6. Remote Control Operation

1. Please align the remote control with the infrared-receiving window on the monitor to operate.
2. Never disassemble the remote control or allow it to drop, or become wet.
3. Press the control buttons firmly. Allow 2 seconds for the picture to change.

- **MUTE (Mute):**
  Press to select ENABLE/MUTE sound.

- **POWER (Power switch):**
  Press to turn on/off the monitor.

- **↔ (Horizontal Turning of Picture):**
  Press to turn picture horizontally.

- **↕ (Vertical Turning of Picture):**
  Press to turn picture vertically.

- **CH+ (Channel Selection+):**
  Press to select the upper setting.

- **CH- (Channel Selection-):**
  Press to select the lower setting or to display the scale.

- **$:**
  Press to decrease Brightness.

- **$:**
  Press to increase Brightness.

- **MENU:**
  Press to show menu.

- **MODE (Picture Mode):**
  Press to select different picture modes (PERSONAL / STANDARD / SOFT / VIVID / LIGHT).

- **CALL (Call):**
  Press to display video channel source.

- **TIMER:**
  Press to set the time to shut down monitor (10, 20, 30, 40 and max 90 minutes).

- **LANG (Language Selection):**
  Press to select language display of English, Deutsch, Français, Español, Português, Italiano, Nederlands or Русский options.

- **SYS:**
  Press to select PAL / AUTO / NTSC.

- **SEL:**
  Press to select CAM channels.
7. Basic Operation

(1) Installation of Center Mounting Bracket:
1. Adjust monitor level by sliding the support to the desired height.
2. Adjust the angle of the monitor and tighten the knob on the center mounting bracket.

(2) Installation of U-support Bracket

(3) Connection of Power cable

Single red wire to positive power supply of DC/10-32V.
Single black wire to GND.
White wire for positive power wire of left light.
Blue wire for positive power wire of right light.
Brown wire for positive power wire of reversing light.
Green wire for any trigger control.
Yellow RCA for video output.
White RCA for Audio output.

5. Parts Identification

![Image of Parts Identification]
### 4. Accessories

<table>
<thead>
<tr>
<th>Accessories</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Mount Bracket</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>U-Support Bracket</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>Angle Adjustment Screws</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>Sun Shield</td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>Power Cable</td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
<tr>
<td>IR Remote Control</td>
<td><img src="image6.png" alt="Image" /></td>
</tr>
<tr>
<td>AV Cable</td>
<td><img src="image7.png" alt="Image" /></td>
</tr>
<tr>
<td>Cigarette Lighter</td>
<td><img src="image8.png" alt="Image" /></td>
</tr>
</tbody>
</table>

### 4. Reversing Display:

1. When the white wire is connected to the positive wire of the left turn light, the monitor automatically switches to CAM1 (left side camera) when the left turn indicator is activated.

![Diagram](image9.png)

2. When the blue wire is connected to the positive wire of the right turn light, the monitor automatically switches to CAM2 (right side camera) when the right turn indicator is activated.

![Diagram](image10.png)

3. When the brown wire is connected to the positive wire of back-up light, the monitor automatically switches to CAM3 (back-up camera) when the back-up light is turned on. The distancing grid will also be displayed.

![Diagram](image11.png)

4. When the green wire is activated, the monitor automatically switches to CAM4.

![Diagram](image12.png)

**Special Notice**

Accessory supply may be different for different application.
8. Menu

- Press MENU to display the following options and settings:
  1. PICTURE
  2. OPTION
  3. SYSTEM
  4. AUTO SCAN

1. Picture

BRIGHT, CONTRAST, COLOR, VOLUME, AUTO DIM and SCALE ADJUST will display on the screen as illustrated below:

- Press CH- to select BRIGHT.

2. Features

- TFT LCD monitor with wide angle view and high resolution display.
- Picture image may be adjusted for Horizontal, Vertical, Mirror and Normal viewing.
- Select from 8 languages for user operation.
- Automatic back lighting for buttons.
- Full-function remote control.
- Multiple video formats: PAL/AUTO/NTSC.
- 1 wired AUX input, 4 wireless cameras inputs, 1 video output and 1 audio output.
- Operates from 10-32V. Supports 12V or 24V automobile battery.
- Auto switch to back-up, left or right side camera view.
- On-board speaker.
- Automatic scanning function.
- The scale can be adjusted for left, right, up and down.

3. Technical Specifications

- Product: 7” Digital TFT-LCD Color monitor with built-in 2.4GHz wireless receiver.
- Demodulation mode: FM
- Frequency range: 2400-2483MHz
  Group supported: 2414, 2432, 2468, 2450
- Distance: 238m (barrier-free)
- Reception capability: -86dB
- Resolution: 900 x 3 (RGB) x 480
- Contrast: 500:1
- Brightness: 400cd/m².
- Viewing angle: U: 50 / D: 60, R/L: 70
- Audio output: 1W
- Loudspeaker: one 15x24mm round loudspeaker
- Power supply: Automobile storage battery (10-32V)
- Power consumption: about 8W
- Outer dimension: 182mm (W) x 122mm (H) x 43mm (T)
- Operating temperature: -20°C ~ +60°C
- Storage temperature: -30°C ~ +80°C, RH90%

Special Notice

All specifications are subject to change without notice.
Maintenance

(1) Remove all the cable connections from the monitor before cleaning the device.
(2) Use a mild household detergent and clean the unit with a slightly damp, soft cloth.

Never use strong solvents such as thinner or benzine, as they might damage the finish of the device.

When exit menu and press CH- to display the grid line.

If ↑ is selected, press △ or ▽ to adjust the scale up/down; if ↓ is selected press +/- to adjust the scale left/right.

(2) Option

LANG, SCALE, CAM1, CAM2, CAM3, CAM4 and AUX options will display on the screen as illustrated below:

Press CH- to select LANG.

Press △ or ▽ to select English, Deutsch, Français, Español, Português, Italiano, Nederlands or Русский options.

Press CH- to select SCALE.

Press △ or ▽ to select ON/OFF. Scale refers to the reversing distance indicator displayed on the monitor.

Declaration of conformity

This device complies with Part 15 of the 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 operation.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

CAUTION

This symbol 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 risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your warrantee and necessitate expensive repairs.
1. Precautions

Storage and Keeping

(1) Do not expose the monitor to excessive heat or cold. The storage temperature of this device is -30~+80°C, and the operating temperature is -20~+60°C. The humidity is RH90%.

(2) Never use this device near a bathtub, wash basin, kitchen, damp basement, swimming pool or similar places.

(3) Never use this device in environments with excessive moisture, dust or smoke.

(4) Avoid dropping or striking this device.

(5) Avoid using this device in enclosed spaces, areas with excessive vibration or subject to severe impacts.

(6) Never puncture, scratch or use abrasive cleaning materials on this device.

(7) Do not place cables where they may be pinched or stepped on.

(8) Leave at least a 2" space between the monitor and walls, cabinets or other objects to allow adequate air circulation around the device.

(9) The monitor is not designed to be waterproof.

Operating Precautions

(1) The device may be powered by a 12 or 24 volt automotive battery or vehicle electrical system.

(2) Make sure all cables are connected properly. Improper cable connections may damage the monitor. Remove the power cable connections when you do not intend to use the device.

---

Warning!

1. High voltage is present within the monitor. The opening of the case should be by professionals.

2. Do not watch the video while driving unless you are monitoring the rear view camera display.

Special Notice

Occasionally, a few highlights or dark spots may occur on the LCD screen. This is a very common phenomenon in active matrix display technology, and doesn’t necessarily indicate any defects or faults. Never try to repair this device by yourself. In case of any problems, please turn off the display at once and notify our company or authorized dealer. The monitor is a complex device. Any disassembly or modification may lead to damage and void the warranty.
The product is aimed at assisting in safe driving and provides the driver with a broader field of vision. As the driver, you are solely responsible for the appropriate operation of your vehicle and the safety of your passengers and pedestrians, and you should abide all state and local traffic laws and regulations. Do not over use any features of this system that it might distract you from safe driving. The top priority of your driving should always be the safe operation of your vehicle. A&I Products Inc will not accept any responsibility/recourse whatsoever for accidents and/or injuries resulting from failure to observe these precautions or safety instructions.

10. Troubleshooting

The symptoms described below do not necessarily mean a failure within the display. Please check the following items before you initiate request for repair.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Possible Causes/Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>No picture, no sound</td>
<td>Improper connection of automobile adapter. Use of unauthorized power supply. Power switch is on OFF position.</td>
</tr>
<tr>
<td>No sound</td>
<td>Check whether AV cable is properly connected.</td>
</tr>
<tr>
<td>Dark picture</td>
<td>Check whether audio wire is properly connected or the sound volume is turned off or set too low.</td>
</tr>
<tr>
<td>No color</td>
<td>Check whether brightness and contrast are adjusted correctly; Check whether the environment's temperature is too low.</td>
</tr>
<tr>
<td>Upside down or lateral</td>
<td>Adjust the color settings.</td>
</tr>
<tr>
<td>No reversing function (i.e. Picture)</td>
<td>Use the remote control horizontal/vertical selection switch to set proper orientation</td>
</tr>
<tr>
<td>No revers function</td>
<td>The black wire of the monitor AV cable to the reversing light may be loose. The red wire from the monitor may be loose.</td>
</tr>
</tbody>
</table>

9. Waterproof Camera Specification

<table>
<thead>
<tr>
<th>Image Device</th>
<th>1/3” CMOS PC3089</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV System</td>
<td>PAL</td>
</tr>
<tr>
<td></td>
<td>NTSC</td>
</tr>
<tr>
<td>Effective Pixels</td>
<td>756 x 504 pixels</td>
</tr>
<tr>
<td>Sensing Area</td>
<td>4.80 mm x 3.73mm</td>
</tr>
<tr>
<td>Scanning System</td>
<td>2:1 Interface</td>
</tr>
<tr>
<td>Sync. System</td>
<td>Internal</td>
</tr>
<tr>
<td>Resolution</td>
<td>500TV Lines</td>
</tr>
<tr>
<td>Horizontal Sync Frequency</td>
<td>15.625 kHz</td>
</tr>
<tr>
<td>Vertical Sync Frequency</td>
<td>50 Hz</td>
</tr>
<tr>
<td>Video Output</td>
<td>1.0Vp -p, 75Ohm</td>
</tr>
<tr>
<td>Gamma Consumption</td>
<td>0.45</td>
</tr>
<tr>
<td>AGC</td>
<td>Auto</td>
</tr>
<tr>
<td>S/N Ratio</td>
<td>Better than 46.5dB</td>
</tr>
<tr>
<td>White Balance</td>
<td>Auto</td>
</tr>
<tr>
<td>Electronic Shutter</td>
<td>1/60(NTSC)/1/50(PAL) ~ 1/100,000 Seconds</td>
</tr>
<tr>
<td>BLC</td>
<td>Auto</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>~ 40°C ~ +80°C, RH95%MAX</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>~ 30°C ~ +70°C, RH95%MAX</td>
</tr>
<tr>
<td>Power Supply</td>
<td>DC12V</td>
</tr>
<tr>
<td>Waterproof Rating</td>
<td>IP69K</td>
</tr>
<tr>
<td>Viewing Angle</td>
<td>120°</td>
</tr>
<tr>
<td>Audio</td>
<td>Yes</td>
</tr>
<tr>
<td>Minimum Illumination</td>
<td>0 Lux</td>
</tr>
<tr>
<td>Night Vision Distance</td>
<td>12~15m</td>
</tr>
<tr>
<td>Image Mode</td>
<td>Mirror/Normal Image Switch</td>
</tr>
<tr>
<td>IR CUT</td>
<td>Yes</td>
</tr>
<tr>
<td>Channels of Frequency Available</td>
<td>CH1, CH2, CH3, CH4</td>
</tr>
</tbody>
</table>

Special Notice

The symptoms described below do not necessarily mean a failure within the display. Please check the following items before you initiate request for repair.

- Improper connection of automobile adapter. Use of unauthorized power supply. Power switch is on OFF position.
- Check whether AV cable is properly connected.
- Check whether audio wire is properly connected or the sound volume is turned off or set too low.
- Check whether brightness and contrast are adjusted correctly; Check whether the environment's temperature is too low.
- Adjust the color settings.
- Use the remote control horizontal/vertical selection switch to set proper orientation.
- The black wire of the monitor AV cable to the reversing light may be loose. The red wire from the monitor may be loose.
Operating Instructions

Please read this manual thoroughly before operating the device, and keep it for future reference.

2.4G 7 Inch Wireless Digital Color LCD Monitor

V 1.3