

# BACKUP CAMERA INSTALLATION – Dual Mount Universal Camera

Thank you for your purchase! All information provided in this instructional guide is given on an as-is basis. All wires should be verified and tested for functionality before any connections are made. All wiring connections should be made using OEM approved wire repair techniques which include, but are not limited to, soldering and heat-shrinking all connections. Professional installation is recommended!

# **BEFORE YOU BEGIN**

#### READ AND UNDERSTANT THIS DOCUMENT BEFORE INSTALLING ANYTHING!

**Compatibility:** This camera kit will connect to any monitor with a RCA input for rear camera. This camera can also be mounted on the front of the vehicle as the harness provides a wire that will change the display from mirror to positive image.

Wire Harness: The harness for this kit is designed to make all electrical connections inside the vehicle.

**Mount Style:** There are two mounts included in this kit; license plate version (goes behind license plate) and universal mini-mount (can be mounted anywhere).

# **KIT CONTENTS**

- Super CMOS high resolution camera mounted to license plate bracket
- Additional camera bracket (mini bracket)
- Wire harness
- (2) short screws for mini bracket
- (1) spare long screw for license plate bracket
- Foam pad for mini bracket

# **REQUIRED TOOLS**

- Standard wire stripper/crimper
- Drill
- ¼" drill bit
- Multi-meter or computer safe test light
- Trim removal tool or small plastic putty knife
- Soldering iron and solder (optional)
- Shrink tube (optional)

### **Installation Steps**

Unpack the contents of the package and gather the required tools listed above so you can be sure you have everything you need before you begin. You may also need additional supplies and tools based on your specific installation as required.

 Determine which bracket is more suitable to your installation and swap the camera if necessary. The license plate bracket is already mounted on the camera.

Alternatively you can swap the camera to the universal mini-mount using the included two small screws and secure the self adhesive foam tape to the bracket.

- If using license plate remove plate and reinstall placing camera bracket behind plate. If using mini mount locate a suitable mounting location, clean surface, and stick the camera into place. It is recommended to use screws to secure the camera more permanently.
- 3. Locate an existing grommet if able to pass camera cable through to get harness into the vehicle interior. A license plate light grommet typically works great and a small slit will allow you to easily pass the small cable through. You may have to remove interior trunk panels to gain access to the back of the grommet. If no grommet is available drill a ¼" hole for the cable to pass through as shown in the photo.







4. Connect chassis harness to camera wire and route toward front of vehicle, tucking under carpet and side panels along the way. Sill plates typically can be removed by simply pulling them from the surface as there normally aren't any screws holding them down. If you have a lift gate it will be necessary to remove the interior panel and route the camera wire through the harness boot that connects the lift gate to the main vehicle body. Be careful to consider moving parts such as power rear windows etc. to ensure that the camera harness will not interfere or get damaged.

5. Locate a suitable power and ground by using a suitable power tester. You may have to remove kick panels to find wiring bundles that will provide a 12v+ reverse activated or ignition power source. See chart below:

Wire Color	Polarity	Function	Description	Location
Red	12v +	Ignition or reverse activated power	Will display 12v + when the key is in ignition or in reverse if wired to reverse activated power	Commonly found in drivers kick panel or on fuse box
Black	(-)	Ground	Chassis ground	Any bolt that is attached to metal

- 6. Connect the camera power and ground wires to the appropriate power source and ground location you located in the previous step. It is desirable to use solder and heat shrink tube but you can also use T-taps or other quick connector.
- 7. Connect RCA video cable to your monitor input.
- 8. Test camera system and reassemble panels.

NOTE: Parking guidelines can be turned off by cutting the white looped wire on the camera harness.

NOTE: For front camera applications cutting the blue wire will flip the image from mirror view to positive view.

### Support

Camera-Source will provide you with excellent support of your new camera. We just ask that try a few things before contacting us:

- 1. Verify that you have 12v at the point where the camera red wire is connected. If so, disconnect the camera and verify that you have 3.4v on one of the inside pins. Be careful not to bridge them together. If you have more than 3.4v you likely have a bad ground
- 2. Ensure the camera connector is seated tight inside the chassis harness socket. It takes a good amount of effort to ensure it is seated properly.
- 3. The blue wire at the end of the camera harness controls camera orientation. If the view is opposite from desired you need to either cut the blue wire or splice it back together, depending on your desired view.
- 4. The white wire controls the parking guidelines. Cut the wire to make the lines go away or splice it back together to make them reappear.

If you can rule these out, contact us at <a href="mailto:support@camera-source.com">support@camera-source.com</a> or 888-844-9763. We will contact you ASAP to help you resolve your issue.