

1. Using bolts, nuts and washers, mount the sensors to supplied L-shaped brackets, and tighten them firmly.
2. Using the nuts and bolts supplied mount the L-shaped bracket together with sensor to a solid surface of vehicle grille or bumper.
3. Use the supplied bubble level to check horizontal and vertical alignment of each sensor.

PLAN YOUR LASER INTERCEPTOR INSTALLATION CAREFULLY!

It is highly advisable to check for entry points from engine compartment into drivers' cabin **before** installation of sensors. For rear sensor installation, check the routing access points behind license plate, or lights.

If you are unable to find entry points from the engine bay into the drivers cabin, you will need to drill a hole of at least $\Phi 5$ mm (13/64 in) in order to route cable into the cabin (if installation is done by a professional installer, please consult with your customer before drilling any holes).

Apply rubbing alcohol, if needed, where the cables pass through the vehicle firewall so that you can easily pull cable into cabin, and prevent possible damage to any parts).

After installation is a completed use cable tie to fasten the sensor cables to a solid surface, and preferably locate them away from hot objects

POSITIONING SENSORS

- Install each sensor mid-way between the centre of the vehicle and the right and left hand sides of the vehicle.[refer to image: Installation front view]
- When using the bubble level, ensure that each sensor is parallel with them.
- Vehicle must be positioned on flat surface in order to position sensor horizontal with the road.
- Make sure that sensor has an unobstructed “view” to the road, so that the unit can function properly. Do not install sensors behind any solid surface that would block reception or transmission to or from the sensors
- If you need to install sensors behind the grille, please refer to the ADVANCED SENSOR INSTALLATION section, in order to position the sensors correctly.
- For optimal performance, sensors need to be facing straight forward, or backward (if using rear sensors).

IMAGE: INSTALLATION SIDE VIEW

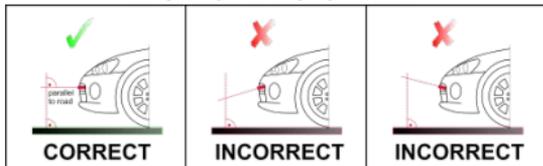


IMAGE-INSTALLATION TOP VEIW

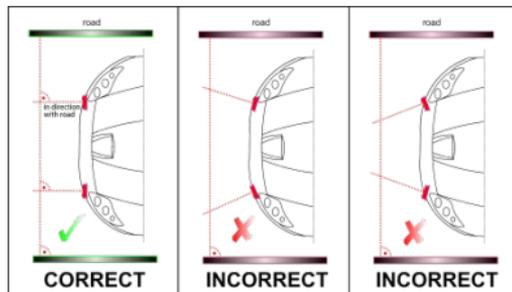
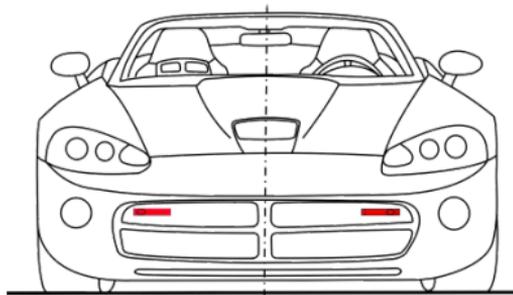
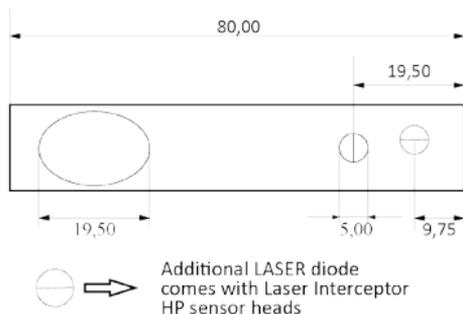


IMAGE: INSTALLATION FRONT VIEW



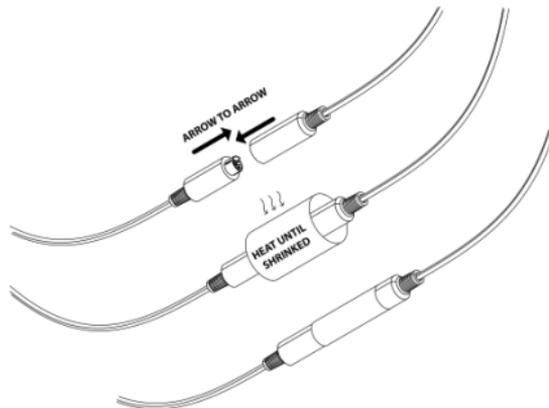
POSITIONING SENSOR BEHIND FRONT GRILLE

Should you need to install sensors behind the front grille of the vehicle, it is crucial that the sensors are positioned properly. The receiver lens and transmitter have an unobstructed view ahead. Image below shows positions of both receiver and transmitter component positions. The ellipse represents the receiving sensor lens, of 19,5 mm (0,77 in.) across, while the circle/s with a diameter of 5 mm represents the location of the laser diode transmitter/s.

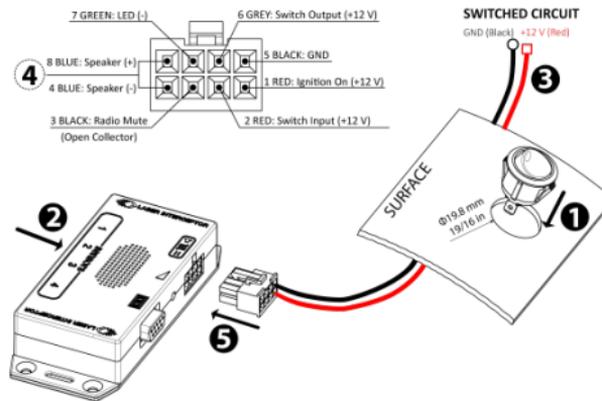


SECURING CONNECTORS WITH SHRINK TUBE

After you are sure that you installed all components properly, and inspected that everything works, it's advisable to use supplied heat shrink tube to help protect connectors against water, moisture, dust etc.



CONTROL UNIT INSTALATION OVERVIEW

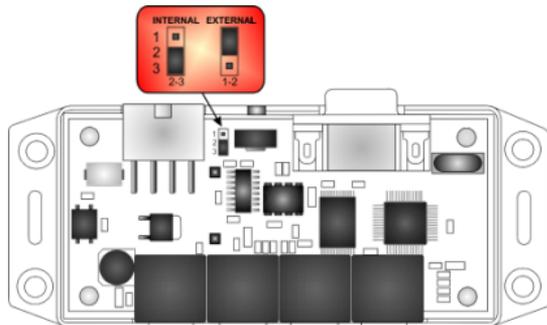


IMPORTANT

Plan your installation carefully. Find appropriate place to position the ON/OFF switch – preferably somewhere near drivers’ reach. Make sure that after routing the wire harness, from 12 V switched circuit, up to the control unit power plug that you have enough cable to connect the wiring harness to the switch.

- Find an appropriate place for drilling the hole for installation of the power switch. It’s good to have power switch installed within the drivers reach. Drill a hole of minimum of $\Phi 20.5$ mm (19/16 in), so that the switch can fit tightly into the hole. Position the switch so that you can easily see the LED. The built in LED will illuminate once the ignition is switched on. During an alert, the LED will blink, until you turn off your device or the alert ceases.
- Position the control unit inside the cabin, under the dashboard, so you can easily connect the sensor cables that you previously routed. Connect the front sensors into ports 1 and 2 and the rear sensors into ports 3 and 4. Ensure you have access to the RS232 port also.
- Connect the black wire from wiring harness to negative ground power supply, or to the vehicle chassis. Locate access to accessory power source, and connect the red wire from wiring harness to a +12V SWITCHED circuit power supply (usually car radio power supply). [refer to the connector wiring diagram on the left]
- OPTIONAL: To automatically mute the radio audio during an alert, connect blue audio wires to audio mute input of your car radio. You can use an external speaker for audio output, as shown on the next page.
- Plug in power connector until it “locks”.
- Power on your Laser Interceptor device!

SPEAKER JUMPER SETTINGS



NOTE!

Standard position of the speaker jumper has pins 2 and 3 connected.
In order to use external speaker for audio output, change the speaker jumper position so that it connects pins 1 and 2.
Refer to image above!

FIRMWARE UPDATING; USING ADVANCED CONTROLS

From time to time, please refer to our website www.laser-interceptorusa.com in order to find latest updates for voice packs and firmware.

To keep your unit up to date you will need to download Laser Interceptor Communicator software. This software can be downloaded from our website free of charge for all Laser Interceptor users.

To connect the control unit with your PC, use a Serial cable or USB to RS232 Serial cable (sold separately).

Once you have selected and saved your settings using Laser Interceptor Communicator and your device is installed then Operation of your Laser Interceptor is automatic after power up, you can now enjoy your experience on the road.

When switched on the control unit will check that all components of device are working properly, and you will receive “Welcome” sound, which means that everything works properly. All sensors will work in parking mode until the predefined time expires. After the parking aid time expires, all sensors should start operation in defense mode.

Upon detecting a signal, you will receive an alert that identifies the type of device, and broadcasts a warning to you to decrease your speed. The sensors will automatically start running defense algorithms. Slow down to the posted speed limit and turn off the Laser Interceptor if it is not automatically set to do so.

After a while power on device back again (if necessary), in order to stay safe on the road.

OPERATING WAVELENGTH:	905 nm
OPERATING TEMPERATURE:	-25°C +80°C -13°F +176°F
POWER CONSUMPTION:	Dual: 135 mA – 560 mA Quad: 185 mA – 611 mA
SENSOR DIMENSIONS:	80,3 mm (W) x 15,3 mm (H) x 22,7 mm (D) 3,16 in (W) x 0,6 in (H) x 0,89 in (D)
CPU DIMENSIONS:	100 mm (W) x 25 mm (H) x 51 mm (D) 3,93 in. (W) x 0,98 in. (H) x 2,0 in. (D)
SENSOR CABLE LENGTH:	1,5 m + 4,5 m 4,92 ft. + 14,76 ft.
WIRING HARNESS LENGTH:	1 m 3,28 ft.
EXTENSION CABLE LENGTH (OPTIONAL):	2 m 6,56 ft.

CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CONFORMANCE WITH INTERNATIONAL STANDARDS

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IEC/FDA CLASS 1 LASER



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CLASS 1 LASER PRODUCT

This product complies with IEC 60825-1:2007-03 Ed. 2.0.
This product complies with 21CFR Subchapter J Parts
1040.10 and 1040.11 except for deviations pursuant
to Laser Notice No.50 dated June 24, 2007.