

## 9002-9613 Installation Instructions (Slimline Manual Dimming OEM Mirror with 3.5" Display)

**IMPORTANT:** Check kit contents and read instructions before installing. For the latest full color instructions please visit [www.brandmotion.com](http://www.brandmotion.com)

**Kit contents:** Manual Dimming Mirror with 3.5" Video Display  
Mirror Harness with 16-pin and RCA connectors  
These Instructions

### Mirror Removal & Mounting

NOTE: This mirror has a Wedge/ D-tab style mounting base. Please check our application guide to ensure it is compatible with your vehicle (for specific applications, adapters are available separately). In some cases, it may be necessary to remove a cover to access the wedge mount on the windshield and/or modify the cover slightly to clear the mirror mount.

To install:

- Loosen vehicle mirror screw using a T20 Torx driver and remove existing vehicle mirror.  
**CAUTION:** Do not twist mirror as windshield damage could result.
- Carefully slide supplied Mirror onto the windshield tab.
- Torque supplied Mirror screw to 1.8 Nm (16 lb-in) and do not exceed 2.2 Nm (19.5 lb-in).



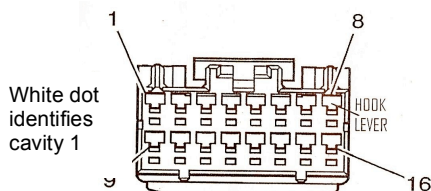
### Camera requirements

The camera signal must be strong enough for the mirror to detect signal when reverse is engaged. We recommend that the camera be connected to mirror prior to installation to confirm compatibility. Best results are on cameras that have a 0.8- 1.6v DC coming out of video composite lead (commonly a yellow RCA jack). Depending on camera output it may require reverse to be supplied by a 12v switched ignition rather than reverse feed. To test this use a multimeter set to DC and connect the (-) lead to the camera RCA shield and the (+) lead to the camera RCA tip with the camera powered ON.

### Mirror Wiring

- Use a multimeter to test for vehicle Ignition (+) and Reverse (+) signals. Typical locations are behind the driver or passenger side kick panel or under the dash. Set parking brake, start vehicle, and have an assistant shift into Reverse while you test for Ignition and Reverse signals.
- Plug 16-pin connector on supplied Mirror Harness into supplied Mirror.

Connector face and back of mirror images



- Route Mirror Harness beneath headliner and down the A-pillar closest to the Ignition and Reverse signal locations.
- Splice Mirror Harness wires to the following required connections:  
**Red** - Ignition controlled power 12v+ when key is ON  
**Black** - Chassis ground  
**Green** - Connect to Reverse (+) power (backup lamps)
- Connect female RCA plug on supplied Mirror Harness to male camera RCA.

<b>Mirror Harness Pinout</b>		
<b>PIN</b>	<b>WIRE COLOR</b>	<b>FUNCTION</b>
1 – 5	N/A	N/A
<b>6</b>	<b>White</b>	<b>Video (+)</b>
<b>7</b>	<b>Brown</b>	<b>Video (-)</b>
<b>8</b>	<b>Black</b>	<b>Ground</b>
<b>9</b>	<b>Green</b>	<b>Reverse Signal 12v+</b>
10 – 12	N/A	N/A
<b>13</b>	<b>Red</b>	<b>Ignition Controlled 12v+</b>
14 – 16	N/A	N/A

These instructions only pertain to functions on the supplied mirror and do not support other vehicle features.

### Test Mirror

Set parking brake, start vehicle, and shift into Reverse. If image appears in the LCD display, all connections have been made properly.

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### Powering Up the Camera

The mirror stays ON for over 1 second when reverse is disengaged, and if the camera is connected to the reverse tail lamp then the screen will flash Blue. If the camera does not power up instantly when the vehicle is shifted into reverse, the screen will not detect the camera and will not display an image. For these reasons we recommend that the camera be connected to Ignition (+).

### Mirror Operation

1. To dim, push tab on bottom of mirror forward. Pull tab backward to undim mirror.
2. **Temporary Monitor Manual Shut Down:**

If while in reverse you require to turn OFF the camera monitor, simply press and release the POWER button on the back side of the mirror. (Note: once reverse is disengaged the mirror will go back to normal operation and will turn ON next time reverse is engaged).

**NOTE 1: Mirror Voltage Requirements:** The supplied Mirror must see a voltage of 12.5v DC or better on the Reverse trigger lead. In the event the signal is too low the signal quality may be affected drastically when vehicle is running. To correct low Reverse signal power, the voltage must be raised using a Single Pull Dual Throw Relay.

#### Relay Wiring:

- 30 To mirror Reverse trigger (Green lead)
- 85 Chassis Ground
- 86 Reverse trigger from vehicle (reverse lamp)
- 87 High current Ignition controlled power lead +
- 87a Not used

Connect the rest of Mirror Harness wires as instructed above.

**NOTE 2: For Ford vehicles only:** If the vehicle has a separate display on the IP for the compass and it displays "--" after the OE mirror is removed, further steps are necessary in order for it to function again. You must supply two 9' 20-gauge wires (recommended: one red and one yellow). Splice the wires to the location from which you removed the vehicle's mirror connector and splice their opposite ends to the vehicle's mirror connector that will be relocated along with the mirror circuit board. For more details, refer to Section 6 of 1008-9520 kit instructions at [www.brandmotion.com](http://www.brandmotion.com)