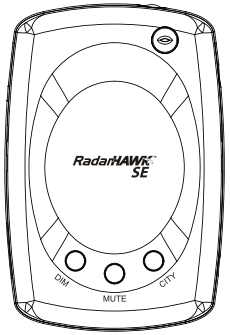
RadarHAWK™ SE



RADAR LASER DETECTOR
Owner's Manual

INTRODUCTION

Thank you for purchasing the wireless RadarHAWK™ SE Radar and Laser Detector. The new RadarHAWK™ SE model incorporates advanced antenna technology and eSEremely low power consumption circuitry to ensure top-class performance. It is a completely integrated radar and laser detector, which responds X, K, Ku and Ka band radar guns and all known laser speed guns in use today.

The RadarHAWK™ SE is specially designed to be a simple-to-use device in any vehicle or motorcycle keeping you fully protected at all times. This manual contains instructions and information explaining how the RadarHAWK™ SE operates.

Please read the manual in detail to get the most out of the outstanding performance and features of the RadarHAWK™ SE.

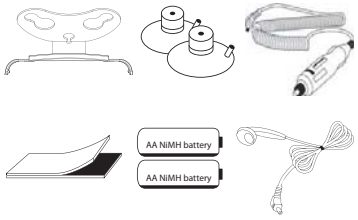
WARRANTY

We warrant your RadarHAWK™ SE against all defects in materials and workmanship for a period of one(1) year from the date of the original purchase.

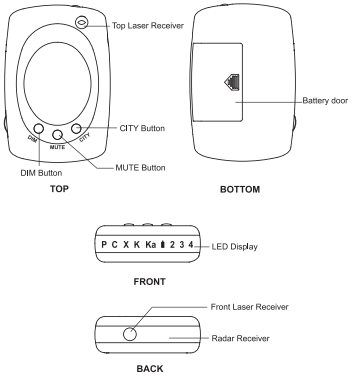
FEATURES AND STANDARD ACCESSORIES

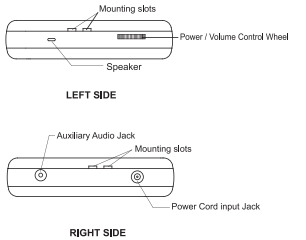
1) Accessories included with your RadarHAWK™ SE

- Mounting Bracket
- Suction Cups
- 12V DC Power Cord & Fuse
- Fastener Tape
- Operation Manual
- Two AA NiMH Rechargable Batteries
- Earphone



2) Controls and Functions





a. Power/Volume Control Wheel
Turns the detector on/off and controls the volume level.

b. DIM Button
Dim mode reduces the illumination of the display.
You can adjust the brightness of the display.

c. MUTE Button
Silences the audio alarm

d. CITY Button
Press the City button to reduce false alarms while driving in the city. While driving on the highways or rural, press the City button again to turn off City mode for long range detection.

RadarHAWK™ SE

e. FRONT LASER RECEIVER/ TOP LASER RECEIVER
Laser lens to detect laser signals

f. RADAR RECEIVER
Receives the radar signals emitted by traffic radars

g. SPEAKER
Alarms with tone

h. MOUNTING SLOTS
Mount the bracket

i. POWER CORD INPUT JACK
Connect the DC Power cord here

j. AUXILIARY AUDIO JACK
Connect the earphone or speakers here

k. LED DISPLAY

- P: Power on indicator
- C: City mode indicator
- X: X band signal indicator
- K: K band signal indicator
- X & K: Ku band signal indicator
- Ka: Ka band signal indicator
- : Low battery indicator/ Battery charging indicator
- 2 3 4: Signal Strength meter/ laser signal indicator

INSTALLING THE UNIT

For the best performance, select the proper location for the unit where it has a direct view of the road. The antenna and lens should not be obstructed by metal or metallic surfaces and should be pointed at the horizon for accurate long range detection.

- Choose a location that does not block the driver's vision.
- Mount the detector in a level position.
- Do not mount the detector behind metal surfaces, windshield antennas, wiper blades, ornaments or mirrored glass.
- Do not mount the detector where the driver or passenger may be injured in case of an abrupt stop.

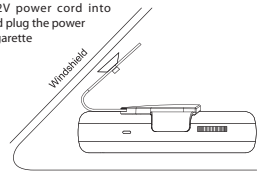
1) FASTENER TAPE MOUNTING ON DASHBOARD

a. Use a damp cloth to thoroughly clean both the bottom of the detector and the dashboard.
b. Peel of the tape's paper backing and apply the tape to the bottom of the detector.
c. Remove the paper backing from the other side of the tape and press the detector onto the dashboard.

2) WINDSHIELD MOUNTING

The supplied windshield bracket lets you quickly mount the detector to your vehicle's windshield.

a. Install the suction cups onto the bracket by fitting them into their holes.
b. Attach the bracket to windshield.
c. Attach the detector to the bracket.
d. Bend bracket for correct detection angle (if necessary). Do not use the detector to bend bracket.
e. Plug the DC12V power cord into the detector and plug the power cord into the cigarette lighter socket.



3) POWER CONNECTION

a. The RadarHAWK™ SE is specially designed to operate on two AA NiMH rechargeable batteries. To ensure maximum performance, we advise that you do not use other battery typrs.

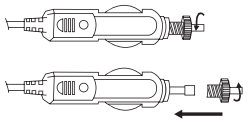
b. The RadarHAWK™ SE is also designed to operate on most DC12V negative ground vehicle electrical systems. The power cord provided with the detector has a cigarette light socket plug at one end and a small connector at the other.

- Insert the small connector into the jack on the side of the detector.
- Insert the other end into the cigarette lighter socket of your vehicle.

If the detector does not operate when you turn it on, remove the adapter from the cigarette lighter socket and carefully check the socket for debris. Also, check the fuse in the adapter and your vehicle's fuse box.

4) REPLACING FUSE

If the detector stops operating, the fuse in the plug might be blown. If it has blown, unscrew the top of the plug to remove the fuse and replace it with a new one.



OPERATION

1) POWER AND VOLUME CONTROL

To turn on the detector, connect power/insert battery and rotate the wheel controller(located on the side of the detector) until you hear it click. To turn off the detector, rotate the wheel controller in the opposite direction until it clicks again. You can also use the controller to adjust the volume level by turning it up or down within the range that it does not click.

2) SELF-TEST & FEATURE MEMORY

When powered up, the detector performs self-test.

- HIGHWAY or CITY
- BRIGHT or DIM or DIMMER
- TONE
- BAND SELECTION

It will automatically remember the above user settings when the unit is turned off or removed from the power. All the features selected are retained in memory.

3) BRIGHTNESS CONTROL

Press DIM button to toggle between 3 different brightness levels. The brightness options are: Bright, Dim and Dimmer.

When a signal is detected, alerts are always displayed in Bright, regardless of the brightness level you have selected. The display returns to your setting following the alert. The factory default mode is Bright.

4) MUTE

Press the MUTE button for less than three seconds to toggle between MUTE ON and MUTE OFF. Mute can be used when you manually turn the audio alert off. Mute ON will be automatically reset to Mute OFF when you turn the detector o?. Mute ON does not remain in the detector's memory. The factory default mode is Mute OFF.

5) AUTO AUDIO CONTROL

Auto Audio Control will have the detector report with reduced audio alarms for continuously detected alerts. When a signal is constantly reported for more than 10 seconds, the detector will gradually reduce the audio level in the following 10 seconds. The reduced audio level will continue for new alerts detected within 60 seconds from the previous alert.

6) HIGHWAY AND CITY MODE

The false-alerts are often caused in urban areas by automatic door openers, air traffic control systems, alarm systems and more. The City mode reduces the detector's sensitivity and eliminates responses to false sources. Highway mode provides maximum sensitivity for open road driving where there are no false signals.

7) BAND SELECTION

There is a band selection feature for two X bands and the Ku band. The K and Ka bands are always "on" to detect. Hold down DIM and CITY button for three seconds to enter band selection mode. Signal

strength LEDs (2, 3, 4) shows Band On or Off status. Turn on the LED to select the band.

- Signal Strength display 2: X Band(9.9GHz)
  - Press DIM button to turn on or off .
- Signal Strength display 3: X Band(10.525GHz)
  - Press MUTE button to turn on or off.
- Signal Strength display 4: Ku Band(13.45GHz)
  - Press CITY button to turn on or off.

The factory default is all bands on.

8) SIGNAL STRENGTH METER

The numbered LEDs are called signal strength meter when they are displayed together with a radar band LED to indicate the strength of a detected signal. The higher number, the stronger the signal.

9) LASER DETECTION

Police laser devices transmit an invisible light beam at wavelength of 904 nanometers. All numbered LEDs will start blinking when a laser signal is detected.

10) VG-2 UNDETECTABLE

The VG-2 is a "radar detector detector" device used by police to detect signals radiated by a radar detector. The RadarHAWK™ SE does not produce emissions detectable by VG-2 radar detector sensing devices.

11) SELECTABLE TONE

There are two selectable alert tones. To change the tone sound, press MUTE for three seconds. The unit will change the tone sound.

12) DEMO MODE

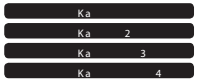
Press and hold both the MUTE and CITY buttons, then the detector will demonstrate how it operates when each radar and laser signal is detected.

X band signal detected operation

K band signal detected operation

Ku band signal detected operation

Ka band signal detected operation



Laser signal detected operation

All LEDs on

It automatically exits after five seconds from the all-LED on status. Or press any button to exit the all-LED on status, which is the end of DEMO mode. After this has been completed the detector automatically enters detection mode and begins detecting signals.

13) CHARGING THE BATTERIES

When the power is supplied from 12-volt DC power cord, the two AA NiMH rechargeable batteries will be charged and the battery indicator LED will turn ON to show that the batteries are charging. Within 2.5 hours, the batteries will be fully charged and battery indicator LED will automatically turn off.

14) AUTO POWER-OFF AT BATTERY MODE

In the event that you forget to turn off the RadarHAWK™ SE when you leave your vehicle, it has an automatic power-off feature to conserve battery life. The RadarHAWK™ SE will automatically shut off when no signals are detected for approximately 60 minutes. An obtrusive audio and visual warning will confirm that the auto power-off is about to happen. You can cancel auto power-off by pressing any button while the audio and visual warning is being displayed.

15) BATTERY LIFE

The RadarHAWK™ SE can provide approximately 30~40 hours of rechargeable battery life. RadarHAWK™ SE has a separate low battery indication LED. It intermittently blinks with warning alarms from the moment when there is approximately two to four hours of battery life remaining.

CARE AND MAINTENANCE

Your RadarHAWK™ SE is an example of superior design and craftsmanship. The following suggestions will help you to handle your detector in a proper way.

Never leave the detector on the windshield when you park your vehicle. The temperature in the vehicle in summer can reach levels above what is considered to be safe for this detector.

To make you less susceptible to break-in and theft, you should remove the detector from your windshield when you leave your vehicle.

Do not expose the detector to moisture. Rain dew, road splash, or other liquids that can damage the internal components and reduce sensitivity of the detector.

TROUBLESHOOTING

1) If the detector does not turn on

a. Check the power cord or battery. Be sure all power connectors are properly installed.
b. Check the fuse that controls power to the cigarette lighter socket. See your vehicles owner's manual.
c. The cigarette lighter socket might be dirty. Clean it with fine emery cloth to ensure a good and clean connection.
d. Vehicle electrical problem exists.
e. Make sure that the volume control is in the ON position.

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

2) If the detector gives a false alert when the vehicle hits bumps

a. Check the vehicle's electrical system, including the main battery cable and alternator connections.
b. Install a filter capacitor (470uF. 25volts) on the back of the cigarette lighter socket, across the power connections.

3) If the receiving signals are weak

a. Check the angle of detector.
b. Point detector to the horizon.
c. Radar antenna / laser lens is obstructed.
d. Relocate the detector.

SPECIFICATIONS

RADAR

Receiver Type	Dual Conversion Superheterodyne
Antenna Type	Linear Polarized. Self-Contained Antenna
Detector Type	Frequency Discriminator
Frequency of Operation:	X Band Ku Band K Band Ka Band

LASER

Receiver Type	Pulsed Laser Signal Receiver
Detector Type	Digital Signal Processor
Opto Sensor	Photo Diode with Convex Condenser Lens

GENERAL

Temperature Range	-20°C to +70°C
Power Requirements:	12~15V DC, 500mA (Negative Ground)
Dimensions HxWxD	1.0" X 2.85" X 4.2"
Weight	160g with two AA rechargeable NiMH

*Specifications are typical. Individual units might vary. Specifications are subject to change without notice.

RadarHAWK™ SE
FCC ID : U9P-RH-SE

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.

In addition, any changes or modifications to this product, which are not expressly approved by Q3 Innovations, LLC in writing, could void the user's authority to operate this product.

FCC Compliance Statements

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

Warning : Your are cautioned that any change or modifications to the equipment not expressly approved by the party responsible for compliance could void your authority to operate such equipment.