



## 800 Series Installation Instructions

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# IMPORTANT

Every reasonable effort has been made to ensure that information within these Operating Instructions is correct at the time of release, but the company 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:

Your attention is drawn to our Terms & Conditions of Sale. 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 any 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.

## Software Licence

Further to our general Terms & Conditions of Sale, the software described in these Operating Instructions is furnished under the following Software Licence Agreement:

1. Licence: You may use the program on the machine provided. You may not copy, duplicate or transmit the program in any form, in whole or in part, without the express prior written permission of the company.
2. Term: The licence is effective until terminated. You may terminate the licence by destroying the program together with all copies, or returning the program to the company.
3. The company does not warrant that the program will meet your requirements or that its operation will be uninterrupted or error free.
4. In no event will The company be liable to you for any incidental or consequential damages, including lost profits, business operation and the like, arising out of the use or inability to use this program. You acknowledge that you have read this Agreement, understand it, and agree to be bound by its provisions.

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

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## HEALTH AND SAFETY

1. The equipment is not weatherproof and should not be used outside in rain or snow.
2. The internal circuits and components of the analyser should not be tampered with. No internal parts are operator serviceable.
3. Operators should exercise due caution with regard to the engine fan and associated belts.
4. Always provide ventilation by using an exhaust gas extraction system or by having an adequate supply of fresh air.

**Carbon Monoxide (CO) from a vehicle exhaust is a highly poisonous gas. If it is breathed in, it is absorbed by the blood and will result in greatly slowed reactions and if absorbed in sufficient quantity can be fatal. Published figures show that a concentration of 0.3% CO in the air can be fatal if inhaled for more than 30 minutes.**

5. Before starting an engine, ensure that the gear selector is in neutral or park.
6. Care should be taken with regard to scalding from the cooling system, burns from the exhaust system and electric shocks from the ignition HT system.
7. When disconnecting the fuel system of a hot engine beware of the fire hazard caused by fuel spilling onto manifolds, ignition distributor, etc.
8. Position the mains cable and sampler pipe in such a manner that they do not present a hazard to anyone.
9. The earth lead of the mains supply cable MUST ALWAYS be connected to a good earth point.
10. Operators should not allow themselves to come into contact with water or other similar conductors when using the equipment.
11. Equipment should be sited in an area designated and clearly marked:

**FOR USE BY AUTHORISED PERSONNEL ONLY**

## INTRODUCTION

This equipment leaves the factory set for 230V a.c. nominal, single phase 50/60 Hz. mains supply. Where the mains voltage differs from this, it is essential that the equipment is ordered for the specific voltage in your region.

The equipment should be stored and kept in a dry condition.

The trolley is supplied with all main parts (i.e. Computer, Gas Analyser etc.) fitted, with the exception of the Keyboard, Mouse and Monitor. Details for fitting these items are covered in this manual.

Carefully unpack all items and examine for damage. Check contents against the packing list enclosed for any loss or discrepancy. Report any loss, breakage or discrepancy to the supplier immediately.

## IMPORTANT NOTE

**Do not disconnect or reconnect any leads between the various parts of the trolley without first SWITCHING OFF the mains supply; this does not include any connections to the vehicle under test.**

## FITTING THE KEYBOARD AND MOUSE

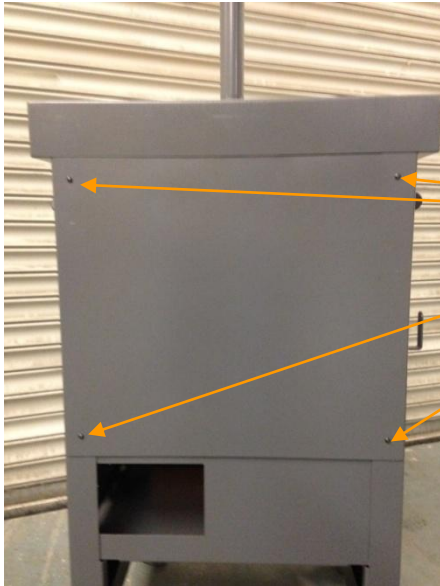


Fig. 1

To fit the Keyboard, Mouse and Monitor follow the procedure detailed below, observing the correct sequence of actions:

1. Remove the back panel as shown in Fig. 1 by unscrewing the 4 earth nib Philips screws.

1. Place the keyboard in the recessed tray of the trolley lid. Feed the cable through the holes behind the keyboard (Fig.2), over the top of the PC and plug in to the USB connectors on the back of the PC (Fig.3). The keyboard should be secured to the tray using the supplied Velcro strips. Feed the mouse cable through the hole at the top of the trolley (Fig.2), and plug in to the USB connectors on the back of the PC (Fig.3).

Keyboard & Mouse  
Cable holes

Fig. 2

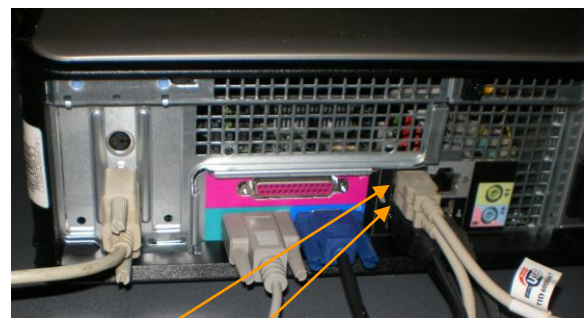
Keyboard Mouse  
Connectors

Fig. 3

Note: If a wireless mouse has been provided the USB receiver should be positioned in the lower of the two USB ports on the front of the PC.

The wireless mouse can be used in conjunction with the standard mouse.

When in use the mouse pointer can be changed to a larger format for a better distance visibility of the pointer. To change the pointer do the following from the main desktop:

Select Start/Control Panel/Mouse/Pointers  
then double-click on 'Normal Select' and select a larger pointer.

We suggest the following pointer for high visibility at a distance:



## FITTING THE MONITOR

- Unpack the monitor and remove the four screws on the monitor mounting panel. Assemble the monitor to the bar mounted monitor bracket and secure using the four screws as shown in Fig. 4a. Fit the monitor signal lead and feed this through the monitor bracket, adjust tilt of screen as required and tighten in position.

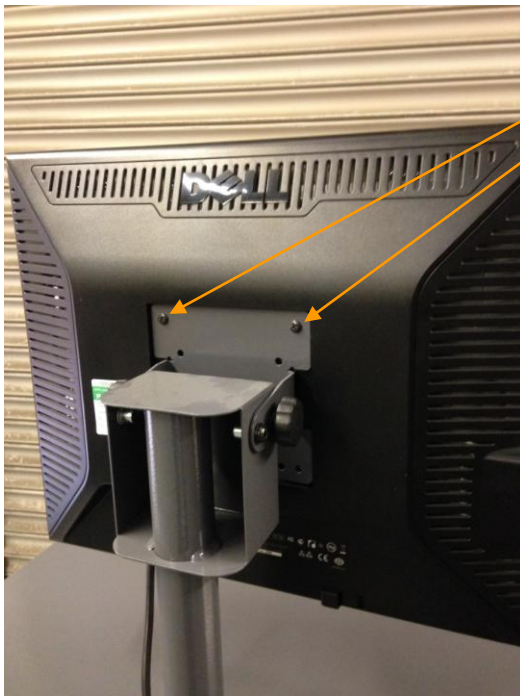


Fig. 4a

Remove the four screws and secure the monitor to the bracket assembly.



Fig. 4b

Monitor signal lead

- Remove the plastic grommet from the hole in the trolley immediately behind the Monitor. Feed the monitor signal lead through the grommet from the top and then down through the hole in the metalwork. The monitor mains lead is already fitted to the trolley and the free end will be lying with the PC. Feed this up through the metalwork and then through the grommet from the bottom. Replace the grommet.
- Feed the mains cable through the monitor bracket and plug the lead into the socket on the back of the Monitor. Then plug the signal lead into the 15 way high density 'D' type connector on the computer as shown in Fig. 4b Tighten the screw locks finger tight. Ensure that there is enough slack left on the cables to allow the Monitor to swivel up and down.
- Carefully bundle all cables neatly into the rear of the unit, replace the back panel and secure with the four earth nib Philips screws

## OIL TEMPERATURE PROBES

Depending on the model purchased you will have either a cabled or wireless version of the temperature probe. The Oil Temperature probe holster/recharging station is located on the top of the left side panel of the unit towards the rear. Fig 6a and 6b show the DX211-11 cabled probe connections.

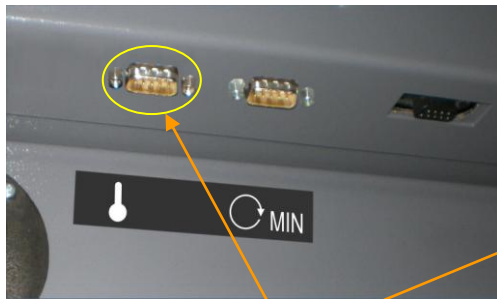


Fig. 6a

Cabled Oil Temp  
Probe connector

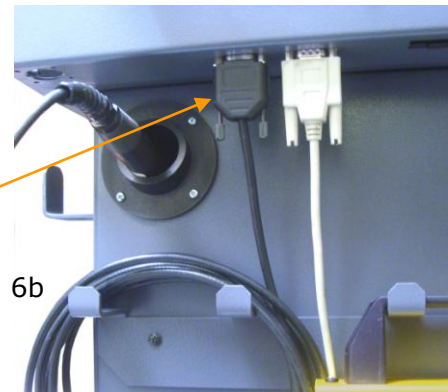


Fig. 6b

The wireless probe (DX211-11BT) does not require any connections. The probe is both switched off and recharged by being inserted into its holster (see Fig. 6c). It is imperative that the unit be returned to the holster immediately after each use. Failure to do this may cause the probe to cease operating during the working day. It will then require a continuous charging period of 48 hours to recover.

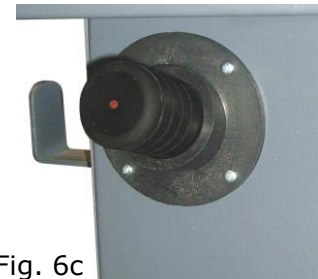


Fig. 6c



## BATTERY TACHOMETER (optional on Smokemeter)

Depending on the model purchased you may have either a cabled or wireless version of the Battery Tachometer. The cabled Battery tacho CDSS6 (or DX211-12) is connected as shown in Fig. 7a, 7b and 7c below. The wireless Battery Tacho CDSS6BT (or DX211-12BT) is similar to the cabled version but does not require a comms connection. When not in use, the tachometer may be hung by its handle on the hooks provided on the left side of the trolley.

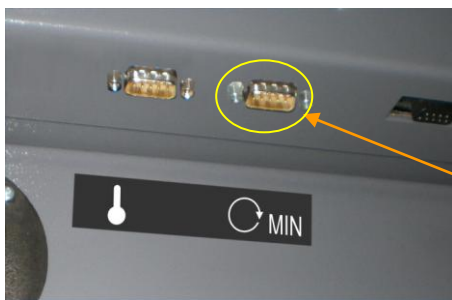


Fig. 7b

Battery Tacho (cabled) connector

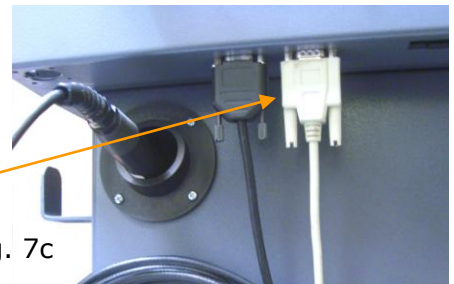


Fig. 7c

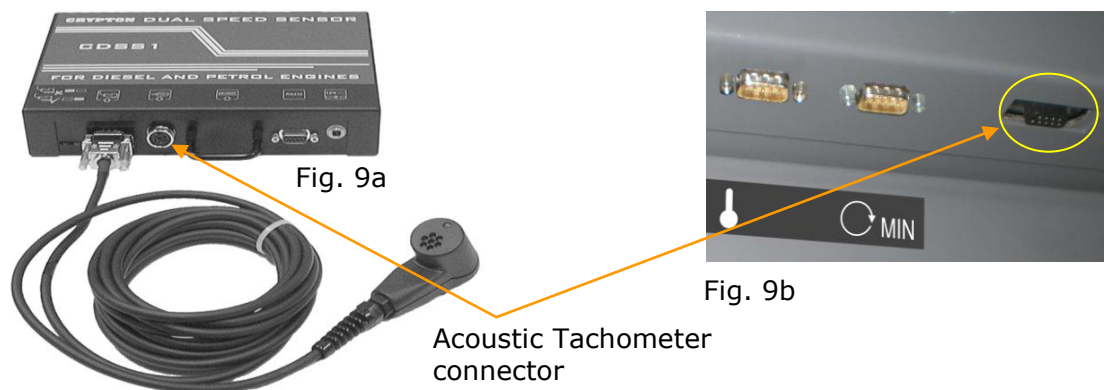
## OPTIONAL EQUIPMENT

A number of optional devices may be fitted for use with the 800 Series Emissions Analysers. Please refer to the Software and Hardware operating instructions for details.

Wireless peripherals requires the use of wireless enabled equipment to operate. The wireless receiver will be situated in the upper USB port on the PC front panel.

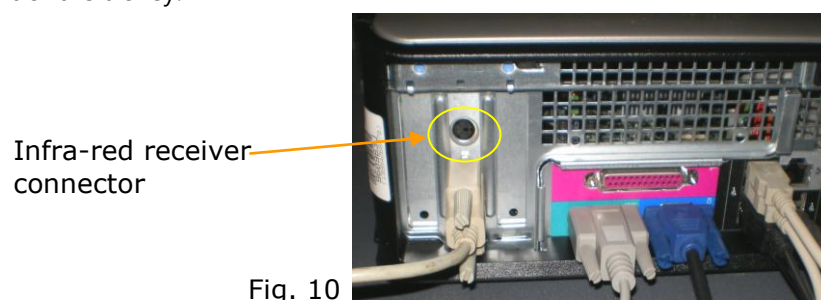
## FITTING THE ACOUSTIC TACHOMETER

The Acoustic Tachometer kit (CDSS1-700) is supplied with an interface module which is mounted inside the trolley. The Acoustic Tachometer is connected to the separate 9-way connector of this interface module. The connector is positioned beneath the top section of the trolley on the left side (Fig. 9b).



## FITTING THE INFRA-RED KEYBOARD

The optional Infra-red Keyboard (IRKYB1) can be used either in conjunction with the existing keyboard and mouse or as a replacement to it. The Infra-red receiver is located on the top surface immediately behind the PC lid, with the red window facing forward. This unit can be fixed to the trolley using the supplied double-sided adhesive pad. The cable is fed through the top monitor cable aperture and the connector is mated on the PC (as shown in Fig. 10). The keyboard should be placed in the keyboard recess of the lid toward the front of the trolley.



## CONNECTING TO THE MAINS POWER SUPPLY

The equipment should be connected to the mains power supply via the mains cable supplied with the equipment. This equipment leaves the factory set for 230V a.c. nominal, single phase 50/60 Hz. mains supply.

The mains IEC inlet is situated on the lower right hand side of the trolley. Where a Smokemeter is supplied the inlet will be located just beneath the smokehead cradle. The mains cable should be restrained using the 'P' clip situated above the mains inlet to prevent inadvertent disconnection of the mains supply during use.

## OPERATION

Before switching on, ensure that the disk drives are empty so that the computer uses the hard disk as its program source.

The trolley is switched ON by a rocker switch situated on the right side of the cabinet.

Each time the power is switched on, a 'self-test' routine will be initiated to check important areas of the electronic circuitry. If a fault is detected, a statement will appear on the screen. This exact statement should be passed on to the Service Office (see back of manual), or Agent if overseas, to enable the Service Engineer to recognise the fault before arriving on site. If during normal usage the equipment appears to function abnormally, switch the mains supply off, wait 10 seconds then turn on again to perform a self-test and thereby determine if there is a circuit malfunction.

Switch on using the switch on the side of the cabinet; the mains switches of the individual units (computer, monitor, printer, gas analyser, etc.) should normally be left on.

### **Note 1:**

It is good practice to maintain computer based equipment at an even temperature. If your garage is subject to large temperature variations it is recommended that you leave the unit ON at all times. The monitor can be turned off at night using it's own mains switch. Continuous power gives two advantages - less thermal cycling of the computer and a faster gas/smoke module warm-up at low ambient temperatures.

### **Note 2:**

ALWAYS exit the application program you are running and return to the main menu screen before switching the equipment off (use to the shut down icon on the desktop screen). This will ensure that all 'Windows' files are correctly closed and that the equipment programs are in a tidy condition before powering down.

## OPERATING SYSTEM

After switch on, the computer will perform the start up sequence and the Windows desktop will be displayed as shown below.

The 800 Series is controlled by means of 'icons' on the desktop. Each application is accessed by double clicking on the individual icon for that application. The desktop will only show the programs associated with the particular model you have purchased and may not display all the programs shown below.



### SHUT DOWN

Double click to shut the system down. This will take a short period of time during which the 'Windows is shutting down' message will be displayed. When the computer has shut down it is safe to turn the power off.



### PETROL EXHAUST ANALYSIS (UK Models only)

Double click to launch the Petrol Exhaust Analysis program. For details of how to use this program, connections and operation of the gas analyser, please refer to the on-screen Operators Manuals.



### DIESEL EXHAUST SMOKEMETER (UK only)

Double click to launch the Diesel Smokemeter program. For details of how to use this program, connections and operation of the Smokemeter, please refer to the on-screen Operators Manuals.



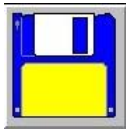
### **EXHAUST EMISSIONS ANALYSIS (Non UK only)**

Double click to Launch a combined Petrol and Diesel control application. Please refer to the on-screen Software operating instructions for further details.



### **OPERATORS MANUALS**

Double click to open a folder containing Operators Manuals in Adobe Portable Document Format. Clicking on any manual will open it in Adobe Acrobat Reader.



### **INSTALL/UPDATE SOFTWARE**

Double click to run a program called Install.exe or Setup.exe for a disk placed in the disk drive. First, place the Application Installation Disk in the disk drive then double click on the icon.

#### **Note:**

The disk must be placed in the drive BEFORE the option is selected or an error message will be displayed. When installation is complete the new program icon will then appear on the Desktop. Application software supplied on CD-ROM may automatically begin the install process when inserted into the CD-ROM drive.

**IMPORTANT: KEEP ALL ORIGINAL DISKS FOR FUTURE USE, AS THE PROGRAM MAY ONLY BE REMOVED OR UPDATED IF THE ORIGINAL DISK IS AVAILABLE!**

## **DISK INFORMATION**

### **INSTALLING A DISK**

Any additional software packs chosen for use with the unit will be accompanied by an application manual. They should be unpacked and stored safely.

Carefully unpack the programme disk, open the disk tray by pressing the CD-ROM tray access button located on the front of the PC, then place the disk fully into the disk tray with the disk label uppermost. When correctly inserted the disk tray can be closed. To remove the disk, press the release button underneath the disk drive slot and slide out the disk.

### **SAFE DISK HANDLING**

Once programmed, the protected floppy disk and CR-ROM will give trouble-free use provided that reasonable care is taken in handling and general usage.

1. Do not expose the CD-ROM to excessive high or low temperatures, e.g. do not leave in direct sunlight.
2. Do not leave the CD-ROM in a wet environment.
3. Do not allow the CD-ROM to lie in an exposed position where it can collect dust.
4. Keep the disk as clean as possible. Avoid touching the surfaces of the CD-ROM.
5. **DO NOT SCRATCH THE SURFACE.**

## AFTER SALES SERVICE

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. Contact us for On-Site Service / Overhaul / Spare Parts.

## UK Technical Support

If you require a Service Engineer to attend ON SITE, either due to an equipment fault, or for machine calibration, or if the equipment covered by this manual requires to be sent back for factory overhaul, or if you need spare parts, please contact our Product Support Helpline at the following number:

Email: [support@cryptontechnology.com](mailto:support@cryptontechnology.com)

Tel: +44 (0) 844 665 7610

Fax: +44 (0) 844 665 7604

Crypton provide information and contracts covering the following:

Vehicle Data; Fault Code Information; Diagnostic Information; Software Updates; Software Support Contracts & Accessories

## Overseas

Service required outside the UK is provided by the agent from whom your equipment was purchased. For details of local service agents please call:

Email: [support@cryptontechnology.com](mailto:support@cryptontechnology.com)

Fax: +44 (0) 844 665 7604

Continental Automotive Trading UK Ltd  
36 Gravelly Industrial Park  
Birmingham B24 8TA  
United Kingdom  
[www.cryptontechnology.com](http://www.cryptontechnology.com)

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E & O E. The Company reserves the right to introduce improvements in design or specification without prior notice.

The sale of this product is subject to our standard terms, conditions and relevant product warranty