

# 2.4G Digital wireless rv backup camera system



## INTRODUCTION

Thank you for purchasing our product, please read it thoroughly before operating and keep it for future reference.

The Digital Wireless Rear Vision System will improve your ability to see behind your car, pickup truck, camper, travel trailer, fifth wheel trailer or motorhome. We have taken numerous measures to ensure that your product is delivered in top condition and will perform to your satisfaction.

## IMPORTANT SAFETY INSTRUCTIONS

### Before you install

If you are not confident working with 12V/24V DC vehicle wiring, contact your vehicle manufacturer or your nearest retailer/installer to get a professional installation.

### Innovation: NO Interference

This device is free from interferences coming from Bluetooth, smartphones, WiFi routers, power lines and other various electrical equipment.

### Repair

The camera system should not be opened. Any attempt at modification or repair by the user will void the warranty.

## PARTS

### 1. Monitor and U Shape Mounting Bracket



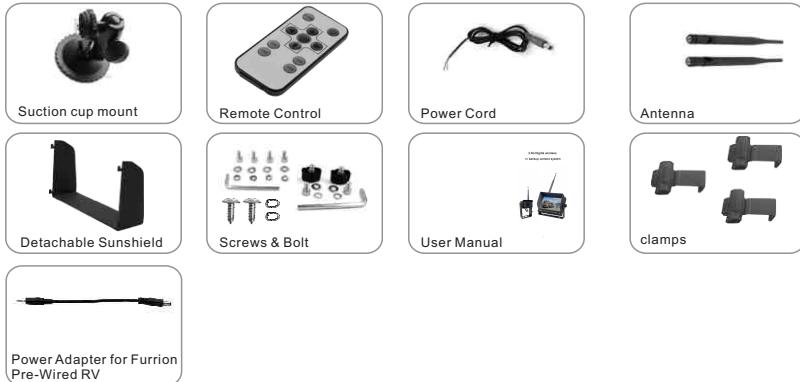
SD Card Slot (memory card not included, max support 128GB)



### 2. Camera



### 3. Accessories



**Attention:** The above accessories list may have little differences for different retail platforms, we may increase or update some accessories without notifying in advance, please subject to the actual received package.

### 4. Monitor Power Cable



These instructions do not apply to all vehicles. They are only meant as a general guide due to the number of different makes and models. For vehicle specific questions, contact your vehicle manufacturer.

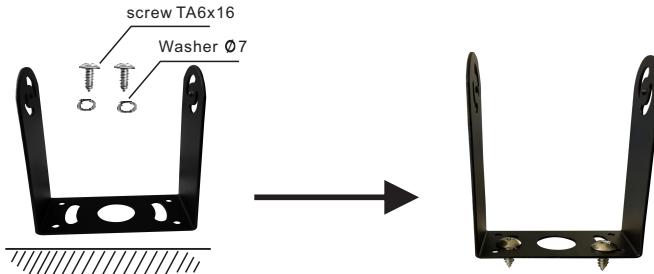
## Installation

### Camera Installation

#### **Caution**

Make sure there are no electrical cables, gas lines or important parts behind where the drill holes will be. Make sure to isolate the 12V or 24V power source by disconnecting the negative (-) terminal from the battery.

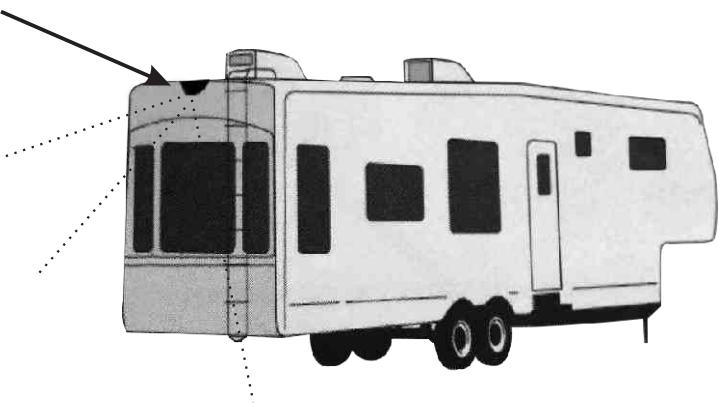
#### **Metal brackets for plain surfaces**





## **Camera Positioning**

Camera location



## **Wiring Installation**

The system can be used as a rear observation system or as a backup camera system.

- To use as a rear observation system, the camera needs to be wired to a constant 12V/24V power source. Ex: If connected to running lights or marker lights, the lights must be ON for the system to operate.
- To use system as a backup camera system, the camera needs to be wired to a circuit that turns on when the reverse gear is engaged. Ex: Backup lights.

1. Choose routing path for the camera's power cable to the power source depending on the desired function.

2. Before drilling the hole, make sure there are no components behind the surface you are drilling such as electrical cables, gas lines, or other important components that can be damaged.

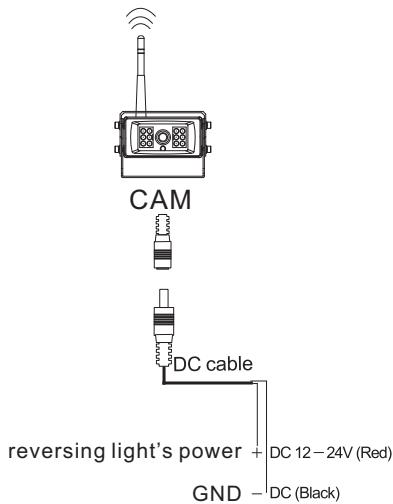
3. After drilling the hole, insert the supplied grommet then route the camera cable into the opening.

The grommet must be used to prevent the metal edge from cutting the cable.

4. Locate the power source required: Backup lights if used as a backup camera or running/marker lights is used as a rear observation system.

5. Once you have located the power source, route the camera cable to that location. Never route the cable on the outside of the vehicle.

6. Connect wires as diagram below.



7. Make sure the battery's negative terminal is disconnected. After determining the positive and negative wires, splice the wires using the quick connectors included.

8. Reconnect the negative terminal to the battery.

### **Monitor Installation**

Make sure the monitor is mounted in a location that will not obstruct your vision while driving.

1. Suction Cup Mounting.

- a. Slide the suction cup mounting bracket's head into the monitor's back metal clip.
- b. Before mounting the monitor, clean the mounting surface well.
- c. Position the suction cup to your wind shield.
- d. Press the suction cup against the surface and press the lock down to fix it.

e. adjust the knob to set the screen at a good viewing angle and tighten knob on the bracket to lock into position.



To maximize the efficiency of the suction cup mount, it is recommended that the mounting be performed under the following conditions:

- Surface temperature should be between 21°C and 38°C.
- Mounting below 10°C should be avoided.
- Mounting should not occur in direct sunlight.

Mounting should be protected from direct sunlight exposure for a period of 24 hours.

## 2. On dash mounting

You can fix it on dash by using the original U shape bracket or purchase an extra surface mount bracket from our store.



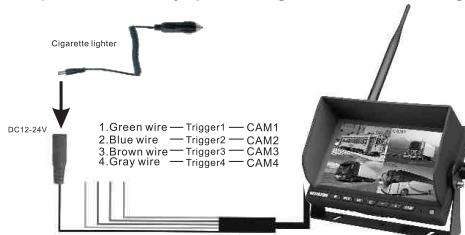
Optional

3. Feed the monitor's power socket with the supplied cigarette lighter. The cable must not interfere with safe driving operations.

4. Insert cigarette lighter into the vehicle's power socket.

5. Trigger signal wires connections

**Attention:** The trigger signal wiring require professional technical person to install, if you install one backup camera only, please ignore those wirings.



1. When the green wire is activated, the monitor automatically switches to CAM1.
2. When the blue wire is connected to the positive wire of the left turn light, the monitor automatically switches to CAM2(left side camera) when the left turn indicator is activated.
3. When the brown wire is connected to the positive wire of the right turn light, the monitor automatically switches to CAM3 (right side camera) when the right turn indicator is activated.
4. When the gray wire is connected to the positive wire of back-up light, the monitor automatically switches to CAM4(Back-up camera) when the back-up light is turned on.

## OPERATION

### 1. Power Supply

Power to the monitor is supplied with the vehicle's 12V/24V power socket.

### 2. Monitor Operation

- a. After power is on, the red indicator is ON and the monitor will automatically enter into function.
- b. If there is no signal detected, the receiver LCD will turn off automatically. If there is a signal, the image is displayed and the LED is OFF.

The buttons include Menu/Return, Rec/Confirm, SD (Memory), Power, -, +, CAM (channel) as shown below:



M	Press to show OSD or return to the previous menu
REC	Start or stop recording/Confirm
SD	Enter into the recorded file route
POWER	Power on or off the monitor
-	Select forward in OSD operation
+	Select backward in OSD operation
CAM	Select the displayed camera channels or 2/4 split display mode

### 3. Pairing

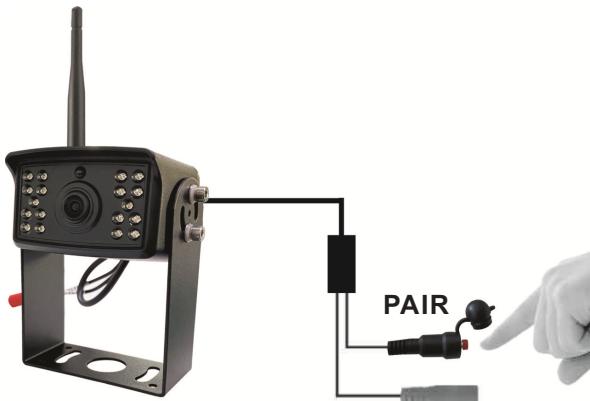
Press the "M" button to enter in main menu and press "REC" key to enter pairing interface.



Press "REC" key to enter pairing state when PAIRING START appears.



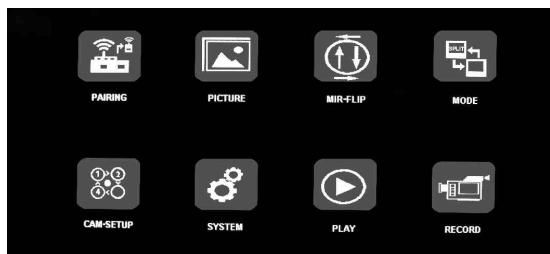
At this time, press the button on the camera to pair the camera with the monitor.  
After pairing is successful, the word "PAIRED" will be displayed on the screen  
(Please note that the back



Short pressing

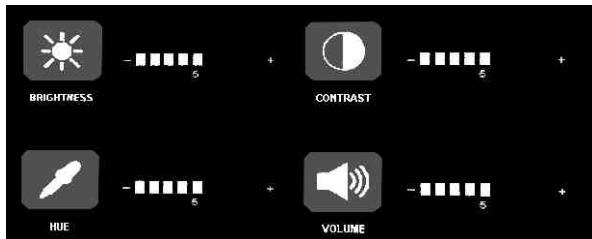
## 4. Setup

Press the “-” or “+” button to select SETUP on the screen



### 4.1 PICTURE

PICTURE: Press the “REC” key to enter BRIGHTNESS, CONTRAST, HUE and VOLUME settings.



#### (1) BRIGHTNESS setting

Select the Brightness icon, press “REC” key to enter settings, press “-” or “+” keys to select the required Brightness setting.

#### (2) CONTRAST setting

Select the Contrast icon, press “REC” key to enter settings, press “-” or “+” keys to select the required Contrast setting.

#### (3) HUE setting

Select the Hue icon, press “REC” key to enter settings, press “-” or “+” keys to select the required Color setting.

#### (3) VOLUME setting

Select the Volume icon, press “REC” key to enter settings, press “-” or “+” keys to select the required Volume setting.

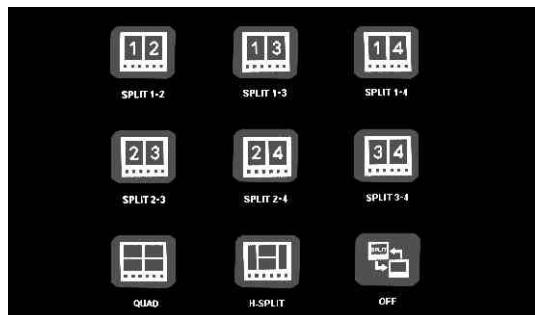
## 4.2 MIR-FLIP

MIR-FLIP: Press the “REC” key to enter NORMAL/MIRROR/FLIP/MIR-FLIP.



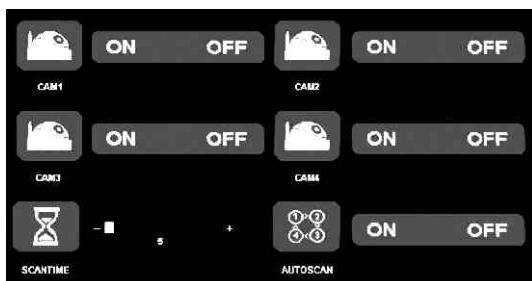
#### 4.3 MODE

MODE: Press “CAM” to switch image as below.



#### 4.4 CAM-SETUP

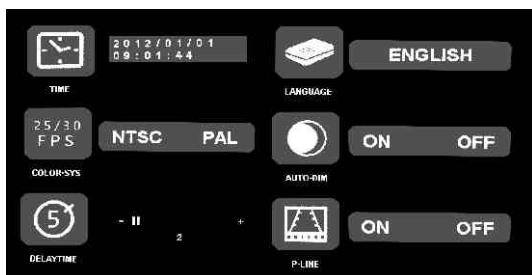
Press “-” or “+” to select CAM SETUP, press “REC” to enter.



AUTO SCAN mode enable it can loop display each channel at 5-45 seconds, you can turn off any channels when no need or turn on or off the auto scan mode freely.

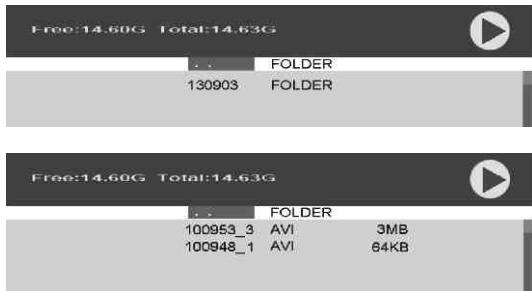
#### 4.5 SYSTEM

Press “-” or “+” to select SYSTEM, press “REC” to enter



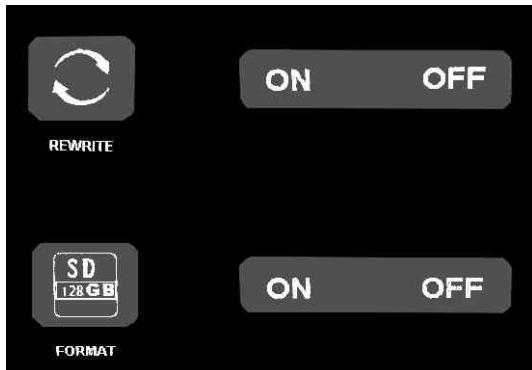
## 4.6 PLAY

Press “-” or “+” to select the recorded video clips, press “REC” to playback.



## 4.7 RECORD

Press “-” or “+” to select RECORD, press “REC” to enter.



**REWRITE:** When SD card is full, the monitor will delete the earliest recorded file one by one, and keep recording.

**FORMAT:** SD card must be formatted before being used. All documents in SD card will be lost once format the card.

## 5. Camera Transmitter operation

5.1 When used for the first time, make sure to pair the transmitter (camera) and the receiver (monitor).

Select CAM1/CAM2/CAM3/CAM4 on the monitor and press the “REC” key to enter pairing mode. Press PAIR button within 20 seconds and wait for pairing to be completed. Wait until the word “PAIRED” is displayed on the monitor after pairing is successful.

If the pairing is not completed in time, the monitor will return to the previous mode. For an installed device, pairing requires a two person operation.

5.2 The paired camera transmitter can trigger the receiver to work automatically after power is on. The screen display delay is less than one second.

5.3 The camera transmitter has infrared night view function. If it is too dark, the infrared LED is automatically turned on for supplemental lighting.

**CAUTION:** The LED will emit faint red light when turned ON. Do not stare at the light for a long period. This could cause eye injuries.

## TECHNICAL SPECIFICATIONS

Camera	
Power Supply	+9~+30V
Current Consumption	TYPE:170mA, Max.250mA
Resolution	1080P
Frame Rate	25f/s 30f/s
Operating Temperature	-10~+60 °C
Video Codec	MPEG4
Voice Sample Rate	16KHz/12BIT ADC ADPCM/PCM
Operation Frequency	2400 ~ 2483.5MHz
Line of Sight Range	>200M
LCD monitor	
LCD display screen size	7inch
Resolution	1024*600
Power Supply	+9~+30V
Current Consumption	TYPE:380mA, Max.480mA
Resolution	1080P
Video Codec	AVI
Frame Rate	25f/s 30f/s
Operating Temperature	-10~+60 °C
RF Bit Rate	4Mbps



Waste electrical products should not be disposed of with household waste.

Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.

## FCC WARNING

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.