## 4. Accessories

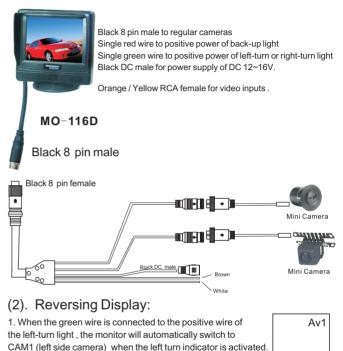


## 5. Parts Identification



# 6. Basic Operation

### (1). Connection Diagram:



 When the red wire is connected to the positive wire of back-up light, the monitor will automatically switch to Av2

(back-up camera).

Av2

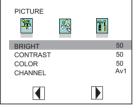
# 7. Menu

- Touch anywhere to display the following options and settings:
  - 1. PICTURE 2. OPTION
  - 3. SYSTEM

### (1) Picture

The BRIGHT, CONTRAST, COLOR, CHANNEL options will display on the screen as illustrated below:

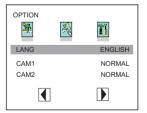
• Touch BRIGHT to select brightness.



Touch  $\blacksquare / \blacksquare$  to adjust the brightness.

## (2) Option

- The LANG , CAM1 , CAM2 options display on the screen as illustrated below :
- Touch LANG to select language.



 $\label{eq:constraint} \ensuremath{\mathsf{Touch}}\xspace/\ensuremath{\mathsf{Touch}}$ 

# 2. Features

- 1. TFT LCD monitor with wide angle view and high resolution display.
- 2. Picture image can be adjusted to Mirror or Normal viewing.
- 3.8 languages available.
- 4. Multiple video formats available: AUTO/PAL/NTSC.
- 5.2 AV inputs.
- 6. Operate from 12 16V. Support 12V automobile battery.
- 7. Automatically switch to back-up, left or right side camera views.
- 8. On-board speaker.

# 3. Technical Specifications

- 1. Product: 3.5" digital touch-screen TFT LCD color monitor.
- 2. Audio output: 1W.
- 3. Loudspeaker: one 14\*25 mm loudspeaker.
- 4. Power supply: Automobile storage battery (12-16V).
- 5. Power consumption: about 3W.
- 6. Outer dimension: 96mm (W) × 95mm (H) × 23mm (T).
- 7. Dot pitch: 0.219mm (H) × 0.219mm (V).
- 8. Resolution: 320 × RGB x 240.
- 9. Color depth: 24 bit
- 10. Display colors:16.7 m dithering.
- 11. Contrast: 350:1.
- 12. Brightness: 350cd/m<sup>2</sup>.
- 13. Viewing angle: U: 40 / D:60, R/L: 60.
- 14. Operating temperature: -20~+60°C, RH90%.
- 15. Storage temperature: -30~+70°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 unit.
- Use a mild household detergent and clean the unit with a slightly damp and soft cloth.Never use strong solvents such as thinner or benzine, as they might damage the finish of the device.



Â

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.

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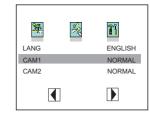
#### CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your warrantee and neccessitate 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 undesirable Operation.

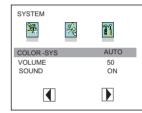


Touch ◀ / ▶ to select CAM1 normal or mirror.

#### (3) System

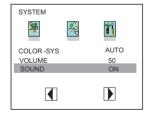
The COLOR-SYS, VOLUME, SOUND functions display on the screen as illustrated below :

Touch COLOR-SYS.



Touch ◀ / ▶ to select PAL / AUTO / NTSC.

Touch SOUND.



Touch ◀ / ▶ to select ON / OFF.

# 8. 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 un- authorized 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 environment temperature is too low.
No color picture	Adjust the color settings.
Upside down or lateral inverted picture	Use horizontal / vertical selection switch to set proper orientation.
No reversing function (i.e. Picture)	The black wire of the AV cable connected to the reversing light may be loose. The red wire of the monitor may be loose.

## 1. Precautions

#### Storage and Keeping

- 1. Do not expose the monitor to excessive heat or cold. The storage temperature of this device is -30~+70°C, and the operating temperature is -20~+60°C. The humidity is Rh90%.
- 2. Never use this device near a bathtub, washing basin, kitchen, damp basement, swimming pool or similar places.
- 3. Never use this device in environment 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 unit.
- 9. The monitor is not designed to be waterproof.

#### Operating Precautions

- 1. The device may be powered by a 12 volt automotive battery or vehicle electrical system.
- 2. Make sure all cables are connected properly. Improper cable connections may damage the monitor. Remove power connection after use.

### Marning!

High voltage is present within the monitor. The opening of the case should be by professionals.
 Do not watch the video while driving unless you are monitoring the rear view camera display.

### \land 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 dealers. The monitor is a complex device. Any disassembly or modification may lead to damage and void the

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#### ▲ Special Notice

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 priorityof 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.

## Waterproof Camera



#### • Specification

Image Device	1/4" CMOS ASX340CS
TV System	NTSC
Effective Pixels	640*480pixels
Sensing Area	4.077mm*3.136mm
Scanning System	2:1 Interlace
Sync. System	Internal
Resolution	420TV Lines
Horizontal Sync Frequency	15.734 kHz
Vertical Sync Frequency	60 Hz
Video Output	1.0Vp-p, 750hm
Gamma Consumption	0.45
AGC	Auto
S/N Ratio	Better than 46dB
White Balance	Auto
Electronic Shutter	1/60(NTSC)/1/50(PAL)~1/100,000 Seconds
BLC	Auto
Storage Temperature	–20°C ~ 70°C, RH95%MAX
Operating Temperature	–40°C ~ 80°C, RH95%MAX
Power Supply	DC12V
Waterproof rating	IP69K
Viewing Angle	150°
Audio	Yes
Minimum Illumination	0 Lux
Night vision distance	3~5m
Image mode	Mirror



**Operating Instructions** 



## Digital LCD Color Monitor

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

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