

# BOYO<sup>®</sup>

VISION

## User's Manual

*VTM9001*



Before operating the Monitor, please read this manual thoroughly and keep it for future reference.

## Feature

### Monitor Feature:

- Screen size: 9-inch panel
- Input: 2AV input
- System: PAL and NTSC auto switching
- Resolution: 800\*R. G. B\*480 Pixel
- Power supply: DC12-24V
- Built-in speaker
- V2 is always prior when reversing
- Keep last memory
- OSD menu
- Contrast, color, brightness adjustable
- Viewing angle range: (left/right) 65 degrees (top) 40 degrees (down) 15 degrees

## Monitor Controls



1. Power Indicate Light
2. Power
3. V1/V2 switch
4. (-) Decrease setting
5. Menu
6. (+) Increase setting
7. MODE
8. R/C Window

## Menu Setting

The parameter of the analog quantity can be set by following ways:

After power on, callout the menu by pressing "MENU" on the remote control or panel, then press "+" / "-" to adjust the specific parameter.

### 1. BRIGHTNESS

Choose BRIGHTNESS in the Menu, and then press "+" and "-" on the panel or remote control to adjust it. Press "MENU" to confirm after chose the desired effect and press it again to go to the next option.

### 2. CONTRAST

Choose CONTRAST in the Menu, and then press "+" and "-" on the panel or remote control to adjust it. Press "MENU" to confirm after chose the desired effect and press it again to go to the next option.

### 3. HUE

Choose HUE in the Menu, and then press "+" and "-" on the panel or remote control to adjust it. Press "MENU" to confirm after chose the desired effect and press it again to go to the next option.

### 4. SATURATION

Choose SATURATION in the Menu, and then press "+" and "-" on the panel or remote control to adjust it. Press "MENU" to confirm after chose the desired effect and press it again to go to the next option.

### 5. VOLUME

Choose VOLUME in the Menu, and then press "+" and "-" on the panel or remote control to adjust it. Press "MENU" to confirm after chose the desired effect and press it again to go to the next option.

### 6. LANGUAGE

Choose LANGUAGE in the Menu, and then press "+" and "-" on the panel or remote control to adjust it. Press "MENU" to confirm after chose the desired language and press it again to go to the next option.

### 7. SOURCE

Choose SOURCE in the Menu, and then press "+" and "-" on the panel or remote control to choose the channel between AV1 and AV2. Press "MENU" to confirm after chose the desired channel and press it again to go to the next option.

### 8. RESET

Choose RESET in the Menu, and then press "+" and "-" on the panel or remote control to reset to defaults for the image adjustment, volume, and auto-shutoff time. Press "MENU" to go to the next option.

### 9. L/R

Choose L/R in the Menu, and then press "+" and "-" on the panel or remote control to set the left and right mirror image. Press "MENU" to go to the next option.

### 10. U/D

Choose U/D in the Menu, and then press "+" and "-" on the panel or remote control to adjust up and down rotation for the image. Press "MENU" to go to the next option.

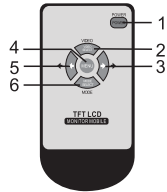
### 11.16:9/4:3

Choose 16:9/4:3 in the Menu, and then press "+" and "-" on the panel or remote control to adjust the display ratio between 16:9 and 4:3. Press "MENU" to go to the next option.

### 12. EXIT

Choose EXIT in the Menu, and then press "+" and "-" on the panel or remote control to exit the menu setting.

## Remote Control



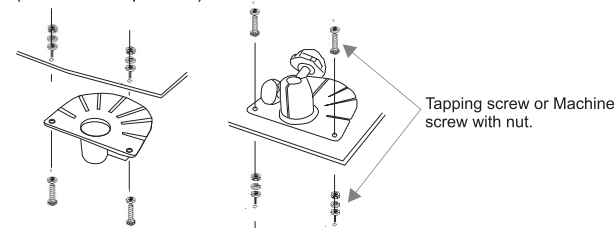
- 1.Power
- 2.V1/V2 switch
- 3.Decrease setting
- 4.Menu
- 5.Increase setting
- 6.Mode selection

## Monitor Installation

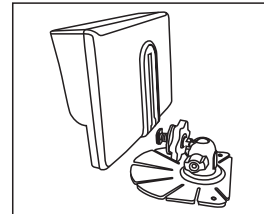
- Install the monitor on a surface which will support more than 4 kg (9Lbs) of weight
- Install the monitor away from a speaker mounted in the vehicle so the picture is not distorted by the speaker's magnetic field.
- Don't install the unit in an extremely hot or humid place (radiator, air duct, etc.) or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- The monitor is not designed for waterproof.

## Monitor Installation

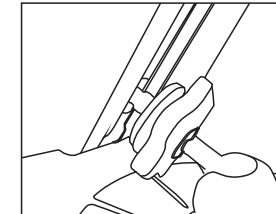
- 1.Firstly please fix the the screws with the fan shaped stand tightly, (such as the picture)



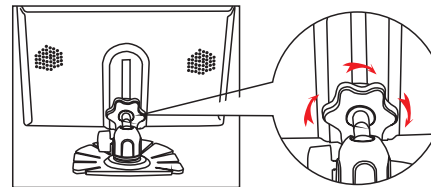
- 2.Secondly put the metal buckle piece on the top of the fan-shaped stand into the notch at the back of the monitor.(such as the pictures)



- 3.Move the stand to the proper location.(such as the pictures)

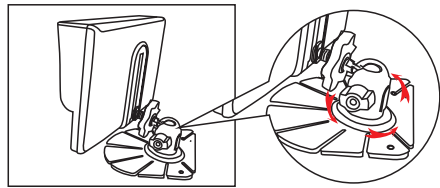


- 4.To fix the big screws of the stand until to keep the monitor fixed (such as the pictures)



## Monitor Installation

5.If users want to change the direction or angle of the monitor, firstly to loosen the screws on the bottom of the stand. Then move the monitor to the desired location then fix the screws on the bottom of the stand again.(such as the pictures)



## Connection

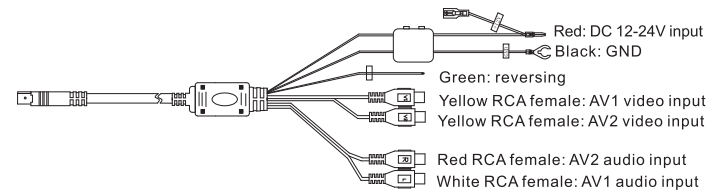
- Connect the RED wire to the positive(12V or 24V DC) Power terminal which is Energized with the ignition key in the accessory position
- Connect the BLACK wire to a suitable GND connection point on the vehicle.
- Connect the GREEN ( video 1 trigger ) wire to the switched power output terminal of the "R"(reverse)gear, Trigger is always in priority.

### Caution

- ⚠ Before making the connection, disconnect the ground terminal of the car battery for avoiding short circuits.
- ⚠ The plugs should fully inserted into the connectors or jacks. a loose connection may cause malfunctioning of the unit

## Connection

### 1.Wiring diagram(1)



### 2.Wiring diagram(2)



## ***Operating Instructions***

- When you turn the ignition key to the accessory or on position, the power is supplied through control box to the monitor and monitor is in stand-by (S/B)

### **Note the power of the monitor**

- When you push the power switch on the off position, the monitor placed in off mode. The monitor is not turned on until restart the ignition key or push the power switch in on position.
- When you set the change lever to the reverse position, the monitor is turned on and picture from "camera 1" appears.

## ***Cleaning and general maintenance***

- If your vehicle has been parked in direct sun light resulting in considerable rise in temperature inside the vehicle , allow the unit to cool off before operating.
- Clean the unit with a slightly damp soft cloth. Use a mild household detergent, Never use strong solvents such as thinner or benzine as they might damage the finish of the unit.

### **Cleaning**

Unplug or power off mode before cleaning, Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

### **Ventilation**

Holes in the cabinet and of the back or bottom are provided for ventilation, and to ensure reliable operation of the monitor equipment by protecting from overheating. these holes must not be blocked or covered.

### **Object and liquid entry**

Never push objects of any kind into this monitor equipment through holes as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind of product.

### **Service**

Do not attempt to service this system by yourself as opening of removing covers may expose you to dangerous voltage or other hazards .refer all servicing to qualified service personnel.