



Battery Tachometer Operations Manual

CDSS6 / CDSS6BT



Important

Every reasonable effort has been made to ensure that information within these Operating Instructions is correct at the time of release, but Continental cannot accept responsibility for any errors that may occur.

The information in these Operating Instructions is subject to change without notice, and does not represent a commitment on the part of Continental.

Service & Warranty

The reliability of this equipment is fully supported by our service agents with repair workshops and field service engineers to provide a full range of After-Sales Care, including installation, contract maintenance, factory overhaul and emergency repairs on site. Please refer to the page at the end of this manual for full details.

Note

If a service engineer is called out under service warranty where, upon inspection and test the equipment is found to be in full working order and no fault found, the user is liable to be charged the cost incurred for this call out. Before calling out an engineer, ensure your equipment is faulty by checking its operation, particularly mains supply and fault codes/self test if applicable.



WARNING

Do not attempt to operate this equipment unless you have read and understood these instructions.

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1 Safety

- ! Always follow the vehicle manufacturer's instructions when holding the cut off speed of Diesel engines.
- ! When connecting the tachometer, be careful to avoid rotating or hot components (e.g. fan, exhaust manifold).
- ! When connecting to the battery take care to avoid shorting the positive terminal to any parts which may be at ground potential (i.e. metalwork).
- ! Unless authorised, do not remove or make any alteration to any part of the supplied equipment. Contact the supplier.
- ! Do not use the battery tachometer for any other purpose than for which it is intended.
- ! Keep this user manual in an easily accessible place

2 Introduction

The CDSS6 and CDSS6BT RPM Adapters derive engine speed by monitoring the alternator ripple voltage across the vehicle battery. When the alternator is charging, the ripple frequency varies slightly or modulates in proportion to the engine speed. The unit uses this frequency modulation to derive an engine speed signal.

The CDSS6 is hard-wired to the smokemeter, the CDSS6BT communicates via Bluetooth® wireless technology.

3 List of Contents

- Please check that all the contents are present.
- > 1 x CDSS6
 - > 1 x Power/Sensing cable
 - > 1 x Operating Instructions
 - > 1 x RS232 Serial signal cable (CDSS6 only)

4 Connections

CDSS6 & CDSS6BT

RS232 Serial signal Comms connector
(CDSS6 wired version only)



Battery cable connector

5 Fitting

The CDSS6 is supplied with an RS232 Serial Comms cable for connection to the Smokemeter. The CDSS6BT is a wireless device that will communicate with a Bluetooth® Smokemeter via Bluetooth® wireless technology. Ensure the battery clamp leads are connected to the CDSS6.

6 Operation

The CDSS6 will communicate directly with the PC via the RS232 Null Modem comms cable.

The CDSS6BT communicates to a suitable Bluetooth® smokemeter via Bluetooth® wireless technology and will have been set up and configured to the smokemeter equipment.

Start the engine, turn on the vehicle lights, and allow engine to idle. Ensure all other vehicle accessories; internal blower, screen heater etc. are off. Attach the CDSS6 clips to the battery noting the correct polarity (or use the optional Accessory Socket lead). When prompted by the smokemeter program, set the correct number of cylinders of the vehicle engine.

 BEWARE OF ROTATING PARTS.

Allow the engine to idle while the CDSS6/ CDSS6BT initialises (this may take up to 15 seconds). When complete the unit will indicate the engine speed on the console screen.

If the indicated speed appears to be incorrect, reset the CDSS6/CDSS6BT by disconnecting and then reconnecting one of the battery lead

- Please note that on a small number of vehicles the readings may be unstable, inaccurate or unreadable. To minimise the risk of this:-
- Load the battery as much as possible by doing the following:
 - Switch on the vehicle headlights/ Main beam/Fog/Spots,
 - Switch on the heated rear window

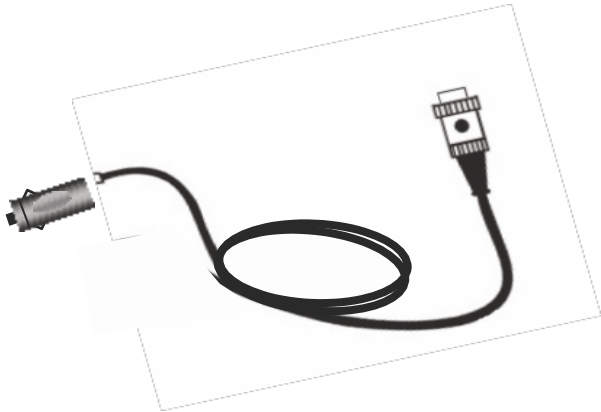
- However - Switch off the cabin fan as this can introduce interference.
- Keep the engine speed stable during the initialisation time <17Sec.
- If, after initialisation the speed is stable but reading incorrectly, change the cylinder setting on the 'Tacho Set-up' screen until the correct value appears

7 Technical Data

Engine type	4-stroke diesel and petrol
Measurement range	400-9999rpm
<u>Accuracy</u>	±20 rpm below 2000 rpm ±2% above 2000rpm
Response	<1 second
Initialisation	≤17 seconds
Power supply protection	9-15V dc <0.5A reverse polarity
Operating temperature	0 to +45°C
Humidity	<90%noncondensing
Dimensions	230x100x40mm
Weight	790g

8 Spares

9 Optional Part



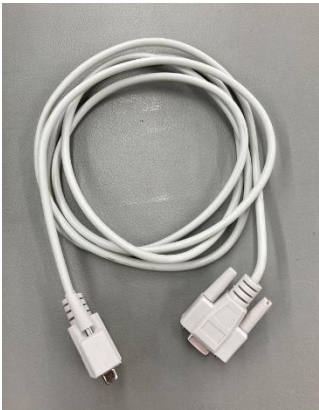
Power/Sensing cable
A2C8902400000

(for connection to vehicle
accessory socket)



Power/Sensing cable
A2C8792150000

(for connection to vehicle
battery)



Signal cable A2C8895420000

(for connection to trolley)

10 Product Support

11 Contact Details

Apart from the routine maintenance and adjustments stipulated in this manual the equipment must not be tampered with in any way. All further servicing must be carried out only by an engineer from our Authorised Agents. Failure to observe these conditions will invalidate the Guarantee.

10.1 UK Customers

If you require a Service Engineer to attend ON SITE within the UK, for any of the following reasons:

- > An equipment fault
- > For machine calibration
- > You need spare parts
- > Equipment covered by this manual requires returning for factory overhaul.

10.2 Overseas Customers

Service and spare parts cover outside the UK is provided by the agent from whom your equipment was purchased.

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Disposal of equipment

- > Do not dispose of this equipment as miscellaneous solid municipal waste but arrange to have it collected separately.
- > The re-use or correct recycling of electronic equipment (EEE) is important in order to protect the environment and the wellbeing of humans.
- > In accordance with European Directive WEEE 2002/96/EC, special collection points are available for the delivery of waste electrical and electronic equipment.
- > The public administration and producers of electrical and electronic equipment are involved in facilitating the processes of the re-use and recovery of waste electrical and electronic equipment through the organisation of collection activities and the use of appropriate planning arrangements.
- > Unauthorised disposal of waste electrical and electronic equipment is punishable by law with appropriate penalties.

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Legal Notice

The information in this document contains only general technical descriptions and performance characteristics, the applicability of which can depend on further factors in case of actual use. It is not meant or intended to be a specific guarantee of a particular quality or durability.

An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. We reserve the right to make changes in availability as well as technical changes.

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E & O E. The Company reserves the right to introduce improvements or changes in the design or specification without prior notice. The sale of these products is subject to our standard terms, conditions and relevant product warranty.

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