Wireless solar rear view system

SUNWAYI

100% DIY, intalls in minutes

NO DRILLING / NO SPLICING

User Manual

Version 1.0 (neutral)

INTRODUCTION

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Welcome

Thanks for your choosing WSU43 product, which provides value and quality. Please read this User Manual carefully before using the product.

Wireless SolarPower RearVision can display image behind the vehicle and can be used when backing up or any time you want to view behind the vehicle (even while your vehicle is in park).

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01. CONPONENTS

1. All-in-one camera with built-in battery and solar panel

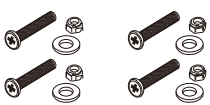
2. 4.3 inch monitor

3. holder of monitor

4. power cord with a Touch Botton for Rearview (as standby reversing trigger)

5. USB cord

6. screw & plate washer & hex/nut (4pcs)



7. Screw & Tool

02. GETTING STARTED

Remove the whole Wireless SolarPower RearVision WSU43 packing or assembly and make sure all components are included.

Charge the All-in-one camera's built-in battery

1. Connect the supplied USB cord to the micro USB port of the All-in-one camera.
2. Plug the USB cable into any standard USB charger with an output rating of 500mA or higher.
3. Charge 2 to 5 hours.

Under normal use, the All-in-one camera maintains a charge with exposure to sunlight. A battery status indicator is provided on the monitor when the camera is in use. If you're storing your vehicle in a garage (or not exposing the camera to sunlight on a regular basis) for more than one month, you may need to recharge it via the micro USB port.

Check the wireless function

1. Shake the camera in the air.
2. Touch the Monitor buttom quickly and check the image after the monitor is powered. Or touch the "**Touch for Rearview**" button on the car charge adapter to trigger the monitor to work, check the image after the monitor is powered.

Note

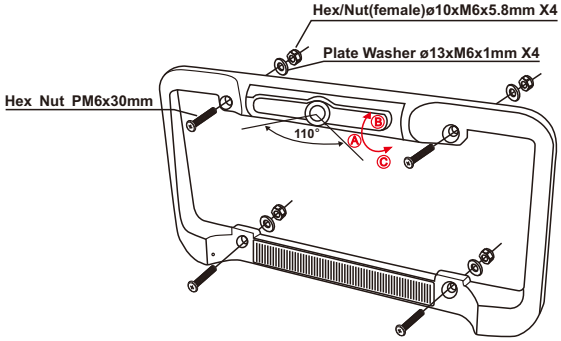
* All-in-one camera has to be waken up from sleeping status by little vibtation.

* In the process of use, there is wireless interference from outside. If no connection normally, the device will shut off automatically 10 seconds later. Then please touch the "**Touch for Rearview**" button go turn it on.

03. INSTALLATION

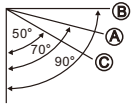
Camera Installation

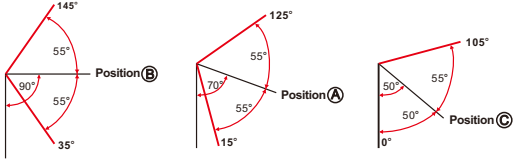
1.



Camera Angle

To adjust the camera angle for ideal angle if the default angle (such as position **A**) is not good, just use your fingers to hold the camera house and move the Lens to position **B**, position **C**, or other angle.





Note

* Please note when rotating the lens: hold the license plate holder with one hand, and the outer frame of the camera with the other hand and rotate up or down to make the best Angle.

04. MONITOR MOUNT

1. Two way to mount the monitor
   1) Stick on the dash board: Fix holder bracket A (see figur 1) to the install position of monitor via screw tool, choose and clean a right place on the dash board, tear the paper of the monitor holder's sticky tape, put and press the holder on the dash board.

Figure 1

   2) Socket on the window shield: Fix holder bracket B (see figur 2) to the monitor via screw tool, choose and clean a right place on the window shield. With the suction lever in the released position, press the suction cup against the windshield. Press the suction lever toward the suction cup to lock the mount. To adjust the angle of monitor, loosen the collar on the ball joint, retighten in the desired position.

Figure 2

2. Plug the monitor cigarette lighter, then socket power cord into a 12-volt DC power port.

05. OPERATION

Using the RearVision WSU43

1. Switch your 12-volt DC power port on with your ignition, the monitor wil start work accordingly, the video signal will be sent from camera and will be displayed on the monitor.

   The image is set to time out in 30 seconds. However if you wish to shut the image off manually, just touch the "**Touch for Rearview**" Button on the monitor again anytime to stop at once.

2. If you want to see the backup image when driving your car , just touch the "**Touch for Rearview**" Button on the top of monitor (see figure 1), or touch the "**Touch for Rearview**" button of the cigarette lighter adapter(see figure 2).

Touch
for rearview

Figure 1

Touch
for rearview

Figure 2

05. OPERATION

3. When the vehicle is shut off, power is removed from the monitor and the monitor will shut off automatically, and the camera will stop work.

Note:

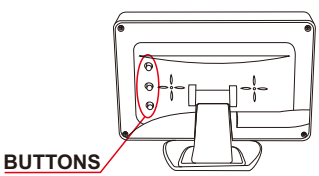
* If you want the RearVision WSU43 to keep working after 30 seconds (for example, you cannot finish reversing your vehicle during 30 seconds), you have to touch the "**Touch for Rearview**" button on the monitor or the cigarette lighter adapter for another 30 seconds.

* After you have been staying inside vehicle quietly (eg. sleeping) with vehicle engine stopping, you want to see the backup image but only put your vehicle key on the ACC -ON position (no starting the engine), there will have no image on the monitor after touching the starting button.
  So you have to give the vehicle a light vibration (such as re-open and shut vehicle door, or tap somewhere lightly), then touch "**Touch for Rearview**" button to start work.

06. BUTTON & SETTING

Function of the monitor backup buttons

1. **The middle button**:
   Short Press to enter monitor menu setting.
   Long Press (press and hold for 3 seconds) to confirm the chosen item in the menu setting interface.



2. **The Up button**:
   Short Press to change/add parameter value at the menu setting interface.

3. **The Down button**:
   Short Press to change/decrease parameter value at the menu setting interface.

Short Press DOWN button to switch the Parking Guide Lines display modes (Display or No display).

Menu Operations:

While the monitor is showing the backup camera image, short press the middle button to enter the main menu interface, and 4 options are available (Including Pairing, Image Parameters, Image Mirror, Software Information).

Image Parameters(Brightness, Contrast, Color) setting interface are shown bellow:

Brightness/Contrast/Color settings are similiar. Take Brightness as an example,when brightness is chosen, press UP or DOWN button on the interface to adjust the brightness as shown bellow:

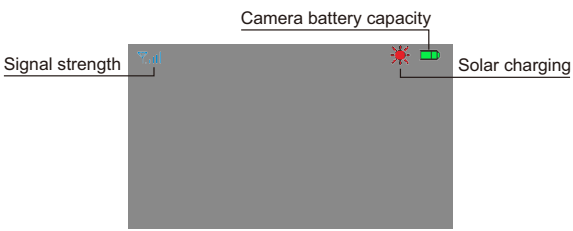
Select “Image Mirror”, press UP or DOWN button on the interface to mirror the image.(It is best to have a video image displayed when making this selection).

Select “Software Information”, press UP or DOWN button to display the software version information.

Notice:

* All MENU adjustment needs to be completed within 30 seconds, otherwise it will automatically shut down.

07. INTERFACE ICON



Signal strength Solar charging

All-in-one Camera battery capacity

08. INFORMATION

Battery Icon is on the top right corner of the screen, indicates the relative capacity of the built-in lithium battery of the All-in-one camera when a video image is present.

Signal strength of the received image is on the top left corner of the screen when a video image is present.

Red Indicator Light

When the monitor is powered on and still stay standby mode, the Red indicator Light doesn't work. When touching the **"Touch forReview"** button, the Light will blink quickly. When the monitor works, the light will extinguish.

All-in-one Camera

The Camera & Video transmitter are built-inside the US license plate, and is equipped with the built-in rechargeable lithium battery, which is connected with the solar panel.

A USB charging port is provided to charge the battery initially prior to mounting on your vehicle, as well as to recharge if needed. When charged fully, the battery will last for several months under average use with NO SUNLIGHT (average use is defined as 5 times per day).

When the monitor is turned on, work command is sent to the camera, upon receive this signal, the camera will work from standby mode at once, and send image video to the monitor for 30 seconds.

09. SPECIFICATION

CAMERA

Operational Current(when transmitting): <280mA

Sleeping Current: <0.06mA

Pixels: 960×576

View Angle: 110˚

Image Sensor: 1/3'' CMOS

Image Quality: Max 30 fps

Camera Assembly: IP 65

TRANSMITTER

Frequency: 2406 ~ 2475 MHz

Transmission distance: >328 ft. (>100 m)

Working Temperature: 14˚~ 122˚F (-10˚~ 50˚C)

MONITOR

LCD Display Screen Size: 4.3 inches

Power Cord Fuse: 1A

Operation Current: <150mA

Effective Pixels: 480×272

10. DISCLAIMER

WSU43 Wireless SolarPower RearVision is intended to assist responsible driver, but it doesn't relieve a driver from full responsibility for operation of the vehicle. It is the driver's sole responsibility to avoid contact with any objects, animals, especially persons. By installing and/or using WSU43 Wireless SolarPower RearVision, you agree that you are solely responsible for the operation of your vehicle, the Rear Vision supplier is not responsible for any property damage, personal injury, or loss of life that may result from the operation of your vehicle.

Notice:

Some USA states or local government may have regulations or laws that restrict the use of anything that might impair the clear view of a license plate. Check local laws for explanation.

WARRANTY INFO

WSU43 Wireless SolarPower RearVision product is warranted to the original purchaser for a period of one(1) year from the date of original purchase against all defects in materials and workmanship, when purchased from a supplier. This limited warranty is void if the unit is abused, misused, modified, installed improperly, or if the housing and/or serial numbers have been removed. There are no express warranties covering this product other than those set forth in this warranty.

11. WARRANTY INFO

All express or implied warranties for this product are limited to one (1) year. The supplier is not liable for damage arising from the use, misuse, or operation of product including but not limited to loss of time, invonvenience, loss of use of your product property damage caused by your product or its failure to work, or any other incidental consequential damages including personal injury.

Service Under Warranty

During the warranty period, defective units will be repaired or replaced (with the same or a comparable model) at supplier's option, without charge to the purchaser with dated proof of purchase. Units returned without dated proof of purchase will be considered out of warranty, therefore are not covered by the described Limited Warranty. We will not assume responsibility for loss or damage incurred in shipping.

Service Out-of-Warranty

Units will be repaired at "out-of-warranty" service rates when:

1. The unit's warranty has expired.
2. A dated proof of purchase is not supplied.
3. The unit has been returned without its serial number.
4. The unit has been misused, abused, modified, installed improperly, or had its housing removed.

12. TROUBLESHOOTING

♦ If the monitor doesn’t turn on when power is applied:

1. Check to make sure the power source is active (if your cigarette lighter is switched with vehicle ignition, your monitor will only work when the vehicle is running or the key in the ON position).
2. Check to make sure the fuse and power cord are in working order.

♦ If the monitor doesn’t display images within a few seconds of touching the starting button:

1. The battery in the camera may be depleted and require recharging.
2. In the process of use, there is wireless interference from outside. so if you can't turn on the product over 15 seconds after touching the botton , please touch the Touch for Rearviw botton again to turn it on.

♦ If the video image is poor:

Check that the camera lens is clean from road grime, snow, or ice.

♦ If the video image does not last 30 seconds:

Recharge the battery in the camera.

♦ If no image after touching “Touch for Rearview”Botton in quiet (no vibration at all) environment, such as testing the WSU43 in office or laboratory.

Vibrate the camera, touch the powered Monitor “Touch for Rearview” button quickly (not over 3 minutes from vibration) to wake up the sleeping camera, make it enter standby status and receive the command from the monitor.

Notice:

* Under the actual situation of installation, test, and use of vehicle, the environment is different totally. Little vibration must happen when open vehicle door, people touching the vehicle, even the engine work.
So the camera will stay at standby status.

13. CARE & MAINTENANCE

Cleaning

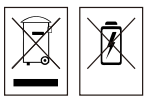
Don’t clean or wipe the All-in-one Camera with solvents or chemical materials. If necessary, remove dirt or stains using a soft cloth dampened with a mild detergent solution.

Fuse Replacement

1. Turn the cap on the tip of the power plug counterclockwise (no tools needed).
2. Remove the cap, center pin and fuse.
3. Replace the fuse with a new 1-am fuse.
4. Replace the center pin and cap. Turn the cap clockwise.

Disposal

The Wireless SolarPower RearVision is designed to provide years of service. The RearVision WSU43 should be recycled or safely disposed of at a local recycling center.



14. FCC Statement

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.