Product Manual
Installation Instructions

Rear View Camera Systems

Model # RVS-091407

© 2009-2013 Rear View Safety Inc.
Table of Contents

Introduction .......................................................... 4
Safety Information .................................................... 5
Package Contents ..................................................... 6
Settings/ Maintenance .............................................. 7
Installation Guide ..................................................... 8
Positioning .............................................................. 11
Pairing and Connecting .............................................. 12
Operation Guide ....................................................... 12
LCD Parametres ......................................................... 13
Monitor Dimensions .................................................. 14
Product Info ............................................................. 15
Warranty ................................................................. 17
Introduction

Please read all of the installation instructions carefully before installing the product. Improper installation will void manufacturer’s warranty.

Congratulations on purchasing a Rear View Backup Camera System. With this manual you will be able to properly install and operate the unit.

The Backup Camera System is intended to be installed as a supplement aid to your standard rear view mirror that already exists in your vehicle. The Backup Camera System should not be used as a substitute for the standard rear view mirror or for any other mirror that exists in your vehicle.

In some jurisdictions, it is unlawful for a person to drive a motor vehicle equipped with a TV viewer or screen located forward of the back of the driver’s seat or in any location that is visible, directly or indirectly, to the driver while operating the vehicle.
Safety Info

- Place the monitor away from direct sun light, heat, water or moisture. This product is made with precise electronic components. Handle with care. Improper use can cause a malfunction.

- Firmly fix the monitor stand to secure location.

- While installing the Rear View System be careful with the wire positioning in order to avoid wire damage.

- The Rear View System should only be used when the vehicle is in reverse. Do not watch movies or operate the monitor while driving. It may cause an accident.

- Do not install the monitor where it may obstruct drivers view or obstruct an air bag device.

- Do not attempt to service this product on your own. If the system has any problem, disconnect the power and contact customer service.

- Dropping the unit may cause possible mechanical failure.

If you have any questions about this product, contact:

Customer Service:
Rear View Safety
1680 Atlantic Ave #301
Brooklyn, NY 11213
Tel: 800 764-1028

IN NO EVENT SHALL SELLER OR MANUFACTURER BE LIABLE FOR ANY DIRECT OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM ANY DEFECTIVE PRODUCT OR THE USE OF ANY PRODUCT.
Package Contents

1. Monitor
2. Wireless Digital Transmitter
3. Power Cable
4. Cameras (Optional)
5. Optional Bracket
6. 3M Sticker
Settings

You can adjust the contrast and brightness of the Monitor according to your desired level.
Note: Contrast and Brightness setting ONLY works while the backup image is on the screen.
1. To Adjust Contrast
Press the arrow key up or down
The system has 2 program functions:
1. Camera Setting
   Push the Menu to pair, pairing mode will enable for 30 seconds
2. System Setting
   A. Power saving push menu to change the selection and hold the Menu for long to exit
   B. Brightness you can adjust the brightness of screen
   C. Distance Grid, select grid line on/off
   D. Default setting

Maintenance

Cleaning
• If dirt, rain or snow attaches to the camera, the monitor may not clearly display objects.
• Do not use alcohol, benzene or thinner to clean the camera. This will cause discoloration. To clean the camera, wipe with a clean cloth dampened with mild cleaner diluted with water and then wipe with a dry cloth.
Installation Diagram

Mounting the monitor:
The monitor mounts on to the existing rear view mirror in your vehicle. The monitor uses a special pressurized mechanism (see diagram A) which clips onto the existing rear view mirror. To hard wire the monitor, (see Diagram B) locate a 12V+- in your fuse box and make sure the selected fuse is a ignition power source.
1. Locate the reverse taillights wiring behind your reverse light. You may need to remove the interior panel in order to locate. You only need to attach the signal booster power wire to ONE of the reverse lights, not both. If you cannot manually locate the tail light cables, please contact the vehicle manufacturer or reference a wiring diagram for your vehicle.

2. At your taillight, remove the light bulb socket from the reverse light housing.

3. Determine the reverse light power wires for your car, designating the positive and negative wires.

4. Connecting the Power Cables:
   - Red wire to reverse light’s Positive wire. Connect the camera’s Black Wire to reverse light’s Negative wire. (see Diagram C)
   - Place the fixed adapter from the Wireless Digital Transmitter Power Cable into the Wireless Digital Transmitter.
   - Determine the best place to mount the Transmitter. The Transmitter is not waterproof and needs to be protected.

5. Determine the best route for the Camera Cable from the top of your license plate to the Transmitter. You may need to drill a small hole in the panel behind where the license plate is situated.
6. Plug the attached wire from the Camera into the Wireless Transmitter. Ensure that the wires are not tangled.

7. While sitting in the driver’s seat of the car with the key in the ignition position. The monitor will automatically start when vehicle is put in reverse. If when you place the vehicle in reverse there is no image, you may need to pair the camera with the monitor.

8. Put the vehicle in reverse. If you have a clear picture, put the vehicle back in park and turn the key to the off position. You are now ready for final step shousing.

9. Take the Wireless Transmitter and using the double sided 3M Sticker attach the box to the inside of your car.

10. Replace the light socket back into the reverse light housing.

11. Replace any interior panels that may have been removed to access the taillight and close your trunk or rear hatch.
Positioning
Pairing is not necessary as the unit has already been paired. If you are not able to connect the camera, please try to pair the camera by the following steps:
1. Press “Pair” button on the Wireless Digital Transmitter. You will see the LED Blinking in RED/BLUE. The unit will remain in Pair mode for 30 seconds
2. Go to the monitor and do the following step:
   a. Press “Menu”
   b. Go to “Pair Camera”
   d. The unit is now in pair mode - if the unit was able to search and connect with the camera, the display will show “Pair OK”. If no camera is found, then the display will show “Timed Out”.

1. Power ON/OFF
   • The Dash or Mirror Monitor will automatically turn ON when it is connected to a power source, and the camera is receiving power.
2. Connection
   • Rearview image will be automatically appear on the screen during reverse and will remain in standby when the vehicle is in any other gear or driving forward.”
## LCD Parameters

<table>
<thead>
<tr>
<th><strong>TFT LCD Digital Monitor</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Screen Size</strong></td>
<td>4.3&quot;</td>
</tr>
<tr>
<td><strong>Dot Resolution</strong></td>
<td>1440(H)x234(V)</td>
</tr>
<tr>
<td><strong>Display Format</strong></td>
<td>16:9</td>
</tr>
<tr>
<td><strong>Display Brightness</strong></td>
<td>350</td>
</tr>
<tr>
<td><strong>Viewing Angle</strong></td>
<td>90° Min</td>
</tr>
<tr>
<td><strong>Video Input</strong></td>
<td>1 channel</td>
</tr>
<tr>
<td><strong>Video Source</strong></td>
<td>1Vp-p, 75Ω</td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>DC 12V</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td>5W</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>10°C ~ +65°C</td>
</tr>
<tr>
<td><strong>Video System</strong></td>
<td>Auto NTSC/PAL</td>
</tr>
<tr>
<td><strong>Overall Dimensions</strong></td>
<td>10” (L) x 3.5” (H) x 1” (D)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>400G</td>
</tr>
<tr>
<td><strong>Impact Rating</strong></td>
<td>5G</td>
</tr>
<tr>
<td><strong>Active Area</strong></td>
<td>154.08(H) x 86.58 (V)</td>
</tr>
<tr>
<td><strong>Sync System</strong></td>
<td>Internal</td>
</tr>
</tbody>
</table>
Monitor Dimensions

Display Image Size:
4.2 x 2.2
## Product Info

<table>
<thead>
<tr>
<th>Camera</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Picture Elements</strong></td>
<td>MT9V36</td>
</tr>
<tr>
<td><strong>Gamma Correction</strong></td>
<td>r=0.45 to 1.0</td>
</tr>
<tr>
<td><strong>Image Sensor</strong></td>
<td>480TV lines NTSC:510(H)*492(V)</td>
</tr>
<tr>
<td><strong>Lens</strong></td>
<td>2.1mm</td>
</tr>
<tr>
<td><strong>View Angle</strong></td>
<td>130°</td>
</tr>
<tr>
<td><strong>Sync System</strong></td>
<td>Internal Synchronization</td>
</tr>
<tr>
<td><strong>Infra-red distance</strong></td>
<td>30 Feet (9 Infrared IR)</td>
</tr>
<tr>
<td><strong>Usable Illumination</strong></td>
<td>0 Lux (IR On)</td>
</tr>
<tr>
<td><strong>Power Source</strong></td>
<td>DC 12V(+/− 10%)</td>
</tr>
<tr>
<td><strong>S/N Ratio</strong></td>
<td>More than 48dB</td>
</tr>
<tr>
<td><strong>Electronic Iris</strong></td>
<td>1/50, 160-1/100,000sec</td>
</tr>
<tr>
<td><strong>Video Output</strong></td>
<td>1Vp.p 75ohm</td>
</tr>
<tr>
<td><strong>IR Switch Control</strong></td>
<td>CDS Automatic Control</td>
</tr>
<tr>
<td><strong>Impact Rating</strong></td>
<td>10G</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>-25°C - 50°C / RH 95% Max</td>
</tr>
<tr>
<td><strong>Storage Temperature</strong></td>
<td>-25°C - 60°C / RH 95% Max</td>
</tr>
</tbody>
</table>
One Year Warranty
Rear View Safety Inc. warrants this product against material defects for a period of one year from date of purchase. We reserve the right to repair or replace any such defective unit at our sole discretion. Rear View Safety Inc. is not responsible for a defect in the system as a result of misuse, improper installation, damage or mis-handling of the electronic components. Rear View Safety Inc. is not responsible for consequential damages of any kind.

This warranty is void if: defects in materials or workmanship or damages result from repairs or alterations which have been made or attempted by others or the unauthorized use of nonconforming parts; the damage is due to normal ware and tear, this damage is due to abuse, improper maintenance, neglect or accident: or the damage is do to use of the Rear View Safety Inc. system after partial failure or use with improper accessories.

Warranty Performance
DURING THE ABOVE WARRANTY PERIOD, SHOULD YOUR REAR VIEW SAFETY PRODUCT EXHIBIT A DEFECT IN MATERIAL OR WORKMANSHIP, SUCH DEFECT WILL BE REPAIRED WHEN THE COMPLETE REAR VIEW SAFETY INC. PRODUCT IS RETURNED, POSTAGE PREPAID AND INSURED, TO REAR VIEW SAFETY INC. OTHER THAN THE POSTAGE AND INSURANCE REQUIREMENT, NO CHARGE WILL BE MADE FOR REPAIRS COVERED BY THIS WARRANTY.

Warranty Disclaimers
NO WARRANTY, ORAL OR WRITTEN, EXPRESSED OR IMPLIED, OTHER THE ABOVE WARRANTY IS MADE WITH REGARD TO THIS REAR VIEW SAFETY INC. REAR VIEW SAFETY INC. DISCLAIMS ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE AND ALL OTHER WARRANTIES. IN NO EVENT SHALL REAR VIEW SAFETY INC. LIABLE FOR ANY INCIDENTAL, SPECIAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES OR FOR ANY COSTS, ATTORNEY FEES, EXPENSES, LOSSES OR DELAYS ALLEGED TO BE AS A CONSEQUENCE OF ANY DAMAGE TO, FAILURE OF, OR DEFECT IN ANY PRODUCT INCLUDING, BUT NOT LIMITED TO, ANY CLAIMS FOR LOSS OF PROFITS.