INSTRUCTION MANUAL

9.7” LCD VIDEO MONITOR

Model: LCM-971

Please read this manual thoroughly before use and keep for future reference.
Warning Statements

* Follow this safety instruction to use the monitor properly and prevent the damages.

* This safety instruction has “Warning” and “Caution” as below.

**WARNING:** If the user does not follow this instruction, it may cause the serious damage to the user.

**CAUTION:** If the user does not follow this instruction, it may cause the slight damage to the user or cause some damages to the monitor.

* Keep this user’s guide book for later use.

- Never remove the back cover and touch the inside of the monitor. If you need a service, please contact the service center.

- Keep away the monitor from the direct sunlight and a heating appliance.

- Never push objects of any kind into this product as they may result in a risk of fire or electric shock.

- Connect the power code to the wall outlet tightly. If the power code or plug are defective and the wall outlet is not tight, please do not use them.
Warning Statements

Do not install this monitor on the outside and near water. If may cause damage to the product, electric shock and fire.

For cleaning do not use liquid cleaners. Never touch the power plug with wet hands.

When lightning and thundering, unplug the monitor from the wall outlet and never touch it.

Unplug this product from the wall outlet, when it does not operate for a long time.

When smoking and noising from the monitor, unplug the product from the wall outlet and contact a service center.

How to fix

1. Do not open this product as it contains high voltage inside.
2. It may create an electric shock.
3. If the user disassembles and remove the back cover, it does not make sure
4. To make up for the damages and do a service and exchange the monitor.
Cautions

- Install this monitor some distance from the wall and do not install unless proper ventilation is provided.
- Place this product on a stable place. If not, it may fall, causing serious damages to the monitor and people.
- The openings must not be blocked by curtain, rug or other similar surface.
- When carrying this monitor, be careful not to damage the panel and drop it. It may cause some trouble.
- Before carrying the monitor, turn it off and unplug the signal cables and power code from the wall outlet.
- Take the power plug out from the wall outlet. Do not pull the cable. It may snap the inner wires and cause overheating and fire.
- Install this monitor about 50cm far from the eyes and an angle of 0~15 degrees below eyes. Too close installation may cause having weak sight.
- Do not press the LCD panel with hands or the sharpened material hardly.
- For cleaning, unplug the monitor from the wall outlet. Do not use the liquid cloth. Use the soft cloth.
- Do not use the chemical liquid for cleaning. It may cause fading and breakage.
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INSTALLATION

1.1 Unpacking

Remove the package cover and place the product on a flat and secure surface or in the installation location. This equipment should be unpacked and handled with care. If an item appears to have been damaged in shipment, notify the shipper immediately. Check whether all the following device and accessories are included with the main system. If any items are missing, notify your Sales or Customer Service Representative.

1.2 Part List

The following table lists the parts included:

<table>
<thead>
<tr>
<th>Monitor</th>
<th>User’s Guide</th>
<th>External Power Cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Adaptor</td>
<td>VGA Cable</td>
<td></td>
</tr>
</tbody>
</table>
1.3 Main Functional at Front Panel

1. **MENU / EXIT**
   Activates and exits the OSD.

2. **SOURCE / ▼▼ ▼▼**
   Select input source, and move the OSD menu.

3. **AUTO / △△ △△**
   Move the OSD menu and auto adjustment of RGB source.

4. **◄◄ ◄◄ / VOL**
   Decrease the level of volume and move the previous menu.
   Enable Key lock On/Off control while it is pushing for 3 second.

5. **▷▷ ▷▷ / SELECT**
   Increase the level of volume and select the OSD menu.

6. **уй / POWER**
   Turns the power ON or OFF. There will be a few seconds delay before the display appears.
   The power LED(next to the power switch) lights with green when the power is turned ON.
   The power is turned off by pressing the power switch again and the power LED goes Red.

7. **LED LAMP**
   Power ON Indicator

8. **SPEAKERS**
1.4 Connection at Back Panel

1. HDMI Input
2. AV1 Input
   Composite signal input for AV 1.
3. AV1 Output
   Video Looping output for AV 1.
4. AV2 Input
   Composite signal input for AV 2.
5. AV2 Output
   Video Looping output for AV 2.
6, 7. AUDIO1 IN
   Stereo audio signal input.
   This input for AV1 and S-VIDEO.
8. S-Video Input
   Y/C separated signal input.
9. PC AUDIO Input
10. RGB Input
11. DC 12V Input
OSD (On Screen Display) SETTING

■ A. INPUT Select

Inputs can be set to AV1, AV2, S-VIDEO, HDMI and PC mode.

1. Press the SOURCE button and then ▲/▼ Button to move the source
2. Press the ▶ button to select the source.
3. Press the MENU/EXIT Button to exit the INPUT menu.

■ B. MENU SELECTION

1. Press the MENU/EXIT key to access the main menu.
2. Use the ▲ and ▼ arrow key to highlight a selection.
3. Press the ▶/SELECT key to select an item.
4. Use the ▲ and ▼ arrow key to highlight a selection.
5. Use the ◀ and ▶ arrow key to adjust the setting on a selected item.

■ C. PICTURE MENU on OSD

C. 1 INPUT SOURCE (AV1, AV2, S-VIDEO, HDMI)

- OSD Menu is working on after it connects the source signal.
1. Press the MENU/EXIT Button and then ◀/▶ Button to select the PICTURE menu.
2. Press the ▲ or ▼ Button and then button to select the Button to select the adjustment item you need.
3. Press the ◀ or ▶ Button to active the item.
   Ex) if you select the BRIGHTNESS, then the below picture appears on the bottom screen.

![Brightness Adjustment](image)

4. Press the MENU/EXIT button to move to the previous menu.

C.2 INPUT SOURCE (PC Mode only)

5. Press the MENU/EXIT Button and then ◀/▶ Button to select the PICTURE menu.
6. Press the ▲ or ▼ Button and then button to select the Button to select the adjustment item you need.
7. Press the ◀ or ▶ Button to activate the function.
   Ex) if you select the BRIGHTNESS, then the below picture appears on the bottom screen.
8. ‘Auto’ function is adjusting the location of screen by receiving the sync signal from PC.
   Ex) Resolution change.
9. ‘Color Auto’ is adjusting the optimum color coordination automatically.

D. VOLUME MENU on OSD (AV1, AV2, S-VIDEO, PC, HDMI)

1. Press the ▶/Enter button for adjusting the volume up and down.
E. SYSTEM MENU on OSD (AV1, AV2, S-VIDEO, HDMI)

1. Press the MENU/EXIT Button and then ◀/▶ Button to select on the SYSTEM menu.
2. Press the ▲ or ▼ Button and then button to select the Button to select the adjustment item you need.
3. Press the ◀ or ▶ Button to active the item.

PC (VGA)

4. Press the MENU/EXIT button to move to the previous menu.

F. FUNCTIONS MENU on OSD (PC Mode only)

1. Press the MENU/EXIT Button and then ◀/▶ Button to select the FUNCTION menu.
2. Press the ▲ or ▼ Button and then button to select the Button to select the adjustment item you need.
3. Press the ◀ or ▶ Button to active the item.
4. Press the MENU/EXIT button to move to the previous menu.
G. HOT KEY Function Definition

<table>
<thead>
<tr>
<th>OSD KEY</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENU / EXIT</td>
<td>OSD ON/OFF, Exit</td>
</tr>
<tr>
<td>MODE/DOWN</td>
<td>Source Change, Menu down</td>
</tr>
<tr>
<td>VOL+/RIGHT</td>
<td>Volume menu On / Volume Up</td>
</tr>
<tr>
<td>VOL-/LEFT</td>
<td>Volume Down</td>
</tr>
<tr>
<td>AUTO/UP</td>
<td>Auto Adjust, Menu up</td>
</tr>
<tr>
<td>POWER</td>
<td>POWER ON / OFF</td>
</tr>
</tbody>
</table>

SPECIFICATION

<table>
<thead>
<tr>
<th>VIDEO</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen Size</td>
<td>9.7”</td>
</tr>
<tr>
<td>Pixel Type</td>
<td>Active Matrix TFT</td>
</tr>
<tr>
<td>Panel Resolution</td>
<td>1024 x 768 @60Hz</td>
</tr>
<tr>
<td>Pixel Pitch</td>
<td>0.192mm x 0.192mm</td>
</tr>
<tr>
<td>Brightness</td>
<td>300 cd/㎡</td>
</tr>
<tr>
<td>Contrast Ratio</td>
<td>600 : 1</td>
</tr>
<tr>
<td>Aspect Ratio</td>
<td>4 : 3</td>
</tr>
<tr>
<td>Viewing Angle (H/V)</td>
<td>178°/178°</td>
</tr>
<tr>
<td>Display Color</td>
<td>262,244 colors (6 bit)</td>
</tr>
<tr>
<td>Response Time</td>
<td>&lt; 35ms</td>
</tr>
<tr>
<td>Video System</td>
<td>NTSC / PAL / SECAM</td>
</tr>
<tr>
<td>Frequency (H)</td>
<td>30 ~ 61KHz</td>
</tr>
<tr>
<td>Frequency (V)</td>
<td>55 ~ 75Hz</td>
</tr>
<tr>
<td>Panel Lamp Life</td>
<td>10,000hours</td>
</tr>
<tr>
<td>Power Source</td>
<td>DC12V adapter (Auto Switching)</td>
</tr>
</tbody>
</table>
APPENDIX

1. D-SUB Connector PIN Assignment

<table>
<thead>
<tr>
<th>PIN NO.</th>
<th>PIN Name</th>
<th>PIN NO.</th>
<th>PIN Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RED VIDEO</td>
<td>9</td>
<td>NC</td>
</tr>
<tr>
<td>2</td>
<td>GREEN VIDEO</td>
<td>10</td>
<td>SIGNAL CABLE DETECT</td>
</tr>
<tr>
<td>3</td>
<td>BLUE VIDEO</td>
<td>11</td>
<td>GROUND</td>
</tr>
<tr>
<td>4</td>
<td>GROUND</td>
<td>12</td>
<td>SDA (for DDC)</td>
</tr>
<tr>
<td>5</td>
<td>GROUND</td>
<td>13</td>
<td>H-SYNC</td>
</tr>
<tr>
<td>6</td>
<td>RED GROUND</td>
<td>14</td>
<td>V-SYNC</td>
</tr>
<tr>
<td>7</td>
<td>GREEN GROUND</td>
<td>15</td>
<td>SCL (for DDC)</td>
</tr>
<tr>
<td>8</td>
<td>BLUE GROUND</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. HDMI Type A PIN Assignment

<table>
<thead>
<tr>
<th>PIN NO.</th>
<th>PIN Name</th>
<th>PIN NO.</th>
<th>PIN Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TMDS Data2+</td>
<td>11</td>
<td>TMDS Clock Shield</td>
</tr>
<tr>
<td>2</td>
<td>TMDS Data2 Shield</td>
<td>12</td>
<td>TMDS Clock-</td>
</tr>
<tr>
<td>3</td>
<td>TMDS Data2-</td>
<td>13</td>
<td>CEC</td>
</tr>
<tr>
<td>4</td>
<td>TMDS Data1+</td>
<td>14</td>
<td>Reserved (HDMI 1.0-1.3c), HEC Data -</td>
</tr>
<tr>
<td>5</td>
<td>TMDS Data1 Shield</td>
<td>15</td>
<td>SCL (PC serial Clock for DDC)</td>
</tr>
<tr>
<td>6</td>
<td>TMDS Data1-</td>
<td>16</td>
<td>SDA (PC serial Clock for DDC)</td>
</tr>
<tr>
<td>7</td>
<td>TMDS Data0+</td>
<td>17</td>
<td>DDC/CEC/HEC Ground</td>
</tr>
<tr>
<td>8</td>
<td>TMDS Data0 Shield</td>
<td>18</td>
<td>+5V Power (max 50 mA)</td>
</tr>
<tr>
<td>9</td>
<td>TMDS Data0-</td>
<td>19</td>
<td>Hot Plug Detect (All Versions) and HEC Data + (Optional, HDMI 1.4+ with Ethernet)</td>
</tr>
<tr>
<td>10</td>
<td>TMDS Clock+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**TROUBLESHOOTING**

* When the following troubles are occurred, follow the trouble shooting before contacting a service center.

<table>
<thead>
<tr>
<th>Troubleshooting</th>
<th>Troubleshooting Tip</th>
</tr>
</thead>
<tbody>
<tr>
<td>The screen doesn’t show up</td>
<td>1. Make sure if the power supply is connected property</td>
</tr>
<tr>
<td></td>
<td>2. Turn on the power.</td>
</tr>
<tr>
<td></td>
<td>3. Select the input signal right for the connected port.</td>
</tr>
<tr>
<td>The screen is too light or to dark</td>
<td>Control the BRIGHTNESS</td>
</tr>
<tr>
<td>The screen size is not fit for the PC signal</td>
<td>Press the AUTO key among keys in the front. (It is used only in the PC signal)</td>
</tr>
<tr>
<td>The screen color shows strange in the PC signal</td>
<td>In the FUNCTION menu of OSD menu, perform the AUTO-ADJUST.</td>
</tr>
</tbody>
</table>

**Limited Warranty**

All products carry a limited warranty from ship date against defects in materials and workmanship. We are not liable for improper installation that results in damage to mounts, adapters, display equipment or personal injury.