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RadioShack®
www.radioshack.com℠

360° Laser/Radar Detector

with VG-2 Guard

SAFETY ALERT
TRAFFIC WARNING SYSTEM

Owner's Manual
Please read before using this equipment.

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❒ Features

Your RadioShack 360° Laser/Radar Detector can alert you to many traffic radar and laser systems with its distinct visual and audio alerts. It receives X-, K-, and Ka-band radar signals, and detects both the instant-on and laser systems many law enforcement agencies use to measure vehicle speed. Plus, your detector can give you advance warning of potential road hazards by detecting signals from transmitters that broadcast Safety Alert System™ alerts.

Note: Before reading this Owner's Manual, read the supplied booklet *Questions and Answers About Vehicle Speed Detection* to familiarize yourself with the terms and uses associated with your detector.

Your detector's features include:

360° Detection — detects laser signals from all around your vehicle.

X-, K-, Ka-Band, Laser, and Ultralyte Laser Signal Detection — warns you when it detects signals from traffic radar or laser devices. Different tones and display indicators let you know the type of signal received.

Safety Alert System Detection — alerts you to the presence of potential road hazards, approaching emergency vehicles, and busy railroad crossings broadcast by a Safety Alert System transmission.

VG-2 Protection — makes your detector invisible to the VG-2 radar detector when it senses VG-2 operation.

Instant-On or Pulse Radar Protection — alerts you to sudden high level and laser signals.

City/Highway Modes — let you minimize alerts when you are in areas that have false radar sources.

City/Highway Indicator — lights when you select city mode.

FAST® (False Alert Suppression Technology) — helps prevent false alarms caused by non-traffic radar sources.

Tutorial Mode — lets you experience how the detector alerts you with its detection display and tones to the different signals the detector recognizes.

Your radar/laser detector includes the following items:

- coiled power cord
- windshield bracket with suction cups
- hook and loop tape
- spare fuse
- *Question and Answer About Vehicle Speed Detection*

Important: Some areas have laws regulating the use of radar detectors. Check with your local law enforcement agency about the laws in your area.

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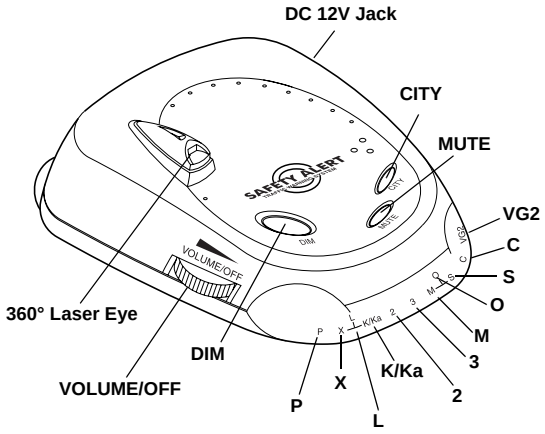
❒ A Quick Look



360° Laser Eye — receives incoming laser signals directed at your vehicle from all directions.

VOLUME/OFF — turns the detector on and off and lets you adjust the volume.

DIM — controls the brightness of your detector's indicators.

P (Power) Indicator — lights when the detector is turned on.

X (X-Band Radar) Indicator — flashes when the detector detects an X-band radar signal.

L (Laser) Indicator — both indicators under L (X and K/Ka) flash when the detector detects a laser signal.

K/Ka (K/Ka-Band Radar) Indicator — flashes when the detector detects either a K- or Ka-band radar signal.

2 and **3** — signal strength indicators that flash to provide an accurate visual indication of the strength of radar signals the detector receives.

M (Emergency Vehicle) Indicator — flashes when the detector detects the signal related to an emergency vehicle from a safety alert transmitter.

O (Moving Train) Indicator — both indicators under O (M and S) flash when the detector detects the signal related to a moving train from a safety alert transmitter.

S (Stationary Road Hazard Situation) Indicator — flashes when the detector detects the signal related to a stationary road hazard from a safety alert transmitter.

C (City) Indicator — lights when the detector is in the city mode.

VG-2 Indicator — lights when a VG-2 signal is detected.

MUTE — silences the alert tone for about 20 seconds.

CITY (City/Highway) — switches between the city and highway modes.

DC 12V Jack — provides easy power cord attachment.

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SAFETY ALERT SYSTEM

The Safety Alert System employs low-powered transmitters used by some emergency services and road crews to alert drivers to hazardous road conditions. The system can indicate stationary, moving, or railroad hazards.

The system has the potential to dramatically decrease the occurrence of traffic accidents by increasing drivers' awareness of local road hazards. Having this safety alert compatible laser/radar detector will ensure that you are ready to benefit from this system wherever it is in use.

❒ *Installation*

SELECTING A MOUNTING LOCATION

For the best performance, select a location that provides the detector's sensors a direct view of the road.

Notes:

- The detector's radar antenna is at the opposite end from the indicators.
- Though the detector has a 360° laser and radar detection coverage, the radar detection is more sensitive to oncoming traffic.

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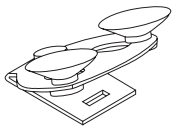
Mounting Guidelines

Follow these guidelines when selecting a location.

- Choose a location that does not block the driver's view of the road.
- Mount the detector in a level position with a clear view to both the front and rear of your vehicle and insure its view of the road is not blocked by any metal object.
- Some vehicles have InstaClear®, or ElectriClear®, defogging windshields, which have metal coatings that block signals. Some vehicles have a solar shield that block signals. Check your vehicle's owner's manual to see if your vehicle has any of these features. A detector installed in a vehicle with any of these features will probably not detect a signal.
- Since window tinting reduces the received strength of laser signals, you should not mount the detector behind any tinted glass.
- Do not mount the detector where the driver or a passenger might hit it in a sudden stop or accident.

Caution: Place the detector out of view when you leave the vehicle. This keeps the detector out of sight of thieves and prevents exposing it to extremely high temperatures, which might temporarily impair your detector's performance.

WINDSHIELD MOUNTING

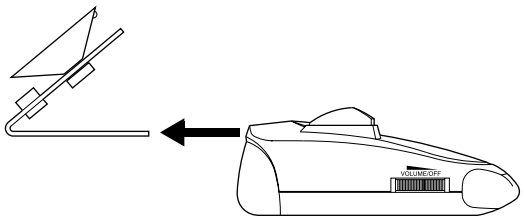


The supplied suction-cup windshield bracket lets you easily mount the detector on the windshield.

Caution: Do not use the bracket in a vehicle that has a plastic coating on the windshield designed to protect passengers during an accident. If you use the bracket on this type of windshield, you might permanently mar the windshield's surface. For an alternative mounting method, see “Hook-and-Loop Mounting” on Page 10.

1. Clean the selected windshield area, position the bracket on the windshield, and press firmly on each suction cup to secure it in place.

2. Slide the detector onto the base plate until it snaps into place.



To adjust the mounting angle, remove the detector from the bracket, then the bracket from the windshield and adjust the bracket by carefully bending it.

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HOOK-AND-LOOP MOUNTING

In some vehicles, the dashboard may be the best location to mount the detector. For this mounting, use the supplied hook-and-loop tape as follows.

1. Use a damp cloth to clean the bottom of the detector and the dashboard. Let both surfaces dry.

   Note: The tape's adhesive might not stick to a surface treated with vinyl cleaner or protectant.

2. Remove the tape's paper backing and stick the tape to the bottom of the detector (do not cover the serial number).

   Tip: On a curved dashboard, cut the supplied strip in half and use one strip on each side of the bottom of the detector.

3. Remove the paper backing from the other side of the tape and press your detector onto the dashboard.

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❒ Connecting Power

Caution:

- Use only the supplied power cord. If your power cord is lost or damaged, you can order a replacement cord from your local RadioShack store.
- Before plugging the power cord's cigarette-lighter plug into your vehicle's cigarette-lighter socket, make sure the plug's tip is screwed firmly onto the plug. See “Replacing the Fuse” on Page 19 for more information about the cigarette-lighter plug.
- Unplug the power cord's cigarette-lighter plug from your vehicle's cigarette-lighter socket when you turn off the ignition. This prevents draining your vehicle's battery if you leave the detector on when you turn off the ignition.

Plug the supplied power cord's barrel plug into the detector's **DC 12V** jack. Then plug the cord's cigarette-lighter plug into your vehicle's cigarette-light socket.

Note: If the detector does not operate when you turn it on, remove the cigarette-lighter plug from your vehicle's socket and check the socket for ashes and other debris. Also, check the fuse in the cigarette-lighter plug and your vehicle's fuse block (see “Replacing the Fuse” on Page 19).

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❒ *Operation*

To turn on the detector, rotate **VOLUME/OFF** toward **VOLUME** until it clicks. After self-testing, the P (power) indicator lights.

To adjust the volume, rotate **VOLUME/OFF** left or right.

To turn off the detector, rotate **VOLUME/OFF** toward **OFF** until it clicks and all indicators turn off.

DEMONSTRATING ALERTS

To familiarize yourself with your detector's different alerts and warning indicators or to check the alerts and warning indicators, you can run a demonstration.

To start the demonstration, turn on the detector while holding down **DIM** and **CITY**. The demonstration starts when the P indicator flashes.

To select the demonstration for each alert and warning indicator, press **DIM**. The detector demonstrates the alerts in the following order:

1. X-Band Alert
2. K-Band Alert
3. Ka-Band Alert
4. Laser Alert
5. Ultralyte Laser Alert
6. VG-2 Alert
7. Emergency Vehicle Alert
8. Railroad Alert
9. Road Hazard Alert

To stop the demonstration, press **CITY** at any time.

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OPERATION SETTINGS

Selecting the City and Highway Modes

Your detector has two operating modes: city and highway. In city mode, the detector requires a stronger X-, K-, or Ka-band signal before it sounds or indicates an alert.

Notes:

- City mode helps prevent false alerts in tightly populated areas where radar signals can bounce off surrounding structures.
- The city mode has no effect on laser alerts or instant-on radar.

The highway mode provides maximum sensitivity for open-road driving. The unit is preset to highway mode when you turn it on.

To select the city mode, press **CITY**. The C indicator lights.

To return to the highway mode, press **CITY** again and the C indicator turns off.

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Selecting Display Brightness

You can select from three levels of brightness for your radar detector indicators: bright, dim, and dark. The indicator's brightness level is always set to full brightness when you turn it on.

Press **DIM** once to reduce the indicators' brightness by 70%. Press **DIM** a second time to turn off all indicators except the **P** indicator. Press **DIM** a third time to return all indicators to full brightness.

Muting the Audio Alert

While the detector sounds a radar or safety alert signal, you can press **MUTE** to temporarily silence the detector. The detector automatically resets the mute to off 20 seconds after the radar or safety alert signal stops. Or, you can simply press **MUTE** again before it resets to return the detector to normal operation.

Note: The laser alert signal remains audible even if you press **MUTE**.

RECEIVING AND IDENTIFYING RADAR, LASER, SAFETY ALERT, AND VG-2 SIGNALS

When your detector senses a radar signal, it responds with different audible and visual alarms to indicate the signal type for X-, K-, and Ka-band signals. The detector also indicates the signal strength by increasing the rate at which it flashes the indicators and sounds the tone as you get closer to the radar source. In addition, the 2 and 3 signal strength indicators flash to visually indicate the strength of radar signals.

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When your detector senses an Instant-On radar signal, it sounds continuous beeps, then all indicators light.

When your detector senses a laser signal, both the X- and K/Ka indicators flash, and the detector sounds continuous tones for about 3 seconds.

When your detector senses a Ultralyte laser signal, the X-, K/Ka-, 2, and 3 indicators flash in order.

When VG-2 is detected, the VG-2 indicator flashes and the detector sounds a distinctive tone. The detector does not respond to any radar source during a VG-2 alert, and laser alerts are not affected.

Note: If there is another detector in the vicinity, you might receive false signals.

When your detector senses a Safety Alert signal, it responds with distinctive audible and visual alarms to indicate the alert type for emergency vehicle (M), Rail Road Alert (O), or Road Hazard (S).

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❒ Troubleshooting

If you have problems operating your detector, these suggestions might help.

Problem	Suggestion
The detector does not turn on.	Be sure all power connections are secure.
	The cigarette-lighter socket might be dirty. Clean it with fine emery cloth to ensure a good, clean connection.
	Check the fuse in the power cord's cigarette lighter plug. See “Replacing the Fuse” on Page 19.
	Check the fuse that controls power to your vehicle's cigarette-lighter socket. See your vehicle's owner's manual.
Caution: Do not place any metal object other than the cigarette lighter or cigarette-lighter plug in the cigarette-lighter socket. Doing so could blow a fuse in your vehicle or cause the metal object to become very hot.	
The detector gives a false alert when you use vehicle accessories such as power windows, motorized mirrors, brakes, and so on.	Check the vehicle's electrical system for loose connections, including the main battery cable and alternator connections.
	Install a filter capacitor (1000 µF, 35 volts), on the back of the cigarette-lighter socket, across the power connections.

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Problem	Suggestion
The detector performs the self-test, but does not respond to radar signals when you see a police car.	A police car might not be equipped with radar (see the supplied booklet, *Questions and Answers About Vehicle Speed Detection*).
	Police might be using VASCAR-type speed detection (see the supplied booklet, *Questions and Answers About Vehicle Speed Detection*).
The detector has poor laser detection range.	Be sure the laser detection lens is not blocked.
	Be sure the detector is properly mounted. See “Selecting a Mounting Location” on Page 7.
	Use lens-cleaning solution to clean the laser detection lens.

If you cannot solve the problem after trying these suggestions, take your detector to your local RadioShack store for assistance.

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❒ Care and Maintenance

Your RadioShack 360° Laser/Radar Detector is an example of superior design and craftsmanship. The following suggestions will help you care for your detector so you can enjoy it for years.

- Keep the detector dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.
- Keep the detector away from dust and dirt, which can cause premature wear of parts.
- Handle the detector gently and carefully. Dropping it can damage circuit boards and cases and can cause the detector to work improperly.
- Wipe the detector with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the detector.

Modifying or tampering with the detector's internal components can cause a malfunction and might invalidate its warranty. If your detector is not performing as it should, take it to your local RadioShack store for assistance.

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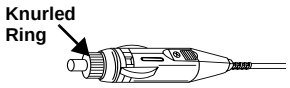
REPLACING THE FUSE

If the detector stops operating, follow these steps to check the fuse in the power cord's cigarette-lighter plug and replace it with a 2-amp, $1\frac{1}{4} \times \frac{1}{4}$, fast-acting fuse, if necessary.

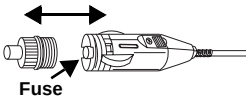
Caution: Using a fuse that does not meet the above requirements can damage your detector, the power cable, or the vehicle's electrical system.

1. Turn the knurled ring on the cigarette-lighter plug counterclockwise to unscrew it.



   Caution: If you must use pliers to loosen the ring, be careful not to crush the ring or the metal tip inside the ring.

2. Remove the ring and tip from the power cord's cigarette-lighter plug, then remove the old fuse.



   Note: Take care not to lose the ring or tip, or the spring inside the plug.

3. Check the fuse. If it has blown, replace it.

4. Replace the metal tip inside the ring, make sure the spring is intact, then place the fuse inside the cigarette-lighter plug and screw the ring back onto the plug. Make sure the tip is visible when you reassemble the cigarette-lighter plug.

   Caution: Never use pliers or other tools to retighten the ring on the cigarette-lighter plug.

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❒ *Fcc Statement*

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

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❒ Note

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Limited One-Year Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for one (1) year from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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