Stinger system installation manual

Laser-only

North America
SSIM-L-NA-v3.4-24 © Stinger 2024

Legality

Many countries in the world have their own, unique regulations regarding drivers being alerted to, and protected from, speed traps. Depending on the country, citizens may or may not have the freedom to receive information concerning speed traps and to be alerted accordingly. The rules regarding citizens having the liberty to freely receive the information from laser speed trap guns often differ 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 particular 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 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 erase 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 on the Strip is done like this: simultaneously hold ‘-’ and ‘+’ for 3 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 plug any third party equipment into any of the ports of your Stinger system, and do not connect any of our Lasers to third party equipment. 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.

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 it 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 lens!

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.

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.

For optimal performance of the Stinger System it’s important to carefully follow the directions provided in this installation manual. For questions please call Stinger technical support at the number shown below:

Stinger Worldwide +31 252 - 41 80 95

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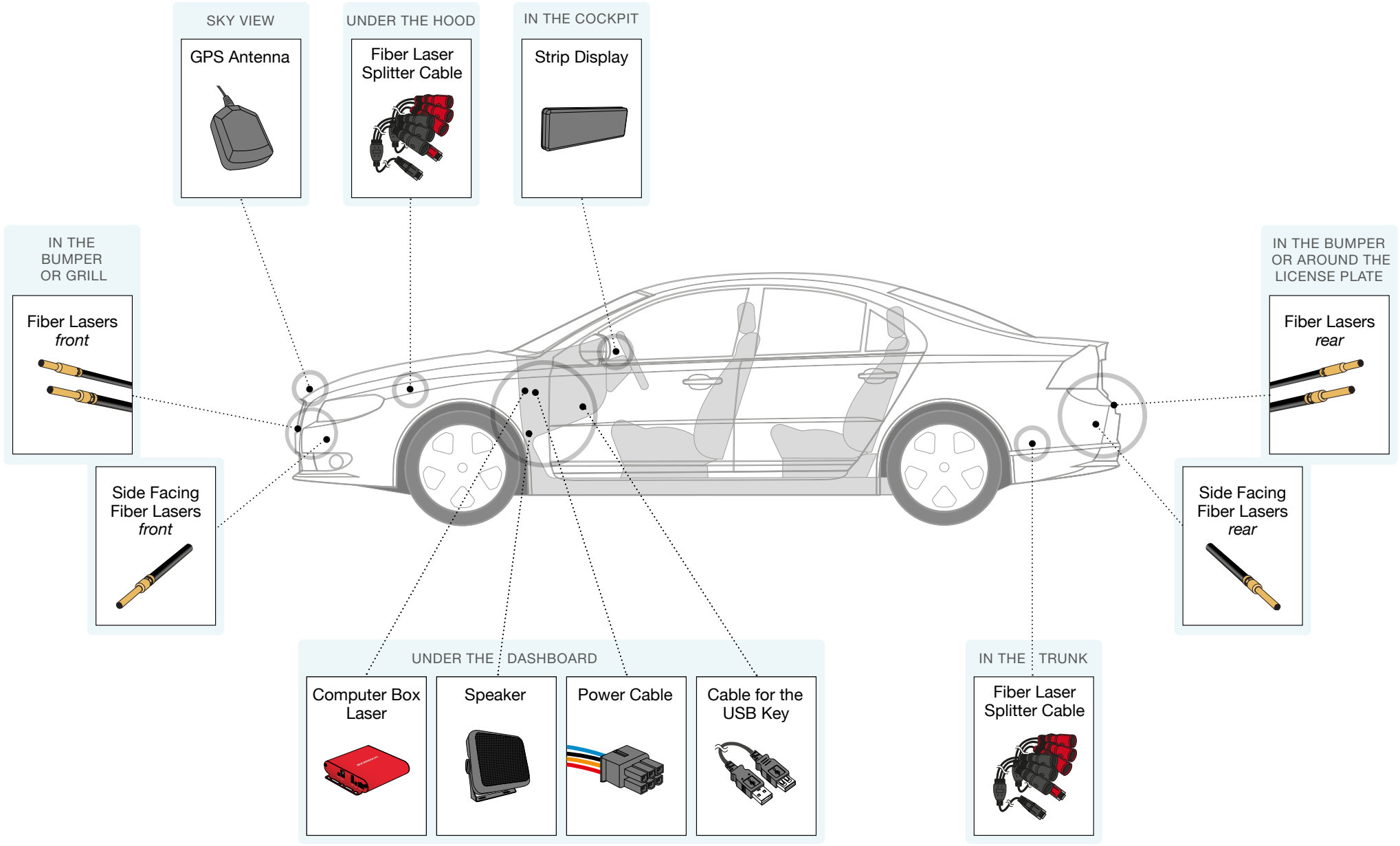
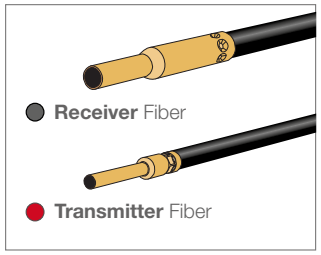
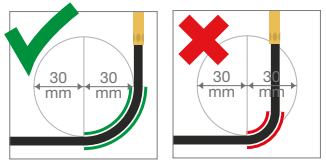
SUGGESTED MODULE PLACEMENT

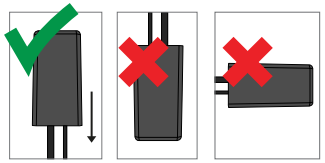


1 Fiber Lasers

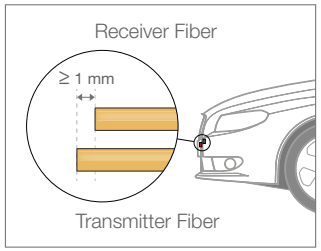




Minimum bend radius of the Fiber cables

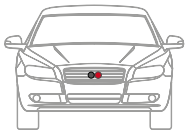


Install Laser Fiber boxes with cables downwards



If laser detection is combined with Shielding, Stinger's extraordinary Fiber Laser must be placed in pairs (consisting of a Fiber Laser Receiver and a Fiber Laser Transmitter). We refer to them as 'pairs' because a Receiver and Transmitter should be placed in each other's vicinity. (Receivers can be placed on their own, without any Transmitters, in case of a detection-only setup.)

- Each pair of Fibers (one Receiver, one Transmitter) should be positioned near each other. Preferably, not less than 0.5 inch, and not more than 8 inches apart. These are indications for optimal performance, but there's not necessarily a hard cut-off point.
- Fibers should be facing straight forward over the road, with an uplift of about 5 degrees: a mounting angle of anywhere between 0 degrees and 10 degrees is good, but make sure the Fibers are never aimed down (keep in mind the possible driver and passenger influence on the balance of the car) as this can reduce performance.
- Make sure a Fiber Laser Transmitter is never mounted in a way that its laser signals can hit a nearby part of the vehicle (such as e.g. an ornament, emblem, or grill blade or such), as this can cause interfering reflections on the Receiver.
- Fibers can be mounted with the aid of e.g. heat shrink tubing, glue (**not hot glue**), or preferably into a drilled hole. Both the Receiver and the Transmitter require a 3.2 mm hole.
- Place the Transmitter **at least 1 mm** further to the front than the Receiver.



1x Receiver, 1x Transmitter

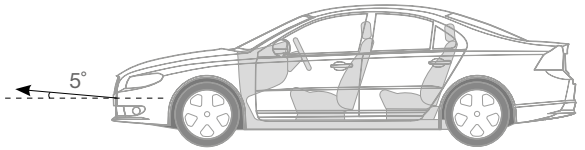
2x Receiver, 2x Transmitter

3x Receiver, 3x Transmitter

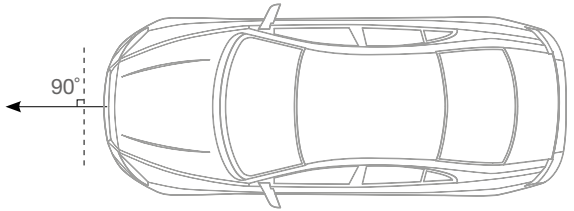
1a Protecting the front of the car

In case of one pair of Fibers (or of a single Fiber Receiver), make sure it's placed in the center of (the front of) the car laterally, at a height that is generally directly above the license plate area (see example). This should adequately protect the entire center mass section of the car.

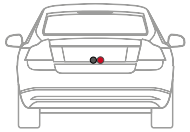
- For more complete coverage of the entire front of the car, we recommend placing two pairs of Fibers, whereby the pairs should be evenly divided over the front of the car (laterally). In other words: one pair at circa 1/3 of the width of the vehicle and the other pair at 2/3 of the width with a maximum distance of 23 inches between the two pairs of Fibers (see example).
- For maximum protection, including for trucks and larger cars, three pairs of Fibers can be placed. In this case, make sure one pair of Fibers is placed in the center front of the car. Additionally, one pair of Fibers should be placed close by each headlight unit. Preferably directly on the sides of the headlights that are nearest to the center of the car, or directly underneath the headlights (see example).



Front Laser Aim slightly upwards

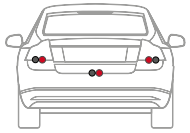


Front Laser Perpendicular to the front of the car



1x Receiver, 1x Transmitter

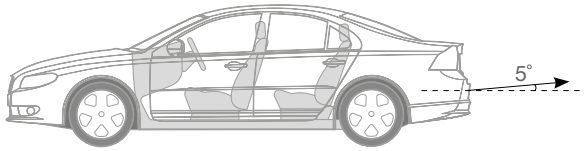
2x Receiver, 2x Transmitter



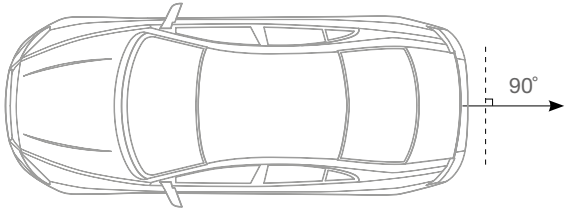
3x Receiver, 3x Transmitter

1b Protecting the rear of the car

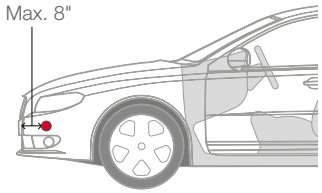
A single pair of Laser Fibers (or for detection-only just a Laser Fiber Receiver) should be mounted as close as possible to the license plate, and can usually even be placed in the (horizontal) center of the car under the rear bumper or spoiler. Additional Lasers may be placed closer to the outsides (see examples).



Rear Laser Aim slightly upwards



Rear Laser Aim straight backwards

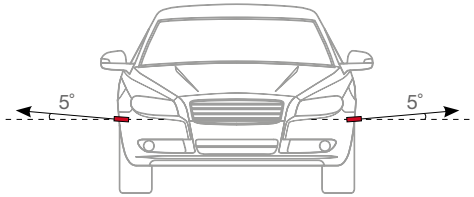


Side Laser Mounted near front of the car

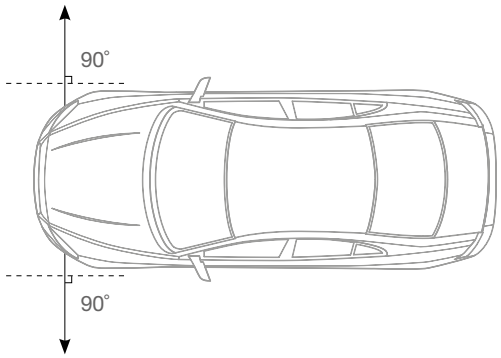
1c Protecting the side of the car

For protection against automated laser speed traps placed on the side of the road, side facing Fibers can be installed.

- Drill a 2.6 mm hole in the sides of e.g. the bumper, spoiler, the license plate holder of the car, not more than 8 inches from the very front (or very rear) of the vehicle.
- The Lasers need to face in a 90 degree angle looking to the side of the road, with a circa 5 degree uplift (see examples).



Side Lasers Must be angled sideways and aimed slightly upwards

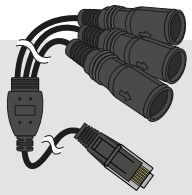


Side Lasers aim straight sideways

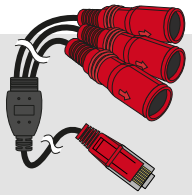
2 Computer Box Laser

The Computer Box must be placed in a dry and protected location such as in or under the dashboard.

- Mount the Computer Box with e.g. tie-wraps or Velcro.



Laser Receiver Splitter Cable in Rx port



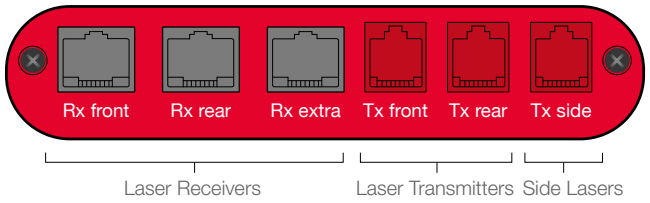
Laser Transmitter Splitter Cable in Tx port

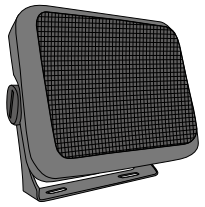
Never cut any part of the splitter cables.

3 Connecting the Fiber Lasers

The Tri-cords connect the Laser Fibers to the Computer Box. Make sure the cables don't touch any moving or hot parts, or interfere with car operation and maintenance.

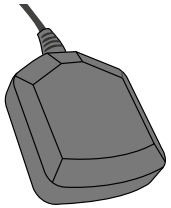
- Take the adhesive heat shrink tube (supplied) and pull it over one of the mini-DIN connectors.
- Connect the male mini-DIN connector of the Lasers to the same color female mini-DIN connector port of the Tri-cord.
- Position the heat shrink tube over both connectors. Heat it gradually and evenly with a heat gun until it's shrunk tightly and uniformly around the connectors.
- Connect the other end of the Tri-cords to the matching color port of the Computer Box. Make sure you connect the front, optional rear, and optional side Laser Tri-cords to the corresponding ports in the Computer Box.





4 Speaker

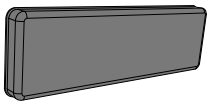
Place the speaker in an open area, but preferably out of sight (e.g. under the dashboard) and connect it to the Audio port of the Computer Box.



5 GPS Antenna

For best GPS reception place the GPS antenna outside the cabin of the car, for instance in a protected space at the top end of the hood or in the bumper. The GPS antenna must face up – towards the sky – and should be covered by plastic, but not metal.

- Connect the cable of the antenna to the GPS port of the Computer Box.
- Make sure the GPS antenna is mounted in a dry location and never sits in a puddle of water.



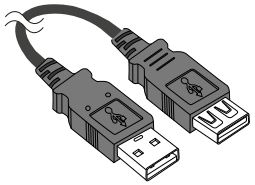
6 Strip

Place the Strip display at a convenient location for the driver to see and control.

- The Strip can be placed either horizontally or vertically. If placed horizontally, make sure the '+' on the sticker is to the right (and the cable on the back is on top).
- Connect the Strip to the Display port of the Computer Box.

Installers:
Please first confer with the customer to determine the desired position for the Strip display in the 'cockpit'. We generally advise to place the display so that it will be easily visible for – and within comfortable reach of – the driver.

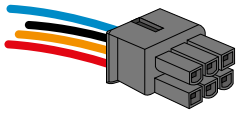
7 Cable for the USB Key



The Stinger system is updated with the Stinger USB Key and therefore it is important to choose a convenient place to install the cable.

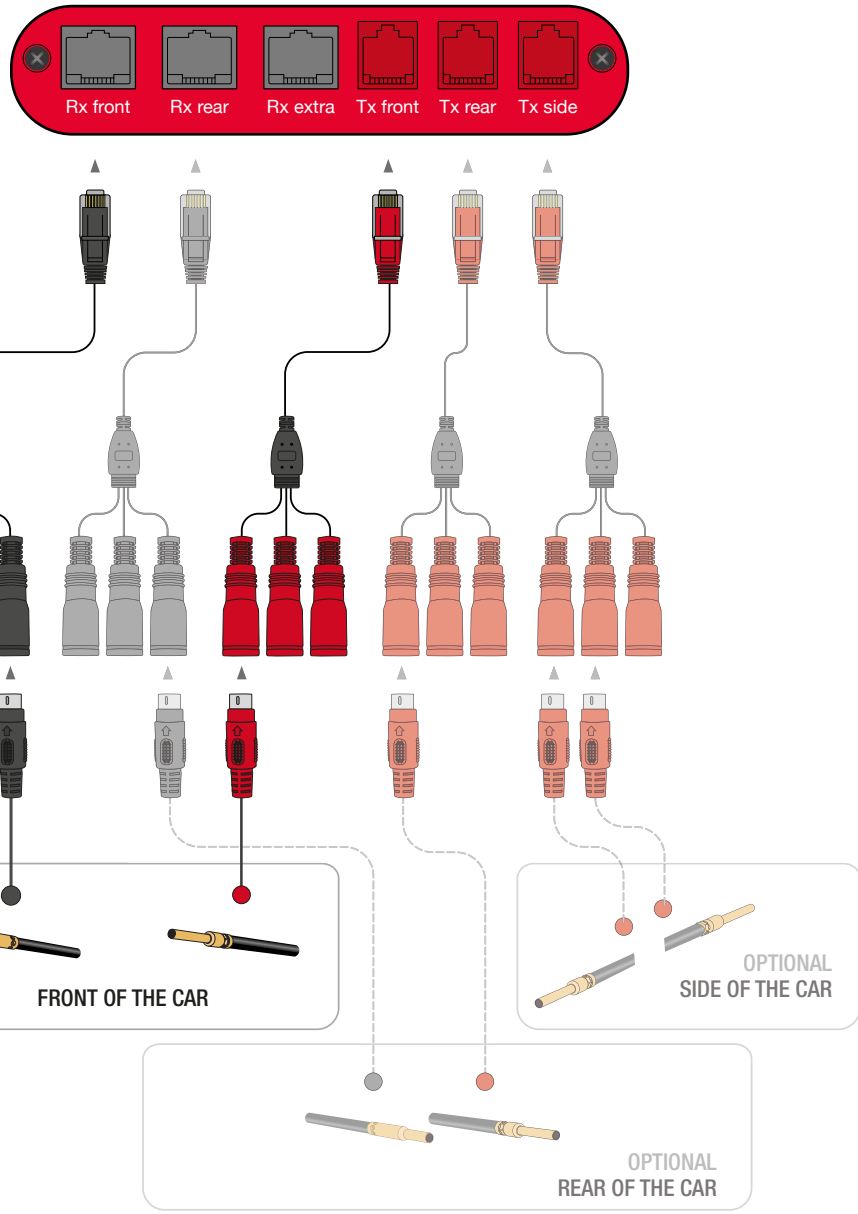
- Place the cable with the female connector where it is easily accessible. For instance in the glove compartment or a compartment in the console.
- Connect the male plug of the cable to the USB port of the Computer Box.

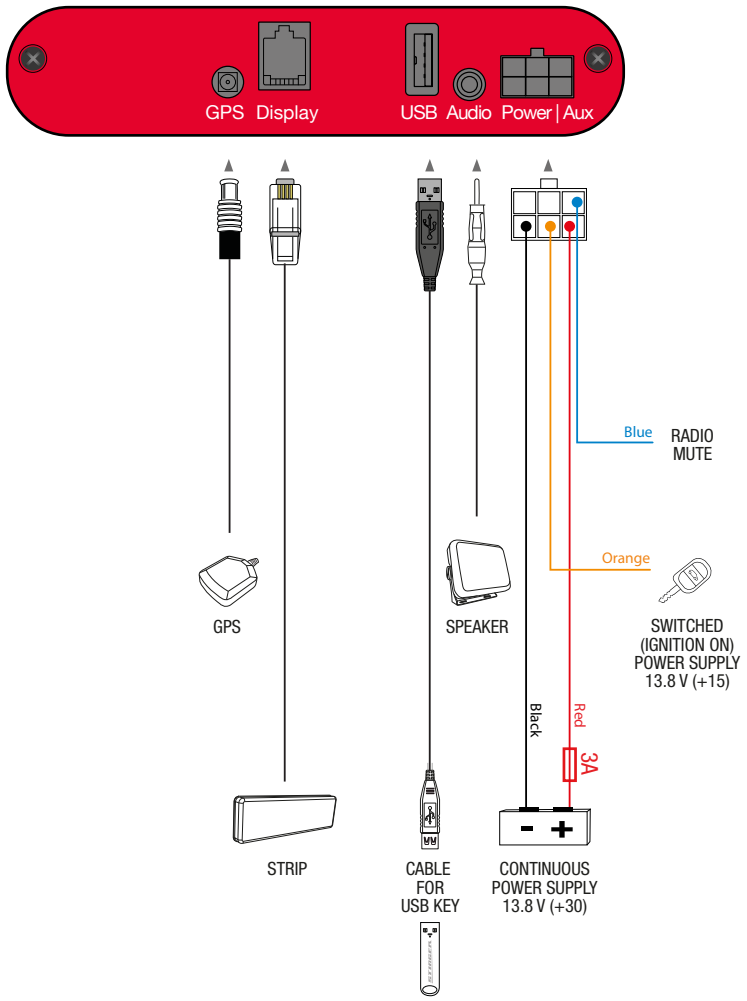
8 Power Cable



- Connect the black wire to a ‘clean’ metal ground-point of the car chassis, or directly to the negative pole of the car battery.
- Connect the orange wire to the ignition-actuated 13.8V battery power (+15).
- Connect the red wire directly to the (continuous) 13.8V battery power (+30). Make sure the connection is on the battery, or as close to it as possible.
- Connect to a group of at least 10A, the Stinger power supply holds a 3A fuse.
- Optional: Connect the blue wire to the radio mute option of the car stereo system.

WIRING DIAGRAM





Contact & Support Information

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

United States & Canada

Carcomputer USA, Inc
(858) 230-6665
stinger.com/us
stinger@carcomputerusa.com

Worldwide

Stinger
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FCC Information

FCC compliance 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.

Modification of this device may void the user's authority to operate the equipment under the FCC rules.

Canadian regulatory statement
This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC ID: 2ABKP-VIP201412

The relevant modules of this product comply with U.S. 21 CFR 1040.10 with deviations pursuant to Laser Notice no. 50 and with EN IEC 60825-1 (2007).