STINGER

speedtrap protection for high-performance cars

Stinger system
user manual

Legality

Many countries in the world have their own, unique regulations regarding drivers being alerted to, and protected from, speedtraps. Depending on the country, citizens may or may not have the freedom to receive information concerning speedtraps and to be alerted accordingly. In some countries citizens have the liberty to freely pick up all radio signals, while in others that is made illegal. Also the freedom to receive the information from laser speedtrap guns often differs per country.

In order to offer its products to car drivers throughout the world (like in the so called "common market" of the E.U., where the laws vary widely per country, as well as in many other countries and states on our planet), Stinger, in certain markets, only supplies versions of the Stinger system that are incapable of certain functionalities. Radar Alerting, Laser Alerting, LaserShield®, and SpotList may not be available on those versions.

Please remember that it is and always will be your personal responsibility to be aware of and abide by the locally applicable laws. Therefore, please always thoroughly check local legislation before using your Stinger system. If you are driving in a country where you do have the freedom to use Radar Alerting and/or Laser Alerting and/or LaserShielding and/or SpotList Alerting, you can download and install the software appropriate for that country.

Of course you can later delete this (new) functionality, in order to easily and completely stay in compliance with local legislation whenever entering a jurisdiction that does not allow one or more of the above mentioned functionalities. Erasing is achieved like this: on the View interface by pressing the 'S' key, then the Erase button in the next screen. On the Strip interface by simultaneously holding - and + for around 5 seconds or longer. On the LED and button by pressing the button for 4 seconds. Erasing ensures that your Stinger system is incapable of Radar Alerting, Laser Alerting, LaserShield®, and sometimes SpotList Alerting. A new software download and installation (available where allowed) are required in order to once again change the version of your Stinger system.

Please be aware that all features and functionalities described in this manual are subject to the presence of the corresponding hardware modules.

Note: Under no circumstance does your Stinger constitute a license to exceed the posted speed limits. Alerts from your Stinger serve as an effective reminder to mind your speed. Always drive responsibly and pay full attention to traffic.

Important Safety Instructions
Read carefully, prior to operating the laser.

Do not connect any third party modules to any part of the Stinger system. Doing so may cause fire or damage to the unit, and voids warranty.

Use of controls or adjustments or performance or procedures other than those specified herein may result in hazardous radiation exposure, or cause fire or damage to the unit, and voids warranty.

Special Caution
The Stinger Laser Transmitter, may transmit a laser beam that can be harmful to sight. Never, under any circumstances look at the sensor while it is operating and / or is connected to a power supply. This is especially true for looking into the Laser Transmitter from up close, or through any kind of optical lenses!

Laser safety
The Stinger Laser has been tested and classified as a class 1 laser product in accordance to European and international eye safety regulations EN 60825-1 (2014) and IEC 60825-1 (2014) under normal operating conditions and those of single fault failure.

Definition: Class 1 laser products are safe under any reasonably foreseeable conditions of operation, but may be hazardous if a person employs optics within the beam. An outer transmitter of the Stinger Laser is labeled in accordance to regulations.

CLASS 1 LASER PRODUCT

Maintenance
The Stinger system is basically maintenance free, however, you should check periodically that lenses on outer sensors are clean. You can gently clean them with any water based means or using a simple wipe.

Contact & Support Information

For more information, video manuals, and updates for your Stinger, go to www.stinger.com/getstarted/

If, at any point, you have questions regarding your Stinger or a Stinger dealer, please contact your local distributor, or:

Head Office
Phone: +31 (0)252 - 41 80 95
Website: www.stinger.com
Email: mail@stinger.com

Welcome Stinger user

We appreciate you have chosen us for the protection of your performance vehicle. It's our goal and pleasure to help you enjoy driving in as much freedom and safety as possible, so please let us know if there is any way in which we can improve your Stinger experience.

We think you'll find the Stinger system offers the best all-around speedtrap protection out there, and combines that with the most discrete design as well as an intuitive user interface display. To maximize your driving pleasure, please take a little time to read this manual. A Stinger system can be used with either a Strip display (for optimum discretion and simplicity) or a View display (for maximum control), so make sure to read the section that shows your display of choice.

Thank you for going with Stinger!

Contents

1. Keeping your Stinger up-to-date

To optimally benefit from your Stinger system we suggest you use the Stinger Desktop application on your Mac or PC to check for updates at least every other month.

1. When you start using your new Stinger USB Key for the first time, please connect it to the USB port of your active Stinger and start your car in order to 'match' them.
2. Then connect the USB Key to your Mac or PC.
3. Launch the Stinger Desktop application on your Mac or PC. It will automatically check for any available updates to your Stinger. If you have not yet installed the Stinger Desktop application on your Mac or PC, you can download it from world.stinger.com/updates-and-software/
4. Follow the instructions of the Stinger Desktop application to load the updates onto the USB Key.
5. Next, take the USB Key to your car and connect it to the USB port of your Stinger.
6. Turn your Stinger on. The updates on the Strip display will start automatically after connecting. On the View display, follow the installation instructions. **Make sure the installation will not be interrupted!**
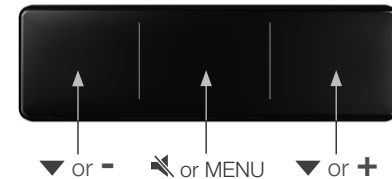
2. Stinger with Strip display

Contents

Note: Functionalities may differ depending on the software version, installed hardware modules, and/or the region you are in.

2.1 Basic use

Operating your Stinger system with a Strip display is elegant and simple. It will automatically turn on when you start your car.

Strip: Three touch areas

▼ or −   ◁× or MENU   ▼ or +

The Strip will blink green during start up. Your Stinger system is fully operational once the Strip is solid green.

The color-coded alerts make driving with Strip very

straightforward: Green means 'relax', yellow means 'suppressed alert' or a SafetySignal, red means 'full alert'.

2.2 Alert types

Depending on the hardware and software configuration of your Stinger system, it can protect against various types of speedtraps.

Stinger system with:	Protection against speed trap type:			
	Induction loops	Section	Laser based	Radar based
Laser only	✖	✖	✔	✖
Radar only	✔	✔	✖	✔
Laser and Radar	✔	✔	✔	✔

Speed

Red light

Section control

Lasergun

Side laser

On tripod

In car

Fixed radar

Radar gun

2.2a Spot

With the help of GPS technology your Stinger will alert you for fixed speedtrap installations (such as posts with induction loops, or radar installations) that we call 'Spots'. Stinger has mapped the locations of nearly all fixed speedtrap installations in many countries and distributes these to its users in the form of a so-called 'SpotList'.

Whenever you approach a SpotList location, your Strip will blink red and an audio alert will be played. The faster the audio alert beeps, the closer you are to the fixed speed trap.

Your Strip will blink red when you approach a SpotList location.

2.2b Section

Section Alerting will warn you for, and guide you through, section controls (a.k.a. *SPECS* or *automated VASCAR*). With section control, cameras (regardless of your speed) register your vehicle at point 'A' and then again at point 'B' (often at least a kilometer apart). A computer then automatically calculates your average speed between points 'A' and 'B' and issues a ticket if your average speed is higher than the posted speed limit.

With your Stinger, you will effortlessly be guided through section controls.

Approaching section

When you are approaching a section control, your Strip will blink yellow and your Stinger will play an audio alert.

Your Strip will blink yellow when you approach a section control location.

During section

When you enter the section control, you'll get another audio alert. As long as your average speed is under or on the speed limit, your Strip will keep blinking yellow.

However, anytime your average speed exceeds the speed limit, your Strip will blink red and an audio alert is played. Lower your driving speed to get your average down. When your average speed is back on the speed limit, the audio alert stops and the Strip will blink yellow again.

Within a section control your Strip will blink red any time your average speed exceeds the limit.

2.2c Laser

Your Stinger can expertly protect you against laser speedtraps*. In such traps, a handheld device or fixed installation is used to fire laser light towards your car to determine your speed.

Laser Alerting*

Your Stinger can instantly see a laser being fired at you, often already when cars ahead of you are being targeted, and immediately alert you with both audio and visual warnings:

When laser is detected, Strip will
blink yellow or red.

Sound

While getting an alert, you can mute the sound by tapping the middle touch area:

Volume down	Mute alert	Volume up

TIP: if LaserShield is up, 'mute' wil also instantly kill the LaserShield.

*Optional: available where allowed.

LaserShield®*

When being fired at with laser, your Stinger can instantly deploy a shield of invisible light: LaserShield®. It can (temporarily) make it virtually impossible for laser guns to measure your speed.

Your Stinger's LaserShield® is so advanced that even modern side-lasers (positioned next to the road, for instance installed into the guard rail) can be effectively blocked (optional Stinger Side Laser required).

When laser is detected and
LaserShield® is up, Strip will
light up solid red.

Shield-up time

LaserShield® will stay up for a default time of 4 seconds after the initial alert. After this so called Shield-up time runs out, the shield will automatically go down, allowing law enforcement a 'second shot' at measuring your speed. At speeds below 30 km/h or ca. 20 mph, the Shield will always be down.

TIP: the Shield-up time is adjustable in the Settings menu.

2.2d Radar

Radar based speedtraps determine your speed using radio waves. They can be part of a fixed installation such as in a cabinet next to or above the road, or mounted in or next to a police vehicle.

Fortunately, the unique radar antenna of your Stinger system can expertly find the radio waves emitted by any of these types of speed traps.*

When your Stinger recognizes a radar source, your Strip will blink red and will play an audio alert.

When radar is detected, Strip will blink red (or yellow when surpressed or considered false).

Sound
While getting an alert, you can mute or adjust the volume:


| Volume down | Mute alert | Volume up |

2.3 Erasing LaserShield and Laser/Radar Alerting

Different regions and countries often have their own, unique regulations when it comes to drivers being alerted for - or protected from - speed traps. Always thoroughly check local legislation before using your Stinger system. Please remember it is your responsibility to know, and abide by, the law.

You can erase Laser Alerting, LaserShielding and Radar Alerting in order to stay in compliance with local legislation whenever entering a country or region that limits your freedom to protect yourself from speed traps and other surveillance.

Erasing on your Strip is achieved by simultaneously holding **-** and **+** for around 5 seconds. After you have heard the "swiping" sound as a confirmation, the above mentioned functionalities have been deleted from your Stinger system.

A new software download (available where allowed) and installation are required in order to re-install functionalities.
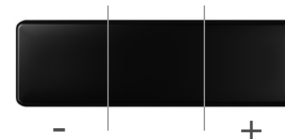
Simultaneously hold both - and +
for around 5 seconds to erase functionalities.

*Optional: available where allowed.

2.4 SafetySignals

Your Stinger incorporates an ingenious safety system. At great distances it picks up SafetySignals that can be transmitted around work zones, school zones and emergency vehicles. These signals will be transcoded in real-time and trigger the appropriate alert. This way your Stinger can alert you up to a kilometer ahead for special traffic situations. Depending on the application, there are several ways a SafetySignal can be generated.

Cars equipped with Stinger Laser can automatically and instantly alert other - Stinger Laser equipped - cars to dangerous situations such as heavily braking traffic.

When a SafetySignal is being received, Strip will blink yellow.

2.5 Suppression of false alerts

SpeedSense

This function eliminates unneccessary alerts when driving below a certain speed (pre-set at 30 km/h). To change this value, check chapter *2.7 Changing Settings.*

FalseList*

While getting a false alert, hold the **+** area on the right of the Strip for around 3 seconds to store that specific signal at that specific location in the FalseList of your Stinger, or just wait for the system to auto learn. Either way, your Stinger system will get quieter and quieter over time.

Hold the + for around 3 seconds to immediately add a false alert to the FalseList

2.6 Switching off your Stinger

Your Stinger system will automatically turn on and off along with your car. To manually switch it off, press the MENU button until you hear 'goodbye' or the swipe sound.

ATTENTION: Your Stinger will not be turned on automatically upon starting your car if you have switched off the system manually. You will have to manually turn it back on by touching the MENU button.

2.7 Changing Settings

The Strip menu is voice guided. To enter it, just touch the **MENU** button area (except when your Strip is displaying an alert). The Strip will then light up white.

VALUE **DOWN** | **MENU** | VALUE **UP**

By repeatedly pressing the **MENU** button you can select the various **Settings**, as indicated by the voice guidance. The order of the Settings and the accompanying **Options** are in the overview on the right.

With the **DOWN** and **UP** buttons you can cycle through the **Options** for each setting.

After changing a setting, press the **MENU** button again to confirm and go to the next setting.

After about 8 seconds of inactivity, or at the end of the menu settings, you will automatically leave the Settings Menu.

The Settings menu

Settings	Options
Radar X	On or off
Radar K	On or off
Radar low power only	On or off
Radar Ka	On or off
Automatic Falselist	On or off
Laser mode	Receive only (only Laser Alerts, no Shield) or Receive and Shield.
Shield-up time	Number of seconds the LaserShield will remain up when triggered.
Side protection	When Side Laser Protection is installed, you can turn the Side-Shield on or off.
Units	Kilometers or miles.
SpeedSense	Set the speed under which your Stinger won't play audible alerts.
Brightness	Set the brightness of the Strip's backlight.
Dark mode	Turns of the backlight of the Strip except for when getting an alert.
Start-up sound	Enable or disable the start-up and the shutdown sound.
Versions	Tells the installed software version(s).

Note: settings may differ depending on the software version, installed hardware modules, and/or the region you are in.
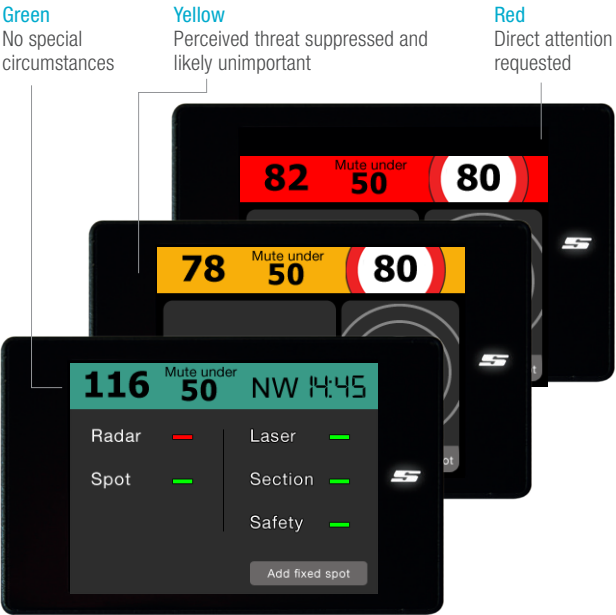
3. Stinger with View display

Contents

Note: Functionalities may differ depending on the software version, installed hardware modules, and/or the region you are in.

3.1 Basic use and Settings

Your View display provides fast and full control over your Stinger. It will automatically start up each time you turn on the ignition of your car and shut down when you turn the ignition off again. Clear, color-coded alerts make driving with your Stinger pleasurable and straightforward: Green means 'relax', yellow 'suppressed alert' and red 'full alert'.

Green
No special circumstances

Yellow
Perceived threat suppressed and likely unimportant

Red
Direct attention requested

After start-up your View will take you to the Pilot screen: the standard operating screen.

For any further interaction you can use the touch display. At any time, pressing the Stinger S-key will take you directly to the Main menu.

In the Main menu you can proceed to the Settings menu where you can change settings such as volume, alert behavior, brightness, time, language, kilometer/miles, side buttons and SpeedSense.

From the Main menu simply press the 'Pilot' icon to return to the Pilot screen.

───────── **Pilot screen** ─────────

▬ Function active
▬ Function not active
▬ Functionality maybe reduced by settings, software or hardware

S-key
Access to main menu

SpeedSense
(See: *3.4 Suppression of false alerts*)

Your current speed
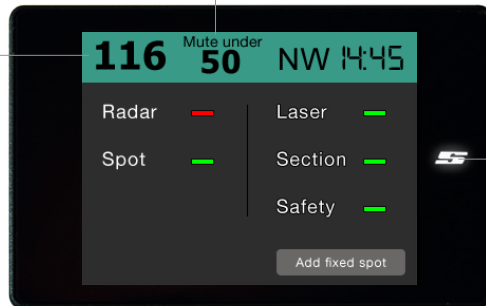
───────── **Main menu** ─────────

Side buttons
'Hidden' keys for which you can select the functions in the Settings menu. Default are volume up and down.

3.2 Alert types

Depending on the hardware and software configuration of your Stinger system, it can protect against various types of speedtraps.

Stinger system with:	Protection against speed trap type:			
	Induction loops	Section	Laser based	Radar based
Laser only	✕	✕	✓	✕
Radar only	✓	✓	✕	✓
Laser and Radar	✓	✓	✓	✓

Speed

Section control

Lasergun

On tripod

Red light

Side laser

In car

Fixed radar

Radar gun

3.2a Spot

With the help of GPS technology your Stinger will alert you for fixed speedtrap installations (such as posts with induction loops, and radar installations) that we call 'Spots'. Stinger has mapped the locations of the vast majority of fixed speed trap installations in the world and distributes these in the form of a so-called 'SpotList'.
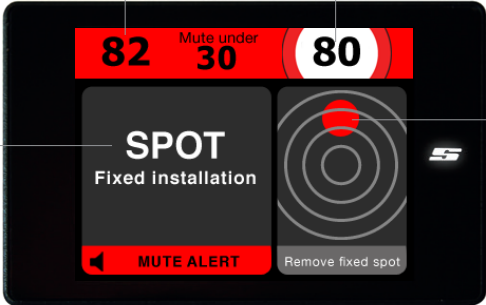
Whenever you approach a location that's in the Stinger SpotList, your View will show you the following type of alert screen:

Spot alert
Alerts will start ca. 15 seconds ahead of a spot.

Your current speed
Your GPS speed (usually more accurate than that of the car's speedometer).

Limit
The stored speed limit for that location.[1]

Target view
Indicates the relative proximity of the fixed installation.

82   Mute under 30   80

SPOT
Fixed installation

MUTE ALERT   Remove fixed spot

[1] Stored limit might not always correspond with the actual speed limit

3.2b Section

Section Alerting will warn you for, and guide you through, section controls (a.k.a. *SPECS* or *automated VASCAR*). With section control, cameras (regardless of your speed) register your vehicle at point 'A' and then again at point 'B' (often at least a kilometer apart). A computer then automatically calculates your average speed between points 'A' and 'B' and issues a ticket if your average speed is higher than the posted speed limit.

With the clear information of your View, you will effortlessly be guided through section controls.

Approaching section

Alert
You will get an initial alert when approaching the section.

Limit
The set speed limit for the section. You can change the limit set by your Stinger by pressing the speed limit sign.
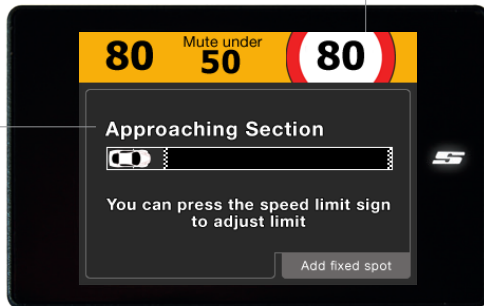
During section

Average speed
Your real-time average speed through the Section so far.

Section length
Your position within the Section shown graphically and in numbers.
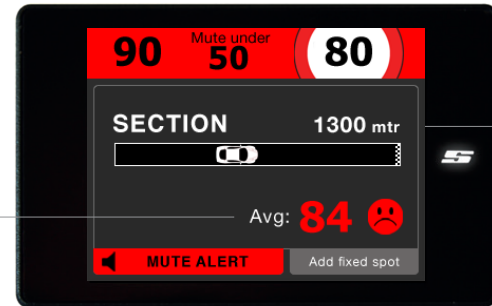
End of section

Average speed
Your final average speed over the completed Section. If you have complied with the speed limit, a green 'smiley face' will be shown. If you have been speeding, a red 'sad face' will be shown and you'll hear the sound of a camera shutter.
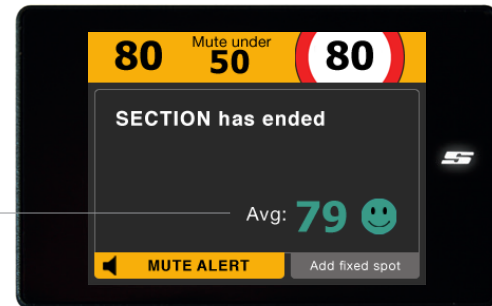
3.2c Laser

Your Stinger can expertly protect you against laser speedtraps*. In such traps, a handheld device or fixed installation is used to fire laser light towards your car to determine your speed.

Laser Alerting*

The Laser Alerting functionality allows your Stinger to instantly see when laser hits your vehicle, often already when cars ahead of you are being targeted. In your car you will be alerted with clear visual and audible warnings.
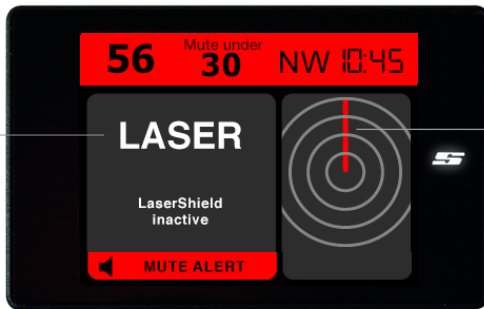
———— **Laser Alerting** ————

Alerts
The moment your Stinger identifies laser light it will display an alert like below. Even the type of laser device can be shown.

Target view
A visual representation of the beam indicating the direction of the lasergun.**

LaserShield®*

When being fired at with laser, your View can instantly deploy a shield of invisible light: the LaserShield®. It will (temporarily) make it virtually impossible for laser guns to measure your speed.

Your Stinger's LaserShield® is so advanced that even modern side-lasers (positioned next to the road, for instance installed into the guard rail) can be effectively blocked (optional Stinger Side Laser required).

———— **LaserShield®** ————

Shield-up time
Upon the initial alert, the LaserShield® will remain active for a number of seconds that can be set under *Settings > Laser > Shield-up time*. After that Shield-up time the shield will automatically go down, allowing law enforcement a 'second shot' at measuring your speed. At speeds below ca. 30km/h the shield will always be down.
Tip: Touching (near) the Shield icon immediately drops your LaserShield®.
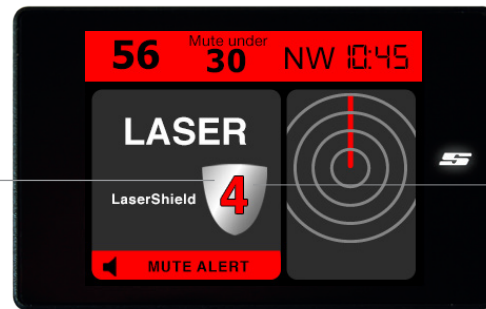
Shield active indicator
Showing countdown timer. Also the 'touch-to-kill' area.

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* Optional: available where allowed.
** Requires installation of front and rear Lasers on your car.

3.2d Radar

Radar based speedtraps determine your speed using radio waves. They can be part of a fixed installation such as in a cabinet next to or above the road, or mounted in or next to a police vehicle. Fortunately, the unique radar antenna of your Stinger system can expertly find the radio waves emitted by any of these types of speed traps.*

The extreme accuracy of your Stinger is also evident in the Spectrum Analysis screen. Go to 'settings' to select it as your default screen or to define it as a toggle key.

Radar Alerting

Band and Frequency
Name of the frequency band (such as K and Ka) as well as the exact frequency.

Target view
Indicates whether radar originates from ahead, the side, or the rear.**

Signal Strength
Signal strength indication displayed on a scale of 1 to 10. The higher the strength, the closer the relative vicinity of the radar.
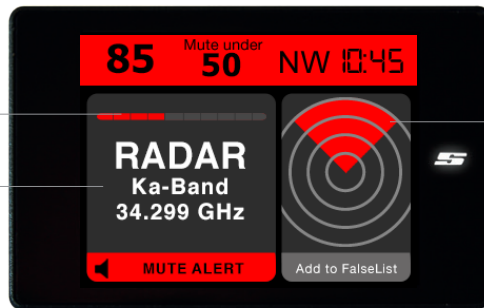
Spectrum Analysis

3D Graph
Analysis of the X, K and Ka bands can be shown simultaneously. The horizontal axis indicates the relative frequency, the vertical axis the relative signal strength.

* Optional: available where allowed.
** Requires installation of front and rear radar antennas on your car.

3.3 Erasing LaserShield® and Laser/Radar Alerting

Different regions and countries often have their own, unique regulations when it comes to drivers being alerted for - or protected from - speed traps. Always thoroughly check local legislation before using your Stinger System. Please remember it is your responsibility to know, and abide by, the law.

You can erase Laser Alerting, LaserShielding and Radar Alerting in order to stay in compliance with local legislation whenever entering a country or region that limits your freedom to protect yourself from speed traps and other surveillance.

Erasing is achieved by first pressing the 'S' key. In the subsequent screen simply choose the ERASE button. This will render your Stinger incapable of Radar Alerting, Laser Alerting, LaserShield®, and - depending on region - SpotList Alerting.

A new software download (available where allowed) and installation are required in order to re-install functionalities.

3.4 Suppression of false alerts

SpeedSense
This function offers an easy way to eliminate unneccessary alerts. Simply activate a threshold speed under which your Stinger will automatically mute all alerts. Just press the *Mute Under* area to choose a speed threshold.

FalseList*
Whenever you receive a false alert, tap the *Add to FalseList* area to immediately store that specific signal at that specific location in the FalseList of your Stinger, or just wait for the system to auto learn. Either way, your Stinger system will get quieter and quieter over time.

SpeedSense
Example: You are driving 65 km/h and therefore below the SpeedSense threshold of 80 km/h. A Radar Alert will therefore stay muted.

FalseList
If you prefer for a specific alert to stay muted subsequent times you drive by its location (irrespective of the speed you will be going), press the *Add to FalseList* area.
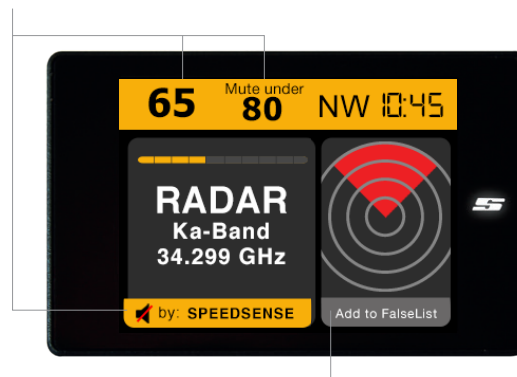
* Optional: available where allowed

3.5 SafetySignals

Your Stinger incorporates an ingenious safety system. At great distances it picks up SafetySignals that can be transmitted around work zones, school zones and emergency vehicles. These signals will be transcoded in real-time and trigger the appropriate alert. This way your Stinger can alert you up to a mile ahead for special traffic situations. Depending on the application, there are several ways a SafetySignal can be generated.

Cars equipped with Stinger Laser can automatically and instantly alert other - Stinger Laser equipped - cars to dangerous situations such as heavily braking traffic.
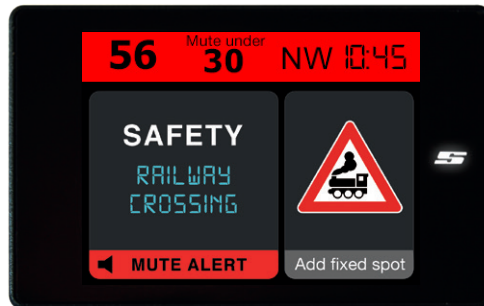
3.6 PoliceCheck

This unique Stinger feature can help you dispute unjust or incorrect traffic citations. With PoliceCheck switched on *(Main Menu > Settings > PoliceCheck)*, your Stinger will automatically log encounters of radar, laser and other types of speedtraps. Of those moments it will also log additional data, including essential details such as time, location, your speed, and type of laser or frequency of radar device. That enables you, for instance, to later check if the radar in question has been operating within legal bandwidths.

In the Stinger Desktop application you can retroactively look up, store and print all the collected data.

3.7 Mileage Log

To assist with someone's hourly billing or travel cost administration, and in some regions even to help avoid extra governmental taxes, your Stinger can keep detailed track of all your business and private car travel.

At the start of any trip you simply choose the trip type (Business, Private or Commute) or simply let it default. To register trip 'interruptions' like gas and food stops you just choose 'Pitstop' when resuming your trip.

With the supplied Stinger USB Key it is simple to transfer your MileageLogging information to the Stinger Desktop application on your Mac or PC and further manage the data.

Tip 1: In order to safeguard your Mileage Log data, we advise you to upload it to your Mac or PC on a monthly basis.

Tip 2: If you leave your USB Key hooked up to your Stinger in your car, a back-up of your Mileage Log and PoliceCheck data will automatically be saved on your USB Key.
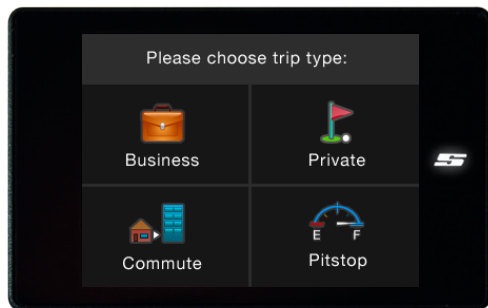
3.8 Switching off your Stinger

Your Stinger will automatically turn on and off along with your car. If you want to manually switch it off, press the Stinger 'S' and press 'OFF'.

ATTENTION: Your Stinger will not be turned on automatically upon starting your car if you have switched off the system manually. You will have to manually turn it back on by pressing the Stinger 'S'.

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speedtrap protection for high-performance cars