

# **LCD** Monitor





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# Security and Maintenance

# 1.1 Product Security Warning

This series product has been passed the thoroughly security test before it shipped out of the manufacturer. It is to maintain the operation security and remove the risk of electric shock. In the product and the user's manual, all the warning fonts or the labels are highlighted to guarantee the operation safety, protect the device, and ensure all the persons are away from the risk of accident and injury. The warning significance as follows:

Marning OAny ignorance of this symbol may result in improper performance and error operation, which may cause death or other serious injuries to the operator and other persons.

⚠ **Notice** ♠ Any ignorance of this symbol may result in improper performance and error operation, which may cause personal injury or component damage.

# 1.2 Environment

- This series product is designed to use in the indoor environments only. It is not suitable
  for the outdoor use. Please make sure there is corresponding air conditioning device in
  the indoor environments. Please keep it away from the humidity environments or the
  environments of too much dust.
- Please do not block the vent or the flow of the air around the product. The poor ventilation may result in high temperature in the internal device and may cause fire.

# 1.3 Usage

#### Screen Protector

The screen protector is designed to protect the screen, preventing scratches during transportation. Please take it off before installation.

Please use absorbent ball or mull to clean the screen surface when it is dirty. Do not use ketone material.

If there is leakage of liquid crystal, please keep it away from your body and eyes.

#### Remote Control

Please take out batteries in the remote control if not used for long term.

At time of battery change, please follow the right polarity (+, -). Otherwise, battery may be damaged and may cause battery liquid leakage, which may result in fire, personal injury or product damage.

Use standard battery only, and do not mix new and used batteries. Otherwise, it may cause battery liquid leakage, which may result in battery damage, fire, personal injury or product damage.

# Accessories Inspection

Please check the accessories according to the following Chart 2– 1. (Note: The following figure list is equipped with standard configuration, so some special users should refer to the packing list).

Accessories Name	Quantity
LCD Monitor	1
AC Power Line	1
VGA Cable (1.5m/1 male on both	1
side )	
Remote Control (one pair of	1(Ctandarda yaru bu aariga)
batteries included, 1.5V2 )	1(Standards vary by series)
Screw (M6)	8
User's Manual	1
Base	optional
Wall Mount	optional

Chart 2-1

02\_\_\_\_\_\_03

# Product Introduction

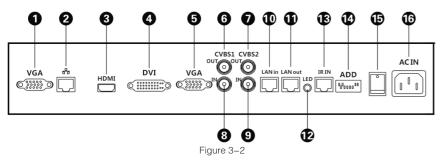


Figure 3-1

The product is shown as the above. Please see Figure 3-1.

# 3.1 Port

The port interface and its description are shown as follows, please see Figure 3–2 and Chart 3–1.



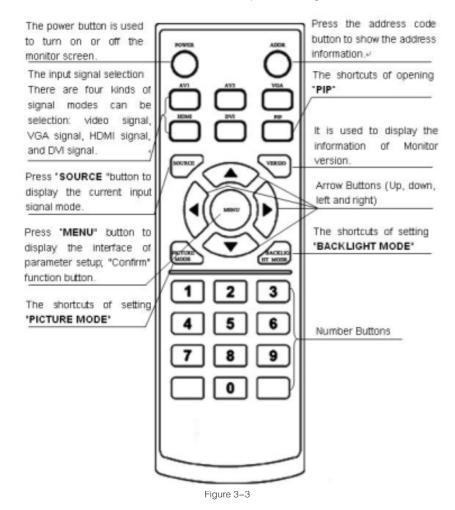
SN	Name	Port Description					
1	VGA	VGA signal input (optional)					
2	IR IN	RJ45Port input (optional)					
3	HDMI	HDMI signal input (not available for network decode card)	1000 v 1000/601 l-				
4	DVI DVI(-D) signal input		1920 × 1080/60Hz downward compatible				
5	VGA VGA signal input		η				
6	Video1 OUT	CVBS1 signal output(1Vp-p ,75Ω)					
7	Video2 OUT	CVBS2 signal output(1Vp-p ,75Ω)					
8	Video1 IN	CVBS1 signal input(1Vp-p ,75Ω)					
9	Video2 IN	CVBS2 signal input(1Vp-p,75Ω)					
10	LAN in	COM 232signal input (RJ45)					
11	LAN out	COM 232signal output (RJ45)					
12	LED	LED indication					
13	IRIN	RJ45 port input (remote receiving )					
14	ADD	Address dial-up switch	Extension use				
15	Power	AC input switch					
16	AC OUT	AC output plug					

Chart 3-1

04\_\_\_\_\_\_05

# 3.2 Remote Control Diagram

The remote control interface is shown as follows; please see Figure 3-3.





# **Remote Control Address Setup**

When there are more than two monitors in use, you can select address to control. In other words, you can control those monitors one by one.

# 4.1 Hardware Address Setup

Hardware address setup is shown in Figure 4-1.

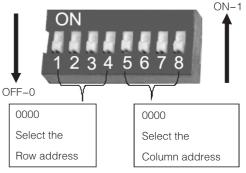


Figure 4-1

The selected port of hardware address ADD: using 8 digit DIP switches, and the first 4 switches (1,2,3,4) are Row addresses, and the last 4 switches (5,6,7,8) are Line addresses. In Figure 4–1, if you dial up, it will be 1, otherwise it will be 0. Hardware address is binary. The biggest splicing that can be supported is  $1111 \times 1111$ .

The binary digits corresponding to the Arabic Numbers 1~15 are as following:

Arabic	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Binary	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111

#### For example:

- ◆ Row: 1, Line:1

  If the corresponding binary digits of 1 is 0001, then the 8 dial setups should be (0 0 0 1 0 0 0 1).
- Row: 2, Line: 3
   If the corresponding binary digits of the row address 2 is 0010, and that of the line address 3 is 0011,

then the 8 dial setups should be(0 0 1 0 0 0 1 1).

After finishing the setup, you need to restart the device to make the equipment take effect. The equipment will save the setup automatically, and you do not need to set it later. If you need to change the address, please power it again after updating the address.

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# 4.2 Software Address Setup

Press the address button on remote control, menu will pops up on screen (It will automatically detect hardware address). Set the lower row and line address XX (Arabic) to the same address code in upper row and line with number keys. Press menu button to confirm. For example, in Figure 4–2 the automatically detected address is (row: 1, line: 1), then set the lower address to (row: 01, line: 01) and press menu button.



Figure 4-2

After you have set address, you can use remote control as normal, the control period is 60s. It becomes invalid after 60s, and if you want to re-control, you must set remote control address.

When you do not need to set remote control address, switch all hardware dial-up to off (effective after restart). Now, you can use remote control as normal.



# **Parameter Setup**

# 5.1 Video 1/Video 2

Press menu on remote control to display main menu. In main menu interface, press ▼ on remote control to exit. See Figure 5–1.

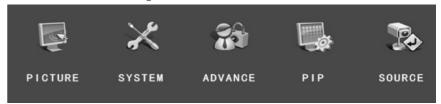


Figure 5-1

# **5.1.1 Picture Setup**

In main menu interface, select picture via arrow key ◀ ▶ and press menu key on remote control to enter picture setup interface.

Select item to adjust via ▲ ▼ arrow key and press menu key on remote control to enter parameter setup interface. See Figure 5–2.

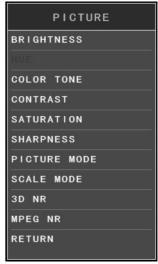


Figure 5-2

#### **♦ BRIGHTNESS**

Brightness adjusts overall brightness of picture. You can adjust via ◀ ▶ key on remote control. See Figure 5–3.



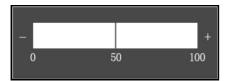


Figure 5-3

#### **♦** HUE

HUE function is available under NTSC standard only. You can adjust via ◀ ▶ key on remote control. See Figure 5–4.

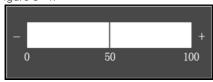


Figure 5-4

#### **♦ COLOR TONE**

Color tone adjusts overall tone of picture. You can adjust via ▲ ▼ key on remote control. See Figure 5–5.



Figure 5-5

### **♦ CONTRAST**

Contrast adjusts overall layering of picture. You can adjust via ◀ ▶ key on remote control. See Figure 5–6.

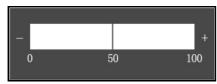


Figure 5-6

# **♦ SATURATION**

Saturation adjusts color depth of picture. You can adjust via ◀ ▶ key on remote control. See Figure 5–7.

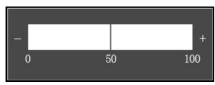


Figure 5-7

#### **♦ SHARPNESS**

Sharpness adjusts the definition of picture. The higher the sharpness, the higher the definition will be, but please note that high definition leads to obvious noise. You can adjust via ◀ ▶ key on remote control. See Figure 5–8.

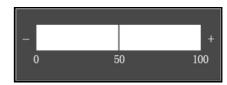


Figure 5-8

#### **♦ PICTURE MODE**

Picture mode adjusts overall effect of picture. You can adjust via ▲ ▼ key on remote control. See Figure 5–9.



Figure 5-9

#### **◆ SCALE MODE**

Scale mode adjusts display scale of picture. You can adjust via ▲ ▼ key on remote control. See Figure 5–10.



Figure 5-10

#### ♦ 3D NR

3D NR adjusts noise level to reduce picture noise. You can adjust via ▲ ▼ key on remote control. See Figure 5–11.



Figure 5-11

#### **♦ MPEG NR**

MPEG NR soften picture to reduce noise thus improve quality. You can adjust via ▲ ▼ key on remote control. See Figure 5–12.





Figure 5-12

### **♦ RETURN**

By pressing menu key on remote control, you can exit picture setup interface.

#### 5.1.2 System

In main menu interface, select system via arrow key ◀ ▶ and press menu key on remote control to enter system setup interface.

Select item to adjust via ▲ ▼ arrow key and press menu key on remote control to enter parameter setup interface. See Figure 5–13.



Figure 5-13

#### **♦ RESETTING**

Resetting resets parameters to default. You can adjust via ▲ ▼ key on remote control. See Figure 5–14.

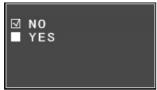


Figure 5-14

#### **◆ BACKGROUND MODE**

Background mode sets background color when there is no signal on screen. You can adjust via ▲ ▼ key on remote control. See Figure 5–15.



Figure 5-15

#### **◆** OSD-LANGUAGE

OSD language sets language of menu. You can adjust via ▲ ▼ key on remote control. See Figure 5–16.



Figure 5-16

#### **♦ SLEEP TIMER**

Sleep timer sets standby after a certain period of timer. You can adjust via ◀ ▶ key on remote control. See Figure 5–17.



Figure 5-17

#### **♦ BACKLIGHT MODE**

Backlight mode sets backlight brightness of screen. You can adjust via ▲ ▼ key on remote control. See Figure 5–18.



Figure 5-18

#### **♦ VERSION**

Press menu key on remote control to display version information. If you upgrade the system, version information will automatically change. See Figure 5–19.

GENERAL\_DHL××\_GT16\_19201080 \_BIOS\_V2.000.0000.0.R.130101

Figure 5-19

## **♦** DCC

DCC adjusts overall layering of dynamic picture. You can adjust via ▲ ▼ key on remote control. See Figure 5–20.



Figure 5-20

### **♦ OSD-DURATION**

OSD-duration adjusts duration of menu display on screen. You can adjust via ◀ ▶key on remote control. See Figure 5–21.



Figure 5-21

#### **♦ RETURN**

By pressing menu key on remote control, you can exit system setup interface.

#### 5.1.3 Advance

In main menu interface, select advance via arrow key ◀ ▶ and press menu key on remote control to enter advance setup interface. See Figure 5–22.



Figure 5-22

# Initial password:8888.

In advance setup interface, professional staff can set: parameter set, picture mode, color tone, overscan, factory reset and ADC adjust. See Figure 5–23.

Warning: Non-professional staffs are not allowed to modify advance setup. The manufacturer is not liable for any problem resulted from modification done by non-professional staff.



Figure 5-23

#### 5.1.4 PIP

In main menu interface, select PIP via arrow key ◀ ▶ and press menu key on remote control to enter PIP setup interface.

Select item to adjust via ▲ ▼ arrow key and press menu key on remote control to enter parameter setup interface. See Figure 5–24.



Figure 5-24

#### **♦** MULTI-PICTURE

Multi-picture enables or disables multi-picture mode and set its display mode. You can adjust via ▲ ▼ key on remote control. See Figure 5–25.



Figure 5-25

When multi-picture is off, you cannot adjust: sub source, h-position, v-position, border color, swap, h-size and v-size.

#### **♦ SUS SOURCE**

Sub source sets signal format of sub window in dual window mode. You can adjust via ▲ ▼ key on remote control. See Figure 5–26.



Figure 5-26

#### ♦ H-POSITION

H–position adjusts horizontal position of sub window. You can adjust via ◀ ▶ key on remote control. See Figure 5–27.

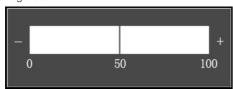


Figure 5-27

#### ♦ V-POSITION

V-position adjusts vertical position of sub window. You can adjust via ◀ ▶ key on remote control. See Figure 5-28.

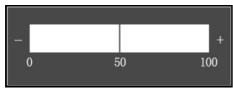


Figure 5–28

#### **♦ BORDER COLOR**

Border color adjusts border color of sub window. You can adjust via ▲ ▼ key on remote control. See Figure 5–29.



Figure 5-29

#### **♦** SWAP

Press menu key on remote control, and screen will exchange signal formats of main window and sub window.

#### ♦ H-SIZE

H-size adjusts horizontal size of sub window. You can adjust via ◀ ▶ key on remote control. See Figure 5-30.

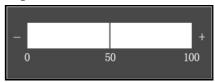


Figure 5-30

#### ♦ V-SIZE

V-size adjusts vertical size of sub window. You can adjust via ◀ ► key on remote control. See Figure 5-31.

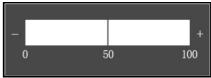


Figure 5-31

# **♦ RETURN**

By pressing menu key on remote control, you can exit source setup interface.

#### **5.1.5 Source**

In main menu interface, select source via arrow key ◀ ▶ and press menu key on remote control to enter source setup interface. See Figure 5–32.



Figure 5-32

LCD Monitor

Select source via arrow key ▲ ▼ on remote control, and press menu key to confirm.

#### **♦ RETURN**

By pressing menu key on remote control, you can exit source setup interface.

#### 5.2 PC

Press menu key on remote control to display main menu. In main menu interface, press ▼ key to exit. See Figure 5–33.



Figure 5-33

# 5.2.1 Picture

In main menu interface, select picture via arrow key ◀ ▶ and press menu key on remote control to enter picture setup interface. See Figure 5–34.

Select item to adjust via ▲ ▼ arrow key and press menu key on remote control to enter parameter setup interface.

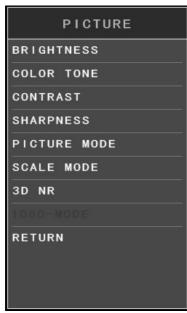


Figure 5-34

#### **♦ BRIGHTNESS**

Brightness adjusts overall brightness of picture. You can adjust via ◀ ▶ key on remote control. See Figure 5–35.

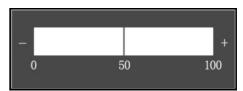


Figure 5-35

#### **♦ COLOR TONE**

Color tone adjusts overall tone of picture. You can adjust via ▲ ▼ key on remote control. See Figure 5–36.



Figure 5-36

#### **◆ CONTRAST**

Contrast adjusts overall layering of picture. You can adjust via ◀ ▶ key on remote control. See Figure 5–37.

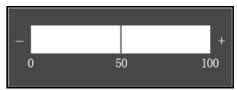


Figure 5-37

#### **♦ SHARPNESS**

Sharpness adjusts the definition of picture. The higher the sharpness, the higher the definition will be, but please note that high definition leads to obvious noise. You can adjust via ◀ ▶ key on remote control. See Figure 5–38.



Figure 5-38

#### **♦ PICTURE MODE**

Picture mode adjusts overall effect of picture. You can adjust via ▲ ▼ key on remote control. See Figure 5–39.





Figure 5-39

# **♦ SCALE MODE**

Scale mode adjusts display scale of picture. You can adjust via ▲ ▼ key on remote control. See Figure 5–40.



Figure 5-40

#### ◆ 3D NR

3D NR adjusts noise level to reduce picture noise. You can adjust via ▲ ▼ key on remote control. See Figure 5–41.



Figure 5-41

#### ♦ 1080 MODE

1080 mode is available under VGA mode only with resolution of 1920\*1080. When screen cannot display in full screen, you can adjust display via ▲ ▼ key on remote control. See Figure 5–42.



Figure 5-42

# **♦ RETURN**

By pressing menu key on remote control, you can exit picture setup interface.

#### 5.2.2 System

Refer to Ch 5.1.2.

#### 5.2.3 Advance

Refer to Ch 5.1.3.

#### 5.2.4 PIP

Refer to Ch 5.1.4.

### 5.2.5 Geometry

In main menu interface, select geometry via arrow key ◀ ▶ and press menu key on remote control to enter geometry setup interface. See Figure 5–43.

Select item to adjust via ▲ ▼ arrow key and press menu key on remote control to enter parameter setup interface.

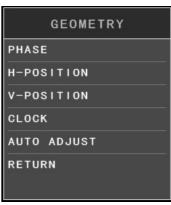


Figure 5-43

#### ◆ PHASE

You can adjust via ◀ ▶ key on remote control.

#### **♦** H-POSITION

You can adjust via ◀ ▶ key on remote control.

#### ◆ V-POSITION

You can adjust via ◀ ▶ key on remote control.

#### **♦ CLOCK**

You can adjust via ◀ ▶ key on remote control. See Figure 5-44.

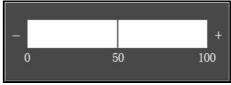


Figure 5-44

#### **♦ AUTO ADJUST**

Press menu key on remote control, and system will automatically adjust screen to best effect.

#### ◆ RETURN

By pressing menu key on remote control, you can exit geometry setup interface.

## 5.2.6 Signal

Refer to Ch 5.1.5.

# 5.3 HDMI/DVI

Press menu key on remote control to display main menu. In main menu interface, press ▼ key to exit. See Figure 5–45.

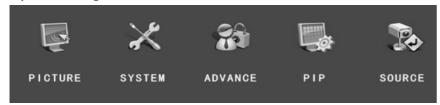


Figure 5-45

# 5.3.1 Picture

Refer to Ch 5.2.1.

# 5.3.2 System

Refer to Ch 5.1.2.

### 5.3.3 Advance

Refer to Ch 5.1.3.

# 5.3.4 PIP

Refer to Ch 5.1.4.

# 5.3.5 Signal

Refer to Ch 5.1.5.

# 6

# FAQ

This chapter describes the key points and strategies to solve problems that will be encountered in the process of installing or using the product. Most of the faults can be resolved according to the following steps without maintenance services. If the problem is not included in the following description in Chart 6–1, please contact the supplier to handle it.

Symptom	Troubleshoot				
	1. Power ( AC 220V ) is connected to the device or				
	not.				
	2. Check the power cable has been damaged or				
1) I cannot boot up the device	not.				
(black screen).	3. Check the on-off button has been turned on or				
	not.				
	4. Check the power on-off button has been				
	damaged or not.				
	5. The indication light is on or not.				
	1. Check signal cable connection is good or not.				
2) Plus sersen (ne signal)	2. Check there is signal source output or not.				
2) Blue screen (no signal)	3. Check signal cable is in good condition or not.				
	4. Check the input signal is out of the product				
	input range or not.				
2) Caraca and not display all	1. Check the signal cable connection is good or				
3) Screen can not display all colors.	not.				
Colors.	2. Replace the cable if the signal cable has been				
	damaged.				
4) The device does not respon d	Check if the button is damaged or stuck.				
when I control it.	2. Check there is battery in the remote control and				
	has been well installed.				
5) The device temperature is too	Check the fan is running properly or not.				
high.	2. Check the environment ventilation is good or				
	not.				

Chart 6- 1

# Product Label and Expression

According to China's Measures for the Control of Pollution from Electronic Information Products, the product label and expression are as follows:

# 7.1 Product Pollution Control Label

This product series adopts the following sign of pollution control for electronic information product:



# 7.2 Toxic or Hazardous Materials or Elements List

Chart 7-1 Content label of toxic or hazardous materials or elements

Component Name	Cd	Cr VI	Hg	Pb	PBB	PBDE
Case	0	0	0	0	0	0
LCD Panel	0	0	0	0	0	0
Control Module	0	0	0	×	0	0
Auxiliary Material	0	×	0	0	0	0

His form is based on the provisions of SJ/T 11364.

O: Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the GB/T 26572standard.

: Indicates that the concentration of the hazardous substance of at least one of all homogeneous materials in the parts is above the relevant threshold of the GB/T 26572 standard.

Note: The Pb in the control module and the Cr VI in the auxiliary material conforms to the exemption section of the EU Restriction of Hazardous Substances (RoHS) directive.

# 7.3 Product Expression

Our company began to implement the EU Restriction of Hazardous Substances (ROHS) directive since 2005. From now on, all the products will confront the requirements of relevant directions.

#### Note

- This user's manual is for reference only. Slight difference may be found in LCD Monitor Manual user interface.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks are the properties of their respective owners
- If there is any uncertainty or controversy, please refer to the final explanation of
- Please visit our website for more information.

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