



KXM/KUM series 4K LCD Monitors

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# USER MANUAL

V1.2.2

Shenzhen Konvision Technology Co., Ltd  
<http://www.konvision.com>

## **About This Manual**

The instructions in this manual are for KXM/KUM Series 4K LCD monitors.

The following description use model KUM-2710D pictures.

Please confirm the model number of the device before reading this manual.

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## 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 is operated.
- . 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 be strictly enforced.
- 1. Please use the power cord recommended by 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 need.
- 8. If there is no image or sound, please unplug the power cord from the AC outlet immediately. Please consult professionals if there still have problems 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 falling down, may cause severely hurt to children and adults and also 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 place.
- 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 good heat dissipation effect.

## 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 be 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 cloth that has been 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 place.

**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 manufacturer.

**Transportation**

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

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

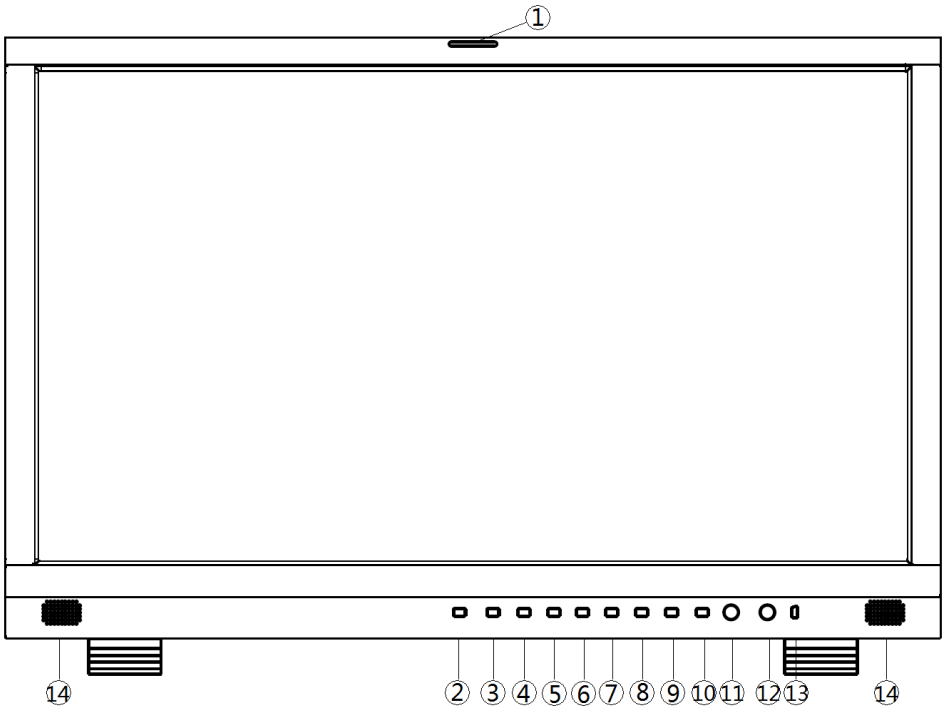
- A. This product smells smoke and off-flavor.
- B. When this product displays abnormal operating conditions, such as there is no picture or sound.
- C. When any liquid is splashed into the product or product dropped.
- D. When the product soaked or fall into the water.
- E. When the product has been damaged or other damage circumstances.
- F. When the power cord or plug is damaged.

**The following does not belong to failures:**

1. If the static image displayed too long, it will have residual image, which should be attributed to the characteristics of LCD display but not a failure. Residual image will disappear automatically after a period.
2. If this device used in a cold environment, the screen may appear residual 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 are manufactured with high precision technology, and a small number of pixels may not be able to show intermittent.
4. When touch monitor there may be appear slight vibrate.
5. Screen and cabinet will become warm gradually during operating.
6. When the monitor appears cracked voice.
7. When the monitor appears mechanical vibrate voice.

## Parts and Functions

### A. 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: through TSL3.1 or TSL 4.0 protocol control Tally light

#### (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) HDMI Button and Indicator

Press this button to select the current input source for HDMI signal input, the indicator is blue.



**(4) SDI Button and Indicator**

Press this button to select the current input source for SDI signal input, the indicator is blue.

Press the button continuous, can select different SDI port:

Single SDI (Port 1): Select SDI 1 video input channel

Single SDI (Port 2): Select SDI 2 video input channel

Dual SDI (Port 1,2): Select dual SDI 1 and SDI 2 video input channel

Quad SDI (Port 1,2,3,4): Select quad SDI 1, SDI 2, SDI 3, SDI 4 video input channel

**(5) MODE Button**

Select SDI or HDMI display mode (for example SQD, 2-SI, Quad View, Single etc.)

**(6) WINSEL Button**

Coordinate with MODE button, switch display window in different mode.

**(7) F1 Key**

Function key F1, its function can be set in the menu.

**(8) F2 Key**

Function key F2, its function can be set in the menu.

**(9) F3 Key**

Function key F3, its function can be set in the menu.

**(10) 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.

**(11) 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:

**Volume:** volume adjustment items.

**Backlight:** screen backlight brightness adjustment items.

**(12) 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:** screen backlight brightness adjustment items.

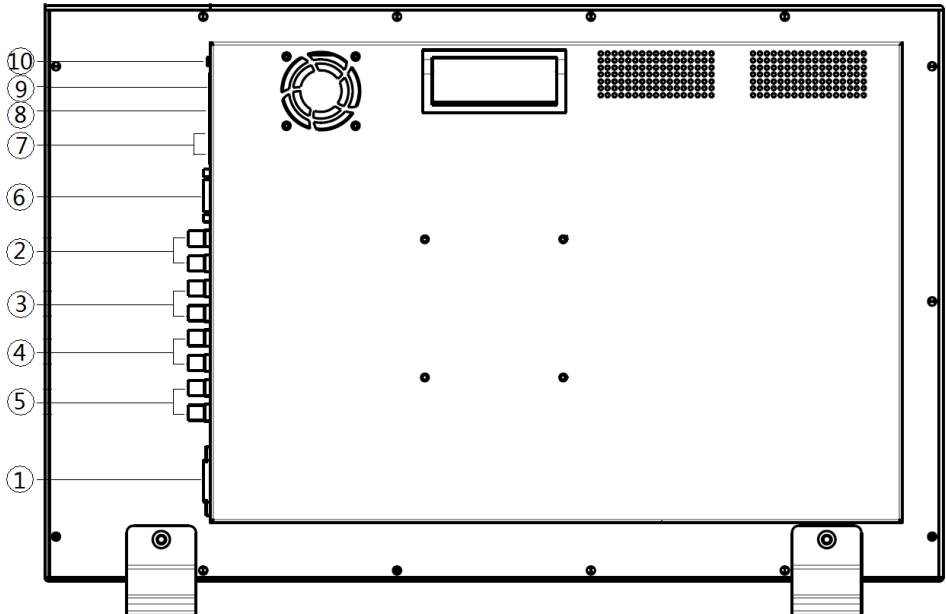
**Contrast:** image contrast adjustment items.

**(13) USB**

Reserved port.

**(14) Speaker**

Speaker out.

**B. Rear View****(1) AC IN**

AC power supply

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

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

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

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

**(4) SDI 3 (IN/OUT)**

3G/HD-SDI input, output

**(5) SDI 4 (IN/OUT)**

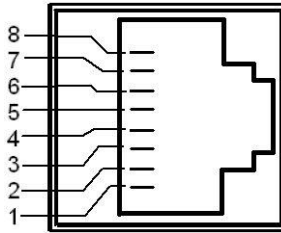
3G/HD-SDI input, output

**(6) DVI IN (Max 4K/60p)**

DVI input: through HDMI convert DVI, input HDMI signal, Max support 4096x2160 60Hz

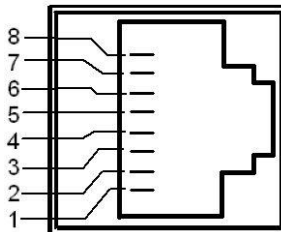
**(7) RS422 IN and RS422 OUT**

RS422 in and out. RS422 control adoptive TSL3.1 or TSL4.0 protocol. According to this protocol, it supports dynamic UMD/Tally control



Pin	RS422 IN Signal name	RS422 OUT Signal name
1	GND	GND
2	GND	GND
3	Tx-	Tx-
4	Rx+	Rx+
5	Rx-	Rx-
6	Tx+	Tx+
7	NC	NC
8	NC	NC

**(8) GPI interface:**



Pin	GPI Signal	Description
1	GPI1	When connect GND, GPI1 works, GPI1 function can be set in the menu function option
2	GPI2	When connect GND, GPI2 works, GPI2 function can be set in the menu function option
3	GPI3	When connect GND, GPI3 works, GPI3 function can be set in the menu function option
4	NC	Not connect
5	NC	Not connect
6	GPI4	When connect GND, GPI4 works, GPI4 function can be set in the menu function option
7	NC	Not connect
8	GND	Ground

**(9) LAN**

Ethernet port for color correction, upgrading, remote network control. (For specification instructions please contact with the dealer)

**(10) AUDIO OUT**

Analog stereo audio interface output

**SDI Input Connection and Display Mode**

SDI input connection method: Single Link 12G/6G/3G/HD-SDI, Dual Link 6G-SDI, Quad Link 3G-SDI. Through SDI key, MODE key, WINSEL key interaction, can set different SDI connection and display mode.

SDI Port Select	Display Mode Select
Single SDI(Port 1)	AUTO
Single SDI(Port 2)	6G/12G 2-SI
Dual SDI(Port 1,2)	3G Single
Quad SDI(Port 1,2,3,4)	Quad View

**SDI Port Select:**

**SDI Key:** press SDI key continuous, can select different SDI Port

**Single SDI (Port 1):** select single SDI input, SDI 1 Port

**Single SDI (Port 2):** select single SDI input, SDI 2 Port

**Dual SDI (Port 1,2):** select dual SDI input, SDI 1 and SDI 2 Port

**Quad SDI (Port 1,2,3,4):** select quad SDI input, SDI 1, SDI 2, SDI 3, SDI 4 Port

**Display Mode Select:**

**MODE key:** press MODE key continuous, can select different display mode

**In Single SDI (Port 1) or Single SDI (Port 2):**

**Auto:** auto detect signal type. The monitor can realize auto detect in the single 1.5G, 3G, 6G and 12G SDI input

**6G/12G 2-SI:** 4K 2-SI mode. The screen will display normal only in the single 6G and 12G SDI input. In this mode, the screen will display abnormal in the single 1.5G and 3G SDI input and should switch into 3G Single or AUTO mode.

**3G Single:** The monitor will display in full screen, in the single 1.5G and 3G SDI input. The monitor will select 1/4 picture of the 4K, 2-SI to display in full screen, in the 6G and 12G SDI input. If continuous press WINSEL key at this moment, can select the rest 2/4, 3/4, 4/4 picture display in full screen.

**Quad View:** The image will display on the top left corner of the screen, in 1.5G and 3G SDI input. 4K signal will divide into 4 1080P image display on the screen, in the 6G and 12G SDI input.

SDI Port Select	Display Mode Select
Single SDI(Port 1)	2-SI
Single SDI(Port 2)	Quad View
Dual SDI(Port 1,2)	3G Single
Quad SDI(Port 1,2,3,4)	

**In Dual SDI (Port 1,2):**

**2-SI:** SDI 1, SDI 2 two 6G SDI consist 4K 2-SI mode

**Quad View:** the image displays quad mode. In the mode of two 6G SDI 1, SDI 2 signal input, the first 6G signal will display upper left and upper right of the image, the second 6G signal will display lower left and lower right of the image.

**3G Single:** the image divide into quad, in the two 6G SDI 1, SDI 2 signal input. In this mode, select 1/4 of the image to display full screen. If continuous press WINSEL key at this moment, can select the rest 2/4, 3/4, 4/4 picture display in full screen.

SDI Port Select	Display Mode Select
Single SDI(Port 1)	Quad View
Single SDI(Port 2)	SQD
Dual SDI(Port 1,2)	2-SI
Quad SDI(Port 1,2,3,4)	Single

**In Quad SDI (Port 1, 2, 3, 4):**

**Quad View;** In the SDI Quad View Mode, SDI 1, SDI 2, SDI 3 SDI 4 input correspond with upper left, upper right, lower left, lower right of the image and SDI 1, SDI 2, SDI 3, SDI 4 access different resolution signals while displaying four screen.

**SQD:** four SDI consist 4K signal, 4K display mode is SQD mode.

**2-SI:** four SDI consist 4K signal, 4K display mode is 2-SI mode.

**Single:** in single display mode, 3G model SDI 1, SDI 2, SDI 3, SDI 4 single image can display full screen when press WINSEL key continuous to select the image. The SQD image consists by four SDI or 1/4 of the 2-SI can display full screen, press WINSEL key continuous, can select the rest 2/4, 3/4, 4/4 image to display full screen.

## HDMI Input Connection and Display Mode

HDMI Port Select	Display Mode Select
Single Link HDMI	HDMI
	Quad View

### Display Mode Select:

**MODE Key:** press MODE key continuous, can select different display mode.

**HDMI:** HDMI display full screen. Max support 4096x2160 60Hz resolution

**Quad View:** when the HDMI resolution is 4K, 4K signal divide into four 1080P image display on the screen. If the HDMI resolution is smaller than 4K, the image display on the upper left of the screen.

## OSD Menu

### Menu Operation:

Press MENU/EXIT key to enter the main menu, 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, the following keys MENU/EXIT key, KNOB, press the KNOB key are frequently used when setting parameters. The role of the keys is:

MENU/EXIT: enter the menu or return to the previous menu

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

### Menu Item Description

**Status Display:**

Main Menu	Status Display
Status Display >	Input Source SDI
Function Settings >	Input Format No Signal
Marker Settings >	SDI Payload ID1 0x00 0x00 0x00 0x00
Waveform >	SDI Payload ID2 0x00 0x00 0x00 0x00
Aux Settings >	SDI Payload ID3 0x00 0x00 0x00 0x00
Color Settings >	SDI Payload ID4 0x00 0x00 0x00 0x00
Video Settings >	Brightness 44
Source Settings >	Contrast 27
Audio Settings >	Scan Mode OFF
CC Setting >	Color Temp 6500K
IMD Settings >	Aspect Aspect
OSD Settings >	HDR OFF
Key Lock >	IP Address 192.168.1.155
	DSP Version V73190312
	MCU Version V190312-V1.2:UL

Status Display	
Menu item	Description
Input Source	Display the current input source
Input Format	Display the current input format
SDI Payload ID1	SDI Payload ID1 (Remark: HDMI without Payload ID)
SDI Payload ID2	SDI Payload ID2 (Remark: HDMI without Payload ID)
SDI Payload ID3	SDI Payload ID3 (Remark: HDMI without Payload ID)
SDI Payload ID4	SDI Payload ID4 (Remark: HDMI without Payload ID)
Brightness	Display current image brightness
Contrast	Display current image contrast
Scan Mode	Display current scan mode
Color Temp	Display color temp
Frame Ratio	Display drawing ratio



HDR	Display selected HDR mode
IP Address	Display factory default IP address; 192.168.1.155
DSP Version	Display machine internal DSP software version information
CPU Version	Display machine internal CPU software version information

## Function Settings:

Main Menu	Function Settings
Status Display > F1	W-Form Mode
Function Settings > F2	HDR Quick Sel
Marker Settings > F3	Color Space
Waveform > GPI 1	Undefined
Aux Settings > GPI 2	Undefined
Color Settings > GPI 3	Undefined
Video Settings > GPI 4	Undefined
Source Settings >	
Audio Settings >	
CC Setting >	
IMD Settings >	
OSD Settings >	
Key Lock >	

Function Settings		
Sub Menu	Settings	Setting Option Description
F1	Undefined W-Form Mode Vector Scope Histogram HDR Fast Select Color Space Gamma	The function keys can be set to the following functions: W-Form Mode, Vector Scope, Histogram, HDR Fast Select, Color Space, Gamma, Audio Meter, Voice (+), Voice (-) Focus Assistant, False Color, Zebra, Blue, Mono, Red, Green, Time Code, Static Frame, Mute, Markup Control, Pattern Gen, Black Stretch.

	Audio Meter Voice (+) Voice (-) Focus Assistant False Color Zebra Blue Mono Red Green Time Code Static Frame Mute Markup Control Pattern Gen Black Stretch	(Pattern Gen: When the function key is set to Pattern Gen, press this function key continuously to produce solid color screens such as red / green / blue / white.  Black Stretch: When the function key is set to Black Stretch, press this function key to increase the brightness of the low-brightness part of the screen.)
F2	Same as above	Same as above
F3	Same as above	Same as above
GPI1	Undefined Markup Control Red Tally Green Tally Blue Mono SDI HDMI Layout	The function keys can be set to the following functions: Markup Control, Red Tally, Green Tally, Blue, Mono, SDI, HDMI, Layout
GPI2	Same as above	Same as above
GPI3	Same as above	Same as above
GPI4	Same as above	Same as above

## Marker Settings:

Main Menu	Marker Settings	
Status Display	> Marker Control	OFF
Function Settings	> Area Marker	2.35:1
Marker Settings	> Center Marker	ON
Waveform	> Safety Area	80
Aux Settings	> Fit Marker	OFF
Color Settings	> Marker Mat	OFF
Video Settings	> Marker Line	Green
Source Settings	>	
Audio Settings	>	
CC Setting	>	
IMD Settings	>	
OSD Settings	>	
Key Lock	>	

Marker Settings		
Sub Menu	Settings	Setting Option Description
Marker Control	On	Turn on all markers
	Off	Turn off all markers
Area Marker	OFF	No Area Marker
	4:3	Area Marker ratio 4:3
	15:9	Area Marker ratio 15:9
	14:9	Area Marker ratio 14:9
	13:9	Area Marker ratio 13:9
	1.85:1	Area Marker ratio 1.85:1
	2.35:1	Area Marker ratio 2.35:1
Center Marker	OFF	Turn off Center Marker
	ON	Turn on Center Marker
Safety Area	OFF	No Safety Area
	80	80% Safety Area
	85	85% Safety Area

	88	88%Safety Area
	90	90%Safety Area
	93	93%Safety Area
Fit Marker	OFF	Turn off Safety Area Marker
	ON	Turn on Safety Area Marker
Marker Mat	OFF	Turn off Marker Mat
	Black	Turn on Marker Mat as Black
	Gray	Turn on Marker Mat as Gray
Marker Line	White	Turn on Marker Line as White
	Red	Turn on Marker Line as Red
	Green	Turn on Marker Line as Green
	Blue	Turn on Marker Line as Blue
	Gray	Ture on Marker Line as Gray

**Waveform:**

Main Menu	Waveform
Status Display >	Waveform Mode OFF
Function Settings >	Waveform scale Digital
Marker Settings >	Waveform Alarm 80
Waveform >	Vector OFF
Aux Settings >	Histogram OFF
Color Settings >	Channel Select Channel 1
Video Settings >	
Source Settings >	
Audio Settings >	
CC Setting >	
IMD Settings >	
OSD Settings >	
Key Lock >	

Waveform		
Sub Menu	Settings	Setting Option Description
Waveform Mode	OFF LUMA YCbCr RGB	Turn off waveform Display LUMA waveform Display YCbCr waveform Display RGB waveform
Waveform Scale	Digital IRE	Waveform scale is displayed numerically Waveform scale is displayed as a percentage of brightness
Waveform Alarm	80-100	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 be indicated in red.
Vector	OFF 100 75	Close vector Vector illustration 100% display Vector reduced to 75% display
Histogram	OFF LUMA RGB	Close histogram Display brightness histogram Display RGB histogram
Channel Select	Channel 1 Channel 2 Channel 3 Channel 4 4K Mode	Select to display channel 1 waveform separately Select to display channel 2 waveform separately Select to display channel 3 waveform separately Select to display channel 4 waveform separately 4K picture measurement waveform

		composed of 4 input channels in 4K mode
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**Aux settings:**

Main Menu	Aux Settings	
Status Display	> False Color	OFF
Function Settings	> Focus Assist	OFF
Marker Settings	> Focus Gain	10
Waveform	> Zebra	OFF
Aux Settings	> Zebra Level	80
Color Settings	> H Flip	OFF
Video Settings	> Time Code	OFF
Source Settings	>	
Audio Settings	>	
CC Setting	>	
IMD Settings	>	
OSD Settings	>	
Key Lock	>	

Aux settings		
Sub Menu	Settings	Setting Option Description
False Color	ON	Turn on False Color
	OFF	Turn off False Color
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
Focus Gain	0-31	Focus Gain 0-31
Zebra	ON	Turn on Zebra
	OFF	Turn off Zebra
Zebra Level	80-100	The zebra line scale can be set to any percentage within the range of 80%-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.
H Flip	ON OFF	Turn on H Flip Turn off H Flip
Time Code	OFF VITC1 VITC2 LTC	Turn on Time Code Time Code Display as VITC1 Time Code Display as VITC2 Time Code Display as LTC (Remark: HDMI signal without Time Code Display)

### Color Settings:

Main Menu	Color Settings	
Status Display	> Data Levels	Limit (64-940)
Function Settings	> Color Space	USER1
Marker Settings	> EOTF	Gamma 2.4
Waveform	> HDR Comparison	OFF
Aux Settings	> Left HDR	Rec. 2100 HLG 1.2
Color Settings	> Right HDR	SDR
Video Settings	> Brightness	44
Source Settings	> Contrast	27
Audio Settings	> Backlight	11
CC Setting	> Color Temp	6500K
IMD Settings	> Red Gain	128
OSD Settings	> Green Gain	128
Key Lock	> Blue Gain	128
	Red Bias	128
	Green Bias	128
	Blue Bias	128

Color Setting		
Sub Menu	Settings	Setting Option Description
Data Levels	Limited Range (64-940) Extended Range (64-1023) Full (0-1023) Custom	Select Limited (64-940) Mode Select Extended (64-1023) Mode Select Full (0-1023) Mode Select Custom Mode
Color Space	Bypass Rec709 EBU DCI P3 D65 DCI P3 Rec2020 USER 1 USER 2	Color Table Select Bypass Color Table Select REC709 Color Table Select EBU Color Table Select DCI P3 D65 Color Table Select DCI P3 Color Table Select Rec2020 Color Table Select USER1 Color Table Select USER2
EOTF	OFF Gamma 2.0 Gamma 2.2 Gamma 2.4 Gamma 2.6 Rec.2100 HLG 1.0 Rec.2100 HLG 1.1 Rec.2100 HLG 1.2 Rec.2100 HLG 1.3 Rec.2100 HLG 1.4 Rec.2100 HLG 1.5 ST2084 PQ S-Log3 SLog3 to HLG SLog to Rec709	User can select different Gamma or turn off Gamma



	Slog2 to Rec709 Slog3 to Rec709 HDR to SDR	
HDR Comparison	OFF ON	Select turn on or turn off HDR Comparison (Note: This function is only supported in SQD mode of single 12G / 6G-SDI and 4X 3G-SDI.)
Left HDR	Rec.2100 HLG 1.1 Rec.2100 HLG 1.2 Rec.2100 HLG 1.3 Rec.2100 HLG 1.4 Rec.2100 HLG 1.5 SDR	The left half of the screen can select different HDR to compare with the right screen (Note: This function is only supported in SQD mode of single 12G / 6G-SDI and 4X 3G-SDI.)
Right HDR	Rec.2100 HLG 1.1 Rec.2100 HLG 1.2 Rec.2100 HLG 1.3 Rec.2100 HLG 1.4 Rec.2100 HLG 1.5 SDR	The right half of the screen can select different HDR to compare with the left screen (Note: This function is only supported in SQD mode of single 12G / 6G-SDI and 4X 3G-SDI.)
Brightness	0-100	Adjust image brightness
Contrast	0-100	Adjust image contrast
Backlight	0-100	Adjust backlight
Color Temp	5500K 6500K 9300K User	Select Color Temp 5500K Select Color Temp 6500K Select Color Temp 9300K Select User-Defined Color

		Temp
Red Gain	0—255	Red Gain 0—255
Green Gain	0—255	Green Gain 0—255
Blue Gain	0—255	Blue Gain 0—255
Red Bias	0—255	Red Bias 0—255
Green Bias	0—255	Green Bias 0—255
Blue Bias	0—255	Blue Bias 0—255
		(Remark: Red, Green, Blue Gain and Bias can be settled when the color temp is set in the user's options)

### Video Settings:

Main Menu	Video Settings
Status Display > Aspect	Aspect
Function Settings > Freeze	OFF
Marker Settings > Scan Mode	OFF
Waveform > Blue Mode	OFF
Aux Settings >	
Color Settings >	
Video Settings >	
Source Settings >	
Audio Settings >	
CC Setting >	
IMD Settings >	
OSD Settings >	
Key Lock >	

Video Settings		
Sub Menu	Settings	Setting Option Description
Aspect	Full Screen	The screen is displayed in Full
	Original Ratio	Screen
	1:1	The screen is displayed in the

		original scale of the input signal. The screen is displayed as 1:1
Freeze	OFF WIN1 WIN2 WIN3 WIN4	Turn off Freeze Select WIN1 Freeze Select WIN2 Freeze Select WIN3 Freeze Select WIN4 Freeze
Scan Mode	OFF ON	Turn off Scan mode Turn on Scan mode
Blue Mode	OFF Mono Blue Red Green	Turn off the color display mode Black and white mode display image Full blue mode display image Full red mode display image Full green mode display image

### Source Settings:

Main Menu	Source Settings
Status Display	> Quad Mode Win1 SDI1
Function Settings	> Quad Mode Win2 SDI2
Marker Settings	> Quad Mode Win3 SDI3
Waveform	> Quad Mode Win4 SDI4
Aux Settings	>
Color Settings	>
Video Settings	>
Source Settings	>
Audio Settings	>
CC Setting	>
IMD Settings	>
OSD Settings	>
Key Lock	>

Source Settings		
Sub Menu	Settings	Setting Option Description
Window Select	Quad Mode Win1	When SDI set in Quad SDI (Port 1,2,3,4) and Quad View at the same time, the users can select the input signal source of each image
	Quad Mode Win2	
	Quad Mode Win3	
	Quad Mode Win4	

### Audio Settings:

Main Menu	Audio Settings	
Status Display	> Audio Source	SDI1
Function Settings	> Audio Channel	CH1&CH2
Marker Settings	> Audio Mode	Normal
Waveform	> Volume	15
Aux Settings	> Audio Meter	OFF
Color Settings	> Meter Direction	Vertical
Video Settings	> Meter Select	CH1-2
Source Settings	>	
Audio Settings	>	
CC Setting	>	
IMD Settings	>	
OSD Settings	>	
Key Lock	>	

Audio Settings		
Sub Menu	Settings	Setting Option Description
Audio Source	Undefined	Audio Source Undefined
	SDI1	Audio Source select SDI1
	SDI2	Audio Source select SDI2
	SDI3	Audio Source select SDI3
	SDI4	Audio Source select SDI4

	HDMI	Audio Source select HDMI
Output Channel	CH1&CH2 CH3&CH4 CH5&CH6 CH7&CH8 CH9&CH10 CH11&CH12 CH13&CH14 CH15&CH16	Select audio output CH1&CH2 Channel Select audio output CH3&CH4 Channel Select audio output CH5&CH6 Channel Select audio output CH7&CH8 Channel Select audio output CH9&CH10 Channel Select audio output CH11&CH12 Channel Select audio output CH13&CH14 Channel Select audio output CH15&CH16 Channel
Audio Mode	Normal Right Channel Mute Left Channel Mute	Left Channel, Right Channel Normal Output Right Channel Mute, Left Channel Output Left Channel Mute, Right Channel Output
Volume	0-31	Volume Adjustment
Audio Meter	OFF ON	Turn off Audio Meter Turn on Audio Meter
Meter Direction	Vertical Horizontal	Audio meter vertical display Audio meter horizontal display
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
	CH5-10	Select meter channel CH5-10
	CH9-12	Select meter channel CH9-12
	CH13-14	Select meter channel
	CH13-16	CH13-14
		Select meter channel
		CH13-16

## CC Settings:

Main Menu	CC Settings	
Status Display	> Channel Select	Channel 1
Function Settings	> CC Mode	OFF
Marker Settings	> 608 Caption Type	CC 1
Waveform	> 708 Caption Type	Service 1
Aux Settings	>	
Color Settings	>	
Video Settings	>	
Source Settings	>	
Audio Settings	>	
CC Setting	>	
IMD Settings	>	
OSD Settings	>	
Key Lock	>	

CC Setting		
Sub Menu	Settings	Setting Option Description
Channel Select	Channel 1	Select single channel SDI1
	Channel 2	CC
	Channel 3	Select single channel SDI2
	Channel 4	CC

	4K Mode	Select single channel SDI3 CC Select single channel SDI4 CC Select 4K mode CC
CC Mode	OFF 708 608	Turn off CC Select 708 Mode Select 608 Mode
608 Caption Type	CC 1 CC 2 CC 3 CC 4	608 select CC 1 type 608 select CC 2 type 608 select CC 3 type 608 select CC 4 type
708 Caption Type	Service 1 Service 2 Service 3 Service 4 Service 5 Service 6	708 select Service 1 type 708 select Service 2 type 708 select Service 3 type 708 select Service 4 type 708 select Service 5 type 708 select Service 6 type

### IMD Settings:

Main Menu	IMD Settings	
Status Display	> IMD Display	OFF
Function Settings	> IMD Color	White
Marker Settings	> IMD Protocol	Local
Waveform	> IMD Name	Channell
Aux Settings	> IMD ID	128
Color Settings	> Baud Rate	38400
Video Settings	> LED TALLY	OFF
Source Settings	> OSD Tally Mode	RG
Audio Settings	> Tally Source	TSL
CC Setting	>	
IMD Settings	>	
OSD Settings	>	
Key Lock	>	

IMD Settings		
Sub Menu	Settings	Setting Option Description
IMD Display	ON	Turn on IMD display
	OFF	Turn off IMD display
IMD Color	Green	IMD character display green
	Red	IMD character display red
	White	IMD character display white
IMD protocol	TSL3.1	Select TSL3.1
	TSL4.0	Select TSL4.0
IMD name	Channel1	IMD name display
IMD ID	128-255	<p>The IMD address can be set anywhere between 128-255.</p> <p>The IMD address can be used to set different IMD addresses of the machine when multiple machines are cascaded. This function can be used to distinguish different machines by IMD address when using RS-422 system to remotely control different machines.</p>
Baud Rate	4800	Select the baud rate
	9600	
	19200	
	38400	
	57600	
	115200	
LED Tally	ON	Turn on LED Tally
	OFF	Turn off LED Tally
OSD Tally Mode	OFF	Turn off OSD Tally



	RG	OSD Tally select RG mode
	GR	OSD Tally select GR mode
	RGY	OSD Tally select RGY mode
LED Tally Source	GPI	Select GPI Select
	TSL	Select TSL protocol control

### OSD Settlings:

Main Menu	OSD Settings	
Status Display	> Language	English
Function Settings	> Menu	30
Marker Settings	> Factory	OFF
Waveform	>	
Aux Settings	>	
Color Settings	>	
Video Settings	>	
Source Settings	>	
Audio Settings	>	
CC Setting	>	
IMD Settings	>	
OSD Settings	>	
Key Lock	>	

OSD Settings		
Sub Menu	Settings	Setting Option Description
Language	Chinese	Menu language selection
	English	Chinese Menu language selection English
OSD time	5-60	Setting menu display time
Factory	NO	Select whether to restore
	YES	factory settings

**Key Lock:**

Main Menu	Key Lock
Status Display >	Key Lock OFF
Function Settings >	
Marker Settings >	
Waveform >	
Aux Settings >	
Color Settings >	
Video Settings >	
Source Settings >	
Audio Settings >	
CC Setting >	
IMD Settings >	
OSD Settings >	
Key Lock >	

Key Lock		
Sub Menu	Settings	Setting Option Description
Key Lock	OFF	Turn off Key Lock
	ON	Turn on Key Lock

## Factory Settings

Use this feature, you can reset this monitor to factory settings.

The factory settings can be restored when the following conditions occur on the monitor:

1. When the parameters of the monitors are misadjusted, enter the factory reset option and restore to factory setting
2. When the monitor's screen display or sound is not normal, you can enter the factory reset option to return to the factory settings in case of non-hardware failure.

Main Menu		OSD Settings
Status Display	>	Language English
Function Settings	>	Menu 30
Marker Settings	>	Factory ON
Waveform	>	
Aux Settings	>	
Color Settings	>	
Video Settings	>	
Source Settings	>	
Audio Settings	>	
CC Setting	>	
IMD Settings	>	
OSD Settings	>	
Key Lock	>	

To do factory reset, please follow the below six steps:

1. Press MENU/EXIT button to enter main menu.
2. Turn VOLUME knob to item Setup and select it.
3. Press KNOB Key to select the menu settings sub-menu option.
4. Press the DOWN button to select the factory setting option.
5. Press the KNOB Key to select whether to restore the factory settings. Select "Yes" and the monitor will be restored to factory settings.

## Remote Control

Remote control the monitor through Ethernet:

1. Connected with monitor via LAN, and you can achieve remote controlling by software “Konvision Device Controller”. (Network remote control software and instructions please contact with the dealer)
2. The network cable is a parallel cable connection

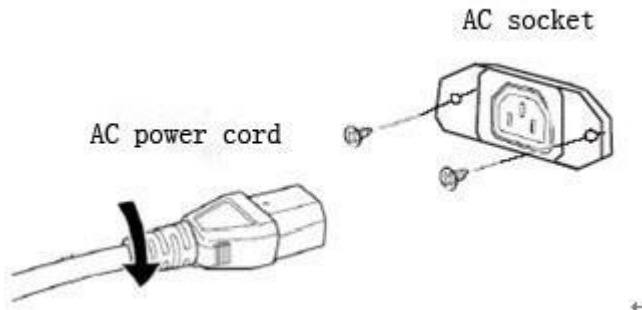
Parallel line connection: Both ends are 568A standard or both ends are 568B standard.

568A standard: green white, green, orange white, blue, blue white, orange, brown white, brown

568B standard: orange white, orange, green white, blue, blue white, green, brown white, brown

## AC Power Connection

Plug the AC power cord into the monitor AC jack



Note: 1) Please hold the plug tight when you pull out the power cord.

2) Please do not connect the power supply before you insert the cable well.

3) Please use power cord match to monitors.

# Warranty Card

User		Tel		Postal Code	
Address					
Product Model			Serial Number		
Dealer			Purchase Date		

## Maintenance Record

Date	Contents of Reparation	Replacement parts		Repairer	User Signature
		Name	Qty		

This warranty card should be filled in immediately when purchasing

Please keep a proper record of this warranty card.

As the continuous improvement of the products, this will subject to change without notice

All contents on this data have been carefully checked, if there is any printing errors & omissions or any misunderstanding, our Company reserves the right of interpretation.