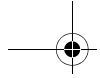


OmiScan

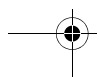
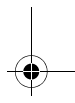
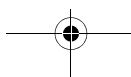
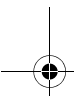
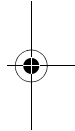
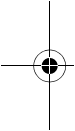


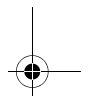
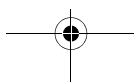
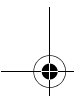
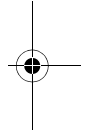
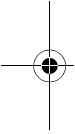
User Manual



Omitec

OmiScan User Manual





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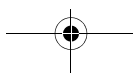
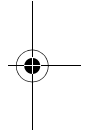
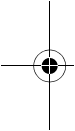
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Introduction

Copyright

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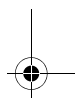
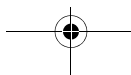
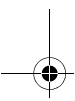
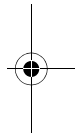
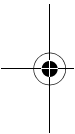
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Introduction

The Omitec OmiScan is a hand-held serial diagnostic tool for carrying out fault finding on Electronic Control Units (ECU's) fitted to cars and light commercial vehicles.

The equipment has been designed to be quick and easy to use whilst still offering the in-depth functionality required to diagnose and service today's modern vehicle control systems.



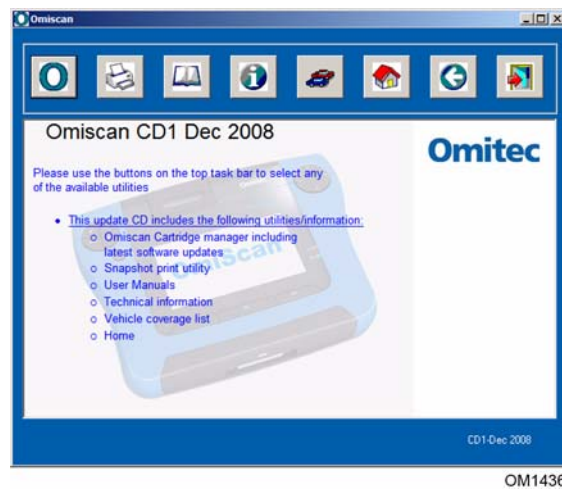
Getting Started

Setting up

OmiScan-Cartridge Manager - Installation

The 'OmiScan Cartridge Manager' software is used to manage the information held on the cartridge. It allows software applications and customer licence information to be updated when required. It is recommended that this software is installed immediately, by following these steps:

IMPORTANT! DO NOT CONNECT THE CARTRIDGE UNTIL ADVISED.

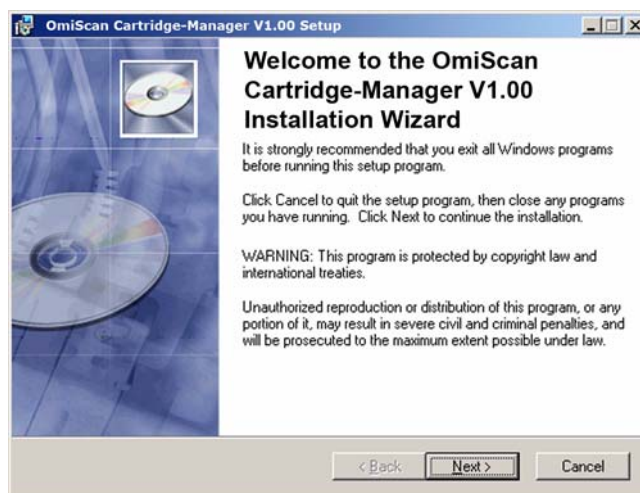


1. Insert the CD into the drive, it should auto run and display the 'Omitec' window.
2. If required the OmiScan-Cartridge Manager software installation will begin, follow the instructions.
3. Press the '**OmiScan Cartridge**' icon. The following screens will be displayed in succession. Press '**Next >**' each time until you receive confirmation that the software has been installed.

Getting Started

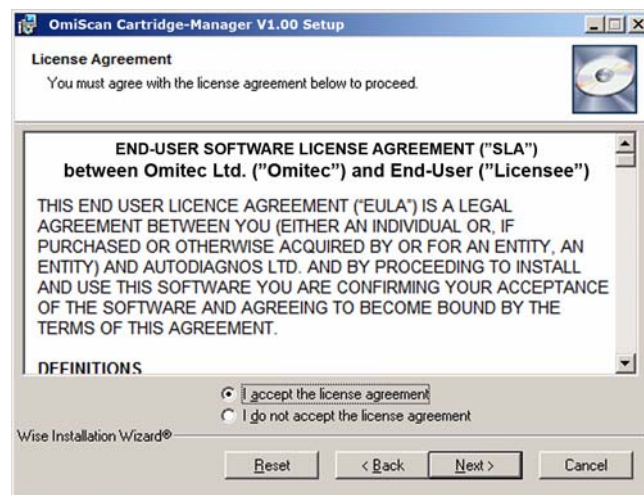


OM1474

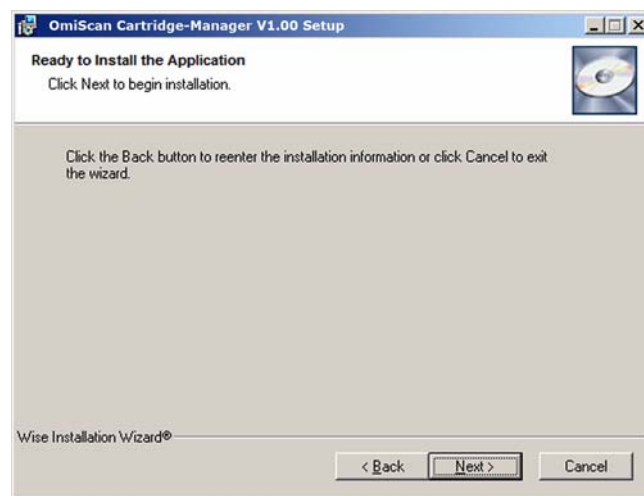


OM1403

Getting Started

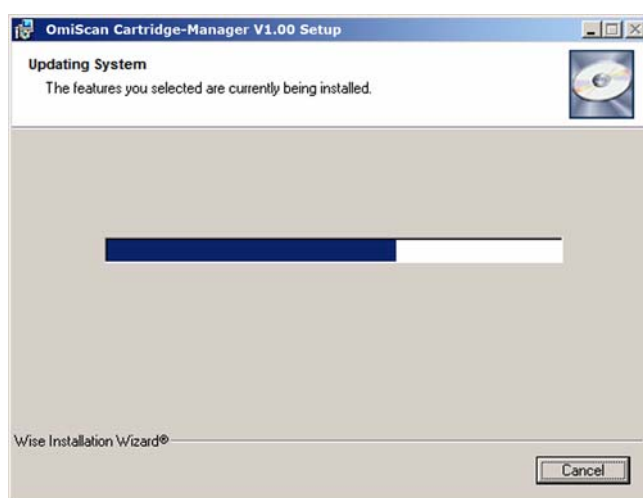


OM1404

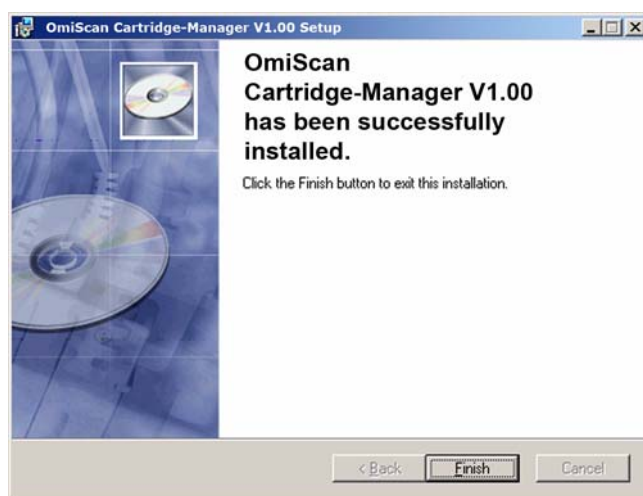


OM1405

Getting Started



OM1406



OM1407

Getting Started

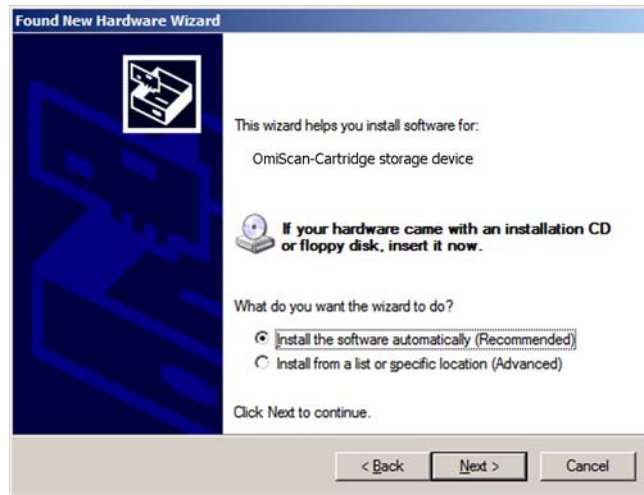
OmiScan Cartridge Driver - Installation



AU0011

1. Once OmiScan Cartridge Manager installation is complete connect the OmiScan Cartridge to a USB port on the PC. Windows will detect a new device and display the '**Found New Hardware Wizard**'. Select '**No, not this time**' and click '**Next >**' to continue.

Getting Started



OM1408

2. Select '**Install the software automatically**' and click '**Next >**'. Windows will automatically install the USB driver from the CD.
3. If a warning message saying that the driver '**.... has not passed Windows Logo testing....**' is displayed, select '**Continue anyway**' at this screen.



OM1409

4. When installation is complete the OmiScan Cartridge Manager software is ready to use.

Getting Started

OmiScan Cartridge Driver - Troubleshooting (Win XP)

If the following error message is displayed when trying to start 'OmiScan Cartridge manager' but no 'Found New Hardware' message has appeared then we advise following the steps detailed below to update the driver.



OM1410

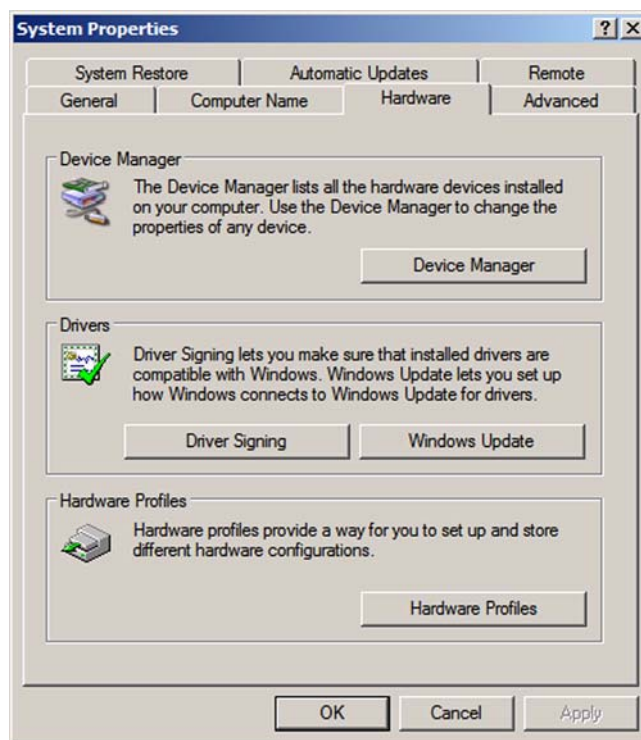
Note: If the OmiScan Cartridge is connected to a USB port that has not previously been used we advise re-trying using a different USB port.

Getting Started

Updating driver

Ensure the latest Omitec CD is in the CD drive and the OmiScan Cartridge is connected to the PC.

To update the driver used for the OmiScan Cartridge right click on MY COMPUTER (which can be found either on the desktop or within Windows 'START'), select 'Properties' then the 'Hardware' tab followed by 'Device Manager'.



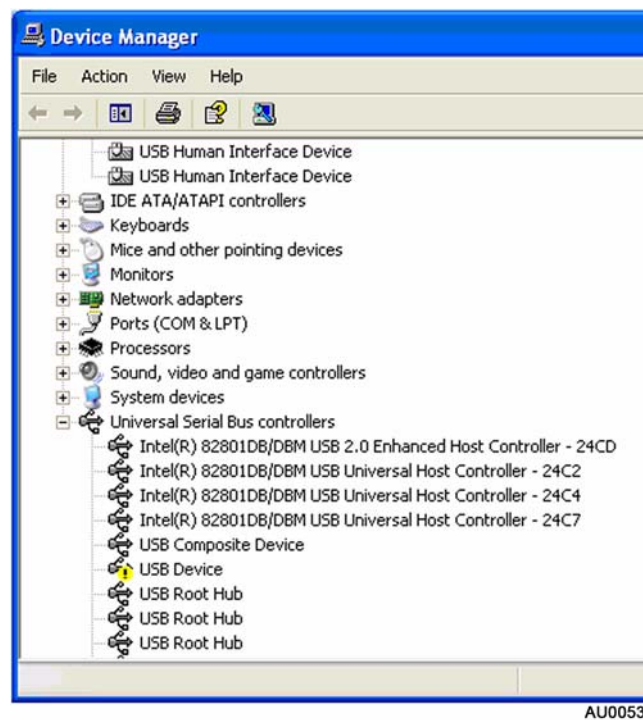
AU0052

Getting Started

Look for any 'unknown device'. These will normally be highlighted by either a yellow ! or ?.

By removing the USB cable from the OmiScan Cartridge the 'unknown device' should disappear.

Reconnect the OmiScan Cartridge to the PC and 'right click' on the 'unknown device'. Select 'Update Driver' to display the following message box.



AU0053

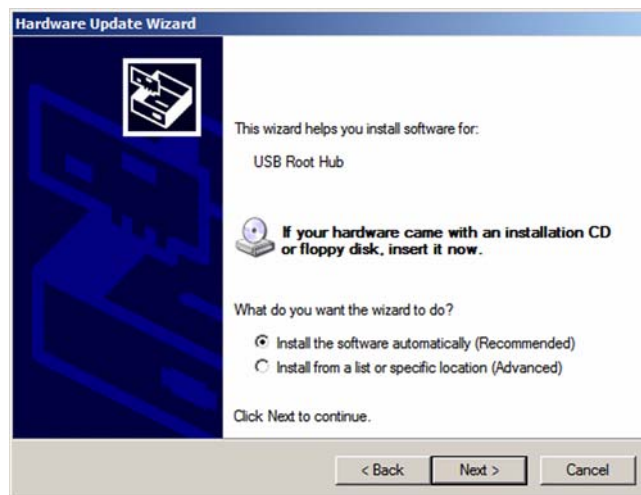
Getting Started

Select **'No, not this time'** then continue...



AU0054

Select **'Install the software automatically'** then continue...



AU0055

Getting Started

Click 'Continue Anyway' to proceed...



OM1411



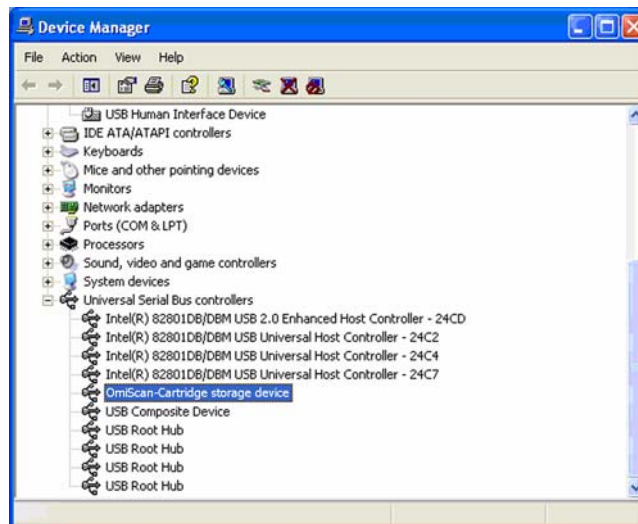
OM1412

Getting Started



OM1413

The OmiScan Cartridge is now shown as a recognised USB device.



OM1414

Once driver installation is complete the OmiScan Cartridge manager software is ready to use.

Getting Started

Connecting OmiScan Cartridge Manager

1. Connect OmiScan Cartridge to the PC using the USB cable.
2. Launch the OmiScan Cartridge Manager from the icon on the Desktop. Click **'OK'** to begin connecting to the cartridge.
3. If the **'Found New Hardware Wizard'** message appears repeat steps described in **'OmiScan Cartridge Installation'** section to complete the driver installation.
4. During the installation process, OmiScan Cartridge Manager connection to the cartridge may have timed out, this will cause an error message to be displayed. In this case click **'Retry'** to reconnect, the OmiScan Cartridge Manager will then start as normal.
5. If the following message box appears the desired operating language must be selected.

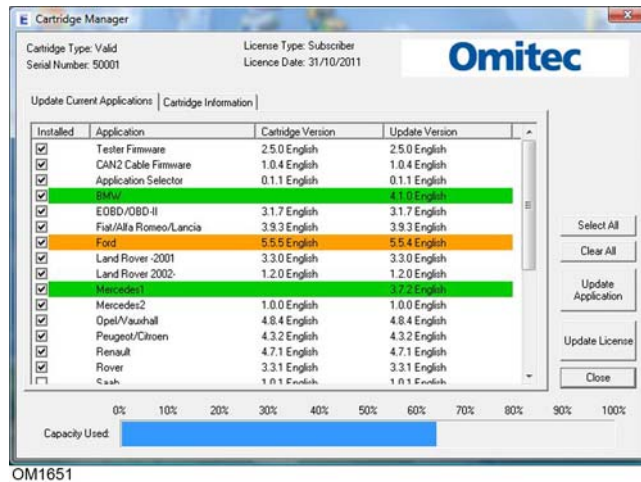


OM1415

Getting Started

6. The OmiScan Cartridge main page contains the following information:

- OmiScan Cartridge serial number.
- License subscription information.
- Applications available for respective license.
- Software version of cartridge applications.
- Update versions available for applications.



OM1651

Downloading applications

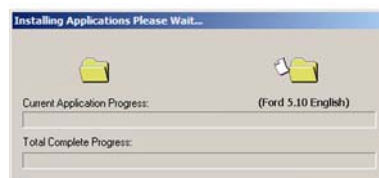
1. When connecting to the OmiScan Cartridge, software versions are checked by the application. User requirements are represented by a 'tick'. A tick will be shown against all loaded applications; the configuration of loaded applications can be modified at any time to suit requirements. The removal of a tick will result in a particular application being deleted from the cartridge at the point the **'Update Application'** button is selected.
2. Applications highlighted in **'Green'** indicate that a later software version is available. The application will be updated at the point the **'Update Application'** button is selected.

Getting Started

- Applications highlighted in '**Orange**' indicate that the software version available (on PC or CD) is a lower version than that currently loaded on the cartridge. The application will be 'downgraded' at the point the '**Update Application**' button is selected.

Note: To prevent accidental downgrading of applications it is recommended to ensure the latest OmiScan update CD is baded in the CD tray when the cartridge manager application is being used.

- Click the '**Update application**' button to begin updating.



OM1416

- When all required applications have been updated the following message will be displayed.



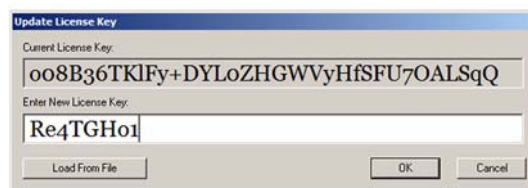
OM1417

Getting Started

Updating License

A unique license key is provided by Omitec for every OmiScan Cartridge. License keys provide the OmiScan Cartridge with application and subscription information.

To update or re-enter a license key click the '**Update License**' button. Enter new license key in the text box and click '**OK**' to confirm.



AU0018

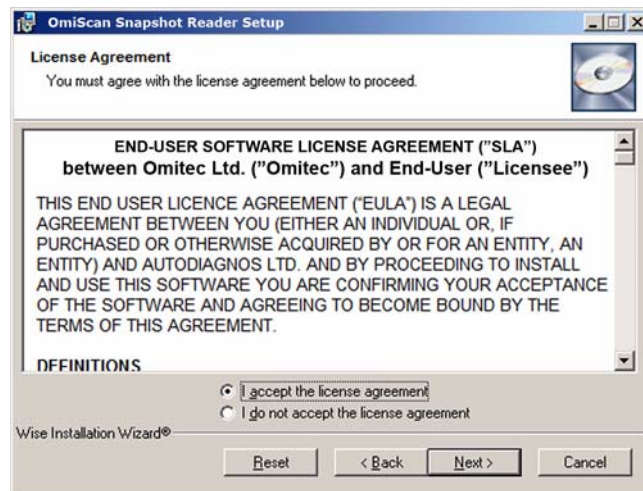
Getting Started

OmiScan Snapshot Reader - Installation (Windows XP and Vista)

1. To install the software click on the 'Install OmiScan Snapshot reader' icon and follow the prompts.

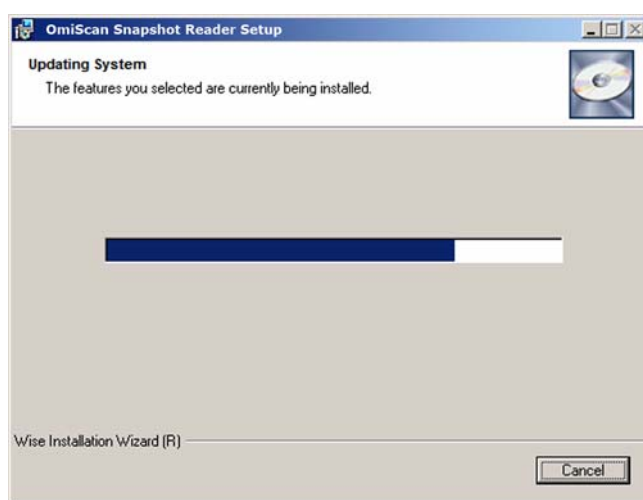


OM1475



OM1418

Getting Started



OM1419

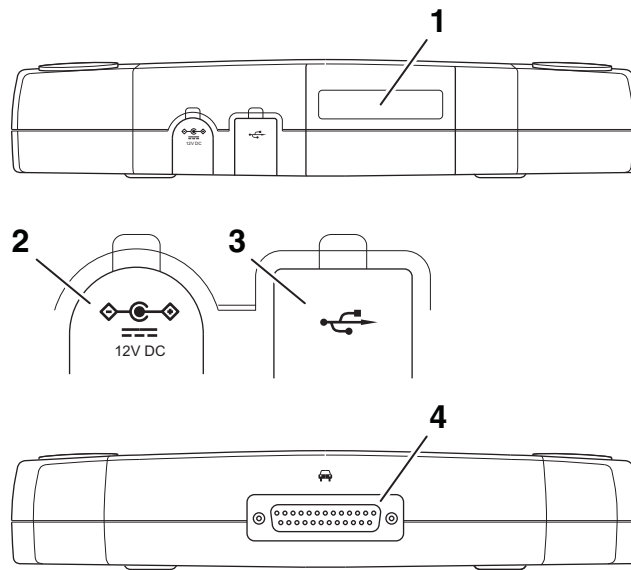


OM1420

Using OmiScan

Getting familiar with OmiScan

Connection points

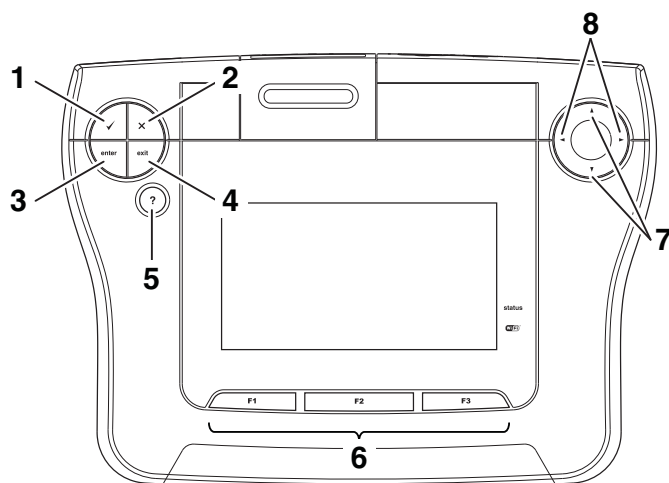


OM1426

1. OmiScan Cartridge
2. Power input (12v DC)
3. USB interface
4. Connection to vehicle

Using OmiScan

Display buttons and keys

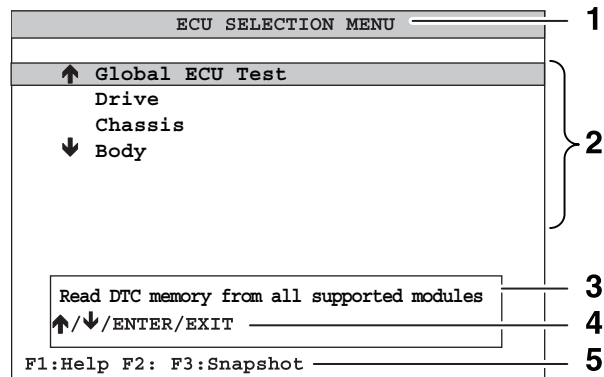


OM1400

1. 'Yes' Button - To be used in accordance with screen instructions
2. 'No' button - To be used in accordance with screen instructions
3. 'Enter' button - Press to activate selection
4. 'Exit' button - Press to step backwards
5. 'Help' button - Press to obtain further information
6. Function keys (F1, F2, F3) - To be used in accordance with screen instructions
7. Cursor Keys (Up/Down) - Used to move between menu selections or to update groups of figures
8. Cursor Keys (Left/Right) – Used to move between numbers when updating figures, or to scroll through menus and text

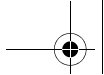
Using OmiScan

Typical screen layout



OM1421

1. Header.
2. List of menus - the selected alternative is marked.
3. Explanation of selected alternative.
4. List of permitted keys.
5. Explanation of function keys.

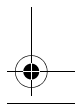
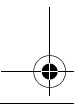
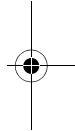
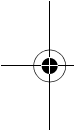


Using OmiScan

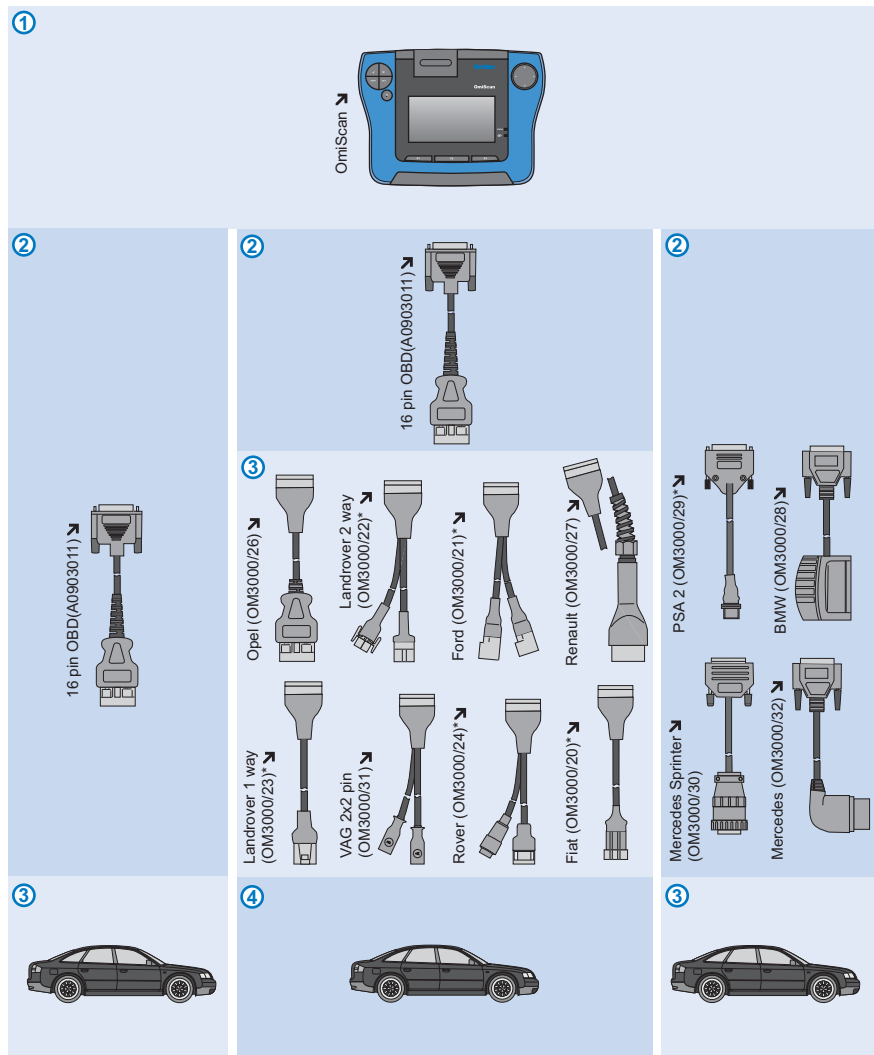
Connections

To ensure reliable communications with any module selected the following steps should be followed:

1. Identify vehicle and refer to the vehicle coverage list found on the CD to make sure the application is supported.
2. Locate vehicle diagnostic connector.
3. Select the correct cable configuration using the cable Quick guide chart below.
4. Connect required cables to OmiScan.
5. Insert OmiScan Cartridge into OmiScan.
6. Connect to the vehicle diagnostic connector.



Using OmiScan



OM1425

* Requires Battery Cable 12v

Using OmiScan

Display and keys

Communicate

When connected to the vehicle diagnostic connector the OmiScan will power up and execute a self test procedure. Once complete the main menu will display the vehicle manufacturers currently available on the OmiScan Cartridge.

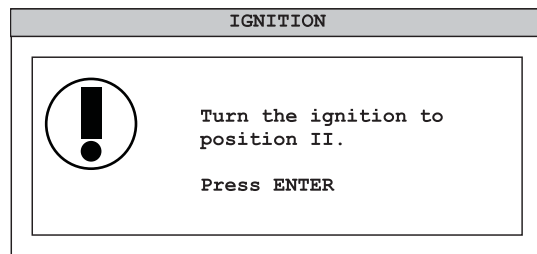
To start communications use the keypad to navigate through the menu and follow on-screen prompts when displayed.

Each car manufacturer has its own specific menu. In most cases you will be asked a series of questions to narrow down the specific system you want to diagnose.

Use **↑** and **↓** to move the cursor between menu choices, and then press **ENTER**.

In some instances you may be presented with a choice of different ECU's under the same engine code. It is important you select the correct ECU fitted to the vehicle. In such cases we recommend that you physically identify the ECU before proceeding. Selecting the wrong ECU could result in the OmiScan giving incorrect information or not functioning properly.

When the OmiScan has identified the correct system, you will be asked to turn the ignition on. **Do not turn the ignition on until instructed to do so.**



AU0033

The application will attempt to connect to the selected ECU. If you have trouble connecting to the ECU, turn the ignition off, wait for 15 second and try again.

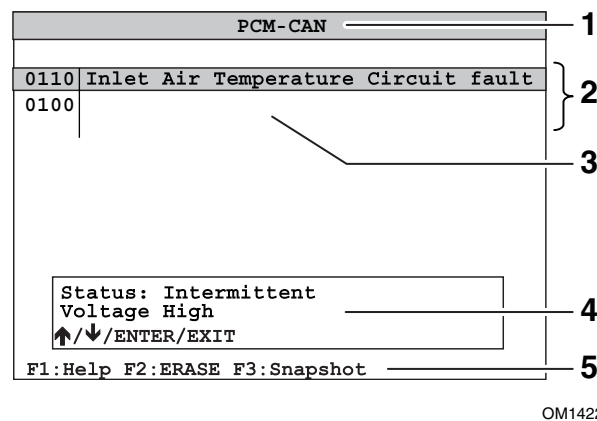
Using OmiScan

Functionality Overview

Each system will have a specific set of functions described thereafter. Most functions will give you the opportunity to take a snapshot using the function keys.

ECU Identification: The ECU identification will give the electronic signature of the ECU.

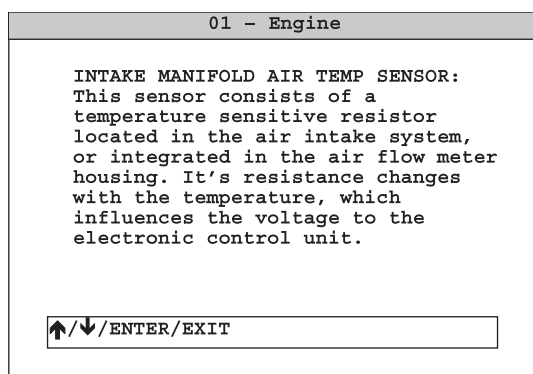
Read DTC memory: All registered Diagnostic trouble codes (DTCs) in the relevant ECU are indicated on the display. Use $\uparrow$ and $\downarrow$ to move the cursor for more information on each DTC. Additional information about the fault is then shown on the display. The numerical codes can be used if you want to look in the service literature for more information about the component or fault.



1. ECU information
2. List of stored fault codes (DTCs)
3. Text relevant to the highlighted DTC
4. Additional DTC information
5. Function keys:
 - F1 - User help.
 - F2 - Erase DTCs.
 - F3 - Save information.

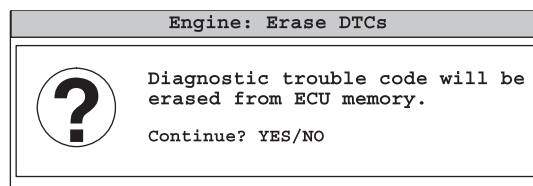
For some DTCs, you can get information about the selected component. Press HELP or ENTER. Further information about the component is shown on the display. Use $\uparrow$ and $\downarrow$ to scroll through the help text and use $\leftarrow$ and $\rightarrow$ to scroll one screen at a time.

Using OmiScan



AU0035

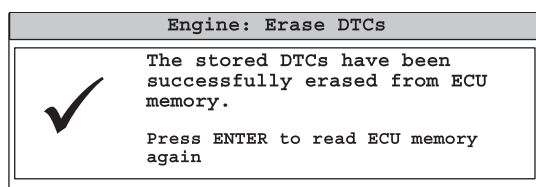
To delete a DTC, Use ↑ and ↓ to select it and press F2.



AU0036

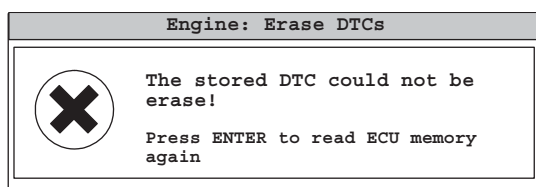
Confirm the deletion by selecting YES or cancel the function by selecting NO. The stored DTCs will have been erased from the ECU memory.

Using OmiScan



AU0037

If the DTCs were not successfully erased, the following message is displayed.



AU0038

Monitor list

OmiScan reads current data from the car's control unit. The values are updated continuously.

It is possible to modify the monitor list so that only selected parameters are displayed.

Use **↑** and **↓** to move the cursor to select data parameter. For the selected data parameter, use YES to include, and NO to exclude the data parameter from the list.

Further information on the data parameter is shown on the display.

Using OmiScan

PCM-CAN: Select List	
Battery Voltage	Yes
↑ Coolant Temp	No
Map Sensor	Yes
Throttle Position	No
Engine speed	No
Idle air control	No
O2 Sensor loop	No
O2 Sensor	Yes
EGR	No

Coolant Temperature Sensor
 ↑/↓/ENTER/EXIT

F1:Help F2: F3:Deselect all

OM1423

Actuators

In most cases, the actuators can simply be switched on and off using the YES/NO buttons on the OmiScan. The F1 key can also be used to toggle the actuator automatically, leaving the operator free to inspect the system under test.

PCM-CAN
Fuel pump relay test
Ignition coil cylinders 1 test
Ignition coil cylinders 2 test
Ignition coil cylinders 3 test
Ignition coil cylinders 4 test
EGR pulse ratio test
Fuel tank ventilation valve test
Idle air control test

Ignition coil cylinders 1 test
 ↑/↓/ENTER/EXIT

F1:Help F2: F3:

OM1424



Using OmiScan

Reset adaptation values

It is possible to reset some systems to their original adaptation values. (e.g. BMW DDE5.0).

Self Test

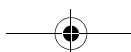
Some systems can perform a self-test and then display the trouble codes that have been logged during this test.

Module Synchronisation

The OmiScan can synchronise replacement ECU's.

When replacing a defective ECU, it may be necessary to synchronize the new ECU to other ECU's in order for it to function correctly.

The synchronisation procedures vary between manufacturers and ECU types and are described in detail within manufacturer's sub-sections.



Using OmiScan

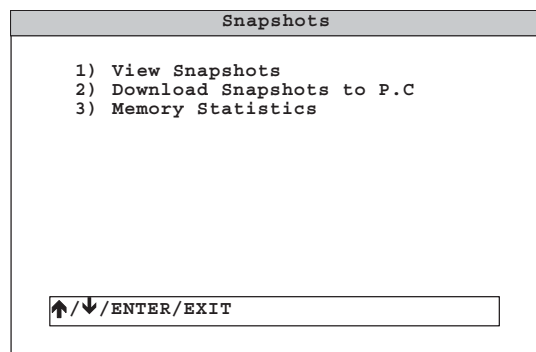
Snapshot Reader functions

During diagnostic procedures the OmiScan has the facility to save information in the form of a Snapshot. The information can be viewed on the OmiScan at a later time or can be downloaded to a PC, using the Snapshot Reader application.

To use this feature simply press the F3 button at any point during a diagnostic test procedure and the currently viewed information will be saved within the OmiScan memory for later use.

Viewing Snapshots

To view currently stored snapshots on the OmiScan select the '**View Snapshots**' option at the top of the main menu. (Note: This menu option will only be available when snapshots are stored.) Select option 1 from the menu.

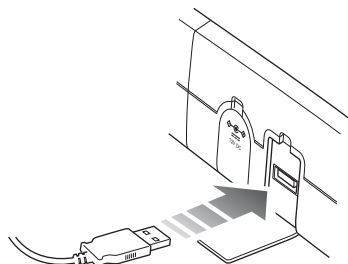


AU0042

Using OmiScan

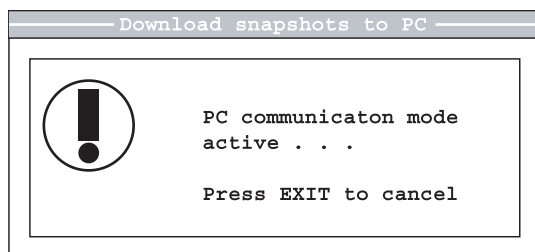
Downloading Snapshots

1. To download snapshots from the OmiScan to a PC first ensure the '**OmiScan Snapshot Reader**' application has been previously installed on the PC.



OM1427

2. **Connectivity:** The data link is provided by the USB ports.
3. Switch on the OmiScan. Ensure power can be supplied to the OmiScan, while connected to the PC. Connect the USB cable to link the OmiScan, and PC.
4. Select the '**View Snapshots**' menu, then select '**Download Snapshots to PC**' mode.



AU0044

Using OmiScan

5. Start the snapshot download. If required, complete the Customer and Vehicle Details, then press the LOAD button.



OmiScan Print Utility

Snapshot Options Help

Customer Details

Name

Telephone No.

Address

Vehicle Details

Registration No.

Make and Model

Chassis No.

Comments

OmiScan

LOAD

OM1435

6. If required, complete the Customer and Vehicle Details, then press the LOAD button. If all the settings are correct, the snapshots will be extracted from the OmiScan, processed, and displayed in your default web browser. If this fails or locks at connecting, proceed to troubleshooting.
7. The snapshot is automatically saved to a file named, Snapshot.html. If you want to save the snapshot is must be saved under another name. Select '**Snapshot, Save**' and file the new snapshot.
8. To view previously saved snapshots, select the menu option '**Snapshot, View**'.

Support Services

Product Support

When assistance is required to ensure efficient operation of the Omiscan please contact Omitec Ltd or your local supplier.

Product Support services include help with the following:

- Omitec software installation.
- OmiScan Cartridge updating.
- Diagnostic socket locations.
- Application coverage.
- Communication issues.
- Diagnostic trouble code identification.
- Procedural help.
- Service and Repair of equipment.

Technical Information

Vehicle technical information maybe required to carry out diagnostic procedures using the OmiScan.

For example:

- Fault finding assistance.
- Diagnostic trouble code interpretation.
- Wiring diagrams.
- Common problems.
- Specific system 'actual' values.

This type of information is available either directly from vehicle manufacturers or from third party providers of information via CD, Internet and telephone support services. Please contact your supplier for details of technical information products which they can provide.



Support Services

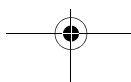
Training

With vehicle systems becoming increasingly complex the importance of training has never been as important. With this in mind Omittec Ltd believes that dedicated training courses will benefit technicians using the OmiScan and allow it to be used to its full potential.

Please contact your supplier for details on what services they can offer.

Omittec Website

Visit the 'Support' section at **www.Omittec.com** to keep up to date with useful information and procedural help.

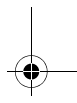
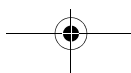
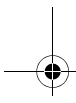
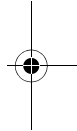
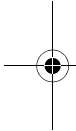




Contact Details

Omitec Address and Contact Numbers

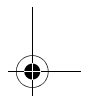
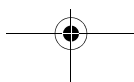
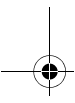
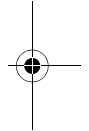
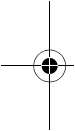
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Replacement parts

Parts list

Description	Part Number
Omiscan Handset	OM3000U01UK
Omiscan Cartridge	OM3000CART
J1962 (16 pin) cable	OM3000/10
USB Cable A to B	CB9166A
BMW 20 pin cable	OM3000/28
Fiat 3 pin adaptor	OM3000/20
Ford 2/3 pin adaptor	OM3000/21
Land Rover ABS adaptor	OM3000/23
Land Rover adaptor	OM3000/22
Mercedes 38 pin cable	OM3000/32
Mercedes Sprinter 14 pin cable	OM3000/30
Opel 10 pin adaptor	OM3000/26
PSA 2 pin cable	OM3000/29
Renault 12 pin adaptor	OM3000/27
Rover 3 pin adaptor	OM3000/24
VAG 2 pin adaptor	OM3000/31
VAG LT35 14 pin adaptor	OM3000/25
Battery cable 12v	OM3000/33
Carry Case - Omiscan	CS2108A
Carry case - Cable set	CS2015A/FM1035A
Update CD	OM3000CDxx
Mains Power Supply	PSE15-312A



Omitec

Modular Integrated Diagnostics

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