2.4GHZ WIRELESS REVERSING CAMERA KIT WITH LCD MONITOR

Dual Channel

Please carefully read and follow the following safety and operating instructions.

IMPORTANT SAFETY INSTRUCTIONS

Before You Install

If you are not confident working with 12 volt DC vehicle wiring, removing and reinstalling interior panels, carpeting, dashboards or other components of your vehicle, contact the vehicle's manufacturer, or consider having the camera system professionally installed.

Interference

This device, as well as all other wireless devices, may be subject to interference. Interference may be caused by cell phones, Bluetooth headsets, Wi-FI routers, power lines and other various electrical equipment, etc.

Repair

The camera system should not be opened. Any attempt at modification or repair by the user will entail the loss of your guarantee.

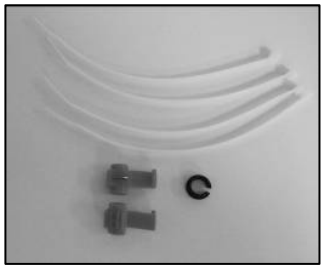
PARTS

1. Monitor and mounting Arm

2. 2 x Camera's with mounting plates

3. 2 x Transmitters

4. Mounting Accessories x 2



5. Monitor Power Cable

6. Transmitter Power Cables x 2

INSTALLATION

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

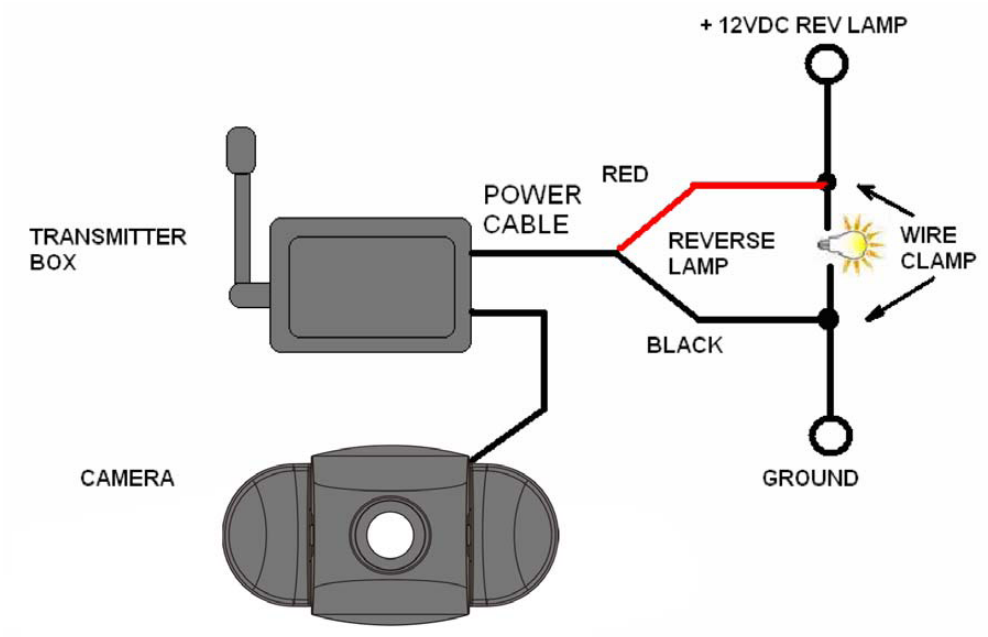
Camera installation

There are several ways to mount the cameras on the back of your vehicle or trailer. But the most convenient is to mount it near the license plate of the vehicle or trailer.
Each camera is with a mounting plate with double side adhesive tape that can be placed behind the license plate.
The camera is tilt-able, camera angle can be adjusted manually on vertical direction. Make sure that its field of view and detection are not obstructed.

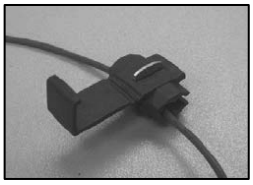
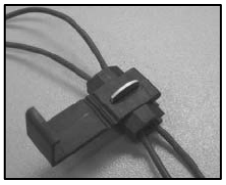
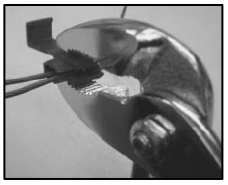
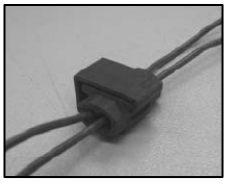
There are two sets of cameras and transmitters, use the same way below to install them on the vehicle and trailer respectively.

1. Choose a routing path for the camera's ,Remove the rear license plate, and then loosen the license plate bolts/screws.
2. Tear off the cover paper of adhesive tape on the mounting plate, stick the camera to the back of license plate.
3. Mount the license plate on the license plate bracket.
4. lower cable through the vehicle's (or trailer's) body to the reverse light circuit. If in doubt, seek professional installation assistance.
5. Some vehicles (or trailer) may have a hole available to pass the wire through, for example, the location where the license plate light is mounted, or you can drill a hole close to where the power cable that is attached to the camera. *If you are able to use an existing hole, skip the next two steps.*
6. Before you drill a hole you MUST CHECK and see WHAT IS BEHIND WHERE YOU ARE DRILLING. If there are any vehicle components, such as electrical parts or fuel system components behind, you must take precaution not to damage them. Remove the license plate with camera before drilling.
7. When the hole is made, insert the supplied grommet, then pass the camera cables through the grommet into the vehicle (or trailer's). You must use the grommet to prevent the metal edge of the hole from cutting the camera cable.
8. Mount the transmitter box inside the trunk. Connect the camera's power cable and the transmitter box power cable to the transmitter box.
   NOTICE: Choose position to mount the transmitter boxes as close as possible to the receiver for better signal transmission; The length of the power cables are long enough for routing from the rear end to the front of the vehicle or trailer.
   The transmitter doesn't comply with weatherproof.

9. Next you'll need to find the vehicle's (or trailer'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 12V+ wire it will be necessary to gain access to the rear of the vehicle's (or trailer's) tail light. For help locating the vehicle's (or trailer's) reverse light circuit contact your vehicle's (or trailer's) manufacturer for vehicle specific wiring diagrams.
10. Once you have located the reverse light circuit you will have to route the transmitter box power cable to that location. You must securely fasten the power cable to prevent it from being caught on any vehicle component such as the trunk hinge. **Never** route the cable on the outside of the vehicle (or trailer)! 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 coloured wire. If you are uncertain about the wiring, you can use a 12 volt multi-meter available at most auto parts stores to determine which is the positive wire. Follow the manufacturer's instructions for the safe use of the multimeter.



11. After determining which wire is the positive and which is the negative, turn off the ignition key, then remove the battery's negative cable.
12. Splice the red wire using the supplied in-line wire connectors to the reverse light's positive (+) wire. Use a set of slip joint pliers to squeeze the TAP and insure good connection.

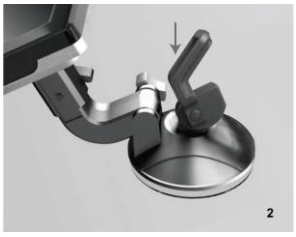





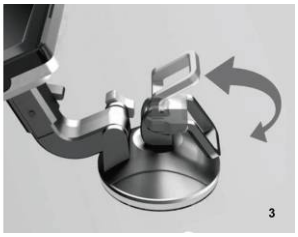
13. Next splice the black wire of the transmitter box power cable to the reverse light's negative (-) wire or ground.
14. Replace the reverse light bulb, and then re-install the light socket. Secure all the wires with cable ties or electrical tape.
15. Re-attach the negative battery cable to the battery.

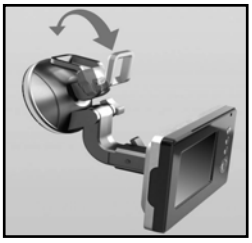
Monitor Installation

When choosing a location to mount the monitor, make sure the monitor is in an area that will not obstruct your vision while driving.

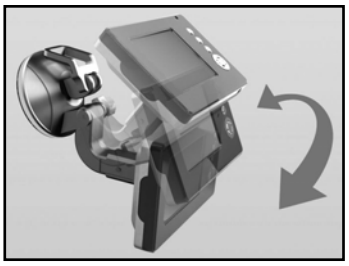
1. Before mounting the monitor, clean the mounting surface well.
2. Position the suction mount to the smooth surface which suits your requirement.
3. Press the suction cap against the smooth surface and press the lock down to attach and fix the mount to the surface.

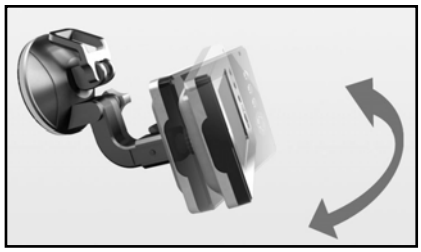






4. Snap in the monitor to the suction mount.
5. Adjust the mounting arms to suit your view angle to the monitor and tighten the screws on the mount to fix the position.





6. Route the power cable to the vehicle's cigarette lighter socket/12V power outlet. The cable must not interfere with the safe operation of the vehicle.
7. Insert the small 12 Volt DC plug of the power cable into the right side of the monitor.
8. Plug the 12 Volt cigarette lighter plug into the vehicle's cigarette lighter socket.

To maximize the effectiveness of the suction mount, it is recommended that the application be performed under the following conditions:

- Surface temperature should be between 21 and 38 degrees Celsius.
- Application below 10 degrees should be avoided.
- Application should not occur in direct sunlight.

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

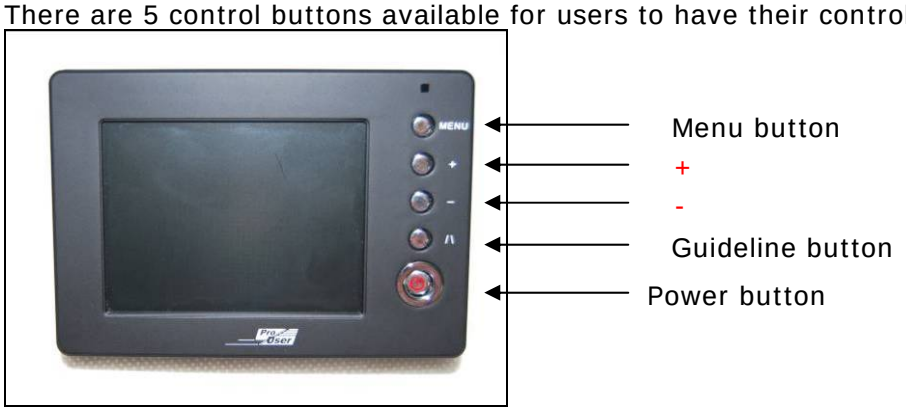
NOTE: UNDER EXTREME BRIGHT LIGHT CONDITIONS, THE SCREEN IMAGE MAY TAKE A FEW SECONDS TO STABLIZE. PLEASE WAIT UNTIL THE IMAGE HAS STABLIZED BEFORE BACKING UP.

System testing

1. Reattach the vehicle's negative battery cable.
2. Turn the ignition key to the accessory position, do not start the vehicle.
3. Engage the parking brake, and then put the shifter in the reverse position.
4. Look at the monitor, if the image does not match your rear view mirror press the Image Orientation button on the monitor to correct the image.
5. After testing the unit and you are satisfied with the route you have chosen for the cabling, you must permanently install it.
6. Route all wires behind interior panels or under carpeting so they are hidden. Use supplied cable ties to neatly gather any excess wire.

OPERATION

There are 5 control buttons available for users to have their controls:



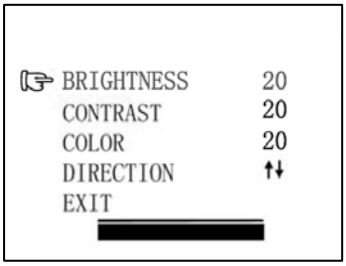
Power button

Press the POWER button to supply power to the monitor. The monitor will automatically turn on when the vehicle is in reverse gear.

When the monitor image is on, the blue LED will be lit. If there is power to the monitor, but the monitor image is OFF, the blue LED will blink on and off. When the monitor power is off, no picture can appear on the screen and the blue LED will be off.

Menu button

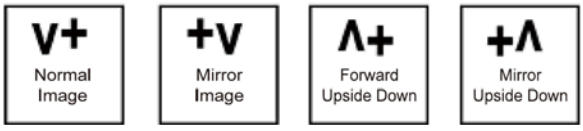
Press the Menu button to enter the menu screen as shown below:



Repeat pressing the Menu button to select **Brightness**, **contrast**, **colour** or **direction** of the picture.

Press the + button or – button to adjust settings within the control selected. Press the **+** button to increase the value and press the **–** button to decrease the value.

To change the orientation of the screen image, press the menu button until **direction** is selected. By pressing the **+** or **-** button repeatedly, different screen orientations will be available. These different views allow you to mount the camera and monitor in any position with keeping the right picture on the monitor.



To exit the menu screen, select **exit** on the screen.

Guideline button

This camera system has the option to show distance-guidelines on the display. This helps you to visually see the distance between the objects behind your car. By pressing the guideline button, you can switch this option on and off.

Channel switch buttons

When menu is not activated, press + or – buttons to switch from one channel to another channel, so you can choose to see the image from the rear of the vehicle or from the rear of your trailer.

TECHNICAL SPECIFICATIONS

Camera	
Operating Voltage	12V DC
Current consumption	<150mA
Image sensor	CMOS
No. of pixel	640x480
Resolution	>330
Optical lens	2,4mm / F2,1
Wireless transmitter	
Transmission frequency	2414MHz,2468MHz
RF transmission distance (open space)	>80M
LCD monitor	
Operation Voltage	12V DC
Standby Current	<45mA
Operation Current	**≤350mA**
LCD display screen size	3,5inch
No. of pixel	320x240
Operation temperature	-10 to +45 degree Celsius