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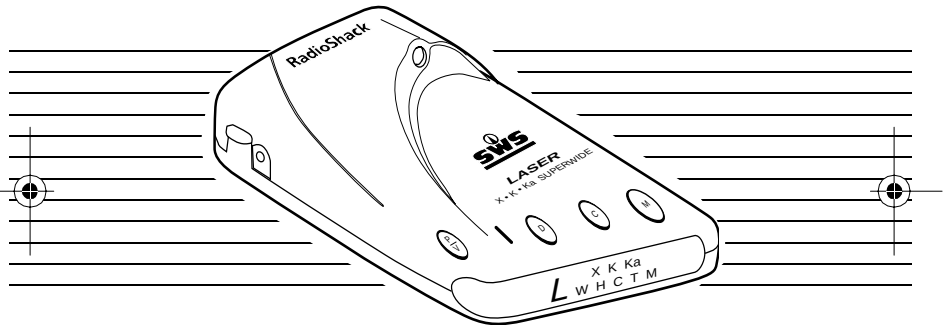
Owner's Manual

X•K•Ka Superwide Radar/ Laser Detector

Please read before using this equipment.



SWS safety warning system

Cat. No. 22-1669

RadioShack™

FEATURES

Your RadioShack X•K•Ka Superwide Radar/Laser Detector can alert you to all known police traffic radar and laser systems. It receives X-, K-, and Ka-band radar signals and also detects both the instant-on and laser systems many police departments use to measure vehicle speed. Plus, it can alert you to hazards by detecting Safety Warning System signals.

Your detector has many useful features, including:

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

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

Safety Warning System™ Detection — alerts you to the presence of potential road hazards and emergency vehicles signalled by a safety warning system transmission.

Front- and Rear-Looking Laser — detects laser signals from both the front and the rear of your vehicle.

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

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

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Safety Warning System and SWS are trademarks of Safety Warning System LLC.
InstaClear is a registered trademark used by Ford Motor Company.
ElectriClear is a registered trademark used by Libbey, Owens, Ford, and Delco-Remy.

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Auto Quiet — lets you set the radar detector to give you a full-volume alert for about 5 seconds, then reduce its alert to minimum volume.

Dim/Dark Modes — let you dim the display for nighttime operation, or have the radar detector go completely dark whenever it detects traffic radar signals.

Your radar/laser detector includes the following items:

- Power Cord
- Windshield Bracket with Suction Cups
- Hook and Loop Fastener
- This Owner's Manual

We recommend you record your detector's serial number here. The number is on the detector's bottom panel.

Serial Number: _____

Note: 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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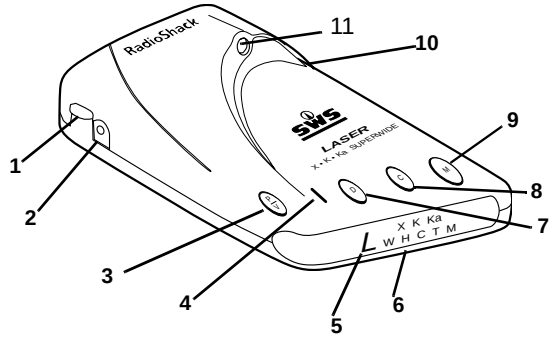
A QUICK LOOK



1 **Bracket Release Button** — lets you quickly remove the detector's bracket.

2 **Power Jack** — the power cable plugs in here.

3 **P/V (Power/Volume) Button** — turns the detector on and off and lets you adjust the volume.

4 **Speaker** — sounds distinct warnings.

5 **High Intensity Digital Display** ∇ προωιδεσ διστινχτ ωισυαλ χονφιρματιον οφ σιγναλσ δετεχτεδ ανδ σιγναλ στρενγτη, ανδ ινδιχατεσ τηε σελεχτεδ οπερατινγ μοδεσ.

6 **Visual Radar/Safety Indicators** — the appropriate indicator lights when the detector detects a traffic or safety radar signal.

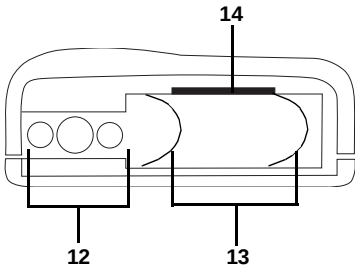
7 **D (DARK) Button —** dims the display for night operation or darkens the display so all indicators turn off during an alert.

8 **C (CITY/HIGHWAY) Button** — switches between the city and highway modes.

9 **M (Mute) Button** — lets you silence alerts.

10 **Auxiliary Jack —** lets you easily connect an auxiliary laser receive module (available by special order from your local RadioShack store, RSU #11670049) for added front and rear laser protection.

11 **Rear Laser Detection Lens** — receives incoming laser signals from the rear.



12 **Front Laser Detection Lens** — receives incoming laser signals from the front.

13 **Radar Detection Antenna** — receives the incoming radar signals.

14 **Mounting Bracket Slot** — holds the windshield mounting bracket.

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INSTALLATION

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.
- The detector's view of the road must not be blocked by any metal object.
- Some vehicles have InstaClear® or ElectriClear® defogging windshields, which have metal coatings that block signals. General Motor's APV vans have a solar shield that keeps the vehicle cooler during the summer, but also blocks signals. 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: Whichever mounting method you choose, 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 can temporarily impair performance.

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HOOK-AND-LOOP TAPE MOUNTING

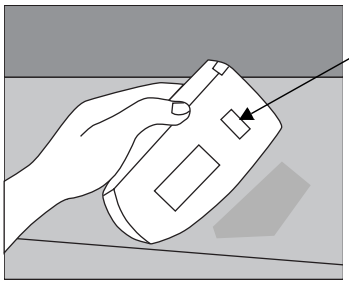
For some dashboards, the hook-and-loop tape included with your detector might be best for mounting. Follow these steps to use the hook-and-loop tape.

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 backing and stick the tape to the bottom of the detector.

   Note: Do not place the hook-and-loop tape over the detector's serial number.



   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 backing from the other side of the tape and press the detector onto the dashboard.

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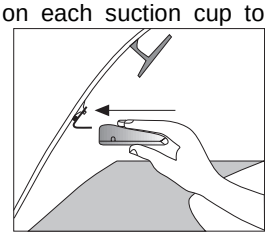
WINDSHIELD MOUNTING

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.

1. Align the groove in each suction cup with the slots in the windshield bracket and slide the suction cups out until they lock into place.
2. Press the supplied black rubber windshield mount stop into the small hole on the windshield bracket.

   Note: You might need to slightly twist the stop to get it to pop into the hole.
3. Clean the selected windshield area, position the bracket on the windshield, and press firmly on each suction cup to secure it in place.
4. Slide the radar detector onto the base plate until it snaps into place.



5. To level the detector, press the bracket release button to remove the bracket from the detector. Then bend the bracket.

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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 20 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 your vehicle's battery from being drained if you leave the detector on when you turn off the ignition.

Plug the supplied power cord's short barrel plug into the detector's power jack. Then plug the cord's cigarette-lighter plug into your vehicle's cigarette-lighter 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 debris. Also check the fuse in the cigarette-lighter plug and your vehicle's fuse block (see "Replacing the Fuse" on Page 20).

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OPERATION

TURNING THE DETECTOR ON AND OFF

To turn on the detector, press and release **P**/**V**.

The detector sounds a distinctive alert and lights the indicators for each band as a self test, in the order presented in the following table. Then all indicators turn off except the power indicator, and the detector returns to the same operating modes as the last time you used it.

Alert Type	Audible Alert	Visual Alert
X	Low steady	X + Digit 8
K	High trill	K + Digit 8
Ka	Medium warble	Ka + Digit 8
Safety	Low-high	W (weather), H (highway hazard), C (highway construction), T (travel advisory), or M (moving vehicle) indicator + Digit 8
Laser	High-low	L
VG-2	None	Middle display segment (–)

To turn off the detector, press and release **P**/**V** again.

See “Receiving and Identifying Alert Signals” on Page 15 for more information about alerts.

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ADJUSTING THE VOLUME

The detector has four volume levels. To change the detector's volume, press and hold down **P**/**V**. The detector sounds a tone at the current volume level and displays a **1**, **2**, **3**, or **4**. When the detector reaches full volume, it displays **4**. When the detector reaches minimum volume, it displays **1**. Release **P/V** when the volume is at the desired level.

Note: When the detector reaches either the maximum or minimum volume, you must release and press **P**/**V** again to reverse the volume direction.

DEMONSTRATING ALERTS

To familiarize yourself with the different alerts your detector produces, you can run a demonstration. To start the demonstration, press and release **M** and **C** at the same time with the detector turned on. The detector demonstrates the alerts for X, K, Ka, safety warning, laser, and VG-2, in that order. To end the demonstration, press **P**/**V**.

MUTING ALERTS

While a radar, laser, or safety warning alert is sounding, you can press **M** (mute) to temporarily silence the detector for the current alert and any new alert that is produced within 10 seconds. Visual alerts are not affected.

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AUTO QUIET

Auto quiet reduces the selected audio level to the minimum volume about 5 seconds after it detects a speed or safety radar signal. The audio alert for any new signal received within 10 seconds sounds at the minimum level. Auto quiet does not affect VG-2 or laser alerts.

To turn on auto quiet, press **M** when the detector is not sounding an alert. The detector displays **A** for 1 second.

To turn off auto quiet, press **M** when the detector is not sounding an alert.

SELECTING THE CITY AND HIGHWAY MODES

In the city mode, the detector sounds two or three alert tones when it detects weak traffic or safety radar signals. If the signal becomes stronger, it sounds two or three additional beeps. The display continues to react immediately to traffic radar signals to keep you quietly informed.

Note: The city mode has no effect on laser or VG-2 operation.

To select the city mode, press **C** (city) until the detector displays **C**. The detector beeps once.

The highway mode provides maximum alert response for open-road driving. To select the highway mode, press **C** until the detector displays **H**. The detector beeps twice.

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DIMMING THE DISPLAY

Press **D** once to dim the display. The display dims immediately.

Press **D** again and the display dims when it is not detecting a signal, and blanks the display entirely while it receives a signal and for 10 seconds after the signal goes away.

Press **D** a third time to restore the display to full brightness.

SETTING THE VG-2 OPTION

VG-2 is a system used by some law enforcement agencies that detects the use of radar detectors in vehicles. It does this by detecting the weak radio signals used in radar detectors. Your radar detector can sense a VG-2 system and shift its operating frequencies out of the range detected by VG-2, making your radar detector essentially invisible to this system.

To turn the VG-2 option on or off, press **P**/**V** and **M** at the same time. Then press **C**. The middle segment (–) turns on and the detector beeps once to indicate the VG-2 option is on. If the VG-2 option is off, the middle segment turns off and the detector beeps once.

After you set this feature, press **P**/**V** again. The detector beeps twice.

Note: Your detector does not detect traffic radar when VG-2 has been detected.

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RECEIVING AND IDENTIFYING ALERT SIGNALS

Your detector gives different audible alerts for each signal. In addition, the alert tone pulse rate increases with signal strength and the detector displays a digit from 1 to 8 to indicate the signal strength (1 is weakest and 8 is strongest). (See “Demonstrating Alerts” on Page 12 to find out how the detector alerts you to X-, K-, Ka-band, safety warning system, laser, and VG-2 signals.)

When your detector senses instant-on radar, it sounds an intense, 3-second tone and displays **P**.

Safety Radar Audio/Visual Alerts

Your radar detector detects all safety radar including the new Safety Warning System and Safety Alert. These systems provide advanced warning of hazards and let you respond appropriately to potentially dangerous conditions.

Note: Not all areas have Safety Warning System or Safety Alert transmitters. Your radar detector only alerts you to hazards if the area you are in has transmitters sending signals.

When your radar detector encounters safety radar, it sounds a distinctive tone and displays the signal strength. In addition, your radar detector informs you of the type of hazard by displaying one of five letters:

W (weather) — confirms detection of a weather advisory such as heavy fog or high winds.

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H (highway) — confirms detection of a highway hazard such as an accident or dangerous intersection.

C (construction) — confirms detection of a highway construction hazard.

T (travel) — confirms detection of a travel related advisory such as congested traffic, rest area ahead, and so on.

M (moving) — confirms detection of a fast or slow moving vehicle, such as police in pursuit, oversize vehicle ahead, and so on.

The safety radar indicator appears for as long as the signal is present. The audio alert is continuous, but the faster the beeping, the closer you are to the source.

Laser Audio/Visual Alerts

If you are the targeted vehicle, a laser gun can often determine your speed within seconds after you receive an alert.

However, if you are traveling near or behind the targeted vehicle and receive an alert, you should have time to respond. Any laser alert, regardless of duration, requires immediate action!

When your radar detector detects a laser signal from ahead or behind, the laser audio sounds and the radar detector displays **L** for as long as the signal is present (for a minimum of 3 seconds).

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RESETTING THE DETECTOR

The detector keeps the audio level, city/highway mode, mute mode, dim mode, auto quiet mode, VG-2 option, and on or off setting in memory when power is removed. When you reapply power, it returns to these same settings.

To reset the detector to its factory default settings, unplug the detector's power cord from the cigarette-lighter socket, press and hold **P**/**V** and **M**, plug in the power cord, wait for it to beep, then release **P**/**V** and **M**. The detector turns off the auto quiet, dim, and VG-2 option, returns to highway mode, and sets the volume to its maximum level.

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TROUBLESHOOTING

If you have problems operating your radar/laser detector, the suggestions in this section might help. If you cannot solve the problem after trying these suggestions, take your detector to your local RadioShack store for assistance.

If the detector does not turn on:

- Be sure all power connections are secure.
- Check the fuse that controls power to the cigarette-lighter socket. See your vehicle's owner's manual.
- Check the fuse in the cigarette-lighter plug. See "Replacing the Fuse" on Page 20.
- The cigarette-lighter socket might be dirty. Clean it to give a good, clean connection.

  Caution: Do not place any metal object other than the cigarette lighter or a 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.

If the detector gives a false alert when the vehicle hits bumps in the road:

- Check the power connections.

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If the detector gives a false alert when you use accessories such as power windows, motorized mirrors, brakes, and so on:

- Check the vehicle's electrical system, including the main battery cable and alternator connections.
- Install a filter capacitor (1,000 µf, 35 volts, such as Cat. No. 272-1032) on the back of the cigarette-lighter socket, across the power connections.

If the detector performs the power on self-test (see "Turning the Detector On and Off" on Page 11), but does not respond to radar signals when you see a police car:

- A police car might not be equipped with radar, or might be using instant-on radar and not have the radar gun triggered (see the separate booklet *Questions and Answers About Vehicle Speed Detection*).
- Police might be using VASCAR-type speed detection (see the separate booklet *Questions and Answers About Vehicle Speed Detection*).

If the detector has poor laser detection range:

- Be sure the laser detection lenses are not blocked.
- Use lens-cleaning solution to clean the laser detection lenses and the windshield.

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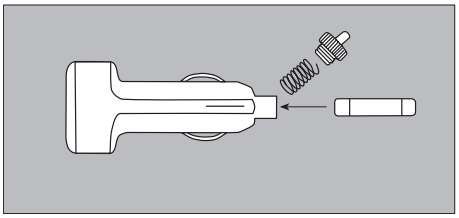
REPLACING THE FUSE

If the detector stops operating, check the fuse in the DC power cord's cigarette-lighter plug. If it has blown, follow these steps to replace it with a 2-Amp, $1^1/_4 \times {}^1/_4$ mm, fast-acting fuse (Cat. No. 270-1007).

Caution: Using a fuse that does not meet these ratings or defeating the fuse protection can damage your detector or the vehicle's electrical system.

1. Carefully unscrew the tip of the cigarette-lighter plug.



2. Remove the tip from the cigarette-lighter plug, then remove the old fuse.

   Note: Take care not to lose the spring inside the holder, or the metal ring.

3. Replace the fuse.

4. Press the cigarette-lighter plug's tip down into the body, then screw it back in.

   Caution: Be sure you press the cigarette-lighter plug's tip down before screwing it in, or you might damage the plug.

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NOTES

One or more of the following patents apply: 4,315,261; 5,146,227; 5,379,456. Other patents pending.

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RadioShack Limited Warranty

This product is warranted against defects for 1 year from date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply **bring your RadioShack sales slip** as proof of purchase date to any RadioShack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

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