



INSTALLATION GUIDE

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IMPORTANT READ BEFORE PROCEEDING

The Spotto Blind Spot Radar should only be installed by a qualified or suitably competent and experienced automotive technician.

The steps outlined herein are only a guide to assist in the installation of the Spotto system. It is assumed that the technician has sufficient knowledge in the dismantling / reassembly of the vehicle and the wiring and installation of automotive electrical components.

It is the technician's responsibility to ensure that the whole of the electrical installation, and of the Spotto system, must be provided in accordance with this guide and to the requirements set down by any applicable Australian Standards, Codes of Practice and Australian Design Rules.

The Spotto Radar sensor must not protrude past the extremities of the vehicle or cause the overall width of the vehicle to exceed 2.5m.

If you have any questions regarding the Spotto system, or the installation of the system, please contact our support team for assistance. Do not proceed if you are unsure.

Call 1-800-227548

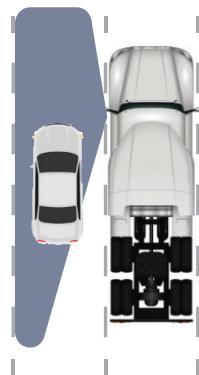
(Mon - Fri 8:30 - 17:00 AEST)

1 System Overview

To reduce the risk of collisions with objects in the truck's blind spot, the Spotto Blind Spot Radar monitors the area along the left side of the truck and will warn the driver with both visual and audible alerts to objects in the detection zone.

The system consists of the Radar sensor, mounted to the passenger side of the truck, the Blind Spot Indicator fitted at the passenger-side A-pillar, for visual alerts, plus a buzzer installed under the dash which delivers the audible warnings.

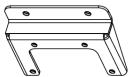
The truck's driving speed is obtained via GPS technology and allows for 2 operational modes - low speed urban mode with Turn-Assist below 30km/h and normal driving mode above 30km/h.



2 What's in the box



Radar Sensor



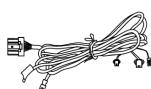
Sensor Mounting Bracket



Control Box



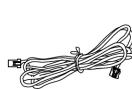
GPS Receiver



Main Harness



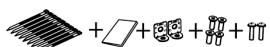
Blind Spot Indicator LED



Sensor Extension Cable

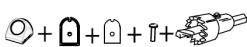


Alarm



Installation Kit

- Cable Ties
- Velcro
- Control Box Bracket - 2 pcs
- Bolts M6*16 - 4 pcs
- Screws ST8*30 - 2 pcs



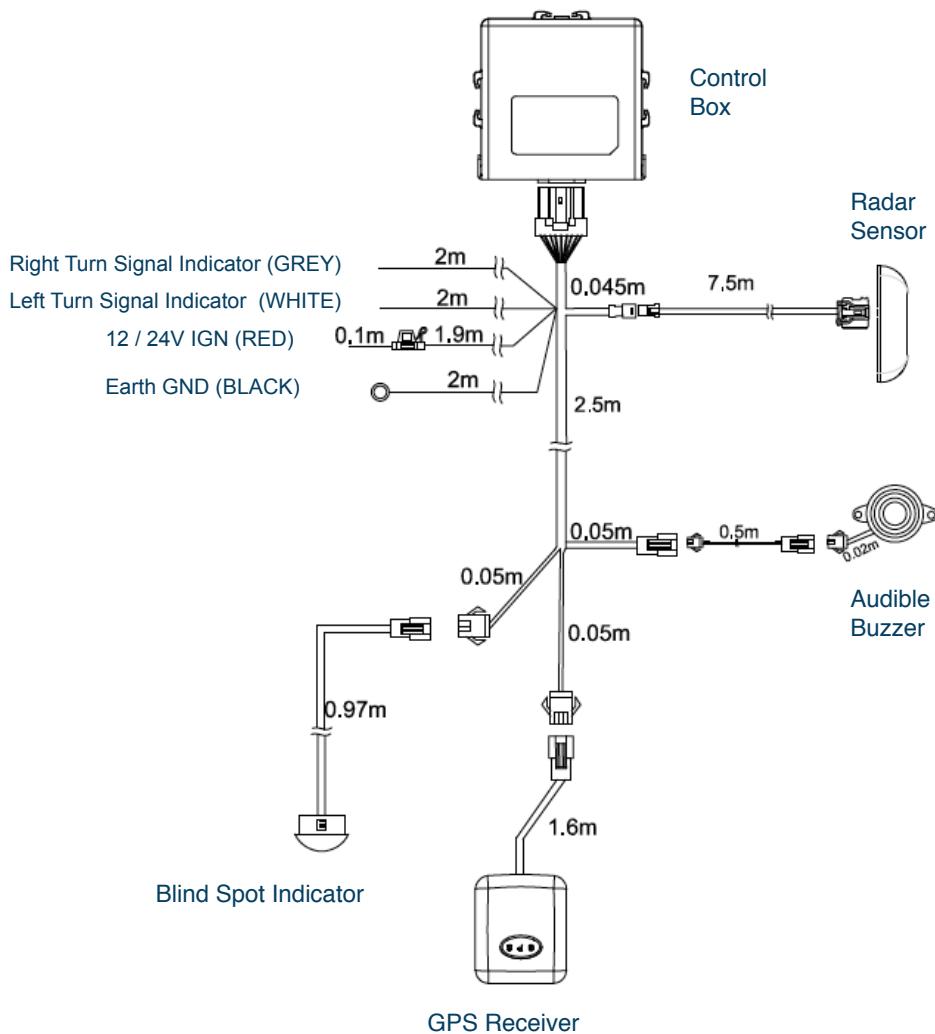
Blind Spot Indicator Mounting Kit

- LED Housing
- LED Housing Back Plate
- Double-sided Tape
- Screw 3*12 - 1pc
- 14mm Hole Saw



Buzzer Extension Cable

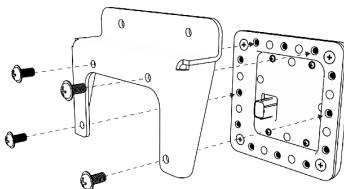
3 Wiring schematic



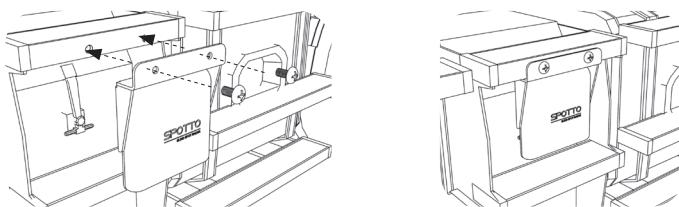
4 Attaching the Radar Sensor

1. Attach the Radar sensor to the mounting bracket using the supplied 4 x M6*16 bolts.

Ensure the Radar sensor orientation is correct - logo facing upwards.



2. Aim to fit the sensor as close to the front of the truck as possible, on the top step of the passenger side.
3. Position the mounting bracket against the face of the step.
4. Use the 2 holes on the mounting bracket as a template and drill 2 holes into the front face of the step
5. Attach the sensor bracket to the step using the supplied 2 x ST8*30 screws or a nut and bolt of your choice.



IMPORTANT

To ensure optimum detection performance, the radar sensor must be installed within the following tolerances:

Sensor Height: 100cm ($\pm 10\text{cm}$) from the ground to the sensor centre.

Horizontal Angle: The face of the sensor must be **parallel** with the truck body (less than 1°)

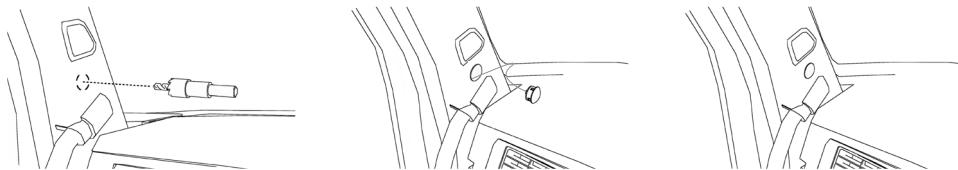
Vertical Angle: The face of the sensor must be **perpendicular** to the ground (90° $\pm 1^\circ$)

5 Installing the Blind Spot Indicator

The Blind Spot Indicator should be fitted within the driver's direct line-of-sight when checking the side mirror. The recommended location is at the truck's A-pillar. You have the option of installing it flush in the A-pillar trim, or surface-mounting it using the supplied housing and mounting kit.

Option 1: Flush fit

1. Drill a 14mm hole in the A-pillar trim using the supplied hole saw.
2. Insert the cable into the hole and run it down the inside of the trim.
3. Press the Blind Spot Indicator into the hole.

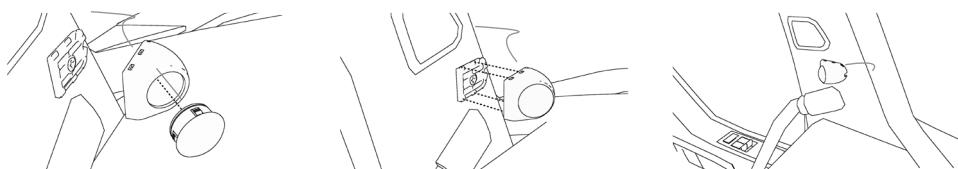


Option 2: Surface mount

1. Attach the base of the mounting kit to the A-pillar trim using the supplied double-sided tape and self-tapping screw.

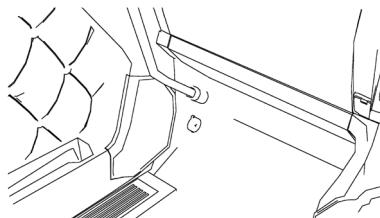


2. Feed the cable through the housing and press the Blind Spot Indicator flush into the housing.
3. Press the housing onto the mounting base until it locks together.
4. Route the cable out the rear of the housing, behind the trim into the dash.



6 Fitting the Buzzer

1. The buzzer should be located in the passenger-side footwell - exposed for louder volume or hidden behind the trim for a more concealed appearance.
2. Attach it securely using the supplied double-sided tape and 2 screws.



7 Attaching the GPS Receiver

1. The GPS receiver must be located on the inside of the windshield at the left hand side of the truck.
2. Attach the GPS receiver to the windshield using the supplied double-sided tape.
3. Route the cable into the dash.



8 Fitting the Control Box

1. The control box should be located within the cabin of the truck. The recommended location is in the centre, behind the centre dash panel.
2. Fix the control box firmly to a metal structure using the supplied double-sided tape and mounting brackets.

9 Wiring and Connectivity

Reference the wiring schematic on page 2.

1. Plug the main harness into the control box.
2. Plug the sensor extension cable into the Radar sensor.
3. Route the sensor extension cable into the cabin towards the control box.
4. Plug the sensor extension cable into the main harness.
5. Plug the Blind Spot Indicator cable into the main harness.
6. Plug the GPS receiver cable into the main harness.
7. Plug buzzer extension cable into the buzzer
8. Plug the buzzer extension cable into the main harness.

Electrical Connections

Disconnect the battery positive terminal or isolate the truck's power prior to commencing with the electrical connections.

1. Connect the GREY wire to the truck's RIGHT turn indicator +12/24v
2. Connect the WHITE wire to the truck's LEFT turn indicator +12/24v
3. Connect the RED wire to the trucks ACC/IGN +12/24v
4. Connect the BLACK wire to the truck's GND

10 System Self-Test

1. Turn the key to ACC/IGN.
2. The system will power-up and enter self-check mode.

The Blind Spot Indicator remains illuminated for 2 seconds then turns off
The system self-test has passed and the system is active.

The Blind Spot Indicator flashes 5 times in 10 seconds.

There is a problem with the Radar Sensor.

Check that the Radar sensor is plugged in.
If it is plugged in, then it is faulty and it should be replaced.

The Blind Spot Indicator flashes 15 times in 10 seconds

There is a problem with the GPS receiver

Check that the GPS receiver is plugged in.
If it is plugged in, then it is faulty and it should be replaced.

11 Technical Specifications

	Short Range Radar (SRR)	Ultra Short Range Radar (USRR)
Operating Voltage (V)	9 - 36v	
Operating Current (mA)	<300mA @ 12V	
Operating Temperature (°C)	-40°C ~ 80°C	
Storage Temperature (°C)	-40°C ~ 85°C	
Operating Frequency (GHz)	76GHz - 77GHz	77GHz - 81GHz
Transmission Power (dBm)		12dBm
Modulation Mode		FMCW
Antenna Type	1TX, 4RX	2TX, 4RX
FOV Angle (vertical) (°)		30°
FOV Angle (horizontal) (°)		150°
Angle Accuracy (°)		± 0.5°
Speed Measurement Range (km/h)	-120km/h ~ +120km/h	-30km/h ~ +30km/h
Speed Resolution (km/h)	0.94km/h	0.46km/h
Speed Accuracy (km/h)	± 0.47km/h	± 0.23km/h
Distance Resolution (m)	0.36m	0.04m
Distance Accuracy (m)	±0.18m	±0.02m
Angle Resolution (°)	30°	15°

12 Dip Switch Settings

SWITCH #	STATUS	DEFINITION	
1	ON	Enable audible alert at speed below 30km/h	DEFAULT
	OFF	Disable audible alert at speed below 30km/h	
2	ON	System is active at speed below 30km/h	DEFAULT
	OFF	System is not active at speed below 30km/h	
3	ON	System is active at speed above 30km/h	DEFAULT
	OFF	System is not active at speed above 30km/h	
4	ON	Radar is mounted to the LEFT side of the vehicle	DEFAULT
	OFF	Radar is mounted to the RIGHT side of the vehicle	