# Installation Instructions **3500**

Wireless Laser-Radar Detector

THE WHISTLER GROUP, INC. CORPORATE HEADQUARTERS

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# **TOOLS REQUIRED**

#### **Tools Required For Installation**

<ul> <li>Phillips or Blade Screwdriver</li> <li>3/8" Open End Wrench</li> <li>Electric Drill</li> <li>Drill Bit: 13/64", 5/16". 7/64", 9/64", and 13/64"</li> <li>Other Tools May Be Required Based On Your Vehicle Type Or Requirements For Customized Installation</li> </ul>		
Dimensions: • Control Panel: .8" H x 2.8" W x 2.3" L • Radar Antenna: 1.4" H x 4.0" W x 3.6" L • Laser Antenna: 1.9" H x .9" W x .7" L		
Cable Lengths: • Radar Antenna Cable: 3' • Laser Antenna Cable: 9' • Control Panel Power Cable: 4' • Receiver Power Cable: 4'		
Specifications are subject to change without notice.		

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### WHISTLER 3500 COMPONENTS

#### **Radar Antenna & Power Cable**



The waterproof radar antenna with Temperature Probe is mounted at the front of your vehicle, usually behind the grill. The power cable connects to the vehicle's battery.

#### **Control Panel And Power Cable**



The compact control panel is mounted on the dash in a location convenient for viewing. The power cable plugs into the control panel.

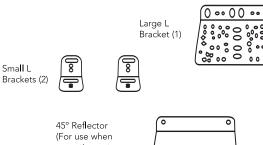
#### Laser Antenna



The Laser Antenna is mounted inside your vehicle using the windshield bracket or Hook and Loop Fastener

# **MOUNTING BRACKETS**

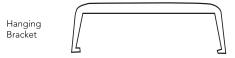
#### Antenna Mounting Brackets And 45° Reflector



45° Reflector (For use when mounting antenna in vertical position.)

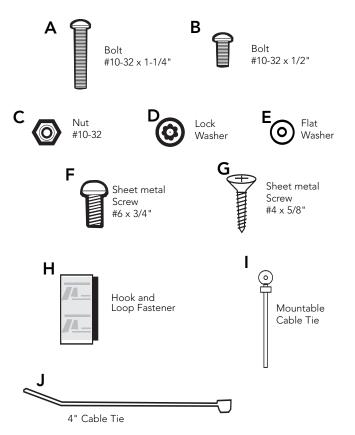


#### **Control Panel Mount Brackets**





# **MOUNTING FASTENERS**



# MOUNTING FASTENERS

Reference	Description/Use	Qty
А	Bolt #10-32 x 1-1/4" • Fastens Large L or Small L Bracket to vehicle support.	2
В	Bolt #10-32 x 1/2" • Fastens Small L to Large L Bracket (optional approach).	2
С	Nut #10-32 • Use with #10-32 bolts.	4
D	Lock Washer • Use with #10-32 bolts.	4
E	Flat Washer • Use with #10-32 bolts.	2
F	Sheetmetal Screw #6 x 3/4" • Fastens Large L/Small L Bracket or 45° Reflector to radar antenna. Mounts Temp. Probe	7
G	Sheetmetal Screw #4 x 5/8" • Fastens hanging bracket to interior vehicle surface.	2
Н	Hook & Loop 1/2" x 1" • Fastens LRM-5 to back of rearview mirror when windshield bracket is not used.	1
1	Mounting Cable Tie • Secures cable from radar antenna at various locations in engine compartment.	1
J	4" Cable Tie • Secures cable from radar antenna at various locations in or under the vehicle.	5

Note: If mounting fasteners are missing from your package, please call 1-800-531-0004 for replacements.

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# INSTALLATION OF RADAR ANTENNA

#### **General Information**

The radar antenna is waterproof and designed to be mounted at the front of your vehicle. In most vehicles the best mounting location is directly below or behind the bumper. Radar signals will pass through non-metallic materials such as fiberglass and plastic, however, be sure to mount the receiver away from any metal, as it will block the receiver's antenna. Because the optimal location for mounting the antenna varies by vehicle type, the hardware supplied is designed to offer a wide variety of mounting options. We suggest choosing the option that enables the antenna to be securely fastened and provides the antenna window adequate forward visibility.

**NOTE:** The "antenna" is the bubble area on the case. All references to antenna in this manual will be the bubble area.

# **NOTE:** Use of hardware that is not supplied or DRILLING into the case will cause damage to the receiver and void the warranty.

#### Antenna Mounting Brackets

There are two types of mounting brackets for the antenna: Large (L) and Small L (2). The Large L bracket fastens to the antenna using two or more screws (#6 x 3/4"). Slide the screw through the hole on the flange of the antenna and then tighten into the metal bracket (do not overtighten). The large L Bracket may be fastened to the antenna in a variety of positions as shown on page 8.

#### Do not drill into the receiver housing!

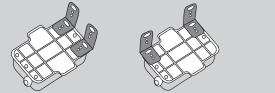
### INSTALLATION OF RADAR ANTENNA



The layout of holes on the large L Bracket accommodates multiple antenna mounting positions.

This arrangement provides flexibility for fastening the antenna/bracket assembly to your vehicle in a manner that allows the antenna window (ANTENNA) to have a forward looking view of the road ahead.

The Small L Brackets (2) may also be fastened to the antenna in different positions as shown below:



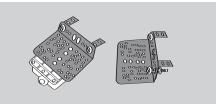
The Small L Brackets may be fastened to any of the six holes on the antenna.

Use one #6 x 3/4" screw to fasten each Small L Bracket to the antenna. Again, do not over tighten the screws.

In some situations it may be advantageous to use both the Large Land Small L Brackets to install the antenna in a vehicle.

# INSTALLATION OF RADAR ANTENNA

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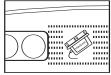


Large L and Small L Brackets may be used in combination. The Small L Brackets are fastened to the Large L Bracket using the #10-32 x 1/2" bolts, #10-32 nuts and lock washers.

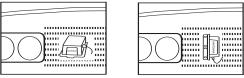
To fasten the Large L or Small L Brackets to your vehicle, mark the supporting structure through the appropriate holes in the brackets, then drill the holes in the supporting structure with a 13/64" drill bit. Attach the bracket(s) to the supporting structure using two bolts (#10-32 x 1-1/4") and corresponding nuts, flat washers, and lock washers. You may also use 2 #6 sheet metal screws. Because rough road surfaces can cause excessive vibration or bouncing, be certain to fasten the bracket(s) securely to your vehicle.

#### Horizontal Or Vertical Mounting Of Antenna

The antenna can be attached to the vehicle in a horizontal or vertical position, or at any angle between these two points. Select the position that allows you to fasten the antenna to your vehicle in the most secure manner



Best mounting angle for optimum detection of all types of radar guns.



Radar antenna mounted in horizontal position.

#### Horizontal Mounting

When mounting the antenna in a horizontal position (or on an angle between), remember to keep the ANTENNA window as close to perpendicular as possible to the road surface (ANTEN-NA window should not be angled up toward the sky or down toward the road surface).

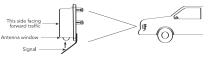
#### Mounting Vertical (with 45° Reflector)

For vehicles that do not have sufficient clearance behind the bumper (about 5") to mount the antenna in a horizontal position, the 45°. Reflector should be used.

The 45° Reflector is attached to the antenna with two screws (#6  $\times$  3/4") on the side of the antenna housing marked ANTENNA. Slide the screws through the corner holes on the flange of the antenna housing and then tighten into the metal reflector (do not over tighten).

# INSTALLATION OF RADAR ANTENNA

Mount the antenna to the vehicle such that the ANTENNA window is facing the road surface, sky, right or left of the vehicle, and the reflector has an unobstructed view of the road ahead.



Radar antenna mounted(vertical) with 45° Reflector.

Mounted in this position, radar signals are reflected into the ANTENNA window.

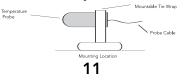
### Mounting the Temperature Probe

Find a location that is far enough away from the engine and radiator heat but still in the airflow for the vehicle. Mounting the Probe too close to these heat areas will give a false high temperature.

- Attach the mountable tie wrap (supplied) to the Temperature Probe as shown.
- Mark location for Probe, then drill a hole using a 7/64" drill bit. Attach Probe with tie wrap in the correct orientation using the #6 x 3/4 screws.

**NOTE:** Mount the Probe so that there is space between the Probe and the mounting area.

<u>Do not</u> mount Probe directly to metal area.



# INSTALLATION OF LASER ANTENNA

#### Antenna Cable to the Battery

**CAUTION:** Always wear safety glasses and exercise caution when working near the battery. Car batteries emit hydrogen gas while charging and may explode if sparks are present.

Once the antenna is installed connect the cable from the radar antenna to quick disconnect power cable. Tie this cable in a knot similar to using an electrical extension cord. Locate the power and ground connection terminals on the power cable. Connect the positive lead (wire with fuse holder) to the positive terminal on your car battery (on a conventional battery, remove the terminal first, on a side-mounted battery, remove the wire assembly from the terminal). Connect the other lead to the battery ground (the battery ground is generally a bolt located on the inner fender well, adjacent to the battery). **NOTE:** For optimum performance and freedom from battery related problems, make sure your car's battery terminals are

clean and free from any corrosion. Using the supplied tie wraps, secure the excess power cable

away from all moving engine components.

### **General Laser Information**

The laser antenna provides both front and rear laser reception. Mount the laser antenna with the 3-lens array facing forward (down the road) and the single lens facing behind. This approach offers the greatest protection, since you will most often be traveling into a laser signal, rather that away from it when laser speed enforcement is encountered. For effective protection, make sure the laser antenna has an unobstructed view forward and behind, and that it is not placed behind metallic sun screens.

# INSTALLATION OF LASER ANTENNA

#### Mounting the Laser Antenna

The laser antenna can be mounted to the front windshield using the windshield bracket supplied.

### Installing the Laser Antenna

Before using, attach the suction cup and rubber bumpers (2) to the metal bracket. If necessary, you may bend the metal bracket in order to position the laser antenna correctly (3-lens array facing forward, single lens facing behind.)



Laser antenna mounted with windshield bracket.

Using Hook & Loop Fasteners, the laser antenna may also be mounted to the back side of your rearview mirror. Be careful not to block the rear facing lens when mounted in this manner. Also, clean the appropriate surfaces with isopropyl alcohol before adhering the adhesive side of the fastener to those surfaces.



Laser antenna mounted to rearview mirror with Hook & Loop Fasteners.

# INSTALLATION OF CONTROL PANEL

### **General Information**

The control panel may be mounted using the Under Dash Bracket or Hook & Loop fastener supplied. As an alternative, you may also use the Through Dash Bracket. When choosing a mounting location, consider your needs for ease of viewing the display, accessibility of controls (remember Mute Mode may be used frequently), and concealment.

The control panel can also be mounted on its side and even upside down! Installation just got a lot more flexible.

### Control Panel Mounted With Under Dash Bracket

Fasten the Under Dash Bracket to your vehicle's dash with the two #4 x 5/8" sheet metal screws provided. A 5/64" drill bit should be used to drill pilot holes for the screws. Use the holes in the bracket to mark the location for pilot holes.

Once the bracket is fastened to your vehicle, the control panel can be attached to it. However, we suggest connecting all cables to the back of the control panel before snapping it into the bracket. See page 15 for proper placement of cables.

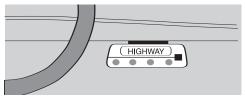


Control panel snaps into rather than slides onto the Under Dash Bracket.

# INSTALLATION OF CONTROL PANEL

#### **Control Panel Mounted With Hook & Loop Fasteners**

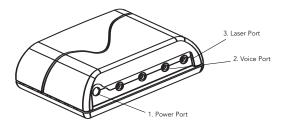
Fasteners can be used to mount the top or bottom of the control panel to your vehicle. Before adhering the adhesive side of the fastener to a surface, clean that surface with isopropyl alcohol.



Use of Hook & Loop simplifies control panel installation.

#### **Control Panel Mounted With Through Dash Bracket**

Installation instructions are provided with the bracket. We recommend using a professional installer if you are not familiar with customized dashboard installations.



# INSTALLATION OF CONTROL PANEL

#### Laser Antenna Cable Connection

After mounting the laser antenna, conceal the cable and plug the stereo jack connector into the port on the back of the control panel labeled **LASER** port (3).

#### **Power Cable Connection**

The power cable has a plug on one end which connects to the back of the control panel at the port labeled **PWR** port (1). At the other end of the power cable, the power and ground wires are separated. The ground wire has a "U" type connector which should be fastened to a metal surface. Look for an existing screw or bolt under the dash to use as a grounding point. The power wire has a spade type connector which should be connected to a switched +12 volt DC circuit in your vehicle's fuse box. A switched circuit is one that has power when your vehicle is on, but has no power when your vehicle is off. Connect the "U" type connector to the ground point selected, attach the power cord plug to the control panel area marked "PWR" then touch the power wire to the +12 volt DC switched power source selected; if the control panel sounds the self test sequence, then all connections are correct.

# **OPTIONAL ACCESSORIES**

#### More Volume/Voice Module

The voice module can be used to articulate the band ID, Safety Warning and Feature Selection. Plugs into **VOICE** port (2).

**NOTE:** This is the only audio option that can be plugged into the 3500. Any other device may damage the unit and void the warranty.

The following accessories can be ordered directly from Whistler by calling 1-800-531-0004 or visit our online store at www.whistlergroup.com

Order Code	Description	Price
403200	Voice Module	\$ 79.95

Shipping and handling (per order) \$7.50 Prices are subject to change without notice.

# TROUBLESHOOTING

PROBLEM: No display or audio.

- Check fuse in power cable, replace if necessary.
- Check fuse in fuse box, replace if necessary.
- Make sure power cable is properly grounded.

**PROBLEM:** Unit alarms when using vehicle equipment or electrical accessories (brakes, power mirrors/windows, directionals, horn, etc.)

- Check condition of vehicle's electrical system, including battery and alternator.
- Install a filter capacitor (470mfd. 25 volt or larger capacitor value) where power connection is made.

**PROBLEM:** Audio alerts are not loud enough.

- Cancel Auto Quiet Mode or City Mode
- Check audio level settings.

**PROBLEM:** Display shows Communication error.

- Warning communicates "loss of link" between control panel and Radar antenna.
- Check fuse in receiver's power cord.
- Check antenna connection at battery.
- Relocated ground terminal to a different location.
- Relocated power terminal to a different location.
- Contact the factory, if you suspect antenna is defective.

If difficulties occur which cannot be solved by information in this Troubleshooting Guide, please call Whistler Customer Service at 1-800-531-0004 or visit our FAQ page at **www.whistlergroup.com**, before returning your unit for service.

### For warranty information, refer to owner's manual.