HD Color LCD Monitor

7" High Resolution On-Camera Field, Director of Professional Monitor

User manual
Dear users:

Thank you for purchasing our photography, broadcast HD-SDI LCD Monitor kit. This product employs digital signal processing circuit and professional TFT LCD screen. It’s high brightness, low power consumption, stable performance and emits no radiation advantages, strong compatibility, adjustable color temperature control. Advanced features include Screen marker, CAMERA mode, Image magnification, Image flip and change, Monochrome mode etc. It is an ideal portable light weight frame supporting the monitor.

The monitor is not only with HDMI, COMPONENT (YPbPr), composite video, Audio signals input, also with HD-SDI input & output, to meet different customers' needs.

Product feature:
- Peaking focus assist (peaking filter)
- CAMERA mode: Canon 5D Mark II mode
- After exposures hint
- False Colors
- Image magnification/scaling, image flip function
- Picture in picture (PIP) function
- Line field blanking
- Brightness histogram
- Front earphone hole
- Monochrome display: color, black and white, red, green, blue, closed
- Aspect ratio: full screen, point to point, panoramic. Zoom 2, Zoom 1, 4:3
- Scan mode: standard, underscan, overscan
- Screen marker: off, 96%, 93%, 90%, 85%, 80%
- Screen Center Marker (cross mark) display setting
- Display pixel and the pixel point to point display
- Panel button function custom setting
- The current picture still, capture function
- LED backlight, image display brighter, screen does not flicker

To insure best use of the unit, please read the user's manual carefully.

CAUTION
1. Please use the adapter attached in the accessory.
2. Do not expose this product to direct sunlight, heat or humid conditions.
3. Keep away from strong light while using this product so as to obtain the clearest and the most colorful picture.
4. Please avoid heavy impact or drop on the ground.
5. Do not use chemical solutions to clean this unit. Please simply wipe with a clean soft cloth to keep the brightness of the surface.
6. Without adjustable component in the unit, please do not take apart or repair the unit by yourself, to avoid damage the product.

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9. **F2:** Custom button, see F4

10. **F1:** Volume down, in OSD menu for left adjustment, function confirm or decrease the value of analog on the menu

11. **F1:** Custom button, see F4

12. **MENU:** To activate or close OSD (on-screen display) menu

13. **YPbPr:** YPbPr Color difference signal input selection button

14. **VIDEO:** Composite video signal input selection button

15. **HDMI:** HDMI HD signal input selection button

16. **SDI:** Digital component serial signal input selection button

17. Sun shade slot

18. LCD display panel

19. TALLY(indicator)

### 1.2. Rear panel view

1. **HDMI OUT:** HDMI(High Definition Multimedia Interface) signal output

2. **HDMI IN:** HDMI(High Definition Multimedia Interface) signal input
3. Y IN: Y signal input
4. Y OUT: Y signal output
5. Pb IN: Pb signal input
6. Pb OUT: Pb signal output
7. Pr IN: Pr signal input
8. Pr OUT: Pr signal output
9. VIDEO IN: Composite Video signal input
10. VIDEO OUT: Composite video signal output
11. AUDIO IN: Audio signal input
12. AUDIO OUT: Audio signal output
13. HD-SDI IN: Digital component serial interface signal input (optional)
14. HD-SDI OUT: Digital component serial interface signal output (optional)
15. Battery Plate slot: (According to the users' requirements selection) - see attached instruction
16. DC power input interface
17. 4-pin XLR DC power input
18. Tally (indicator) signal input
19. Power ON/OFF Switch: — Power On, O Power Off

1.3 Side view:

1. There are 1/4 thread mounting holes in the monitor, they are not only for fix hot shoe mount, magic arm, but also convenient for customers' install sun shade

1.4. Battery plates:

- F970
- LP-E6
- D28

Panasonic Anton Bauer
Sony V-Mount Plate

According to the different requirements of battery for the customers, attached different battery plate slots. NO requirements, the factory defaults assembly F970 battery plate.

1.4.1 Sony F970 battery slot for battery of Sony DV:
Sony F970 F960 F950 T930 T770 T750 F730 F570 F550 F530 QM91D OM91 QM90D QM90 QM71D QM71 QM70D QM70 QM51D QM51FM71 FM70 series

1.4.2 Canon LP-E6 battery slot for battery of Canon DV:
Canon LP-E6

1.4.3 Panasonic D28 battery slot for battery of Panasonic DV:
Panasonic D55 D54S D54SE D40 D35 D33 D32 D28 D25 D22 series
1.4.4 Sony V-mount camera battery plate

1.4.5 Panasonic Anton Bauer battery plate

1.5. Battery plates for various batteries

Three types of batteries corresponding to the upper three slots

F970  LP-E6  D28

Remark: Different specifications of the battery, capability is different. The working time for the monitor will be different. Higher capability (working time) will be longer.

1.6. Power input way

There are some ways to supply the power of the monitor:

1.6.1. The power supply by the adapter. 12V/1.2A is optional DC voltage changer, insert DC power input interface directly. It can be chose qualified adapter which current with output voltage DC 6~18V, output capacity >15W by customers.

Please note that the polarity of power input is inner POSITIVE, outer NEGATIVE. Otherwise will damage the product. (see attached image)

Picture:

[-] [C] [+]

Please use the adapter attached in the accessories. If necessary to use other specifications adapter, please note to provide the qualified adapter which power supply should be not less than 15W (DC6V-18V)

1.6.2. This product also can be by 4-Pin XLD interface to use the power supplied from camera.

<table>
<thead>
<tr>
<th>Pin Number</th>
<th>Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GND</td>
</tr>
<tr>
<td>2, 3</td>
<td>NC</td>
</tr>
<tr>
<td>4</td>
<td>+12V</td>
</tr>
</tbody>
</table>

1.6.3. Another option of power source is using batteries. The product back case including battery slot is available for five types of batteries. Customers can choose different battery slots according to their needs. (NO requirements, the factory defaults assembly F970 battery plate)

- Battery install way as below picture

Picture:

[Diagram showing battery installation]
Suggestion: Better remove the battery for long-term NO use this product.

Different specifications of the battery, capability is different. The working time for the monitor will be different. Higher capability (working time) will be longer.

Without design charging circuit for the monitor, please remove the battery to the battery charger for charge.

CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS

1.7. Sun shade installation and remove

1.7.1 Installation: Positive parallel alignment of the sun shade and monitor, the projection of the sun shade hanging claw at the monitor sun shade slot (see the monitor front view marked 17), pay attention to the left and right position should be aligned around inserted balanced slide down.(see picture)

- Sun shade installation picture

1. The sun shade protruding hanging claws alignment the monitor sun shield slot, the position should be aligned with the left and right, send the

sun shade hung claw to monitor slot.

2 Inserted around balanced slide down, match with sun shade and monitor

3 Please follow steps 1. 2. 3, otherwise will damage the cover, please do not press the L/R panel of the sun shade, if not, unable open the cover.

1.7.2 Remove: When you want to sun shade is removed from the monitor, hands were clenched monitor and the sun shade, drag up sun shade from monitor, then separates the sun shade from the monitor.
• Sun shade remove picture:

1. According to the following steps, close the sun shade in order

2. Left and right balance to move sunshade, the hanging claw and slot separate.

3. Remove the sun shade

1.8. Tally use and connect

To use random TALLY kit connect TALLY signal line from the switching station as shown

Connection method:

1. Active connection: GND and G with 0-5V voltage wire shorted to ground access

   - When the voltage is 0.3-2.7V, green TALLY lamp lights
   - When the voltage is 2.8-5.5V, red TALLY lamp flashes

2. Passive connection: GND, R, G all shorted red TALLY lamp flashes

   - Please note the connection method

2. Button operation instruction

  SDI → Digital component serial signal input selection

  HDMI → High Definition Multimedia Digital Signal input selection

  VIDEO → Composite video signal input selection
Ypbpr → Color difference interface video signal input selection

MENU → Menu button

< → Volume up, in OSD menu for left adjustment, function confirm or increase the value of analog on the menu

> → Volume down, in OSD menu for right adjustment, function confirm or decrease the value of analog on the menu

▲ → Enter menu operation for menu option and submenu up selection

▼ → Image still and menu operation down selection button. No need to enter menu operation, press this button directly enables the movable picture still in the picture. Enter menu operation as menu option and submenu down selection

摄影模式．使用5D2或55D和其他相似的照相机，压住此键，屏幕图像消失。若无松开此键，屏幕将恢复原状。

F1 → Custom button, can select(Screen marker, monochrome display, point to point, peaking focus assist, false colors filter, exposure, brightness histogram, scanning mode, center marker, segmentation, magnification) one of them as definition function, please set the system into menu.

F2 → Custom button, see F1

F3 → Custom button, see F1

F4 → Custom button, see F1

3. Menu function introduction

In the operating status, press button "MENU", then enter into OSD mode.

Press the unit button "▲" or "▼" to select the options which you need: (display result) (sound) (system setting) (scan position adjust). after select the button you need, press "<" or ">", press "<" or ">", then press "A" or "V", on the unit to confirm, if need to exit OSD menu, repress button "MENU".

- Display result setting (this setting has 3 pages menu)

Press "MENU" key, pop up OSD menu as below, "▲" or "▼" to select , press "<" or ">", press "A" or "V", to select the adjustment, then use "<" or ">", to adjust or select the adjustment. Press "MENU" to exit.

- Menu page 1 picture

Contrast: To adjust the brightest and darkest ratio of the image

Brightness: To adjust the image's brightness

Saturation: To adjust the saturation

Tint: Adjustment of the NTSC signal in the composite video mode, the other mode is invalid

Sharpness: To adjust the depth to the image

Color Temp: Use the adjustment the color temperature can be pre-set (user, 6500K, 7300K, 9300K)
**Picture Mode:** the image brightness, standard, soft, the user (the contrast, brightness, color settings) effect settings

**Aspect Ratio:** full screen display, point to point, panoramic. Zoom2, Zoom 1, 4:3 mode selection

- **Sound setting**

  Press "MENU" key, pop up OSD menu as below, "A" or "V" to select

  press "<" or ">", to confirm, press "A" or "V" to select the

  adjustment, then use "<" or ">", to adjust or select the adjustment.

  Press "MENU" to exit.

- **System setting** *(This setting has 3 pages menu)*

  Press "MENU" key, pop up OSD menu as below, "A" or "V" to select

  **Volume:** To adjust the volume

  **Balance:** To adjust 2-channel (L&R)

- **Language:** Chinese, English

  **Screen Marker:** Picture framing marker selection frame (off, 96%, 93%, 90%, 85%, 80%)

  **Center Marker:** Screen center marker (cross marker) display setting

  **Scan Mode:** To deal with special image (standard, overscan, underscan)

  **Check Field:** Color, black and white / monochrome switching, to switch image color, black and white, monochrome (red, green, blue)

  **Camera:** Canon 5D II or similar camera when shooting, image NO deformation, NO black, NO delay, perfect without distortion

  **Image Flip:** the U/D, L/R of the image around flip

  **H/V delay:** H/V delay optional switch

  **Dot By Dot:** In the video, the point to point display. Observing the image
more clearly

**PIP:** To display two inputs signal picture at the same time, can adjust picture position, size, picture interchange, double picture, picture out picture mode

**S D I:** HD SDI switch option (for with SDI input port modes, other modes select close)

**Effect:** Menu display effect

### Menu page 3 picture
![Menu Transparency](image)

**Menu Transparency:** To select the OSD display effect

**Menu Timer:** To control the automatic disappearance time after menu pop up

**Reset:** On system parameters and settings recover factory settings

**Ver 2.0:** Menu software version number

- **F** Custom button and scan setting (This setting has 2 pages menu)

  - Press "MENU" key, pop up OSD menu as below, **A** "or" **V** "to select
  - press "<" or ">" to confirm, press **A** "or" **V** "to select the adjustment, then use "<" or ">" to adjust or select the adjustment.
  - Press"MENU" to exit.

### Menu page 1 picture
![Menu page 1 picture](image)

**F1:** The corresponding panel button F1 custom button function definition of choice setting (Screen marker, monochrome display, point to point, peaking focus assist, false colors filter, exposure, brightness histogram, scanning mode, center marker, segmentation). The user can enter submenu select one item press the "MENU" is identified as the button function.

**F2:** The corresponding panel button F2 custom button function definition of choice setting

**F3:** The corresponding panel button F3 custom button function definition of choice setting

**F4:** The corresponding panel button F4 custom button function definition of choice setting

**Horizontal Position:** To adjust the image display (L/R)

**Vertical Position:** To adjust the image display (U/D)

### Menu page 2 picture
![Menu page 2 picture](image)

**Horizontal Size:** To adjust the image L/R stretch

**Vertical Size:** To adjust the image U/D stretch
### 3. Signal format form

<table>
<thead>
<tr>
<th>Video signal</th>
<th>Support signal format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite video</td>
<td>PAL/NTSC auto recognize</td>
</tr>
<tr>
<td>Component (Y/Pb/Pr)</td>
<td>1080/50i/60i/50p/60p; 720/50p, 720/60p; 480i, 480p, 576i, 576p;</td>
</tr>
<tr>
<td>HDMI</td>
<td>1080/24i/24p/25i/25p/30i/30p/50i/50p/60i/60p; 720/50p, 720/60p; 480i, 480p, 576i, 576p;</td>
</tr>
<tr>
<td>SDI(optional)</td>
<td>1080/24i/24p/25i/25p/30i/30p/50i/50p/60i/60p; 720/50p, 720/60p; 480i, 480p, 576i, 576p;</td>
</tr>
</tbody>
</table>

### SDI support mode

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Resolution</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1080p@60HZ/59.94HZ</td>
<td>3G</td>
</tr>
<tr>
<td>2</td>
<td>1080p@50HZ</td>
<td>3G</td>
</tr>
<tr>
<td>3</td>
<td>1080i@60HZ/59.94HZ</td>
<td>HD</td>
</tr>
<tr>
<td>4</td>
<td>1080i@50HZ</td>
<td>HD</td>
</tr>
<tr>
<td>5</td>
<td>1080p@30HZ/29.97HZ</td>
<td>HD</td>
</tr>
<tr>
<td>6</td>
<td>1080p@25HZ</td>
<td>HD</td>
</tr>
<tr>
<td>7</td>
<td>1080p@24HZ</td>
<td>HD</td>
</tr>
<tr>
<td>8</td>
<td>720p@60HZ/59.94HZ</td>
<td>HD</td>
</tr>
<tr>
<td>9</td>
<td>720p@50HZ</td>
<td>HD</td>
</tr>
<tr>
<td>10</td>
<td>720p@30HZ/29.97HZ</td>
<td>HD</td>
</tr>
<tr>
<td>11</td>
<td>720p@25HZ</td>
<td>HD</td>
</tr>
<tr>
<td>12</td>
<td>720p@24HZ/23.97HZ</td>
<td>HD</td>
</tr>
<tr>
<td>13</td>
<td>480i@60HZ/59.94HZ</td>
<td>SD</td>
</tr>
<tr>
<td>14</td>
<td>576i@50HZ</td>
<td>SD</td>
</tr>
<tr>
<td>15</td>
<td>PAL</td>
<td>SD</td>
</tr>
<tr>
<td>16</td>
<td>NTSC</td>
<td>SD</td>
</tr>
</tbody>
</table>
6. Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel size</td>
<td>7&quot; TFT LCD</td>
</tr>
<tr>
<td>Pixel</td>
<td>1280 (H) x 800 (V) pixels</td>
</tr>
<tr>
<td>Dot pitch</td>
<td>0.117 (H) x 0.117 (V) mm</td>
</tr>
<tr>
<td>Brightness</td>
<td>350 cd/m²</td>
</tr>
<tr>
<td>Contrast ratio</td>
<td>800:1</td>
</tr>
<tr>
<td>Response time</td>
<td>15 ms</td>
</tr>
<tr>
<td>Viewing angle</td>
<td>89°/89° (LR) 89°/89° (UD)</td>
</tr>
<tr>
<td>Display ratio</td>
<td>16:9 / 4:3 (adjustable)</td>
</tr>
<tr>
<td>LED backlight</td>
<td>LED</td>
</tr>
<tr>
<td>Input voltage</td>
<td>DC 6 - 18 V</td>
</tr>
<tr>
<td>Input signal</td>
<td>(3G-SDI, HD-SDI, SD-SDI, option) HDMI, Component Ypbpr, Composite Video, Audio</td>
</tr>
<tr>
<td>Output signal</td>
<td>(3G-SDI, HD-SDI, SD-SDI, option) HDMI; Component Ypbpr; Composite Video; Earphone monitoring; Audio</td>
</tr>
<tr>
<td>Power consumption</td>
<td>≤ 12.0 W</td>
</tr>
<tr>
<td>Special function</td>
<td>TALLY indicator</td>
</tr>
<tr>
<td>Working temperature</td>
<td>-10 - 55°C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-20 - 65°C</td>
</tr>
<tr>
<td>Unit size (mm)</td>
<td>215 L x 162 W x 62 H (with sunshade cover, F970battery plate F970)</td>
</tr>
<tr>
<td>Unit weight</td>
<td>780±20 g (with sunshade cover, F970battery plate F970)</td>
</tr>
</tbody>
</table>

7. Trouble shooting

If there is any problem using the unit, you can try follow ways to inspect and solve.

- **Without image display**
  - **Trouble shooting**
    - Video cable off or connect incorrectly: Check the quality of the cable, make sure the correct input interface.
    - Without video signal input: Check the signal source and output interface connect is correct or not.
    - Monitor is not be powered on: Check the power whether connected, put the power switch to “on” position.
    - Supply voltage instability: The power adapter or battery is poor connected with battery plate.
    - The power use is self-made, polarity connect inversely: Reference “Power input way” reconnect.

- **Image/color display abnormal**
  - **Trouble shooting**
    - Video cable poor contact: Change video cable, try again.
    - Video signal interfered from external environment: Move to another environment to try again.
    - Video input signal amplitude too low: Check signal source video output, or change signal source have a try.
    - Menu color saturation adjustment closing: Enter menu check color, or reset to factory settings.
    - B/W set in monochrome or black & white: Press the B/W button, back to the color.
    - Image deformation: Reset the ratio.

- **Speaker without sound**
  - **Trouble shooting**
    - Audio cable off or connect improperly: Confirm connected with the corresponding input end.
    - Volume adjustment was closed: Reset the volume control is adjusted to a proper position.
    - HDMI cable poor connected: Check the quality of cable, or change cable have a try.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No sound after switch video signal</strong></td>
<td>This monitor with audio signal only in audio input and HDMI</td>
</tr>
<tr>
<td><strong>Video without sound output</strong></td>
<td>A normal phenomenon. Because in the recording process, in order to avoid the sound field monitor and a voice of harassing together was also recorded in, so the camera itself is no sound output. Only in the playback when a sound output.</td>
</tr>
</tbody>
</table>

**Remark:**

If there are still other problems, please contact with our related deals.
If there are changes without prior notice.