed the testing and inspection before shipping out from factory. The testing and inspection scheme already covers all the Optical, Electronic and Mechanical criteria which have been published by TRANSLITE. To prevent potential hazard, please strictly follow the operation conditions.

Prevention Measure

- Installing the device at the place in which environment temperature between 0 to 45 °C
- Making sure good ventilation for the heat-sink on the rear panel and other heat-sink bores if necessary
- Checking the input AC within the power supply working range and the connection is correct before switching on device
- Checking the RF output level varies within tolerant range if it is necessary
- Checking all signal cables have been properly connected
- Frequently switching on/off device is prohibited; the interval between every switching on/off must greater than 10 seconds.

Conditions need to unplug power cord

- Power cord or socket damaged.
- Any liquid flowed into device.
- Any stuff causes circuit short
- Device in damp environment
- Device was suffered from physical damage
- Longtime idle.
- After switching on and restoring to factory setting, device still cannot work properly.
- Maintenance needed

CHAPTER 5

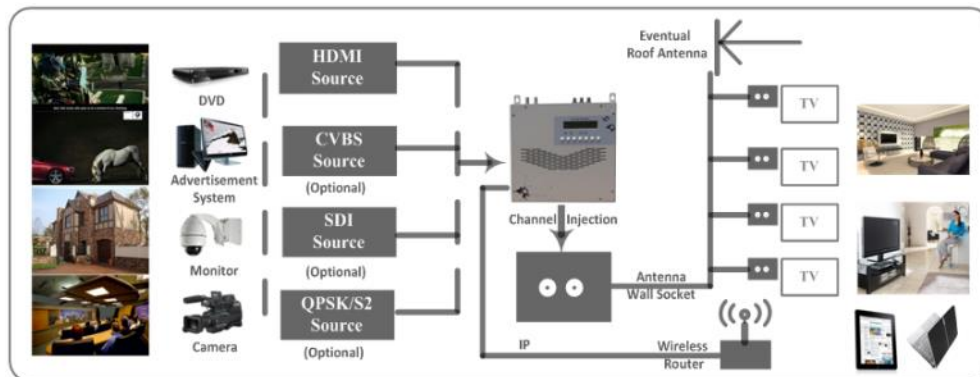
PACKING LIST

TL-9596S Encoder Modulator	1PC
HDMI Cables	8/16/24PCS
Ground Lead	1PC
Power Cord	1PC

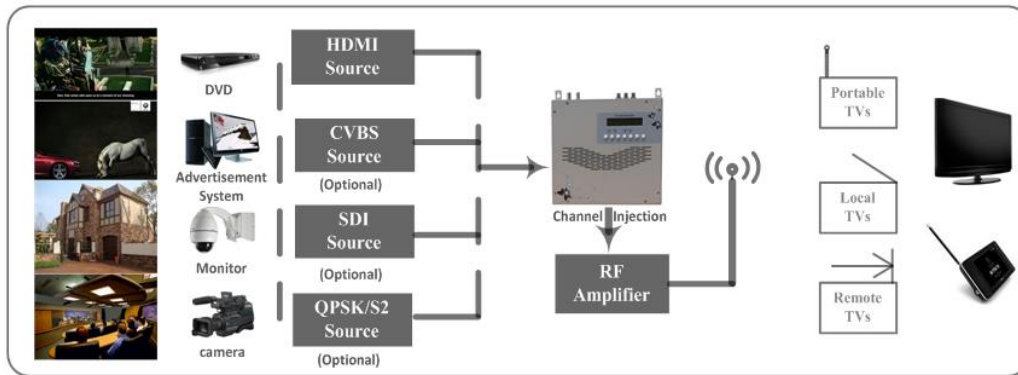
CHAPTER 6

APPLICATIONS

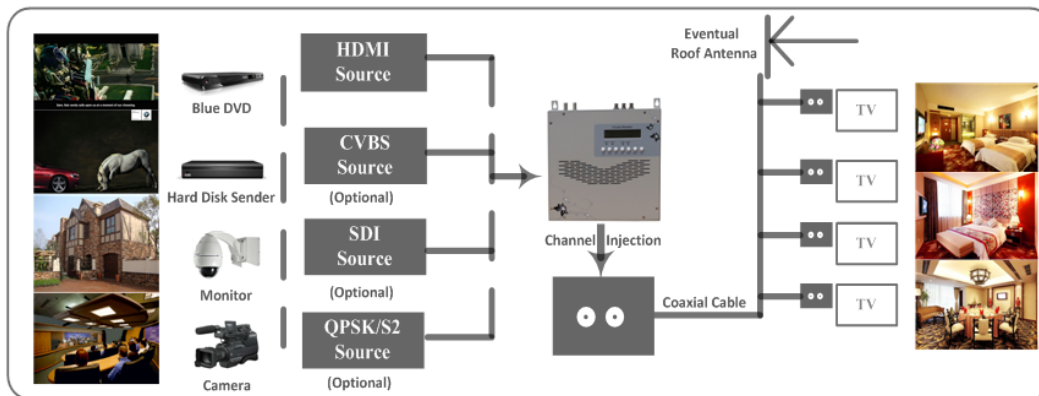
1. Residences and Private Homes Video content DVB-T/ISDB-T distribution



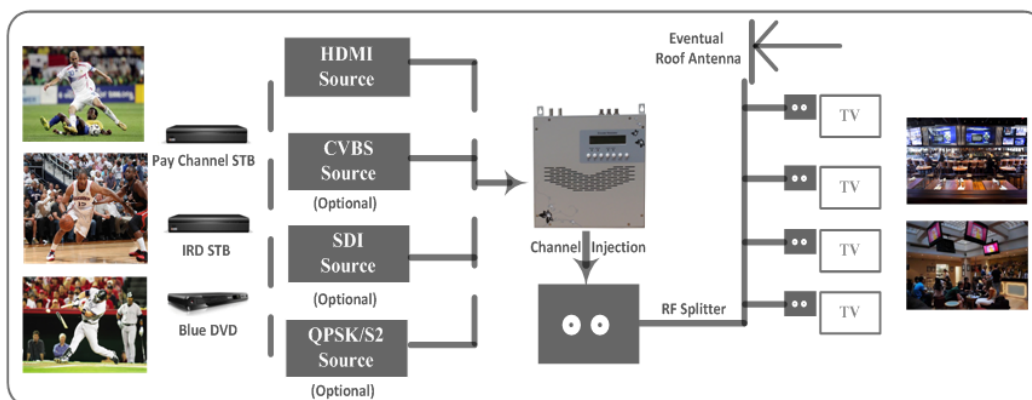
2. Outside Audio-Video contents ON-AIR DVB-T/ISDB-T distribution



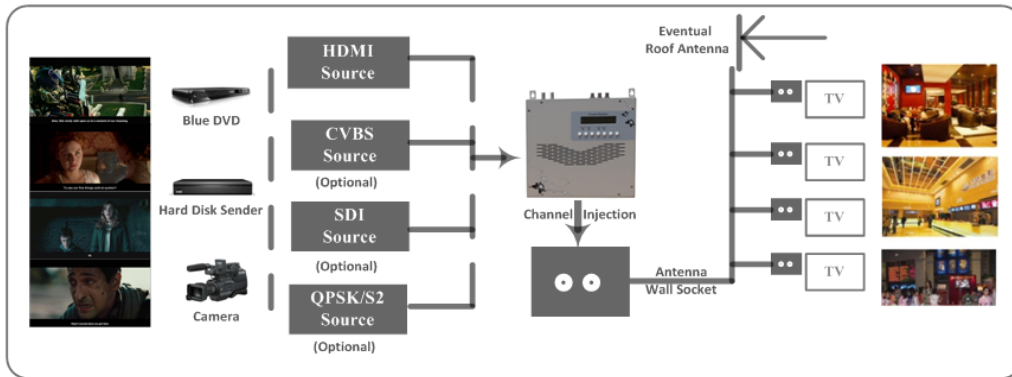
3. Hotel Audio-Video contents DVB-T/ISDB-T distribution



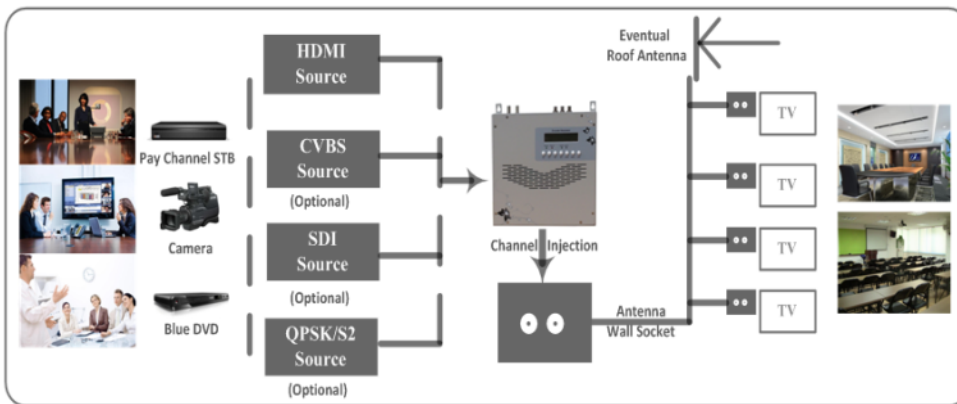
4. Bar Audio-Video contents distribution



5. Cinema Audio-Video contents DVB-T/ISDB-T distribution



6. Company Audio - Video contents distribution



For Sales

North America:

sales@transliteglobal.com

Asia:

sales@translite.co.in

Rest Of The World:

sales@transliteglobal.com

For Support

North America :

support@transliteglobal.com

Asia:

support@translite.co.in

Rest Of The World:

support@transliteglobal.com