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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~+70 °C. The humidity is Rh90%.
2. Avoid dropping or striking this device.
3. Avoid using this device in enclosed spaces, areas with excessive vibration or subject to severe impacts.
4. Never puncture, scratch or use abrasive cleaning materials on this device..
5. Do not place cables where they may be pinched or stepped on.
6. Leave at least a 2" space between the monitor and walls, cabinets or other objects to allow adequate air circulation around the unit.
7. The device is designed to be water-resistant, but not for underwater application.

● 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. Observe polarity. Improper cable connections may damage the monitor. Remove the power cable connections when you do not intend to use the unit.

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.

● Maintenance

1. Remove all the cable connections from the monitor before cleaning the unit.
2. Use a mild household detergent and clean the unit with a slightly damp, soft cloth.
Never use strong solvents such as thinner or benzene, as they might damage the finish of the device.



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.



This symbol is intended to alert the user not to waste electrical and electronic equipment.

CAUTION

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

● 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.



2. Product Features

1. TFT LCD monitor with wide angle view and high resolution display.
2. Picture image may be adjusted for Horizontal, Vertical, Mirror and Normal viewing.
3. Select from 8 languages for user operation.
4. Automatic backlighting for buttons, and automatic brightness control.
5. Full-function remote control.
6. Multiple video formats available: AUTO / PAL / NTSC.
7. Up to 3 CAM inputs.
8. Operates from DC / 10 - 32V. Supports 12V or 24V automobile battery.
9. Automatically switches to back-up, left or right side camera views.
10. Automatic scanning function.
11. On-board speaker.
12. With touch buttons.
13. The scale can be adjusted for left, right, up and down.

3. Technical Specifications

1. 7" TFT- LCD Color monitor with digital panel.
2. Audio output: 1.5W.
3. Loudspeaker: one 15x24mm round loudspeaker.
4. Power supply: Automobile storage battery (10-32V).
5. Power consumption: about 6W .
6. Outer dimension: 197.2mm (W) × 132mm (H) × 30.5mm (T).
7. Dot pitch: 0.0642 (H) × 0.1790 (V).
8. Resolution: 800×3 (RGB) × 480.
9. Contrast: 500:1.
10. Brightness: 400cd/m².
11. Viewing angle: U: 50° / D: 70°, R/L: 70° / 70°.
12. Operating temperature: -20~+70°C, RH90%.
13. Storage temperature: -30~+80°C, RH90%.



Special Notice

All specifications are subject to change without notice.

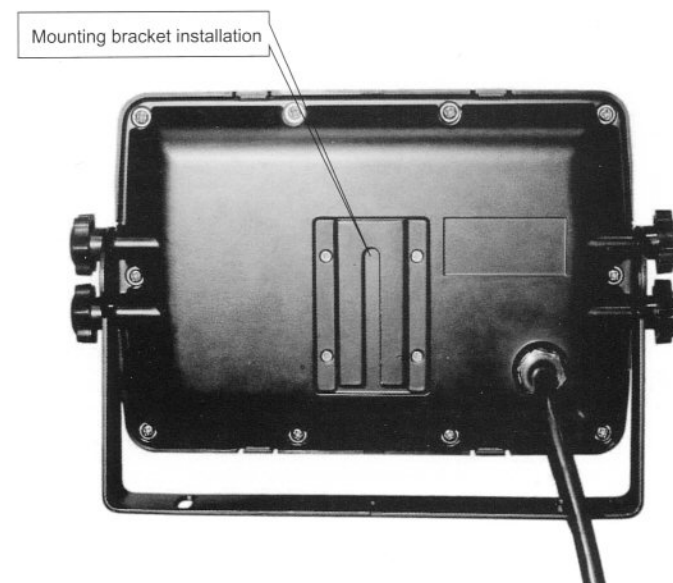
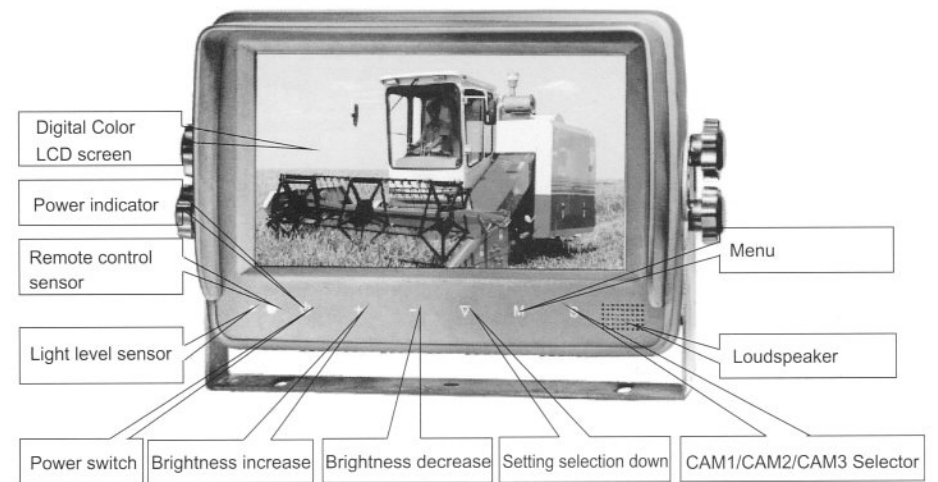
4. Accessories

 U- Support Bracket	 Center Mount Bracket
 AV and Power supply adapter cable	 IR Remote Control
 Sun Shield	 Angle Adjustment screws

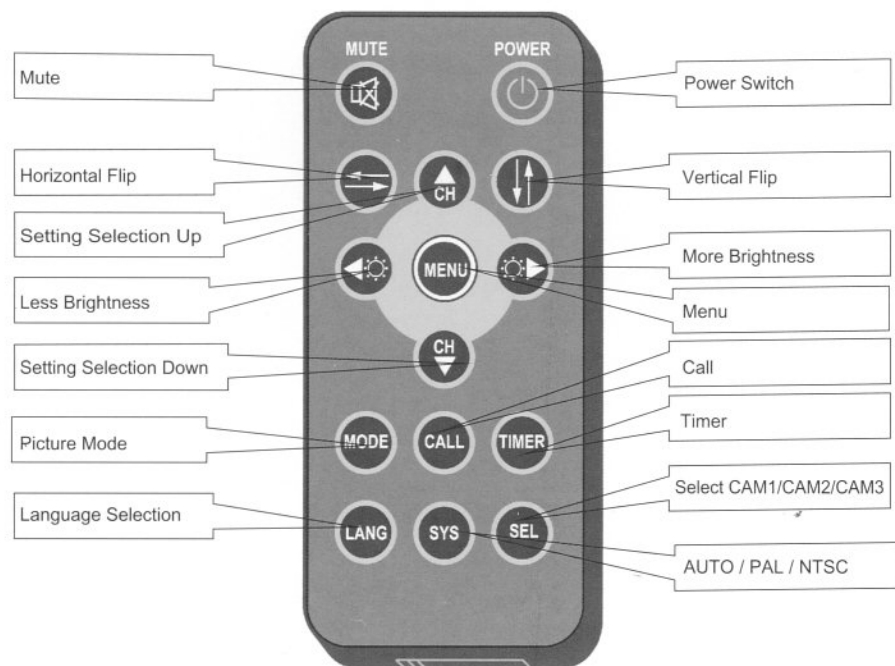
⚠ Special Notice

Accessory supply may be different for different application.

5. Parts Identification



6. Remote Control Operation



! Notice

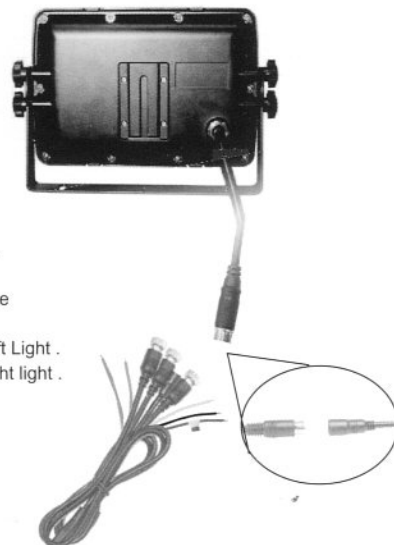
1. Please align the remote control with the infrared-receiving window on the monitor to operate.
2. Never disassemble the remote control or allow it to drop, or become wet.
3. Press the control buttons firmly. Allow 2 seconds for the picture to change.

- **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+ (Setting Selection Up):**
Press to select the upper setting .
- **CH- (Setting Selection Down):**
Press to select the lower setting or to display the scale.
- **◀ (Decrease Brightness):**
Press to decrease Brightness.
- **▶ (Increase 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 timer to shut down the 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 AUTO / PAL / NTSC .
- **SEL:**
Press to select CAM channels.

7. Basic Operation

7.1. Connection of AV Adapter and Controller Cable

Hold the cable , align the side of jack marked with  on the female 13-pin connector with the male 13-pin connector marked with  then firmly plug together.



- ① Black 4 pin male for Camera1.
- ② Black 4 pin male for Camera 2.
- ③ Black 4 pin male for Camera 3.
- ④ Single red wire to power wire of DC / 10-32V.
- ⑤ Single black wire to GND.
- ⑥ Single brown wire to positive power wire of the back-up light.
- ⑦ Single white wire to positive power wire of left Light.
- ⑧ Single blue wire to positive power wire of right light.



Black 13 pin male

Black 13 pin female

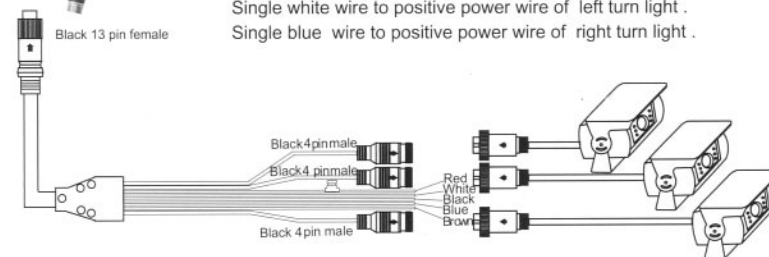
Black 4 pin male for Camera 1 / Camera 2 / Camera 3.
Single red wire to positive power supply of DC / 10-32V.
Single black wire to GND.

Single brown wire to positive power wire of back-up light .

Single white wire to positive power wire of left turn light .

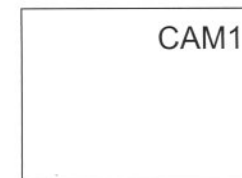
Single blue wire to positive power wire of right turn light.

Single blue wire to positive power wire of right turn light.

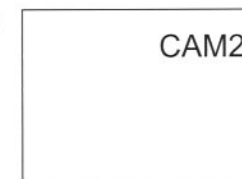


7.3.Reversing Display:

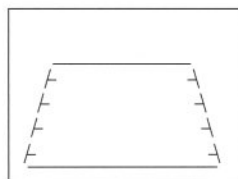
7.3.1. When the white wire is connected to the positive wire of the left turn light , the monitor automatically switches to CAM1 (left side camera) when the left turn indicator is activated.



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



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



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 options will display on the screen as illustrated below:

● Press ▾ to select BRIGHT.

PICTURE	
BRIGHT	50
CONTRAST	50
COLOR	50
VOLUME	50
AUTO DIM	OFF
SCALE ADJUST	OFF

Press + / - to adjust the brightness level.

● When auto dim is turned on in dark environment, OSD turns into dim mode for dim setting ; When auto dim is turned on / off in bright environment, OSD display normal mode.

PICTURE	
DIM BRIGHT	40
DIM CONTRAST	45
DIM COLOR	40
VOLUME	50
AUTO DIM	ON
SCALE ADJUST	OFF

Dim mode

PICTURE	
BRIGHT	50
CONTRAST	50
COLOR	50
VOLUME	50
AUTO DIM	ON
SCALE ADJUST	OFF

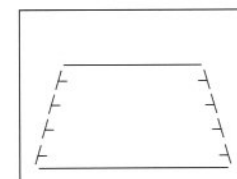
Normal mode

● Press ▾ to select SCALE ADJUST.

PICTURE	
BRIGHT	50
CONTRAST	50
COLOR	50
VOLUME	50
AUTO DIM	OFF
SCALE ADJUST	OFF

Press +/- to select ↑ ↓ or ⇐ ⇒ for scale adjustment ↑ ↓.

● Exit menu and again press ▾ to display the grid line.



If ↑ ↓ is selected, press +/- to adjust the scale up/down; If ⇐ ⇒ is selected, press +/- to adjust the scale left/right.

(2) OPTION

LANG, SCALE, CAM1, CAM2, CAM3 options display on the screen as illustrated below :

- Press ▾ to select LANG.

OPTION	
LANG	ENGLISH
SCALE	ON
CAM1	NORMAL
CAM2	NORMAL
CAM3	NORMAL

Press + / - to select English/ Deutsch/Français/Español/Português/ Italiano/ Nederlands/Русский

- Press ▾ to select SCALE.

OPTION	
LANG	ENGLISH
SCALE	ON
CAM1	NORMAL
CAM2	NORMAL
CAM3	NORMAL

Press + / - to select ON / OFF. Scale refers to the reversing distance indicator displayed on the monitor.

- Press ▾ to select CAM1.

OPTION	
LANG	ENGLISH
SCALE	ON
CAM1	NORMAL
CAM2	NORMAL
CAM3	NORMAL

Press + / - to select NORMAL / MIRROR.

(3) System

COLOR-SYS, BLUE BACK, HORIZONTAL, VERTICAL, ZOOM functions will display on the screen as illustrated below :

- Press ▾ to select COLOR-SYS.

SYSTEM	
COLOR-SYS	AUTO
BLUE BACK	ON
HORIZONTAL	↕
VERTICAL	↕
ZOOM	16:9

Press + / - to select AUTO / PAL / NTSC.

- Press ▾ to select ZOOM.

SYSTEM	
COLOR-SYS	AUTO
BLUE BACK	ON
HORIZONTAL	↕
VERTICAL	↕
ZOOM	16:9

Press + / - to select 4:3.

(4) Auto Scan

AUTO SCAN, SCAN TIME, CAM1, CAM2, CAM3 options display on the screen as illustrated below :

- Press ▾ to select SCAN TIME.

AUTO SCAN	
AUTO SCAN	ON
SCAN TIME	5s
CAM1	OFF
CAM2	OFF
CAM3	OFF

Press + / - to select 1S~90S.

9. 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.

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