

Owner's Manual of Perpetual System

Thanks for your purchase of our flexible, user's friendly and most sophisticated perpetual system. Perpetual has the system with or without RF modules. It is a durable water-proofed system. Its Control Box could stand harsh weather, extreme temperature and rough working environment.

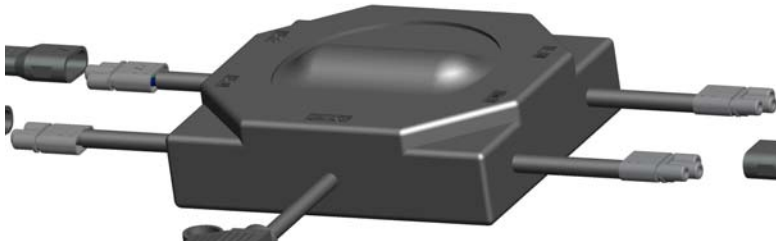
The system's main components

Its main components of the perpetual system are 1 control module, 1 power extension harness, 4 digital sensors, 4 extension sensor-cables in a slit loom, 1 Dome Buzzer extension power line, 1 Dome Buzzer with built-in latch-relay function, 1 LED, 1 momentary switch and 1 set of hardware kit.



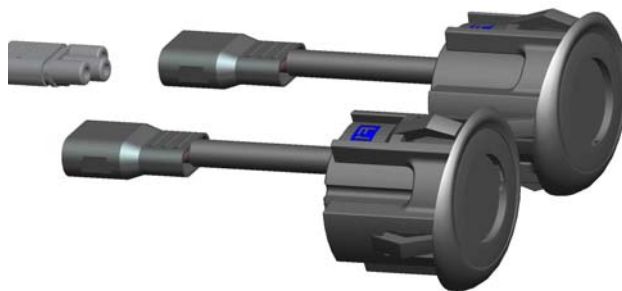
The system's Control Box

The Control Box processes all information gathered. It works as the brain to the human body. It is completely sealed by potting material to make it waterproof. Harnesses and cables are soldered onto PCB and extended out with water-proofed connectors attached.



The system's Digital Sensors

4 Digital Sensors (L, CL, CR, and R) having 15cm pigtail + waterproofed plugs are connected to 4 sensor-cables wrapped in a silt loom. The other end of the cables link to the control box's extended sensor-cable outlets.



The system's Dome Buzzer

Dome Buzzer is connected to the Control Box outlet harness. The Buzzer beeps in different frequencies. The frequency of the beep indicates the distance of the nearest sensor to the obstacle. The other function appears only in self-diagnosis when power switches on.



Once power-on, the system starts its self-diagnosis

- a. 1 beep means all sensors and system work well. ●
- b. 2 beeps mean 1 sensor is out of order. ●●
- c. 3 beeps mean more than one sensor are out of order. ●●●

Once power-on, obstacle distance detection starts

a. To center sensors, intermittent beeps mean the obstacle is within 4ft-6ft



b. To center sensors, rapid beeps mean the obstacle is within 2ft-4ft;

To corner sensor, that mean the obstacle is within 2ft-3ft.



c. Solid beeps mean the obstacle is within 2ft



The system's Momentary switch

Momentary switch is connected with the Dome Buzzer. The system on/off is controlled by the switch. When the system is powered "off" and the gear moves to the "reverse", the system turns back "on" again. When the system is power-on, LED turns on. When the system is power-off, LED turns off. When LED flashes, it indicates more than one sensor are out of order.



The system with or without RF modules

The RF system is having a bulge protruded in the center of the control box whilst the system without RF is using the control box as same as D Dualer's.

- RF = Radio Frequency. TX = Transmission, RX = Receiving

RF system contains 1 x TX module in the control box and 1 x RX module in the buzzer. The signal data is transmitted from the control box (TX) to the buzzer (RX) by Radio Frequency means. It has no signal wire connected between the control box and the Buzzer.

Environment Learning Mode

If the vehicle has a spare tire mounted on the back or awkward contour of the bumper, the system may detect it as an obstacle. By using Environment Learning the false alarm can be eliminated.

Important

Keep an "off" time about 3 seconds. If "off" time is more than 5 seconds, learning mode stops. There is no time limit for "on" time.

Proceeding with Environment Learning

Shift the gear back and forth between reverse and neutral, repeat this operation 5 times, the system would store the obstacle within 90cm into CPU as parameter. That particular obstacle would not trigger the false alarm.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

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.