Instruction Manual

Backup Camera System
For Dodge Promaster Vans

RVS-918718
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NOTE!

*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.
Please read the entire manual and follow the instructions and warnings carefully. Failure to do so can cause serious damage and/or injury, including loss of life. Be sure to obey all applicable local traffic and motor vehicle regulations as it pertains to this product. Improper installation will void manufacturer’s warranty.

**USAGE:**

- The Rear View Camera System is designed to help the driver safely detect people and/or objects helping to avoid damage or injury. However, you the driver, must use it properly. Use of this system is not a substitute for safe, proper or legal driving.

- Never back up while looking at the monitor alone. You should always check behind and around the vehicle when backing up, in the same way as you would if the vehicle did not have the Rear View Camera System. If you back up while looking only at the monitor, you may cause damage or injury. Always back up slowly.

- The Rear View Camera System is not intended for use during extensive back-up maneuvers or backing into cross traffic or pedestrian walkways.

- Please, always remember, the area displayed by the Rear View Camera System is limited. It does not display the entire panorama that is behind you.
INSTALLATION:

- Electric shock or product malfunction may occur if this product is installed incorrectly.

- Use this product within the voltage range specified. Failure to do so can cause electronic shock or product malfunction.

- Take special care when cleaning the monitor.

- Make sure to firmly affix the product before use.

- If smoke or a burning smell is detected, disconnect the system immediately.

- Where the power cable may touch a metal case, cover the cable with friction tape. A short circuit or disconnected wire may cause a fire.

- 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; as it may cause an accident.

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

- Dropping the unit may cause possible mechanical failure.
If you have questions about this product, contact:

Rear View Safety
1797 Atlantic Avenue
Brooklyn, NY 11233
Tel: 1.800.764.1028

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.
Before drilling please check that no cable or wiring is on the other side of the wall. Please clamp all wires securely to reduce the possibility of them being damaged while vehicle is in use. Keep all cables away from hot or moving parts and electrical noisy components.

We recommend doing a benchmark test before installation to insure that all components are working properly.

Step 1: Choose the monitor and camera locations.

Step 2: Install all cables in vehicle, when necessary a 0.8 (20mm) hole should be drilled for passing camera cable through vehicles walls. Install split grommets where applicable.

Step 3: Once all cables and wiring have been properly routed, perform a system function test by temporarily connecting the system. If the system seems to not be operating properly see troubleshooting (page 17).
**Replacement Monitor**

The mirror monitor replaces the existing van mirror. Carefully remove the mirror off the “pin”. Slide the replacement mirror on to the pin and secure it with the screw provided (already in the screw hole). Different cars have different brackets. Depending on your vehicle make and manufacturer. There are many methods to remove the original rear-view mirror, however, please don’t force the mirror off the bracket. The manufacturer will not be responsible for damage caused to your car by incorrect mirror installation. Figure 1.1

**Camera & Cable**

Be sure to position the cable properly. The aviation camera cable uses aircraft grade connectors which means the camera cable can be exposed to all weather elements. Do not run the cable over sharp edges, do not kink the cable and keep away from HOT and rotating parts. Fasten all cables and secure all excess cable. Camera mounts under third brake light for factory like install. Figure 1.2
**Wiring**

Connect the camera to the power harness, then plug into the AV2 input. Connect the RED 12V power wire to an ignition power source and the BLACK 12V ground wire to a chassis ground. The GREEN wire is the REVERSE trigger wire. Connect this wire to the vehicle’s backup light circuit to activate the rear-view image whenever the vehicle shifts into reverse. To connect a second camera, connect it to AV1 input. It can be turned on by pressing the power button on the monitor. Figure 2.1, Figure 2.2

**Precautions for use of Mirror Monitor**

I. The Mirror Monitor is made of glass. Do not subject it to a mechanical shock by dropping it from a high place, etc.

II. Do not apply excessive force to the monitor surface or the adjoining areas since this may cause the color tone to vary.

III. Clean with a soft dry cloth and/or Windex only.

IV. Do not attempt to disassemble the mirror monitor.

**Safety**

- Before drilling, be sure no cable or wire is on the other side.
- Feed as much cable as possible into vehicle & clamp securely. This reduces the possibility of cable being hooked or snagged.
Distance Grid Lines

Generally, to help drivers estimate the distance from obstacles, there are three lines for reference—red, yellow, and green. Those three lines are displayed on the monitor when car is reversing. The green line is 3M from the back of the car and the yellow line is 6.5 ft. The distant red line is 1M from the backside of car while the close red line is 0.4M. Both reference lines on the left and right should leave 0.2M space from the car.

Accuracy

Distance grid line accuracy may vary based on your camera angle. Adjust the distance grid lines to fit your application.
FIGURE 2.1

- Red to ACC +12
- Green to back up light
- Black to GND

5M cable

Back up to camera
Video in

CAMERA
1. RED- Power (+)
2. YELLOW- Video
3. GREEN- Mirror / Normal Imaging
4. WHITE- Audio
5. BLACK- Ground (-)
### About Our Monitor

**Screen Size:** 4.3”

**Display Screen:** TFT-LCD

**Display Resolution:** 400(H)x234(V)

**Aspect Ratio:** 16:9

**Color Depth:** 16.7M dithering

**Pixel Pitch (mm):** 0.219x0.219

**Power Consumption:** 8W

**Working Voltage:** DC12V

**Video Input:** VIDEO-IN to GPS/DVD

(Default) Camera to backup camera

**Signal System:** PAL/Auto/NTSC
Camera Dimensions

3.03 IN  
2.99 IN  
5.16 IN
### Camera Specifications

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<tr>
<td>Sensor</td>
<td>Super CMOS-CMD-III</td>
</tr>
<tr>
<td>Current Consumption</td>
<td>MAX: 60mA</td>
</tr>
<tr>
<td>Resolution</td>
<td>580 TV Lines</td>
</tr>
<tr>
<td>Viewing Angle</td>
<td>170°</td>
</tr>
<tr>
<td>Effective Pixels</td>
<td>762 x 504</td>
</tr>
<tr>
<td>Night Vision</td>
<td>Yes (Min 0.1 Lux)</td>
</tr>
<tr>
<td>TV System</td>
<td>NTSC, Color</td>
</tr>
<tr>
<td>Grid Lines</td>
<td>Yes (On/Off Support)</td>
</tr>
<tr>
<td>Working Voltage</td>
<td>DC 9V-16V</td>
</tr>
<tr>
<td>Waterproof Rating</td>
<td>1P68</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-30 °C ~ +75 °C</td>
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No Image On Screen

- Do a hard reset, unplug all cables and power cables, leave out for 1 minute and then re-connect them
- Check to ensure that the connection to the camera is tight
- Verify camera cable is plugged into port labeled Backup Camera
- Verify that the green positive trigger on power harness is set to reverse power 12v+
- Verify camera is on correct camera input
- Verify cable is connected to monitor
- Connect known working camera and cable to monitor
**ONE YEAR WARRANTY**

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**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**

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If you have any questions about this product, contact:

Rear View Safety, Inc.
1797 Atlantic Avenue
Brooklyn, NY 11233
800.764.1028

Better Cameras. Better Service. IT’S OUR GUARANTEE.