



Wireless Reverse Parking System with 4 Parking Sensors

PDC340



COMPONENTS



Component List

1. Control Unit (Transmitter)
2. Receiver Unit
3. Sensors
4. 12V power cable for use with receiver unit
5. 12V power cable for use with control unit (hard-wiring)
6. 12V power cable for use with receiver unit (hard-wiring)
7. Snap-on Connections

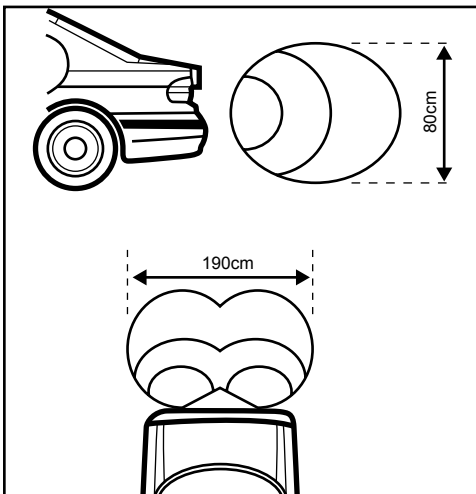
INTRODUCTION

Thankyou for purchasing the PDC340 Reverse Parking Sensor. This manual details the installation and operation of your product. Please read it carefully and keep to hand for future reference. Ensure that the product is working correctly before attempting permanent installation.

The PDC340 is an automatic reversing alert system. It gives a safety warning which tells the driver the distance between the rear of the vehicle and any object in its path.

The sensors transmit an ultrasonic signal when the car is reversing. When the signal senses an object, it will be reflected and received by the PDC340 control unit. These reflected signals are analysed by the control unit microprocessor to detect whether the obstacle is in your path and at what distance. The receiver unit illustrates the distances involved with a series of beeps and illuminated LED's letting the driver know how far away the closest object is located.

Below are graphical representations of the PDC340 detecting patterns:



FEATURES

- The ideal assistant for reverse parking.
- Detects objects (or people etc.) from approximately 40cm up to 1.5 meters behind the vehicle.
- Lessens the risk of damage from unseen objects when parking.
- Illustrates distance between vehicle and object by clear sound and red, yellow or green LED indicators. Adjustable volume.
- 2 reverse sensors for optimal detection.
- Automatic system activation your vehicle is put in reverse gear.
- Quick assembly with 2-wire installation and 3 connectors.

Parts with this system include:

- 1 x Control Unit (transmitter) 1 x Receiver unit
- 4 x Ultrasonic sensors
- 1 x 12V power cable (hard-wiring) for use with the control unit
- 1 x 12V power cable (hard-wiring) for use with the receiver unit
- 1 x 12V power cable (cigarette lighter socket) for use with the receiver unit
- 4 x screws 2 x Snap-on Connectors
- Adhesive mounting pads

GENERAL NOTES: READ BEFORE USE!

- Only to be used as a reversing aid
- Do Not fit to the front of your vehicle
- Not suitable for vehicles with rear engines
- Do not use with a vehicle that has a reversing horn or alarm
- Do not extend cables (may distort the sensors)
- Do not paint or spray the sensors
- Install with car in horizontal position.
- A false response may be recorded if a DC to AC power converter is being used close by.

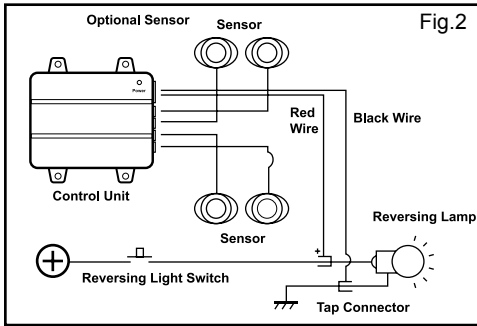
Installation

INSTALLATION GUIDE

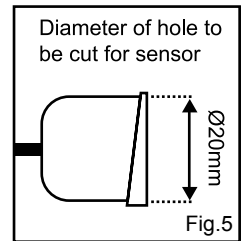
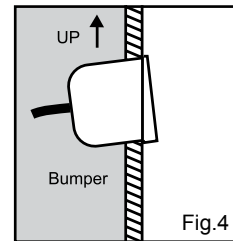
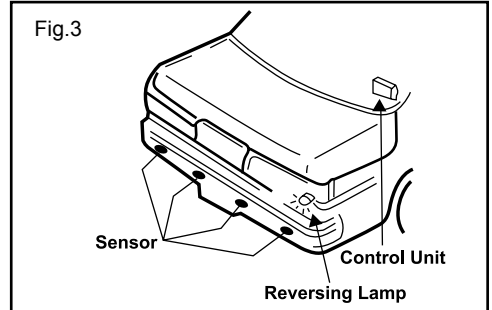
IMPORTANT! During the installation your vehicle must be in neutral and the ignition switched OFF. Disconnect the battery following the vehicle manufacturers instructions before commencing.

Wiring diagram:

Below is a wiring diagram for the PDC340 sensors and control unit showing the necessary connections. Please follow all the instructions before installing your reversing sensors.



- Drill holes of 20mm in diameter to accommodate the sensors (see Fig.5). If you are in any doubt as to where you can drill safely, seek advice from your vehicle manufacturer.



LOCATION OF THE SENSORS

- **IMPORTANT NOTE:** It is strongly recommended that the sensors are fully tested in the proposed positions prior to drilling or performing any irreversible alterations to your vehicle. Before installation first determine the final position for the sensors.
- Locate a flat area at the rear of the vehicle. Sensors should be fitted between 55cm-70cm from the ground. If fitted higher than 70cm the sensors may not detect low objects. If lower than 55cm the signal may reflect from the ground and produce a false reading.
- The sensors should be fitted 90cm apart from each other (at the same height).
- The sensors are intended to be installed at a slight angle (see Fig.4).

WIRING THE SENSORS

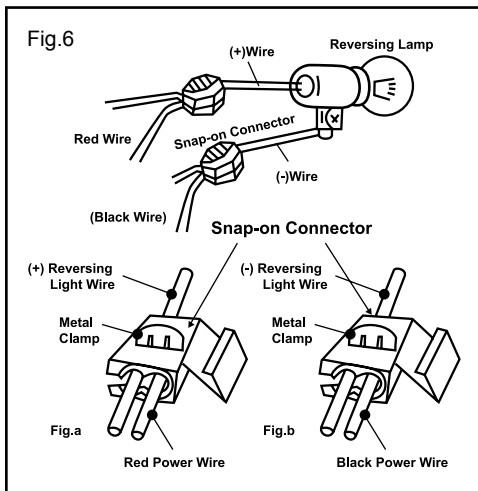
- Having chosen a location for the sensors, you must decide on a route for running the wiring through your vehicle's interior. Do not allow any wires to hang dangerously.

LOCATION OF THE CONTROL UNIT

- Locate the transmitter towards the rear of the vehicle (e.g. in boot), within reach of the sensor and power wires.
- Only once a suitable position is established and the system has been fully tested can the control unit be permanently installed using the screws provided.

CONNECTING THE WIRING TO THE CONTROL UNIT (TRANSMITTER)

- You need to connect the red and black transmitter power cables to your vehicles reversing light wires.
- The red power cable should be connected to the positive reversing light wire (this is the wire that becomes live when you select the reverse gear), using the snap-on connector provided.
- Connect the black power cable to the ground wire from the reversing light, again using the snap-on connector provided.



LOCATING THE RECEIVER UNIT

- This must be installed inside the vehicle (e.g. on the dashboard) where you can see and hear it easily whilst manoeuvring.
- Do not attach in a position that could interfere with the normal driving of the vehicle.
- Attach using the sticky pad supplied.
- This must be installed within reach of the chosen power supply.

CONNECTING THE POWER TO THE RECEIVER UNIT

- Connect the receiver unit to the power supply either by plugging in the cigarette socket adapter or by hardwiring (seek advice from your vehicles manufacturer). You will need to reconnect the battery following manufacturers instructions.

SYSTEM SETUP

- Once you have installed the system and switched it on, you will need to press the 'LEARN' button. This is located on the back of the receiver. This lets the receiver unit sense the transmitter unit and set up a frequency.
- If the mutual frequency is found successfully, then the receiver unit will beep twice.
- If the frequency is not found then you will hear a long beep. If this happens, switch the receiver unit off and on, then press the 'LEARN' button again. If you still have problems, check the system setup and that all wires are connected properly, and that the transmitter unit is switched on.

OPERATION

When you select reverse gear, you will hear a beep. This indicates that the PDC340 is working and has been activated (it does not necessarily mean that there is something behind you.)

As you begin to reverse and an object comes within range, you will hear a beeping sound from the main unit. The frequency or pitch depends on the range of the object being detected. If necessary, you can use the switch on the side of the unit to increase or decrease the volume.

The detective range is 0.4m to 1.5m. Its resolution is 30mm. The accurate distance is transmitted from the control unit (transmitter). The LED display corresponds to the shortest distance from the obstacle.

The table below shows the alarm speed corresponding to the range of the object detected.

DISTANCE	AUDIO ALERT	VISUAL ALERT
over 1.5m	No Beep	No Display
1.5m-1.2m	(•) (Beep)	Green LED Lit
1.2m-1.0m	(•)(•) Beep Beep	Green LED Lit
1.0m-0.6m	(•)(•)(•)	Yellow LED Lit
0.6m-0.4m	(•)(•)(•)(•)	Yellow LED Lit
below 0.4m	continuous tone	All LED are Lit

WHEN THE BEEPING INCREASES AND FINALLY BECOMES A CONTINUOUS TONE AND ALL OF THE LED'S ON THE MAIN UNIT ARE FLASHING, YOU SHOULD STOP IMMEDIATELY, EVEN IF THERE IS NO OBVIOUS OBSTACLE BEHIND YOU.

Your PDC340 may work slightly differently to what is shown in the table above depending on circumstance and also on how your sensors are positioned. You should practice using your set up in a known area before using it in earnest on a day to day basis.

With use, you will find it a convenient and useful aid to your reverse parking.

Fault Finding

FAULT DESCRIPTION	POSSIBLE CAUSE/REMEDY
False or no response	Steep slopes or thin bars. Bushes or other foliage could absorb the signals. Electricity wires nearby could interfere with the signal. (See diagram below) Sensors covered with snow, mud or ice etc.
Power light does not come on when reverse gear has been chosen.	Check that the power wires are properly connected to the reversing light power wires. Check that the snap-on connectors are providing a good contact.
Sensor always shows an object is FT (Red LED) behind vehicle.	Check whether the sensors are located too low, or the angle is pointing downwards and therefore detecting the ground.
Power light (Green LED) is on, but the unit it not detecting any obstacles	Check whether the sensors cable is correctly plugged into the 2 pin socket of the transmitter unit.
Unit does not show correct distances.	Check that the sensors are properly mounted. Adjust as necessary.

If faults cannot be remedied, contact the **Helpline** on **020 8391 6767**
helpline@hilka.co.uk
www.hilka.co.uk

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