



VECTOR LR Remote

RADAR • LASER • SAFETY

Model 975

Installation Guide

Please read carefully before attempting to install this product.

Note: If you are uncertain about the correct power connection procedure or any installation procedure described in this installation guide, please call a qualified automotive center for assistance. BELTRONICS will not be held responsible for any damages incurred through incorrect installation.

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1. Unpacking Contents

Unpack the contents of VECTOR LR Remote and ensure the following parts have been included:

Radar Antenna and Related Parts:

- (1) Antenna Module with 6' cable and in-line connector
- (6') Cable Assembly
- (5) Tie Wraps
- (1) Mounting Bracket
- (1) Reflector

Radar Antenna Mounting Hardware:

- (4)#10 1/2" Machine Screws
- (4) Washers
- (4) Lock Washers
- (4) Nuts
- (3)#10 3/4" Self Threading Screws

Radar/Laser Control Panel Module and Related Parts:

- (1) Radar/Laser Control Panel Module
- (1) Power Cable Assembly with 1 amp, in-line fuse
- (1) Control Panel Mounting Bracket
- (2) black 3/8" Self Threading Screws
- (1) In-Dash Mount
- (2) Black 3/4" Oval Head Screws
- (2) Nuts
- (2) Washers
- (2) Lock Washers
- (1) Dashboard Frame Template
- (1) 1 amp, 3AG Spare Fuse

Laser Modules and Related Parts:

- (1) Front Laser Module with 11' Cable
- (1) Rear Laser Module with 17' Cable
- (2) Suction Cup with Holder
- (2) Hook and Loop Fastener
- (1) Front/Rear Laser Adapter Cable

Suggested Tools Required:

- Circuit Test Light
- Phillips Head Screwdriver
- Drill and bits according to mounting method
- Female Spade connector (Available at Radio Shack)
- Fuse Tap (Available at Radio Shack, Part #270-1204)



2. Selecting Antenna Mounting Location

Select a location inside the engine compartment to mount the antenna. The antenna can also be mounted behind any plastic (Polyurethane) type bumpers, ground effects kits and grid type grille inserts. When selecting a mounting location, keep in mind the following precautions:

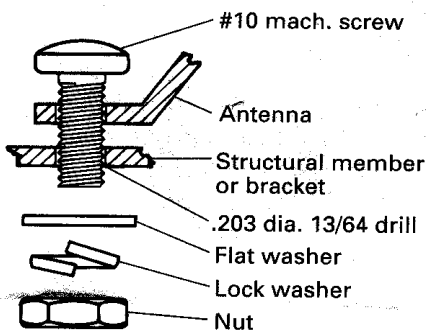
- Do not mount the antenna behind metal or metalized plastic
- Do not mount the antenna behind fan shrouds
- Do not mount the antenna near the vehicle's battery
- Do not mount the antenna behind pop-up style headlights

The antenna can be mounted using one of three different methods:

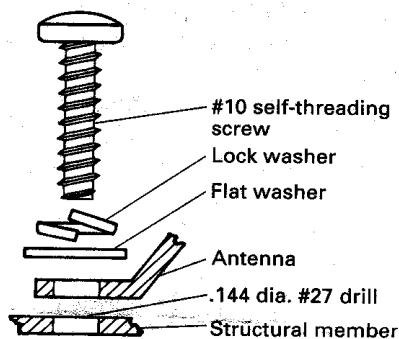
- Direct Installation** – refers to mounting the antenna, in a horizontal position, directly to a structural support. Use of the supplied mounting bracket or reflector bracket is not required.
- Installation using Mounting Bracket** – refers to mounting the antenna with the use of the supplied mounting bracket to gain better access to the chosen structural support in areas where it is not possible to achieve a direct installation.
- Installation using Reflector Bracket** – refers to mounting the antenna with the use of the supplied reflector bracket when space requires the antenna to be mounted in a vertical position. For this type of mounting installation, the supplied mounting bracket may also be used.

3. Selecting Mounting Screws

Two different screw assembly methods can be used to install your unit. Mounting screws depicted in diagram "A" are used when space permits the use of a nut. Mounting screws depicted in diagram "B" are used when space does not permit access to the nut, and the self threading screw is required.



Mounting Method "A"



Mounting Method "B"

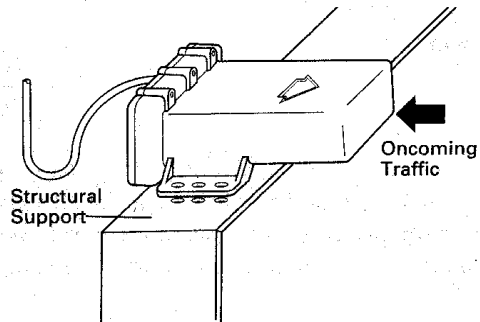
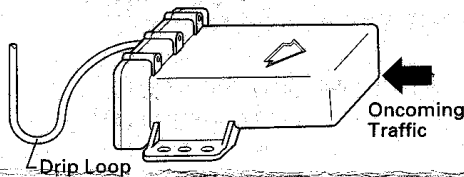


4. Mounting Antenna

Direct Installation (Horizontal)

Depending upon the location, the antenna can be secured to the structural support using either the screws pictured in mounting method "A" or mounting method "B". After you have chosen a suitable structural support, drill a minimum of two (2) holes (size as required) into the structural support – one (1) per side. (Note: enough mounting hardware is included to allow the antenna to be mounted using four (4) screws. Use of all four (4) screws will require the drilling of two (2) additional holes.) Place the antenna over the area and secure into place.

Remember to position the antenna so that the arrow embossed on the housing is pointing in the direction of oncoming traffic.

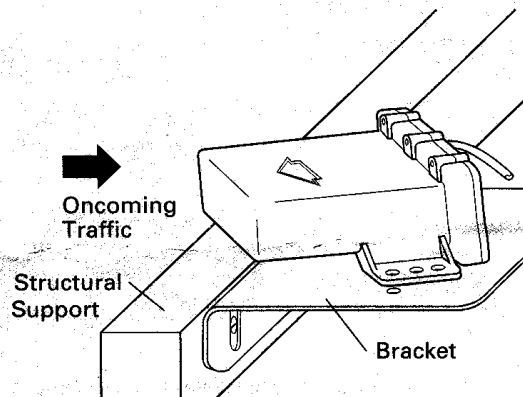


It is advisable to form a downward loop in the cable just before it enters the antenna. This "drip" loop will prevent excess moisture from collecting at the antenna/cable junction.

Mounting Bracket Installation (Horizontal)

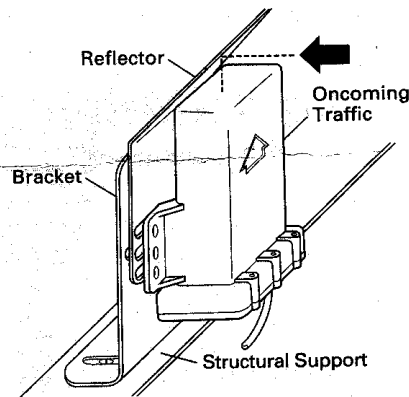
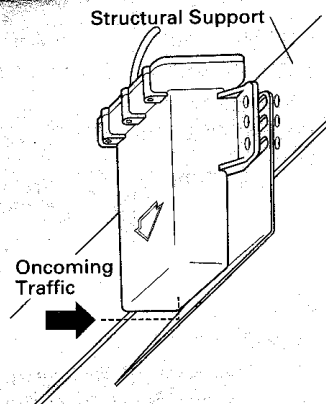
In some vehicles, the use of the mounting bracket can help achieve a secure mounting position when it is not possible to mount the antenna directly to the chosen structural support. To accomplish this, mount the bracket to the selected area using two (2) screws as depicted in mounting method "A" or mounting method "B" (four have been provided). After the bracket is secured to the structural support, the antenna can be attached to the bracket using mounting method "A".

Remember to position the antenna so that the arrow embossed on the housing is pointing in the direction of oncoming traffic. It is advisable to form a downward loop in the cable just before it enters the antenna (see the illustration above). This "drip" loop will prevent excess moisture from collecting at the antenna/cable junction.



Reflector Bracket Installation (Vertical)

To install the antenna in either of the two suggested vertical mounting positions, the reflector must be placed between the antenna and the selected mounting surface.



The mounting screws (A or B) can be inserted through the appropriate holes in the antenna, reflector and mounting surface (structural support or mounting bracket), and secured.

5. Connecting/Routing In-Line Cable

With the antenna mounted in your chosen location, you can now link the 6' of cable from the antenna portion to the remaining 6 feet of cable supplied. This waterproof, in-line connector allows for easy removal of the antenna module should you decide to move the antenna to a different location in the engine compartment or if the antenna should require servicing.



With the in-line connection made, run the cable through the engine compartment to the firewall of your vehicle. Make sure that the cable is not placed near moving parts or parts that become hot when the engine is running. The preferred method is to run the cable along the fender wall of the vehicle or along an existing cable run. Use the tie wraps provided to secure the cable as needed.

6. Routing Cable to Passenger Compartment

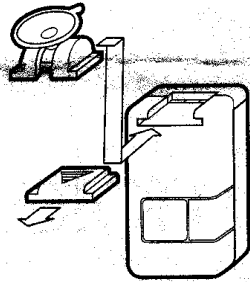
An opening (approximately 1/4" diameter) in the firewall will be required in order to route the cable through to the passenger compartment and make the connection to the control panel. Try to use an existing hole in the firewall to route the cable through the firewall. If no suitable hole exists, you will have to drill one. Select the location carefully before drilling. Ensure the cable is not stressed when routing it through the firewall. This could damage the wires inside the cable.

Proceed with mounting the control panel and Laser module before making the final electrical connections between all three pieces.



7. Mounting The Laser Sensor

Front Laser Sensor (Laser module with 11' cable)



The front Laser module is placed in the center of the windshield, as low as possible, ideally where the windshield meets with the dashboard. The module can be placed horizontally or vertically, however, the Laser optical lens (the highly polished area) must have a clear view of the road ahead for proper operation.

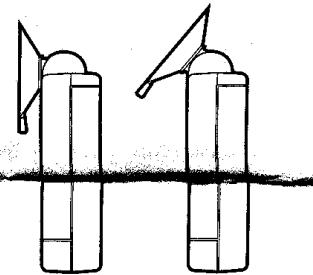
Remove the cover plate at the top of the Laser sensor and slide the windshield suction cup assembly into the retaining socket until it locks into place. Clean the selected windshield area and position the suction cup bracket on the windshield and press firmly to generate adequate suction.

With the Laser sensor mounted, dress the excess cable around the window and post area.

Rear Laser Sensor (Laser module with 17' cable)

The rear Laser module is placed in the center of the rear window, as low as possible. The rear brake light situated on rear ledge, provides an ideal area to position the unit unobtrusively. The module can be placed horizontally or vertically, however, the Laser optical lens (the highly polished area) must have a clear unobstructed view of the road for proper operation.

Using the supplied suction cup bracket, or hook and loop fastener, adhere the module to the rear brake light or rear window. Dress the excess cable around to the front of the vehicle.

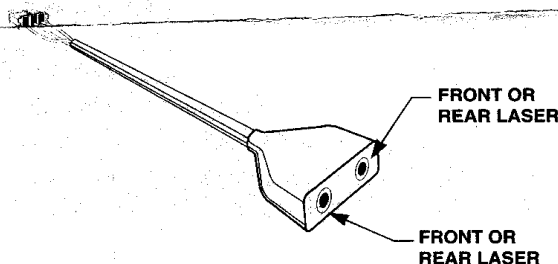


Suction cup pivots for easy installation

Laser Power Connection

With the front and rear Laser modules suitable positioned, and the excess cable suitably dressed, connect the jacks from the front and rear Laser modules to the "Y" connector plug. Note: *either of the two receptacles of the "Y" connector plug can be used with the front or rear laser jack.*

Note: When mounting the Laser modules, ensure there are no state laws restricting the mounting of objects on the windshield, and that there is no threat of injury in case of accident.



8. Mounting The Control Panel

The control panel can be mounted in one of two ways: *under-dash with the plastic bracket*, or *in-dash using the in-dash mount*. The location selected is a matter of personal preference.

Under Dash Mounting

To mount the control panel unit under the dash, you will first need to drill two holes (#35 drill, .110 diameter) in order to fasten the control panel bracket with two (2) black 3/8" self threading screws provided. Once installed, the control panel can slide into the bracket using the slots on each side of the unit. The control panel unit can also be fixed in any desired location using the enclosed hook and loop fastener. The hard portion is attached to the selected area; the soft portion to the control panel unit. To connect the antenna cable to the power cable plug make certain the wire colors of the cable and the colour coding on the plug are matched. Finally, connect the plug to the control panel unit.

In-Dash Mounting

The control panel of the VECTOR LR Remote can be mounted directly into your vehicle's dashboard. For this type of mounting you will first need to select a flat location on your dash where there will be no interference with wires or components.

- First, peel the back off the template provided and place over the selected area.
- Now, drill two 3/16" diameter holes as indicated on the template, and a third hole in the center of the cutout area to allow a saw blade to enter. Cut along the template outline.
- Once the portion of your dash has been cut away, remove the template and insert the dash mount frame into the area and fasten to the dashboard using two (2) 3/4" black oval head screws with flat washers, lock washers and nuts on back side. Before inserting the control panel of the unit, push the cable assembly from the fire wall through from the back of the holder you've just installed into your dash. Now connect the cable to the power cable plug taking care to match the wire colour of the cable to the colour coding on the plug, then connect the plug to the control panel unit and feed all the excess cable back through the holder. Special notches allow the control panel unit to be mounted into the dash holder with varying lengths of the control panel exposed.

9. Power Connection

After the control panel is mounted in your chosen location, and the Radar and Laser connections have been made (*see diagram below*), power connection can be made.

IMPORTANT: REMOVE THE IN-LINE FUSE LOCATED WITHIN THE PLASTIC HOLDER ON THE RED WIRE UNTIL POWER CONNECTION IS MADE.

To make the power connection, take the black wire (negative) from the control panel and secure to a ground location inside the vehicle – normally a screw in the metal floorpan or some other body/structural metal on the vehicle.

The red wire (positive) from the control panel should be connected to the *ignition, accessory* or *auxiliary fuse*. These fuses are the most reliable for connecting a Radar detector and provide the “cleanest” electrical source. These fuses are also switched or “hot” only when the vehicle is running or in the accessory ignition mode. This ensures that the detector operates only when the vehicle is running (or when the key is turned to accessory) and is off when the vehicle is off or when the key is turned in the off position.

To find the correct side of the fuse receptacle, remove the fuse and use a circuit test light. With the key turned to accessory, probe both sides of the fuse receptacle – the side in which the circuit test light remains unlit is the side in which the red wire should be connected (the opposite side of the fuse receptacle should be lit).

Power connection can be accomplished two ways:

1.) Wrap the stripped end of the red wire around the side of the fuse which, when reinserted into the fuse receptacle will make contact with the “unlit” side of the fuse, or...

2.) Attach a fuse tap (available from Radio Shack, part #270-1204) to the fuse according to the directions on the package. Attach a female spade connector (also available from Radio Shack) to the stripped end of the red wire. Now, attach the spade connector to the male end of the fuse tap. Carefully reinsert the fuse into the fuse receptacle taking care that the side of the fuse with the attached red wire makes contact with the unlit side of the fuse receptacle.

Be sure NOT to use the same power source as other accessories such as fog lights, cellular phones, scanners, two-way radio, AM-FM radio, CD players, alarms, etc. These are all sources of electromagnetic interference and may interfere with the correct operation of your detector. Once all the connections have been made, ensure the remaining slack wire is properly stowed away from where it could be damaged or accidentally pulled from connection.

It is now safe to re-install the in-line fuse.

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Loss of Connection Alert: In the event the connection to the antenna should ever become disengaged or connection is not properly made, the X/K/Ka band indicators will flash, coupled with an audible alert.

