

---

TDB008 PARKING SENSOR TESTER  
OPERATING MANUAL



The Diagnostic **BOX**.com

# CONTENTS

| CONTENTS                  |         |
|---------------------------|---------|
| INTRODUCTION              | PAGE 3  |
| GENERAL OPERATION         | PAGE 4  |
| VEHICLE TESTING           | PAGE 10 |
| SPECIFICATION             | PAGE 11 |
| CONTACT INFORMATION       | PAGE 12 |
| DECLARATION OF CONFORMITY | PAGE 13 |

# INTRODUCTION

## **TDB008 Parking Sensor Tester**

The TDB008 has been designed to give a visual indication of the output signals of parking sensors using ultrasonic sensors on a range of vehicles.

Many parking sensor systems now fitted to the latest vehicles require the engine running and the car in reverse gear. In addition to this the vehicles that have a parking assist will shut down if there is a problem and diagnostics of the sensors requires 2 people to check. The TDB008 with its extended pick lead allows a single person to operate the vehicle safely and test the sensors while in the drivers seat.

This makes the TDB008 both a time saving product, but also ensures the system can be tested safely and easily by the workshop technician.

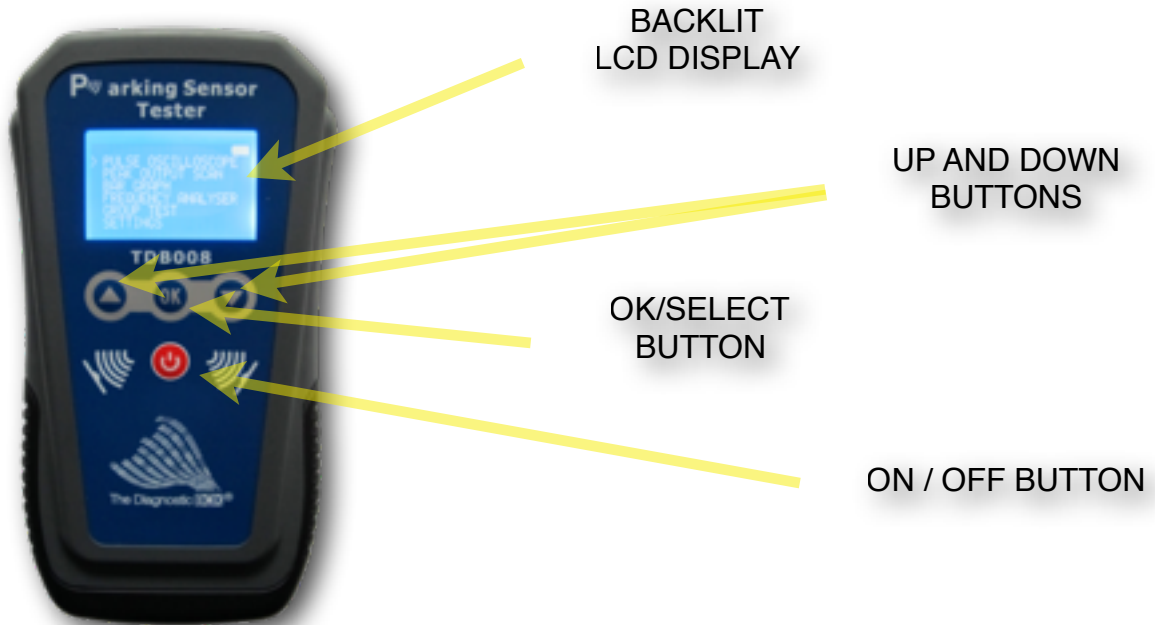
The internal wide frequency range microphone covers the typical ultrasonic automotive range of 34.8 kHz to 68 kHz. The LCD screen can show the signal as a pulse, an average value in either graph form or as a bar graph or a waveform.

The TDB008 also has the facility to display the operating frequency of the ultrasonic sensor together with its signal strength.

The Quick Test also provides a way to check all the sensors together, and compare the results to ensure they are all operating within their normal specifications.

Powered by 4 AAA cells the TDB008 has an operational time of over 20 hours of use, and it also includes a low battery warning and programmable auto switch off time.

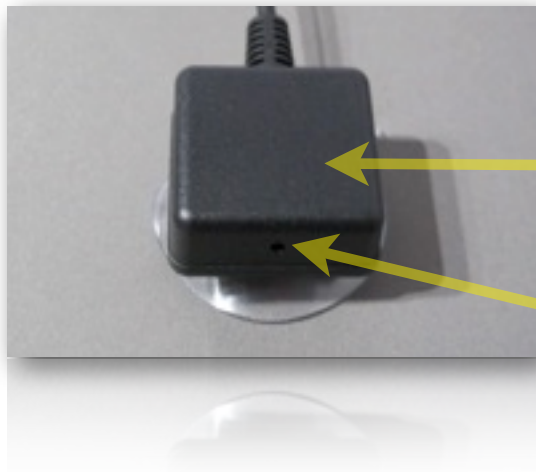
# GENERAL OPERATION



# GENERAL OPERATION

SENSOR PICK UP

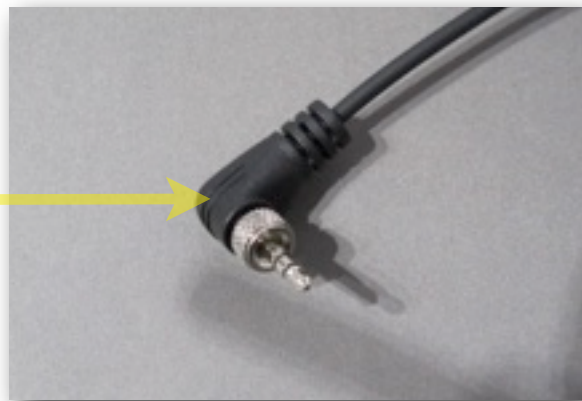
EXTERNAL  
SENSOR  
CONNECTION



EXTERNAL  
SENSOR

SENSOR PICK UP

EXTERNAL  
SENSOR  
CONNECTOR



# GENERAL OPERATION

## INSERTING BATTERIES



SLIDE THE  
COVER AND  
INSERT  
4 x AAA  
BATTERIES

SLIDE THE  
COVER BACK



## TURNING THE TESTER ON

PRESS AND  
HOLD THE RED  
POWER BUTTON



# GENERAL OPERATION

## QUICK TEST

SELECT QUICK TEST  
USING THE UP AND DOWN  
BUTTONS AND PRESS THE  
OK TO SELECT



USING THE UP AND DOWN  
ARROWS ADJUST THE  
SENSITIVITY TO THE  
REQUIRED LEVEL



MEASURE THE FIRST  
PARKING SENSOR AND  
PRESS OK WHEN  
COMPLETE

REPEAT FOR ALL PARKING  
SENSORS

COMPARE RESULTS



# GENERAL OPERATION

## ADVANCED TESTS

SELECT ADVANCED TESTS  
AND THEN SELECT

**PULSE OSCILLOSCOPE**



SELECT ADVANCED TESTS  
AND THEN SELECT

**PEAK OUTPUT SCAN**



SELECT ADVANCED TESTS  
AND THEN SELECT

**BAR GRAPH**



# GENERAL OPERATION

## ADVANCED TESTS

SELECT ADVANCED TESTS  
AND THEN SELECT

**FREQUENCY ANALYSER**



## EXTERNAL SENSOR



THE EXTERNAL SENSOR  
CAN BE CONNECTED TO  
ALLOW 1 PERSON SAFE  
TESTING

CONNECT THE EXTERNAL  
SENSOR TO THE TDB008  
AND ENSURING THE SCEW  
IS ENGAGED SO THE  
CONNECTOR CANNOT  
PULL OUT



# VEHICLE TESTING

## VEHICLE TEST - STAND ALONE



SELECT THE REQUIRED TEST AND POINT THE TDB008 SENSOR PICK TOWARDS THE PARKING SENSOR

## VEHICLE TEST - EXTERNAL SENSOR PICK UP

PLACE THE EXTERNAL SENSOR AS CLOSE TO THE PARKING SENSOR AS POSSIBLE. ENSURING THE PICK HOLE IS POINTING TOWARDS THE SENSOR.

**DO NOT STICK IT ON TOP OF THE SENSOR.**



## SPECIFICATION

|                             |   |
|-----------------------------|---|
| OPERATING VOLTAGE           | 6 VOLTS   |
| OPERATING CURRENT           | 50 mA average   |
| POWER CONSUMPTION           | 300 mW  |
| DETECTION RANGE (FREQUENCY) | 30kHz to 70kHz  |
| MICROPHONE RANGE            | 10Hz to >80kHz  |
| BATTERY                     | 4 x AAA Alkaline or NiMh Rechargeable   |
| OPERATING TEMPERATURE RANGE | 0 to 50 degrees C   |
| IP RATING                   | IP61  |
| SIZE                        | 170mm x 90mm x 40mm   |
| WEIGHT                      | 360 grams   |
| FREQUENCY ANALYSER          | Low range 30kHz to 50kHz<br>High range 50kHz to 70kHz<br>Sensitivity adjustment |
| OSCILLOSCOPE                | Pulse mode 25uS/div<br>Sensitivity adjustment                                   |
| PEAK SCAN                   | Scan time (Full screen) 2 seconds<br>Sensitivity adjustment                     |
| BATTERY LEVEL               | Visual indicator and audible low battery warning                                |
| AUDIO TONE                  | Active in the presence of ultrasonic field and re                               |
| AUTO POWER OFF              | User programmable for 5, 10, 15 mins or none                                    |

## CONTACT INFORMATION

The Diagnostic Box  
Chillington  
Kingsbridge  
Devon  
TQ7 2EZ  
United Kingdom

Tel : +44 1548 580348  
Fax : +44 1548 580348

Email : [info@thediagnosticbox.com](mailto:info@thediagnosticbox.com)

Web : [www.thediagnosticbox.com](http://www.thediagnosticbox.com)

Skype : diagnosticbox

# DECLARATION of CONFORMITY

## DECLARATION OF CONFORMITY

Manufacturer's Name: The Diagnostic Box

Manufacturer's Address: Chillington  
Kingsbridge  
Devon  
TQ7 2EZ  
United Kingdom

Product Name: Parking Sensor Tester

Product Model: TDB008

Conforms to: Specifications  
EN 55022:1998, A1: 2000 + A2: 2003  
EN 55024:1998, A1: 2001 + A2: 2003

Following the Provisions of EMC Directive: 204/108/EEC

TDB008 November

