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Warning:

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

HELP AVOID ACCIDENTS & INJURIES



OPERATION GUIDE

WIRELESS

ALL VEHICLE REAR VIEW

CAMERA SYSTEM

2.4GHz Wireless CCD Back up Camera
System with 7" Color LCD Monitor



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HELP AVOID ACCIDENTS & INJURIES

FCC INFORMATION

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.

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

CAUTIONS

- The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- Turn off the Camera/Receiver if the system is not in use.
- The adapter is used as the disconnect device from the mains. The adapter shall remain readily operable.
- The Camera/Receiver can only be completely disconnected from the mains by unplugging the adapter.
- Do not cut the DC power cable of the apparatus to fit with another power source.
- Attention should be drawn to the environment aspects of battery disposal.

EU Environmental Protection

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.



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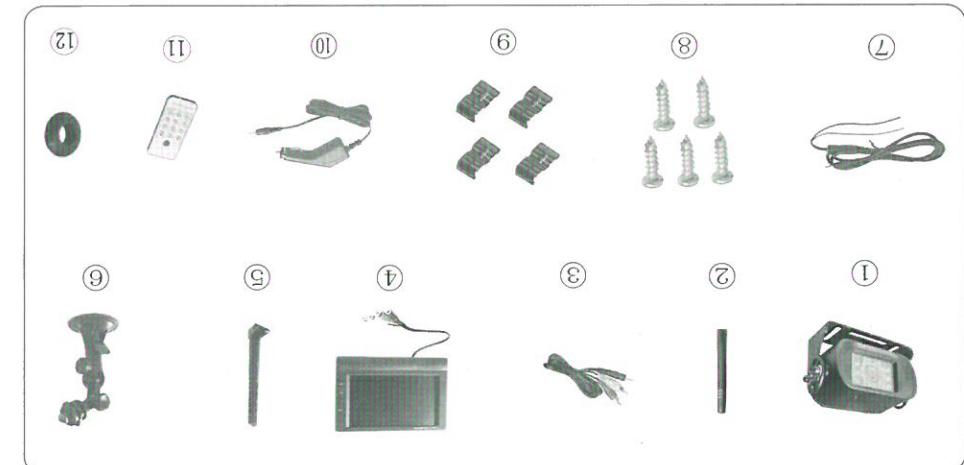
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The graphics included are subject to minor change without notice.

FORWORD

CONGRATULATIONS. The Wireless Back Up Camera, when used as described, will give you years of dependable service in your car, truck, RV, or mini-van. We have taken numerous measures in quality control to ensure that your product arrives in top condition, and will perform to your satisfaction.

PACKING LIST



Optional



Items	Value	RECEIVER
Imaging Sensor	CCD	
Total Pixels	500×582 (PAL) 510×492 (NTSC)	
Horizontal View Angle	80 degree	
Antenna	50 ohm SMA	
Transmission Frequency	ISM 2,400~2,483MHz	
Transmission Power	2mW/FCC,10mW/CE	
Minimum Illumination	0 Lux (IR ON)	
IR Night Range	5m	
Modulation Type	FM	
Bandwidth	18MHz	
Power Supply	+12/+24VDC	
Consumption Current (Max.)	170mA(IR OFF) 8330mA(IR ON)	
Dimensions (W x D x H) (mm)	96×52×61 (Excluding Bracket)	
Weight (about)	400g	
Operating Temperature	-10°C~+50°C/+14°F~+122°F	
Antenna	50 ohm SMA	
Transmission Frequency	ISM 2,400~2,483MHz	
Effective Pixels	480 × 234	
Video System	NTSC/PAL	
Color Configuration	R.G.B. delta	
Received Sensitivity	≤-85dBm	
Consumption Current (Max.)	900mA	
Unobstructed Effective Range(Min.)	100m~150m	
Dimensions(W×D×H)	196 × 27 × 127(mm)	
Weight (About)	450g(Excluding Bracket)	
Power Supply Voltage	+12/+24VDC	
Operating Humidity (Max.)	85%RH	

SPECIFICATIONS

- * Actual transmission range may vary according to the weather, location,
- * Interference and building construction.
- * All the specifications are subject to minor change without prior notice.
- * Channel Frequency: CH1=2,414MHz; CH2=2,432MHz; CH3=2,450MHz; CH4=2,468MHz Only CH 2 and CH 4 are optional.

TESTING THE SYSTEM

- 1.Rettach the vehicle's negative battery cable.
- 2.Engage the parking brake and turn the ignition key to the ON position.
DO NOT start the vehicle. Put the gear shift into reverse.
- 3.The camera will start sending signal, and the monitor will detect the signal and turn itself ON. If the monitor does not come ON press the ON/OFF button.
- 4.If the image does not match your rear view mirror, press the top button on the monitor to change the image until it matches your rear view mirror.
- 5.When you take the gear shift out of reverse the camera will automatically turn OFF, and the monitor will shut down..

There are four different views for the monitor, each time the Image Orientation button is pressed the image orientation will change once.



Normal



Mirror



Mirror Upside Down

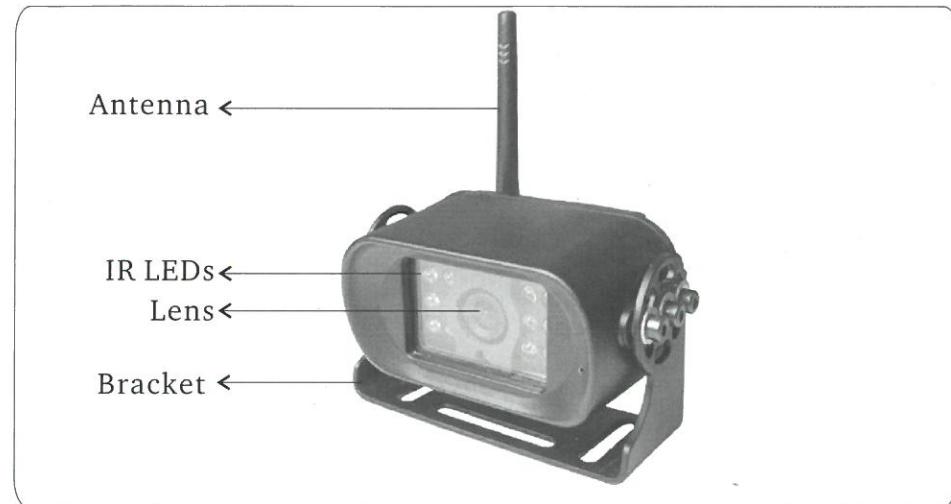


Normal Upside Down

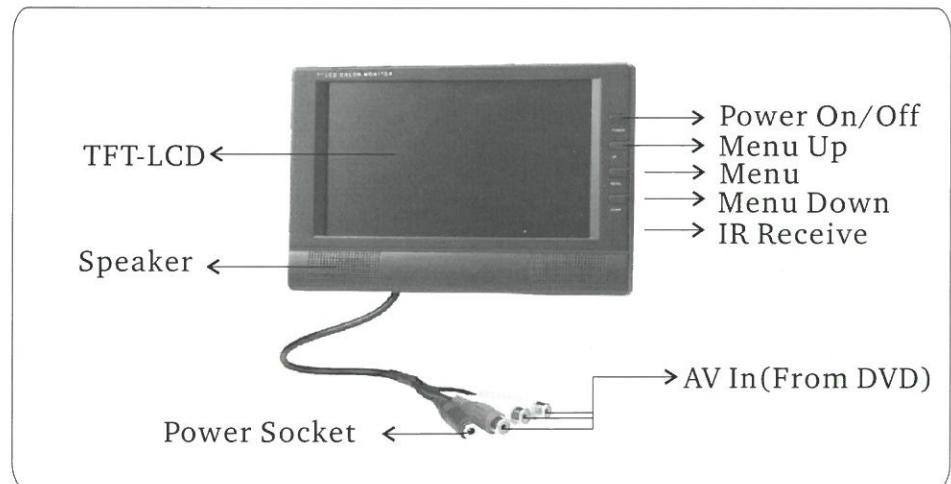
These different views allow you to mount the camera and/or monitor either right aide up or upside down and still display the image correctly on the monitor. The image displayed should match your rear view mirror. After testing the unit, fully tighten the license plate bolts.

STRUCTURE

BACK UP CAMERA

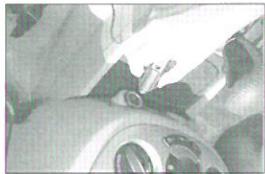


7" TFT- LCD Monitor



* 9901AV means GB9901 + GB7109

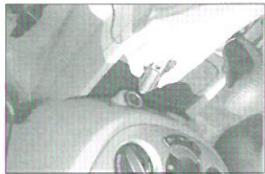
MONITOR POWER CONNECTION



12/24 Volt Cigarette Lighter Adapter Using the Monitor's ON/OFF

There are two ways to supply the monitor with power, one uses a 12/24 Volt cigarette lighter adapter plugged into the vehicle's cigarette lighter socket, and the other uses a wiring harness hard wired to the vehicle's box.

Hard Wired to Fuse Box Using the Monitor's ON/OFF



1. Plug the end of the power cable into the monitor.

2. Plug the 12/24 V car power adapter into car power socket.

3. The monitor will be automatically activated when you back up the car.

Switch

1. Disconnect the negative battery cable from the vehicle's negative battery terminal.

2. Connect the Red wire to the 12/24 Volt Positive terminal in the vehicle's fuse box. See vehicle's owners manual for fuse box diagram.

3. The ground wire must be located on an area of metal on the vehicle's body/freewall that does not have any vehicle components behind it.

4. Drill a hole for the supplied self tapping sheet metal screw. Make sure Sand off any paint to reveal bare metal, this area will be your chassis ground.

5. Strip the insulation from the end of the black wire 1.3cm and wrap the wire around the self-tapping sheet metal screw before tightening.

6. Connect the negative battery cable.

7. Plug the power cord into the monitor.

8. The monitor will be automatically activated when you back up the car.

ON/OFF Button

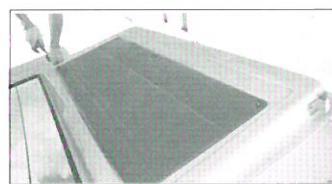
1. Plug the end of the power cable into the monitor.

2. Plug the 12/24 V car power adapter into car power socket.

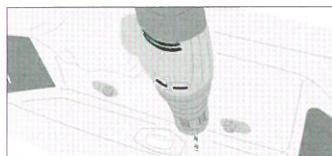
3. The monitor will be automatically activated when you back up the car.

INSTALLATION

CAMERA INSTALLATION



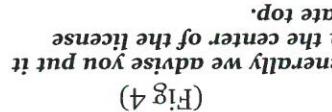
(Fig 1)



(Fig 2)



(Fig 3)



(Fig 4)

Fig 4)
Generally we advise you put it on the center of the license plate top.

Fig 3)
Install the camera by five screws supplied and adjust the camera to an proper angle.

Fig 2)
3. If the holes are all ready, insert the power wire of camera into the supplied ground wire of camera into the vehicle. (Fig 2)
which prevent the metal edge of the hole from cutting the power cable then pass the power wire to your aiguiile. Before drilling, we close to your aiguiile. Before drilling, we stronglly recommend you remove electric parts or fuel system behind the vehicle door and clear the surroundings to avoid unexpected damages to avoid.

* Before you drill those holes you must check out and make sure no other components too close to your aiguiile. Before drilling, we strongly recommend you remove electric parts or fuel system behind the vehicle door and clear the surroundings to avoid unexpected damages to avoid.

* Some vehicles may have a hole available to pass the wire through, if not, you need to drill a hole close to the location of camera for the power wire, and five holes for the screws of camera. (Fig 2)

Note:
1. Lift the backsides door of vehicle and remove the cover to install profitably. (Fig 1)
2. Drill six holes. The one hole for camera's power wire and five holes for camera's the camera. (Fig 2)

You may mount the camera near the license plate's top with screws. Consult your local motor vehicle laws on the use of this product.

These installation instructions do not apply to all vehicles. They are meant as only as a general guide due to big vehicle makes & models. For specific questions, contact your vehicle's manufacturer.

MONITOR INSTALLATION

When choosing a location to mount the monitor, make sure the monitor is on a smooth, flat, level area that will not obstruct your vision while driving, or otherwise interfere with the safe operation of the vehicle.

Using the mount holder to install the monitor

1. Mount holder is stamped on the front window glass.

Plug Power Jack to power ON position, Adjust brightness, contrast, orientation for better image effect.

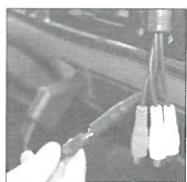
Installation process as following pictures:



Fastening mount holder to the interface of the monitor's back



Peel off the backing paper of the mount holder and suck on the front window of vehicle

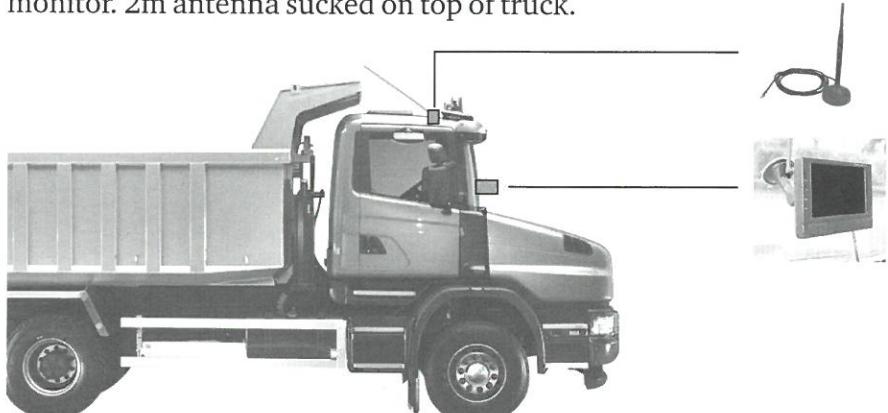


Connect +12/24V power cable to the power socket of monitor

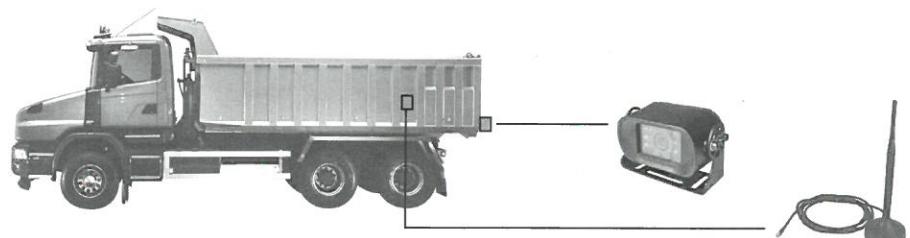


Power on and adjust brightness, contrast, orientation of image of monitor

2. For better receiving effect, please connect optional 2m antenna to monitor. 2m antenna sucked on top of truck.



4. For better transmission effect, please connect optional 2m antenna to wireless camera. 2m antenna sucked on tail of truck.



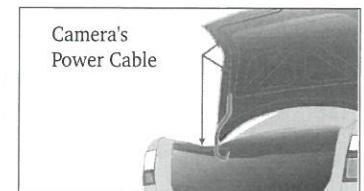
(Fig5)

5. Next you'll need to find the vehicle's reverse lights. Turn off the vehicle's reverse lights. Turn the vehicle's ignition key to the accessory position, engage the parking brake and put the car in reverse. Look at the vehicle's tail lights to see where the reverse lights are located, they are the white lights.

To locate the reverse light's 12/24VDC wire it will be necessary to gain access to the rear of the vehicle's tail light.

For help locating the vehicle's reverse light circuit contact your vehicle's manufacturer for vehicle specific wiring diagrams.

6. Once you have located the reverse light circuit you will have to route the Power Wire to that location. You must securely fasten the Power Wire to prevent it from being caught on any vehicle component such as the trunk hinge (Fig. 6). Never route the cable outside the vehicle.



(Fig6)

7. The reverse light sockets on most vehicles have two wires connected to them. Usually the negative wire is black and the positive wire is a colored wire. If you are uncertain about the wiring, you can use a 12/24 volt test light available at most auto parts stores to determine which is the positive wire.

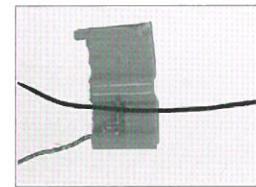
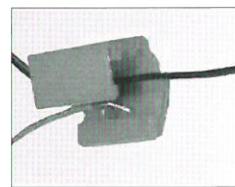
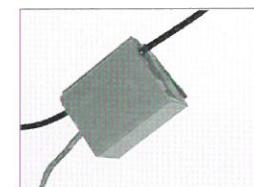
a. Remove the reverse light socket from its housing, then remove the bulb from the socket.

b. Engage the parking brake, turn the ignition key to the ON position, but

The channel of the camera was marked by metal button round in shape. There are two channels optional as follows. Then press the channel button of receiver to select the channel same as the camera's, and the pictures are displayed on the screen.

Camera Channel Setup

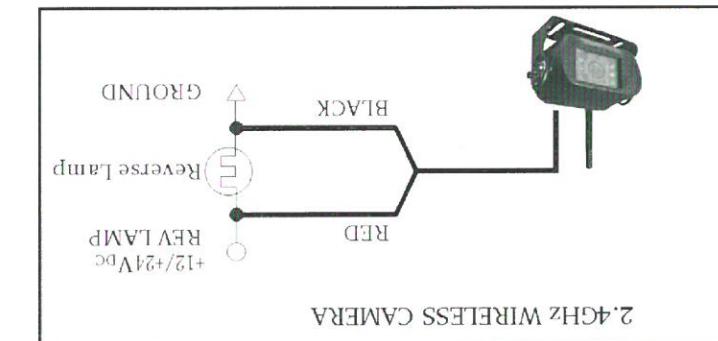
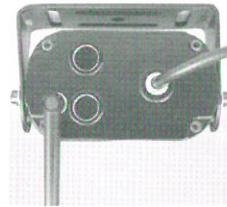
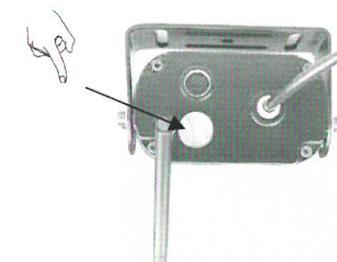
Once connected, wrap with electrical tape. Do not attempt this if you are not knowledgeable with electrical installation practices. Light wires then twisting camera wires to the exposed reverse light wires. Be wired directly to the reverse light circuit by stripping the reverse



In-Line Wire Connector Instructions

If take away the metal button, it will default CH 4. Its operating frequency is 2,468MHz.

If the metal button is installed upside, it means CH 2. Its operating frequency is 2,432MHz.



The camera is equipped with Reverse Voltage Protection. If the camera does not operate, please check that the Red wire is connected to Positive (+) and the Black wire is connected to Negative (-).

Replace the reverse light bulb, then reinstall the light socket. Secure all the wire with cable ties or electrical tape. Reattach the negative battery cable to the battery.

Next splice the black wire of the camera's power wire to the reverse light's negative (-) wire or ground. Ensure good connection.

Following the In-Line Wire Connector Instructions section, splice the Red wire using the supplied In-Line Wire Connector to the reverse lights Positive (+) wire. Use a set of slip joint pliers to squeeze the TAP and Red wire.

After determining which wire is the positive and which is the negative, turn off the ignition key, then remove the battery's negative cable.

Follow the manufacturer's instructions for the safe use of the test light.

Is the positive wire. If it doesn't light up the opposite wire is the Is the positive wire.

If the test light lights up, then the wire corresponds to that contact touch one of the socket's contacts with the positive lead.

Attach the ground wire of the test light to the vehicle ground, then do not start the vehicle. Put the gear shift in the reverse position.