PTS-10A Time Server WEB Manual



Kyland Technology (Shanghai) Co., Ltd.

Version Copyright

R7

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Notice for Safety Operation

The product performs reliably as long as it is used according to the guidance. Artificial damage or destruction of the device should be avoided. Before using the device, read this notice carefully for personal and equipment safety. Please keep the manual for further reference.

- Do not place the device near water sources or damp areas. Keep the ambient relative humidity within the range from 5% to 95% (non-condensing).
- Do not place the device in an environment with high magnetic field, strong shock, or high temperature. Keep the working and storage temperatures within the allowed range.
- Install and place the device securely and firmly.
- Please keep the device clean; if necessary, wipe it with a soft cotton cloth.
- Do not place any irrelevant materials on the device or cables. Ensure adequate heat dissipation and tidy cable layout without knots.
- Wear antistatic gloves or take other protective measures when operating the device.
- Avoid any exposed metal wires because they may be oxidized or electrified.
- Install the device in accordance with related national and local regulations.
- Before power-on, make sure the power supply is within the allowed range of the device. High voltage may damage the device.
- Power connectors and other connectors should be firmly interconnected.
- Do not plug in or out the power supply with wet hands. When the device is powered on, do not touch the device or any parts with wet hands.
- Before operating a device connected to a power cable, remove all jewelry (such as rings, bracelets, watches, and necklaces) or any other metal objects, because they may cause electric shock or burns.
- Do not operate the device or connect or disconnect cables during an electrical storm.
- Use compatible connectors and cables. If you are not sure, contact our sales or technical support personnel for confirmation.
- Do not disassemble the device by yourself. When an anomaly occurs, contact our sales or technical support personnel.
- If any part is lost, contact our sales or technical support personnel to purchase the substitute. Do not purchase parts from other channels.
- Dispose of the device in accordance with relevant national provisions, preventing

environmental pollution.

In the following cases, please immediately shut down your power supply and contact your Kyland representative:

- Water gets into the equipment.
- Equipment damage or shell damage.
- Equipment operation or performance has abnormally changed.
- The equipment emits odor, smoke or abnormal noise.

Indicator Flag

1	Note	Highlight the important information and use of skills, necessary to the operation of your tips, supplement and instructions.
	Attention	Remind you of operation must be pay attention to and follow such as not operating in accordance with the requirements, equipment damage may arise or other unpredictable result.
×	Alarm	Warning you could potentially dangerous situation, if unavoidable, may cause serious personal injury.

1.



1.1. Introduction



[Figure 1-1] PTS-10A Time Server

The PTS-10A Time Server is a standard time server. It supports high precision reference clock, which can be synchronized to absolute time such as GPS, BDS, and GLONASS etc. Built-in TCXO, OCXO helps to provide stable reference frequency source. System supports multiple sources time sync auto selection algorithm which can perform stable switch between GPS, BDS, GLONASS, IRIG-B, PTP and local clock, and sky/ground and master/slave clock backup. PTS-10A time server provides flexible time output channels and signals. The output timing signals include PPS, PPM, PPH, IRIG-B (Demodulated), IRIG-B (Modulated), Serial Time Signal (TOD etc.) etc. Plus, PTS-10A supports network sync time protocols NTP/SNTP and PTP (IEEE1588 v2). IEEE1588 can works in several modes by the software configuration including grandmaster clock, slave clock and boundary clock. PTS-10A has LCD to show any status and do configuration by keyboard. Meanwhile, PTS-10A supports WEB and SNMP functions to manage system.

2.

Operations

2.1. Login

Please connect PTS time server and PC by network cable. Open any WEB Browser of PC and input <u>http://192.168.0.111</u> and press enter, the login WEB screen of PTS will be shown on your screen.

Login Name: 			
Name: admin Password: Submit		Login	
admin Password: Submit 中文	Name:		
Password: Submit 中文	admin		
<mark>Submit</mark> 中文	Password:		
中文		- 1020 - 1040 - 1040 - 1040 - 1040 - 1040 - 1040 - 1040 - 1040 - 1040 - 1040 - 1040 - 1040 - 1040 - 1040 - 1040	
中文		Submit	
		中文	

[Figure 2-1] Login Screen

The default user name is 'admin', the default password also is 'admin'. PTS time server supports user to modify the password of 'admin' after you login WEB management system.

Defore you access WEB management system of PTS time server, please confirm you might access this Ethernet port, if find any problems you should check the network whether or not is ready, maybe connection cable has some broken or something else.

• The IP address is default IP address of eth0 of PTS time server, if you change Ethernet port or Ethernet IP address, you might input the correct IP address again and then go into the WEB management system of PTS time server.

2.2. Logout

After you submit your correct user name and password, the default screen of WEB management system will be shown as:

KYLAND Kyla	المواصدة المراجع				
🗂 Status	🔟 Configuratio	n 🏠 System	🚨 Management		2022-01-11 03:55:33
Status	Source Stat	tus			
Source Status	Source Chann	iel: SAT1	~		
Clock Status	No	Name		Status	
	1	Source Status		Normal	
	2	Satellite Number		7	
	3	Antenna Status		Normal	
	4	Source Bump Status		Normal	
	5	Source Priority		1	

[Figure 2-2] Default Screen

On the top right corner, system has a [Logout] option, if you want to logout system, you might directly click this and then system will go to original login screen and wait user to input login information again.

2.3. Languages

The default language is English, the WEB management system of PTS time server supports English and Chinese. System can switch language to Chinese language by [中 文] option on login screen and default screen.

2.4. Status

The WEB management system supports to view time status by WEB. The status information can help user to easy know the current status and help them to analyze problems as soon as possible.

Press 'Status' to go to the status screen on the top of navigation bar. The status screen will be shown as:

KYLAND Kylar	KYLAND Kyland Technology Co., Ltd. Wekome!!! [Logout] 中文				
🗂 Status	🔲 Configurati	on 🍲 System 🚨 Management	2022-01-11 03:55:33		
Status	Source Status				
Source Status	Source Channel: SAT1 V				
Clock Status					
	No	Name	Status		
	1	Source Status	Normal		
	2 Satellite Number 3 Antenna Status		7		
			Normal		
	4	Source Bump Status	Normal		
	5 Source Priority		1		

[Figure 2-3] Status Screen

2.4.1. Time Information

On the top right navigation bar, there is an area to show the current local time.

2020-02-14 10:30:29

[Figure 2-4] Time Information Screen

2.4.2. Source Status

Press 'Source Status' on the left navigation bar to show source status screen.

Press 'Source Channel' to select SAT1/SAT2/IRIG-B1/IRIG-B2/PTP channel.

Please refer to 'Configuration' section to set parameters.

Select 'SAT1' in Source Channel, the screen will be shown as:

KYLAND Kyl	and Technolog	yy Co., Ltd.			Welcome!!! [Logout] 中文
🗂 Status	🔲 Configurati	ion 🍲 System	📓 Management		2021-12-29 03:03:08
Status	C Source Status				
Source Status	Source Chan	nnel: SAT1	~		
Clock Status					
	No	Name		Status	
	1	Source Status		Normal	
	2	Satellite Number		8	
	3	Antenna Status		Normal	
	4	Source Bump Status		Normal	
	5	Source Priority		1	

[Figure 2-5] Source Status Screen (SAT1)

Table 1 – Source Status Information (SAT1)

Items	Parameters	Description
	Normal	Show the time source status.
Source Status	Normal	Normal: The time source can use;
	Aldrin	Alarm: The time source cannot use.
		Show how many satellites work together.
Satellite Number	0~128	Range is between 0 and 128;
		Default value is 0.
Antenna Status	Normal Alarm	Show the antenna status.
		Normal: The antenna can use;;
		Alarm: The antenna cannot use.
Courses Durses	Normal	Show the time source bump status.
Source Bump	Normal Alarm	Normal: The time source has not bump data.
Status		Alarm: The time source has bump data.
	1~10	Show the priority for time source. 1 is highest source and 10 is
Source Priority	1~10	lowest source. It has 10 levels. System can select best time



Items	Parameters	Description
		sources by source priority.

Select 'SAT2' in Source Channel, the screen will be shown as:

KYLAND Kyla	and Technolog	y Co., Ltd.			Welcome!!! [Logout] 中文
T Status	Configuratio	on 🏠 System	Management		2021-12-29 03:22:39
Status	C Source Status				•
Source Status Source Channel: SAT2		~			
	No	Name		Status	
	1	Source Status		Alarm	
	2 Satellite Number		0		
	3	Antenna Status		Alarm	
	4	Source Bump Status	Source Bump Status	Normal	
	5	Source Priority		2	

[Figure 2-6] Source Status Screen (SAT2)

Table 2 – Source Status Information (SAT2)

Items	Parameters	Description
	Normal	Show the time source status.
Source Status	Alarm	Normal: The time source can use;
	Alditti	Alarm: The time source cannot use.
		Show how many satellites work together.
Satellite Number	0~128	Range is between 0 and 128;
		Default value is 0.
	Normal Alarm	Show the antenna status.
Antenna Status		Normal: The antenna can use;;
		Alarm: The antenna cannot use.
Course Duran	Nerrol	Show the time source bump status.
Source Bump	Normai	Normal: The time source has not bump data.
Status	Alarm	Alarm: The time source has bump data.
		Show the priority for time source. 1 is highest source and 10 is
Source Priority	1~10	lowest source. It has 10 levels. System can select best time
		sources by source priority.

Select 'IRIG-B1' in Source Channel, the screen will be shown as:

KYLAND Kylar	куLAND Kyland Technology Co., Ltd. Welcome!!! [Logout] 中文				
🗂 Status	🔲 Configuratio	n 🍲 System 🚨 Manag	ment 2021-12-29 03:23:13		
Status	Source Stat	tus	1		
Source Status Clock Status	Source Chann	el: IRIG-B1 🗸			
	No	Name	Status		
	1	Source Status	Alarm		
	2	Source Bump Status	Normal		
	3	Source Priority	3		

[Figure 2-7] Source Status Screen (IRIG-B1)

Items	Parameters	Description
Source Status	Normal Alarm	Show the time source status. Normal: The time source can use; Alarm: The time source cannot use.
Source Bump Status	Normal Alarm	Show the time source bump status. Normal: The time source has not bump data. Alarm: The time source has bump data.
Source Priority	1~10	Show the priority for time source. 1 is highest source and 10 is lowest source. It has 10 levels. System can select best time sources by source priority.

Table 3 – Source Status Information (IRIG-B1)

Select 'IRIG-B2' in Source Channel, the screen will be shown as:

KYLAND Kyla	and Technology	Co., Ltd.	Welcome!!! [Logout] 中文
T Status	Configuration	i 🍲 System 🔳 Manageme	t 2021-12-29 03:23:37
Status	Source State	z	
Source Status Clock Status	Source Channe	l: IRIG-B2 🗸	
	No	Name	Status
	1	Source Status	Alarm
	2	Source Bump Status	Normal
	3	Source Priority	4

[Figure 2-8] Source Status Screen (IRIG-B2)

Table 4 – Source Status Information (IRIG-B2)

Items	Parameters	Description
	Normal Alarm	Show the time source status.
Source Status		Normal: The time source can use;
		Alarm: The time source cannot use.
Course Dump	Normal Alarm	Show the time source bump status.
Source Bump		Normal: The time source has not bump data.
Status		Alarm: The time source has bump data.
Source Priority	1~10	Show the priority for time source. 1 is highest source and 10 is

Items	Parameters	Description
		lowest source. It has 10 levels. System can select best time
		sources by source priority.

Select 'PTP' in Source Channel, the screen will be shown as:

KYLAND Kyla	nd Technology	r Co., Ltd.		Welcome!!! [Logout] 中文
🔳 Status	Configuration	n 🎓 System 🔳 Management		2021-12-29 03:24:08
Status	Source Stat	us		•
Source Status Clock Status	Source Channe	el: PTP 🗸		
	No	Name	Status	
	1	Source Status	Alarm	
	2	Source Bump Status	Normal	
	3	Source Priority	5	

[Figure 2-9] Source Status Screen (PTP)

Table 5 – Source Status Information (PTP)

Items	Parameters	Description
	Normal Alarm	Show the time source status.
Source Status		Normal: The time source can use;
		Alarm: The time source cannot use.
Source Bump Status	Normal Alarm	Show the time source bump status.
		Normal: The time source has not bump data.
		Alarm: The time source has bump data.
Source Priority	1~10	Show the priority for time source. 1 is highest source and 10 is
		lowest source. It has 10 levels. System can select best time
		sources by source priority.

2.4.3. Clock Status

Press 'Clock Status' on the left navigation bar to show clock status screen. The clock status screen will be shown as:

KYLAND Kyla	KYLAND Kyland Technology Co., Ltd. Wekome!!! [Logout] 中文				
🔳 Status	Configuration	on 🍲 System 🛛 🚨 Manag	ment 2021-12-29 03:	24:30	
Status	Source Sta	atus 🔰 Clock Status 🗵			
Source Status	No	Name	Status		
Clock Status	1	Selected Source	SAT1		
	2	Lock Status	Locked		
	3	Initial Status	Initialized		
	4	Hold Status	Tracking		
	5	Power#1 Status	Normal		
	6	Power#2 Status	Normal		
	7	Temperature	16383		
	8	Frequency	0.000000		
	9	Longitude	121.251305		
	10	Latitude	31.331928		
	11	Height	98.723000		
	12	Version	R7.55		

[Figure 2- 10] Clock Status Screen

Table 6 – Clock Status Information

Items	Parameters	Description
	C AT1	Show which time source is the current time source.
	SAT2	SAT1: The time source is SAT1 source channel.
		SAT2: The time source is SAT2 source channel.
Selected Source		IRIG-B1: The time source is IRIG-B1 source channel.
		IRIG-B2: The time source is IRIG-B2 source channel.
	FIF	PTP: The time source is PTP source channel.
	LOCAI	Local: The device don't has time source.
	Locking	Show the oscillator status.
Lock Status	Locked	Locking: The oscillator is locking;
		Locked: The oscillator is locked.
	Initializing Initialized	Show the initial status.
Initial Status		Initializing: The device is initializing;
		Initialized: The device is initialized.
	Tracking	Show the hold status.
Hold Status	Hold	Tracking: The device is tracking with time source;
		Hold: The device lost time source $_{\circ}$
	Normal	Show the #1 power supply status.
Power#1 Status	Normal	Normal: The power supply work well;
	Alarm	Alarm: The power supply has alarm.
	Normal	Show the #2 power supply status.
Power#2 Status	Alarm	Normal: The power supply work well;
	Alarm	Alarm: The power supply has alarm.

Items	Parameters	Description
Tomporatura	0.0	Show the internal temperature.
Temperature		The 16383 means it has not temperature sensor inside.
Frequency	0.000	Show the frequency or power grid.
Longitude	0.00	Show longitude of geographic position information.
Latitude	0.00	Show latitude of geographic position information.
Height	0.00	Show height of geographic position information.
Version	-	Show the current version.

2.5. Configuration

The WEB management system supports to set configuration parameter by WEB. The user does not need go to local place to set parameter when time server supports this configuration interface. It is a good option for user to easy manage time server.

Press 'Configuration' to go to the configuration screen on the top of navigation bar. The screen will be shown as:

Status	Config	uration 🙆 System	Anagement	2022-01-11 05:04:08		
Configuration SYNC						
SYNC	Source	Source Channel: SAT1				
CLOCK	No	Name	Parameter	Range		
PTP	1	Source Priority	Level-1 🗸			
OUTPUT	2	Antenna Compensation	0	-999999999,99999999		
TMS	3	Source Mode	SYNC 🗸			
	4	Channel Type	UBLOX8 ~			
	5	Satellite Mode	Auto 🗸			
	Basic In	formation:				
	No	Name	Parameter	Range		
	1	Working Mode	Single 🗸			

[Figure 2-11] Configuration Screen

2.5.1. Sync Source Settings

Press 'SYNC' on the left navigation bar to show synchronization source setting screen. Press 'Source Channel' to select SAT1/SAT2/IRIG-B1/IRIG-B2/PTP channel.

If select 'SAT1' in Source Channel, the setting screen will be shown as:

Configuration	SYNC			
SYNC	Source	Channel: SAT1 🗸		
NTP	No	Name	Parameter	Range
PTP	1	Source Priority	Level-1 🗸	
OUTPUT	2	Antenna Compensation	0	-999999999999999999999
TMS	3	Source Mode	SYNC 🗸	
	4	Channel Type	UBLOX8 🗸	
	5	Satellite Mode	Auto 🗸	
	Basic In	formation:		
	No	Name	Parameter	Range
	1	Working Mode	Single 🗸	

[Figure 2-12] Sync Source Setting Screen (SAT1)

ltem	Parameter	Description
		Set satellite receiver module to receive satellite signal.
		UBLOX5: Select UBLOX5 receiver module;
	UBLOX5	UBLOX8: Select UBLOX8 receiver module;
Channel	UBLOX8	AT3340: Select AT3340 receiver module;
Channel	AT3340	HWA210B: Select HWA210B receiver module;
Туре	HWA210B	HWA210L: Select HWA201L receiver module.
	HWA210L	(A) The device only installs one receiver module for each
		channel. Please confirm with factory label and set the
		correctly channel type to receive satellite information.
		When you select satellite receiver module for each satellite
		channel, you might use this parameter to make it work at
		right mode. Different satellite receiver module has different
	Auto	definition on these options. Before you use this device, please
	A-BDS	contact technical support to confirm how to use them.
Cotollito	A-GPS	UBLOX8 will define as following description:
Satellite	A-GLN	Auto: Make satellite automatic working at GPS mode;
Mode	F-BDS	A-BDS: Make satellite priority working at BDS mode by mixed
	F-GPS	position fix mode with BDS and GPS, when BDS is
	F-GLN	invalid, it can work at GPS mode.;
		A-GPS: Make satellite priority working at GPS mode by mixed
		position fix mode with GPS and BDS, when GPS is
		invalid, it can work at BDS mode;

Table 7 – Sync Source Setting (SAT1)

ltem	Parameter	Description
		A-GLN: Make satellite priority working at GLONASS mode by
		mixed position fix mode with GLONASS and GPS, when
		GLONASS is invalid, it can work at GPS mode;
		F-BDS: Make satellite only working at BDS mode;
		F-GPS: Make satellite only working at GPS mode;
		F-GLN: Make satellite only working at GLONASS mode.
		AT3340 will define as the following description:
		Auto: Make satellite automatic working at GPS mode;
		A-BDS: Make satellite only working at BDS mode;
		A-GPS: Make satellite only working at GPS mode;
		A-GLN: AT3340 does not support GLONASS, this parameter
		can make satellite working at GPS mode by mixed
		position fix mode with GPS and BDS;
		F-BDS: Make satellite only working at BDS mode;
		F-GPS: Make satellite only working at GPS mode;
		F-GLN: AT3340 does not support GLONASS, this parameter
		can make satellite working at GPS mode by mixed
		position fix mode with GPS and BDS.
		A The other modules can ask the technical support.
		According to different antenna types and lengths, system can
Antenna		set time delay compensation for satellite channel.
Compensation	Ons	Unit is nanosecond(ns);
compensation		Range is between -999999999ns and 999999999ns;
		Default value is Ons.
Source		Set the priority for time source. 1 is highest source and 10 is
Priority	1~10	lowest source. It has 10 levels. System can select best time
		sources by source priority.
	SYNC	Set source working mode.
Source	DEER	SYNC: Make it work at individual time source;
Mode	NONE	PEER: Make it work at redundancy time source;
		NONE: Make it doesn't work.
Working	Single	Set time source working logic.
Mode	JIIIBIC	Single: The system can work at one valid time source.

If select 'SAT2' in Source Channel, the setting screen will be shown as:

Status		uration 🗠 System 🔛	Management	2022-01-11 05:05:23
Configuration	Source C	Channel: SAT2 🗸		
NTP	No	Name	Parameter	Range
PTP	1	Source Priority	Level-2 🗸	
OUTPUT	2	Antenna Compensation	0	-999999999,999999999
TMS	3	Source Mode	SYNC 🗸	
	4	Channel Type	UBLOX8 🗸	
	5	Satellite Mode	Auto 🗸	
	Basic Inf	formation:		
	No	Name	Parameter	Range
	1	Working Mode	Single 🗸	
]		Save	

[Figure 2-13] Sync Source Setting Screen (SAT2)

Table	8 – Sync Source Setting (SAT2)

Item	Parameter	Description		
		Set satellite receiver module to receive satellite signal.		
		UBLOX5: Select UBLOX5 receiver module;		
	UBLOX5	UBLOX8: Select UBLOX8 receiver module;		
Channel	UBLOX8	AT3340: Select AT3340 receiver module;		
Turpo	AT3340	HWA210B: Select HWA210B receiver module;		
туре	HWA210B	HWA210L: Select HWA201L receiver module.		
	HWA210L	${igt \Delta}$ The device only installs one receiver module for each		
		channel. Please confirm with factory label and set the		
		correctly channel type to receive satellite information.		
		When you select satellite receiver module for each satellite		
		channel, you might use this parameter to make it work at		
		right mode. Different satellite receiver module has different		
	Auto	definition on these options. Before you use this device, please		
	A-BDS	contact technical support to confirm how to use them.		
Satallita	A-GPS	UBLOX8 will define as following description:		
Modo	A-GLN	Auto: Make satellite automatic working at GPS mode;		
Mode	F-BDS	A-BDS: Make satellite priority working at BDS mode by mixed		
	F-GPS	position fix mode with BDS and GPS, when BDS is		
	F-GLN	invalid, it can work at GPS mode.;		
		A-GPS: Make satellite priority working at GPS mode by mixed		
		position fix mode with GPS and BDS, when GPS is		
		invalid, it can work at BDS mode;		

ltem	Parameter	Description	
		A-GLN: Make satellite priority working at GLONASS mode by	
		mixed position fix mode with GLONASS and GPS, when	
		GLONASS is invalid, it can work at GPS mode;	
		F-BDS: Make satellite only working at BDS mode;	
		F-GPS: Make satellite only working at GPS mode;	
		F-GLN: Make satellite only working at GLONASS mode.	
		AT3340 will define as the following description:	
		Auto: Make satellite automatic working at GPS mode;	
		A-BDS: Make satellite only working at BDS mode;	
		A-GPS: Make satellite only working at GPS mode;	
		A-GLN: AT3340 does not support GLONASS, this parameter	
		can make satellite working at GPS mode by mixed	
		position fix mode with GPS and BDS;	
		F-BDS: Make satellite only working at BDS mode;	
		F-GPS: Make satellite only working at GPS mode;	
		F-GLN: AT3340 does not support GLONASS, this parameter	
		can make satellite working at GPS mode by mixed	
		position fix mode with GPS and BDS.	
		A The other modules can ask the technical support.	
		According to different antenna types and lengths, system can	
Antenna		set time delay compensation for satellite channel.	
Compensation	Ons	Unit is nanosecond(ns);	
compensation		Range is between -999999999ns and 999999999ns;	
		Default value is Ons.	
Source		Set the priority for time source. 1 is highest source and 10 is	
Priority	1~10	lowest source. It has 10 levels. System can select best time	
		sources by source priority.	
	SYNC	Set source working mode.	
Source	DEER	SYNC: Make it work at individual time source;	
Mode	NONE	PEER: Make it work at redundancy time source;	
		NONE: Make it doesn't work.	
Working	Single	Set time source working logic.	
Mode	Single	Single: The system can work at one valid time source.	

If select 'IRIG-B1' in Source Channel, the setting screen will be shown as:

	Conngu		Philagentein			
Configuration	SYNC					
SYNC	Source Ch	annel: IRIG-B1 🗸				
CLOCK NTP	No	Name	Parameter	Range		
PTP	1	Source Priority	Level-3 🖍			
OUTPUT	2	Source Mode	SYNC 🗸			
TMS	3	Input Channel	FI1 👻			
	4	Time Format	DC+ 🗸			
	5	UTC Offset	0.00	-12,12		
	Basic Information:					
	No	Name	Parameter	Range		
	1	Working Mode	Single 🗸			
	1					

[Figure 2-14] Sync Source Setting Screen (IRIG-B1)

Item	Parameter	Description	
Source	1~10	Set the priority for time source. 1 is highest source and 10 is lowest source. It has 10 levels. System can select best time	
Priority		sources by source priority.	
	SYNC	Set source working mode.	
Source	DEER	SYNC: Make it work at individual time source;	
Mode	NONE	PEER: Make it work at redundancy time source;	
	NONE	NONE: Make it doesn't work.	
		Set IRIG-B input time signal coming from which hardware	
Input	FI1	channel. There are two channel, one is FI1 interface and	
Channel	FI2	another is FI2 interface, please refer to section "Panel" and	
		find where these interfaces are.	
Timo		To set IRIG-B input signal format.	
Format	DC+	DC+: positive polarity DC, high level is 1;	
Format	DC -	DC-: negative polarity DC, low level is 1.	
		Set time offset between IRIG-B and UTC time.	
UTC	0.004	Unit is Hour(H);	
Offset	0.000	Range is between -12H and 12H.	
		Default value is 0.00H.	
Working	Singlo	Set time source working logic.	
Mode	Single	Single: The system can work at one valid time source.	

Table 9 – Sync Source Setting (IRIG-B1)

Press 'Save' button to save the current setting when you change setting.

KYLAND Kyla	and Technolo	gy Co., Ltd.		Welcome!!! [Logout] 中文
Status	Configuration System Anagement 2022-01-11			2022-01-11 05:06:16
Configuration	SYNC			
SYNC	Source Cha	annel: IRIG-B2	•	
NTP	No	Name	Parameter	Range
РТР	1	Source Priority	Level-4	
OUTPUT	2	Source Mode	PEER 🗸	
TMS	3	Input Channel	F12 ~	
	4	Time Format	DC+ 🗸	
	5	UTC Offset	0.00	-12,12
	Basic Infor	mation:		
	No	Name	Parameter	Range
	1	Working Mode	Single 🗸	
]		Save	

If select 'IRIG-B2' in Source Channel, the setting screen will be shown as:

[Figure 2- 15] S	Sync Source S	Setting Screen	(IRIG-B2)
------------------	---------------	----------------	-----------

Item	Parameter	Description	
Source	1~10	Set the priority for time source. 1 is highest source and 10 is lowest source. It has 10 levels. System can select best time	
Phoney		sources by source priority.	
	SVNC	Set source working mode.	
Source	DEER	SYNC: Make it work at individual time source;	
Mode		PEER: Make it work at redundancy time source;	
	NONL	NONE: Make it doesn't work.	
		Set IRIG-B input time signal coming from which hardware	
Input	FI1	channel. There are two channel, one is FI1 interface and	
Channel	FI2	another is FI2 interface, please refer to section "Panel" and	
		find where these interfaces are.	
Timo	DC+	To set IRIG-B input signal format.	
Format		DC+: positive polarity DC, high level is 1;	
ronnat	DC -	DC-: negative polarity DC, low level is 1.	
		Set time offset between IRIG-B and UTC time.	
UTC	0.004	Unit is Hour(H);	
Offset	0.001	Range is between -12H and 12H.	
		Default value is 0.00H.	
Working	Singlo	Set time source working logic.	
Mode	Single	Single: The system can work at one valid time source.	

Table 10 – Sync Source Setting (IRIG-B2)

Press 'Save' button to save the current setting when you change setting.

KYLAND Kyla	and Technolo	gy Co., Ltd.		Welcome!!! [Logout] 中文	
🗂 Status	🔲 Configuration 🍲 System 🔛 Management			2022-01-11 05:06:35	
Configuration	SYNC			5	
SYNC CLOCK	Source Cha	annel: PTP 🗸			
NTP	No	Name	Parameter	Range	
PTP	1	Source Priority	Level-5 🗸		
OUTPUT NETWORK	2	Source Mode	NONE		
TMS	Basic Information:				
	No	Name	Parameter	Range	
	1	Working Mode	Single 🗸		
			Save		

If select 'PTP' in Source Channel, the setting screen will be shown as:

[Figure 2-16] Sync Source Setting Screen (PTP)

Item	Parameter	Description
Source Priority	1~10	Set the priority for time source. 1 is highest source and 10 is lowest source. It has 10 levels. System can select best time sources by source priority.
Source Mode	SYNC PEER NONE	Set source working mode. SYNC: Make it work at individual time source; PEER: Make it work at redundancy time source; NONE: Make it doesn't work.
Working Mode	Single	Set time source working logic. Single: The system can work at one valid time source.

Table 11 – Sync Source Setting (PTP)

Press 'Save' button to save the current setting when you change setting.

2.5.2. Clock Settings

Press 'CLOCK' on the left navigation bar to show clock setting screen. The clock setting screen will be shown as:

KYLAND Kylan	nd T	echnolo	ogy Co., Ltd.		Welcome!!! [Logout] 中文
🗂 Status	🗐 Configuration 🔄 System 🗈 Management				2022-09-23 03:19:55
Configuration		SYNC	CLOCK	×	T.
SYNC CLOCK		Informatio	on:		
NTP		No	Name	Parameter	Range
OUTPUT		1	Time Reference	итс 🗸	
NETWORK		2	Time Zone	0.00	-12,12
		3	TAI UTC Offset	37	-32768,32767
		4	Output Mode	Lock 🛩	
		DST:			
		No	Name	Parameter	Range
		1	DST Offset	0.00	-12,12
		2	DST Mode	LOCAL 🗸	
		3	Start Index	1st 🛩	
	1	4	Start Weekday	SUN 🗸	
		5	Start Month	JAN 🗸	
		6	Start Time	00:00	00:00~24:00
		7	Stop Index	1st 🗸	
		8	Stop Weekday	SUN 🗸	
		9	Stop Month	VAL VAL	
		10	Stop Time	00:00	00:00~24:00
				Save	

[Figure 2-17] Clock Setting Screen Table 12 – Clock Setting

Items	Parameters	Description			
	UTC	Set reference time as required.			
		UTC: Make reference time work at UTC format;			
Time Reference		TAI: Make reference time work at TAI format.			
		${ig \Delta}$ If PTP time needs TAI time stamp, please set this			
		parameter to TAI format.			
		Set time zone offset for local time.			
Time Zene	0.00Н	Unit is Hour(H);			
Time zone		Range is between -12H and 12H.			
		Default value is 0.00H.			
		Set time offset between TAI and UTC.			
		Unit is Second(s);			
		Range is between -32768s and 32767s.			
TAI UTC Offset	37	Default value is 37s.			
		${igt \Delta}$ When time source provides this offset value, the current			
		parameter will keep the same value with time source; when			
		time source does not provide this offset value, the current			

Items	Parameters	Description				
		parameter will be set by manual.				
		Set signal output mode.				
	Always	Always: Any interfaces can output signal for any time.				
Output Mode	Lock	Lock: Any interfaces only can output signal after the first				
		time synchronization with any time source.				
		Set Daylight Saving Time (DST) time offset value.				
		Unit is Hour(H);				
DCT Offerst	0.0011	Range is between -12H and 12H.				
DSTOffset	0.00H	Default value is 0.00H.				
		🛆 The default value 0 means system cannot adjust time				
		according to DST configuration.				
	LITC	Set Daylight Saving Time (DST) working mode.				
DST Mode		UTC: Adjusting DST time according to UTC reference time.				
	LUCAL	LOCAL: Adjust DST time according to local reference time.				
	1 st					
	2 nd	Set start parameters for DST starting time.				
Start Indov	3 rd	Set start index number to define week index in month.				
Start muex	4 th	A The Daylight Saving Time (DST) will define by what month,				
	5 th	week, day and time to start.				
	Last					
	MON					
	TUE	Set start parameters for DST starting time				
	WEN	Set start weekday to define day index in week				
Start Weekday	THU	The Daylight Saving Time (DST) will define by what month				
	FRI	week day and time to start				
	SAT					
	SUN					
	JAN					
	FEB					
	MAR	Set start parameters for DST starting time				
	APR	Set start month to define month index in year				
Start Month	MAY	The Daylight Saving Time (DST) will define by what month				
	JUN	week, day and time to start				
	JUL					
	AUG					
	SEP					

Items	Parameters	Description			
	ОСТ				
	NOV				
	DEC				
		Set start parameters for DST starting time.			
		Set start time to define what time to start DST.			
		Format is 24 hours format.			
Start Time	00:00~24:00	Range is between 00:00 and 24:00.			
		Default value is 00:00.			
		A The Daylight Saving Time (DST) will define by what month,			
		week, day and time to start.			
	1 st				
	2 nd	Set stop parameters for DST stopping time.			
Step Index	3 rd	Set stop index number to define week index in month.			
Stop index	4 th	A The Daylight Saving Time (DST) will define by what month,			
	5 th	week, day and time to stop.			
	Last				
	MON				
	TUE	Set step perspectors for DCT stepping time			
	WEN	Set stop parameters for DST stopping time.			
Stop Weekday	THU	The Device to define day index in week.			
	FRI	The Daylight Saving Time (DST) will define by what month,			
	SAT	week, day and time to stop.			
	SUN				
	JAN				
	FEB				
	MAR				
	APR				
	MAY	Set stop parameters for DST stopping time.			
Stop Month	JUN	Set stop month to define month index in year.			
	JUL	A The Daylight Saving Time (DST) will define by what month,			
	AUG	week, day and time to stop.			
	SEP				
	ОСТ				
	NOV				
	DEC				
Stop Time	00:00~24:00	Set stop parameters for DST stopping time.			

Items	Parameters	Description		
		Set stop time to define what time to start DST.		
		Format is 24 hours format.		
		Range is between 00:00 and 24:00.		
		Default value is 00:00.		
		A The Daylight Saving Time (DST) will define by what month,		
		week, day and time to stop.		

2.5.3. NTP Settings

Press 'NTP' on the left navigation bar to show NTP setting screen. The NTP setting screen will be shown as:

المعادي المعادي المعادي المعادي					
Status	Configur	ation 🔄 System	Management	2022-01-11 05:08:09	
Configuration	SYNC	CLOCK	X NTP X		
SYNC	No	Name	Parameter	Range	
CLOCK	1	NTP Server	Disable 🗸		
PTP	2	NTP UTC Offset	0.00	-12,12	
OUTPUT NETWORK TMS			Save		

[Figure 2-18] NTP Setting Screen

Table 13 – NTP Setting

Items	Parameters	Description		
NTP Server	Enable Disable	Activate NTP server feature.		
		Enable: Make NTP server start working;		
		Disable: Make NTP server stop working.		
NTP UTC Offset	0.00Н	Set time offset between NTP time stamp and UTC. If NTP time		
		stamp needs time offset, please set this parameter.		
		Unit is Hour(H);		
		Range is between -12H and 12H.		
		Default value is 0.00H.		

Press 'Save' button to save the current setting when you change setting.

2.5.4. PTP Settings (Optional)

Press 'PTP' on the left navigation bar to show PTP setting screen. The PTP setting screen will be shown as:

figuration	C / SYNC	CLOCK 🗵 🗸 I	тр х ртр х	
IC	No	Name	Parameter	Range
ОСК	1	PTP Mode	MASTER	Kange
	-	Pile Manual Made		
TDUT	2	Delay Measurement Mode	P2P •	
TWORK	3	Sync Interval	STOP 🗸	
5	4	Delay Measurement Interval	STOP 🗸	
	5	Domain1	0 🗸	
	6	Domain2	0 🗸	
	7	Priority1	0	0,255
	8	Priority2	0	0,255
	9	PTP Media	802.3 🗸	
	10	Tx Compensation	0	-999999999,999999999
4	11	Rx Compensation	0	-999999999,999999999
	12	vLan Enable	NO 🗸	
	13	vLan Priority	7	0,7
	14	vLan CFI	0 ~	
	15	vLan TagID	0	0,4095
	16	Master Coordination	NO ~	

[Figure 2-19] PTP Setting Screen

Table 14 – PTP Setting

Items	Parameters	Description				
		Set PTP Clock working mode.				
		Master: Set PTP Clock working at Master of OC mode.				
	Master	Slave: Set PTP Clock working at Slave of OC mode.				
PTP Mode	Slave	Boundary: Set PTP Clock working at Boundary mode.				
	Boundary	${igt \Delta}$ The PTP product supports the maximum two physical				
		ports. When it is Boundary mode, PTP can automatic select				
		one port as Master mode and another port as Slave mode.				
Delau 525		Set PTP Clock delay measurement mode.				
Delay	EZE DOD	E2E: Set it works at E2E mode;				
Mada	PZP Disable	P2P: Set it works at P2P mode;				
iviode	Disable	Disable: Don't enable delay measurement function.				
		Set PTP Clock sending sync message rate of Master mode.				
		-8~4: Set a number for interval. If it is n, the actual interval is				
	0~4	2 ⁿ seconds.				
Sync Interval	-8~4	STOP: Don't send sync message.				
	510P	Default value is STOP.				
		🔺 When PTP mode is Master or Boundary, if this parameter				
		is STOP, it means PTP cannot send Sync, Announce message.				

Items	Parameters	Description			
		Set PTP Clock sending delay measurement message rate of			
		Slave mode.			
		-8~4: Set a number for interval. If it is n, the actual interval is			
Delay	0014	2 ⁿ seconds.			
Measurement	-8~4	STOP: Don't send delay measurement message.			
Interval	STOP	Default value is STOP.			
		A When PTP mode is Slave or Boundary, if this parameter is			
		STOP , it means PTP cannot send Delay, PDelay message			
		according to Delay Measurement Mode.			
		Set the working domain name for PTP message of ETH0.			
Domain1	0~3	Range is between 0 and 3.			
		Default value is 0.			
		Set the working domain name for PTP message of ETH1.			
Domain2	0~3	Range is between 0 and 3.			
		Default value is 0.			
	0~255	Set working priority 1 for PTP message.			
Priority1		Range is between 0 and 255.			
		Default value is 0.			
	0~255	Set working priority 2 for PTP message.			
Priority2		Range is between 0 and 255.			
		Default value is 0.			
	002.2	Set the transmission protocol for PTP.			
PTP Media	802.3	802.3: PTP uses IEEE802.3 transmission protocol.			
	IPV4	IPv4: PTP uses Ipv4 transmission protocol.			
		Set the time delay compensation for receiving PTP message.			
Rx	0.75	Unit is nanosecond(ns);			
Compensation	UIIS	Range is between -999999999ns and 999999999ns.			
		Default value is 0ns.			
		Set the time delay compensation for sending PTP message.			
Тх	0.75	Unit is nanosecond(ns);			
Compensation	Uns	Range is between -999999999ns and 999999999ns.			
		Default value is 0ns.			
vier	VEC	Set whether or not have vLan information in PTP message.			
VLdII Enable	YES NO	YES: Set PTP message with vLan message.			
		NO: Set PTP message without vLan message.			
vLan	0~7	Set vLan priority of PTP message.			

Items	Parameters	Description			
Priority		Range is between 0 and 7.			
		Default value is 0.			
)/Lan		Set vLan CFI information of PTP message.			
VLan	0~1	Range is between 0 and 1.			
CFI		Default value is 0.			
		Set vLan ID information of PTP message.			
VLan	0~4095	Range is between 0 and 4095.			
TagiD		Default value is 0.			
	VEC	Set whether or not use master coordination function (BMC).			
		YES: Enable BMC function.			
Mastar		NO: Disable BMC function.			
Coordination	TES NO	${igt \Delta}$ When BMC is working, device will check all master			
Coordination	NO	messages in the same networks and find the best master			
		clock. This function is suitable for the master clocks to			
		coordinate time.			

2.5.5. Output Settings

Press 'OUTPUT' on the left navigation bar to show output setting screen. Press 'Channel Group' to select SO/O1/O2/O3/O4/O5/AC output channel.

KYLAND Kylai	nd Technolo	ogy Co., Ltd.					Welcome!!! [Logout] 中文
🗂 Status	🔲 Configu	iration 🎓 System	🚨 Manageme	ent			2022-09-05 05:54:16
Configuration	SYNC	CLOCK	NTP	X PTP	OUTPUT	×	
SYNC CLOCK	Channel (Group: SO	~				
NTP	No	Name	P	Parameter		Range	
PTP	1	Second Compensation		0		-9999999999,999999	999
OUTPUT	2	Time Format		UTC	~		
NETWORK	3	Message Format		DL/T1100	~		
	4	Interface BaudRate		9600	~		
				Sa	ve		

[Figure 2-20] Output Setting Screen (SO)

Items	Parameters	Description
Second	Os	Set second compensation offset for SO.
Compensation		Unit is second(s);

Table 15 – Output Setting (SO)

Items	Parameters	Description
		Range is between -999999999s and 99999999s.
		Default value is 0s.
		Set reference time for TOD output signal of SO.
Time Correct		UTC: Make output time working at UTC format;
Time Format	IAI	TAI: Make output time working at TAI format.
	Local	Local: Make output time working at Local format.
		Set coding format for serial message of SO.
	NMEA-RMC	NMEA-RMC: Use RMC coding format of NMEA;
	NMEA-ZDA	NMEA-ZDA: Use ZDA coding format of NMEA;
Niessage	CM-TOD	CM-TOD: Use custom format of Chinese Mobile TOD;
Format	DL/T1100	DL/T1100: Use custom format of DL/T 1100.1.
	СММВ	CMMB: Use custom format of Chinese Radio and Television.
		${igt \Delta}$ The detail message refers to technical specification.
Interface		Set working baud rate for serial port of SO.
DevidDate	300~115200	Range is between 300 and 115200.
BaudRate		Default value is 9600.

If select 'O1' in	Channel Group.	the setting screen	will be shown as:
Il Sciece Of Ill	channel Group,	the setting server	

C Statur	Config		Manago	mont				2022-10-28 05:07:33
Configuration				nent XV P	TP (OUTPUT	X	2022-10-20-03.07.33
SYNC	Channel	Group: 01	~					
NTP	No	Name		Parameter			Range	
РТР	1	Output Signal		PPS1	~			
OUTPUT NETWORK	2	Second Compensation		0			-999999999,9999999999	
TMS	3	PPS Compensation		0			-250000000,250000000	
	4	IRIG-B Mode		Odd	~			
	5	IRIG-B Time Format		UTC	~			
	6	IRIG-B Polarity		+	~			

[Figure 2-21] Output Setting Screen (O1) Table 16 – Output Setting (O1)

Items	Parameters	Description
	PPS1	Set output signal type for O1.
Output	IRIG-B1	PPS1: Set output signal is PPS;
Signal	PPM	IRIG-B1: Set output signal is IRIG-B;
	РРН	PPM: Set output signal is PPM;

Items	Parameters	Description
		PPH: Set output signal is PPH.
		▲ The PPS is pulse signal. It is one pulse per second.
		${igt \Delta}$ The PPM is pulse signal. It is one pulse per minute.
		A The PPH is pulse signal. It is one pulse per hour.
		▲ If the order hardware supports IRIG-B modulated
		interface, only the IRIG-B is valid for IRIG-B modulated
		interface; if the order hardware does not support IRIG-B
		modulated interface, the all output signals are valid.
		Set second compensation offset for O1.
Second	n Os	Unit is second(s);
Compensation		Range is between -999999999s and 99999999s.
		Default value is 0s.
	Ons	Set PPS compensation offset for O1.
PPS		Unit is nanosecond(ns);
Compensation		Range is between -250000000ns and 250000000ns.
		Default value is Ons.
	Even	Set IRIG-B check code for O1.
IRIG-B	Even	Even: Use Even mode check code to code IRIG-B signal;
Mode	Odd	Odd: Use Odd mode check code to code IRIG-B signal.
	LITC	Set reference time for IRIG-B output signal of O1.
Time		UTC: Make output time working at UTC format;
Format		TAI: Make output time working at TAI format.
Format	LUCAI	Local: Make output time working at Local format.
		Set IRIG-B output signal polarity for O1.
	+	+: positive polarity DC, high level is 1;
Polarity	-	-: negative polarity DC, low level is 1.

If select 'O2' in Channel Group, the setting screen will be shown as:

Configuration		c V CLOCK	x V NTP x √ PTP x	TUTTUO
SYNC	Channe	l Group: O2 🗸		
NTP	No	Name	Parameter	Range
РТР	1	Output Signal	PPS2 🗸	
OUTPUT	2	Second Compensation	0	-999999999,999999999
TMS	3	PPS Compensation	0	-25000000,25000000
	4	IRIG-B Mode	Odd 🗸	
	5	IRIG-B Time Format	итс 🗸	
	6	IRIG-B Polarity	+ ~	

[Figure 2- 22] Output Setting Screen (O2) Table 17 – Output Setting (O2)

ltems	Parameters	Description
		Set output signal type for O2.
		PPS2: Set output signal is PPS;
	PPS2	IRIG-B2: Set output signal is IRIG-B;
Output	IRIG-B2	PPM: Set output signal is PPM;
Signal	PPM	PPH: Set output signal is PPH.
	РРН	A The PPS is pulse signal. It is one pulse per second.
		A The PPM is pulse signal. It is one pulse per minute.
		${igt \Delta}$ The PPH is pulse signal. It is one pulse per hour.
		Set second compensation offset for O2.
Second	Second Os npensation	Unit is second(s);
Compensation		Range is between -999999999s and 999999999s.
		Default value is 0s.
		Set PPS compensation offset for O2.
PPS	Ons	Unit is nanosecond(ns);
Compensation		Range is between -250000000ns and 250000000ns.
		Default value is Ons.
	LITC	Set reference time for IRIG-B output signal of O2.
IRIG-B		UTC: Make output time working at UTC format;
Time	IAI	TAI: Make output time working at TAI format.
Format	Local	Local: Make output time working at Local format.
	5	Set IRIG-B check code for O2.
IRIG-B	Even	Even: Use Even mode check code to code IRIG-B signal;
IVIODE	Udd	Odd: Use Odd mode check code to code IRIG-B signal.
IRIG-B	+	Set IRIG-B output signal polarity for O2.

ltems	Parameters	Description
Polarity	-	+: positive polarity DC, high level is 1;
		-: negative polarity DC, low level is 1.

Press 'Save' button to save the current setting when you change setting.

If select 'O3' in Channel Group, the setting screen will be shown as:

Configuration		CLOCK		OUTPUT E
SYNC CLOCK	Channel	Group: 03 🗸		
NTP	No	Name	Parameter	Range
РТР	1	Output Signal	PPS3 🗸	
OUTPUT	2	Second Compensation	0	-999999999,999999999
TMS	3	PPS Compensation	0	-25000000,25000000
	4	IRIG-B Mode	Odd 🖌	
	5	IRIG-B Time Format	итс 🗸	
	6	IRIG-B Polarity	+ ~	

[Figure 2-23] Output Setting Screen (O3)

Items	Parameters	Description
		Set output signal type for O3.
		PPS3: Set output signal is PPS;
	PPS3	IRIG-B3: Set output signal is IRIG-B;
Output	IRIG-B3	PPM: Set output signal is PPM;
Signal	PPM	PPH: Set output signal is PPH.
	РРН	A The PPS is pulse signal. It is one pulse per second.
		A The PPM is pulse signal. It is one pulse per minute.
		${igt \Delta}$ The PPH is pulse signal. It is one pulse per hour.
		Set second compensation offset for O3.
Second	0-	Unit is second(s);
Compensation	US	Range is between -999999999s and 999999999s.
		Default value is 0s.
		Set PPS compensation offset for O3.
PPS	0	Unit is nanosecond(ns);
Compensation	Uns	Range is between -250000000ns and 250000000ns.
		Default value is Ons.
IRIG-B	UTC	Set reference time for IRIG-B output signal of O3.
Time	TAI	UTC: Make output time working at UTC format;

Table 18 – Output Setting (O3)

Items	Parameters	Description
Format	Local	TAI: Make output time working at TAI format.
		Local: Make output time working at Local format.
	Fuer	Set IRIG-B check code for O3.
IRIG-B	Odd	Even: Use Even mode check code to code IRIG-B signal;
Mode		Odd: Use Odd mode check code to code IRIG-B signal.
		Set IRIG-B output signal polarity for O3.
IRIG-B	+	+: positive polarity DC, high level is 1;
Polarity	-	-: negative polarity DC, low level is 1.

Press 'Save' button to save the current setting when you change setting.

If select 'O4' in Channel Group, the setting screen will be shown as:

KYLAND Kyla	and Technol	ogy Co., Ltd.					Welcome!!! [Logout] 中文
T Status	Configuration System Anagement 2022-01-11 05:13:19						
Configuration	SYNC	CLOCK	X NTP	V PTP		X	•
SYNC CLOCK	Channel	Group: 04	~				
NTP	No	Name	Parameter			Range	
PTP	1	Output Signal	PPS4	~			
OUTPUT	2	Second Compensation	0			-999999999,999999999	
NETWORK TMS	3	PPS Compensation	0			-25000000,25000000	
	4	IRIG-B Mode	Odd	~			
	5	IRIG-B Time Format	UTC	~			
	6	IRIG-B Polarity	+	~			
				Save			

[Figure 2-24] Output Setting Screen (O4) Table 19 – Output Setting (O4)

Items	Parameters	Description
		Set output signal type for O4.
		PPS4: Set output signal is PPS;
	PPS4	IRIG-B4: Set output signal is IRIG-B;
Output	IRIG-B4	PPM: Set output signal is PPM;
Signal	PPM	PPH: Set output signal is PPH.
	РРН	A The PPS is pulse signal. It is one pulse per second.
		${igt \Delta}$ The PPM is pulse signal. It is one pulse per minute.
		${igt \Delta}$ The PPH is pulse signal. It is one pulse per hour.
		Set second compensation offset for O4.
Second	0c	Unit is second(s);
Compensation	US	Range is between -999999999s and 99999999s.
		Default value is 0s.

Items	Parameters	Description		
		Set PPS compensation offset for O4.		
PPS	One	Unit is nanosecond(ns);		
Compensation	UIIS	Range is between -250000000ns and 250000000ns.		
		Default value is Ons.		
	LITC	Set reference time for IRIG-B output signal of O4.		
Time		UTC: Make output time working at UTC format;		
Time IAI	TAI: Make output time working at TAI format.			
Format Local		Local: Make output time working at Local format.		
	Evon	Set IRIG-B check code for O4.		
Modo	Odd	Even: Use Even mode check code to code IRIG-B signal;		
Mode Odd		Odd: Use Odd mode check code to code IRIG-B signal.		
		Set IRIG-B output signal polarity for O4.		
	+	+: positive polarity DC, high level is 1;		
Polarity	-	-: negative polarity DC, low level is 1.		

If select 'O5' in Channel Group, the setting screen will be shown as:

KYLAND Kyla	nd Technol	ogy Co., Ltd.		Welcome!!! [Logout] 中文
Status	Config	uration 🙆 System 🛛	Management	2022-01-11 05:13:41
Configuration		V CLOCK	x V NTP x V PTP	X OUTPUT X
SYNC CLOCK	Channel	Group: 05 🗸		
NTP	No	Name	Parameter	Range
PTP	1	Output Signal	PPS5 🗸	
OUTPUT	2	Second Compensation	0	-999999999,99999999
TMS	3	PPS Compensation	0	-25000000,25000000
	4	IRIG-B Mode	Odd 🗸	
	5	IRIG-B Time Format	UTC 🗸	
	6	IRIG-B Polarity	+ ~	
			Save	

[Figure 2-25] Output Setting Screen (O5)

Table 20 – Output Setting (O5)

Items	Parameters	Description		
		Set output signal type for O5.		
	PPS5	PPS5: Set output signal is PPS;		
Output	IRIG-B5	IRIG-B5: Set output signal is IRIG-B;		
Signal	PPM	PPM: Set output signal is PPM;		
	РРН	PPH: Set output signal is PPH.		
		A The PPS is pulse signal. It is one pulse per second.		

Items	Parameters	Description		
		${igt \Delta}$ The PPM is pulse signal. It is one pulse per minute.		
		${igt \Delta}$ The PPH is pulse signal. It is one pulse per hour.		
		Set second compensation offset for O5.		
Second	00	Unit is second(s);		
Compensation	US	Range is between -999999999s and 99999999s.		
		Default value is 0s.		
		Set PPS compensation offset for O5.		
PPS	One	Unit is nanosecond(ns);		
Compensation	Compensation	Range is between -250000000ns and 250000000ns.		
		Default value is Ons.		
		Set reference time for IRIG-B output signal of O5.		
Time		UTC: Make output time working at UTC format;		
Format		TAI: Make output time working at TAI format.		
Format	LUCAI	Local: Make output time working at Local format.		
	Even	Set IRIG-B check code for O5.		
IRIG-B	Even	Even: Use Even mode check code to code IRIG-B signal;		
Niode	Odd	Odd: Use Odd mode check code to code IRIG-B signal.		
		Set IRIG-B output signal polarity for O5.		
	+	+: positive polarity DC, high level is 1;		
Polarity	-	-: negative polarity DC, low level is 1.		

If select 'AC' in Channel Group, the setting screen will be shown as:

KYLAND Kyla	and lechnolo	bgy Co., Ltd.					Welcome!!! [Logout] 中文
🗂 Status	Configu	ration 🙆 System	Management				2022-01-11 05:14:04
Configuration	SYNC	V CLOCK	NTP			×	2
SYNC	Channel G	iroup: AC	~				
NTP	No	Name		Parameter			Range
PTP	1	Peak-to-Peak Value		12.0V	~		
OUTPUT NETWORK	2	Modulation Ratio Value		3.0:1	~		
TMS				Save			

[Figure 2-26] Output Setting Screen (AC)

Table 21 – Output Setting (AC)	

ltems	Parameters	Description			
Dook to Dook	2 0\/~12 0\/	Set IRIG-B output signal peak-to-peak value for O5.			
reak-to-reak	3.00 12.00	Unit is V;			

Items	Parameters	Description
		Step is 0.5V;
		Range is between 3.0V and 12.0V.
		Default value is 12.0V.
		${igt \Delta}$ The modulated IRIG-B signal has the same encoder with
		O1 output channel, the other parameters please refer to O1
		output parameters.
		Set IRIG-B output signal modulation ratio for O5.
		Step is 0.5:1;
		Range is between 3.0:1 and 6.0:1.
Modulation Ratio	3.0:1~6.0:1	Default value is 3.0:1.
		${igt \Delta}$ The modulated IRIG-B signal has the same encoder with
		O1 output channel, the other parameters please refer to O1
		output parameters.

2.5.6. Network Settings

Press 'NETWORK' on the left navigation bar to show network setting screen. The network setting screen will be shown as:

KYLAND Kyla	KYLAND Kyland Technology Co., Ltd. Wekomell [Logout] #2							
Status	Configu	ration 🍲 System	Anagemen					2022-01-11 05:15:03
	SYNC	CLOCK	X NTP	X PTP		X	NETWORK	X
SYNC CLOCK	Network C	hannel: ETH0	~					
NTP	No	Name	Para	meter			Range	
PTP	1	IP Address	192.	168.0.111			XXX.XXX.XXX	
OUTPUT	2	IP Mask Address	255.2	255.255.0			XXX.XXX.XXX.XXX	
TMS	3	Interface Mode	Auto	~				
				Save				
				Save				

[Figure 2-27] – Network Setting Screen

Press 'Save' button to save the current setting when you change setting.

Press 'Network Group' to select different network port including ETH0/1/2/3.

ETH2/ETH3 are optional, they can only work at Copper and 100M mode.

Items	Parameters	Description
		Set IP address for network ports.
IP Address	XXX.XXX.XXX.XXX	ETH0:192.168.0.111
		ETH1:192.168.1.111

Items	Parameters	Description
		ETH2:192.168.0.111
		ETH3:192.168.1.111
		Set Subnet mask address for network ports.
		ETH0:255.255.255.0
IP Mask Address	XXX.XXX.XXX.XXX	ETH1:255.255.255.0
Auto,		ETH2:255.255.255.0
		ETH3:255.255.255.0
	PTS-10A can provide more network types. One of them	
	Auto, 100M-FX FDX, 100M-FX-HDX,	can set ETH0/ETH1 mode work with Auto or work with
		100M and 1000M fiber.
		Auto: 100M/1000M Copper automatic mode;
Interface Mode		100M-FX FDX: 100M Optical full duplex mode;
	1000M-X FDX,	100M-FX HDX: 100M Optical half duplex mode;
	TOOOM-X HDX	1000M-FX FDX: 1000M Optical full duplex mode;
		1000M-FX HDX: 1000M Optical half duplex mode.

2.5.7. TMS Settings (Optional)

Press 'TMS' on the left navigation bar to show TMS setting screen.

Press 'GOOSE channel' to select GOOSE publisher and GOOSE subscriber channel.

- **1** The GOOSE publisher includes GOOSE-P0/GOOSE-P1 and work on ETH0/ETH1;
- **1** The GOOSE subscriber includes GOOSE-S0/GOOSE-S1 and work on ETH0/ETH1.

If select 'GOOSE-P0' in GOOSE Channel, the setting screen will be shown as:

Status	Co	onfiguration 👌	System	🛓 Manaç	ement				2022-01-11 05:18:57
Configuration	<u>.</u>	V CLO	ск 🛛	√ NTP	🗵 🗸 ртр		× NET	WORK	TMS
SYNC	G	OOSE Channel:	OOSE-P0	~					
CLOCK	P	lo Name			Parameter			Range	
PTP	1	GOOSE Pul	blisher		Disable	~			
OUTPUT	2	AppID			0001			0x0000-0xFFFF	
TMS	3	MAC			01:0C:CD:01:00:0)1		XX:XX:XX:XX:XX:XX:XX	
	4	GOOSE Go	CbRef		PTSTTR/LLN0\$GC	\$gocb0			
	5	GOOSE Dat	taSet		PTSTTR/LLN0\$ds	GOOSE0			
	6	GOOSE Go	ID		PTSTTR/LLN0\$GC)\$gocb0			
	7	Trigger Mo	de		PPS	~			
	8	Trigger Per	iod		0			0,255	
	- g	Vlan Priorit	у		7			0,7	
	1	0 Vlan CFI			0	~			
	1	1 Vlan ID			0			0,4095	
	1	2 Test			0	~			
	1	3 confRev			1			0,255	
	1	4 ndsCom			0			0,1	

[Figure 2- 28] GOOSE Publisher Screen (GOOSE-P0) Table 22 – GOOSE Publisher Setting (GOOSE-P0)

Items	Parameters	Description
	Fachlo	Activate GOOSE publisher feature for ETH0.
GOOSE Publisher	Enable	Enable: Make GOOSE publisher start working;
	Disable	Disable: Make GOOSE publisher stop working.
		Set APPID of GOOSE message.
	6 1000	Range is between 0x0000 and 0xFFFF.
APPID	UXXXXX	Default value is 0x0001.
		${igt \Delta}$ APPID is a 32 bits data with hex display.
		Set MAC address of GOOSE message.
	01.0C.CD.01.XX.XX	Default value is 01.0C.CD.01.00.01.
MAG		${igt \Delta}$ The first four parts of MAC address are
MAC		standard value of GOOSE message. If you find
		any network messages with these values, the
		message is GOOSE message.
		Set GCB ID of GOOSE message.
		It is a string defined by GOOSE standard.
GOOSE GoID	PTSTTR/LLN0\$GO\$gocb0	Default value is PTSTTR/LLN0\$GO\$gocb0.
		A Provide IEC61850 ICD file, the current
		default value is made by this ICD file.

Items	Parameters	Description
		Set GCB reference of GOOSE message.
GOOSE GoCBRef		It is a string defined by GOOSE standard.
	PTSTTR/LLN0\$GO\$gocb0	Default value is PTSTTR/LLN0\$GO\$gocb0.
		A Provide IEC61850 ICD file, the current
		default value is made by this ICD file.
		Set GCB dataset of GOOSE message.
		It is a string defined by GOOSE standard.
GOOSE Dataset	PTSTTR/LLN0\$dsGOOSE0	Default value is PTSTTR/LLN0\$dsGOOSE0.
		A Provide IEC61850 ICD file, the current
		default value is made by this ICD file.
	DDC	Set trigger mode to send GOOSE message.
Triagan Mada	PPS	PPS: Use PPS to trigger GOOSE message;
Trigger Wode		PPM: Use PPM to trigger GOOSE message;
		PPH: Use PPH to trigger GOOSE message.
		Set period to send out GOOSE message.
		Range is between 0 and 255.
		Default value is 0.
		🔺 The 0 means no data change and the non-
		zero means system will send a new GOOSE
		when the current time at PPS, PPM or PPH can
		be divisible by trigger period.
		🔺 If trigger mode is PPS, the trigger period
		unit is second. When the whole seconds of the
Trianan Daviad		current time is divisible by trigger period, the
ingger Period	0-255	new GOOSE will generate.
		▲ If trigger mode is PPM, the trigger period
		unit is minute. When the whole seconds of the
		current time is divisible by trigger period
		multiplied by 60, the new GOOSE will generate.
		${ig \Delta}$ If trigger mode is PPH, the trigger period
		unit is hour. When the whole seconds of the
		current time is divisible by trigger period
		multiplied by 3600, the new GOOSE will
		generate.
yl an Briarity	0~7	Set vLan priority of GOOSE message.
		Range is between 0 and 7.

Items	Parameters	Description
		Default value is 7.
		Set vLan CFI information of GOOSE message.
vLan CFI	0~1	Range is between 0 and 1.
		Default value is 0.
		Set vLan ID information of GOOSE message.
vLan ID	0~4095	Range is between 0 and 4095.
		Default value is 0.
		Set Test flag of GOOSE message.
Test	0~1	Range is between 0 and 1.
		Default value is 0.
		Set confRev value of GOOSE message.
confRev	0~255	Range is between 0 and 255.
		Default value is 1.
		Set ndsCom value of GOOSE message.
ndsCom	0~255	Range is between 0 and 255.
		Default value is 0.

Press 'Save' button to save the current setting when you change setting.

If select 'GOOSE-P1' in GOOSE Channel, the setting screen will be shown as:

status	Connige	iration 🐨 System 🕋	Management	
onfiguration				NETWORK X TMS
/NC	GOOSE	Channel: GOOSE-P1 🗸		
.ock IP	No	Name	Parameter	Range
PTP	1	GOOSE Publisher	Disable 🗸	
JTPUT	2	AppID	0002	0x0000-0xFFFF
IS	3	MAC	01:0C:CD:01:00:02	XXXXXXXXXXXXXXXX
	4	GOOSE GoCbRef	PTSTTR/LLN0\$GO\$gocb1	
	5	GOOSE DataSet	PTSTTR/LLN0\$dsGOOSE1	
	6	GOOSE GoID	PTSTTR/LLN0\$GO\$gocb1	
	7	Trigger Mode	PPS 🗸	
	8	Trigger Period	0	0,255
	9	Vlan Priority	7	0,7
	10	Vlan CFI	0 ~	
	11	Vlan ID	0	0,4095
	12	Test	0 ~	
	13	confRev	1	0,255
	14	ndsCom	0	0,1

[Figure 2-29] GOOSE Publisher Screen (GOOSE-P1)

Items	Parameters	Description
		Activate GOOSE publisher feature for ETH1.
GOOSE Publisher	Enable	Enable: Make GOOSE publisher start working;
	Disable	Disable: Make GOOSE publisher stop working.
		Set APPID of GOOSE message.
	6 1000	Range is between 0x0000 and 0xFFFF.
APPID	0xXXXX	Default value is 0x0002.
		APPID is a 32 bits data with hex display.
		Set MAC address of GOOSE message.
		Default value is 01.0C.CD.01.00.02.
		🔺 The first four parts of MAC address are
MAC	01.0C.CD.01.XX.XX	standard value of GOOSE message. If you find
		any network messages with these values, the
		message is GOOSE message.
		Set GCB ID of GOOSE message.
	PTSTTR/LLN0\$GO\$gocb1	It is a string defined by GOOSE standard.
GOOSE GoID		Default value is PTSTTR/LLN0\$GO\$gocb1.
		A Provide IEC61850 ICD file, the current
		default value is made by this ICD file.
		Set GCB reference of GOOSE message.
	PTSTTR/LLN0\$GO\$gocb1	It is a string defined by GOOSE standard.
GOOSE GoCBRef		Default value is PTSTTR/LLN0\$GO\$gocb1.
		A Provide IEC61850 ICD file, the current
		default value is made by this ICD file.
		Set GCB dataset of GOOSE message.
		It is a string defined by GOOSE standard.
GOOSE Dataset	PTSTTR/LLN0\$dsGOOSE1	Default value is PTSTTR/LLN0\$dsGOOSE1.
		${igt \Delta}$ Provide IEC61850 ICD file, the current
		default value is made by this ICD file.
	ססס	Set trigger mode to send GOOSE message.
Triggor Modo	PP3	PPS: Use PPS to trigger GOOSE message;
ingger woue		PPM: Use PPM to trigger GOOSE message;
	rrn	PPH: Use PPH to trigger GOOSE message.
		Set period to send out GOOSE message.
Trigger Period	0~255	Range is between 0 and 255.
		Default value is 0.

Table 23 – GOOSE Publ	isher Setting (GOOSE-P1)

Items	Parameters	Description
		▲ The 0 means no data change and the non-
		zero means system will send a new GOOSE
		when the current time at PPS, PPM or PPH can
		be divisible by trigger period.
		${ig \Delta}$ If trigger mode is PPS, the trigger period
		unit is second. When the whole seconds of the
		current time is divisible by trigger period, the
		new GOOSE will generate.
		▲ If trigger mode is PPM, the trigger period
		unit is minute. When the whole seconds of the
		current time is divisible by trigger period
		multiplied by 60, the new GOOSE will generate.
		▲ If trigger mode is PPH, the trigger period
		unit is hour. When the whole seconds of the
		current time is divisible by trigger period
		multiplied by 3600, the new GOOSE will
		generate.
		Set vLan priority of GOOSE message.
vLan Priority	0~7	Range is between 0 and 7.
		Default value is 7.
		Set vLan CFI information of GOOSE message.
vLan CFI	0~1	Range is between 0 and 1.
		Default value is 0.
		Set vLan ID information of GOOSE message.
vLan ID	0~4095	Range is between 0 and 4095.
		Default value is 0.
		Set Test flag of GOOSE message.
Test	0~1	Range is between 0 and 1.
		Default value is 0.
		Set confRev value of GOOSE message.
confRev	0~255	Range is between 0 and 255.
		Default value is 1.
		Set ndsCom value of GOOSE message.
ndsCom	0~255	Range is between 0 and 255.
		Default value is 0.

Configuration	<u>.</u>			T NETWORK N TMS
SYNC	GOOSE	Channel: GOOSE-SO 🗸		
CLOCK NTP	No	Name	Parameter	Range
ртр	1	GOOSE Subscriber	Disable 🗸	
DUTPUT	2	MAC	01:0C:CD:01:00:01	XXXXXXXXXXXXXXXX
MS	3	GOOSE GoCbRef	PTSTTR/LLN0\$GO\$gocb0	
	4	GOOSE DataSet	PTSTTR/LLN0\$dsGOOSE0	
	5	GOOSE GoID	PTSTTR/LLN0\$GO\$gocb0	
	6	Entry	0	0,31
	7	Byte	0	0,31
	8	Bit	0	0,7

If select 'GOOSE-S0' in GOOSE Channel, the setting screen will be shown as:

[Figure 2- 30] GOOSE Subscriber Screen (GOOSE-S0) Table 24 –GOOSE Subscriber Setting (GOOSE-S0)

Items	Parameters	Description
	Enable	Activate GOOSE subscriber feature for ETH0.
GOOSE Subscriber	Dicable	Enable: Make GOOSE subscriber start working;
	Disable	Disable: Make GOOSE subscriber stop working.
		Set APPID of GOOSE message.
MAC	0xXXXX	Range is between 0x0000 and 0xFFFF.
MAC		Default value is 0x0001.
		${igt \Delta}$ APPID is a 32 bits data with hex display.
		Set GCB ID of GOOSE message.
	PTSTTR/LLN0\$GO\$gocb0	It is a string defined by GOOSE standard.
GOOSE GoID		Default value is PTSTTR/LLN0\$GO\$gocb0.
		rightarrow Provide IEC61850 ICD file, the current
		default value is made by this ICD file.
		Set GCB reference of GOOSE message.
	PTSTTR/LLN0\$GO\$gocb0	It is a string defined by GOOSE standard.
GOOSE GoCBRef		Default value is PTSTTR/LLN0\$GO\$gocb0.
		${igt \Delta}$ Provide IEC61850 ICD file, the current
		default value is made by this ICD file.
		Set GCB dataset of GOOSE message.
GOOSE Dataset	PTSTTR/LLN0\$dsGOOSE0	It is a string defined by GOOSE standard.
		Default value is PTSTTR/LLN0\$dsGOOSE0.

Items	Parameters	Description
		A Provide IEC61850 ICD file, the current
		default value is made by this ICD file.
		Set the entry index of GOOSE message.
		Range is between 0 and 31.
Entry	0~31	Default value is 0.
		${ig \Delta}$ The maximum entry is 32. The 0 is the first
		entry. The 31 is the last entry.
Byte		Set the byte position of entry item
		Range is between 0 and 31.
	0~31	Default value is 0.
		${ig \Delta}$ The maximum byte of entry is 32. The 0 is
		the first byte. The 31 is the last byte.
		Set the bit position of byte item.
		Range is between 0 and 7.
Bit	0~7	Default value is 0.
		${ig \Delta}$ The maximum bit of byte is 8. The 0 is the
		first bit. The 31 is the last bit.

If select 'GOOSE-S1' in GOOSE Channel, the setting screen will be shown as:

Status	Config	uration 🏠 System 🔝	Management	2022-01-11 05:21:20
Configuration		CLOCK XV NTP	X PTP X OUTPUT X	NETWORK TMS
SYNC CLOCK	GOOSE	Channel: GOOSE-S1 🗸		
NTP	No	Name	Parameter	Range
РТР	1	GOOSE Subscriber	Disable 🗸	
OUTPUT	2	MAC	01:0C:CD:01:00:02	XXXXXXXXXXXX
TMS	3	GOOSE GoCbRef	PTSTTR/LLN0\$GO\$gocb1	
	4	GOOSE DataSet	PTSTTR/LLN0\$dsGOOSE1	
	5	GOOSE GoID	PTSTTR/LLN0\$GO\$gocb1	
	6	Entry	0	0,31
	7	Byte	0	0,31
	8	Bit	0	0,7

[Figure 2-31] GOOSE Subscriber Screen (GOOSE-S1)

Table 25 – GOOSE Subscriber Setting (GOOSE-S1)

Items	Parameters	Description
GOOSE Subscriber	Enable	Activate GOOSE subscriber feature for ETH1.

Items	Parameters	Description		
	Disable	Enable: Make GOOSE subscriber start working;		
		Disable: Make GOOSE subscriber stop working.		
		Set APPID of GOOSE message.		
MAG	0	Range is between 0x0000 and 0xFFFF.		
MAC	UXXXXX	Default value is 0x0002.		
		${igt \Delta}$ APPID is a 32 bits data with hex display.		
		Set GCB ID of GOOSE message.		
		It is a string defined by GOOSE standard.		
GOOSE GoID	PTSTTR/LLN0\$GO\$gocb1	Default value is PTSTTR/LLN0\$GO\$gocb1.		
		A Provide IEC61850 ICD file, the current		
		default value is made by this ICD file.		
		Set GCB reference of GOOSE message.		
		It is a string defined by GOOSE standard.		
GOOSE GoCBRef	PTSTTR/LLN0\$GO\$gocb1	Default value is PTSTTR/LLN0\$GO\$gocb1.		
		rake Provide IEC61850 ICD file, the current		
		default value is made by this ICD file.		
		Set GCB dataset of GOOSE message.		
		It is a string defined by GOOSE standard.		
GOOSE Dataset	PTSTTR/LLN0\$dsGOOSE1	Default value is PTSTTR/LLN0\$dsGOOSE1.		
		${igt \Delta}$ Provide IEC61850 ICD file, the current		
		default value is made by this ICD file.		
		Set the entry index of GOOSE message.		
		Range is between 0 and 31.		
Entry	0~31	Default value is 0.		
		${igt \Delta}$ The maximum entry is 32. The 0 is the first		
		entry. The 31 is the last entry.		
		Set the byte position of entry item		
		Range is between 0 and 31.		
Byte	0~31	Default value is 0.		
		${igt \Delta}$ The maximum byte of entry is 32. The 0 is		
		the first byte. The 31 is the last byte.		
		Set the bit position of byte item.		
		Range is between 0 and 7.		
Bit	0~7	Default value is 0.		
		${igt \Delta}$ The maximum bit of byte is 8. The 0 is the		
		first bit. The 31 is the last bit.		

2.6. System

The WEB management system supports to manage Gateway, Route information and to backup and restore configuration file, in the same time it also supports firmware management and log management of PTS time server by WEB.

Normally, if has SNMP features, the SNMP management node will be shown in the left navigation bar.

Press 'System' to go to the system screen on the top of navigation bar. The screen will be shown as:

KYLAND Kylar	nd Techn	ology Co., Ltd.							1	Welcome!!! [Logout] 中文
🔳 Status	🔲 Confi	guration 🔷 Sys	stem 🔹 Ma	anagement						2022-01-11 05:23:51
System	E	fault Gateway)
Default Gateway Static Route	Defa	ult Gateway:								
Configuration	Gate	eway					0	peration		
Firmware								Add		
SNMP										
	Rout	ing Table:								
	ID	Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface	Operation
	1	192.168.3.0	0.0.0	255.255.255.0	U	0	0	0	eth3	Del
	2	192.168.2.0	0.0.0	255.255.255.0	U	0	0	0	eth2	Del
	3	192.168.1.0	0.0.0	255.255.255.0	U	0	0	0	eth1	Del
	4	192.168.0.0	0.0.0	255.255.255.0	U	0	0	0	eth0	Del
	• 5	127.0.0.0	0.0.0	255.0.0.0	U	0	0	0	lo	Del
	6	0.0.0.0	192.168.1.1	0.0.0.0	UG	0	0	0	eth1	Del
	7	0.0.0.0	192.168.0.1	0.0.0.0	UG	0	0	0	eth0	Del

[Figure 2-32] System Screen

2.6.1. Gateway

Press 'Default Gateway' on the left navigation bar to manage Gateway information. The gateway screen will be shown as:

KYLAND Kylar	nd Tech	nology Co., Ltd.							ł	Welcome!!! [Logout] 中文
🔳 Status	🖬 Cor	figuration 🏠 Sys	stem 🔹 Ma	anagement						2022-01-11 05:23:51
System	E	Default Gateway								1
Default Gateway Static Route	De	ault Gateway:								
Configuration	G	ateway					0	peration		
Log								Add		
SNMP										
	Ro	iting Table:								
	10	Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface	Operation
	1	192.168.3.0	0.0.0.0	255.255.255.0	U	0	0	0	eth3	Del
	2	192.168.2.0	0.0.0	255.255.255.0	U	0	0	0	eth2	Del
	3	192.168.1.0	0.0.0	255.255.255.0	U	0	0	0	eth1	Del
	4	192.168.0.0	0.0.0	255.255.255.0	U	0	0	0	eth0	Del
	4 5	127.0.0.0	0.0.0	255.0.0.0	U	0	0	0	lo	Del
	6	0.0.0	192.168.1.1	0.0.0.0	UG	0	0	0	eth1	Del
	7	0.0.0.0	192.168.0.1	0.0.0.0	UG	0	0	0	eth0	Del

[Figure 2-33] Gateway Screen

The current routing table will be listed on the bottom of screen.

Press 'Add' to add a new gateway for PTS time server.

Press 'Del' to delete the selected route information.

2.6.2. Route

Press 'Route' on the left navigation bar to manage Route information. The route screen will be shown as:

KYLAND Kyla	nd Techr	nology Co., Ltd								Į	Welcome!!	! [Logout] 中文
🗂 Status	Cont	figuration 🙆 Sy	stem 🔝 Ma	anagement								2-01-11 05:24:27
System	E / D	efault Gateway	Static Route									
Default Gateway Static Route	Stat	ic Route:										
Configuration	Int	erface Network			Netmask		Gate	way				Operation
Firmware	et	NET 🗸					YES	~				Add
	ID	Destination	Gateway	Genma	isk	Flags	Metric	Ref	Use	Iface	Opera	ition
	ID	Destination	Gateway	Genma	isk	Flags	Metric	Ref	Use	Iface	Opera	ition
	1	192.168.3.0	0.0.0	255.255	5.255.0	U	0	0	0	eth3	Del	
	2	192.168.2.0	0.0.0	255.255	5.255.0	U	0	0	0	eth2	Del	1
	3	192.168.1.0	0.0.00	255.255	5.255.0	U	0	0	0	eth1	Del	
	4	192.168.0.0	0.0.0	255.255	5.255.0	U	0	0	0	eth0	Del	
	4 5	127.0.0.0	0.0.0	255.0.0	.0	U	0	0	0	lo	Del]
	6	0.0.0	192.168.1.1	0.0.0.0		UG	0	0	0	eth1	Del]
	7	0.0.0.0	192.168.0.1	0.0.0.0		UG	0	0	0	eth0	Del	

[Figure 2-34] Route Screen

The current routing table will be listed on the bottom of screen.

Press 'Add' to add a static route for PTS time server.

Press 'Del' to delete the selected route information.

2.6.3. Configuration

Press 'Configuration' on the left navigation bar to backup and restore configuration file. The configuration screen will be shown as:

KYLAND Kyland Technology Co., Ltd.							
🗂 Status	🔲 Configuration 🛛 🏠 Sy	stem 📔 🔠 Management			2022-01-11 05:24:		
System	🖸 🖉 Default Gateway	Static Route Static Configuration	n X				
Default Gateway Static Route	Configuration:						
Configuration	File			Operation	Operation		
Firmware	选择文件 未选择文件			Restore	Backup		
SNMP							

[Figure 2-35] Configuration Screen

Press 'Backup' and system will pop-up a tip window, let user to select a directory to save configuration file. The name of configuration file is named by MAC address.

Press 'Restore' to restore a configuration by WEB. Before do it, please select a file. After press 'Restore', the system will active your selected configuration file.

2.6.4. Firmware

Press 'Firmware' on the left navigation bar to upgrade firmware. The firmware screen will be shown as:

KYLAND Kyla	KYLAND Kyland Technology Co., Ltd. Wekome!!! [Logout] +								
🗂 Status	Configuration 🕸 System	2022-01-11 05:25:28							
System	Configuration Firmware	× ×							
Default Gateway Static Route	Firmware:								
Configuration	File	Operation							
Firmware Log SNMP	透揮文件 未选择文件	Download							

[Figure 2-36] Firmware Screen

Press 'Download' to update the new firmware of PTS time server. Before do it, please select upgrade file. After finish this action, you should reboot device and make the new firmware active. There are 2 types to reboot device. One is turn off power and then turn on; another is controlled by WEB management system.

The firmware should be published by Official.

2.6.5. Log

Press 'Log' on the left navigation bar to manage log feature. The Log screen will be shown as:

- Status	🔲 Configu	iration 🙆 System 🔺 Manag	ement	2022-01-19 07:57:
System	💽 🦯 Defau	It Gateway Log X		
Default Gateway	<	1/10 > >		
Static Route	No	Time	Name	Status
Configuration	1	2022-01-19 12:36:59	SAT1 Source Status	Normal
Firmware	2	2022-01-19 12:36:53	SAT1 Source Status	Alarm
SNMP	3	2022-01-18 15:22:47	Selected Source	SAT1
	4	2022-01-18 15:22:41	Selected Source	LOCAL
	5	2022-01-18 15:22:41	SAT1 Source Status	Normal
	6	2022-01-18 15:22:35	SAT1 Source Status	Alarm
	7	2022-01-18 14:07:54	SAT1 Source Status	Normal
	8	2022-01-18 14:07:49	SAT1 Source Status	Alarm
	9	2022-01-18 12:26:02	SAT1 Source Status	Normal
	10	2022-01-18 12:25:59	SAT1 Source Status	Alarm
	11	2022-01-17 10:38:18	SAT1 Source Status	Normal
	12	2022-01-17 10:38:15	SAT1 Source Status	Alarm
	13	2022-01-13 14:02:53	SAT1 Source Status	Normal
	14	2022-01-13 14:02:52	SAT1 Source Status	Alarm
	15	2022-01-13 09:17:32	SAT1 Source Status	Normal
	16	2022-01-13 09:17:28	SAT1 Source Status	Alarm
	17	2022-01-12 13:23:38	SAT1 Source Status	Normal
	18	2022-01-12 13:23:33	SAT1 Source Status	Alarm
	19	2022-01-11 12:11:36	SAT1 Source Status	Normal
	20	2022-01-11 12:11:35	SAT1 Source Status	Alarm

[Figure 2-37] Log Screen

Log management supports to view and export log file to local. The each page will show the maximum 20 log items. More log will show the others page. You might change by navigation bar of top page. Press 'Refresh' can refresh the log item. Press 'Export' can export a log file to local and view it.

2.6.6. SNMP (Optional)

Press 'SNMP' on the left navigation bar to manage SNMP feature. The SNMP screen will be shown as:

KYLAND Kylar	nd Technology Co.,	Ltd.					Welc	ome!!! [Logout] 中文
🗂 Status	🔟 Configuration 🏾 🎓	System	anagement					2022-07-19 09:16:50
System	💽 🦯 Default Gateway	Static Route	Configuration	X Firmware	X Log	X	SNMP	×
Default Gateway Static Route	Agent Port:	161	Trap Port:	162		Engine ID:	8000078	900000000000
Configuration Firmware	V1/V2C	+Add +Del						
Log	No Communi	ity			Access			
SNMP	1 public	~			RO	~		
	V3	+Add +Del						
	No User /	Access Authenticat	ion	Auth Password		Privacy	Privacy Password	1
	Trap	+Add +Del						
	No Version	Community/User		Dest. IP	RetryTimes		Timeout	Enabled
				Save				

[Figure 2-38] SNMP Screen

SNMP management supports to modify agent port and to add or delete V1/V2C, V3 and TRAP access parameters. The default agent port of SNMP is 161 and the default trap port of SNMP is 162. The Engine ID normally is generated by system. The default access parameter of V1/V2C named 'public', it only has read-only permissions. V3 and TRAP do not have default value.

Any modifications about SNMP should reboot device to activate it.

2.7. Management

The WEB management system supports to change user password and reboot device by WEB.

Press 'Management' to go to the management screen on the top of navigation bar. The screen will be shown as:

KYLAND Kyla	nd Technology Co., Ltd.	Welcome!!! [Logout] 中文
Status	🗐 Configuration 🛛 🏠 System	Management 2021-12-29 04:18:13
🛛 Management	Password	
Password		Change Password
Reboot	Old password	
	New password	
	Confirm password	
		Save

[Figure 2-39] Management Screen

2.7.1. Change Password

Press 'Change Password' on the left navigation bar to change password. The change

password screen will be shown as:

KYLAND Kyla	الله المعامل الم معامل المعامل ا								
Status	🔟 Configuration 🏾 🍲 System	I Management	2021-12-29 04:18:13						
🛛 Management	Password								
Password		Change Password							
Reboot	Old password								
	New password								
	Confirm password								
		Save							

[Figure 2-40] Change Password Screen

Please 'Save' to confirm the new password.

2.7.2. Reboot

Press 'Reboot' on the left navigation bar to reboot device. The reboot screen will be shown as:

KYLAND Kyla	and Technology C	o., Ltd.		Welcome!!! [Logout] 中文		
Status	Configuration	🏠 System	Management	2021-12-29 04:18:42		
Management Password	Password	Reboot	×	<u>د</u>		
Reboot				Reboot		

[Figure 2-41] Reboot Screen

Press 'Reboot' to reboot device, but it need user to confirm again according to pop-up dialog.

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