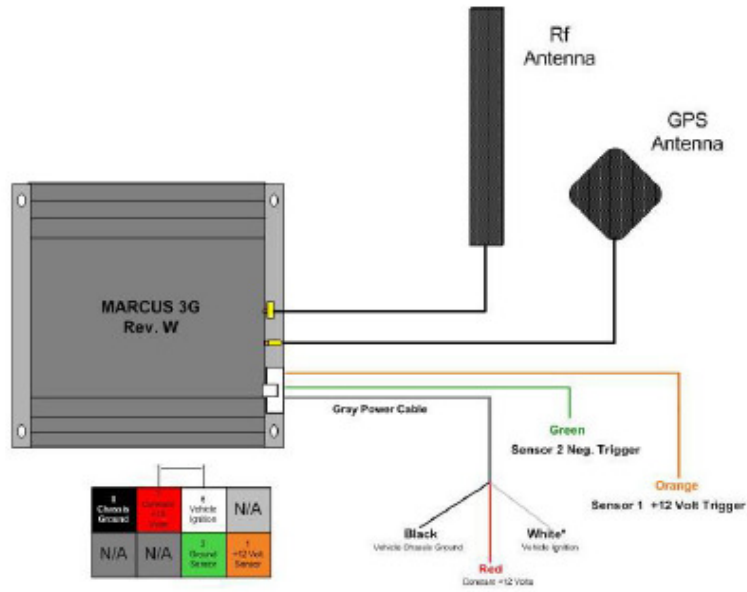




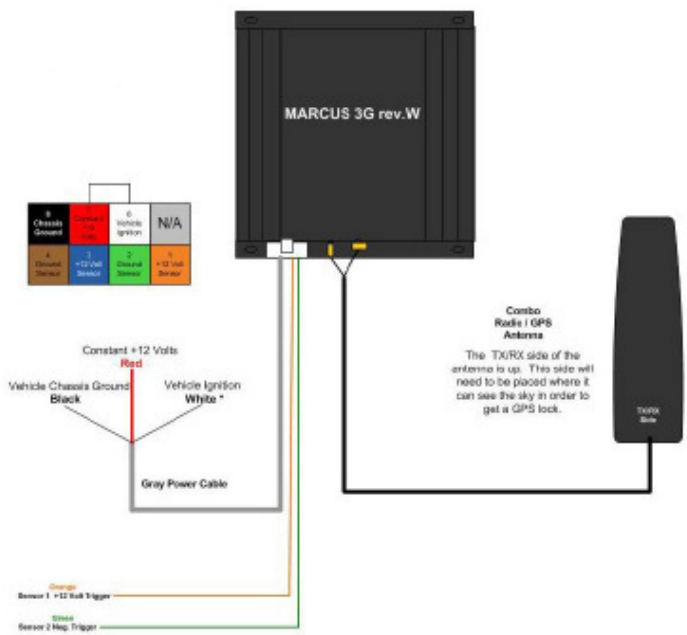
## **MARCUS® 3G Radio Module Installation Manual**

**MARCUS®  
3G GPRS RADIO MODULE**



**MARCUS® 3G Radio Module Wiring Diagrams**

In Figure 1.2.2 above, the complete MARCUS® 3G Radio Module with components is displayed. Figure 1.2.3 below shows the MARCUS® 3G Radio Module with a Combo GPS/Radio antenna.



### 3.4 Combo GPS/RF Antenna

Some configurations come with a combination GPS/RF antenna. This antenna should be placed on the windshield with the GPS side facing outwards.





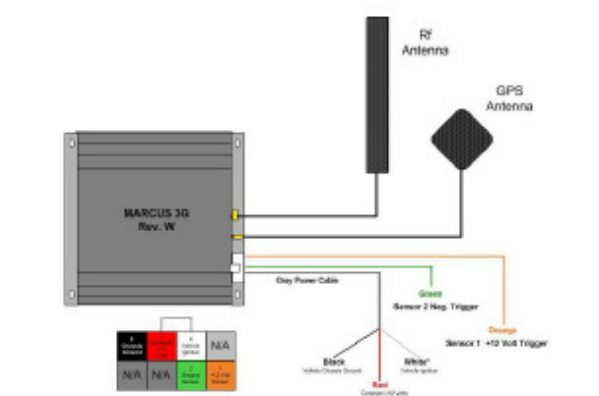
3.3.1 Picture - Example Placement of Glass Mount GPS and RF Antennas

### Wiring Harness



5.4.1 Figure - MARCUS® 3G Radio Connector Pin Layout

- 1) +12 Volt Input
- 2) Ground Input
- 3) OPEN
- 4) OPEN
- 5) OPEN
- 6) Vehicle Ignition
- 7) Constant +12 Volts
- 8) Chassis Ground

| Description of Views                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Pictures and Diagram of MARCUS® 3G Radio                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Front View with LEDs</b><br/>Picture D-1 MARCUS® 3G Radio Module Front View</p> <p><b>USB:</b> USB Connector Port<br/><b>SIM DOOR:</b> SIM Tray</p> <p><b>PWR:</b> - Device is powered<br/> <ul style="list-style-type: none"> <li>• Permanently OFF – No Power or Device In Sleep Mode</li> <li>• GREEN Permanently ON – Device functional</li> </ul> </p> <p><b>GPS:</b> - GPS fix is valid<br/> <b>RADIO:</b> - GPRS modem in transmit</p> <p><b>COM:</b> - Device online with MARCUS® Servers<br/> <b>ENG:</b> - Ignition is powered<br/> <ul style="list-style-type: none"> <li>• Permanently OFF – Engine OFF</li> <li>• GREEN Permanently ON – Engine ON</li> </ul> </p> <p><b>AUX1:</b> - Auxillary component is active</p> |  <p style="text-align: center;"><b>Picture D-1 MARCUS® 3G Radio Module Back View</b></p>       |
| <p><b>Back View Connector Layout</b><br/>Picture D-2 MARCUS® 3G Radio Module Back View</p> <p>NOTE: Power connection must be wired in the following manner:<br/> <b>Red Wire</b> = Constant 12 Volts, Pin 7<br/> <b>Black Wire</b> = Chassis Ground, Pin 8<br/> <b>White Wire</b> = Switched Ignition, Pin 6</p> <p><b>Left Connector:</b> (8 pin) Power - + 12 Volts DC<br/>3 wire install with optional 4 sensor input lines<br/> <b>Center Connector:</b> GPS Connector / SMB Male Snap-on<br/> <b>Right Connector:</b> RF Connector / SMA Female Screw on</p>                                                                                                                                                                         |  <p style="text-align: center;"><b>Picture D-2 MARCUS® 3G Radio Module Back View</b></p>       |
| <p><b>MARCUS® 3G Radio Module Wiring Diagram</b><br/>In Figure D-4 to the right, the complete MARCUS® 3G Radio Module with components is displayed.</p> <p><b>GPS Antenna:</b> Glass mount; with tape side toward the glass on lower passenger side windshield.</p> <p><b>RF Antenna:</b> Glass mount; with tape side toward the glass on upper passenger side windshield.</p> <p><b>NOTE:</b> Sensors connected through 8 pin Power connector.</p> <p><b>AUX I/O Orange wire, Pin 1</b> can be configured to monitor either powered sensors (+12 Volts trigger)</p> <p><b>AUX I/O Green wire, Pin 2</b> can be configured to monitor negative sensors (Grounded trigger)</p>                                                             |  <p style="text-align: center;"><b>Figure D-4 MARCUS® 3G Radio Module Wiring Diagram</b></p> |