

VIDEOLOGY®

IMAGING SOLUTIONS INC.

LCD MONITOR USER MANUAL

45M19H

19" TFT LCD



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Videology Imaging Solutions, Inc. USA
37M Lark Industrial Parkway
Greenville, RI 02828
Tel: 401-949-5332
Fax: 401-949-5276



Videology Imaging Solutions, B.V. Europe
Liessentstraat 2B
NL-5405 AG Uden, The Netherlands
Tel: +31 (0) 413-256261
Fax: +31 (0) 413-251712

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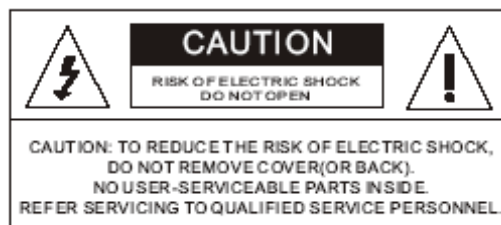
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1. Warning

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 non-insulated 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.

2. Precautions

2.1. 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.

2.2. 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.

2.3. 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.

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3. 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 performance.

4. Features

- NTSC/PAL Auto Selectable
- 300 cd/m2 Brightness
- Remote Control
- Inputs/Outputs: 2 BNC Composite Video, S-Video, 2CH Audio (RCA) & PC IN
- Auto Termination 75 Ohms
- VESA Standard Bracket & Desktop Mount
- Easy OSD Menu User Interface
- Wall Mountable

5. Operating Instructions

5.1. Control

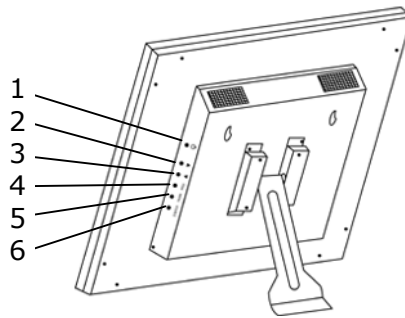


Figure 1. 19" LCD Monitor

1. **Power**
Monitor power ON / OFF. At OFF mode, monitor will be at standby status
Green Light -- Power On
Red Light -- Standby mode
2. **Adjust** ◀
Increase the value on the OSD menu or turn ON / OFF function
3. **Adjust** ▶
Decrease the value on the OSD menu or turn ON / OFF function
4. **Item**
Chose sub menu from Audio / Video / Image
Press again to enter selected option
5. **Menu**
OSD menu ON / OFF control
6. **Source**
Select input signal from AV1, AV2, S-Video or PC

6. Connectors

6.1. 19" Monitor Back Panel

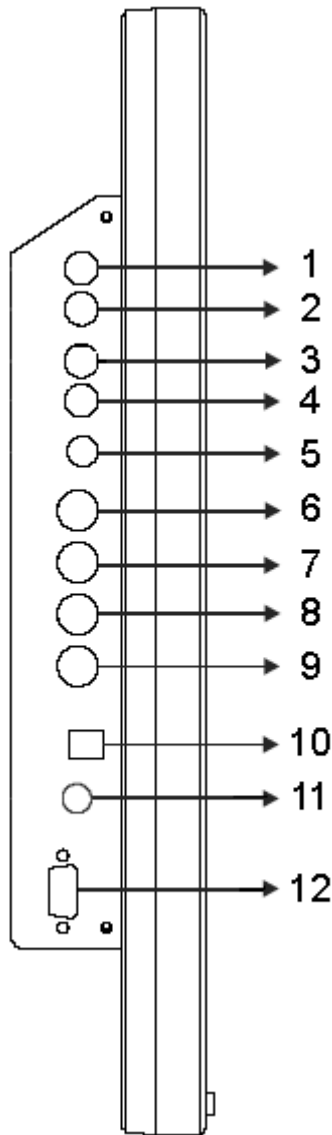


Figure 1. 19" Back Panel

- 1 **AUDIO 2 OUT**
Audio looping outputs for AUDIO 2
- 2 **AUDIO 2 IN**
Stereo Audio Signal Input, this input is for PC or Av2 or S-Video (refer to note below)
- 3 **AUDIO 1 OUT**
Audio looping outputs for AUDIO 1
- 4 **AUDIO 1 IN**
Stereo Audio Signal Input, this input is for Av1 (refer to note below)
- 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**

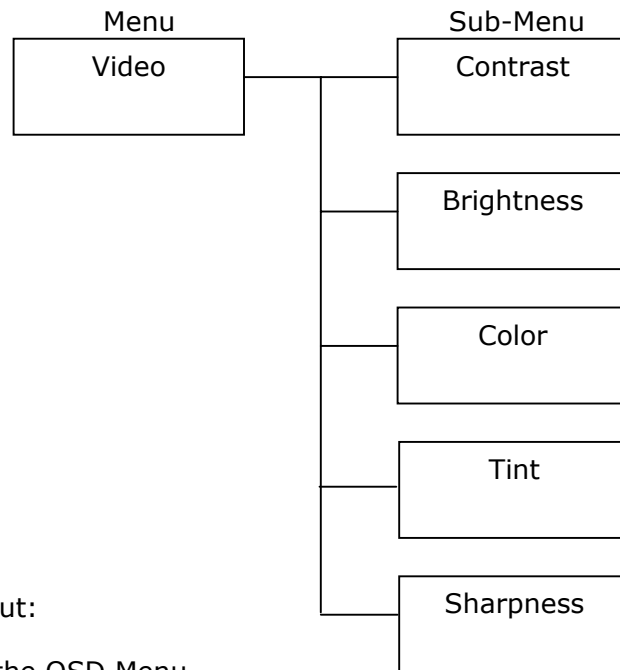
Note: Audio out is muted until video is present

Audio Connections

	Audio 1	Audio 2
PC		√
AV1	√	
AV2		√
S-Video		√

7. OSD Architecture

7.1. 19" Monitor Video Function



Press **SOURCE** to select a video input:

Press the MENU button to bring up the OSD Menu.

Press again to select VIDEO, then press ITEM twice to enter submenu.

As shown, press keys to adjust selection.



Figure 2. Example

Note: In remote control, press key to adjust.
(After adjustment, the monitor will store new settings)

Contrast

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

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 video noise and foreheads to turn white.

Color

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

TINT

Adjusts the colors on the screen. Reds and yellows are most noticeable. Tint also sets for pleasing facial tones. **Note: Appears in NTSC mode only.**



Sharpness

Sets the desired sharpening enhancement to the picture.

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7.2. Video Function (PC Mode Only)

Press **SOURCE** to select a image input:

Press the MENU button to bring up the OSD Menu.
Press   again to select IMAGE, then press ITEM twice to enter submenu.

As shown, press   keys to adjust selection.



Note: In remote control, press   key to adjust.
(After adjustment, the monitor will store new settings)

Auto

Auto detect screen detail data, such as clock and phase.

Contrast

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

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 video noise and foreheads to turn white.

H-Position

Allows adjustment for the horizontal position.

V-Position

Allows adjustment for the vertical position.

Clock

Is used to adjust to the best picture quality. It adjusts the number of the clock pixels across one timeline. Therefore it can affect the picture's position and size.

Note: Improper adjustment will caused image failure.

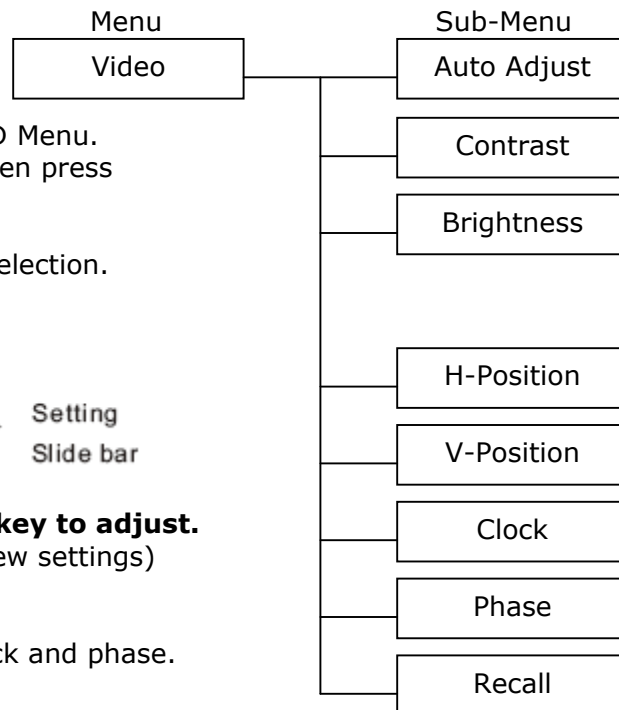
Phase

Is used to adjust to the best picture quality. It adjusts the sampling phase across one pixel at a time. When the phase is not adjusted properly, the picture will be unclear. Therefore this value should be carefully adjusted.

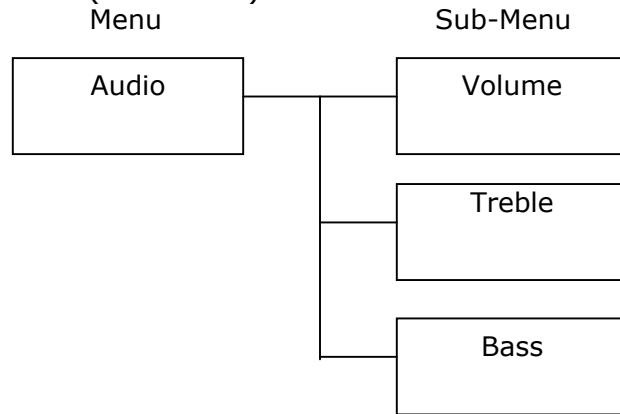
Note: Improper adjustment will caused image failure.

Recall

Sets the monitor to the original factory setting.



7.3. Audio Function (All Models)



Press the MENU button to bring up the OSD Menu.

Press again to select AUDIO, then press ITEM twice to enter submenu.

As shown, press keys to adjust selection.



Figure 3. Example

Note: In remote control, press key to adjust.
(After adjustment, the monitor will store new settings)

Volume

Controls built-in as well as external speakers output volume.

Note: Volume control can also be adjusted by hot key. (Remote Operation)

Treble

Audio treble adjustment.

Bass

Audio bass adjustment. Will not affect internal speakers. Bass adjustment is dependant on external speaker response.

Note: Audio is muted without accompanying video input.

8. LCD Monitor Mounting Guide

8.1. Desktop Mount

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

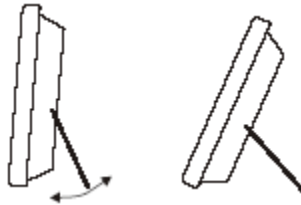


Figure 4.

8.2. Wall / VESA mount

Please follow the fix-hole size on back panel to install the LCD to the wall directly, or use a VESA mount.

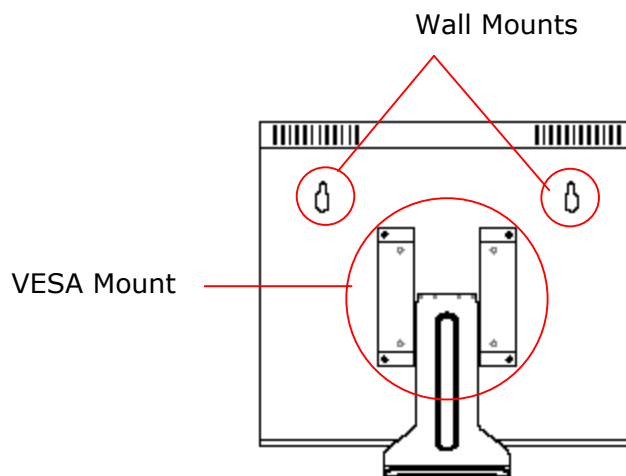


Figure 5.

9. Device Connectors

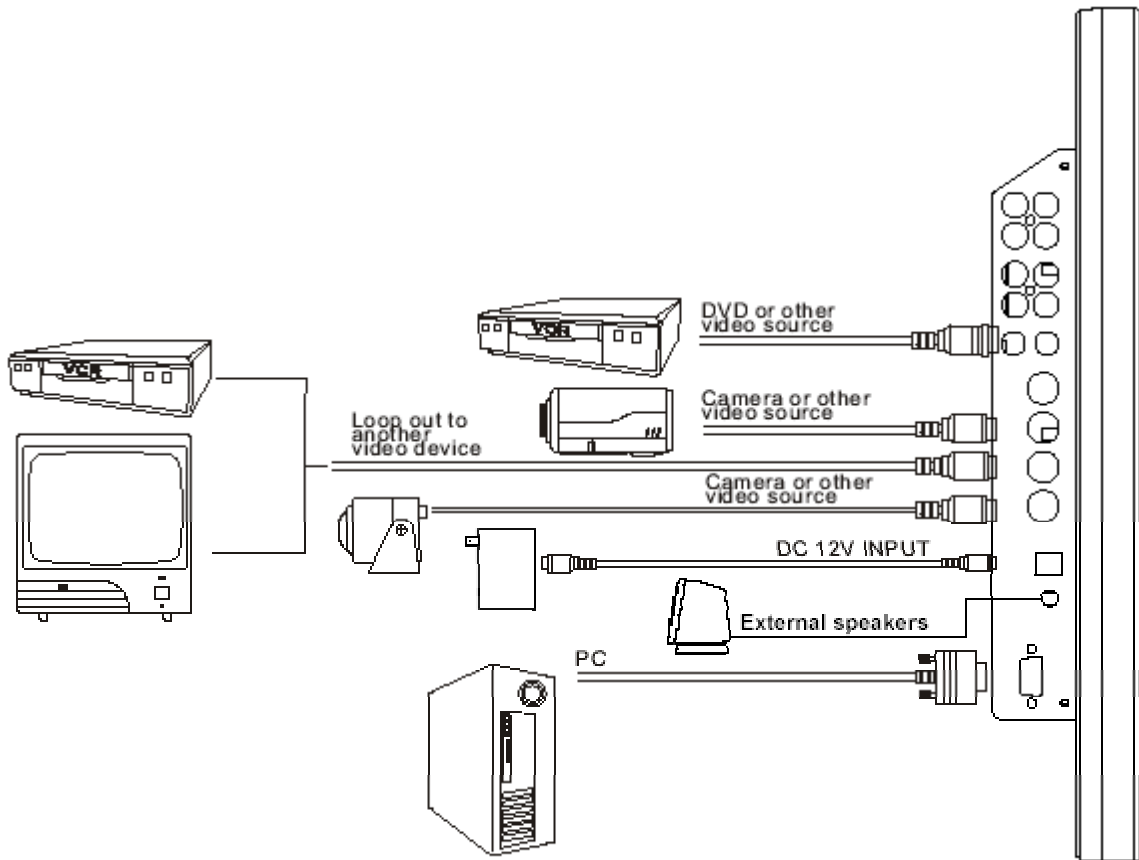


Figure 6. LCD Connectors

- a) Connect PC to Monitor through VGA connector as shown in the above picture
See Table 1 for support resolutions.
- b) Connect External device such as DVD or Game Player to Monitor as shown in the above picture
- c) Connect CCD Camera 1 and 2 to Monitor through Video Input 1 and 2 (BNC Connect)
as showing in the above picture

Note: Please refer to Specification for auto detection after changing resolution setting.

Table 1. Support Resolutions

19" Monitor

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

10. Specifications

Electrical

	45M19H
Operating System	NTSC/PAL auto detect
Brightness	300 cd/m ²
Aspect Ratio	4:3
Picture Diagonal	19"
Active Area (W x H)	13.24" x 11.85" (336.3mm x 301.1mm)
Resolution (H x V)	1280 x 1024 (SXGA)
Video Angle	Up 80°, Down 80°, Left 80°, Right 80°
Contrast Ratio	700:1
Video Input	2 CH composite video 1Vp-p 75ohm 1 S-Video:Y=1.0Vp-p w/neg. sync C=0.285Vp-p
Video Output	2 CH composite video 1Vp-p 75ohm
Audio Input/Output	2 CH (RCA)
In/Out Impedance	Auto termination (75 Ohms)
Power Source	12VDC/90-260VAC 60Hz/50Hz adaptor
Power Consumption	3A/36W

Environmental

Ambient operating temperature	-10° C ~ 50° C (14°F ~ 1`22°F)
Operating Humidity	20% - 85% RH

Mechanical

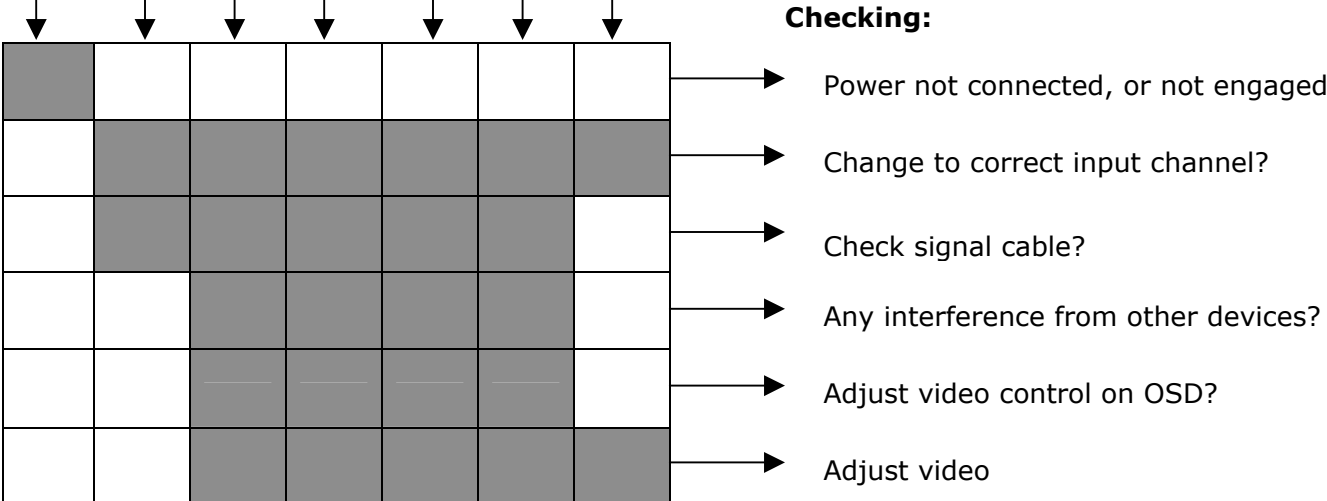
Dimensions W x H x D	16.9" x 14.01" x 2.62" (429.5mm x 356mm x 66.7mm)
Weight	7.8 kg (17.2 lbs)
Accessories <i>Included</i>	Power supply, power cord, 15 pin D-sub, 12VDC / 24VAC adapter Bracket: VESA 100 standard
Connectors	Video: 2 BNC inputs/output 1 S-Video 4-pin Mini DIN Audio: 2 RCA input/output 1 Ø3.5mm jack input PC: 1 15-pin D-sub connector

11. Appendixes

11.1. Troubleshooting

Problem:

- 1. No power
- 2. No video or audio
- 3. Bad video or audio
- 4. Image not stable
- 5. Abnormal line
- 6. Ghost image
- 7. Desired video disappears

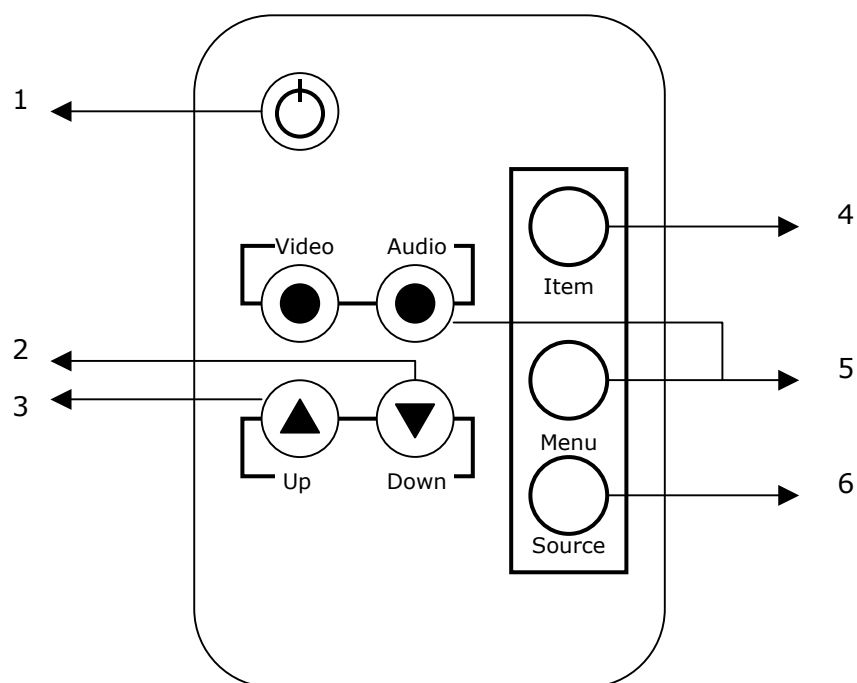


Checking:

11.2. Package Contents

- A. LCD monitor
- B. Power cord
- C. Accessory kit
 - a. DB15 – DB15 VGA cable
 - b. 1/8" male to 1/8" male mini stereo plug cable
- D. User manual
- E. 12V Power Adapter

12. Remote Control



- 1. Power**
Monitor power ON / OFF. At OFF mode, monitor will be on standby status
LED - Green Light -- Power On
Red Light -- Standby mode
- 2. Adjust ▼**
Decrease the value on the OSD menu or turn ON / OFF function
- 3. Adjust ▲**
Increase the value on the OSD menu or turn ON / OFF function
- 4. Item**
Chose sub menu from Audio / Video / Image
Press again to enter selected option
- 5. Menu**
OSD menu ON / OFF control
- 6. Source**
Select input signal from AV1, AV2, S-Video or PC

13.Contact

To contact Videology Imaging Solutions:

USA:

Videology Imaging Solutions Inc.
37M Lark Industrial Parkway
Greenville, RI 02828
USA
Tel: (401) 949-5332
Fax: (401) 949-5276

Europe:

Videology Imaging Solutions Europe
Liessentstraat 2-B
NL-5405 AG Uden
The Netherlands
Tel: +31 (0) 413 256 261
Fax: +31 (0) 413 251 712

Please also visit our WEB-site at:

<http://www.videologyinc.com/>

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Videology Imaging Solutions Inc. is an ISO 9001 registered video camera developer and manufacturer serving security, industrial and machine vision, biometric and specialty OEM markets. The main facility is based in Greenville, Rhode Island, USA and Videology Imaging Solutions BV is located in Uden The Netherlands. The company designs, develops, manufactures and distributes video, image acquisition and display products.

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