# 23.8" Native Ultra HD 4K Monitor USER GUIDE





1.713.272.8822 support@ikancorp.com © 2013 ikan Corporation. All right reserved

# Contents

Front.3Rear.4MENU Description.5COLOR.6FUNCTION.8DISPLAY.10DISPLAY FUCTION.11AUDIO.13MARKER.14ANALOG.15SETTING.16List of Compatible Video Formats.17Specifications.18Dimension.19CONDITIONS OF WARRANTY SERVICE.20	Safety Instructions	2
Rear4MENU Description5COLOR6FUNCTION8DISPLAY10DISPLAY FUCTION11AUDIO13MARKER14ANALOG15SETTING16List of Compatible Video Formats17Specifications18Dimension19CONDITIONS OF WARRANTY SERVICE20	Front	3
MENU Description5COLOR6FUNCTION8DISPLAY10DISPLAY FUCTION11AUDIO13MARKER14ANALOG15SETTING16List of Compatible Video Formats17Specifications18Dimension19CONDITIONS OF WARRANTY SERVICE20	Rear	4
COLOR6FUNCTION8DISPLAY10DISPLAY FUCTION11AUDIO13MARKER14ANALOG15SETTING16List of Compatible Video Formats17Specifications18Dimension19CONDITIONS OF WARRANTY SERVICE20	MENU Description	5
FUNCTION8DISPLAY10DISPLAY FUCTION11AUDIO13MARKER14ANALOG15SETTING16List of Compatible Video Formats17Specifications18Dimension19CONDITIONS OF WARRANTY SERVICE20	COLOR	6
DISPLAY10DISPLAY FUCTION11AUDIO13MARKER14ANALOG15SETTING16List of Compatible Video Formats17Specifications18Dimension19CONDITIONS OF WARRANTY SERVICE20	FUNCTION	8
DISPLAY FUCTION.11AUDIO.13MARKER.14ANALOG.15SETTING.16List of Compatible Video Formats.17Specifications.18Dimension.19CONDITIONS OF WARRANTY SERVICE.20	DISPLAY	10
AUDIO.13MARKER.14ANALOG.15SETTING.16List of Compatible Video Formats.17Specifications.18Dimension.19CONDITIONS OF WARRANTY SERVICE.20	DISPLAY FUCTION	11
MARKER.14ANALOG.15SETTING.16List of Compatible Video Formats.17Specifications.18Dimension.19CONDITIONS OF WARRANTY SERVICE.20	AUDIO	13
ANALOG	MARKER	14
SETTING	ANALOG	15
List of Compatible Video Formats	SETTING	16
Specifications	List of Compatible Video Formats	17
Dimension	Specifications	18
CONDITIONS OF WARRANTY SERVICE	Dimension	19
	CONDITIONS OF WARRANTY SERVICE	20

# Safety Instructions

- To help avoid damaging your monitor, connect only one power (DC or battery) in operation.
- Rough handling of product may cause physical damage or malfunction.
- Never insert anything metallic into the monitor openings. Doing so may create the danger of electric shock.
- To avoid electric shock, never touch the inside of the monitor. Only a Qualified should open the monitor's case.
- Openings in the monitor cabinet are provided for ventilation. To prevent overheating, these openings should not be blocked or covered.
- Put your monitor in a location with low humidity and a minimum of dust. Avoid places like damp basement or dusty hallways.
- Place the monitor on a solid surface and treat it carefully. The screen is made of glass and can be damaged if dropped or sharply hit.
- Do not attempt to remove the back cover, as you will be exposed to a shock hazard. The back cover should only be removed by qualified service personnel.
- Unplug the monitor power before you connect external devices to the monitor.
- If your monitor does not operate normally, or if there are any unusual sounds or smells coning from it, unplug it immediately and contact us.
- Please do not disassemble the monitor. No service will be provided in that case.
- Displaying fixed picture for a long time may cause an afterimage or dead Spots. To recover LCD pixels, display whole white picture on screen for an hour or two and pixels will be recovered.
- No service will be provided for user's own color calibration.

### Front



# Input Switcher(VGA, DVI, HDMI-1(HDMI 2.0), HDMI-2, HDMI-3, HDMI-4, SDI)

#### MENU

Enter into menu and choose.

#### **Buttons for Adjustment or Choose**

Buttons used to adjust Volume/ Brightness/ Contrast/ Hue/ Saturation/ Sharpness/ Backlight.

#### EXIT

Exit the menu/ choose the input signal.

#### **Function Keys**

Short press these buttons for functions operation, and long press these buttons for function key setting(Check Field, Freeze, Mute, Temperature, Over Scan, Display Mode, Zoom, Aspect Ratio, Safety Area, Center Marker, Display Rotate).

#### Indicator

**Headphone Jack** 

Power

### Rear



**TALLY Indicator Signal Input** 

**VGA** Input

HDMI 1(2.0) Input

HDMI 2 Input

HDMI 3 Input

HDMI 4 Input

**DVI Input** 

Audio L/ R Stereo Input

### **SDI Input**

### **DC Input**

For DC power supply. Check the DC Input voltage. In case of using the Battery power, DC 11 ~ 27V is usable.

$\frown$	Pin number	Signal
1 4	1	GND
(°2 3)	2	No connection
(••)	3	No connection
$\smile$	4	V+

# **MENU Description**

### General Cautions for OSD Menu or Display

The menu may not be displayed even when user pressed Menu button if there's No Signal, or in unclear signal status.

The menu selection may be saved for each input signal mode, so sometimes user should do menu selection again.

# COLOR

	COLOR	SDI
	Backlight	83
<b>*</b>	Brightness	50
<u>∎</u>	Contrast	50
- <b>1</b> .3	Color Adjust	Enter
	Hue	50
	Saturation	50
	Gamma	Off
• <b>*****</b> *	Color Temp	User
**		
- Ton		WENO: Select EXIT

### Backlight

Adjust the Backlight from 0 to 100.

#### **Brightness**

Adjust the Brightness from 0 to 100.

#### Contrast

Adjust the Brightness from 0 to 100.

### **Color Adjust**

Enter to adjust the Hue and Saturation of three primary colors(Red, Green, Blue) and three auxiliary colors(Cyan, Yellow, Magenta).

#### Hue

Adjust the Hue from 0 to 100.

#### Saturation

Adjust the Saturation from 0 to 100.

#### Gamma

Adjust the Gamma Off, 1.8, 2.0, 2.2, 2.4.

### **Color Temp**

Select color temperature among User, 9300K, 7500K, 6500K, 5800K or sRGB.(Gain Menu are displayed on USER temperature only).

# **FUNCTION**

	FUNCTION	SDI
38	Aspect Ratio	Full
~~~	Over Scan	Off
	Peaking	Off
- <b>1</b> .3	Freeze	Off
- "	Zoom	Off
÷	Check Field	Off
- -		
*	():Move	MENU:Select EXIT:Exit

### Aspect Ratio

Set the Aspect Ratio of the screen to be Full, 16:9, 4:3, 1:1, 2.39:1, 2.35:1, 1.896:1, 1.85:1.

#### **Over Scan**

Set the Over Scan to be on/ off. When turn on this mode, the image displays 90% of the original signal.

#### Peaking

Turns on Peaking mode.

#### Freeze

Turns on Freeze mode.

#### Zoom

Turns on Zoom mode, to zoom Z1(the upper left part)/ Z2(upper right part)/ Z3(down left part)/ Z4(down right par)/ Z5(upper half part)/ Z6(down half part) of the image.

### **Check Field**

Turns on Check Field mode. The mode can be set Red, Green, Blue or Mono.

# DISPLAY

	DISPLAY	SDI
<u>.</u>	Display Mode	1P
<b>7</b>	Display Function	Enter
	Select Region	1P
- <b>1</b> 1	Input Source	Enter
<b>•</b> • <b>"</b>	Information	Enter
÷		
•		
*	():Move	MENU:Select EXIT:Exit

### **Display Mode**

Set the Display Mode of the screen to be 1P(1 picture), 2P-LR(2 pictures on the left and the right separately), 2P-TB(2 pictures on the top and the bottom separately), PIP(picture in picture), 4P(4 pictures).

#### **Display Function**

Enter to set the Rotate, Ratio, Position, Transparency, Size and Input Swap of the image.

#### **Select Region**

Choose the Select Region in different Display Mode. To adjust the Brightness, Contrast, Hue, Saturation, Sharpness and Backlight of the images separately or simultaneously.

#### **Input Source**

Enter to choose the Input Source(Auto, VGA, SDI, HDMI1, HDMI2, HDMI3, HDMI4 or DVI) for each image.

#### Information

Enter to check the information of each image.

# **DISPLAY FUNCTION**

# Display Function Setting in Different Display Mode

	DISPLAY	SDI
<u>د</u> د	1P Rotate	0°
<b>*</b>	LR Ratio	0
	PIP Position	RB
- <b>1</b> .3	PIP Transparency	0
•••	PIP Size	5
÷	Input Swap	Enter
a <b></b> a		
*	():Move	MENU:Select EXIT:Exit

Display Mode	Display Function	Select Region	Input Source
1P	1P Rotate (0°, 90°, 180°, 270°)	1P	SDI, HDMI1 , HDMI2, HDMI3, HDMI4, DVI, Auto, VGA
2P-LR	LR Ratio(0~4); Input Swap	2P-L,2P-R,Full	1P, 2P
2P-TB	Input Swap	2P-T,2P-B,Full	1P, 2P
PIP	PIP Position (LT, RT, LB, RB, Mid, User); PIP Transparency(0~10); PIP Size(0~10); Input Swap	Main, Sub, Full	1P, 2P
4P	/	Full, 1P-in, 1P-Out, 2P-in, 2P-Out, 3P-in, 3P-Out, 4P-in, 4P-Out,	1P, 2P, 3P, 4P

# AUDIO

	AUDIO	SDI
مد	Volume	50
	Mute	Off
	Audio Source	D1
<b>(</b> ))		
÷		
• <b>*****</b> *		
**	():Move	MENU:Select EXIT:Exit

### Volume

Set Volume of speaker between 0 to 100.

#### Mute

Turn on/ off the Mute mode.

#### **Audio Source**

Select the speaker output between the analog signal(A0) and the digital signal(D1). For VGA/ DVI, use the analog signal(A0). For HDMI/ SDI, use the digital signal(D1).

# MARKER

	MARKER	SDI
3.	Safety Area	Off
<b>*</b>	Center Marker	Off
	Line Width	3
<b>•</b> (•)	Line Color	Red
Ŀ		
• • •		
**	():Move	MENU:Select EXIT:Exit

#### Safety Area

Turn on the Safety Area mode, to adjust size of the Safety Area to be 80%, 85%, 90%, 93% or 96%.

#### **Center Marker**

Set Preference to display center marker or not.

#### Line Width

Set the Line Width of the Safety Area and the Center Marker between 0 to 10.

#### Line Color

Set the Line Color of the Safety Area and the Center Marker to be Red, Green, Blue or White.

# ANALOG

	ANALOG	VGA
<u>دد</u>	Auto Adjust	Enter
	H Position	50
	V Position	50
<b>.</b>	Clock	50
<b>•••</b>	Phase	77
÷		
• <b>****</b> *		
*	():Move	MENU:Select EXIT:Exit

### Auto Adjust

When with VGA input, enter the Auto Adjust to set H/ V Positions and Phase auto.

#### **H** Position

Adjust the image position on the left/ right of the screen.

### **V** Position

Adjust the image position on the top/ bottom of the screen.

#### Clock

Adjust the screen linear displayed on the screen.

#### Phase

Adjust the timing interference of the monitor, generally do not use it.

# SETTING

	SETTING	SDI
<u>دد</u>	Reset	Enter
<b>*</b> *	Time	11
	H Position	50
<b>-1</b> .0	V Position	50
<b>•••</b>	Language	English
<b>E</b>	Transparency	0
	Rotate	0°
**		
MLM	():Move	MENU:Select (EXII):Exit

#### Reset

Reset all the parameters of the monitor to factory setting.

#### Time

Set the menu display time between 1 to 60s.

#### **H** Position

Adjust the menu H Position displayed on the screen.

#### **V** Position

Adjust the menu V Position displayed on the screen.

#### Language

Set the menu display language between English and Chinese.

#### Transparency

Adjust the transparency of the menu display between 0 to 255.

### Rotate

Adjust the Rotate of the menu display between 0°, 90°, 270°.

# List of Compatible Video Formats

Signals	Input Signal Formats
	4K
	480i/576i/480p/576p
HDMI	720p (60/59.94/50/30/29/25/24/23.98)
	1080i (60/59.94/50 )
	1080p (60/59.94/50/30/29.97/25/24/24sF/23.98/23.98sF)
	480i/576i
SDI	720p (60/59.94/50/30/29/25/24/23.98)
	1080i (60/59.94/50)
	1080p (60/59.94/50/30/29.97/25/24/24sF/23.98/23.98sF)

# **Specifications**

Panel Size	23.8" IPS LCD
Resolution	3840 (H)×2160(V) pixels
Dot Pitch (mm)	0.13725(H)×0.13725(V)
Brightness	310 cd/m <sup>2</sup>
Contrast	1000:1
Viewing Angle	178°(L/R) /178°(U/D)°
Backlight	LED
Input Voltage	DC 13 ~ 18V
Input Signal	HDMIx4(HDMI2.0 x 1; HDMI1.4 x 3) SDI, DVI, VGA, Audio(L/R), Tally, USB Upgrade
Output Signal	SDI
Audio Output	Headphone Jack, Speaker
Power Consumption	≤ 42W
Special Function	TALLY indicator
Working Temperature	- 10 ∼ 50°C
Storage Temperature	- 20 ~ 60°C
	565W×372H×78D
Unit Size	(without U stand)
(mm)	601.0W×420.7H×124.1D
	(with U stand)
Unit Weight	7.26kg (with U stand)

# Dimension



### D24 (W X H X D)

601.0×420.7×124.1mm

(23.7 x 16.6 x 4.9 inches)



#### CONDITIONS OF WARRANTY SERVICE

- Free service for one year from the day of purchase if the problem is caused by manufacturing errors.
- The components and maintenance service fee will be charged if the warranty period has expired.

Free Service will not be Provided in the Following Situations: (\* Even if the product is still within the warranty period.)

- Damage caused by abuse or misuse, dismantling, or changes to the product not made by the company.
- Damage caused by natural disaster, abnormal voltage, and environmental factors etc.