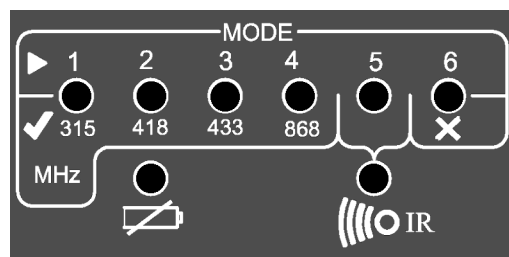


## Introduction

Congratulations on choosing the OmiDetect 150.

The OmiDetect is a diagnostic tool for activating and checking Tyre Pressure Monitoring System (TPMS) valve sensors. The OmiDetect can also check Remote Keyless Entry (RKE) transmitters, both Radio Frequencies (RF) and infrared (IR).

## Overview



The OmiDetect has a display of 6 LEDs, a low battery indication LED (🔋) and an IR sensor (📡IR).

The LEDs have a dual function. They are used to indicate the selected mode and also to display the detected frequency. LED 1, 2 or 3 illuminates dependent on which frequency is detected; 315 MHz, 418 MHz or 433 MHz. LED 4 is not currently used. LED 5 indicates IR detection. LED 6 (✘) indicates an invalid response.

OmiDetect is also equipped with a 2-button keypad:

Key	Function
	Power/Mode selection. Refer to "Using OmiDetect"
	Start test

## Operation

When using OmiDetect, observe the following precautions:

- Ensure vehicle is in 'park' or 'neutral' and the handbrake is applied.
- Keep away from metal objects, such as clamps, wheel alignment or tyre press equipment, as this will prevent a good RF signal.
- Keep away from any known RF transmitters, such as mobile phones and other RKE transmitters. Signals received from these devices could result in the incorrect signal being detected.

## Using OmiDetect

1. Turn on the OmiDetect by holding down the key, for 2-3 seconds.
2. Select the mode by repeatedly pressing the key until the appropriate mode LED is illuminated.  
*NOTE: If the type of valve is known, select appropriate mode and proceed. If not, proceed to test all available modes. See "Tyre Valve Sensor Modes".*  
*If testing an RKE transmitter, use Mode 3.*
3. To start the test, press the key.
4. The display LEDs will illuminate in sequence to indicate that OmiDetect is searching for a valid signal.  
*NOTE: This test cycle can take up to 65 seconds, depending on which mode is selected.*
5. A valid signal will be indicated by either LED 1, 2, 3, or 5 illuminating continuously for 5 seconds and accompanied by 3 beeps.
6. If a valid signal is not received within the test cycle, the Invalid response (✘) LED will illuminate accompanied with a constant tone.
7. After the completion of a test, the OmiDetect will auto-power off after 5 seconds.
8. Press and hold the key for 3 seconds to cancel any operation and to turn the OmiDetect off.

## Tyre Valve Sensor Modes

There are 3 modes of operation for tyre valve sensor tests:

Mode 1 is used for tyre valve sensors activated with a continuous wave (~~~~~).

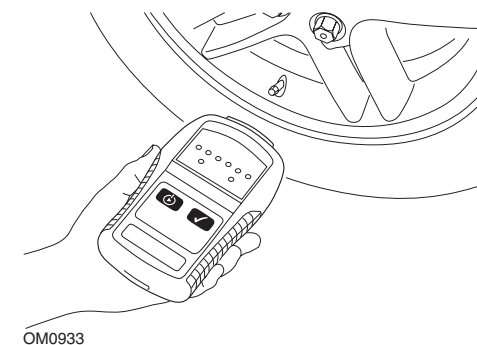
Mode 2 is used for tyre valve sensors activated with a modulated wave (⏏⏏⏏⏏⏏).

Mode 3 is also known as 'Receive mode'. If modes 1 and 2 fail to generate a valid response from a known TPMS valve, mode 3 is used to check that the valve sensor is operating.

Press the valve stem to release air pressure for 5 seconds. This will induce immediate valve sensor transmission and a valid response signal should be displayed.

*NOTE: Mode 3 is also used to check RKE transmitters.*

## Checking Tyre Valve Sensors



After selecting the appropriate mode, Refer to "Using OmiDetect", hold the front end of the OmiDetect on or close to the tyre sidewall, where it meets the wheel rim, adjacent to the tyre valve. Refer to "Specifications" table for activation range.

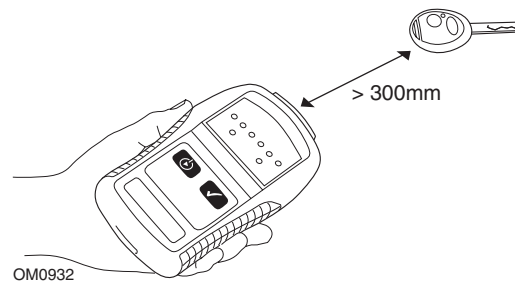
*NOTE: Do not aim at the valve stem. The valve stem is metal and will prevent a good RF signal.*

*On low profile tyres, the area for the RF to penetrate the tyre sidewall is small, carefully aim the OmiDetect half way between the tyre rim and the tread.*

### Checking RKE Transmitters

The OmiDetect can also be used as an RKE transmitter tester and will check for RF transmission on 315 MHz (USA model only), 418 MHz (European model only) and 433 MHz frequencies. It will also check most IR transmitters or remote controls.

An IR transmitter can usually be identified by an optic lens or LED.



After starting the test, Refer to "Using OmiDetect", press the RKE transmitter button.

*NOTE: The RKE transmitter must be at least 300 mm (12 in) away from the OmiDetect.*

*IR transmitters should be aimed at the IR sensor.*

### Testing RKE Transmitter Power/Range

RF transmitter power/range can be established by increasing the distance between the OmiDetect and the transmitter.

Repeat the test, increasing the distance between the OmiDetect and the transmitter until a signal is not detected. A detection range of up to 5m is possible from a good condition transmitter.

Comparing the results to a known good transmitter of the same brand, will determine the condition of the transmitter under test.

### Specifications

TPMS valve sensor activation:	Inductively coupled RF at 125 KHz
Activation range:	50 - 200mm (2 - 8 in) dependant on sensor and wheel type
Activation formats:	Continuous wave Pulse Code Modulated
RF detection frequencies:	315 MHz (USA model only) 418 MHz (Europe RKE only) 433 MHz
IR detector	38 KHz format reception
Power	9V Battery (Alkaline/Manganese) - PP3, IEC 6LR61 or 6F22 <i>NOTE: DO NOT USE RECHARGEABLE BATTERIES</i>
Approvals	RTTE, CE

**Omitec**

## OmiDetect



## Operating Instructions

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