


Hisense LCD Monitor

HME8C55E

User Manual

Read the User Guide thoroughly before using Hisense LCD monitor and keep it properly for future reference.

RSAG2.025.7401SS B Version

Website: www.hisense.cn

Preface

Dear users,

Hello. Thank you for purchasing Hisense LCD monitor, which will provide you with satisfying display effect. Read the User Guide thoroughly before using the LCD monitor and keep it properly for future reference. Hisense shall not be liable for any accidents arising from violations of the safety precautions and use instructions of the User Guide.



Hisense Group Service Hotline: 4006111111

Hisense Group Installation Hotline: 4008011111

Hisense service quality supervision tel: 0532-83091111



Only the repair personnel are allowed to repair the LCD monitor and replace its components. Failure to comply will result in electric shock and fire.

The device is a class I device. Be sure to connect the product to a grid power output socket with grounding protection.

Safety Information and Precautions

Read the following information thoroughly before using the LCD monitor:

❖ Safety Precautions

- The LCD monitor has passed safety certification testing and can be used reliably and safely. In order to ensure secure use and correct maintenance and prevent accidents or man-made damages, please read this section as well as the notices and statements on the equipment carefully. Contact Hisense if you encounter any problems when using the LCD monitor.
- The input voltage of the monitor is AC 220 V, with a frequency of 50 Hz.
- To avoid hazards, do not place the LCD monitor on a soft pad. If the LCD monitor will not be used for a long time, disconnect its power cable. The LCD monitor contains hazardous high voltage inside, so do not disassemble it by yourself. This device must be maintained by qualified personnel. If the device has any error, please contact Hisense or our authorized distributors.
- Install the device near a socket easy to use. Network source disconnection devices such as the switches, power plugs, and appliance coupler shall be away from debris, and shall be easy to operate.
- Use licensed power cables that match the voltage of the power socket and meet the safety standards of the country or region where the power cables are used. Never overload the power socket. Use qualified sockets that have passed national safety certification.
- Protect the power lead: Put the power line in a place to prevent it from being stepped on or squeezed by objects above or against, and pay special attention to the positions of the plug and socket of the power line.
- Do not expose this device to any rainy or moisture places. Keep the LCD monitor away from any high-temperature and heat-generating object.
- This equipment shall not be used in an environment with a mixture of flammable anesthetics and air, oxygen, or nitrous oxide.
- Do not touch any non-application part of this device when it is running to avoid discomfort caused by the high temperature of the device.

❖ Remarks

- The LCD monitor is intended for use in the target sales regions. If it is used outside these regions, its performance may be different from the specifications.
- It is recommended that you use the specified accessories of the LCD monitor, which can be used only with the spare parts and accessories that are manufactured or specified by Hisense. Before the operation, test and verify the equipment and completed settings.
- It takes about 30 minutes for the electronic components of the LCD monitor to achieve stable performance. It is recommended that you start the LCD monitor in advance to ensure display accuracy.
- Condensation may form inside and outside the LCD monitor if the LCD monitor is of low temperature and moved into a room or the room where it is located experiences fast temperature

Safety Information and Precautions

rise. In this case, turn on the monitor after the condensation disappears; otherwise, the monitor will be damaged.

- Do not cover or block any ventilation holes on the device housing. When the monitor is installed in a closet or other closed environments, keep a certain gap between the monitor and sides of the closet.
- In order to avoid changes in brightness due to long-term use and maintain a stable brightness, we recommend that the monitor be used at a slightly lower brightness.
- Keep the high-frequency electrotome away from this monitor, and cables or devices connected to this monitor. The high-frequency electrotome, when turned on, may interfere with nearby devices. The OSD menu of the monitor may be activated by interference, affecting the monitor function. The image display may be abnormal due to interference, affecting the viewing effect.
- It is recommended that you clean the LCD monitor exterior periodically to extend its service life.
- Do not clean or maintain the monitor when it is powered on. Remove the monitor power cable for cleaning or maintenance.
- Do not modify the monitor without authorization of the manufacturer.
- It is strongly recommended that you prepare a backup monitor for important tasks. If you do not need to use the monitor for a long time, disconnect the monitor from the power socket to avoid damage to the monitor caused by transient voltage. To completely power off the monitor, remove the power plug from the power socket.

❖ Description and Maintenance of the LCD monitor

Preventive maintenance is not required. However, the monitor needs to be regularly maintained to make the monitor in the optimal state and run securely. It is recommended that you check the monitor function and safety regularly, for example, at least once every year.

- The screen is a key component of the LCD monitor and requires periodic maintenance.
- Do not squeeze the edges of the LCD monitor or frame. Failure to comply may cause display failure.
- Do not touch or press the monitor with sharp objects, which may cause damage to the screen.
- Do not use organic solvents such as alcohol and gasoline, or chemical reagents such as acid and alkali to contact the housing or monitor, which may lead to gloss reduction, fading, and image quality reduction of the housing or monitor.
- Do not clean the monitor housing or screen with any diluent, benzene, wax, and abrasive cleaning agent that may damage the monitor housing and screen.
- It is recommended that the surfaces of the monitor housing and panel be cleaned with special screen cleaning cloth.
- When necessary, after the monitor is shut down, wet a small piece of clean soft cloth with water, and properly clean the housing and monitor to remove the dirt on the surface gently.

❖ Important Information

Safety Information and Precautions

- The pictures in this document are for reference only and may be different from the appearance of the actual product. The information in this document is subject to change without notice.
- This document provides instructions on correctly installing and using the LCD monitor. Please keep it properly. If it is lost, contact Hisense.
- See the monitor certificate label for its production date.

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Overview

Thank you for choosing Hisense LCD. This product is an LED-backlit color LCD monitor for professionally trained medical personnel to accurately display a variety of images during surgeries.

Features

- This monitor has a safety backup design with dual power supplies to ensure seamless connection of the two power supplies and real-time processing, thereby ensuring high reliability during operation and realizing trouble-free and safe display.

- Real-time picture enhancement (RPE)

It optimizes the definition and contrast of dynamic videos frame by frame to improve the reality and presence of the videos.

- Color Gamut Match (CGM)

The monitor matches the color gamut according to the format of output signals, so as to display pure basic colors, present more color details, and reproduce the actual color display effect more realistically.

- Custom gamma Yc

The monitor provides the function of customizing gamma curves for different scenarios.

- UHD display

The monitor resolution reaches 3840 x 2160, ensuring accurate display of the HD images output by the camera system or other systems, free of blurring and distortion.

- Ultra-low energy consumption control technology

The monitor uses environmentally friendly LED-backlit LCD panel as well as the power consumption control technology, to achieve low power consumption and low heat dissipation, extending the service life of the whole machine.

- UHD digital input and output interface

The monitor supports multiple HD digital input and output signals, and can be connected to various camera systems and other imaging equipments to meet the complexity requirements of operating rooms.

- Fan-free muting technology

The monitor is designed with the fan-free muting technology and can dissipate heat without fans, meeting the noise, dust, and bacteria requirements of operating rooms.

Overview

Technical Specifications

Model		HME8C55E
Name		LCD monitor
LCD monitor panel	Size	55 inches
	Panel type	Color LCD panel
	Diagonal length	139 cm
	Backlight	LED
	Screen size	1209.6 mm x 680.5 mm
	Screen ratio	16:9
	Resolution	3840x2160
	Max. display colors	1.07 billion colors
	Pixel pitch	0.315 mm (horizontal) x 0.315 mm (vertical)
	Brightness	600 cd/m ²
	Contrast	4000:1 (Typical)
	Response time	6 ms (G to G) (typ.)
Visible angle	≥ 178° (CR 10:1)	
Factory default brightness		400±20 cd/m ²
Input signal interfaces		HDMI x 1 DVI x 2 DP x 1 VGA x 1 3G-SDI/HD-SDI x 5
Output signal interfaces		HDMI x 1 3G-SDI/HD-SDI x 5
Interaction interface		RS485x2
Power supply	Input voltage	220 V, 50 Hz
	Typical power	220 W
Machine dimension (W x H x T)		1260 mm x 756 mm x 90 mm
Product weight (net)		37 kg
Fixing equipment		Meeting the requirements of compatible design for hanging on the wall, lifting, and embedded in the wall
Pitch (VESA standard)		400 mm x 200 mm

Overview

Environment conditions	Temperature	Working temperature: 10°C to 35°C (best performance)/0°C to +40°C (most secure) Storage/Transportation temperature: -20°C to +60°C
	Humidity	Working humidity: 20%-85% R.H. (non-condensing) Storage/Transportation humidity: 10%-90% R.H. (non-condensing)
	Atmospheric pressure	Working atmospheric pressure: 700-1060 hPa Storage atmospheric pressure: 200-1060 hPa
Execution standard		Q/0202RSR 631

Accessories

Name	Quantity	Remarks
User Manual	1 copy	
Power cable	1	Standard
One HDMI cable	1	Standard

Note

- In case of missing or damaged components, please contact Hisense or our designated distributors in time. Please keep the original package. If you need to send this product back, please use the original packaging. Do not press heavy articles on this product during transportation. Do not place any heavy weight on top of the package during transportation.

Installation

Mounting and Installing the Monitor

❖ Remarks

Ventilation

- Do not cover or block any ventilation holes on the device housing. When mounting the monitor in a closet or another confined place, leave a certain distance between the monitor and the side of the closet.

Installation

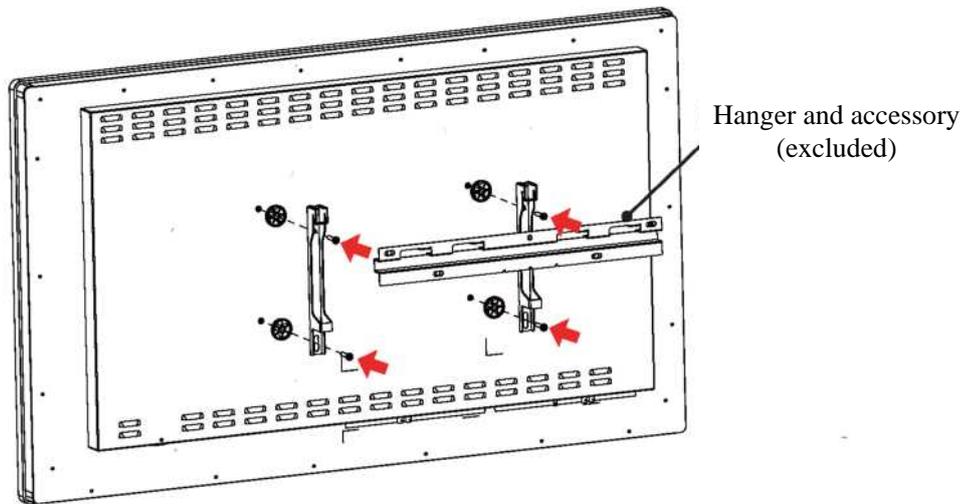
- The equipment should be placed on a flat, sturdy, and stable surface that can bear at least three LCDs. If the equipment is placed on an unstable cart or bracket, it may fall, causing serious injuries to children or adults and serious damage to the equipment. Do not climb to or lean on the equipment.
- When adjusting the angle of the equipment, move the equipment slowly to prevent it from falling or slipping off the bracket or support arm.
- If the equipment is connected to a support arm, do not use the equipment as a handle to move the equipment. For instructions on how to move support arms connected to equipments, refer to the instruction manual of support arms.
- Ensure security when installing, maintaining, and checking the equipment.
- This equipment must be installed by professional personnel, especially when determining whether the wall strength is sufficient to support the weight of the monitor. To mount the equipment on a wall, ensure security during installation and use of the equipment.
- Hisense assumes no responsibility for any damage or personal injury caused by improper use or incorrect installation.

❖ Installation instruction

Mounting arms and brackets that comply with the VESA standard are applicable for the monitor.

Hanger model recommended (optional) for HME8C55E: LG400652A

Installation



1. Before installing the wall-mounted bracket, put the whole machine on a firm, clean, and padded table. The whole machine is heavy, so ensure that the installation table is firm and reliable.
2. Remove the screws from the mounting holes in the rear shell.
3. To ensure firmly install the machine, the length of the screws (M6) in the wall-mounted hole in the rear shell should be 8-10 mm. Too long screws will cause irreparable damages to the whole machine.

CAUTION

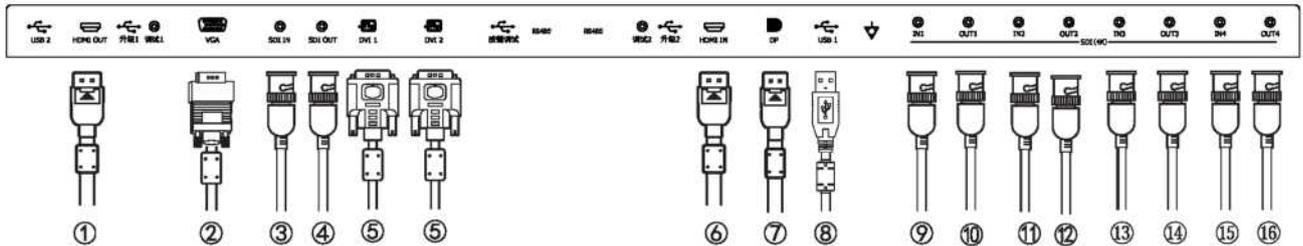
- Use support arms authenticated by VESA.
- The VESA interface of the monitor has been designed with a security coefficient of 4 (be able to support a weight 4 times of the monitor weight). In the medical system, support arms with a proper security coefficient must be used, for example, IEC 60601-1.

Installation

Input Port Connection

Connect one or more video sources to the corresponding video input interface of the monitor:

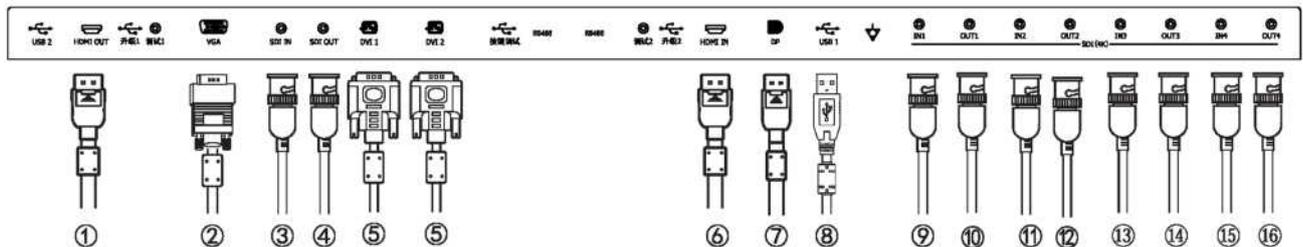
1. HDMI IN: ⑥
2. SDI IN: ③/⑩/⑫/⑮
3. DVI: ⑤
4. DP: ⑦
5. VGA: ②



Output Port Connection

Connect one or more available video receivers to the corresponding video output interface of the monitor:

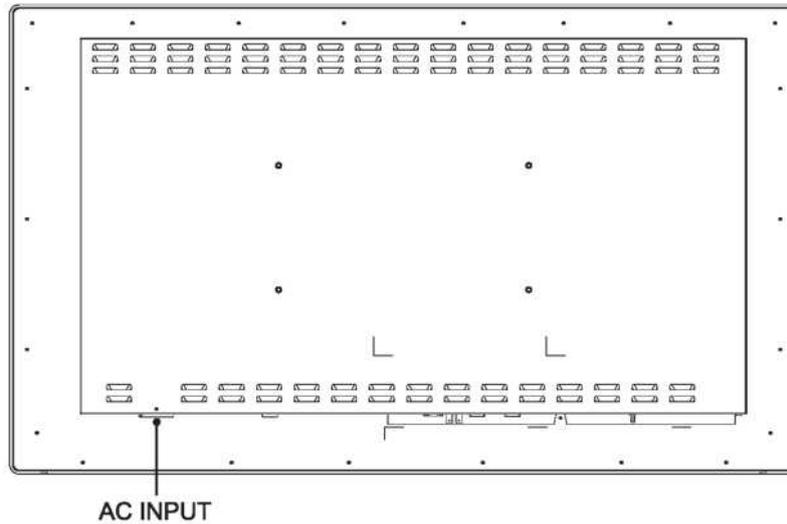
1. HDMI OUT: ①
2. SDI OUT: ④/⑩/⑫/⑮



Installation

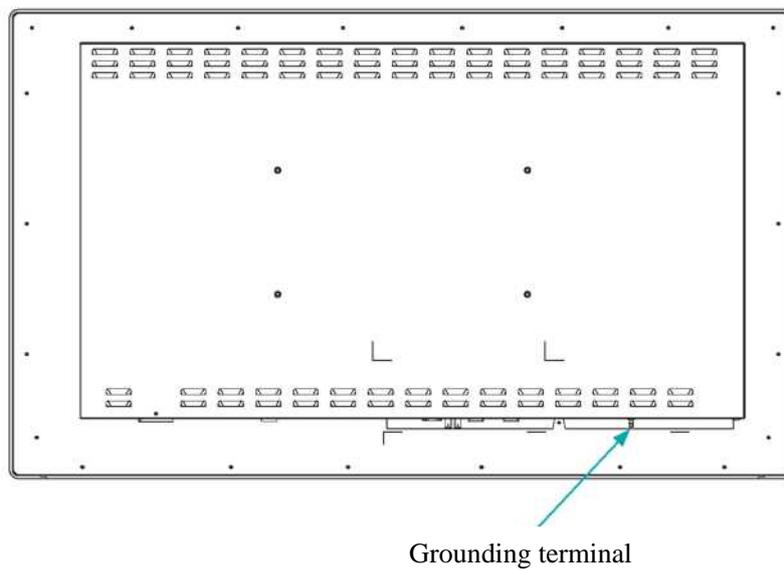
Power Supply Connection

Connect the AC power line delivered with the monitor to the AC power supply interface of the monitor.



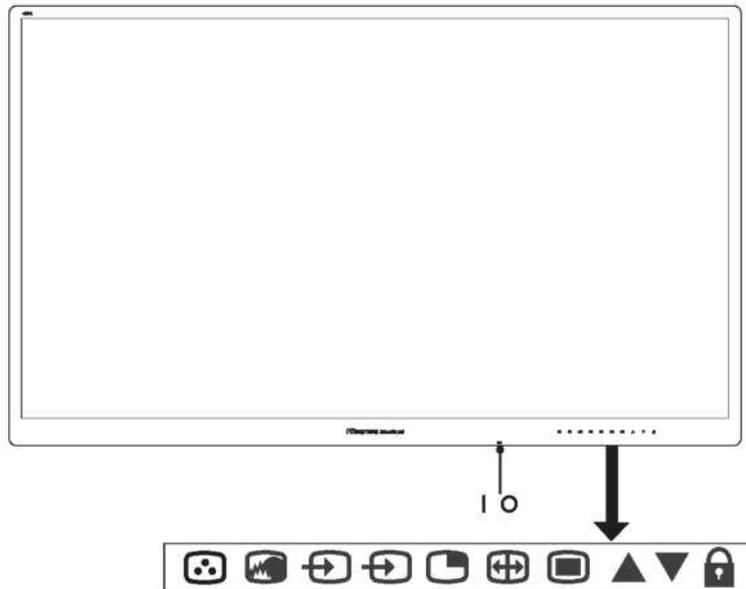
Protective Grounding

Use an AWG18 wire (with the maximum cable length approved by national regulations) to connect the protective grounding pin to the grounding socket to ground the monitor.



Monitor Components and Connectors

Monitor Front View



□ Button Description

	Power switch	It is used to turn on or off the monitor.
	LOCK	Press and hold the button for 3s for locking or unlocking. The default value is restored upon restart. The lock function is available for all buttons.
	Downward	Press this button to quickly adjust the image contrast ratio when no menu is displayed, with the progress bar displayed. Press this button as a navigation button or to decrease values when a menu is displayed.
	Upward	Press this button to quickly adjust the image brightness when no menu is displayed, with the progress bar displayed. Press this button as a navigation button or to increase values when a menu is displayed.
	MENU	Press this button to display a menu or access the current option.
	SWAP	When a menu is displayed, press this button to access the previous menu. When a single window is displayed with no menu, press this button for shortcut menus, such as Normal, Freeze, Rollovers, and Mirror.

Monitor Components and Connectors

		When two or three windows are displayed with no menu, press this button to exchange signal sources. When four windows are displayed with no menu, this button is unavailable.
	Display Mode	Press this button to display the Display Mode menu, and select a multi-window mode.
	INPUT2	Press this button to configure signal sources for each window.
	INPUT1	Press this button to select the signal source of a window. When a single window is displayed, the signal source shortcut menu is displayed. When multiple windows are displayed, the window selection menu is displayed. After you select a window, the signal input shortcut menu is displayed after 3s.
	RPE	Press this button to set the RPE, with three levels available.
	Image mode	When a single window is displayed, the Image Mode shortcut menu is displayed. When multiple windows are displayed, the window selection menu is displayed. After you select a window, the Image Mode shortcut menu is displayed after 3s.

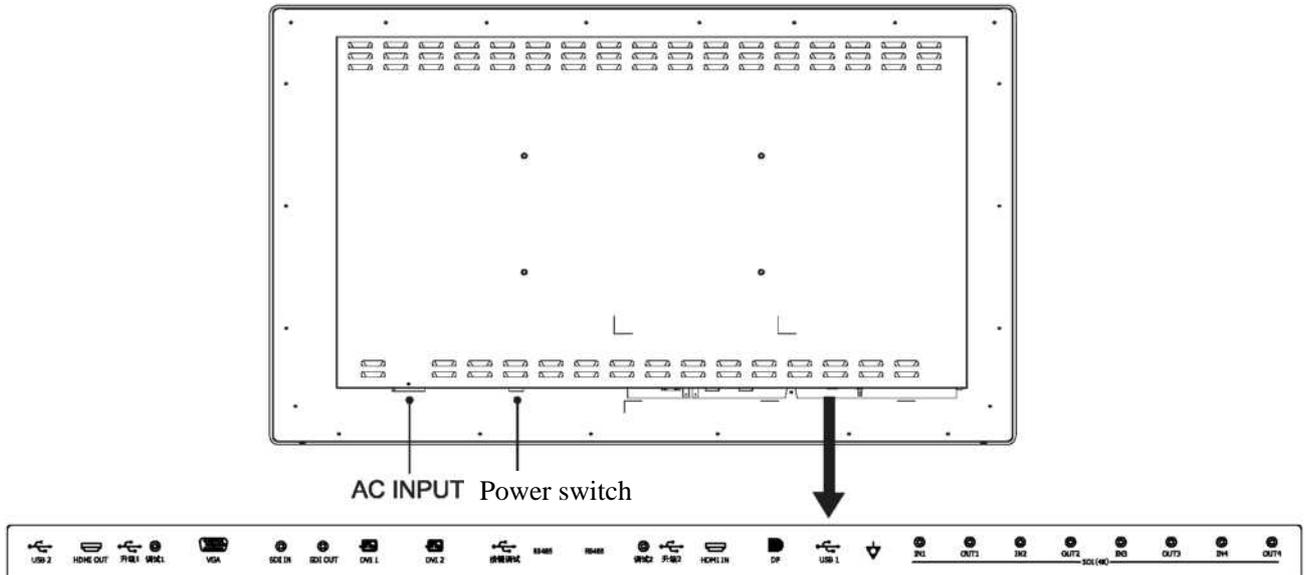
Power switch

It is used to power on and off the LCD monitor.

It takes more than 5s to restart the monitor, so that the system can be completely reset after power failure.

Monitor Components and Connectors

Monitor Input and Output Interfaces

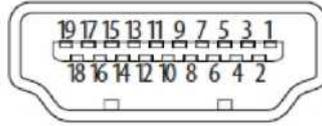


Interface Function	Connector Description
Software upgrade interface	Select upgrade 1 or upgrade 2 for different chips.
DVI signal input interface	DVI1 and DVI2
DP signal input interface	DP (DisplayPort 1.2)
VGA signal input interface	VGA
SDI signal input interface	SDI IN
SDI signal output interface	SDI OUT
HDMI signal input interface	HDMI IN
HDMI signal output interface	HDMI OUT
SDI(4K) signal input and output interface	SDI(4K) input and output interface, with four groups to be used concurrently
Type-B USB debugging interface	USB 1, USB 2
RS485 control signal input and output interface	RS485 <input checked="" type="checkbox"/> Note There are two RS485 interfaces, with one for input and one for output. The interfaces are compatible with full duplex and half duplex.
Equipotential terminal☆	Connect to an equipotential plug

Monitor Components and Connectors

Definition of Monitor Connector Pins

- Simple HDMI illustration



HDMI definition table

HDMI pin definition					
Pin	Definition	Pin	Definition	Pin	Definition
1	TMDS Data2+	8	TMDS Data0 Shield	15	SCL (I ² C Serial Clock for DDC)
2	TMDS Data2 Shield	9	TMDS Data0-	16	SDA (I ² C Serial Data Line for DDC)
3	TMDS Data2-	10	TMDS Clock+	17	DDC/CEC/ARC/HEC Ground
4	TMDS Data1+	11	TMDS Clock Shield	18	5 V (min. 0.055 A)
5	TMDS Data1 Shield	12	TMDS Clock-	19	Hot Plug Detect
6	TMDS Data1-	13	CEC		
7	TMDS Data0+	14	Reserved		

- Schematic Diagram of DVI Signal Input Port:



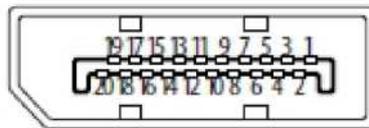
DVI Port Definition Table:

DVI pin definition					
Pin	Definition	Pin	Definition	Pin	Definition
1	TMDS Data2-	9	TMDS Data1-	17	TMDS Data0-
2	TMDS Data2+	10	TMDS Data1+	18	TMDS Data0+
3	TMDS Data2/4 Shield	11	TMDS Data1/3 Shield	19	TMDS Data0/5 Shield

Monitor Components and Connectors

4	NC	12	NC	20	NC
5	NC	13	NC	21	NC
6	DDC Clock	14	+5 V Power	22	TMDS Clock Shield
7	DDC Data	15	Ground (for +5 V)	23	TMDS Clock+
8	NC	16	Hot Plug Detect	24	TMDS Clock-

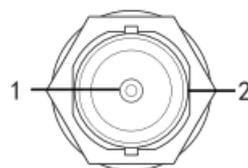
Simple DP interface illustration



DP definition table

DP pin definition			
Pin	Definition	Pin	Definition
1	ML_Lane 3 (n)	11	GND
2	GND	12	ML_Lane 0 (p)
3	ML_Lane 3 (p)	13	CONFIG1
5:4	ML_Lane 2 (n)	14	CONFIG2
5	GND	15	AUX CH (p)
6	ML_Lane 2 (p)	16	GND
7	ML_Lane 1 (n)	17	AUX CH (n)
8	GND	18	Hot Plug
9	ML_Lane 1 (p)	19	Return
10	ML_Lane 0 (n)	20	DP_PWR (3.3 V 500 mA)

Simple SDI interface illustration

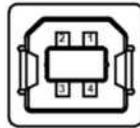


Monitor Components and Connectors

SDI definition

SDI pin definition	
Pin	Definition
1	RXD/TXD
2	GND

- ❑ Simple illustration for type-B USB interface



Definition of type-B USB interface

B-type interface pin definition			
Pin	Definition	Pin	Definition
1	+5 VDC	3	Data+
2	Data-	4	GND

Operational Instructions and Function Adjustment

Power-on/off

Power-on: Move the IO power switch to I. Then, the power is turned on and the monitor is powered on.
Power-off: Move the IO power switch to O. Then, the power is turned off and the monitor is powered off.

Note

If you do not need to use the monitor for a long time, turn off the power and disconnect the monitor from the power socket.

Power Indicator Status

If the green power indicator is on, the power is turned on and the monitor works normally.

When the monitor indicator color is orange, the power switch is turned on, and the equipment is in the power saving state.

If the power indicator is off, the power is turned off and the monitor is shut down.

Button Locking/Unlocking

To avoid misoperation, buttons can be locked and unlocked. Before using a button, you must unlock the button first.

Unlock buttons: When a button is locked, press and hold the  LOCK button for 3s. The button is unlocked and available, with the light color changed to white.

Lock buttons: When a button is unlocked, press and hold the  LOCK button for 3s. The button is locked and unavailable, with the light off.

Timeout locking: When a button is unlocked and is not operated in 120s, the system automatically locks the button and the button indicator is off.

Shortcut Menu Operation

Mode Selection

The following modes are available in the power-on state:

Option	Definition
Factory	The optimal display mode preset in the factory
DICOM	Compliant with DICOM Part 14
Hybrid GAMMA	Compliant with Gamma and DICOM, with support for custom parameter settings.

Operational Instructions and Function Adjustment

User1	Compliant with Gamma, with support for custom parameter settings
User2	Compliant with Gamma, with support for custom parameter settings
User3	Compliant with Gamma, with support for custom parameter settings
User4	Compliant with Gamma, with support for custom parameter settings
User5	Compliant with Gamma, with support for custom parameter settings
User6	Compliant with Gamma, with support for custom parameter settings

Basic Menu Operations

Main Menu Item	Submenu	Submenu and Item
Picture 	Image mode	Preset, DICOM, Hybrid GAMMA, User1, User2, User3, User4, User5, and User6
	Backlight	0-100
	Gamma	DICOM/1.8/2.0/2.2/2.4/2.6/γc
	Color Temp.	6500K/7500K/8500K/9300K/Custom1/Custom2
	Brightness	0-100
	Contrast	0-100
	Saturation	0-100
	Sharpness	0-10
	Color Gamut Management	BT709 and BT2020
	RPE	Off, Level1, Level2, and Level3
NR	Off, N1, N2, and N3	
Display Settings 	Display Mode	Single Window, PIP, Fill PBP, Level PBP, Three Window1, Three Window2, and Four Window
	Swap	
	PIP Setting	PIP Size and PIP Position
	Image Freezing	Freeze and Normal
	Image Rollovers	Normal, Rotation, and Mirror
	Image Rotating	Normal, Rotate Left, and Rotate Right
	Scale	Full Scale Screen Dot to Dot 4:3 5:4
VGA Auto Adjust		
Signal Input 	(Screen for allocating window signals in each mode)	HDMI SDI(4K) SDI DP

Operational Instructions and Function Adjustment

		DVI1 DVI2 VGA
OSD Settings 	Language	Chinese and English
	Menu Location	Upper Left, Bottom Left, Upper Right, Bottom Right, and Center
	Time-out	10s, 20s, 30s, 60s, and 120s
System Settings 	SDI(4K) Setting	Square Division and 2 Sample Interleave
	HDMI Output Resolution	1920x1080P 60 Hz and 3840x2160P 60 Hz
	Logo Set	Enable and Disable
	Power Saving	Enable and Disable
	Monitor Info	Model, SN, Panel Resolution, Product Usage Time, and Backlight Usage Time
	Mode Rename	User modes 1 to 6 are in a list.
	Factory Reset	Confirm and Cancel

CAUTION

- Gray items on a menu are unavailable in the current mode and state.

Detailed Operation Description

Picture

In the boot state, this menu is used to adjust parameters displayed in different image modes.

Adjustment Procedure

- Press  **MENU** to call out the **User** menu.
- Press **▲UP** or **▼DOWN** to select , and then press  **MENU** to enter the **Picture** menu.
- Press **▲UP** or **▼DOWN** to select a target item and then press  **MENU** and **OK** to enter the lower-level menu.
- In each submenu, press the **▲ UP** or **▼ DOWN** button to select an option or adjust parameters.
- Press  **SWAP** to return to the previous menu or exit the main menu.

Operational Instructions and Function Adjustment

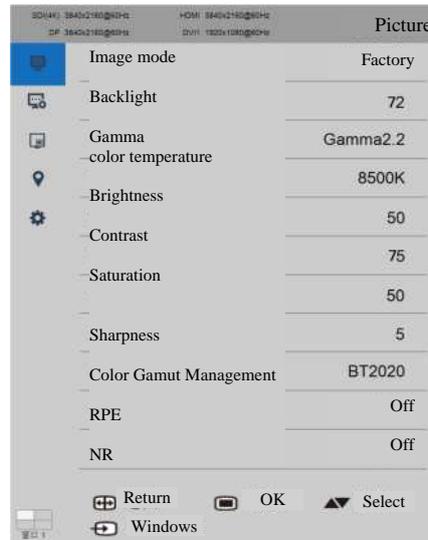


Image mode

This menu is used to switch image modes for system storage, as well as to switch image parameters. Adjustment options: Preset, DICOM, Hybrid GAMMA, User1, User2, User3, User4, User5, and User6.

Backlight

Adjust the backlight brightness for image display.

Adjustment range: 0-100.

Gamma

Adjustment options: DICOM/1.8/2.0/2.2/2.4/2.6/ γ c.

Note

- γ C is a Gamma curve customized based on the user demands.

color temperature

It is used to adjust the color temperature of the displayed image.

Adjustment option: 6500K/7500K/8500K/9300K/Custom1/Custom2.

Note

- You can select **Custom1** or **Custom2** to adjust the color temperature value. The three color coordinates R, G, B can be adjusted from 0 to 100.

Brightness

It is used to adjust the brightness of the displayed image.

The value range is 0-100.

Contrast

Operational Instructions and Function Adjustment

It is used to adjust the contrast of the displayed image.

The value range is 0-100.

Saturation

Adjust the image saturation.

Adjustment range: 0-100.

Sharpness

Adjust the image resolution.

Adjustment range: 0-10.

Color Gamut Management

This menu is used to switch the color gamut range of images.

Adjustment options: BT709 and BT2020.

RPE

This menu is used to adjust the RPE effect of images.

Adjustment options: Off, Level1, Level2, and Level3.

NR

This menu is used to adjust the monitor NR level.

Adjustment options: Off, N1, N2, and N3.

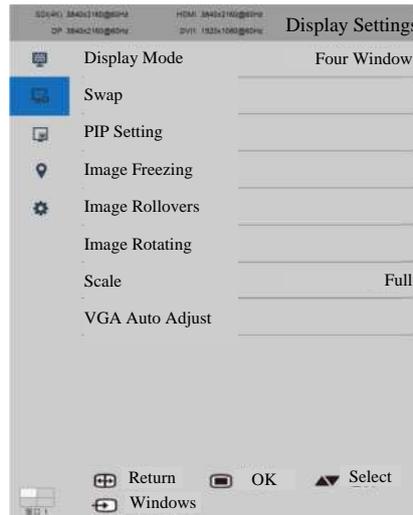
Display Settings

In the boot state, this menu is used to adjust the display status of an image on the screen.

Adjustment Procedure

- Press  **MENU** to call out the **User** menu.
- Press the **▲ UP** or **▼ DOWN** button to select , and press the  **MENU** button to access the **Display Settings** menu.
- Press the **▲ UP** or **▼ DOWN** button to select an adjustment item, and then press the  **MENU** button to confirm the adjustment and access the submenu level. In each submenu, press the **▲ UP** or **▼ DOWN** button to select an option or adjust parameters.
- Press  **SWAP** to return to the previous menu or exit the main menu.

Operational Instructions and Function Adjustment



Display Mode

This menu is used to adjust the multi-window mode of the monitor.

Adjustment options: Single Window, PIP, Fill PBP, Level PBP, Three Window1, Three Window2, and Four Window

Note

- You can press the **Display Mode** button to display the **Display Mode** menu for setting.

Swap

This menu is used to exchange the window positions on the screen in a multi-window display mode.

Note

- This menu is available only for the Two Window and Three Window modes. No position change occurs in the Four Window mode.
- During the exchange, signal source positions change clockwise on the screen.

PIP Setting

This menu is used to adjust the PIP size and positions in the PIP display mode.

Adjustment options: PIP Size (Large PIP, Medium PIP, and Small PIP), and PIP Position (Upper Left, Bottom Left, Upper Right, and Bottom Right)

Freeze Frame

It is used to freeze or unfreeze the displayed image.

Options are Freeze and Normal.

Note

The Image Freezing function is supported only when a single window is displayed.

Operational Instructions and Function Adjustment

Flip Pattern

It is used to switch the image flip mode.

Options are Normal, Mirror, and Rotation.

Note

- **Rotation** is used to rotate the image by 180° along the horizontal direction.
- **Mirror** is used to rotate the image by 180° along the vertical direction.
- The **Flip Pattern** function is only available in **Single** mode.

Image Rotating

Rotate the image left or right by 90°.

Adjustment options: Normal, Rotate Left, and Rotate Right.

The Image Rotating function is supported only when a single window is displayed.

Scale

Set the Screen Scale mode for the current image.

Option	Definition
Full	The image is displayed in full screen mode. The image may be deformed due to the difference between the image resolution and screen resolution.
Scale Screen	The image is enlarged. A horizontal or vertical blank stripe may appear on the image due to the difference between the image resolution and screen resolution.
Dot to Dot	Center the image according to the original size.
5:4	The displayed image may have a blank area in the horizontal or vertical direction.
4:3	The displayed image may have a blank area in the horizontal or vertical direction.

Note

- Only the Full, Scale Screen, and Point to Point modes are supported when multiple windows are displayed.

VGA Auto Adjust

This menu is used to automatically adjust the image position and phase when a VGA signal is displayed.

Note

This menu is unavailable when other signal sources are displayed.

Operational Instructions and Function Adjustment

❖ Signal Input

Adjustment steps:

- Press  **MENU** to call out the **User** menu.
- Press the **▲ UP** or **▼ DOWN** button to select , and press the  **MENU** button to access the **Signal Input** menu.
- Press the **▲ UP** or **▼ DOWN** button to select a window in a display mode, and then press the  **MENU** button to confirm the selection and access the signal source list. In the signal source list, press the **▲ UP** or **▼ DOWN** button to select a specified signal source and then press the **MENU** button to confirm the selection.
- Press the  **SWAP** button to access the previous menu.

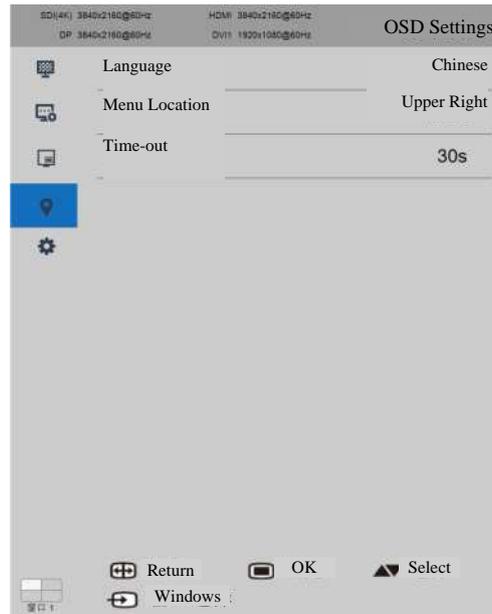


❖ OSD Settings

Adjustment Procedure

- Press  **MENU** to call out the **User** menu.
- Press **▲ UP** or **▼ DOWN** to select , and then press  **MENU** to enter the **OSD** menu.
- Press the **▲ UP** or **▼ DOWN** button to select an adjustment item, and then press the  **MENU** button to confirm the adjustment and access the submenu level. In each submenu, press the **▲ UP** or **▼ DOWN** button to select an option or adjust parameters.
- Press  **SWAP** to return to the previous menu or exit the main menu.

Operational Instructions and Function Adjustment



❑ Language

It is used to set the display language of the **OSD** menu.

Adjustment options: Chinese and English

❑ Menu Location

It is used to set the display position of the **User** menu.

Options are Upper Left, Bottom Left, Upper Right, Bottom Right, and Center.

❑ Time-out

It is used to set the display time of the **User** menu.

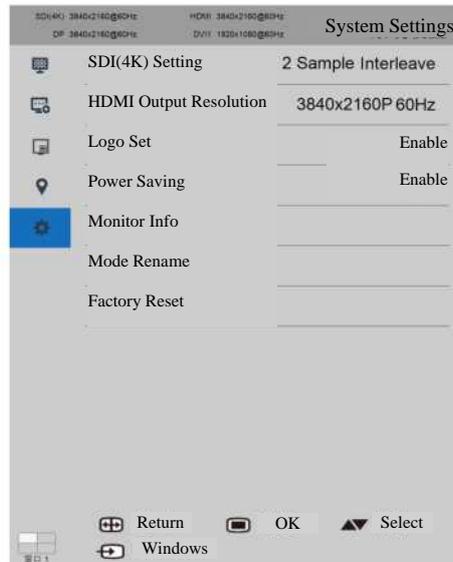
Adjustment options: 10s, 20s, 30s, 60s, and 120s.

❖ System Settings

Adjustment Procedure

- Press **MENU** to call out the **User** menu.
- Press the **▲ UP** or **▼ DOWN** button to select **⚙️**, and press the **MENU** button to access the **system settings** menu.
- Press the **▲ UP** or **▼ DOWN** button to select an adjustment item, and then press the **MENU** button to confirm the adjustment and access the submenu level.
- In each submenu, press the **▲ UP** or **▼ DOWN** button to select an option or adjust parameters.
- Press **⏪ SWAP** to return to the previous menu or exit the main menu.

Operational Instructions and Function Adjustment



SDI(4K) Setting

This parameter is used to set the signal source format in the SDI(4K) channel.

Adjustment options: Square Division and 2 Sample Interleave.

HDMI Output Resolution

This menu is used to adjust the resolution type for HDMI output.

Adjustment options: 1920x1080P 60Hz and 3840x2160P 60Hz

Logo Set

It is used to set whether to display the Hisense LOGO upon power-on. Options are Enable and Disable.

Note

- The default value is Enable.

Power Saving

It is used to set whether to enable or disable the power saving function. Options are Enable and Disable.

Note

- Disable: When the monitor detects that the input port has no signal input, it keeps the backlight on.
- Enable: When no signal input is detected through an input interface, the monitor automatically enters the power saving mode.
- The power saving function is **disabled** initially. Before the monitor enters the power saving mode, the system prompts "Preparing to enter the power saving mode..."

Operational Instructions and Function Adjustment

Monitor Info

View the information about the local monitor.

Available options: Model, SN, Panel Resolution, Product Usage Time, and Backlight Usage Time.

Mode Rename

It is used to rename the **User** mode.

Note

- Only the name of **User1** to **User6** can be renamed.
- Only a name containing eight characters, including English letters, numbers, and spaces is supported.

Factory Reset

It is used to rest the monitor menu settings.

Adjustment options: Confirm and Cancel.

Note

If you choose **Confirm**, all menu parameters are restored to the default factory values.

Troubleshooting

Troubleshooting

Before repair, check the following table for possible fault causes.

If the fault persists after you follow the instructions in the User Guide, you can consider repair.

Fault Symptom	Solution
The power indicator does not light on.	<ul style="list-style-type: none"> ● Check whether the power plug is securely connected to the socket. ● Unplug and plug the power connector and restart the monitor. ● Check whether the power button is switched to the I side.
The power indicator lights on in orange.	<ul style="list-style-type: none"> ● Check whether the signal cable is securely connected. ● Check whether the output resolution of the connected signal source is the optimal resolution required by this product. ● Press and hold the “” button and press the INPUT1 or INPUT2 button to select the interface of the connected signal source. ● Restart your personal computer or the connected signal source equipment.
The image is blurred or has interference stripes or obvious color edges on characters.	<ul style="list-style-type: none"> ● Check whether wiring is secure. ● It is recommended that the connection cables delivered with the LCD monitor be used. ● Restart the PC or the connected signal source device.
The image is abnormal.	<ul style="list-style-type: none"> ● Check whether the output resolution of the current signal source is appropriate. ● Restart the PC or the connected signal source device.
The screen has blurs (color irregular pinstripes) wholly or partially.	<ul style="list-style-type: none"> ● This problem occurs when the signal source output format does not match with this product. Please check the signal output format. ● Restart the PC or the connected signal source device.
The image is not displayed on the full screen, with blurs on the edges.	<ul style="list-style-type: none"> ● A similar phenomenon occurs when the signal source output format does not match that of the monitor. Please check the signal output format.

Maintenance Disclaimer

Maintenance Disclaimer

- ❑ Qingdao Hisense Medical Equipment Co., Ltd. guarantees that within two years from the date of purchase of this product, if the original purchaser encounters a failure when using the product according to this manual, for example, the equipment is faulty, a component is damaged, or the LCD monitor brightness fails to reach that recommended in the manual, we will repair or replace the product based on our judgment.
- ❑ The warranty period is limited to three years from the date of purchase when the product is used with the brightness recommended brightness described in the user manual. The brightness guarantee period applies when the service time of the product is not more than 30,000 hours (brightness is 300 cd/m²).
- ❑ Hisense will not take warranty responsibility for the following situations:
 - The product is faulty due to the buyer's retrofitting, modification, overuse and misuse, accidents, incorrect installation, natural disasters, or improper maintenance by a third party other than Hisense and authorized distributors.
 - The product ages because it has been used with brightness above the recommended value in the User Guide for a long time.
 - The product is faulty and damaged due to external equipment.
 - The product is faulty because its original serial number is modified or eliminated.
 - Any component of the product ages, especially the LCD screen, accessories, consumables, and sensors.
- ❑ During repair, Hisense and authorized distributors will use replacement parts that meet the quality control standards Hisense. Hisense shall not be liable for the infringement damage caused by the buyer's unreasonable use or unauthorized disassembly, repair, or alteration.
- ❑ Hisense or our authorized distributor will not be liable for any damage or loss of data or other information stored in any media or any component of any product after the product is repaired by Hisense or our authorized distributor.
- ❑ The warranty period of any product that has been installed as a replacement part or repaired based on the instructions of the User Guide will terminate at the end of the original warranty period.

Safety Information

- ❑ According to the test result, this equipment complies with the following standards:
GB4943.1-2011 Information technology equipment - Safety, GB9254-2008 Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement, GB17625.1-2012 Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase), EMC: IEC/EN 60601-1-2:2014, and EN 55011/CISPR 11 Class B.
- ❑ When the LCD monitor is used with a medical imaging system, ensure that the equipment connected to the LCD monitor's signal I/O complies with medical equipment standards. All external connections with other peripheral equipments must comply with the requirements of Article 16 in IEC 60601-1 of edition 3.1, or the medical electrical system requirements of Table BBB.201 in IEC 60601-1-1.
- ❑ The electromagnetic waves emitted by power supply equipment may affect the use of the LCD monitor and damage it. Install the LCD monitor in an environment free of electromagnetic wave interference.
- ❑ If the LCD monitor generates interference or reacts to interference, take one or more of the following measures:
 - Adjust the position or direction of the affected equipment.
 - Increase the distance between the LCD monitor and the affected equipment.
 - Consult Hisense.
- ❑ Please use the power line provided by our company and ground it correctly.
- ❑ Do not modify or retrofit the LCD monitor by yourself. Failure to comply with cause interference and damage to the LCD monitor.
- ❑ Equipment classification
 - Anti-lightning class: Class I
 - operating mode: continuous
 - Protection level: IP65 for the front surface, and IP22 for other surfaces
 - Medical equipment class: (MDR 2017/745): Class I
 - EMC level (IEC 60601-1-2): Group I Class B

Compliance Information

Intended Use

HME8C55E is a monitor for displaying images from cameras or other systems in medical environments.

FCC class B

This device conforms to requirements of Federal Communications Commission (FCC). Equipment operations are restricted by the following two conditions: (1) This equipment cannot cause harmful interferences, (2)and this equipment must be resistant to any interferences, including interferences that may cause unnecessary operations. According to the test result, this equipment complies with the restrictions on Class B digital equipments in Part 15 of the FCC regulations. These restrictions are intended to provide reasonable protection against harmful interference when the device is used in residential installation environments.

This device can generate, utilize, and radiate RF energy. If it is not installed and used according to this manual, it may cause harmful interference to radio communication. However, we do not guarantee that this equipment will not cause interferences in a specific installation environment. If this equipment does cause interferences to radio or display reception (you can judge by turning on or off the equipment), we recommend that you take one or more of the following measures to eliminate the interferences:

- . Adjust the direction or position of the receiving antenna.
- . Make the equipment far away from the receiving equipment.
- . Insert the equipment plug into the socket of another circuit to depart from the receiving equipment circuit.
- . Seek help from agents or experienced radio and monitor technicians.

Environmental Protection Information

Environmental Protection Information

Chinese Mainland RoHS

- The LCD monitor meets the environmental protection requirements of the *Administrative Measures for Limiting the Use of Hazardous Substances in Electrical and Electronic Products*.
- During its environmental-friendly service life, the LCD monitor does not cause leakage and precipitation of harmful substances and other problems affecting the health of users in the process of use, so it can be used safely.
- Waste recycling precautions

If the LCD monitor is no longer required or has reached the end of its service life, please abide by the laws and regulations on recycling and treatment of waste electrical and electronic products of your country, and send the LCD monitor to the local manufacturer with state qualification of waste recycling and treatment. The recycling manufacturer shall properly dispose of the components

containing harmful substances.

- Environmental-friendly service life

The environment protection service life mark printed on the nameplate and storage box of this product indicates that the environment protection service life of electrical and electronic products is 10 years.

Environmental-friendly
service life identifier



Names and content of harmful substances in the LCD monitor

Component	Harmful Substance					
	Lead and Its Compounds	Mercury and Its Compounds	Cadmium and Its Compounds	Hexavalent Chromium Compounds	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
Circuit board assembly	X	○	○	○	○	○
LCD screen	X	○	○	○	○	○
Power cable and connection cable	X	○	○	○	○	○
Non-flame-retardant plastics and polymer components	○	○	○	○	○	○
Flame-retardant plastics and polymer components	○	○	○	○	○	○
Metal components	X	○	○	○	○	○

This table is prepared based on SJ/T 11364.

○: The content of this harmful substance in all homogeneous materials of this component is below the limit specified in GB/T 26572.

X: The content of the harmful substance in at least one homogeneous material of the components exceeds the limits specified in GB/T 26572.

EU RoHS

- Directive 2011/65/EC restricts certain hazardous substances in electrical and electronic devices.
- According to component suppliers' declaration, this product complies with RoHS requirements.

Biological Hazards and Return

This device has specific structure, specifications, and manufacturing materials which are easy to wipe and clean, and is suitable for multiple purposes in hospitals and other medical environments where regular cleaning procedures are established. However, to prevent the spread of infectious agents, this device cannot be used in bio-polluted environments. Therefore, the customer shall solely bear the risk of using this equipment in a biologically polluted environment. If this equipment is used with unavoidable potential biological pollution, the customer must perform purification treatment by following the latest version of the ANSI/AAMI ST35 standard for each product that needs to be returned to the seller (or authorized service provider) for maintenance, repair, rework, or troubleshooting. The customer also must affix at least one yellow label on the top of the package of the returned product to indicate that the product has been purified. If the returned product does not provide such external purification label and/or such description is lost, the seller (or authorized service provider) may refuse to receive the product and ship it back to the customer, and the freight shall be borne by the customer.

Cleaning and Disinfection

❖ Note

- When cleaning the monitor, disconnect the power cable from the main power supply.
- Do not scratch the monitor surface with any hard or frosted material.
- You can use a soft damp cloth to wipe off the dust, fingerprints, and oil stains (a small amount of mild detergent can be dipped).
- Dry the water drops immediately.

❖ Allowed Cleaning Solutions

- Alcohols (75% alcohol or 70% isopropanol)
- Glutaraldehyde (2.4%) solution
- Optical cleaning agents and similar products

Legal Disclaimer

Disclaimer

Although we have made every effort to ensure the technical accuracy of this document, we are not responsible for possible errors. We aim to provide you with a document as accurate and practical as possible. If you find any mistakes in the document, please inform us.

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Symbol Description

Symbols on the Device

On the device or power supply, you can see the following symbols (this list may not include all symbols):

	Indicates that the equipment complies with the requirements of the applicable EC directives.
	This device meets the requirements of Part 15 of FCC regulations (Class A or Class B).
	This device has been certified by Canadian and American UL regulations.
	This device has been certified by CCC regulations.
	This device has been certified by KC regulations.
	USB connector on the device.
	Manufacturer information.
	Date of manufacturing.
	Temperature limit.
	Device SN.
	Category number.
	Warning: Dangerous Voltage.
	Caution: Refer to the documents delivered with the monitor.
	WARNING
	Refer to the user manual.
	Marked according to the EU Waste Electrical and Electronic Equipment (WEEE) Directions.

Symbol Description

	Direct current (DC).
	Power-on.
	Power-off.
	Grounding device.
	EU authorized representative information.
	The terminal of the device places different parts of the system at the same potential.
	Humidity limit.
	Atmospheric pressure limit.

Annex

Annex A Allowed Signal Formats

All-window Display Channel	DVI	HDMI	DP	SDI	SDI(4K)
Resolution	1024 x 768 @ 60 Hz	1024 x 768 @ 60 Hz	1024 x 768 @ 60 Hz	720/59.94p	4096 x 2160p 30
	1280 x 1024 @ 60 Hz	1280 x 1024 @ 60 Hz	1280 x 1024 @ 60 Hz	720/60p	4096 x 2160p 50
	1600 x 1200 @ 60 Hz	1600 x 1200 @ 60 Hz	1600 x 1200 @ 60 Hz	720/50p	-
	1920 x 1080 @ 60 Hz	1920 x 1080 @ 60 Hz	1920 x 1080 @ 60 Hz	1080/59.94i	4096 x 2160p 60
	1920 x 1080 @ 59.94 Hz	1920 x 1080 @ 59.94 Hz	1920 x 1080 @ 59.94 Hz	1080/60i	3840 x 2160p 30
	1920 x 1200 @ 60 Hz	1920 x 1200 @ 60 Hz	1920 x 1200 @ 60 Hz	1080/50i	3840 x 2160p 50
	2048 x 1536 @ 60 Hz	2048 x 1536 @ 60 Hz	2048 x 1536 @ 60 Hz	1080/50p	-
	3840 x 2160 @ 30 Hz	3840 x 2160 @ 30 Hz	3840 x 2160 @ 30 Hz	1080/60p	3840 x 2160p 60
	3840 x 2160 @ 60 Hz	3840 x 2160 @ 60 Hz	3840 x 2160 @ 60 Hz	-	-

PBP Display Channel	DVI	HDMI	DP
Resolution	640 x 480 @ 60 Hz	640 x 480 @ 60 Hz	640 x 480 @ 60 Hz
	800 x 600 @ 60 Hz	800 x 600 @ 60 Hz	800 x 600 @ 60 Hz
	1024 x 768 @ 60 Hz	1024 x 768 @ 60 Hz	1024 x 768 @ 60 Hz
	1280 x 1024 @ 60 Hz	1280 x 1024 @ 60 Hz	1280 x 1024 @ 60 Hz
	1920 x 1080 @ 60 Hz	1920 x 1080 @ 60 Hz	1920 x 1080 @ 60 Hz
	1600 x 1200 @ 60 Hz	1600 x 1200 @ 60 Hz	1600 x 1200 @ 60 Hz
	1920 x 2160 @ 60 Hz	1920 x 2160 @ 60 Hz	1920 x 2160 @ 60 Hz

Computer signal formats supported by the VGA port

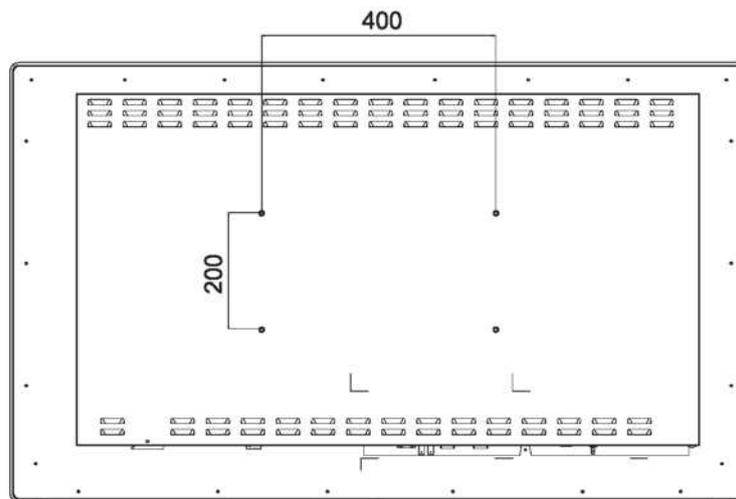
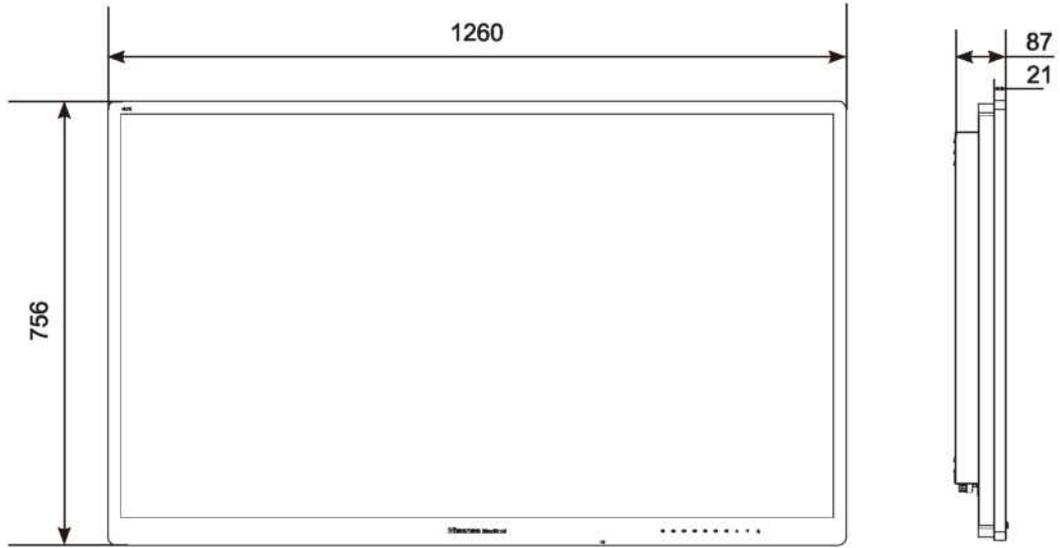
Resolution	Refresh Frequency
800 x 600	60 Hz
1024x768	60 Hz
1920x1080	60 Hz

Remarks:

* This signal only supports the YCbCr 4:2:0 format.

Annex

Appendix B Monitor Size (Unit: mm)



Hisense Medical

海信医疗

Qingdao Hisense Medical Equipment Co., Ltd.

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