Konvision

konvision

V1.0.1

Konvision Monitor
IP25G Series LCD Monitors

USER MANUAL

Catalogue

About This Manual

The instructions in this manual are for IP25G
Series LCD monitors.
The following description use model KUM-
1810D-IP25G pictures.
Please confirm the model number of the
device before reading this manual.

Notes

Notes

For the safety use of products, please read the following instructions regarding the installation, use and maintenance carefully.

· Please read the product safety and operating instructions carefully before the product operate.
· Please keep the safety and operating instructions for future reference.
· Please pay strict attention to the warnings and implement the products according to the operating instructions closely.
· All operating instructions should strictly enforced.

1. Please use the power cord recommended by the manufacturer.
2. Please do not place heavy objects on the power cord.
3. Please do not expose the monitors to rain, humid, dusty places.
4. Please do not place vessels with liquid (such as cups, beverage bottles) on the monitor.
5. Please do not place this product in high heat places.
6. Please make sure the earth terminal is good in order to avoid electric shock.
7. Please do not open the back cover to avoid electric shock. Please contact professionals for service needs.
8. If there is no image or sound, please unplug the power cord from the AC outlet immediately. Please consult professionals if problem still exists after examining carefully.
9. Do not place this product at unstable places such as cars, shelves or tables, as it is easy to make the product fall down, may cause severe hurt to children and adults and damage to the product.
10. Please do not touch the power plug with wet hands, as it will cause electric shock.
11. Please do not expose the LCD panel in direct sunlight for a long time, it will result in damage or aging of the LCD panel.
12. Please display this product at a suitable temperature and humidity.
13. Please do not spray any liquid things and/or add any objects into the monitor, it might cause voltage instability and short-circuit, also can easily cause fires and blackouts.
14. If do not use the device for a long time, please unplug the power cord from the AC outlet.
15. Please keep not less than 5cm space around the vents while using the monitor, in order to obtain a good heat dissipation effect.

LCD and OLED Screen Note

The monitor may appear unrecoverable residual images, when it switches to other signals after displaying the same images for a long time, even if the images is in a moving video, such as still LOGO or still characters etc. Please use a screen saver or timer to avoid displaying the same images for a long time.

Security

Screen Maintenance

Please follow the below guidelines carefully to prevent discoloration, stains and scratches on the screen:

· Avoid striking the screen with any object.
· Do not wipe the screen hard.
· Do not wipe the screen with solvents such as alcohol, thinner or gasoline.
· Do not spray detergent or other cleaners on the monitor or LCD panel, as it may cause fault because of water droplets into the monitor.
· Do not write on the screen.
· Do not paste or stick any viscous markers on the screen.

Screen may cleaned by gently wiping with lint free cloth to remove dust. For the more difficult cleaning, use lint free cloth that has been very lightly dampened with detergent, then dry any excess moisture from the monitor or LCD panel immediately to prevent damage.

Cabinet Maintenance

Please follow the guidelines below to prevent potential damage.

- Do not wipe the cabinet with solvents such as alcohol, thinner or gasoline.
- Do not use any pesticides and/or other volatile substances.
- Do not allow prolonged contact with rubber or plastic.
- Do not wipe the cabinet hard. Use a soft, lint free cloth to clean. If the cabinet cleaning is more difficult, use lint free clothIf the cabinet cleaning is difficult, please use lint free cloth that has very lightly dampened with detergent and then dry it to wipe.

Installation

- Keep adequate air circulation to prevent device internal overheating. Please do not place the product on the surface of some certain objects (such as blankets, carpets,etc.), as these objects may block the vents.
- Please keep the device away from heat generating sources, such as radiator, heaters and air duct, also keep it away from much dust or mechanical vibration.

Rack mount Installation

For rack mount installation, please keep 1U space from both top and bottom to make sure, adequate air circulation, or install an external electric fan. Please follow the instructions and install with the rack mounts provided by the manufacturer.

Transportation

This monitor is precise equipment and needs professional packing materials to transport.
Please do not use packing materials provided by suppliers except KONVISION or its authorized packing material suppliers.

When the following situations occur, please turn off the power, and do not insert the plug. Contact a professional service staff to deal with timely.

1. This product smells of smoke and off-flavor.
2. When this product displays abnormal operating conditions, such as there is no picture or sound.
3. When any liquid splashed into the product or product dropped.
4. When the product soaked or fell into the water.
5. When the product has been damaged or under other easy to get damaged circumstances.
6. When the power cord or plug damaged.

The following does not belong to failures:

1. If a static image displayed too long, panel will have residual image, which should attributed to the LCD display characteristics, but not a failure. Residual image will disappear automatically after a period.
2. If this device is used in a cold environment, the screen may appear a burn-in image. This is not a product failure, when the monitor temperature changes, screen will return to normal conditions.
3. LCD screen may appear tiny spots (red, blue or green), this is not a fault, LCD screens manufactured with high precision technology, and a small number of pixels may not be able to show intermittent.
4. When touch monitor it may be appear slight vibration.
5. Screen and cabinet will become warm gradually during operating.
6. When the monitor hear cracked voice.
7. When the monitor hear mechanical vibrate voice.

Parts and Functions

Front View
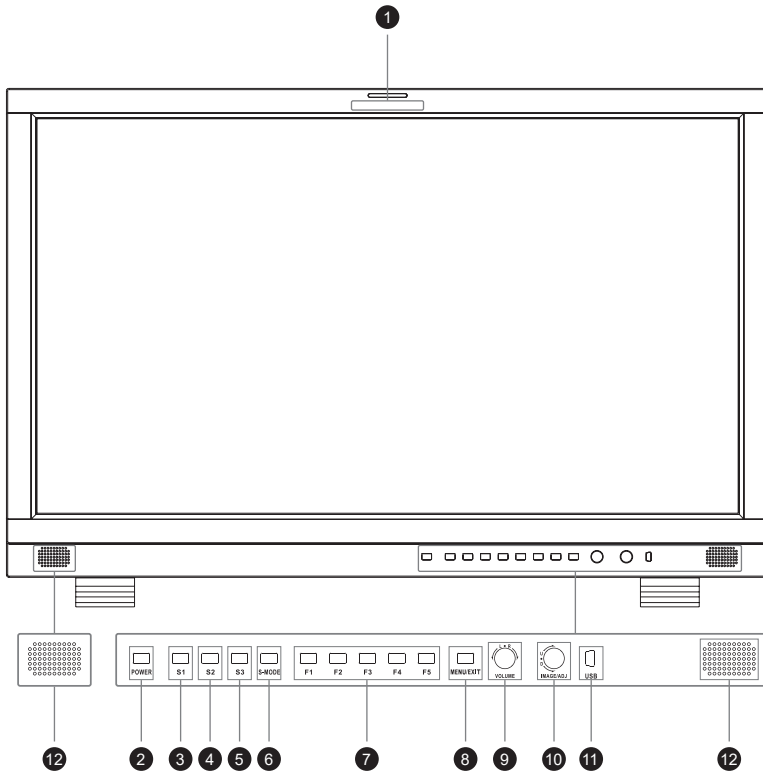
1 Tally Indicator

Tally indicator control in two ways:

1. GPI Interface (see the control method at GPI interface description behind)

2. RS422 Port: control Tally light via TSL 3.1 or TSL 4.0 protocol. RS422 interface, 8Bit data, 1 stop, even parity, 38400 baud.

2 Power Button and Indicator

When the external AC power supply with electricity, the indicator light is red. Press this POWER button to power on the monitor, and the indicator light turns blue. Press this button around 2 seconds can turn off the monitor power supply and indicate light turns to red.

3 S1 Button and Indicator

Press the S1 button, the indicator will turn blue. Currently, the S1 button switch to the configuration corresponding to the S1 button.

4 S2 Button and Indicator

Press the S2 button, the indicator will turn blue. Currently, the S2 button switch to the configuration corresponding to the S1 button.

5 S3 Button and Indicator

Press the S3 button, the indicator will turn blue. Currently, the S3 button switch to the configuration corresponding to the S1 button.

⑥ S4 Button and Indicator

Press the S4 button, the indicator will turn blue. Currently, the S4 button switch to the configuration corresponding to the S1 button.

⑦ F1-F5 Button

Function button, its function can be set in the menu. After setting the button function, press the custom key quickly switch to the corresponding function.

⑧ MENU/EXIT Button

Press to display the on-screen menu, press it again to clear the on-screen menu. Press to display or exit menu, also can back to previous menu.

⑨ VOLUME (L/R) Knob

When in the menu, spin this knob to select L/R operation.
When not in the menu, press the knob continuous, will appear following adjustment:
Audio Mute: audio mute on/off
Volume: volume adjustment items.

⑩ IMAGEADJ (U/D) Knob

When in the menu, spin this knob to select up/down operation.
When not in the menu, press the knob continuous, will appear following adjustment:
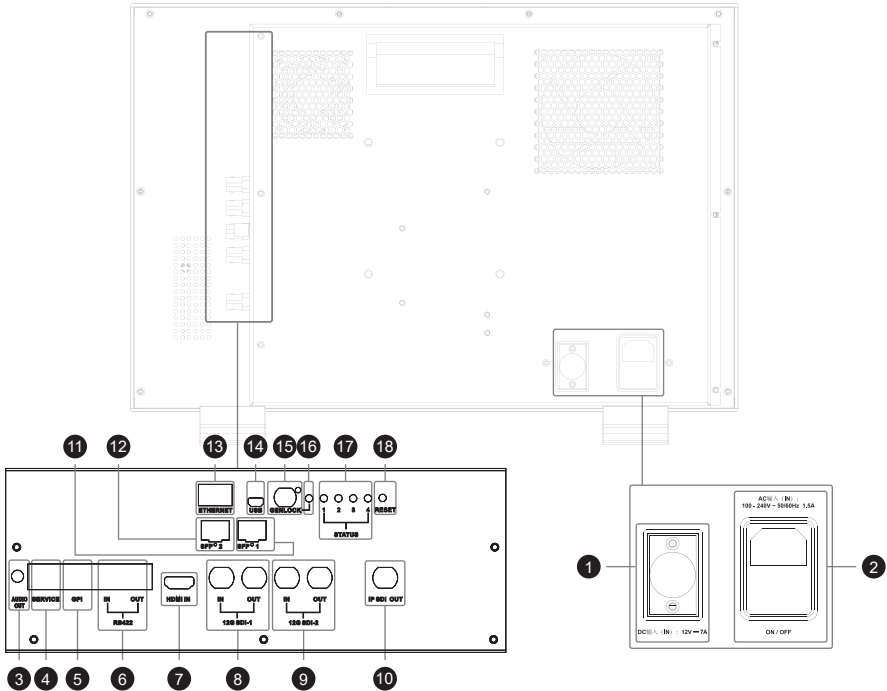**Brightness:** adjust the backlight of the image.

⑪ USB

Upgrading the monitor FPGA, OSD, APP EDP software or LUT file with USB port.

⑫ Speaker

Speaker out.

Rear View

1 **AC IN and Switch**

AC power supply.

AC power input is powered on, switch to "I" to power on, switch to "O" to power off, and shut down.

2 **DC IN (Remark: only for a few models)**

DC 12V power supply.

Pin Definition:
Pin 1: GND
Pin 2: NC
Pin 3: NC
Pin 4: +12V
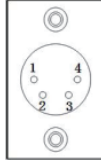
3 **AUDIO OUT**

Analog stereo audio interface output.

4 **Service**

Ethernet port for color correction, upgrading or control UMD via TSL5.0. (For specification instructions please contact with the dealer)

5 **GPI Interface:**

Diagram	Pin	GPI Signal	Description
	1	GPI 1	When connect GND (or lower level), GPI 1/2/3 works, GPI 1/2/3 function can be set in the menu function option.
	2	GPI 2	
	3	GPI 3	
	4	NC	Not connect.
	5	NC	
	6	GPI4	When connect GND, GPI4 works, GPI4 function can be set in the menu function option.
	7	NC	Not connect.
	8	GND	Ground. When using the GPI function, it needs to be connected to the GND of the GPI device.

6 **RS422 IN and RS422 OUT**

RS422 in and out. RS422 control adoptive TSL3.1 or TSL4.0 protocol. According to this protocol, it supports dynamic UMD/Tally control. (RS 422 interface, 8bit data, 1 stop, even parity, 38400 baud)

Diagram	Pin	RS422 IN Signal Name	RS422 OUT Signal name
	1	GND (Power Ground)	GND (Power Ground)
	2	GND (Power Ground)	GND (Power Ground)
	3	Tx-	Tx-
	4	Rx+	Rx+
	5	Rx-	Rx-
	6	Tx+	Tx+
	7	NC (Not Connect)	NC (Not Connect)
	8	NC (Not Connect)	NC (Not Connect)

7 **HDMI IN/OUT**

HDMI signal input/output interface, Max support 4096×2160 60Hz.

8 **SDI 1 (IN/OUT)**

12G/6G/3G/HD-SDI input, output.

9 **SDI 2 (IN/OUT)**

12G/6G/3G/HD-SDI input, output.

10 **IP SDI OUT**

SDI output from IP input.

11 **SFP 1**

4K ST2110 IP input interface.

12 **SFP 2**

4K ST2110 IP input interface.

13 **ETHERNET**

RJ-45 1000M/100M Ethernet Interface. Support SNMP V1.0 control protocol.

Users can set and modify the parameters of the monitor via remote web control interface.

14 **USB**

IP internet program upgrade interface.

15 **GENLOCK**

Gen lockable with BB or Tri-level external interface.

16 **GENLOCK LED**

GENLOCK status indicator.

17 **STATUS LED**

LED status indicator.

18 **RESET Button**

Reset the 4K ST2110 IP function parameters to default.

OSD Menu

Menu Operation

Press MENU/EXIT key to enter the main menu, and then spin any knob to switch between options in the same menu. After you find the corresponding option, press the KNOB key to enter the next menu, and then spin the knob to find the corresponding Parameter, press KNOB key first, then spin the knob key to adjust the value of the parameter. When the parameter is set, press MENU/EXIT to return to the previous menu.

Then use a similar method to set the remaining parameters. In summary, when setting parameters the following keys MENU/EXIT key, KNOB, press the KNOB key are frequently used. The role of the keys are:

MENU/EXIT: enter the menu or return to the previous menu. Exit main menu, shortcut key menu, S1/S2/S3/S4 menu etc.
IMAGEADJ (U/D) KNOB or VOLUME (L/R): in the same menu, switch the options; or adjust the value of the parameters. Press the knob, select to confirm or enter the next menu.

Note: If the current menu settings are gray, the user cannot set the menu. If the current menu settings are white, the user can set menu.

Sub Menu	Description
Input Mode	Display the current input mode.
Input Format	Display the current input format and resolution.
Color Space	Display the color space of the signal source.
Gamma	Display the Gamma value of the signal source.
Color Temp	Display the color temp of the signal source.
Backlight	Display the current backlight of the screen.
Gateway	Display the default gateway (default value 192.168.001.001).
Subnet Mask	Display the default Subnet Mask(default value: 255.255.255.000).
IP Address	Display the factory default IP address: 192.168.001.155.
Device ID	Display the Device ID .
DSP Version	Display DSP software version information.
EDP Version	Display EDP software version information.
MCU Version	Display MCU software version information.

Menu Item Description

Status Display:

Status	Input Mode	Single Input
VPID/HDMI Status	Input Format	SDI1
Config	Color Space	Rec 709
Function	Gamma	2.4
Source	Color Temp	6500K
Color	Backlight	9
Image	Gateway	92.168.001.001
Scope	Subnet Mask	255.255.000.000
Assist	IP Address	192.168.001.155
Marker	Device ID	0002100415130500F20303
Audio	DSP Version	V74230529
CC	EDP Version	V75230529
UMD	MCU Version	V230608-V440_01_UEF-B
System		

VPID/HDMI Status (SDI):

Status	Channel Select	Channel 1
VPID/HDMI Status	Source	SDI1
Config	Payload ID	00 00 00 00
Function	SMPTE Standard	Unknown
Source	Color Depth	--
Color	Color Format	--
Image	Picture Rate	--
Scope	Scanning Method	--
Assist	Colorimetry	--
Marker	Link Assignment	--
Audio		
CC		
UMD		
System		

Sub Menu	Description
Channel Select	Select different channel to view different signal parameter.
Source	Display the current input signal.
Payload ID	Display the Payload ID of the SDI signal.
SMPTE Standard	Display the SMPTE protocol of the SDI signal.
Color Depth	Display the Color Depth of the signal.
Color Format	Display the Color Format of the signal.
Picture Rate	Display the Picture Rate of the signal.
Scanning Method	Display the Scanning Method of the signal.
Colorimetry	Display the Colorimetry of the signal.
Link Assignment	Display the Link Assignment of the SDI signal.

VPID/HDMI Status (HDMI):

Status	Channel Select	Channel 1
VPID/HDMI Status	Source	HDMI
Config	Color Format	--
Function	Data Level	--
Source	Color Depth	--
Color	Colorimetry	--
Image		
Scope		
Assist		
Marker		
Audio		
CC		
UMD		
System		

Sub Menu	Description
Channel Select	Select different channel to view different signal parameter.
Source	Display the current HDMI signal.
Color Format	Display the Color Format of the signal.
Data Level	Display the Data Level of the signal.
Color Depth	Display the Color Depth of the signal.
Colorimetry	Display the Colorimetry of the signal.

Config Settings:

Status	Load Config	>>
VPID/HDMI Status	Save Config	>>
Config	Export Config	>>
Function	Import Config	>>
Source	Power On Config	Last Config
Color	Config1 Name	Config1
Image	Config2 Name	Config2
Scope	Config3 Name	Config3
Assist	Config4 Name	Config4
Marker	Config5 Name	Config5
Audio	Factory Reset	>>
CC		
UMD		
System		

Sub Menu	Description
Load Config	Select the Config to load. · Config1-5
Save Config	Users can preset the Config, after saving, users can set the Config to S1-S4 and other keys. · Config1-5 Note: After modifying the parameters, be sure to save the Config. Otherwise, it still load the previous Config when press S1-S4 keys.
Export Config	Use U disk to export current or all Config. · Export Current Config · Export All Config
Import Config	Use U disk to import current or all Config. · Import Current Config · Import All Config
Power On Config	[Last Config]Load the last Config when power on.[Config1-5]Load the select Config 1-5 when power on. · Last Config · Config1-5
Config1 Name	Config1 Name and can rename the Config1.
Config2 Name	Config2 Name and can rename the Config2.
Config3 Name	Config3 Name and can rename the Config3.
Config4 Name	Config4 Name and can rename the Config4.
Config5 Name	Config5 Name and can rename the Config5.
Factory Reset	[Current Config]Reset the Current Config.[All Config]Reset all the Config. · Current Config · All Config

Function Settings:

Status	S1	Config1
VPID/HDMI Status	S2	Config2
Config	S3	Config3
Function	S4	Config4
Source	S Key Info	Off
Color	Function Preset	Preset 1
Image	F1	CC Mode
Scope	F2	Data Level
Assist	F3	Color Space
Marker	F4	EOTF
Audio	F5	Color Temp
CC	GPI 1	Marker Display
UMD	GPI 2	Red Tally
System	GPI 3	Green Tally
	GPI 4	Yellow Tally
	Color Quick Select	Quick Rec709
	Data Level Preset	Limit(64-940)
	Color Space Preset	Rec709
	EOTF Preset	2.4
	Function Reset	>>

Sub Menu	Setting Option Description
S1	Set the Config of S1 key. · Config1-5
S2	Set the Config of S2 key. · Config1-5
S3	Set the Config of S3 key. · Config1-5
S4	Set the Config of S4 key. · Config1-5
S Key Info	[**OFF**]Press S Key, doesn't display S Key info.[**ON**]Press S Key, display S Key info. · OFF · ON
Function Preset	Users can preset 4 functions. · Preset 1-4
F1	F1 key function. · Preset the F1 function.
F2	F2 key function. · Preset the F2 function.
F3	F3 key function. · Preset the F3 function.
F4	F4 key function. · Preset the F4 function.
F5	F5 key function. · Preset the F5 function.

Sub Menu	Setting Option Description
GPI 1	Set GPI 1 function. · GPI 1 function
GPI 2	Set GPI 2 function. · GPI 2 function
GPI 3	Set GPI 3 function. · GPI 3 function
GPI 4	Set GPI 4 function. · GPI 4 function
Color Quick Select	Preset the Color and then it can be preset in the F function key for quick select.
Data Level Preset	Preset the Data Level and then it can be preset in the F function key for quick select. (Note: users can preset it only when the Color Quick Select is set to User)
Color Space Preset	Preset the Color Space and then it can be preset in the F function key for quick select. (Note: users can preset it only when the Color Quick Select is set to User)
EOTF Preset	Preset the EOTF and then it can be preset in the F function key for quick select. (Note: users can preset it only when the Color Quick Select is set to User)
Function Reset	Reset all the Sub Menu to Factory Settings.

Source Settings:

Status	Display Mode	Single
VPID/HDMI Status	Input Mode	Single Input
Config	Win1 Source	SDI1
Function	Win2 Source	SDI2
Source	Win3 Source	SDI3
Color	Win4 Source	HDMI
Image	SDI1 Rename	SDI1
Scope	SDI2 Rename	SDI2
Assist	SDI3 Rename	SDI3
Marker	SDI4 Rename	SDI4
Audio	SFP Rename	SFP
CC	HDMI Rename	HDMI
UMD	Win Border	OFF
System	Win1 Border Color	Green
	Win2 Border Color	Green
	Win3 Border Color	Green
	Win4 Border Color	Green
	Win1 Border Width	6PX
	Win2 Border Width	6PX
	Win3 Border Width	6PX
	Win4 Border Width	6PX

Sub Menu	Setting Option Description
Display Mode	**[Single]**Select Single display. **[Quad]**Select Quad display. · Single · Quad
	<table><tr><td>Win1</td><td>Win2</td></tr><tr><td>Win3</td><td>Win4</td></tr></table>
Input Mode	Select signal input mode. · Single · Quad
Win1 Source	Select the signal of the Win1. · SDI1 · SDI2 · 25G IP · HDMI
Win2 Source	Select the signal of the Win2. · SDI1 · SDI2 · 25G IP · HDMI (Note: It cannot be set if the menu is grey. It can be set when the display mode is set to Quad Mode or Quad Split)
Win3 Source	Select the signal of the Win3. · SDI1 · SDI2 · 25G IP · HDMI (Note: It cannot be set if the menu is grey. It can be set when the display mode is set to Quad Mode or Quad Split)
Win4 Source	Select the signal of the Win4. · SDI1 · SDI2 · 25G IP · HDMI (Note: It cannot be set if the menu is grey. It can be set when the display mode is set to Quad Mode or Quad Split)
SDI1 Rename	SDI1 User-defined name. · SDI1
SDI2 Rename	SDI2 User-defined name. · SDI2
25G IP Rename	25G IP User-defined name. · 25G IP
HDMI Rename	HDMI User-defined name. · HDMI

Sub Menu	Setting Option Description
Win Border	**[OFF]**Turn off Win Border in Quad Mode.**[ON]**Turn on Win Border in Quad Model. · OFF · ON (Note: this function only available in Quad Mode)
Win1 Border Color	Select the color of the Win1 Border. · White · Green · Blue · Cyan · Red · Yellow (Note: this function only available in Quad Mode)
Win2 Border Color	Select the color of the Win2 Border. · White · Green · Blue · Cyan · Red · Yellow (Note: this function only available in Quad Mode)
Win3 Border Color	Select the color of the Win3 Border. · White · Green · Blue · Cyan · Red · Yellow (Note: this function only available in Quad Mode)
Win4 Border Color	Select the color of the Win4 Border. · White · Green · Blue · Cyan · Red · Yellow (Note: this function only available in Quad Mode)
Win1 Border Width	**[3PX]**Select 3PX width for border line. **[6PX]**Select 6PX width for border line. **[8PX]**Select 8PX width for border line. · 3PX · 6PX · 8PX
Win2 Border Width	**[3PX]**Select 3PX width for border line. **[6PX]**Select 6PX width for border line. **[8PX]**Select 8PX width for border line. · 3PX · 6PX · 8PX

Sub Menu	Setting Option Description
Win3 Border Width	**[3PX]**Select 3PX width for border line. **[6PX]**Select 6PX width for border line. **[8PX]**Select 8PX width for border line. · 3PX · 6PX · 8PX
Win4 Border Width	**[3PX]**Select 3PX width for border line. **[6PX]**Select 6PX width for border line. **[8PX]**Select 8PX width for border line. · 3PX · 6PX · 8PX

Color Settings:

Status	Color Ctrl	All Screen
VPID/HDMI Status	Channel Select	Win1
Config	Cross Partition Show	Auto
Function	Data Level	Auto
Source	Color Space	Rec709
Color	EOTF	2.4
Image	Transfer Matrix	Auto
Scope	R Saturation	50
Assist	G Saturation	50
Marker	B Saturation	50
Audio	R Hue	0
CC	G Hue	0
UMD	B Hue	0
System	Sharpness	10
	DBrightness	0
	Contrast	0
	Color Temp	6500K
	R Gain	512
	G Gain	512
	B Gain	512
	R Offset	512
	G Offset	512
	B Offset	512

Sub Menu	Setting Option Description
Color Ctrl	**[Full Screen]**Full screen color ctrl unified settings. **[Zone Ctrl]**Zone ctrl · Full Screen · Zone Ctrl (Note: this function only available in Quad Mode)

Sub Menu	Setting Option Description
Channel Select	Used for Zoon Ctrl, users can set different color parameter for each window. | Win1	Win2
Win3	Win4 | · Win1 · Win2 · Win3 · Win4
Cross Partition Show	Reserved function. · Auto · ON
Data Level	Auto matches Data Level of the input signal.User can select different Data Level according to the input signal. · Auto · Limit (64-940) · Extend (46-1019) · Full (0-1023) · SMPTE Full (4-1019)
Color Space	**[Auto]**Auto matches color space of the input signal(only for Rec709 or Rec2020). **[Bypass]**Color Table Select Bypass. **[Rec709]**Color Table Select REC709. **[EBU]**Color Table Select EBU. **[DCI P3 D65]**Color Table Select DCI P3 D65. **[DCI P3]**Color Table Select DCI P3. **[Rec2020]**Color Table Select Rec2020. **[User1-User6]**Color Table Select User1-User6. · Auto · Bypass · Rec709 · EBU · DCI P3 D65 · DCI P3 · Rec2020 · U1_User1 · U2_User2 · U3_User3 · U4_User4 · U5_User5 · U6_User6 (Note: users can load their own color table into the User1-User6)
EOTF	Bypass: EOTF use the gamma of the screen itself. Users can select different EOTD according their requirement. Bypass, 2.0, 2.2, 2.4, 2.6, 2.4(HDR), Rec.2100 HLG 1.03/1.11/1.16/1.20/1.27/1.33 ST2084 PQ ST2084 PQ(softroll) Slog/2/3, Clog/2/3, Vlog, Dlog, LogC
Transfer Matrix	Select a transfer matrix that matches the input signal. · Auto · Rec601 · Rec709 · Rec2020

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Sub Menu	Setting Option Description
R Saturation	Red Saturation, default value: 50. · 0~200
G Saturation	Green Saturation, default value: 50. · 0~200
B Saturation	Blue Saturation, default value: 50. · 0~200
R Hue	Red Hue, default value: 0. · -100~100
G Hue	Green Hue, default value: 0. · -100~100
B Hue	Blue Hue, default value: 0. · -100~100
Sharpness	Sharpness, default value: 10. · 0~20
DBrightness	DBrightness, default value: 0. · -2000~2000
Contrast	Contrast, default value: 0. · -2000~2000
Color Temp	Color Temp settings.Users can customize the Color Temp, and save to corresponding user mode, and then press the S1-S4 keys to load Note: After modifying the parameters, be sure to save the Config. Otherwise, it still load the previous Config when press S1-S4 keys. · 6500K · 9300K · 5500K · User1 · User2 · User3 · User4
R Gain	Red Gain (only available in Color Temp user mode) · 0-1023
G Gain	Green Gain (only available in Color Temp user mode) · 0-1023
B Gain	Blue Gain (only available in Color Temp user mode) · 0-1023
R Offset	Red Offset (only available in Color Temp user mode) · 0-1023
G Offset	Green Offset (only available in Color Temp user mode) · 0-1023
B Offset	Blue Offset (only available in Color Temp user mode) · 0-1023

Image Settings:

Menu item	Setting Option Description
Backlight	Adjust screen backlight. · 0-100
Aspect Ratio	[Full Screen]The screen is displayed in Full Screen.[Original Ratio]The screen will display the original scale of the input signal.[1:1]The screen is displayed as 1:1. · Full Screen · Original Ratio · 1:1
Freeze	[OFF]Turn off Freeze. [ON]Turn on Freeze. · OFF · ON
Over Scan	[OFF]Turn off Over Scan . [ON]Turn on Over Scan. · OFF · ON
Mirror/Rotation	[OFF]Turn off Mirror/Rotation . [Mirror]Horizontal mirror display. [Rotation]The screen is rotated 180°. · OFF · Mirror · Rotation
Blue Mode/Only Mode	[OFF]Turn off the blue mode.[Mono] Black and white mode display image. [Blue]Full blue mode display image. [Red]Full red mode display image. [Green]Full green mode display image. · OFF · Mono · Blue · Red · Green

Scope Settings:

Status	Waveform	Off
VPID/HDMI Status	Waveform Scale	Digital
Config	Waveform Alarm	80
Function	Waveform Filter	Off
Source	Vector	Off
Color	Histogram	Off
Image	Measure Channel	Win1
Scope		
Assist		
Marker		
Audio		
CC		
UMD		
System		

Sub Menu	Setting Option Description
Waveform	**[OFF]**Turn off waveform. **[LUMA]**Display LUMA waveform. **[YCbCr]**Display YCbCr waveform. **[RGB]**Display RGB waveform. **[Quad Luma]**Display Quad Luma (Remark: this function only available in the Quad-view mode.) · OFF · LUMA · YCbCr · RGB · Quad Luma
Waveform Scale	**[Digital]**Waveform scale is displayed numerically.**[IRE]**Waveform scale is displayed as a percentage of luminance.**[Luma PQ]**HDR PQ luminance waveform.**[Luma HLG]** Luma HLG luminance waveform. · Digital · IRE · Luma PQ · Luma HLG
Waveform Alarm	The waveform alarm display can be set to any percentage within the range of 80%-100%. When the measured waveform reaches or exceeds this percentage, an alarm will occur and the alarm will indicate in red. · 80-100
Waveform Filter	**[OFF]**Turn off Waveform Filter. **[ON]**Turn on Waveform Filter. · OFF · ON
Vector	**[OFF]**Close vector. **[100]**Vector illustration 100% display. **[75]**Vector reduced to 75% display. · OFF · 100 · 75

Sub Menu	Setting Option Description
Histogram	**[OFF]**Close histogram. **[LUMA]**Display brightness histogram. **[RGB]**Display RGB histogram. · OFF · LUMA · RGB
Measure Channel	**[Channel 1]**Select to display channel 1 waveform separately. **[Channel 2]**Select to display channel 2 waveform separately.**[Channel 3]**Select to display channel 3 waveform separately.**[Channel 4]** Select to display channel 4 waveform separately. · Channel 1 · Channel 2 · Channel 3 · Channel 4 (Note: this function only available in the Quad-view mode.)

Assist Settings:

Status	False Color	Off
VPID/HDMI Status	HDR Area	Off
Config	Focus Assist	Off
Function	Focus Assist Level	32
Source	Zebra	Off
Color	Zebra Level	80
Image	Time Code	Off
Scope	Time Code Position	TOP
Assist		
Marker		
Audio		
CC		
UMD		
System		

Sub Menu	Setting Option Description
False Color	**[ON]** Turn on False Color. **[OFF]** Turn off False Color. **[HDR]** Turn on False Color with HDR. · ON · OFF · HDR
HDR Area	Turn on HDR Area function to see the HDR percentage of the input signal. · ON · OFF
Focus Assist	**[OFF]**Turn off Focus Assist.**[Red]**Turn on Focus Assist as Red.**[Green]**Turn on Focus Assist as Green.**[Blue]**Turn on Focus Assist as Blue · OFF · Red · Green · Blue

Sub Menu	Setting Option Description
Focus Assist Level	Focus Assist Level value 0-100. · 0-100
Zebra	**[ON]**Turn on Zebra. **[OFF]**Turn off Zebra. · ON · OFF
Zebra Level	The zebra line scale can be set to any percentage within the range of 0%-100%. When the brightness in the picture reaches or exceeds this percentage, an alarm will occur and the alarm part will be overlaid with a red zebra crossing. · 0-100
Time Code	**[OFF]**Turn on Time Code. **[VITC1]**Time Code Display as VITC1. **[VITC2]**Time Code Display as VITC2. **[LTC]**Time Code Display as LTC. · OFF · VITC1 · VITC2 · LTC Remark: HDMI signal without Time Code Display
Time Code Position	**[Top]**Time Code display at the top of the screen.**[Bottom]**Time code display at the bottom of the screen. · Top · Bottom

Marker Settings:

Status	
VPID/HDMI Status	
Config	
Function	
Source	
Color	
Image	
Scope	
Assist	
Marker	
Audio	
CC	
UMD	
System	

Marker Display	Off
Aspect Marker	1.85:1
Center Marker	On
Safety Area	80
Fit Marker	Off
Marker Mat	Off
Marker Line Color	Green
Box Display	Off
Box Center	On
Box Mat	Off
Box Line Color	Green
Box Line Width	4PX
Box HStart	100
Box VStart	100
Box Width	3640
Box Height	1960

Sub Menu	Setting Option Description
Marker Display	**[On]**Turn on all markers.**[Off]**Turn off all markers. · On · Off
Aspect Marker	**[OFF]**No Aspect Marker.**[4:3]**Aspect Marker ratio 4:3.**[16:9]**Aspect Marker ratio 16:9.**[15:9]**Aspect Marker ratio 15:9.**[14:9]**Aspect Marker ratio 14:9.**[13:9]**Aspect Marker ratio 13:9 **[1.85:1]**Aspect Marker ratio 1.85:1 **[2.35:1]**Aspect Marker ratio 2.35:1 · OFF · 4:3 · 16:9 · 15:9 · 14:9 · 13:9 · 1.85:1 · 2.35:1
Center Marker	**[OFF]**Turn off Center Marker.**[ON]**Turn on Center Marker. · OFF · ON
Safety Area	**[OFF]**No Safety Area mark display.**[80]**80%safety area is displayed.**[85]**85%safety area is displayed.**[88]**88%safety area is displayed.**[90]**90%safety area is displayed.**[93]** 93%safety area is displayed. · OFF · 80 · 85 · 88 · 90 · 93
Fit Marker	**[OFF]**Turn off Fit Marker.**[ON]**Turn on Fit Marker. · OFF · ON
Marker Mat	**[OFF]**Turn off Marker Mat.**[Black]**Turn on Marker Mat as Black.**[Gray]**Turn on Marker Mat as Gray. · OFF · Black · Gray
Marker Line Color	**[White]**Turn on Marker Line Color as White.**[Red]**Turn on Marker Line Color as Red.**[Green]**Turn on Marker Line Color as Green.**[Blue]** Turn on Marker Line Color as Blue. **[Gray]**Ture on Marker Line Color as Gray. · White · Red · Green · Blue · Gray

Sub Menu	Setting Option Description
Box Display	**[OFF]**Turn off Box Display. **[ON]**Turn on Box Display. · OFF · ON
Box Center	**[OFF]**Turn off Center. **[ON]**Turn on Center. · OFF · ON
Box Mat	The color of the filling outside the box wireframe. · OFF · White · Black · Translucent · Red · Green · Blue
Box Line Color	The color of the box wireframe. · White · Green · Blue · Cyan · Red · Yellow
Box Line Width	**[4PX]**Select 4PX width for border line. **[8PX]**Select 8PX width for border line. · 4PX · 8PX
Box HStart	Horizontal start position setting of the Box wireframe. · 0-3840
Box VStart	Vertical start position setting of the Box wireframe. · 0-2160
Box Width	Horizontal width setting of the Box wireframe. · 0-3840
Box Height	Vertical height setting of the Box wireframe. · 0-2160

Audio Settings:

Status	Audio Source — Win1
VPID/HDMI Status	Left Audio Channel — CH1
Config	Right Audio Channel — CH2
Function	Audio Mode — Normal
Source	Volume — 15
Color	Mute — Off
Image	Audio Phase — Off
Scope	Audio Level Meter — Off
Assist	Meter Display Mode — Vertical
Marker	Meter Select — CH1-2
Audio	
CC	
UMD	
System	

Sub Menu	Setting Option Description
Audio Source	In Quad-view mode, the select Win display the Audio Source. · Win1-4
Left Audio Channel	Select left audio output Ch1~Ch16. · Ch1~Ch16
Right Audio Channel	Select right audio output Ch1~CH16. · Ch1~Ch16
Audio Mode	**[Normal]**Left Channel, Right Channel Normal Output.**[Right Channel Mute]** Right Channel Mute, Left Channel Output.**[Left Channel Mute]**Left Channel Mute, Right Channel Output. · Normal · Right Channel Mute · Left Channel Mute
Volume	Volume Adjustment. · 0-31
Mute	**[OFF]**Turn off Audio Mute. **[ON]**Turn on Audio Mute. · OFF · ON
Audio Phase	**[OFF]**Turn off Audio Phase. **[ON]**Turn on Audio Phase. · OFF · ON
Audio Level Meter	**[OFF]**Turn off Audio Meter. **[ON]**Turn on Audio Meter. · OFF · ON
Meter Display Mode	**[Vertical]**Audio meter vertical display. **[Horizontal]**Audio meter horizontal display. · Vertical · Horizontal

Sub Menu	Setting Option Description
Meter Select	**[CH1-2]**Select meter channel CH1-2. **[CH1-4]**Select meter channel CH1-4. **[CH5-6]**Select meter channel CH5-6. **[CH5-8]**Select meter channel CH5-8. **[CH9-10]**Select meter channel CH9-10.**[CH9-12]**Select meter channel CH9-12.**[CH13-14]**Select meter channel CH13-14.**[CH13-16]**Select meter channel CH13-16. · CH1-2 · CH1-4 · CH5-6 · CH5-8 · CH9-10 · CH9-12 · CH13-14 · CH13-16

CC Settings:(Only available for SDI Signal)

Status	Channel Select	Channel 1
VPID/HDMI Status	CC Mode	OFF
Config	CC 608	CC 1
Function	CC 708	Service 1
Source		
Color		
Image		
Scope		
Assist		
Marker		
Audio		
CC		
UMD		
System		

Sub Menu	Setting Option Description
Channel Select	Channel 1-4 The select Channel display the CC. · Channel 1-4
CC Mode	**[OFF]**Turn off CC. **[708]**Select 708 Mode. **[608]**Select 608 Mode. · OFF · 708 · 608
CC 608	**[CC 1]**608 select CC 1 type. **[CC 2]**608 select CC 2 type. **[CC 3]**608 select CC 3 type. **[CC 4]**608 select CC 4 type. · CC 1 · CC 2 · CC 3 · CC 4

Sub Menu	Setting Option Description
CC 708	**[Service 1]**708 select Service 1 type. **[Service 2]**708 select Service 2 type. **[Service 3]**708 select Service 3 type. **[Service 4]**708 select Service 4 type. **[Service 5]**708 select Service 5 type. **[Service 6]**708 select Service 6 type. · Service 1 · Service 2 · Service 3 · Service 4 · Service 5 · Service 6

UMD Settings:

Status	UMD Display	OFF
VPID/HDMI Status	UMDColor	White
Config	UMD Protocol	TSL 3.1
Function	UMD Character 1	Channel1
Source	UMD Character 2	Channel2
Color	UMD Character 3	Channel3
Image	UMD Character 4	Channel4
Scope	UMD ID	0
Assist	UMD Screen ID	0
Marker	UMD Display ID	0
Audio	Baud Rate	38400
CC	LED Tally	Off
UMD	UMD Tally Color	RG
System	Tally Source	TSL
	Port Number	3000

Sub Menu	Setting Option Description
UMD Display	**[ON]**Turn on UMD display. **[OFF]**Turn off UMD display. · ON · OFF
UMD Color	**[Green]**UMD character display green. **[Red]**UMD character display red. **[White]**UMD character display white. **[Black]**UMD character display black. · Green · Red · White · Black
UMD protocol	**[Local]**Users can customize the UMD character.**[TSL3.1]**Select TSL3.1. **[TSL4.0]**Select TSL4.0.**[TSL5.0]** Select TSL5.0. · Local · TSL3.1 · TSL4.0 · TSL5.0 Note: TSL3.1/TSL4.0 use RS422 interface, 8bit data, 1 stop, even parity, 38400 baud.TSL5.0 use LAN interface, the default IP address of the monitor: 192.168.1.155.

Sub Menu	Setting Option Description
UMD Character1	UMD name of the single picture mode or Win1 in Quad mode. · Channel1 (Note: UMD protocol should select Local)
UMD Character 2	UMD name of the Win2 in Quad mode. · Channel2 (Note: UMD protocol should select Local)
UMD Character 3	UMD name of the Win3 in Quad mode. · Channel3 (Note: UMD protocol should select Local)
UMD Character 4	UMD name of the Win4 in Quad mode. · Channel4 (Note: UMD protocol should select Local)
UMD ID	The IMD address can be set anywhere between 0-126. The IMD address can set to different IMD addresses of the machine when multiple machines are cascaded. This function can used to distinguish different machines by IMD address when using RS-422 system remote control different machines. · 0-126
UMD Screen ID	IMD Screen ID can be set anywhere between 0-65534. · 0-65534 Remark: Only available in TSL5.0
UMD Display ID	IMD Display ID can be set anywhere between 0-65531. · 0-65531 Remark: Only available in TSL5.0
Baud Rate	Select the baud rate. · 4800 · 9600 · 19200 · 38400 · 57600 · 115200 Remark: Default baud rate is 38400.
Led Tally	[ON]Turn on Led Tally. [OFF]Turn off Led Tally. · ON · OFF
UMD Tally Color	[OFF]Turn off OSD Tally. [RG]OSD Tally select RG mode. [GR]OSD Tally select GR mode. [RGY]OSD Tally select GR mode. · OFF · RG · GR · RGY

Sub Menu	Setting Option Description
Tally Source	[GPI]Select GPI Select. [TSL]Select TSL protocol control. · GPI · TSL
Port Number	Network Port Number 3000. · 3000

System Settings:

Status	Key Lock	Off
VPID/HDMI Status	Language	English
Config	Menu Display Timer	30
Function	Menu Position	Right Bottom
Source	OSD Blend	15
Color	DPMS	Always on
Image	Key Led	Level 1
Scope	Source Info	Off
Assist	USB Mode	USB Flash Disk
Marker	USB Upgrade	>>
Audio	DHCP	Off
CC	Gateway	192.168.001.001
UMD	Subnet Mask	255.255.255.000
System	IP Address	192.168.001.115

Sub Menu	Setting Option Description
Key Lock	[OFF]Turn off Key Lock. [ON]Turn on Key Lock. · OFF · ON
Language	[Chinese]Menu language selection Chinese.[English]Menu language selection English. · Chinese · English
Menu Display Timer	Setting the menu display timer. · 5-60
Menu Position	Selecting the position of the menu. · Top Left · Top Right · Bottom Left · Bottom Right
OSD Blend	Setting the transparency of the menu. · 0-30
DPMS	[Always ON]Screen backlight is always turn on.[Light Sleep]Screen backlight will turn off if no signal or no operation for 1 minute.[Deep Sleep]The monitor will enter Eco mode if no signal or no operation for 1 minute, need press power button to wake up. · Always ON · Light Sleep · Deep Sleep

Menu item	Setting Option Description
Key Led	Setting the level of the Key indicator. · OFF · Level 1 · Level 2
Source Info	**[OFF]**Turn off source info. **[ON]**Turn on source info. · OFF · ON
USB Mode	**[USB Flash Disk]**Upgrading the monitor with USB Flash Disk. **[PCU]**Upgrading the monitor with USB connect with PC. · USB Flash Disk · PC
USB Upgrade	**[FPGA]**Upgrading FPGA by USB. **[LUTs]**Upgrading LUTs by USB. **[OSD]**Upgrading OSD by USB. **[EDP]**Upgrading EDP by USB. **[APP]**Upgrading APP by USB. **[ALL]**Upgrading All firmware by USB. · FPGA · LUTs · OSD · EDP · APP · ALL
DHCP	**[OFF]**Turn off DHCP. **[ON]**Turn on DHCP. · OFF · ON
Gateway	Setting monitor gateway.Default gateway: 192.168.001.001. · 255.255.255.000
Subnet Mask	Setting monitor subnet mask.Default subnet mask: 255.255.255.000. · 255.255.255.000
IP Address	Setting monitor IP address..Default IP address: 192.168.1.155. · 192.168.1.155
25G IP Control	Remark: please see below descriptions.

SDI or HDMI Input Source Switching

S1-S4 Key & Config 1-5 Settings

Konvision monitor supports the input of a variety of signals. Since the UHD signals have various formats and need to set parameters such as color gamut, EOTF etc. Therefore, Konvision monitor uses S1/S2/S3/S4 keys to replace SDI1/SDI2/25G IP/HDMI buttons and realize those settings.

Users can set the input signals to Config1-5, and then set the Config1-5 corresponding to S1/S2/S3/S4 key. After saving, press the S1/S2/S3/S4 key to switch different signals.

Note: After modifying the parameters, be sure to save the Config in the menu. Otherwise, it still load the previous Config when press S1-S4 keys.

Single Picture Display

Set 25G IP to Config1, S1 to Config1, single picture mode display 25G IP signal.
The steps are as follows:

1. Connect the monitor signal to SFP 1 BNC.
2. Press MENU/EXIT key, then switch to Source option, select Display Mode to Single, Input Mode to Single Input, Win1 Source to 25G IP.

Status	Display Mode	Single
VPID/HDMI Status	Input Mode	Single Input
Config	Win1 Source	25G IP
Function	Win2 Source	SDI2
Source	Win3 Source	SDI1
Color	Win4 Source	SDI1
Image	SDI1 Rename	SDI1

3. Then, switch to Config option and select Config1, press the Knob button to save.

Status	Load Config	>>
VPID/HDMI Status	Save Config	>>
Config	Export Config	Config1
Function	Import Config	Config2
Source	Power On Config	Config3
Color	Config1 Name	Config4
Image	Config2 Name	Config5
Scope	Config3 Name	Config3
Assist	Config4 Name	Config4
Marker	Config5 Name	Config5
Audio	Factory Reset	>>
CC		

4. After saving, press the S1 key to call Config1. At this time, the screen will display the SFP 1 signal.

Quad Split Mode

Win1	Win2
Win3	Win4

Win1 display SDI1, Win2 display SDI2, Win3 display 25G IP, Win4 display HDMI. Set it to Config1, S1 to Config1, and quad display.The steps are as follows:

1. Connect the monitor signal to SDI1/SDI2/SFP1/HDMI BNC.
2. Press MENU/EXIT key, then switch to Source option, select Display Mode to Quad, Input Mode to Quad Input, Win1 Source to SDI1, Win2 Source to SDI2, Win3 Source to 25G IP, Win4 Source to HDMI.

Status	Display Mode	QUAD
VPID/HDMI Status	Input Mode	Quad Input
Config	Win1 Source	SDI1
Function	Win2 Source	SDI2
Source	Win3 Source	25G IP
Color	Win4 Source	HDMI
Image	SDI1 Rename	SDI1
Scope	SDI2 Rename	SDI2

3. Then, switch to Config option and select Config1, press the Knob button to save.

Status	Load Config	> >
VPID/HDMI Status	Save Config	> >
Config	Export Config	Config1
Function	Import Config	Config2
Source	Power On Config	Config3
Color	Config1 Name	Config4
Image	Config2 Name	Config5
Scope	Config3 Name	Config3
Assist	Config4 Name	Config4
Marker	Config5 Name	Config5

4. After saving, press the S1 key to call Config1. At this time, the screen will display the quad split mode.

Configuration Settings Description

Except switch to different channels, the Config of the S1/S2/S3/S4 can also set other parameters, such as brightness, contrast, EOTF curve, color gamut and so on. Users can preset 5 config in the menu according to their requirement. After modifying the parameters, be sure to save the Config in the menu. Otherwise, it still load the previous Config when press S1-S4 keys.

Set Single Input HDMI to Config5, color space to U1_Users, brightness to 80, S2 key to Config5.
The steps are as follows:

1. Press MENU/EXIT key, then switch to Source option, select Display Mode to Single, Input Mode to Signal Input, Win1 Source to HDMI.

Status	Display Mode	Single
VPID/HDMI Status	Input Mode	Single Input
Config	Win1 Source	HDMI
Function	Win2 Source	SDI2
Source	Win3 Source	SDI3
Color	Win4 Source	HDMI
Image	SDI1 Rename	SDI1
Scope	SDI2 Rename	SDI2

2. Switch the menu to Color option, and select color space to U1_User1.

Status	Color Ctrl	All Screen
VPID/HDMI Status	Channel Setect	Win1
Config	Cross Partition Show	Auto
Function	Data Level	Auto
Source	Color Space	U1_User1
Color	EOTF	2.4
Image	Transfer Matrix	Auto
Scope	R Saturation	50

3. Switch the menu to Image and select Backlight to 80.

Status	Backlight	80
VPID/HDMI Status	Aspect Ratio	Original Aspect
Config	Freeze	Off
Function	Over Scan	Off
Source	Mirror/Rotation	Off
Color	Blue Mode/Mono	Off
Image		
Scope		

4. Switch the menu to Function option and select S2 to Config5.

Status	S1	Config1
VPID/HDMI Status	S2	Config5
Config	S3	Config3
Function	S4	Config4
Source	S Key Info	Off
Color	Function Preset	Preset 1

5. After setting, switch the menu to Config option and select the Save Config to Config5, press the Knob button to save.

Status	Load Config	> >
VPID/HDMI Status	Save Config	> >
Config	Export Config	Config1
Function	Import Config	Config2
Source	Power On Config	Config3
Color	Config1 Name	Config4
Image	Config2 Name	Config5
Scope	Config3 Name	Config3
Assist	Config4 Name	Config4

6. After saving, press the S2 key to call Config5. At this time, the screen will display the HDMI single picture mode, color space is U1_User1, and brightness is 80.

Function Keys Description

1. User can preset the Function keys F1/F2/F3/F4/F5 in the menu.

Status	S1	Config1	
VPID/HDMI Status	S2	Config2	
Config	S3	Config3	
Function	S4	Config4	
Source	S Key Info	Off	
Color	Function Preset	Preset 1	
Image	F1	CC Mode	
Scope	F2	Data Level	
Assist	F3	Color Space	
Marker	F4	EOTF	
Audio	F5	Color Temp	

2. Press F key once, the function key menu pops up, press F key again, then turn on or turn off the corresponding F key function. If press the S1-S4 key when F key menu pops up, users can switch different F key preset group.

Functions		
Change Preset:S1-S4		Preset 1
F1	CC Mode	Off
F2	Data Level	Auto
F3	Color Space	Rec709
F4	EOTF	2.4
F5	Color	6500K

4K ST2110 IP Operating Instructions

4K ST2110 IP Interface Description
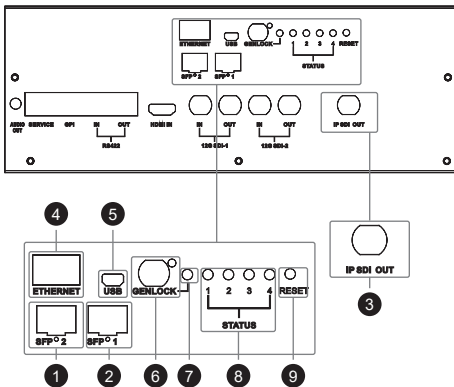
① SFP+ 1

4K ST2110 IP data stream receiving main interface.

② SFP+ 2 (Optional)

4K ST2110 IP data stream receiving redundancy interface. Note: this interface supports the optional function of the ST2022-7 protocol. The IP25G series monitor provides ST2022-7 CLASS A/B/D IP data error recovery function.

③ IP SDI OUT

SDI output from IP input.

④ ETHERNET

RJ-45 1000M/100M Ethernet Interface. Support SNMP V1.0 control protocol. Users can set and modify the parameters of the monitor via remote web control interface. Support NMOS IS-04 and NMOS IS-05 IP network control protocol. Users can log, manage and control IP25G series monitor via NMOS network management system.

⑤ USB

IP internet program upgrade interface.

⑥ GENLOCK

Gen lockable with BB or Tri-level external interface.

⑦ GENLOCK LED

The GENLOCK LED will turn green when the IP25 series monitor is locked by the PTP network synchronous clock signal or external synchronous BB or Tri-level external lock signal. Otherwise, the GENLOCK LED will turn off it indicates that the IP25G series monitor is not locked by the external synchronous signal.

⑧ STATUS LED

 LED status indicator. From left to right:
1. IP25G series monitor working mode status indicator
Blue or green: the IP25G series monitor is set to working mode.
Blue or green indicator steady on or off: the mainboard of the IP25G monitor is damaged, please contact with Konvision or the authorized reseller.
Green indicator flashing: the IP25G series monitor is set to ST2110 IP data stream receiving mode.

2. IP25G series monitor error status indicator
Working normally: the indicator light is green.
Working abnormally: the indicator light will turn red and blink regularly.

3. IP data stream status indicator
  1) The indicator will turn green and blinks when the IP25G series monitor detect IP data flow. The blinking frequency of the green indicator is determined by the amount of the data in the IP packet. The blinking speed will accelerate if the amount of the data is large, and vice versa.
  2) The indicator will turn green when the IP25G series monitor don't detect any IP date stream and data packets.
  3) The indicator will turn off if the SFP+ or SFP28 fiber port is not connected to the LINK Down.

4. Status indicator (Reserved)

⑨ RESET

Reset the 4K ST2110 IP function parameters to default.

4K ST2110 IP Monitor Menu Operation Instructions

This chart introduce the Menu Display and Operation of the IP25G series monitor, including setting the working mode, setting the signal, setting the external synchronization mode, and setting the network parameters etc.

The system menu displays the following status after the IP25G series monitor is initialized.

Note: Before turn on the devise, please connect the input cable, output cable and network optical fibers, and wait the device initialization is complete. When restarting the monitor, please wait around 10 seconds before turn on the monitor.

```
System   IP Address    192.168.001.127
         25G IP Ctrl   >>
                       IPV-25G-SDI ST2110 Decap
                       SFP+In: Video Missing
                       Er:SFP 2 Network Down
```

Press the button to enter the Menu settings option, press again to enter the sub-menu settings option, users can select different parameters such as input, output, IP settings etc.

```
System   IP Address    192.168.001.127
         25G IP Ctrl   >>
                       1.Input
                       2.Output
                       3.IP Settings
                       4.Genlock Mode
                       5.Mode
                       6.System
```

Input

Select the Input option and press the button to enter the sub-menu, the menu is displayed as follows, spin the rotary knob to select different settings.

```
System   IP Address    192.168.001.127
         25G IP Ctrl   >>
                       1.ST2110 SFP Port1
                       2.ST2022-7 SFP Port2
                       3.ST2022-7 Class
```

| ST2100 SFP Port 1

Select the ST2110 SFP Port 1 and press the button to enter the sub-menu, the menu is displayed as follows:

```
System   IP Address    192.168.001.127
         25G IP Ctrl   >>
                       1.Video Flow
                       2.Audio Flow
                       3.ANC Flow
```

1. Video Flow

Select the Video Flow option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System   IP Address    192.168.001.127
         25G IP Ctrl   >>
                       1.Video Flow Enable
                       2.Video payload Type
                       3.Video Source IP
                       4.Video Destination IP
                       5.Video Destination Port
                       6.Video Statistic
                       7.Video Format
```

Menu item	Description
Video Flow Enable	Enable: enable the ST2110 IP video data stream. Disable: disable the ST2110 IP video data stream.
Video Payload Type	Video Payload Type Value: 96-127 (The default value of the ST2110 IP video data packet is 96) Note: users need to set the same RTP Video Payload value in the data receiving device or other data receiving device of other nodes in the IP network system. The Payload value of the ST2110 IP video packet need be different from the Audio and ANC Payload Type values.
Video Source IP	/
Video Destination IP	Set the multicast address of the ST2110 Video receiving video stream for the receiving end to receive.
Video Destination Port	Set the multicast Port of the ST2110 Video receiving video stream for the receiving end to receive. Optional range 0~65535.
Video Statistic	Display the statistics about ST2110 Video IP video packets received by the current device. The IP25G series monitor can display the video data stream statistics of the currently received ST2110 Video IP network packets.

Menu item	Description
Video Format	The ST2110 IP data stream receiver device of the IP25G series monitor is built-in automatic detection function. The device will immediately start to re-receive the ST2110 IP video packet when the device detects problems of the ST2110 IP video data stream receiving packet.

2. Audio Flow

Select the Audio Flow option and press the button to enter the sub-menu, the menu is displayed as follows:

Menu item	Description
Audio Flow Enable	Enable: enable the ST2110 IP audio data stream. Disable: disable the ST2110 IP audio data stream.
Audio Parameters	Sample Mode: Audio Sample Mode settings, users can select AES/L24/ L20/L16 Note: The current IP25G series monitor only support the Sample Mode L24
	Number of Channels: Audio Channel settings The 4K version of the IP25G series monitor support up to 16 audio channels Note: The audio channel settings need to be set the same audio channel with the input signal
	Packet Time: Grouping time of the ST2110 audio data packet, users can select 1ms & 125μs Note: The Packet Time of the ST2110 audio data stream should be set to 125μs, if the 4K system SDI signal is embedded in more than 10 channels of digital audio. If the embedded audio is less than 10 channels, users can select 1ms or 125μs based on the actual ST2110 IP network.
Audio Payload Type	Audio Payload Type Value: 96~127 (The default value of the ST2110 IP audio data packet is 97) Note: users need to set the same RTP Audio Payload value in the data receiving device or other data receiving device of the other nodes in the IP network system. The Payload value of the ST2110 IP audio packet need be different from the Video and ANC Payload Type values.

Menu item	Description
Audio Source IP	/
Audio Destination IP	Set the multicast address of the ST2110 Audio receiving audio stream for the receiving end to receive.
Audio Destination Port	Set the multicast Port of the ST2110 Audio receiving audio steam for the receiving end to receive. Option range 0~65535.
Audio Statistic	/

Audio Statistic

Display the statistics about ST2110 Audio IP audio packets received by the current device.
The IP25G series monitor can display the audio data stream statistics of the currently received ST2110 Audio IP network packets.

3. ANC Flow

Select the ANC Flow option and press the button to enter the sub-menu, the menu is displayed as follows:

Menu item	Description
ANC Flow Enable	Enable: enable the ST2110 IP ANC auxiliary information flow. Disable: disable the ST2110 IP ANC auxiliary information flow.
ANC Payload Type	ANC RTP Payload Type Value: 96~127 (The default value is 100). Note: users need to set the same RTP ANY Payload value in the data receiving device or other data receiving device of the other nodes in the IP network system. The Payload value of the ST2110 IP ANC auxiliary information packet need be different from the Video and Audio Payload Type values.
ANC Source IP	/
ANC Destination IP	Set the multicast address of the ST2110 ANC auxiliary data for the receiving end to receive.
ANC Destination Port	Set the multicast Port of the ST2110 ANC receiving auxiliary data from the receiving end to receive. Option range 0~65535.

Menu item	Description
ANC Statistic	/

Audio Statistic
Display the statistics about the ST2110 ANC auxiliary information IP network packets received by the current device.
The IP25G series monitor can display the audio data stream statistics of the currently received ST2110 Audio Ip network packets.

```
System    IP Address    192.168.001.127
          25G IP Ctrl    >>
                          ANC Flow Statistic
                         Total:462515
                         Dropped:0
                         Seq Error:477
```

ST2022-7 SFP Port 2 (Optional)

The ST2022-7 SFP Port provides failover protection with seamless mirror switching. Users can set the parameters of the ST2110 mirrored video, audio and ANC auxiliary information data streams if the monitor is equipped with ST2022-7 SFP Port.
Press the button to enter the sub-menu, the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl    >>
                         1.Video Flow
                         2.Audio Flow
                         3.ANC Flow
```

1. Video Flow
Select the Video Flow option and press the button to enter the sub-menu, the menu is displayed as follows:

Menu item	Description
Video Source IP	/
Video Destination IP	Set the multicast address of the ST2022-7 Video receiving video stream for the receiving end to receive.
Video Destination Port	Set the multicast Port of the ST2022-7 Video receiving video stream for the receiving end to receive. Optional range 0~65535.
Video Statistic	Display the statistics about ST2022-7 Video IP video packets received by the current device The IP25G series monitor can display the video data stream statistics of the currently received ST2022-7 Video IP network packets.

2. Audio Flow
Select the Audio Flow option and press the button to enter the sub-menu, the menu is displayed as follows:

Menu item	Description
Audio Source IP	/
Audio Destination IP	Set the multicast address of the ST2022-7 Audio receiving audio stream for the receiving end to receive.
Audio Destination Port	Set the multicast Port of the ST2022-7 Audio receiving audio steam for the receiving end to receive.
Audio Statistic	Display the statistics about ST2022-7 Audio IP audio packets received by the current device The IP25G series monitor can display the audio data stream statistics of the currently received ST2022-7 Audio IP network packets.

3. ANC Flow
Select the ANC Flow option and press the button to enter the sub-menu, the menu is displayed as follows:

Menu item	Description
ANC Source IP	/
ANC Destination IP	Set the multicast address of the ST2110 ANC auxiliary data for the receiving end to receive.
ANC Destination Port	Set the multicast Port of the ST2022-7 ANC receiving auxiliary data from the receiving end to receive. Option range 0~65535. Note: 1.The Destination IP address or Port number of the ST2022-7 SFP Port 2 can't be set the same value as ST2110 SFP Port 1. Otherwise, it will cause network address conflict. 2.Enable or disable the multicast IP stream received by Video, Audio, ANC data stream is determined by the Flow Enable in the ST2110 SFP Port 1.
ANC Statistic	Display the statistics about the ST2022-7 ANC auxiliary information IP network packets received by the current device. The IP25G series monitor can display the audio data stream statistics of the currently received ST2022-7 Audio IP network packets.

ST2022-7 Class

Select to enter the ST2022-7 Class and the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.Class A    *
                        2.Class B
                        3.Class C
```

Output

Select to enter the signal format settings of the ST2110 IP data stream after convert and the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.Video Format
```

Press the button to confirm, the menu is displayed as follows:

Users can select the corresponding SDI input signal formats according to the system settings

Note: The IP25G series monitor is available in different 4K, 3G and HD SDI video formats, including 60p, 59.94p and 50p. In China, the available SDI video formats are 4K, 3G UHD SDI 50p and HD-SDI 50i.

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.12G SDI
                        2.QL-3G A 2SI
                        3.QL-3G A SQD
```

IP Settings

Use Web to adjust the IP Settings. The menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.RJ45 Port
                        2.SFP Port1
                        3.SFP Port2
                        4.IGMP Version
```

1. RJ45 Port
Select the RJ45 Port option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.DHCP
                        2.IP Address
                        3.MAC Address
                        4.IP Subnet Mask
                        5.IP Gateway
                        6.SNMP Trap Enable
                        7.SNMP Manager IP
                        8.SNMP Trap Port
```

IP25G series monitor support SNMP V1.0 control protocol, user can set and adjust the parameters of IP25G series monitor through the remote web control interface via RJ45 Ethernet network cable. And realize SNMP network management control and time reporting functions.

IP25G series monitor support NMOS IS-04 network node device registration, discovery, and NMOS IS-05 network node device connection management standard control protocol. User can discover, manage and control the IP25G series monitor through NMOS network management system to facilitate the management and control of ST2110 IP network system.

Menu item	Description
DHCP	Enable: enable the DHCP dynamic host configuration protocol. Disable: disable the DHCP dynamic host configuration protocol.
IP Address	Set the IP address of the IP25G series monitor in the IP network system.
MAC Address	The network solid state physical address of the IP25G series monitor. Users are usually not allowed to change MAC address.
IP Subnet Mask	Set the Subnet Mask of the IP25G series monitor.
IP Gateway	Set the IP Gateway of the IP25G series monitor.
SNMP Trap Enable	Enable: enable the SNMP Trap reporting function. Disable: disable the SNMP Trap reporting function.
SNMP Trap IP Address	Set the network IP address of the NMS server of the IP25G series monitor which is responsible for reporting events.
SNMP Trap Port	Set the network Trap Port of the NMS server of the IP25G series monitor which is responsible for reporting events.

2.SFP Port 1

Select the SFP Port 1 option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.DHCP
                        2.IP Address
                        3.MAC Address
                        4.IP Subnet Mask
                        5.IP Gateway
                        6.FEC Option
                        7.MAC Setup
```

Menu item	Description
DHCP	Enable: enable the SFP 1 Port DHCP dynamic host configuration protocol. Disable: disable the SFP 1 Port DHCP dynamic host configuration protocol.
IP Address	Set the IP address of the IP25G series monitor SFP 1 Port in the IP network system.
MAC Address	The network solid state physical address of the IP25G series monitor SFP 1 Port. Users are usually not allowed to change MAC address.
IP Subnet Mask	Set the Subnet Mask of the IP25G series monitor SFP 1 Port.
IP Gateway	Set the IP Gateway of the IP25G series monitor SFP 1 Port.
FEC Option	/
MAC Setup	/

MAC Setup

1.select to enter MAC Status to display the MAC data status of the IP 25G series monitor SFP 1 Port. It is convenient for users and factory technicians to check, detect and analyze the data transmission of optical fiber networks.

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.Status
                        2.Broadcast Listening
```

2.select the Broadcast Listening option and press again to enter the sub-menu, the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.On
                        2.Off    *
```

The IP25G series monitor supports the ability to detect and verify if the SFP Port 1 is correctly connected to the network or not.

Select On to enable the detection of SFP Port 1, Users can Ping the device address through command line. If the device address can be pinged, the device SFP Port 1 is normal.

After confirming the SFP Port 1 is normal, please select OFF to disable the Broadcast Listening function.

Note: please make sure the Broadcast Listening function is off before the IP25G series monitor is connected to the network. In order to prevent IP25G monitor from being impacted by large data packets while sending and receiving data on the optical fiber network.

3.SFP Port 2

Select the SFP Port 2 option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.DHCP
                        2.IP Address
                        3.MAC Address
                        4.IP Subnet Mask
                        5.IP Gateway
                        6.FEC Option
                        7.MAC Setup
```

The IP25G series monitor ST2022-7 SFP port provides failover protection with seamless mirror switching.

Note: this interface is an optional function interface for IP25G series monitor supporting the ST2022-7 protocol.

The IP25G series monitor provides the ST2022-7 CLASS A/B/D IP data error recovery option.

The IP25G series monitor ST2022-7 option function is configured through the SFP Port 2 port.

Menu item	Description
DHCP	Reserve function, IP25G series monitor need to add ST2022-7 function. Enable: enable the SFP 2 Port DHCP dynamic host configuration protocol. Disable: disable the SFP 2 Port DHCP dynamic host configuration protocol.
IP Address	Set the IP address of the IP25G series monitor SFP 2 Port in the IP network system.

Menu item	Description
MAC Address	The network solid state physical address of the IP25G series monitor SFP 2 Port.
IP Subnet Mask	Set the Subnet Mask of the IP25G series monitor SFP 2 Port.
IP Gateway	Set the IP Gateway of the IP25G series monitor SFP 2 Port.
FEC Option	/
MAC Setup	/

MAC Setup

1.select to enter MAC Status to display the MAC data status of the IP 25G series monitor SFP 2 Port. It is convenient for users and factory technicians to check, detect and analyze the data transmission of optical fiber networks.

If the IP25G series monitor does not add the ST2022-7 option port, the MAC data status of the SFP Port 2 port is not displayed.

If the IP25G series monitor add the ST2022-7 option port, the MAC data status of the SFP Port 2 port is displayed, includes: data connection status, data registration information, data loss situation, packet timestamp situation, reception situation, receiver buffer packet reception peak, usage situation and so on.

```
System   IP Address    192.168.001.127
         25G IP Ctrl   >>
                       1.Status
                       2.Broadcast Listening
```

2.select the Broadcast Listening option and press again to enter the sub-menu, the menu is displayed as follows:

```
System   IP Address    192.168.001.127
         25G IP Ctrl   >>
                       1.On
                       2.Off   *
```

Select On to enable the detection of SFP Port 1, Users can Ping the device address through command line. If the device address can be pinged, the device SFP Port 1 is normal.

If the IP25G series monitor does not add the ST2022-7 option port, users can't Ping the SFP Port 2 port through command line. The SFP Port2 port Broadcast Listening function is invalid and the status is Reserved.
If the IP25G series monitor add the ST2022-7 option port. After confirming the SFP Port 2 is normal, please select OFF to disable the Broadcast Listening function.

Note: please make sure the Broadcast Listening function of the SFP Port 1 and SFP Port 2 is off before the IP25G series monitor is connected to the network. In order to prevent IP25G monitor from being impacted by large data packets while sending and receiving data on the optical fiber network.

4.IGMP Version
Select the IGMP Version option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System   IP Address    192.168.001.127
         25G IP Ctrl   >>
                       1.IGMP Version 3   *
                       2.IGMP Version 2
                       3.Query Packet Info
```

The IP25G series monitor supports the Network Group Management protocol of the IGMP V2 version. The IGMP V3 version is optional and users need to purchase the IGMP V3 version from an authorized reseller.

Note: Users must to ensure the multicast address of the IP25G series monitor is the same as the multicast address of the network switch, if the IP25G series monitor operates under the IGMP V3 network multicast management protocol. Otherwise, Packet Dropped or Sequence Error may occur on the receiving device. As a result, the video output is abnormal or jitter, ghosting, audio errors and other problems.

GenLock Mode

Select the GenLock Mode, the menu is displayed as follows:

```
System   IP Address    192.168.001.127
         25G IP Ctrl   >>
                       1.Mode
                       2.Parameters
```

1. Mode
Select the Mode option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System   IP Address    192.168.001.127
         25G IP Ctrl   >>
                       1.FS Mode
                       2.Low Delay Mode
```

2. Parameters
Select the Parameters option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System   IP Address    192.168.001.127
         25G IP Ctrl   >>
                       1.Genlock Mode
                       2.PTP Settings
                       3.Ext.Lock Settings
```

[1] Genlock Mode
Select the Genlock Mode option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.PTP Lock
                        2.External Lock
                        3.Internal Lock
```

IP25G series monitor external Genlock mode support network clock PTP, external signal BB or Tri-Level external and internal Genlock mode.

IP25G series monitor as a receiving and decoding device for remote data transmission, it is better to provide PTP network accurate master clock, so that the sending and receiving devices are uniformly locked in the PTP network accurate master clock, in order to achieve ultra-low delay data receiving and decoding output.

IP25G series monitor built-in 4K Ultra HD frame synchronization function. The IP25G series monitor can work in the automatic lock input signal clock (internal lock status) if there is no network PTP master clock synchronization signal in the network transmission system.

PTP Lock external Genlock mode supports the SMPTE2059-2 standard.

Please note the following when setting the PTP network clock synchronization signal:

1) The PTP network clock synchronization signal is connected through the SFP Port 1 port of the IP25G monitor and ensure the SFP Port 1 port is connected to the PTP signal network. Press the menu button and select 4-3 IP Settings -> SFP Port 1 to obtain the network parameters such as the IP address, subnet mask and gateway of the SFP Port 1 port by manual or automatically.

2) After the IP25G series monitor SFP Port1 port is connected to the network, users need to confirm the PTP Domain Number of the IP25G series monitor, the same as the Domain Number of the PTP synchronization signal generator.

Users can set the PTP Domain Number in the default DS.domain Number of the PTP Settings in the menu.

3) After the PTP network external synchronization setting is complete, The OSD menu will display the Locked status of PTP network master clock and the accuracy difference between the local clock and the PTP network master clock (Unit: ns)

4) Users can also enter the IP25G series monitor menu: 2.4.2.2 PTP Settings -> 2.4.2.2.2 PTP Status to check whether the device receives the network PTP external Genlock signal and the PTP lock status in real time.

[2] PTP Settings
Select the PTP Settings option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.2059-2 Parameters
                        2.PTP Status
                        3.H_V Phase
```

2.1 2059-2 Parameters (SMPTE2059-2 standard parameter value)

1) defaultDS.priority1 (please refer SMPTE2059-2 technical document for details)

2) defaultDS.priority2 (please refer SMPTE2059-2 technical document for details)

3) defaultDS.domainNumber .
After the IP25G series monitor SFP Port1 port is connected to the network, users need to confirm the PTP Domain Number of the IP25G series monitor, the same as the Domain Number of the PTP synchronization signal generator.
The default value is 127.

4) defaultDS.slaveOnly (please refer SMPTE2059-2 technical document for details)

5) logAnnounceInterval (please refer SMPTE2059-2 technical document for details)

6) announceReceiptTimeout (please refer SMPTE2059-2 technical document for details)
If IP25G series monitor cannot lock PTP signals, users can adjust the value of announce .ReceiptTimeout by increading the number of the PTP signals received per unit tome to obtain stable PTP signals.

7) logSyncInterval (please refer SMPTE2059-2 technical document for details)

8) delayMechanism (please refer SMPTE2059-2 technical document for details)

9) logMinDelayReqInterval (please refer SMPTE2059-2 technical document for details)

10) timeSource (please refer SMPTE2059-2 technical document for details)

11) clockClass (please refer SMPTE2059-2 technical document for details)

12) Reset to Default (please refer SMPTE2059-2 technical document for details)
Reset the PTP to default value.

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.H_Phase = 0 Pixels
                        2.V_Phase = 0 Lines
```

2.2 Select the H_V Phase option and press the button to enter the sub-menu, the menu is displayed as follows:
In the network PTP external synchronization lock status, IP25G series monitor can set H_Phase and V_Phase line and filed phase values, adjust the offset value of PTP synchronization clock signal, to achieve the video data stream output phase and delay.

Note: Users usually do not need to adjust these parameters. If users need to adjust these parameters, please adjust the parameters under the guidance of the professional technical engineer.

[3] Ext. Lock Settings
Select the Ext. Lock Settings option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.H_V Phase
                        2.Genlock Status
```

3.1 Select the H_V Phase option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.H_Phase = 0 Pixels
                        2.V_Phase = 0 Lines
```

In the external synchronization signal or Tri-Level external synchronization lock status, IP25G series monitor can set H_Phase and V_Phase line and filed phase values, adjust the offset value of PTP synchronization clock signal, to achieve the video data stream output phase and delay.
Note: Users usually do not need to adjust these parameters. If users need to adjust these parameters, please adjust the parameters under the guidance of the professional technical engineer.

Operating Mode Settings

The IP25G series monitor operating mode, the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.ST2110 Decap 4K
```

ST2110 Decap 4K indicates the operating mode of the receiving end of the ST2110 IP data stream.

System Settings

The IP25G series monitor system settings, the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.Decapsulator Board
                        2.Control Board
                        3.Error Management
```

Decapsulator Board: display the mainboard info of the corresponding channel.
Control Board: display the network control panel of the corresponding channel.
Error Management: display the error info and log management of the corresponding channel.

1.Decapsulator Board
Select the Decapsulator Board option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System    IP Address    192.168.001.127
          25G IP Ctrl   >>
                        1.Version Information
                        2.System Monitor
                        3.SDI Signal Status
                        4.Device Information
                        5.License Information
                        6.Restore Factory Data
```

Version Information: display the hardware version info of the corresponding channel.

System Monitor: display the mainboard core voltage, cooling fan real-time monitoring of the corresponding channel.

SDI Signal Status: display the input UHD SDI signal status and debugging info of the corresponding channel.

Device Information: display the mainboard chipset DNA info of the corresponding channel.

License Information: display the registration info the corresponding channel.

Restore Factory Data: reset to Factory Data of the corresponding channel.

2. Control Board
Select the Control Board option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System     IP Address      192.168.001.127
           25G IP Ctrl     >>
                           1.Version Information
                           2. Node Description
                           3. Node Label
                           4. NMOS Mode
                           5. NMOS RDS 1
                           6. NMOS RDS 2
```

Version Information: display the NMOS version info of the corresponding channel.

Node Description: users can set the NMOS network node info of the corresponding channel.

Node Label: user can set the NMOS network node label of the corresponding channel to facilitate the identification and management of node devices in the entire NMOS network.

NMOS Mode: select the RDS server mode that display the NMOS connection of the corresponding channel. Users can choose to connect automatically or to specify the RDS server connection. If the RDS server in the NMOS management system is not started, the IP25G series monitor will actively look for the NMOS device and require the user to select the specified NMOS RDS 1 or NMOS RDS2 server.

NMOS RDS 1: users can set and specify the registered IP address and port number of the RDS server 1.

NMOS RDS 2: users can set and specify the registered IP address and port number of the RDS server 2.

3. Error Management
Select the Error Management option and press the button to enter the sub-menu, the menu is displayed as follows:

```
System     IP Address      192.168.001.127
           25G IP Ctrl     >>
                           1. Error Front Display
                           2. Show Last Errors
                           3. Clear Last Errors
```

Error Front Display: press to enter, users can select turn on or turn on the Error Front Display.

Show Last Errors: display the Show Last Errors of the corresponding channel.

Clear Last Errors: press to enter, user can clear the error log of the corresponding channel.

IP25G Series Monitor Web Control Interface Description

IP25G series monitor support remote web control interface operation, users can use RJ-45 Ethernet network for remote connection, input and output signal settings and the settings of various network parameters and so on.

The default network IP address of the IP25G series monitor is 192.168.1.125. The default IP address of the RJ45 Port is also 192.168.1.125. Users can customize the IP address of the device. The default web login user name is admin, the default password is admin.

Users can reset the parameters and default IP address 192.168.1.155, and the web login user name and password of the device through the Red LED button beside the interface if users forget the login IP address and password.

Please connect the IP25G series monitor and computer with RJ-45 network cable, and check if the computer can PING the IP25G monitor IP address. Then, open the web browser of the monitor (such as Windows IE, 360 browser, Sogou browser, Firefox browser etc)

IP25G Series Monitor Web Control Interface Operation

1) Enter the IP25G series monitor IP address https://192/168.1.125 in the browser to go to the web login page.
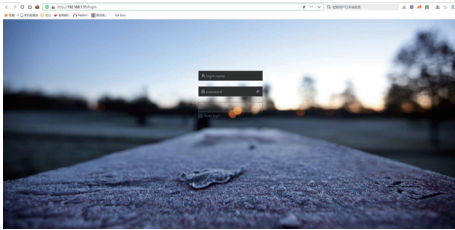
2) Input the user name and password to login the page (Default login user name admin, password admin)

4K ST2110 IP Data Receiving Mode

The 4K ST2110 IP data receiving mode, that is, the ST2110 Decap 4K mode of the web control interface operation is as follows:

1) If the IP25G series monitor is set as 4K ST2110 IP data receiving device, that is, ST2110 Decap 4K mode, the home page of the web control interface display the status of the device as follows:
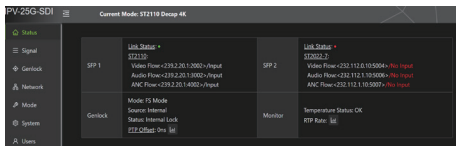
2) Select Input signal source and Video Format of the SFP 1. And adjust the parameters of the Video, Audio and ANC options. Select Signal -> Input –> SFP 1.

Note: The IP25G series monitor ST2022-7 option function is configured through the SFP Port 2 port The IP25G series monitor provides the ST2022-7 CLASS A/B/D IP data error recovery option.
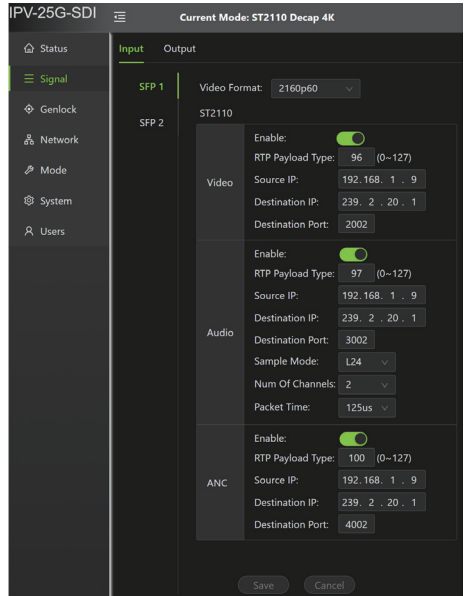
3) Select Output signal source and Video Format. Select Signal -> Output

Users can select 4K 12G-SDI or 4K 4x3G-SDI video format output signal.
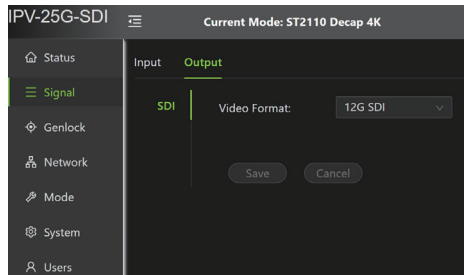
4) Select external synchronous Mode, Source, H Phase line, V Phase line of the Genlock Reference option and set the corresponding parameters. Genlock-> Reference.

IPV-25G-SDI — Current Mode: ST2110 Decap 4K

Reference

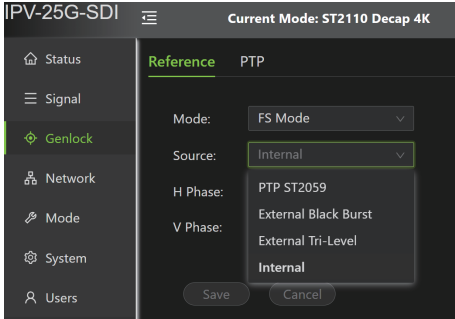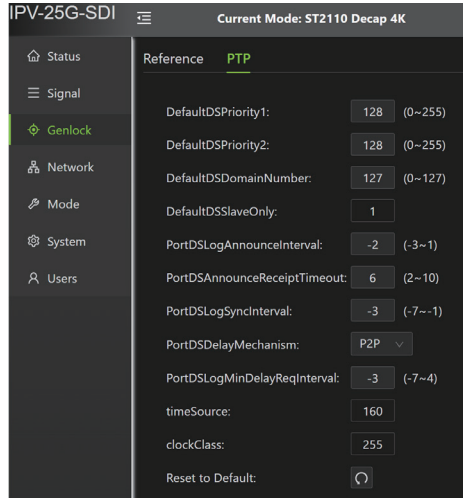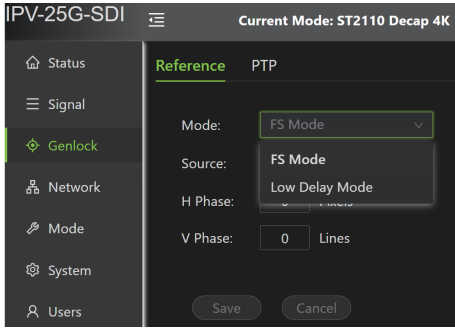|	
Status	Reference PTP
Signal	Mode: **FS Mode** ▼
Genlock	Source: **FS Mode**
Network	**Low Delay Mode**
Mode	H Phase:
System	V Phase: 0 Lines
Users	Save Cancel

IPV-25G-SDI — Current Mode: ST2110 Decap 4K

Status	Reference PTP
Signal	Mode: FS Mode ▼
Genlock	Source: Internal ▼
Network	H Phase: PTP ST2059
Mode	V Phase: External Black Burst
System	External Tri-Level
Users	**Internal**
	Save Cancel

IPV-25G-SDI — Current Mode: ST2110 Decap 4K

PTP

Status	Reference **PTP**
Signal	DefaultDSPriority1: 128 (0~255)
Genlock	DefaultDSPriority2: 128 (0~255)
Network	DefaultDSDomainNumber: 127 (0~127)
Mode	DefaultDSSlaveOnly: 1
System	PortDSLogAnnounceInterval: -2 (-3~1)
Users	PortDSAnnounceReceiptTimeout: 6 (2~10)
	PortDSLogSyncInterval: -3 (-7~-1)
	PortDSDelayMechanism: P2P ▼
	PortDSLogMinDelayReqInterval: -3 (-7~4)
	timeSource: 160
	clockClass: 255
	Reset to Default: ↻

IP25G series monitor as a receiving and decoding device for remote data transmission, it is better to provide PTP network accurate master clock, so that the sending and receiving devices are uniformly locked in the PTP network accurate master clock, in order to achieve ultra-low delay data receiving and decoding output.

IP25G series monitor built-in 4K Ultra HD frame synchronization function. The IP25G series monitor can work in the automatic lock input signal clock (internal lock status) if there is no network PTP master clock synchronization signal in the network transmission system.

5) Select the PTP of the Genlock option and adjust the parameters of each items. Genlock-> PTP.

IP25G series monitor as a receiving and decoding device for remote data transmission, it is better to provide PTP network accurate master clock, so that the sending and receiving devices are uniformly locked in the PTP network accurate master clock, in order to achieve ultra-low delay data receiving and decoding output.
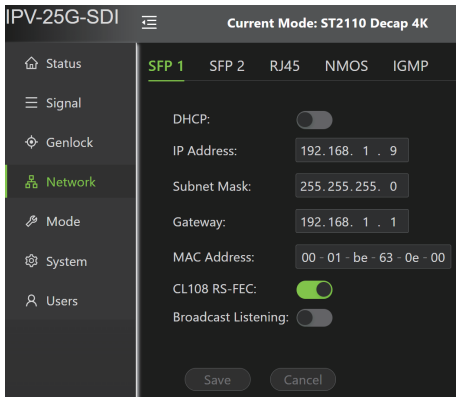
Please refer to the SMPTE2059-2 standard for the parameters settings of the external PTP synchronization, and note the following points:

The PTP network clock synchronization signal is connected through the SFP Port 1 port of the IP25G monitor and ensure the SFP Port 1 port is connected to the PTP signal network.
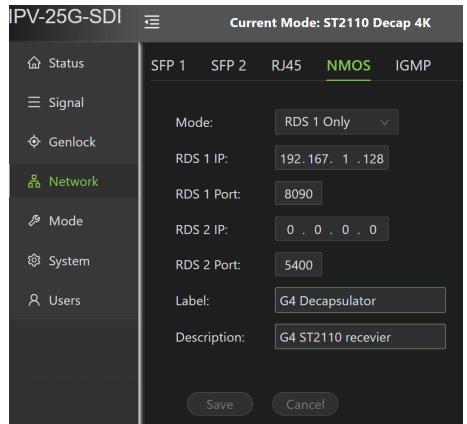
After the IP25G series monitor SFP Port1 port is connected to the network, users need to confirm the PTP Domain Number of the IP25G series monitor, the same as the Domain Number of the PTP synchronization signal generator.
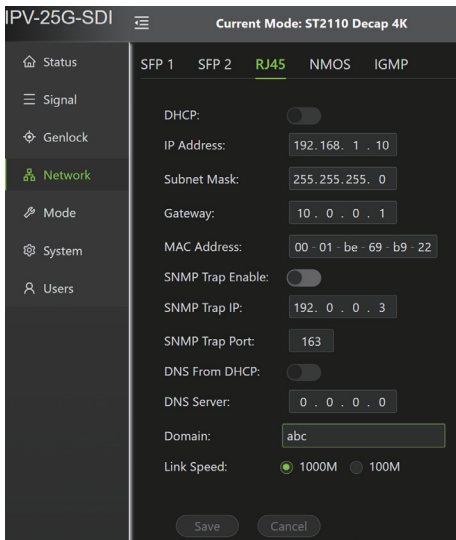
The default value of the IP25G series monitor is 127.

6) Select the SFP 1 of the Network option and adjust the parameters of each item. Network->SFP 1.
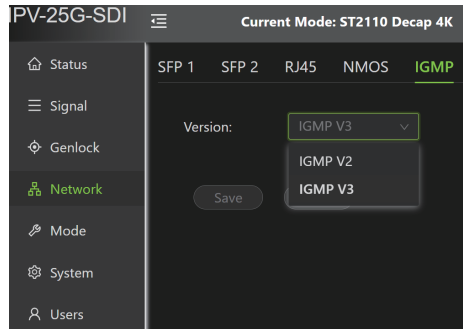
IPV-25G-SDI ☰   Current Mode: ST2110 Decap 4K

Status	SFP 1 SFP 2 RJ45 NMOS IGMP

⌂ Status
☰ Signal
◈ Genlock
▣ **Network**
⟐ Mode
⚙ System
⩊ Users

DHCP: ⚪
IP Address: 192.168. 1 . 9
Subnet Mask: 255.255.255. 0
Gateway: 192.168. 1 . 1
MAC Address: 00 - 01 - be - 63 - 0e - 00
CL108 RS-FEC: 🟢
Broadcast Listening: ⚪

Save   Cancel

7) Select RJ45 of the Network option and adjust the parameters of each item. Network->RJ45.

IPV-25G-SDI ☰   Current Mode: ST2110 Decap 4K

⌂ Status
☰ Signal
◈ Genlock
▣ **Network**
⟐ Mode
⚙ System
⩊ Users

SFP 1   SFP 2   **RJ45**   NMOS   IGMP

DHCP: ⚪
IP Address: 192.168. 1 . 10
Subnet Mask: 255.255.255. 0
Gateway: 10 . 0 . 0 . 1
MAC Address: 00 - 01 - be - 69 - b9 - 22
SNMP Trap Enable: ⚪
SNMP Trap IP: 192. 0 . 0 . 3
SNMP Trap Port: 163
DNS From DHCP: ⚪
DNS Server: 0 . 0 . 0 . 0
Domain: abc
Link Speed: ◉ 1000M ○ 100M

Save   Cancel

8) Select NMOS of the Network option and adjust the parameters of each items. Network->NMOS.

IPV-25G-SDI ☰   Current Mode: ST2110 Decap 4K

⌂ Status
☰ Signal
◈ Genlock
▣ **Network**
⟐ Mode
⚙ System
⩊ Users

SFP 1   SFP 2   RJ45   **NMOS**   IGMP

Mode: RDS 1 Only ⌄
RDS 1 IP: 192.167. 1 . 128
RDS 1 Port: 8090
RDS 2 IP: 0 . 0 . 0 . 0
RDS 2 Port: 5400
Label: G4 Decapsulator
Description: G4 ST2110 recevier

Save   Cancel

9) Select the IGMP of the Network option and adjust the parameters of each item. Network->IGMP.

IPV-25G-SDI ☰   Current Mode: ST2110 Decap 4K

⌂ Status
☰ Signal
◈ Genlock
▣ **Network**
⟐ Mode
⚙ System
⩊ Users

SFP 1   SFP 2   RJ45   NMOS   **IGMP**

Version: IGMP V3 ⌄

IGMP V2
IGMP V3

Save

The IP25G series monitor supports the Network Group Management protocol of the IGMP V2/V3 version.

Note: Users must to ensure the multicast address of the IP25G series monitor is the same as the multicast address of the network switch, if the IP25G series monitor operates under the IGMP V3 network multicast management protocol. Otherwise, Packet Dropped or Sequence Error may occur on the receiving device. As a result, the video output is abnormal or jitter, ghosting, audio errors and other problems.

10) Select the working mode of the Mode option and adjust the parameters. Mode.

Users can define the working mode according to the actual needs: 4K ST2110 IP data stream receing, that is, ST2110 Decap 4K.
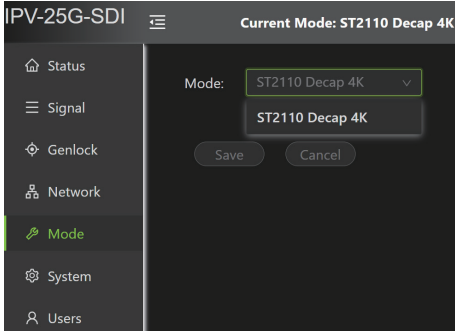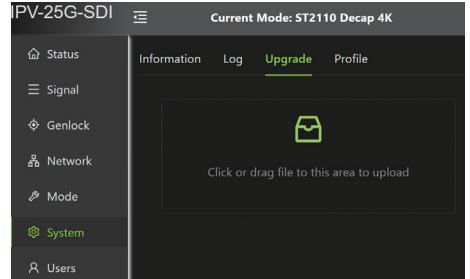
11) Select the Information of the System option and see the detail info of the device. System-> Information.
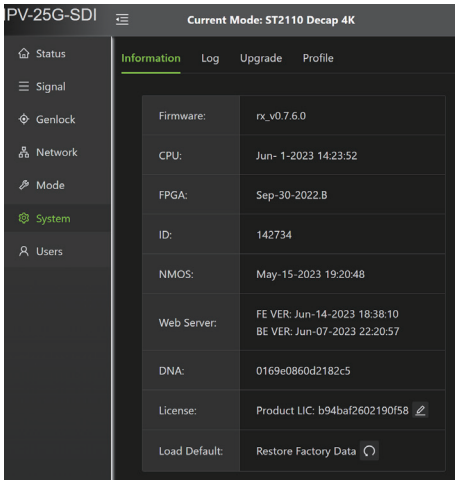
12) Select the Upgrade of the System option and upload a file to upgrade the firmware. System->Upgrade.

Note: please contact with Konvision or the authorized resellers for upgrading.

Konvision

WARRANTY CARD

N<u>o</u>

User		
Tel		
Address		Postal Code
Model. No		Serial Number
Warranty Date		Purchase Date

Item	Contents of Reparation	Replacement parts name	Replacement parts quantity	Remark
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Repairer Signature	Service hotline	User Signature