

TFT LCD MONITOR

USER MANUAL-(RS232)Version

LCD150AV-1DE/3DE

LCD154AV-1DE

LCD170AV-1DE/2DE

LCD200AV-1DE

LCD220AV-1DE

LCD260AV-1DE

LCD320AV-1DE



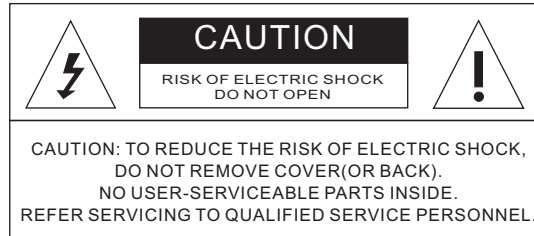
CE

WARNING:

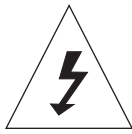
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION:



Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Precautions

Safety-----

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further.

Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Allow adequate air circulation to prevent internal heat built-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.

Installation-----

Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust or mechanical vibration.

The unit is not designed to be waterproof. Exposure to rain or water may damage the unit.

Cleaning-----

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzene as they might damage the finish of the unit.

Retain the original carton and packing materials for safe transport of this unit in the future.

Federal Communications Commission (FCC) Statement

This Equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
- You are cautioned that changes or modifications not expressly approved by that party responsible for compliance could void your authority to operate the equipment.

This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received including interference that may cause undesired

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Features

LCD150AV-1DE/3DE

- Compatible with VGA (640 x 480), SVGA (800 x 600).XGA(1024x768)
- Support vertical refresh rate up to 75 Hz for VGA, SVGA.XGA
- Automatic or manual detection of separate synchronize and composite synchronize of VGA signal
- 15-inch LCD monitor with multiple inputs. (Composite video, Y/C and D-sub computer)
- High brightness of 400 cd/m² forLCD150AV- 3DE,250cd/m² for LCD150AV-1DE
- With 3D comb Filter.
- High contrast 500:1.
- High quality Horizontal and Vertical Scaling with 3D De-interlacing for Display
- Wide viewing of 160°, vertical and horizontal.
- Fast LCD response time of 12ms.
- Luminance transient improvement(LTI),Chrominance transient improvement(CTI)
- Video input support NTSC / PAL standard.
- Built-in high precision Y/C Input signal.
- Video out support auto termination (75 Ohms).
- Audio live-out function with stereo phone Jack output.
- Build-in 2W+2W speaker.
- Support IR remote controller.
- VESA standard (100mm x 100mm) bracket.
- Wall mountable capability.
- RS 232 control(option)
- DVI-Input(option)

Features

LCD154AV-1DE

- Compatible with VGA (640 x 480), SVGA (800 x 600).WXGA(1280x800)
- Support vertical refresh rate up to 75 Hz for VGA, SVGA.WXGA
- Automatic or manual detection of separate synchronize and composite synchronize of VGA signal
- 15.4-inch LCD monitor with multiple inputs. (Composite video,Y/C and D-sub & DVI computer)
- High brightness of 600 cd/m²for
- With 3D comb filter
- High contrast 800:1.
- High quality Horizontal and Vertical Scaling with 3D De-interlacing for Display
- Wide viewing of 120°, vertical and 100° horizontal.
- Fast LCD response time of 5ms
- Luminance transient improvement(LTI),Chrominance transient improvement(CTI)
- Video input support NTSC / PAL standard.
- Built-in high precision Y/C Input signal.
- Video out support auto termination (75 Ohms).
- Audio live-out function with stereo phone Jack output.
- Build-in 2W speaker.
- Support IR remote controller.
- VESA standard (100mm x 100mm) bracket.
- Wall mountable capability.
- RS 232 control(option)
- DVI-Input(option)

Features

LCD170AV-1DE/2DE

- Compatible with VGA (640 x 480), SVGA (800 x 600).XGA(1024x768).SXGA(1280x1024)
- Support vertical refresh rate up to 75 Hz for VGA, SVGA.XGA.(SXGA 60HZ)
- Automatic or manual detection of separate synchronize and composite synchronize of VGA signal
- 17-inch LCD monitor with multiple inputs. (Composite video, Y/C and D-sub computer)
- High brightness of 400 cd/m² for LCD170AV-2DE, 300cd/m² for LCD170AV-1DE
- With 3D comb filter
- High contrast 500:1.
- High quality Horizontal and Vertical Scaling with 3D De-interlacing for Display
- Wide viewing of 130°, vertical and 140° horizontal.
- Fast LCD response time of 8ms.
- Luminance transient improvement(LTI),Chrominance transient improvement(CTI)
- Video input support NTSC / PAL standard.
- Built-in high precision Y/C Input signal.
- Video out support auto termination (75 Ohms).
- Audio live-out function with stereo phone Jack output.
- Build-in 2W+2W speaker.
- Support IR remote controller.
- VESA standard (100mm x 100mm) bracket.
- Wall mountable capability.
- RS 232 control(option)
- DVI-Input(option)

Features

LCD200AV-1DE

- Compatible with VGA (640 x 480), SVGA (800 x 600).
- Support vertical refresh rate up to 75 Hz for VGA, SVGA of VESA standard specification.
- Automatic or manual detection of separate synchronize and composite synchronize of VGA signal
- 20-inch LCD monitor with multiple inputs. (Composite video, Y/C and D-sub computer)
- High brightness of 450 cd/m²
- With 3D comb filter
- High contrast 500:1.
- High quality Horizontal and Vertical Scaling with 3D De-interlacing for Display
- Wide viewing of 140°, vertical and 160° horizontal.
- Fast LCD response time of 16ms.
- Luminance transient improvement(LTI), Chrominance transient improvement(CTI)
- Video input support NTSC / PAL standard.
- Built-in high precision Y/C Input signal.
- Video out support auto termination (75 Ohms).
- Audio live-out function with stereo phone Jack output.
- Build-in 2W+2W speaker.
- Support IR remote controller.
- VESA standard (100mm x 100mm) bracket.
- Wall mountable capability.
- RS 232 control(option)
- DVI-Input(option)

Features

LCD-220AV-1DE

- Compatible with VGA (640 x 480), SVGA (800 x 600).XGA(1024x768).WXGA(1366x768)
- Support vertical refresh rate up to 75 Hz for VGA, SVGA ,XGA, WXGA 60HZ.
- Automatic or manual detection of separate synchronize and composite synchronize of VGA signal
- 22-inch LCD monitor with multiple inputs. (Composite video,Y/C and D-sub &DVI computer)
High brightness of 300 cd/m²
- With 3D comb filter
- High contrast 1000:1.
- High quality Horizontal and Vertical Scaling with 3D De-interlacing for Display
- Wide viewing of 160°, vertical and 170° horizontal.
- Fast LCD response time of 5ms.
- Luminance transient improvement(LTI), Chrominance transient improvement(CTI)
- Video input support NTSC / PAL standard.
- Built-in high precision Y/C Input signal.
- Video out support auto termination (75 Ohms).
- Audio live-out function with phone Jack output.
- Build-in 2W speaker.
- Support IR remote controller.
- VESA standard (100mm x 100mm) bracket.
- Wall mountable capability.
- RS 232 control(option)
- DVI-Input(option)

Features

LCD260AV-1DE

- Compatible with VGA (640 x 480), SVGA (800 x 600).WXGA
- Support vertical refresh rate up to 75 Hz for VGA, SVGA ,WXGA.
- Automatic or manual detection of separate synchronize and composite synchronize of VGA signal
- 26-inch LCD monitor with multiple inputs. (Composite video, Y/C and D-sub computer)
- High brightness of 500 cd/m²
- With 3D comb filter.
- High contrast 800:1.
- High quality Horizontal and Vertical Scaling with 3D De-interlacing for Display
- Wide viewing of 176°, vertical and 176° horizontal.
- Fast LCD response time of 8ms.
- Luminance transient improvement(LTI),Chrominance transient improvement(CTI)
- Video input support NTSC / PAL standard.
- Built-in high precision Y/C Input signal.
- Video out support auto termination (75 Ohms).
- Audio live-out function with stereo phone Jack output.
- Build-in 2W+2W speaker.
- Support IR remote controller.
- VESA standard (100mm x 100mm) bracket.
- Wall mountable capability.
- RS 232 control(option)
- DVI-Input(option)

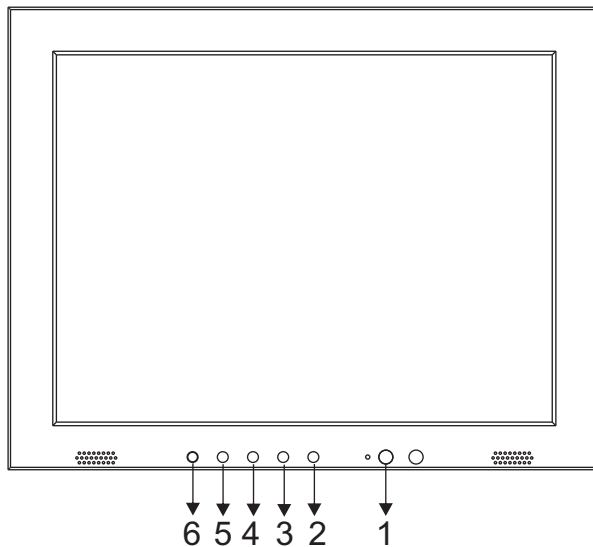
Features

CH-LCD-320AV-1DE

- Compatible with VGA (640 x 480), SVGA (800 x 600).WXGA
- Support vertical refresh rate up to 75 Hz for VGA, SVGA ,WXGA.
- Automatic or manual detection of separate synchronize and composite synchronize of VGA signal
- 31.5-inch LCD monitor with multiple inputs. (Composite video, Y/C and D-sub computer and DVI(option))
- High brightness of 500 cd/m²
- With 3D comb filter.
- High contrast 1500:1.
- High quality Horizontal and Vertical Scaling with 3D De-interlacing for Display
- Wide viewing of 178°, vertical and 178° horizontal.
- Fast LCD response time of 8ms.
- Luminance transient improvement(LTI),Chrominance transient improvement(CTI)
- Video input support NTSC / PAL standard.
- Built-in high precision Y/C Input signal.
- Video out support auto termination (75 Ohms).
- Audio live-out function with stereo phone Jack output.
- Build-in 2W+2W speaker.
- Support IR remote controller.
- VESA standard (75mm/100mm) bracket.
- Wall mountable capability.
- RS 232 control(option)
- DVI-Input(option)

Operating Instructions

(LCD150AV-1DE/3DE,170AV-1DE/2DE,200AV-1DE)



1. Power

Monitor power ON / OFF. At OFF mode, monitor will be at standby status.

LED-Green Light -- Power On

Red Light -- Standby mode

2. 3. Adjust ◀ / ▶

Increase or decrease the value on OSD menu.

◀ Decrease value on the OSD Menu

▶ Increase value on the OSD Menu

4. Item(Optional)

PIP/POP/ function selection.

5. Menu

OSD menu selection.

6. Source

Select input signal from AV1, AV2, S-Video or PC(or DVI).

***Note: PIP&POP Operating(Optional)--KEY Control**

A: Push "ITEM" key to open Sub-picture.

then push "ITEM" key to select the Sub-picture size on screen.
1/16-->1/9-->1/4-->1/2--->Full(Main-picture).

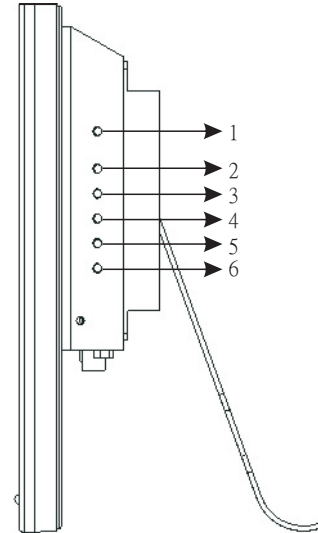
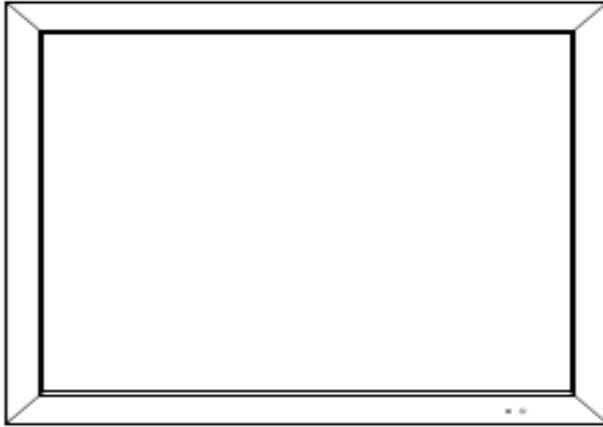
B: Push Down key to select Sub-picture position on screen.

C: Push Up key to select the Sub-picture source.

D: Push Source key to select Main-picture source.

Operating Instructions-Control

(LCD-154AV-1DE/LCD-220AV-1DE)



1. Power

Monitor power ON / OFF. At OFF mode, monitor will be at standby status.

LED-Green Light -- Power On

Red Light -- Standby mode

2. 3. Adjust /

Increase or decrease the value on OSD menu.

 Increase value on the OSD Menu.

 Decrease value on the OSD Menu.

4. Item(Optional)

PIP/POP/ function selection.

5. Menu

OSD menu selection.

6. Source

Select input signal from AV1, AV2, S-Video or VGA,DVI.

Note: PIP/POP Function:

A: Please push "ITEM or SELECT" key to open the pip/pop function then push "ITEM or SELECT" key to select picture size.

1/16-->1/9-->1/4-->1/2-->Full picture

B: Push Down key to select the pip position.

center, lower right, upper right, lower left ,upper left.

C: Push Up key to select the sub-picture source.

D: Push "Source" key to select Main-picture source.

Operating Instructions

(LCD260AV-1DE)



1. Power

Monitor power ON / OFF. At OFF mode, monitor will be at standby status.

LED-Green Light -- Power On

Red Light -- Standby mode

2. 3. Adjust ◀ / ▶

Increase or decrease the value on OSD menu.

◀ Decrease value on the OSD Menu

▶ Increase value on the OSD Menu

4. SELECT(Option)

PIP/POP/ function selection.

5. FUNCTION

OSD menu selection.

6. Source

Select input signal from AV1, AV2, S-Video or PC(or DVI).

***Note: PIP&POP Operating(Option)--KEY Control**

A: Push "SELECT" key to open Sub-picture.

then push "SELECT" key to select the Sub-picture size on screen.
1/16-->1/9-->1/4-->1/2--->Full(Main-picture).

B: Push Down key to select Sub-picture position on screen.

C: Push Up key to select the Sub-picture source.

D: Push Source key to select Main-picture source.

(LCD320AV-1DE)



1. Power

Monitor power ON / OFF. At OFF mode, monitor will be at standby status.

LED-Green Light -- Power On

Red Light -- Standby mode

2. 3. Adjust ◀ / ▶

Increase or decrease the value on OSD menu.

◀ Decrease value on the OSD Menu

▶ Increase value on the OSD Menu

4. PIP(Optional)

PIP/POP/ function selection.

5. MENU

OSD menu selection.

6. Source

Select input signal from AV1, AV2, S-Video or PC.

***Note: PIP&POP Operating(Optional)--KEY Control**

A: Push "PIP" key to open Sub-picture.

then push "PIP" key to select the Sub-picture size on screen.

1/16-->1/9-->1/4-->1/2--->Full(Main-picture).

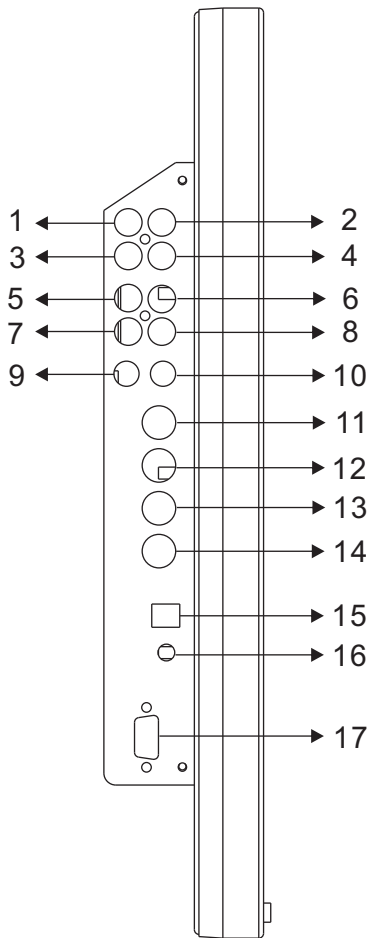
B: Push Down key to select Sub-picture position on screen.

C: Push Up key to select the Sub-picture source.

D: Push Source key to select Main-picture source.

Connections

(LCD150AV-1DE/3DE,170AV-1DE/2DE,200AV-1DE)

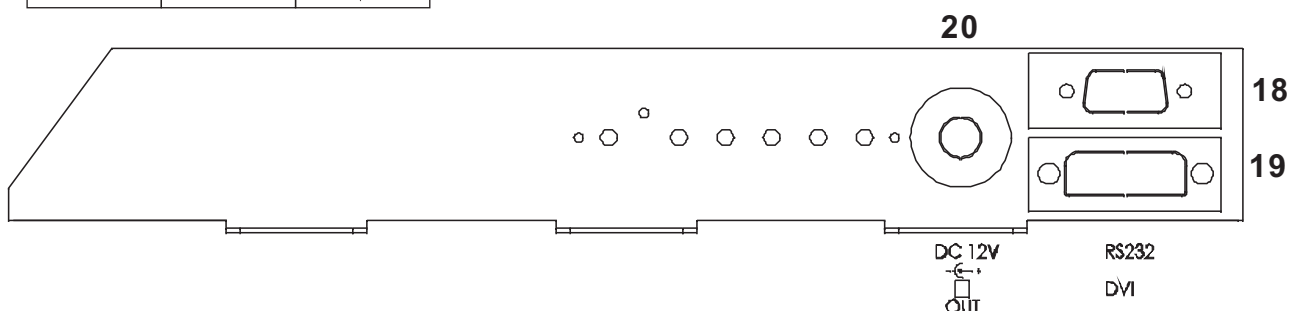


- 1,2 AUDIO 2 OUT (L,R)**
Audio looping outputs for AUDIO 2
- 3,4 AUDIO 2 IN (L,R)**
Stereo Audio Signal Input, this input is for AV2, PC or Y/C (refer to Note below)
- 5,6 AUDIO 1 OUT (L,R)**
Audio looping outputs for AUDIO 1
- 7,8 AUDIO 1 IN (L,R)**
Stereo Audio Signal Input, this input is for AV1
- 9 Y/C IN (S-Video)**
Y/C separated signal input
- 10 Y/C OUT (S-Video)**
Y/C separated signal looping output
- 11 VIDEO 2 OUT**
Video looping output for VIDEO 2
- 12 VIDEO 2 IN**
Composite signal Input for VIDEO 2
- 13 VIDEO 1 OUT**
Video looping output for VIDEO 1
- 14 VIDEO 1 IN**
Composite signal Input for VIDEO1
- 15 Regulated DC12V Power Input (5A)**
- 16 AUDIO LIVE OUT(Stereo)**
- 17 PC VGA IN**
- 18 Rs232 IN**
- 19 DVI-IN**
- 20 DC12V OUT(option)**

NOTE :

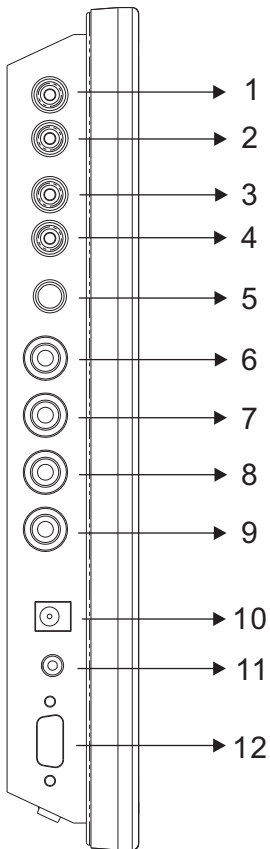
Connections of Audio

| | Audio 1 | Audio 2 |
|---------|---------|---------|
| VGA/DVI | | ✓ |
| AV1 | ✓ | |
| AV2 | | ✓ |
| S-Video | | ✓ |

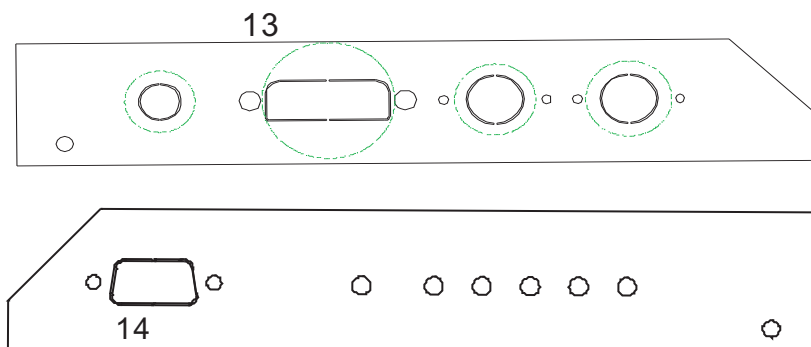


Connections

(LCD-154AV-1DE/LCD-220AV-1DE)



- 1 AUDIO 2 OUT**
Audio looping outputs for AUDIO 2
- 2 AUDIO 2 IN**
Audio Signal Input, this input is for AV2, PC or Y/C (refer to Note below)
- 3 AUDIO 1 OUT**
Audio looping outputs for AUDIO 1
- 4 AUDIO 1 IN**
Audio Signal Input, this input is for AV1
- 5 Y/C IN(S-Video)**
Y/C separated signal Input
- 6 VIDEO 2 OUT**
Video looping output for VIDEO 2
- 7 VIDEO 2 IN**
Composite signal Input for VIDEO 2
- 8 VIDEO 1 OUT**
Video looping output for VIDEO 1
- 9 VIDEO 1 IN**
Composite signal Input for VIDEO1
- 10 Regulated DC12V Power Input**
- 11 AUDIO LIVE OUT**
- 12 PC VGA IN**
- 13 DVI IN**
- 14 RS 232 IN**



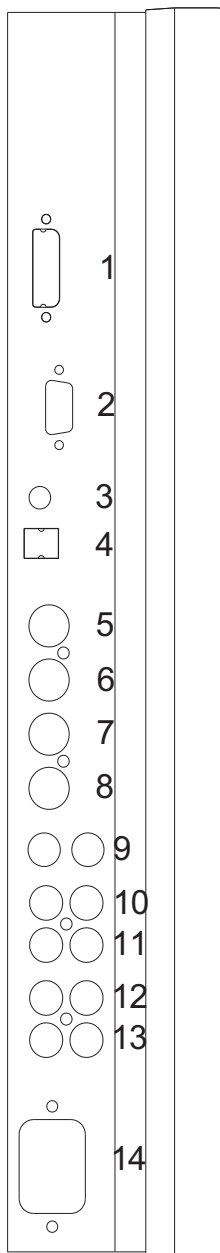
NOTE :

Connections of Audio

| | Audio 1 | Audio 2 |
|---------|---------|---------|
| DVI/VGA | | ✓ |
| AV1 | ✓ | |
| AV2 | | ✓ |
| S-Video | | ✓ |

Connections

(LCD260AV-1DE-Old Version)



- 1 PC DVI- IN (Option)**
- 2 PC VGA-IN**
- 3 AUDIO LIVE OUT(Stereo)**
- 4 DC12V/1A OUT(Option)**
- 5 VIDEO 1 IN**
Composite signal Input for VIDEO1
- 6 VIDEO 1 OUT**
Video looping output for VIDEO 1
- 7 VIDEO 2 IN**
Composite signal Input for VIDEO 2
- 8 VIDEO 2 OUT**
Video looping output for VIDEO 2
- 9 Y/C IN(S-Video)**
Y/C separated signal Input
- 10 AUDIO 1 IN(L,R)**
Audio Signal Input, this input is for Av1
- 11 AUDIO 1 OUT(L,R)**
Audio Looping output, for AUDIO1
- 12 AUDIO2 IN(L,R)**
Stereo Audio Signal Input, this input is for Av2, PC or Y/C (refer to Note below)
- 13 AUDIO 2 OUT(L,R)**
Audio Looping output, for AUDIO1
- 14 AC IN**

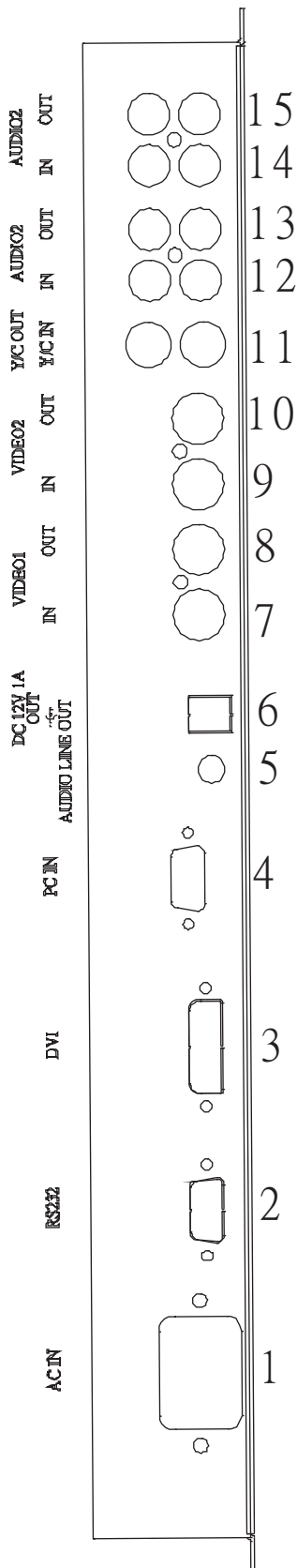
NOTE :

Connections of Audio

| | Audio 1 | Audio 2 |
|---------|---------|---------|
| VGA/DVI | | √ |
| AV1 | √ | |
| AV2 | | √ |
| S-Video | | √ |

Connections

(LCD320AV-1DE)



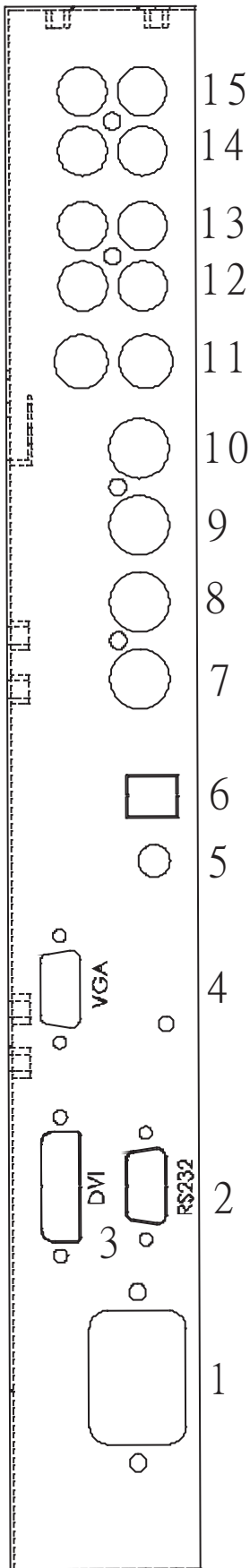
- 1 AC IN
- 2 RS232-IN
- 3 PC DVI- IN
- 4 PC VGA-IN
- 5 AUDIO LIVE OUT(Stereo)
- 6 DC12V/1A OUT(Optional)
- 7 VIDEO 1 IN
Composite signal Input for VIDEO1
- 8 VIDEO 1 OUT
Video looping output for VIDEO 1
- 9 VIDEO 2 IN
Composite signal Input for VIDEO 2
- 10 VIDEO 2 OUT
Video looping output for VIDEO 2
- 11 Y/C IN/OUT(S-Video)
Y/C separated signal Input/Out
- 12 AUDIO 1 IN(L,R)
Audio Signal Input, this input is for Av1
- 13 AUDIO 1 OUT(L,R)
Audio Looping output, for AUDIO1
- 14 AUDIO2 IN(L,R)
Stereo Audio Signal Input, this input is for Av2, PC or Y/C (refer to Note below)
- 15 AUDIO 2 OUT(L,R)
Audio Looping output, for AUDIO1

NOTE :
Connections of Audio

| | Audio 1 | Audio 2 |
|---------|---------|---------|
| VGA/DVI | | √ |
| AV1 | √ | |
| AV2 | | √ |
| S-Video | | √ |

Connections

(LCD260/320AV-1DE-New Version)



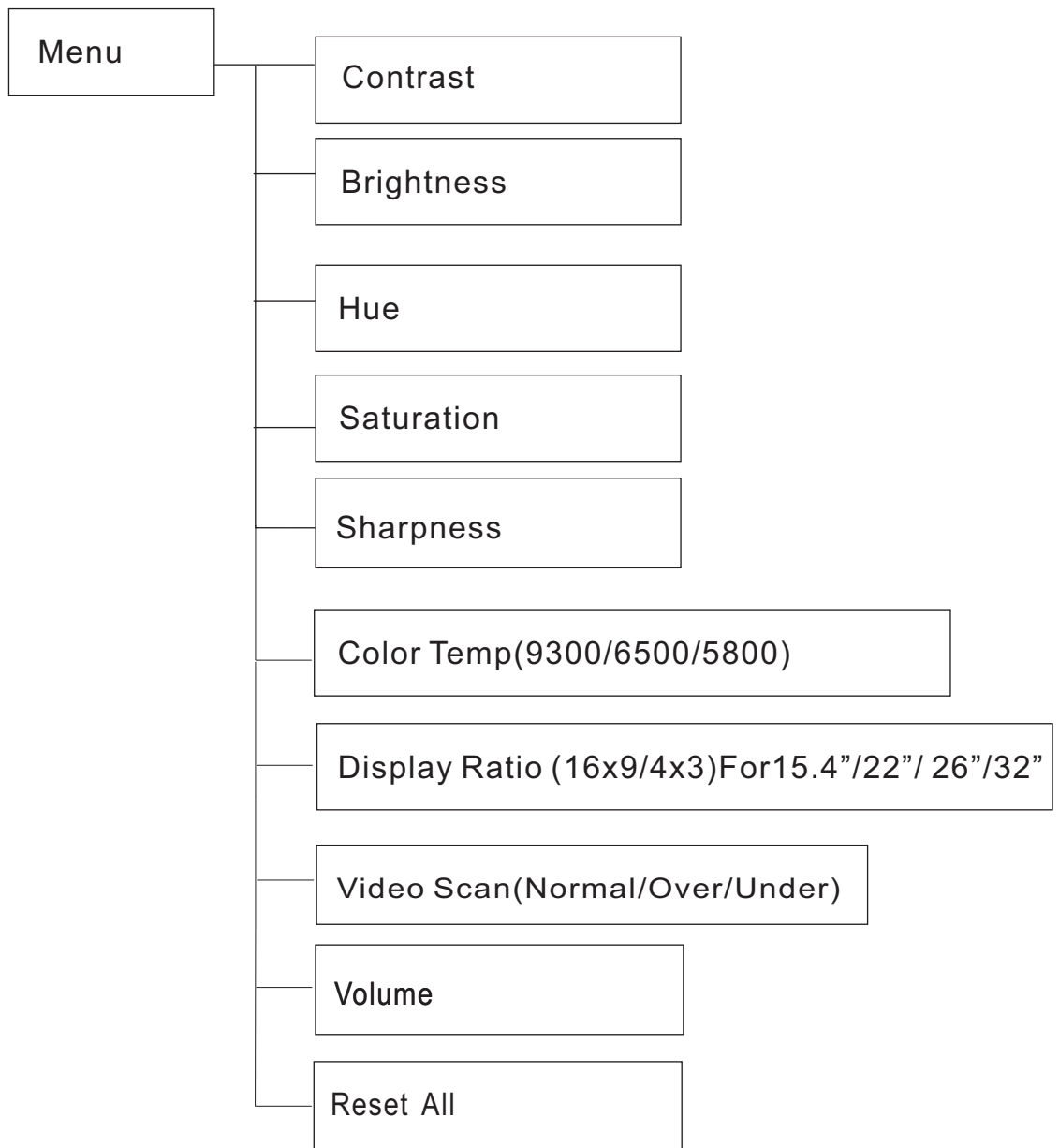
- 1 AC IN
- 2 RS232 - IN
- 3 PC DVI- IN
- 4 PC VGA-IN
- 5 AUDIO LIVE OUT (Stereo)
- 6 DC12V/1A OUT (Option)
- 7 VIDEO 1 IN
Composite signal Input for VIDEO 1
- 8 VIDEO 1 OUT
Video looping output for VIDEO 1
- 9 VIDEO 2 IN
Composite signal Input for VIDEO 2
- 10 VIDEO 2 OUT
Video looping output for VIDEO 2
- 11 Y/C IN/OUT (S-Video)
Y/C separated signal Input/Out
- 12 AUDIO 1 IN (L,R)
Audio Signal Input, this input is for Av1
- 13 AUDIO 1 OUT (L,R)
Audio Looping output, for AUDIO 1
- 14 AUDIO 2 IN (L,R)
Stereo Audio Signal Input, this input is for Av2, PC or Y/C (refer to Note below)
- 15 AUDIO 2 OUT (L,R)
Audio Looping output, for AUDIO 2

NOTE :

Connections of Audio

| | Audio 1 | Audio 2 |
|---------|---------|---------|
| VGA/DVI | | √ |
| AV1 | √ | |
| AV2 | | √ |
| S-Video | | √ |

A. OSD Function



Under AV1, AV2, S-Video mode:

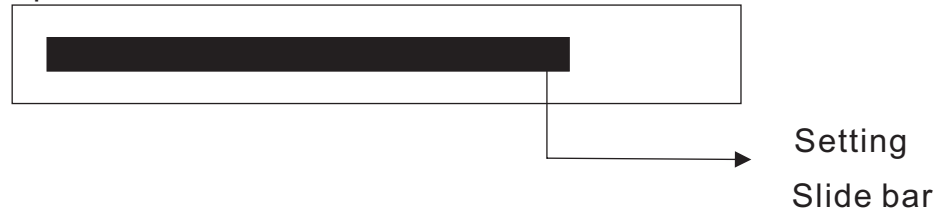
Press the MENU button to bring up the OSD Menu.

Press ◀ ▶ "to Decrease or Increase value on the OSD Menu.

Contrast:

Permits adjustment for contrast between light or dark areas of the picture.

Example:

**Brightness:**

Adjusts the overall picture shade and brightness.

Tip: Use the *Brightness* to make details in the dark areas of the picture to be just visible, and *Contrast* to "brighten" the picture without causing noises and foreheads to turn white.

Hue: Adjust all the colors on the screen, but is most noticeable to the eye in reds and yellows, and is also usually set for pleasing face tones.

Note: Appears in NTSC mode only.

Saturation:

Adds coloring to the black and white picture content (of a color signal), and is usually set for viewer's preference in color saturation.

Sharpness:

Sets the desired sharpening enhancement to the picture.

Color Temp:

Adjust the screen color temperature 9300/6500/5800

Display Ratio:

To selecting 16X9 or 4X3.

Video Scan:

Adjust the screen size to Normal/ Over/Under scan.

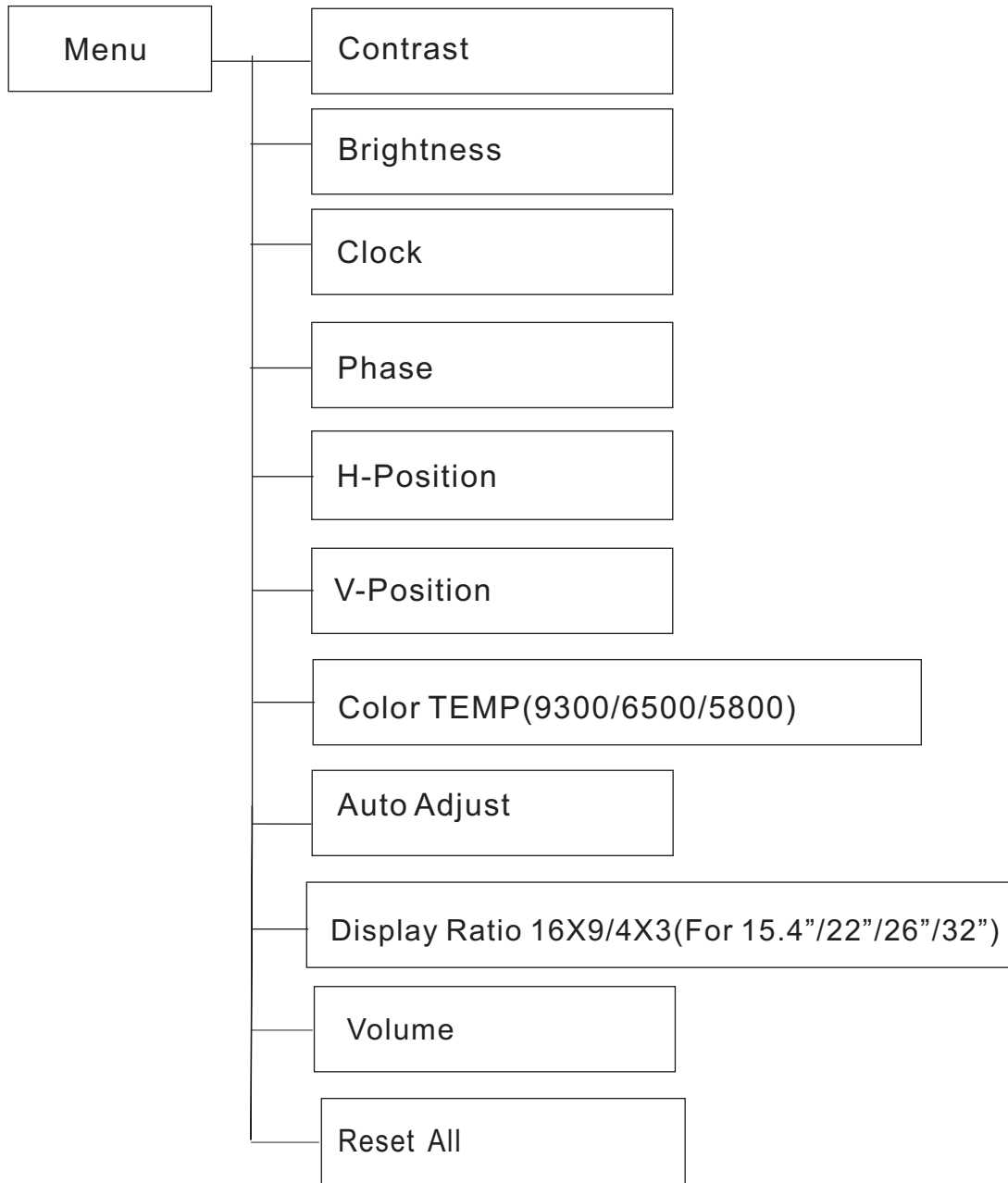
Volume:

Control built-in speakers' output Volume.

Reset All:

Returns all controls back to factory setting.

B. OSD Function (PC Mode Only)



Under Image mode:

Press the MENU button to bring up the OSD Menu.

Press ◀ ▶ to Decrease or Increase value on the OSD Menu.

Contrast: Adjusts foreground white level of the screen image.

Brightness: Adjusts background black level of the screen image.

H-Position: Controls the picture horizontal position.

V-Position: Controls the picture vertical position.

Clock: Adjust the internal pix clock lag in order to optimize the screen image.

Phase: Adjust the internal clock time lag in order to optimize the screen image.

Auto Adjust: Automatically selects the optimal settings for image parameters.

Display Ration: To selecting 16X9 or 4X3

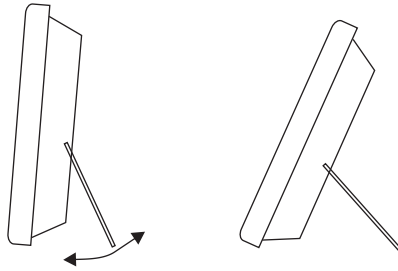
Volume: Control built-in speakers' output Volumes

Reset All: Returns all controls back to factory setting.

LCD monitor Mounting Guide

A. Desktop

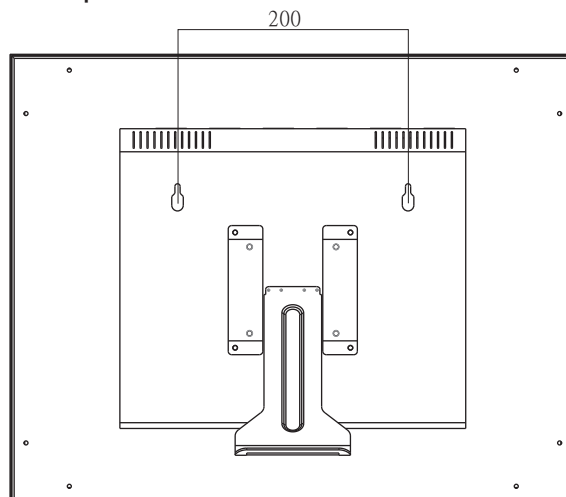
Adjust the viewing angle of LCD to fit most comfortable monitoring status.



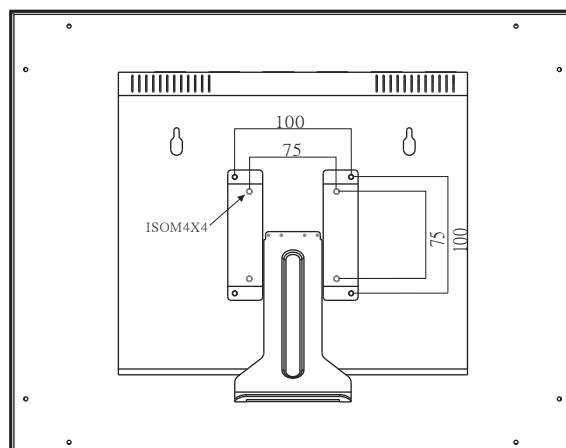
B. Wall mount

Free your space with wall mount design.

Please follow the fix-hole size in back panel to install the LCD to the wall.

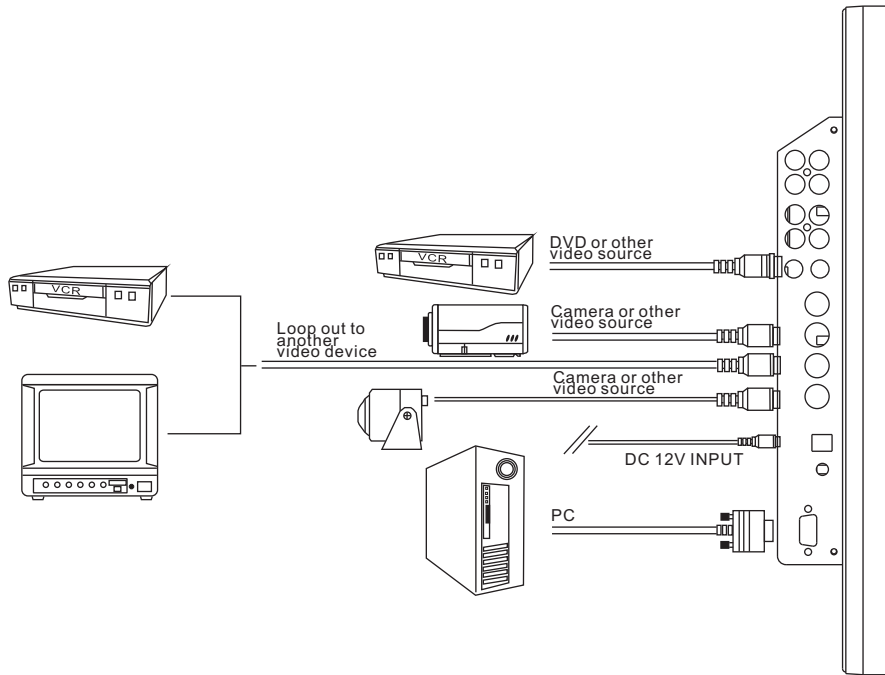


C. VESA Bracket



Connecting Device

(LCD150AV-1DE/3DE、LCD170AV-1DE/2DE、LCD200AV-1DE)



- Connect PC to Monitor through VGA connector as shown on the above picture
- Connect External device such as DVD or Game Player to Monitor as shown on the above picture
- Connect CCD Camera 1 and 2 to Monitor through Video Input 1 and 2 (BNC Connect) as showing on the above picture
- Support Resolution:

LCD150AV-1DE/3DE

| | | |
|----------------|----------------|-----------------|
| 640 x 480 60Hz | 800 x 600 60Hz | 1024 x 768 60Hz |
| 640 x 480 72Hz | 800 x 600 70Hz | 1024 x 768 70Hz |
| 640 x 480 75Hz | 800 x 600 72Hz | 1024 x 768 75Hz |
| | 800 x 600 75Hz | |

LCD170AV-1DE/2DE

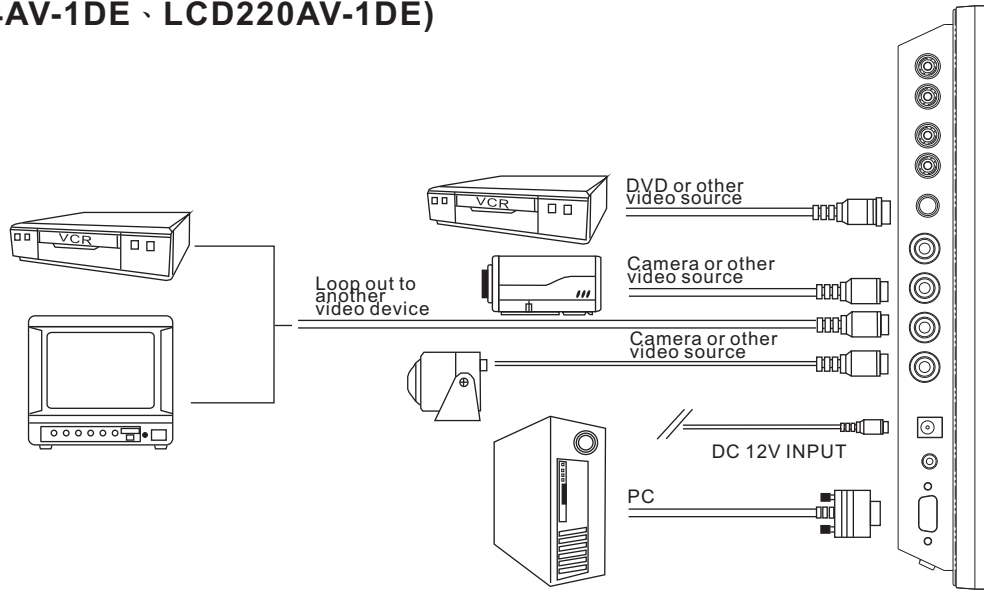
| | | |
|----------------|----------------|------------------|
| 640 x 480 60Hz | 800 x 600 60Hz | 1024 x 768 60Hz |
| 640 x 480 72Hz | 800 x 600 70Hz | 1024 x 768 70Hz |
| 640 x 480 75Hz | 800 x 600 72Hz | 1024 x 768 75Hz |
| | 800 x 600 75Hz | 1280 x 1024 60Hz |

LCD200AV-1DE

| | |
|----------------|----------------|
| 640 x 480 60Hz | 800 x 600 60Hz |
| 640 x 480 72Hz | 800 x 600 70Hz |
| 640 x 480 75Hz | 800 x 600 72Hz |
| | 800 x 600 75Hz |

Connecting Device

(LCD154AV-1DE、LCD220AV-1DE)



- Connect PC to Monitor through VGA connector as shown on the above picture
- Connect External device such as DVD or Game Player to Monitor as shown on the above picture
- Connect CCD Camera 1 and 2 to Monitor through Video Input 1 and 2 (BNC Connect) as showing on the above picture
- Support Resolution

LCD154AV-1DE

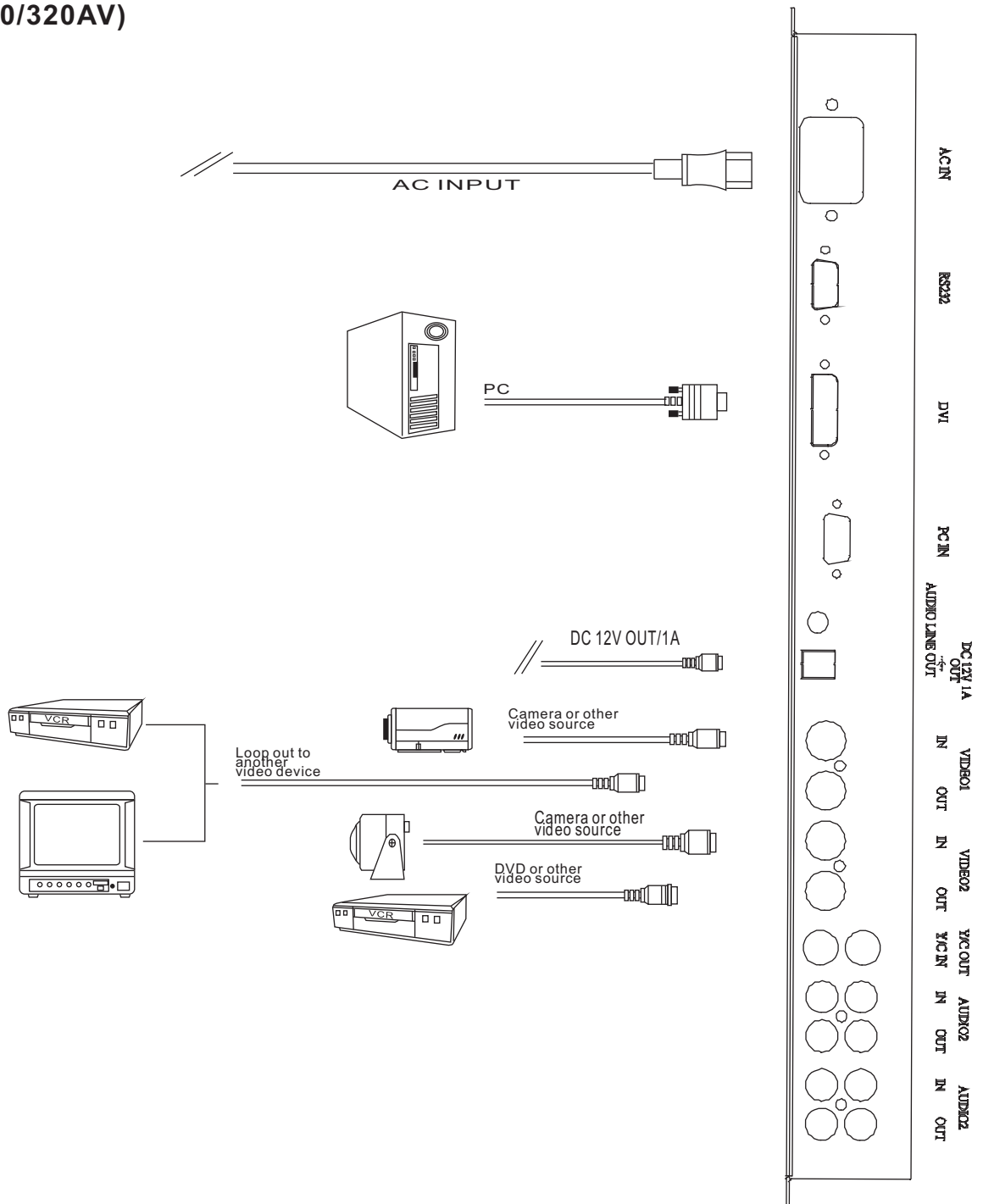
| | | |
|----------------|----------------|-----------------|
| 640 x 480 60Hz | 800 x 600 56Hz | 1024 x 768 60Hz |
| 640 x 480 72Hz | 800 x 600 70Hz | 1024 x 768 70Hz |
| 640 x 480 75Hz | 800 x 600 72Hz | 1024 x 768 75Hz |
| | 800 x 600 75Hz | 1280 x 800 60Hz |

LCD-220AV-1DE

| | | |
|----------------|----------------|-----------------|
| 640 x 480 60Hz | 800 x 600 56Hz | 1024 x 768 60Hz |
| 640 x 480 72Hz | 800 x 600 70Hz | 1024 x 768 70Hz |
| 640 x 480 75Hz | 800 x 600 72Hz | 1024 x 768 75Hz |
| | 800 x 600 75Hz | 1366 x 768 60Hz |

Connecting Device

(LCD260/320AV)



- a. Connect PC to Monitor through VGA connector as shown on the above picture
- b. Connect External device such as DVD or Game Player to Monitor as shown on the above picture
- c. Connect CCD Camera 1 and 2 to Monitor through Video Input 1 and 2 (BNC Connect) as showing on the above picture
- D. Support Resolution:

LCD260/320AV-1DE

| | | |
|----------------|----------------|-----------------|
| 640 x 480 60Hz | 800 x 600 60Hz | 1024 x 768 60Hz |
| 640 x 480 72Hz | 800 x 600 70Hz | 1024 x 768 70Hz |
| 640 x 480 75Hz | 800 x 600 72Hz | 1024 x 768 75Hz |
| | 800 x 600 75Hz | 1366X768 60HZ |

Specification

| | | |
|-------------------|--|----------------------|
| Model | LCD150AV-1DE/3DE | |
| LCD Panel | 15" TFT LCD | |
| Display Colors | 262K | |
| Display area | 304.128 x 228.096mm | |
| Resolution | 1024x 768 (XGA) | |
| Brightness | 250cd/m ² | 400cd/m ² |
| Contrast Ratio | 500:1 typ. | |
| Response Time | 12 ms(Tr+tf) | |
| View angle | L/R | ±80° |
| | U/D | ±80°(up)/55°(Down) |
| 3D Comb Filter | Yes | |
| Input Signal | 1.0Vp-p Composite { BNCx2 Input BNC x 2 Output (Auto Termination) VGA ————— D-Sub 15Pin Input S-Video ————— { 4 Pin Min Din x 1 Input 4 Pin Min Din x 1 Output | |
| DVI/PIP-POP/RS232 | Option | |
| Audio In/Out | RCA(R/L) x 2 set Input RCA(R/L) x 2 set Output 2Wx2W/8ohm | |
| Operating | Power ON/OFF OSD Control Function | |
| Power Supply | W/Power Adapter In: AC 96~260V/50/60Hz Out:DC12V 5A | |
| Power Consumption | 20W | 30W |
| Dimension | 385.8x309.5x81.3 | 419.6x352x81.3 |
| Weight | 4.2kg | 5.7kg |
| Temperature | 0~40°C | |
| Humidity | 20%~80% | |

Specification

| | | |
|-------------------|--|----------------------|
| Model | LCD170AV-1DE/2DE | |
| LCD Panel | 17" TFT LCD | |
| Display Colors | 16.2 M | |
| Display area | 337.92 x 270.336mm | |
| Resolution | 1280x 1024 (SXGA) | |
| Brightness | 300cd/m ² | 400cd/m ² |
| Contrast Ratio | 500:1 typ. | |
| Response Time | 5ms(Tr+tf) | |
| View angle | L/R | ±70° |
| | U/D | ±70°(up)/70°(Down) |
| 3D Comb Filter | Yes | |
| Input Signal | 1.0Vp-p Composite { BNCx2 Input BNC x 2 Output (Auto Termination) VGA ————— D-Sub 15Pin Input S-Video ————— { 4 Pin Min Din x 1 Input 4 Pin Min Din x 1 Output | |
| DVI/PIP-POP/RS232 | Option | |
| Audio In/Out | RCA(R/L) x 2 set Input RCA(R/L) x 2 set Output 2Wx2W/8ohm | |
| Operating | Power ON/OFF OSD Control Function | |
| Power Supply | W/Power Adapter In: AC 96~260V/50/60Hz Out:DC12V 5A | |
| Power Consumption | 30W | |
| Dimension | 419.6x352x81.3 | |
| Weight | 5.7kg | |
| Temperature | 0~40°C | |
| Humidity | 20%~80% | |

A. TROUBLE SHOOTING

Problem:

1.No power

2.No video or audio

3.Bad video or audio

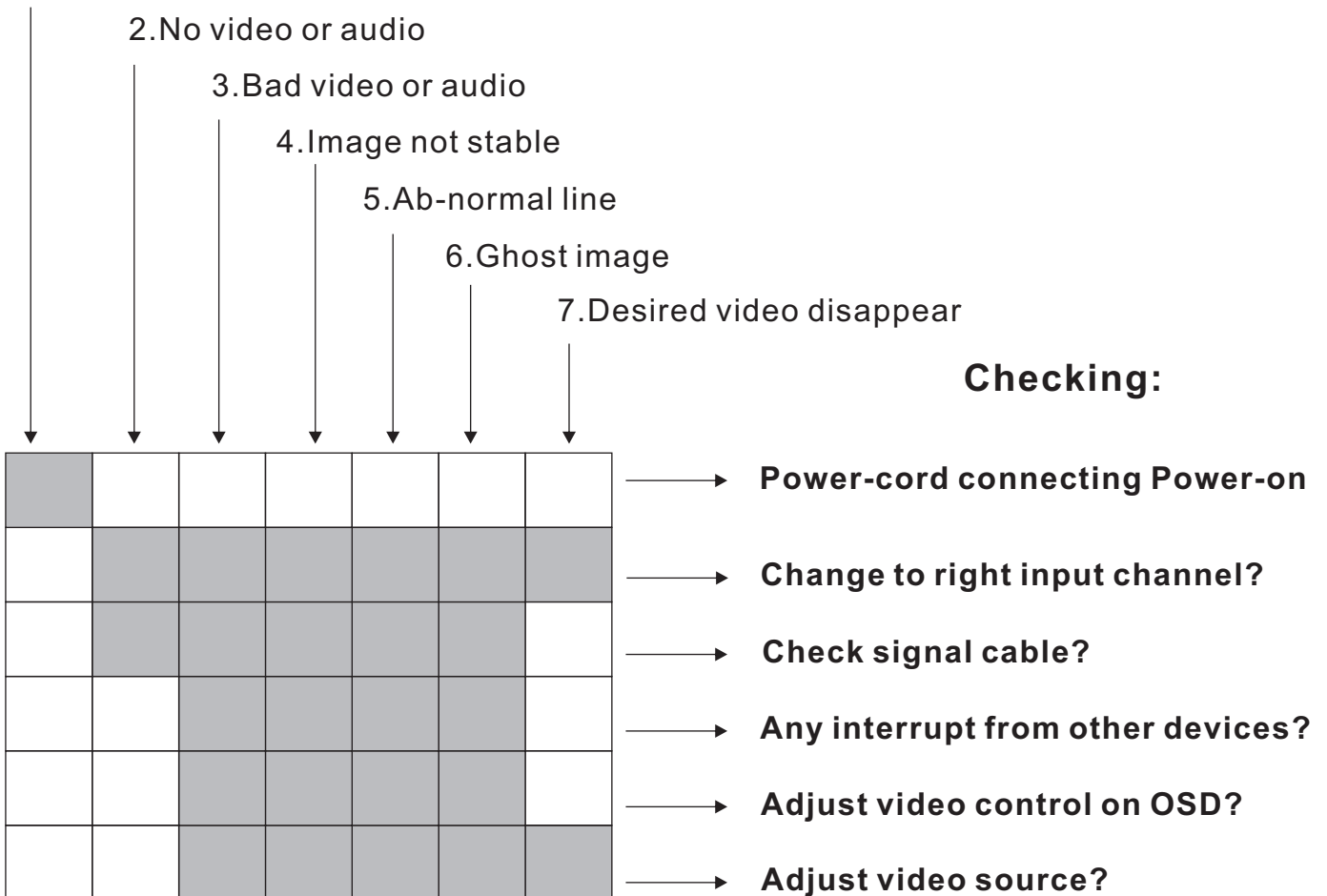
4.Image not stable

5.Ab-normal line

6.Ghost image

7.Desired video disappear

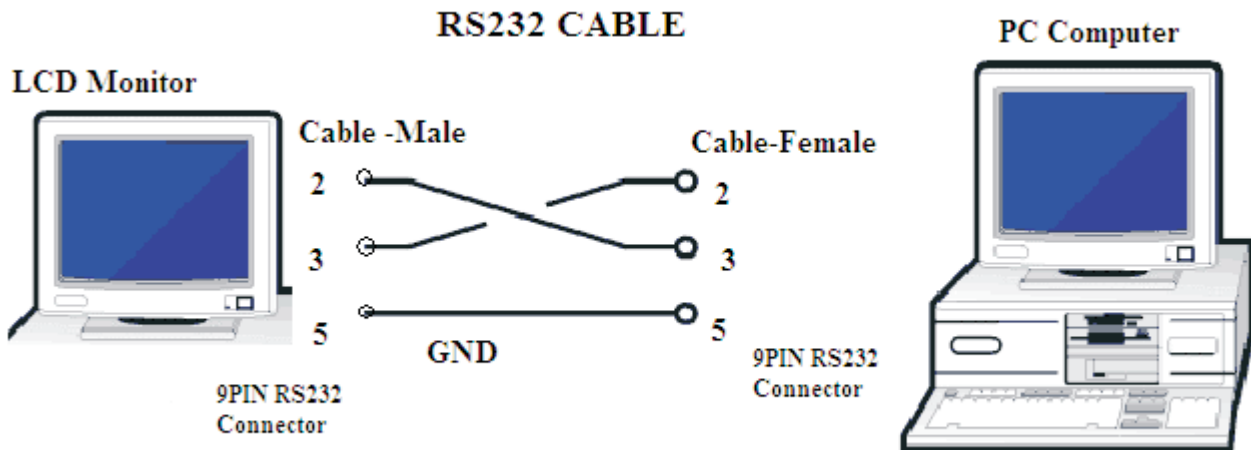
Checking:



Package List

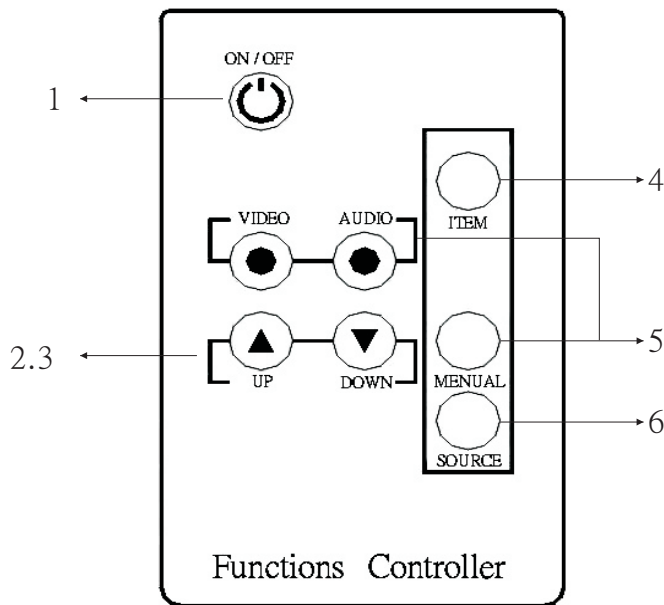
- A. LCD Monitor x 1
- B. Power Cord x 1
- C. Accessory Kit
 - a.DB15-DB15 VGA Cable x1 x 1(option)
 - b.1/8" male to 1/8" male audio cable x 1(option)
- D. User Manual x 1
- E. 12V Power Adapter x 1(Exception 26"/32")
- F. Remote Control x 1

B:RS232 Cable pin definition:



C:RS232 Communication data:

| | | | | | |
|--|---|--|--|--|--|
| Serial Settings for communication with Screen. | | | | | |
| These are the settings that need to be set on a PC/control system for it to communicate with the screen. | | | | | |
| The RS232 serial cable used should be a "Crossed over" type. See diagram above. | | | | | |
| Baud rate | = 9600 bps | | | | |
| Parity | = None | | | | |
| Character length | = 8 bit | | | | |
| Stop bit | = 1 bit | | | | |
| Flow control | = None | | | | |
| Serial commands | | | | | |
| Power Commands | | | | | |
| ===== | | | | | |
| \x02PON\x03 | Power On | | | | |
| \x02POF\x03 | Power Off | | | | |
| ===== | | | | | |
| Volume Commands | | | | | |
| ===== | | | | | |
| \x02AVL:XXX\x03 | Volume preset. XXX = the value 000 to 100 | | | | |
| ===== | | | | | |
| Source Selection | | | | | |
| ===== | | | | | |
| \x02IMS\x03 | Input select(toggle) | | | | |
| \x02IMS:SL1\x03 | AV1 | | | | |
| \x02IMS:SL2\x03 | AV2 | | | | |
| \x02IMS:SL3\x03 | S-Video | | | | |
| \x02IMS:PC1\x03 | PC Input | | | | |
| \x02IMS:PC2\x03 | DVI In | | | | |
| ===== | | | | | |



1. Power

Monitor power ON / OFF. At OFF mode, monitor will be at standby status.

LED- Green Light -- Power On

Red Light -- Standby mode

2. 3. Adjust /

Increase or decrease the value on OSD menu.

 Increase value on the OSD Menu

 Decrease value on the OSD Menu

4. Item(Option)

PIP/POP selection.

5. Menu

OSD Menu control.

6. Source

Select input signal from AV1, AV2, S-Video or PC(orDVI).