

# **OWNER'S MANUAL**

## **STINGER S650**

**ALL-BAND RADAR AND LASER DETECTOR**

WITH VG-2, POP™ AND ULTRA-X /  
ULTRA-K MODES RADAR DETECTION

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## Congratulations!

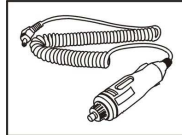
You have purchased the STINGER S650, the newest radar/laser detector. The STINGER S650, incorporates the advanced new antenna technology and extremely low power-consuming circuitry to ensure top-class performance. The STINGER S650, is a complete integrated laser/radar detector, which detects all police radar guns, including Ultra-X and Ultra-K pulse mode radars, as well as laser guns. Besides, STINGER S650 is able to detect signals of VG-2 (devices detecting radar-detectors). The STINGER S650, provides distinct visual and audio alerts to warn you of the presence of X-, K-, Ka- band and VG2 radar signals as well as laser signals in front of you for 180° round. You can drive with confidence when you bring along the STINGER S650. Note: Some local regions and federal regulations may prohibit the use of detection device. Please check with authorities regarding the use of this device in your area before operating it.

## Package Contents

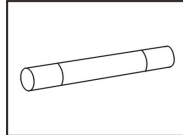
Your STINGER radar/laser detector package includes the following components:

- The STINGER S650 radar/laser detector
- Changeable Panel (2ea)
- Windshield mounting bracket with suction cups (3ea) and bumper
- Coiled 12-volt DC power cord
- Dashboard mounting hook and loop fasteners (1ea)
- Operation manual

### Identifying parts of the unit



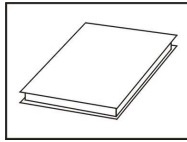
Power Cord



Spare Fuse



Mounting Bracket



Fastener Tape

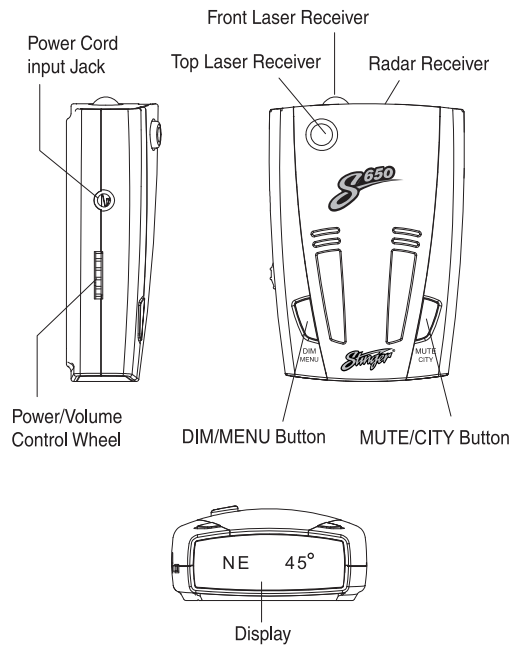


Changeable Panel



STINGER 650

## Basic Features and Controls



## Feature descriptions

- protection against all radar bands (X, K, and super wide Ka)
- 360° laser coverage against all laser guns
- VG-2 signal Detection Capabilities
- pulse signal Detection Capabilities
- digital compass display mode
- city mode to virtually eliminate false radar alerts
- user selectable brightness and mute on/off
- power on/off and volume control wheel
- BLUE BACKLIT DIGITAL Text Display
- tutorial mode to demonstrate operations
- memory to retain previously set operational modes after power-off
- corded power connection into 12-volt car lighter socket (Power cord included)

## Installing the Unit

### Mounting guidelines

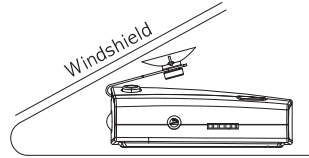
The STINGER radar/laser detector can be mounted on your windshield or dashboard using the mounting bracket and hook-and-loop fastener provided.

- Mount on the windshield in a centered location that will not obstruct the view of the driver and is within reach, so the buttons can be easily accessed.
- Do not mount behind windshield wipers, metal surfaces, ornaments, or mirrored sunscreen glass, as these affect radar/laser signals. Tinted glass does not affect radar/laser signal reception.

*Conceal the STINGER radar/laser detector when you leave your vehicle to prevent theft and to minimize the unit's exposure to extreme temperatures, which can temporarily impair performance.*

### Windshield mounting

1. Install the suction cups and bumper onto the windshield mounting bracket by sliding them into their holes (if not pre-installed).
2. Press the bracket base firmly against the windshield until the suction cups securely take hold.
3. Fasten the bracket at the top sides' slots of the unit.



4. Bend the angle of the windshield mounting bracket, if necessary, to adjust for best viewing and detection angle.
5. When you want to connect power from your vehicle, plug the small connector of the power cord into the 12-volt DC power input jack located on the side of the detector.
6. Plug the large adapter of the power cord into the lighter socket of your vehicle.

#### **Hook-and-Loop Mounting**

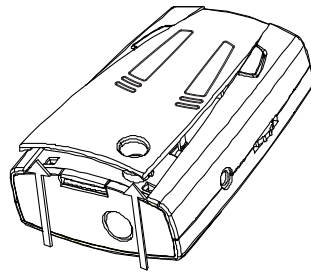
The hook-and-loop tape included with your detector might be the best mounting method for some dashboards. Follow these instructions to use the hook-and-loop tape.

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

#### **Changing the Panel**

To change the panel to another one, follow these steps.

1. Lift up the panel by forefinger or screwdriver from the slot at the mounting bracket location. The panel will pop out as follows.
2. Insert the top of replacing panel near the display into the unit. Gently snap in the other taps to the back of the unit.



# Operation

## Power On

Rotate the wheel controller (located on the side of the detector) until you hear it click. The STINGER radar/laser detector goes through a self-diagnosis sequence and displays the last mode previously set in memory.

## Volume control

Use the volume thumb wheel, located on the side of the STINGER radar/laser detector to adjust volume level.

## Blue backlit display

Press **DIM/MENU** button to turn on the blue backlit.

## Mute on/off selection (Mute mode)

Press the **MUTE/CITY** button repeatedly to toggle between mute on (1 beep) and mute off (2 beep) modes. Mute on will silence the audio alarm for the remainder of an existing signal and for any new alert received. You may also adjust the audio level by using the volume thumb wheel.

## Highway/City mode selection

Press the **MUTE/CITY** button for three seconds each time to toggle Highway (2 beep) and City (1 beep) modes. The CITY mode is indicated by "CITY" at the display.

X-band, occupied by police radar, is also shared for other uses, such as automatic door openers like the ones used at supermarkets, burglar alarms, terrestrial microwave emission, RF braking systems, and other devices. In addition, other radar detectors in close proximity may falsely alert your detector. To reduce false alerts, the STINGER radar/laser detector has city filtering settings. City mode will give you the rejection of X-band alarms by approximately 20%.

highway mode

H I G H W A Y

city mode

C I T Y

When the Compass mode is engaged, it will display a compass heading as follows. When user changes the HIGHWAY/CITY mode, it will be displayed 'HIGHWAY' or 'CITY' for two seconds and will display compass heading again.

**NE 45°**

#### Tutorial mode

The STINGER S650 radar/laser detector has a tutorial mode intended to familiarize you with the various visual displays and distinct audible alerts the unit performs.

To begin the tutorial mode turn the radar/laser detector on while holding the 'DIM/MENU' button and it will demonstrate how it operates when each radar and laser band signal is detected.

#### Tutorial mode start

**T u t o r i a l**

#### X band signal detected operation

**X ▶ 1** (weak signal)

**X ▶▶ 3**

**X ▶▶▶ 5**

**X ▶▶▶▶ 7**

**X ▶▶▶▶▶ 9** (strong signal)



**K band signal detected operation**

**K ▶ 1** (weak signal)

**K ▶▶ 3**

**K ▶▶▶ 5**

**K ▶▶▶▶ 7**

**K ▶▶▶▶▶ 9** (strong signal)

**Ka band signal detected operation**

**Ka ▶ 1** (weak signal)

**Ka ▶▶ 3**

**Ka ▶▶▶ 5**

**Ka ▶▶▶▶ 7**

**Ka ▶▶▶▶▶ 9** (strong signal)

**Laser signal detected operation**

**L A S E R**

**VG-2 signal detected operation**

**V G - 2**

It automatically exits from the end of tutorial mode and go to 'HIGHWAY/CITY' mode.

### Compass Calibration Set-up

Press '**DIM/MENU**' and '**MUTE/CITY**' buttons simultaneously more than 2 seconds to go 'Compass Calibration Mode'.

Perform the calibration on a level surface, following these steps:

1. When entering 'Calibration mode', it speaks "start your calibration".
2. The Calibration will be continued until user presses any key. Please drive 2 circles and press any key when finished. It displays and toggles 'Drive\_2' and 'CIRCLE' during drive. The size of the circles and the direction you drive does not matter. The circles do not need to be perfect circles but must be completed in the same direction. Each circle should take a minimum of 20 seconds but no more than 1 minute to complete.
3. In case 'Compass Calibration' is completed successfully, it display 'COMPLETE' with voice of 'Calibration completed' and exit automatically.
4. In case it is not completed successfully, it displays 'CANCELLED' and exit.
5. If any button is not pressed during one minute, the calibration is stopped and displays 'ERROR' and a 'CANCELLED' message.

### Menu Mode

Pressing '**DIM/MENU**' button for 3 seconds to go to 'Menu' mode. You can set each sub menu as follows.

Press '**DIM/MENU**' button again to scroll each sub menu and press '**MUTE/CITY**' button to select sub menu. After selecting sub menu, press '**DIM/MENU**' button more than 3 seconds to save and exit. Otherwise it is automatically exit after 5 seconds with selected sub menu.

SUB MENU	SELECTION	REMARK
Language Mode	[LANG:ENG] / [LANG:RUS]	ENGLISH or RUSSIAN
VG-2 Mode	[VG-2:ON] / [VG-2:OFF]	VG-2 ON or OFF
Voice Mode	[VOICEoN] / [VOICEoFF]	VOICE ON or OFF
Tone Mode	[TONE:HIG] / [TONE:LOW]	High tone or Low tone
Compass Mode	[CMPS:ON] / [CMPS:OFF]	Compass ON or OFF

### 1. Voice Alert Language selection

The STINGER S650 has two voice versions, which are English and Russian voice. You can select one at the Menu mode.

### 2. VG-2 detection On/Off selection

You can select VG-2 detection On/Off at the Menu mode. Pressing 'DIM/MENU' button for 3 seconds to go to 'Menu' mode.

### 3. Voice Alert On/Off selection

You can select Voice Alert On/Off at the Menu mode. When the detector is set to VOICE ON, you will be notified by voice and visual alerts. VOICE OFF turns off all alert-related voice messages but does not affect any other voice messages.

### 4. Tone selection

The STINGER S650 has two tones of alarm sound (High/ Low). You can set it at the Menu mode.

### 5. Compass display selection

You can select Compass display at the Menu mode. It displays as follows when selected.



### Pulse Protection

Pulse (or instant-on) radar is more difficult to detect than conventional radar because it remains "off" until activated to measure the speed of a targeted vehicle.

When a pulse type transmission is detected, your STINGER detector sounds an urgent audio warning and flashes the Alert strength indicators at their fastest rate.

### Memory confirmation

It will automatically remember your last settings when the unit is turned off or removed from the power. All features selected are retained in the memory except MUTE. Whenever it resets the power, it makes MUTE OFF.

## Troubleshooting

### **If the detector does not turn on:**

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

**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 or bumps:**

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

### **If the receiving signals are weak:**

- Check the angle of detector.
- Point to the horizon.
- Radar antenna / laser sensor is obstructed.
- Relocate the detector clear of any obstruction outside the windshield, such as a wiper blade (see mounting manual).

## Care and Maintenance

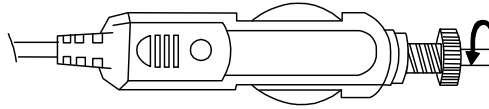
Here are some tips to help you care for your STINGER S650:

- To prevent theft, remove your STINGER radar/laser detector from your windshield or dashboard when you leave your vehicle.
- Avoid extended exposure to direct sunlight. Remove your STINGER radar/laser detector from your windshield when your vehicle is parked for an extended period of time. On hot days the temperature inside your vehicle can reach levels that could damage your STINGER radar/laser detector.
- Do not expose the STINGER radar/laser detector to rain, moisture, spray cleaners, or liquids that could damage the internal circuitry of the detector.

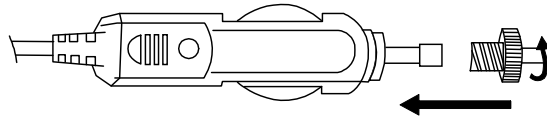
### Fuse replacement

The lighter socket adapter of the power cord has a replaceable 2-Amp SAG fuse located below the silver tip. To check or replace the fuse:

- slowly and carefully unscrew the tip of the plug, making sure the spring and silver tip located inside the plug do not fly out when you remove the cap.



- Check fuse and replace if necessary.



## Specifications

<b>Radar Frequencies:</b>	X-band 10.475 – 10.570GHz K-band 24.050 – 24.250GHz Ka-band 33.40 – 36.000GHz
<b>Laser Wavelength:</b>	800~1100 nm
<b>Operating Temperature Range:</b>	-20°C~60°C
<b>Power Requirements:</b>	12V~16V DC, 120 mA, negative ground
<b>Dimensions HxWxL:</b>	25 x 71 x 105 mm
<b>Weight:</b>	65g

Specifications are typical, individual units may vary.  
Specifications are subject to change without notice.  
Performance may vary with driving behaviors and driving environments.

### FCC Information (FCC ID: W75-STR65)

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 Stinger corporation in writing, could void the user's authority to operate this product.