

## unit 0

### introduction

#### ATTENTION!

This software may cause chassis movements and/or engine start-up.  
Be extremely careful.

The user is responsible for the correct use of the E.A.S.Y. software so as not to cause injury to people or damage to items.

The user is also responsible for complying with all the rules relating to vehicle security and activities in the workshop.

Carefully read the user manual before using the diagnostic tool and follow the instructions displayed on the screen.

#### GENERAL RULES FOR USE

The following instructions should always be strictly followed:

- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheel chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).

The new E.A.SY. Diagnostic System for IVECO commercial vehicles has an entirely new instruction handbook.

In addition to new graphics, the handbook structure follows new principles. Topics are presented in “modules” which form independent units.

The manual consists of the following units:

- **H**<sub>w</sub> installation
- **S**<sub>w</sub> installation
- **S**<sub>w</sub> interface
- **a**cceptance
- **E**CU diagnosis
- **p**rogramming
- **a**ctive diagnosis
- **e**ngine test
- **e**lectrical diagram
- **g**uide to the diagnosis
- **e**ltrascopes
- **B**luetooth Device
- **S**<sub>w</sub> automatic updating
- **C**ertifications

Each unit can be downloaded from the following Internet Page: [www.eltrac.it](http://www.eltrac.it).

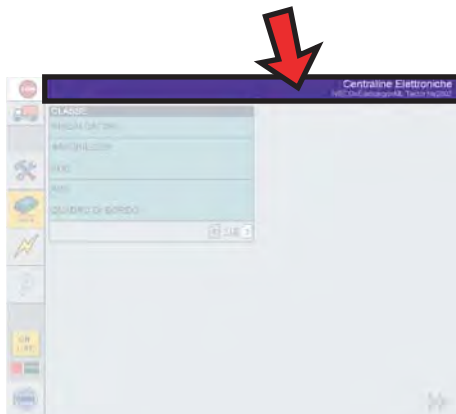
There are three E.A.SY. Diagnostic System market-specific configurations. Each configuration is presented separately, where required.

The handbook was restyled to meet the revolutionised new Diagnostic System interface which results by implementing more user-friendly navigation principles. The new E.A.S.Y. software was specifically developed to assist and facilitate electronic system troubleshooting and programming in the workshop. The interface ensures easily understood troubleshooting procedures which adapt to all diverse needs. E.A.S.Y. is innovative and surprisingly simple to use. Troubleshooting, programming and testing procedures become immediate. Accessing the various environments is more intuitive.

By observing the E.A.S.Y. interface three main operative areas are available, associated to specific functionalities:

- Title Area
- Operative Area
- Keys Area

#### TITLE AREA



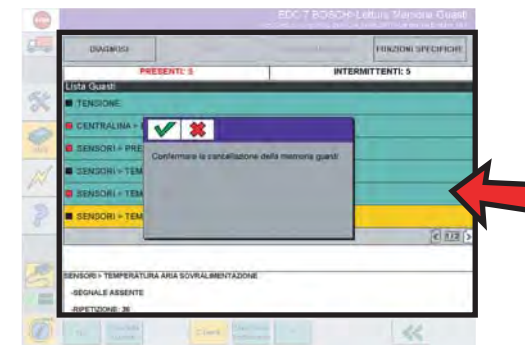
*It indicates the dynamic update of the area name under test and shows previous choices by which you arrived.*

*Useful for mentally retracing the selections made at any time.*

#### OPERATIVE AREA

*Contains systems or functions lists available for the intervention area.*

*The pull-down lists display other selectable lists.*



#### KEYS AREA



*Contains keys for accessing the different environments and the functions to which they are associated.*

Details about the HW installation are described in the [unit 1](#).

Details about the SW installation are described in the [unit 2](#).

Browse the units presented at the beginning to get to know your way round in the new E.A.S.Y. application.

For further details read the information below indicated:

- [Hw installation](#)
- [Sw installation](#)
- [www.eltrac.it](http://www.eltrac.it)

An example for a possible diagnosis path:

- [Sw interface](#)
- [Acceptance](#)
- [ECU diagnosis](#)

## unit I

### Hw installation

#### ATTENTION!

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#### GENERAL RULES FOR USE

The following instructions should always be strictly followed:

- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheel chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).

| E.A.SY. configuration | E.A.SY. LIGHT configuration | Modus Station / IT 2000 Tester user |

The diagnosis system consists of:

- a PC (Panasonic/ your PC + Microsoft Windows 2000 or Windows XP Professional /the Modus PC)
- an instrument used as interface between vehicle and PC (ECI tester or Modus Station/ IT 2000 tester)
- a SW program (E.A.SY.) to process data

By combining the above indicated components 3 different configuration are possible. Select your user configuration type and then follow the relevant information.

## USERS TYPES: IDENTIFY YOUR CONFIGURATION

1. [E.A.SY. configuration](#). PC Panasonic user + ECI module + E.A.SY. sw



2. [E.A.SY. LIGHT configuration](#). user with own PC + ECI module + E.A.SY. sw

3. [Modus Station/IT 2000 Tester user](#) + sw E.A.SY.



| receiving the kit | recognize the supplied accessories | the Panasonic PC | led indicators and ports | the external CD-R DVD | the ECI module | use the kit |



The diagnosis system consists of:

- Panasonic portable PC (Toughbook CF I8, it is the platform on which the SW for the activation has been installed)
- ECI interface module
- E.A.S.Y. SW CD
- CD with documentation
- quick guide
- CD-R/DVD unit
- cables and accessories (ref. [Recognize the supplied accessories](#))
- registration form

*E.A.S.Y. configuration  
complete kit*



For further details read the information below indicated:

- ►► Recognize the supplied accessories
- ►► Sw installation

#### CHECK THE KIT CONTENTS

### Receiving the kit

- 1 underneath the ECI module you can find the [USB cable](#) for connecting the module to the portable PC
- 2 you can find all accessories behind the case divider
- 3 underneath the CD-R/RW unit you can find the [USB cable](#) to connect the unit to the portable PC

| receiving the kit | recognize the supplied accessories | the Panasonic PC | led indicators and ports | the external CD-R DVD | the ECI module | use the kit |

## Recognize the supplied accessories

### OPERATIVE AREA

USB CABLE 4,5M A-ECI TYPE WITH EMIFILTER



*The wire is 4.5 metres long for arranging the laptop computer comfortably when it is connected to the vehicle's diagnostic socket.*

CABLE FOR VEHICLE CONNECTION



*It allows the connection between the vehicle diagnosis socket and the ECI module.*

### ACCESSORIES AREA>POWER SUPPLY AREA

PC POWER SUPPLIER FOR THE MAINS



PC POWER SUPPLIER FOR CIGARETTE LIGHTER OUTLET





| receiving the kit | recognize the supplied accessories | the Panasonic PC | led indicators and ports | the external CD-R DVD | the ECI module | use the kit |

#### ACCESSORIES AREA>CONNECTION AREA

##### USB CABLE A-ECI TYPE WITH EMIFILTER



*It enables the connection between the ECI module and the portable PC.*

##### USB CABLE



*Undereath the CD-R/RW unit you can find the USB cable to connect the unit to the portable PC.*

#### ACCESSORIES AREA>SELF-DIAGNOSIS AREA

##### SELF-DIAGNOSIS CONNECTOR



*Applied to the ECI throughout the self-diagnosis procedure, it enables to detect any failures.*

| receiving the kit | recognize the supplied accessories | the Panasonic PC | led indicators and ports | the external CD-R DVD | the ECI module | use the kit |

## The Panasonic PC

It is a Panasonic personal computer with Windows XP Professional as operative system. Its dimension and weight are very small, with particular resistance features. It is designed to work outside even under a wide range of weather conditions including heavy range and summer sun and to ensure top performances in terms of resistance to impacts and foreign material (dust).

### MECHANICAL PROPERTIES



*Full magnesium alloy casing*  
*Spray and dust resistant*  
*Ports with protection caps*  
*Hard disk with standard MIL STD 810F anti-shock system*

### TECHNICAL DETAILS

|                  |   |                         |  |
|------------------|---|-------------------------|--|
| <b>MODEL</b>     | Toughbook CF 18                                     | <b>MONITOR</b>          | back lighted LCD MONITOR, 1024x768, touch-screen technology            |
| <b>PROCESSOR</b> | Mobile Centrino enhanced Intel SpeedStep Technology | <b>MODEM</b>            | internal modem 56 kbps, RJ11 connector                                 |
| <b>RAM</b>       | 512 MB; DDR 266 MHz                                 | <b>LAN</b>              | 100 BASE-TX, connector RJ45 and 802.11b (wireless)                     |
| <b>VRAM</b>      | 48 MB   | <b>OPERATING SYSTEM</b> | Windows XP Professional  |
| <b>HDD</b>       | 40 GB   | <b>POWER SUPPLY</b>     | AC 100-240V, 50Hz/60Hz   |
|                  |   | <b>BATTERIES</b>        | Li-Ion 7,4V; 4,4 Ah // autonomy: 3,5-5,5 hrs. // charge time: 3-5 hrs. |

| receiving the kit | recognize the supplied accessories | the Panasonic PC | led indicators and ports | the external CD-R DVD | the ECI module | use the kit |

The LCD monitor has been designed to be used under adverse light conditions, such as the direct sun light typical of the work-shop environment. It is supplied with touch screen technology (it is also possible to use the supplied pen, housed in the bottom right-hand monitor compartment) and with an swivel device, which allows you to double-up your machine to be a notebook, as well as a tablet.

On the front part of the PC you can find the buttons for power-on and for the brightness control and the battery status led indicators. Some details are described below.

### led indicators and ports>left side – front buttons



#### PC POWER-ON

when the computer is turned off, slide the power button on the right side: the computer turns on  
when the computer is turned on, slide again the button: the Stand-by mode activates

|                    |  |
|--------------------|--|
| NETWORK CONNECTION |  |
| MAIL INDICATOR     |  |
| SIGNAL RECEPTION   |  |
| POWER SWITCH       |  |

| receiving the kit | recognize the supplied accessories | the Panasonic PC | led indicators and ports | the external CD-R DVD | the ECI module | use the kit |

## right side – front buttons



### LCD BRIGHTNESS CONTROL



buttons for LCD brightness control

### INPUT PANEL



by pressing the button a keyboard is displayed on the LCD screen; the keyboard can be used by touching the letters/buttons on the screen (touch-screen mode) or by using by using the included stylus

### ENTER



it is the same function of the ENTER key on the keyboard

### ROTATION



by pressing the button the screen display rotates counter-clockwise by 90° when you want to use the PC in the Tablet mode

### SECURITY



Same operation as when CTRL + ALT + CANCEL are pressed; it enable to lock the computer

| receiving the kit | recognize the supplied accessories | the Panasonic PC | led indicators and ports | the external CD-R DVD | the ECI module | use the kit |

## left side – front led indicators



### CAPS LOCK

Green indicator light.

*It lights when the CAPS LOCK is pressed. Pressing Caps Lock will make every letter you type a capital.*



### NUM LOCK

Green indicator light.

*It lights when the NUMLK key is pressed. This causes a portion of the keyboard to function as a numeric keypad.*



### SCROLL LOCK

Green indicator light.

*It lights when FN + SCRLK are pressed. It functions differently depending on the application.*



### HARD DISK DRIVE STATUS

Green indicator light.

*This indicator lights when the hard disk drive is accessed.*



### BATTERY PACK STATUS

*It indicates the battery status:*

*NOT LIT- Battery pack is not connected or charging not being performed. ORANGE INDICATOR LIGHT- charging in progress. GREEN INDICATOR LIGHT - fully-charged.*

*RED INDICATOR LIGHT - The battery level is very low, connect the PC to the power supply.*



### POWER STATUS

*NOT LIT - Power off*

*GREEN INDICATOR LIGHT - Power on*

*BLINKING GREEN INDICATOR LIGHT - Stand-by mode.*

| receiving the kit | recognize the supplied accessories | the Panasonic PC | led indicators and ports | the external CD-R DVD | the ECI module | use the kit |

## lateral side – communication ports



- 1 Power outlet
- 2 Connectors for USB cables
- 3 Connector for the modem communication cable (type RJ11)
- 4 Connector for the LAN communication cable (type RJ45)

## POWER ON THE PC

The PC autonomy ranges from approx. 3 to 5 hrs.; when the [BATTERY PACK STATUS](#) is red it is necessary to power the PC. This can be done in the following two ways:

- connect the PC to the mains outlet
- connect the PC to the cigarette lighter outlet (use the appropriate cable)



| receiving the kit | recognize the supplied accessories | the Panasonic PC | led indicators and ports | the external CD-R DVD | the ECI module | use the kit |

## The external CD-R DVD

The unit allows you the reading of CD-ROM and DVD; it also allows the writing of writeable and re-writeable CD's.

### POWER ON AND CONNECT THE CD-R

1 connect the CD-R/RW unit to the PC through the [USB supplied cable](#)



*connect the supplied  
USB cable to the module  
and to the PC, by using a port of the PC*

2 the unit is power supplied by the USB: the POWER/BUSY led lights



**Note:** to open the CD-R press the button to open the top cover; it opens only if the unit is on (POWER/BUSY green led); the CD can be read only if the top cover is closed.  
To turn off the unit disconnect it from the PC.

| receiving the kit | recognize the supplied accessories | the Panasonic PC | led indicators and ports | the external CD-R DVD | the ECI module | use the kit |

## The ECI module (Eltrac Communication Interface)

ECI is an interface module allowing the communication among the vehicle's ECU's and the PC.



WEIGHT 500 g

DIMENSION 175x75x30mm

FLASH MEMORY 4Mb – RAM 1Mb

THERMAL TOLERANCE 0-50°C

POWER SUPPLY 6-32V

CONNECTION INTERFACES  
USB and RS232 standard  
Bluetooth (optional)

VEHICLE INTERFACE  
9 KL ISO 9141 lines  
2 channels CAN Bus 2.0B  
3 digital outputs - 3I/O PWM

The led indicators on the front view allow to check the communication lines activity with the vehicle and with the PC to which the instrument is connected.

### front view – communication led indicators



Led indicators to display the activity of the communication lines K/L



| receiving the kit | recognize the supplied accessories | the Panasonic PC | led indicators and ports | the external CD-R DVD | the ECI module | use the kit |

Led indicators to display the ECU's communication activity.  
The lower led indicators display the CAN lines activity.



The upper led indicator shows that the ECI is power-supplied.  
When blinking the lower led indicator (RUN) shows that the ECI module is correctly working.



The three upper led indicators show the activity of the K/L communication lines.  
The lower led indicator (FAULT) shows the presence of errors on the K/L lines.



Led indicators to display the activity of the USB ports (upper led) or serial (lower led).



#### CONNECT THE ECI MODULE

On the ECI module there are the communication ports for the connection to the PC and to the vehicle.



communication ports for the connection to the PC: from left to right, serial and USB

communication port for the connection to the vehicle



| receiving the kit | recognize the supplied accessories | the Panasonic PC | led indicators and ports | the external CD-R DVD | the ECI module | use the kit |

#### ECI - PC

1 connect the ECI module to the PC by using one of the USB supplied cables (mt 1,8 or mt 4,5)

connect the USB cable (ECI side marked) see p. 3 and picture on the side) to the ECI module:

- remove the holding screws from the ECI module (where present)
- insert the USB connector (ECI marked) into the correct port

connect the USB cable to the PC:

- insert the USB connector (ECI marked) into the correct port

2 turn the PC on

#### Use the kit

- 1 withdraw the Panasonic Portable PC from its compartment
- 2 release the safety clip on the front side
- 3 connect the PC to the mains outlet by using the power supplier (page. 3)



power outlet of the Panasonic portable PC

- 4 withdraw the CD-R/RW unit from its compartment
- 5 connect the unit to the PC (page. 4)

#### ECI - VEHICLE

1 connect the module to the vehicle by using the vehicle connection cable

#### Note:

the module is power-supplied by the diagnostic cable; for this reason to work correctly it must be connected to the vehicle



- 6 turn the portable PC on (page. 6)
- 7 wait until the operative system loading has been completed
- 8 to continue with the registration procedure and the activation of the E.A.S.Y. SW read unit 2

For further details read the information below indicated:

- ► Sw installation

| receiving the kit | recognize the supplied accessories | the ECI module | use the kit |



The diagnosis system consists of:

- ECI interface module
- CD containing the activation program
- E.A.SY. SW CD
- CD with documentation
- cables and accessories (ref. Recognize the supplied accessories)
- quick guide
- registration form

*E.A.SY. LIGHT Configuration*



#### CHECK THE KIT CONTENTS

### Receiving the kit

It is advisable to carefully check the received kit, which has to contain the above indicated components.

#### For further details:

- ►► Recognize the supplied accessories
- ►► Sw installation

| receiving the kit | recognize the supplied accessories | the ECI module | use the kit |

## Recognize the supplied accessories

### OPERATIVE AREA

#### CABLE FOR VEHICLE CONNECTION



*It allows the connection between the vehicle diagnosis socket and the ECI module.*

#### USB CABLE A-ECI TYPE WITH EMIFILTER



*It enables the connection between the ECI module and the portable PC.*

### ACCESSORIES AREA>SELF-DIAGNOSIS AREA

#### SELF-DIAGNOSIS CONNECTOR



*Applied to the ECI throughout the self-diagnosis procedure, it enables to detect any failures.*

| receiving the kit | recognize the supplied accessories | the ECI module | use the kit |

## The ECI module (Eltrac Communication Interface)

ECI is an interface module allowing the communication among the vehicle's ECU's and the PC.



WEIGHT 500 g

DIMENSION 175x75x30mm

FLASH MEMORY 4Mb – RAM 1Mb

THERMAL TOLERANCE 0-50°C

POWER SUPPLY 6-32V

CONNECTION INTERFACES  
USB and RS232 standard  
Bluetooth (optional)

VEHICLE INTERFACE  
9 KL ISO 9141 lines  
2 channels CAN Bus 2.0B  
3 digital outputs - 3I/O PWM

The led indicators on the front view allow to check the communication lines activity with the vehicle and with the PC to which the instrument is connected.

### front view – communication led indicators



Led indicators to display the activity of the communication lines K/L

| receiving the kit | recognize the supplied accessories | the ECI module | use the kit |

Led indicators to display the ECU's communication activity.  
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The three upper led indicators show the activity of the K/L communication lines.  
The lower led indicator (fault) shows the presence of errors on the K/L lines.



Led indicators to display the activity of the USB ports (upper led) or serial (lower led).



#### CONNECT THE ECI MODULE

On the ECI module there are the communication ports for the connection to the PC and to the vehicle.



communication ports for the connection to the PC: from left to right, serial and USB

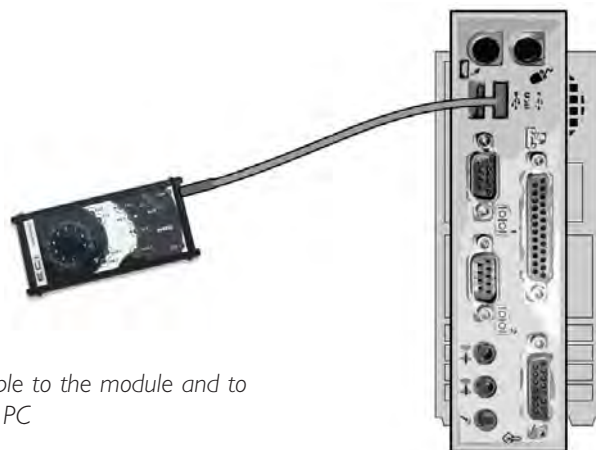
communication port for the connection to the vehicle



| receiving the kit | recognize the supplied accessories | the ECI module | use the kit |

#### ECI - PC

- 1 connect the ECI module to the PC throughout the [USB cable](#)
- 2 turn the PC on



*connect the supplied USB cable to the module and to the PC, by using a port of the PC*

#### Use the kit

- 1 turn the PC on
- 2 wait until the Operating System loading has been completed
- 3 to continue with the registration procedure and the activation of the E.A.SY. SW read [unit 2](#)

#### ECI - VEHICLE

- 1 connect the module to the vehicle by using the vehicle connection cable

#### **Note:**

*the module is power-supplied by the diagnostic cable; for this reason to work correctly it must be connected to the vehicle*



For further details read the information below indicated:

- ►► Sw installation

| use the cd for the first time |

**Modus/IT 2000**

The diagnosis system consists of:

- E.A.SY. SW CD
- CD with documentation
- quick guide

*Modus Station / IT 2000 Tester user*



*Modus Station back*



*CD-R unit*

**POWER ON THE STATION:**

insert the power plug in the outlet of  
the mains supply  
power on the UPS  
turn the switch on the I position

### Use the CD for the first time

- 1 power the Modus Station /IT 2000 Tester
- 2 wait until the System loading has been completed
- 3 insert the E.A.SY. SW cd into the unit

The Modus Station is now ready for the installation of the new Diagnosis SW.

For further details:

- ► Sw installation



## unit 2

### Sw installation

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#### GENERAL RULES FOR USE

The following instructions should always be strictly followed:

- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheels chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).

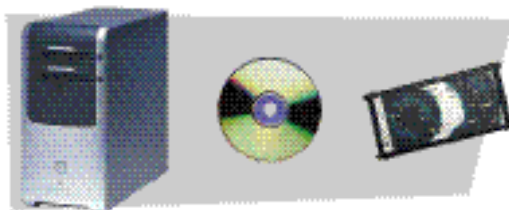
The E.A.S.Y. diagnosis system is formed of:

- a portable PC (Toughbook Panasonic or own + Microsoft Windows 2000 Windows XP Professional or Modus PC)
- an instrument used as interface between vehicle and PC (ECI tester or Modus Station / IT 2000 tester)
- a SW program (E.A.S.Y.) to process data

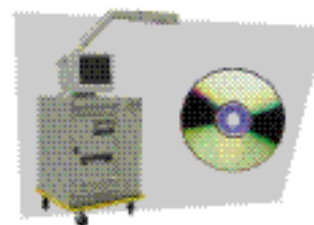
By combining the above indicated components 3 different configuration are possible. Select your user configuration type and then follow the relevant information.

### users types: identify your configuration

1. e.a.sy. configuration for user Panasonic PC + ECI module + E.A.S.Y. sw



2. e.a.sy. light configuration for user's own PC + ECI module + E.A.S.Y. sw.



3. Modus Station / IT 2000 Tester + E.A.S.Y. sw user

## e.a.sy. configuration

user Panasonic PC + ECI module + E.A.SY. sw





## Registration

To use the E.A.S.Y. diagnosis system + ECI module it is firstly necessary to register the E.A.S.Y. system in use and ask for the activation code:

- ◆ connect to [www.eltrac.it](http://www.eltrac.it)
- ◆ from the main page select the specific section E.A.S.Y.
- ◆ select E.A.S.Y. REGISTRATION
- ◆ a fill-in form is displayed
- ◆ enter the data required
- ◆ just click SEND to send the filled in form

### Caution

the activation code received will be requested the first time you run the E.A.S.Y. software.

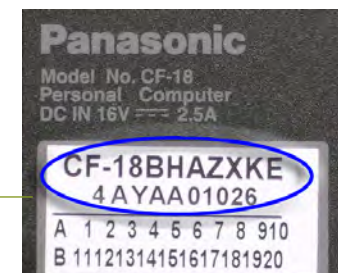


- ◆ within 48 h from forwarding, the code for activating the E.A.S.Y. software will be notified to the user e-mail address specified in the form (►► Activation)

## Registration form

Registration allows you to obtain the activation code. In the registration form you should indicate the customer, logistic and technical information concerning your E.A.S.Y. system. In particular you are required to state the following:

| INFORMATION ABOUT THE E.A.S.Y. SYSTEM CHOSEN |   |
|--|---|
| SYSTEM CHOSEN                                | state whether E.A.S.Y. or E.A.S.Y. Light, choosing from the drop-down menu                              |
| ACTIVATION REQUESTED                         | select the corresponding check-box  |
| ECI SERIAL NUMBER                            | the serial number is type<br>×× - ## ## ## - ## - ## - ##;<br>to be found on the back of the ECI module |
| PANASONIC PC SERIAL NUMBER                   | the serial number is type<br>×× - ## ××××××××<br># ××××× ## ## ##                                       |
| INFORMATION ABOUT PC (IF E.A.S.Y. LIGHT)     |   |
|  | technical information about the PC on which E.A.S.Y. is to be installed                                 |
|  |   |
| INFORMATION ABOUT PRODUCTS OWNED             |   |
|  | Modus, IT2000, IWT or other; stating the serial numbers   |



The registration form must be completed on-line; at the end select the SEND button to end the operation.

if you are not able to connect to the above indicated site, print the form contained on the CD. After having filled in the form, fax it to Eltrac Field Service (+39-11-22309281); this procedure will last more time.

## Connection

1. connect the ECI module to the vehicle using the diagnosis cable



*Note*  
the ECI module is supplied by the diagnosis cable; therefore  
it must be connected to the vehicle to be able to work



2. connect the ECI module to the PC, using one of the two USB cables provided with the module
3. switch the PC on

**For further details read the information below indicated:**

Recognize the supplied accessories

Sw interface

Bluetooth Device

## Activation - first time of use of E.A.SY. software + ECI module

The first time the E.A.SY. Diagnosis System release 3.1 is used, it is necessary to follow the procedure described below:

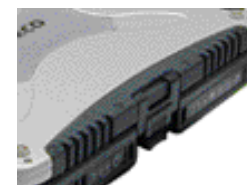
1. make sure you have received the activation code from Field Service
2. connect the ECI module to the Panasonic PC and to the vehicle using the USB cable



3. start the Panasonic PC

### How to start the Panasonic PC

1. remove the portable Panasonic PC from its housing
2. release the safety catch on the front and lift up the monitor



SAFETY CLIP

3. connect the power supply unit to the PC, through the power socket, and to the mains



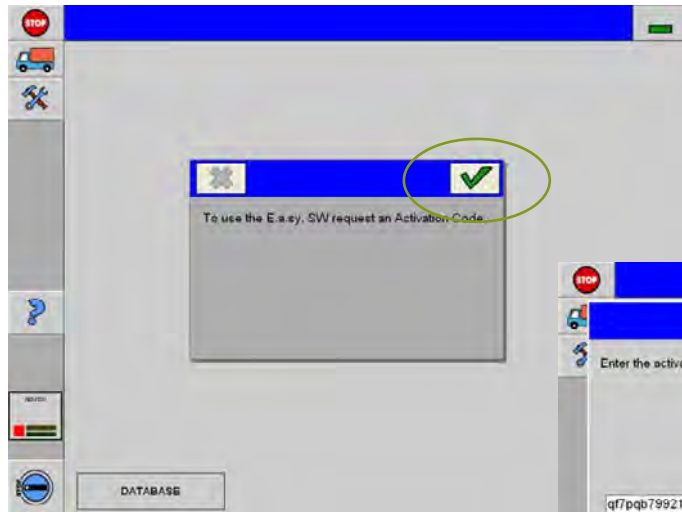
4. switch on the portable PC and wait for loading of the operating system



to switch on the PC move the ON button to the right

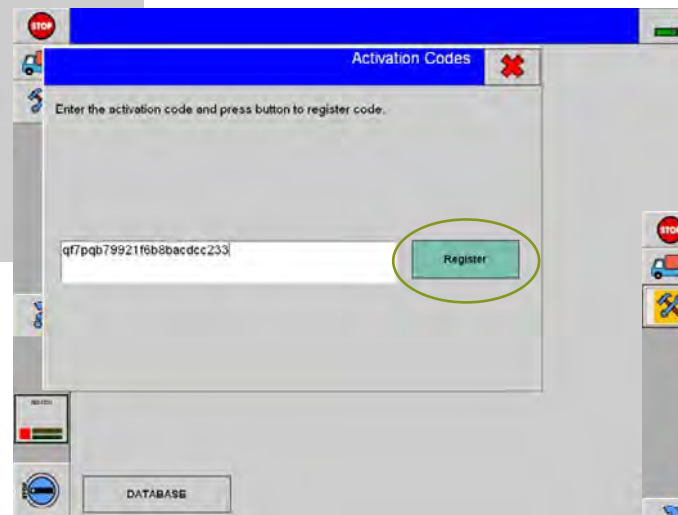
| registration | connection | activating - first time of use | activating - new ECI module | release update |

4. The system asks you to enter the activation code received from Field Service (►► Registration);  
select the TICK button

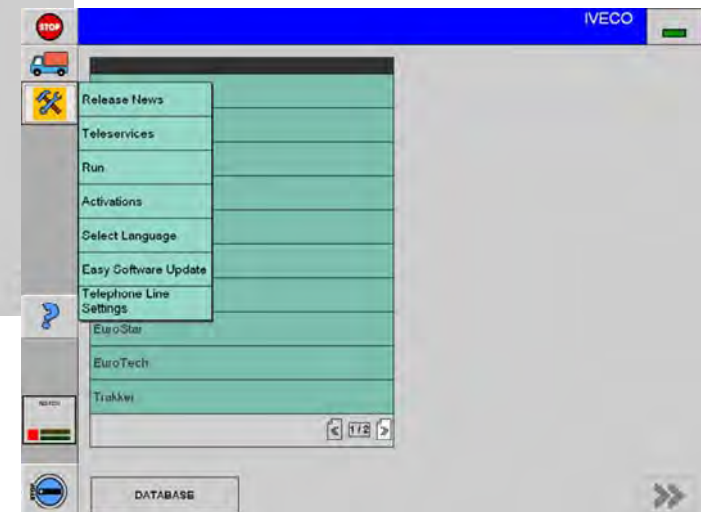


5. enter the activation code received from Field Service

6. select the REGISTER button; a message confirms that registration has taken place



7. select the CROSS button to close the  
*Activation Code* window and go back to the  
E.A.S.Y. screen



8. select the STOP button and restart E.A.S.Y.

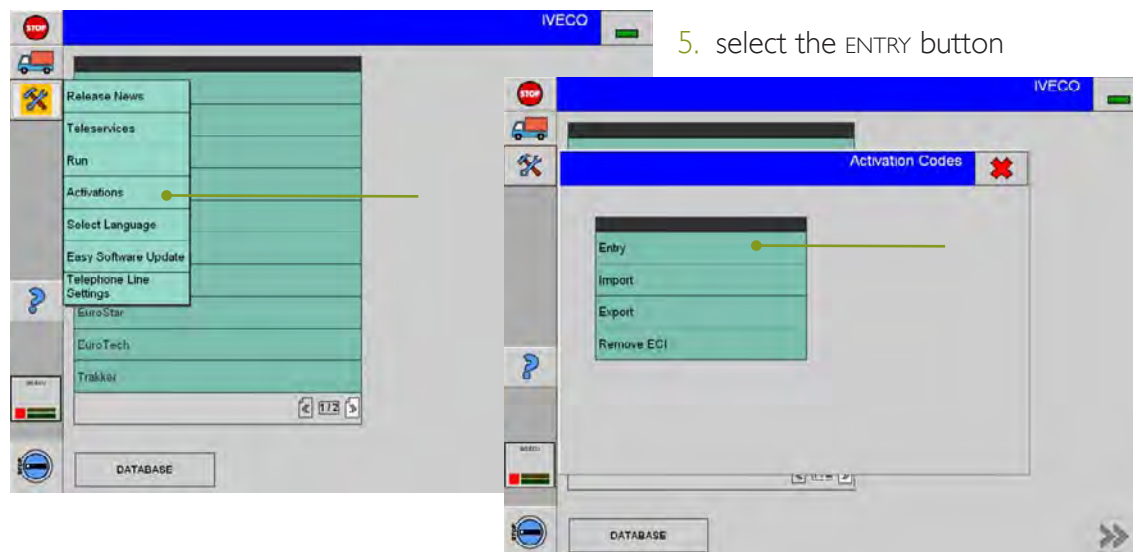
Now all the software functions are available.



## Activating - new ECI module

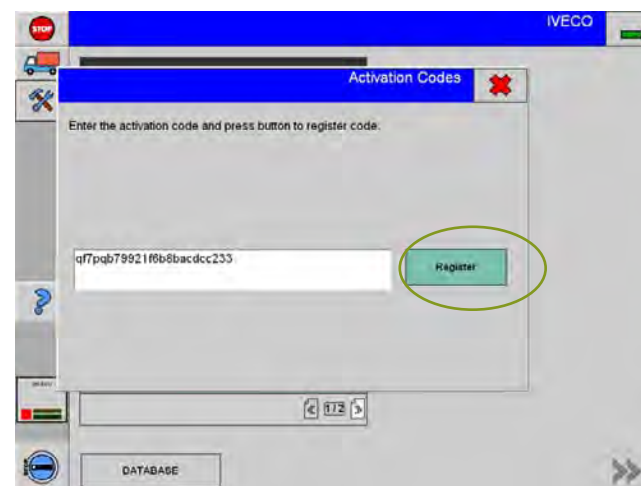
The activation procedure is necessary every time you want to use an ECI module that has not yet been paired to the E.A.S.Y. diagnosis system in use; follow the operations described below:

1. make sure you have requested and obtained the activating code for the ECI module (►► registration)
2. connect the ECI module to the Panasonic PC and to the vehicle using the USB cable
3. start the E.A.S.Y. software: double click on the E.A.S.Y. icon on the PC desktop
4. select the TOOLS>ACTIVATIONS button



5. select the ENTRY button

6. enter the activation code received from Field Service
7. select the REGISTER button; ...a message confirms that registration has taken place



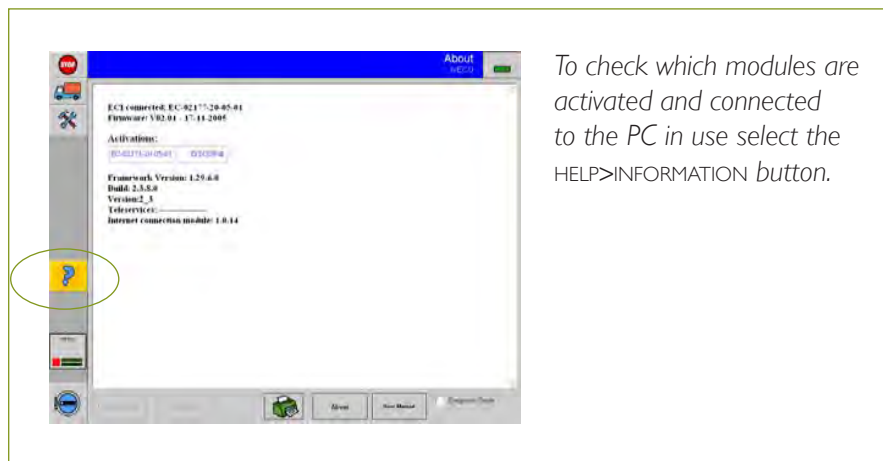
8. select the CROSS button to end activation

9. re-start the E.A.S.Y.

## Activation Codes menu functions

Functions are available for easily handling the activation codes. Selecting **TOOLS>ACTIVATIONS** the activation code window appears which allows access to the *Activation Code* management functions:

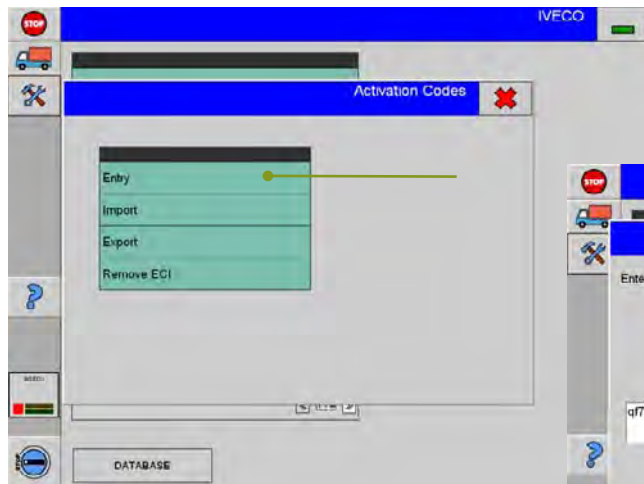
- ◆ **ENTRY** select to enter the activation code received from Field Service
- ◆ **IMPORT** allows you to import the files containing the activation codes
- ◆ **EXPORT** allows you to export the files containing the activation codes
- ◆ **REMOVE ECI** allows you to deactivate an ECI module activated previously on the PC in use.



## Activation Codes > Entry menu functions

This allows you to enter the activation code received from Field Service

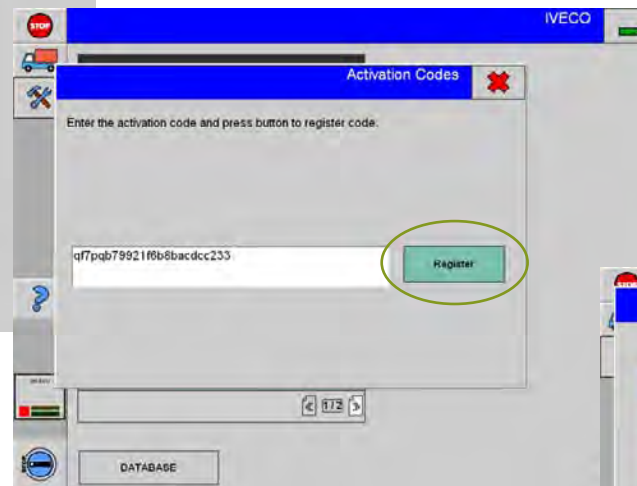
1. select ENTRY



2. select the active field and use the keyboard to enter the activation code

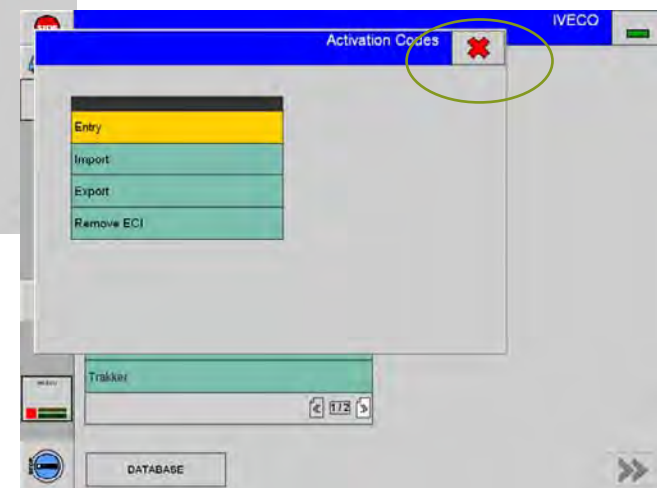
3. select the REGISTER button

4. if the activation code is wrong a message will confirm so



5. select the CROSS button to close the *Activation Code* window and go back to the E.A.S.Y. screen

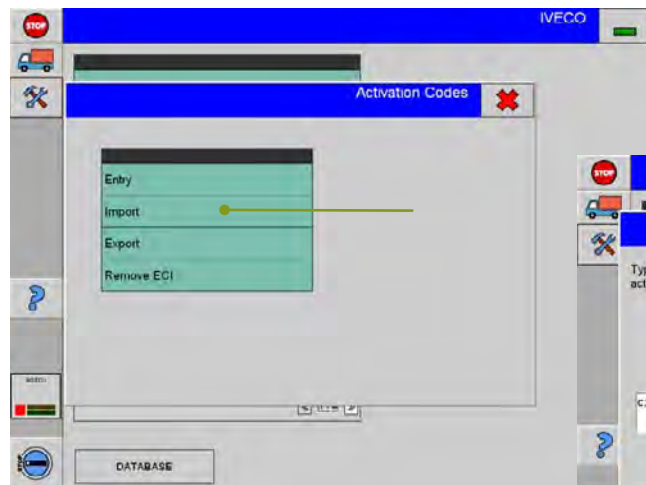
6. re-start the E.A.S.Y. software to make activation effective



## Activation Codes > Import menu functions

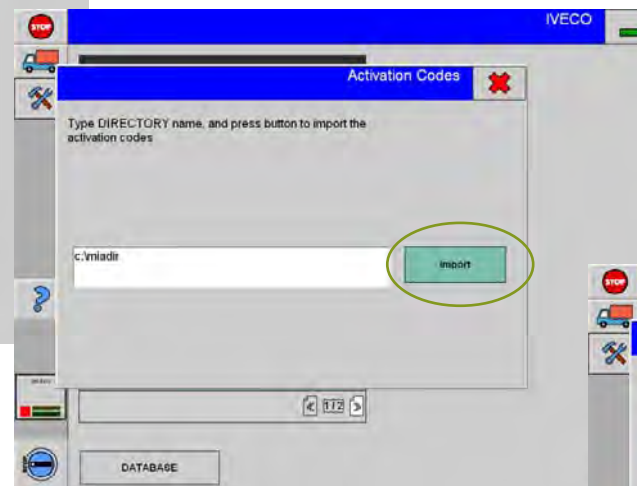
This allows you to import the files containing the activation codes provided by Field Service or coming from a previous export:

1. create a folder that will hold the files containing the activation codes, for example folder **c:\myadir**
2. copy the files with the activation codes (**actCodes.txt** and **ECIs.txt**) in the c:\myadir folder



3. select IMPORT

4. select the active field and, using the keyboard, enter the folder name including the path, **c:\myadir**



5. select the IMPORT button  
a message confirms that import has taken place

6. select the CROSS button to close the Activation Code window and go back to the E.A.S.Y. screen

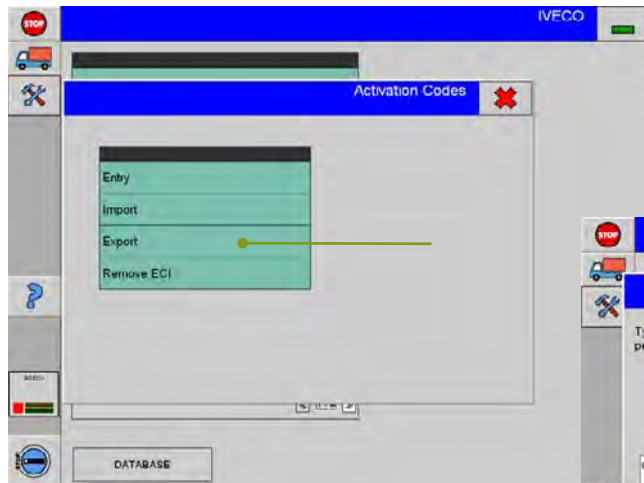


7. re-start the E.A.S.Y. software to make activation effective

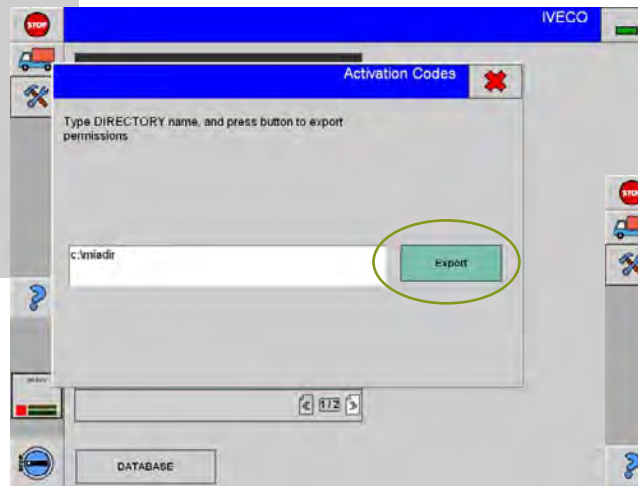
## Other functions of the Activation Codes > Export menu

This allows you to export the files containing the activation codes:

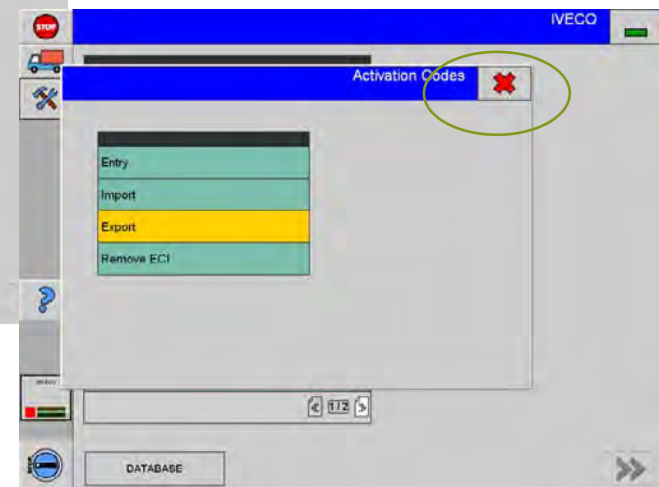
1. create a folder that will hold the files containing the activation codes, for example folder `c:\myadir`
2. select EXPORT



3. select the active field and using the keyboard, enter the folder name including the path, `c:\myadir`
4. select the EXPORT button  
a message confirms that export has taken place



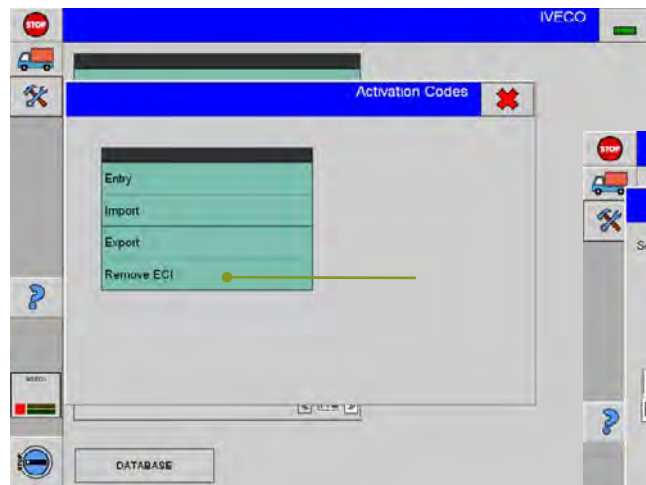
5. select the CROSS button to close the Activation Code window and go back to the E.A.S.Y. screen



## Other functions of the Activation Codes > Remove ECI menu

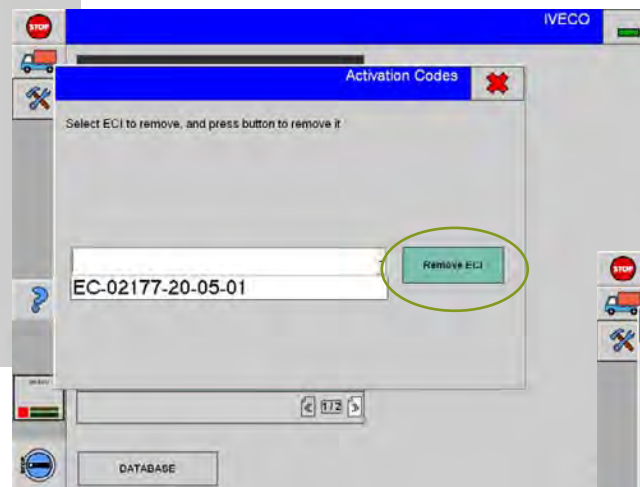
This allows you to deactivate an ECI module activated previously on the PC in use:

1. select REMOVE ECI

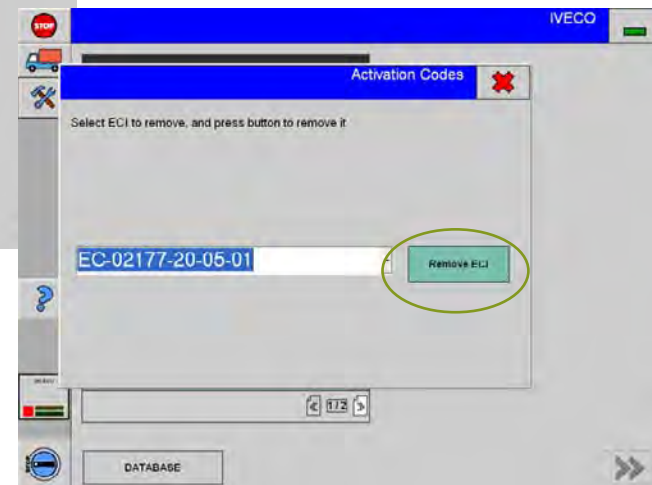


2. using the drop-down menu choose the ECI module you want to deactivate

3. select the REMOVE ECI button



4. select the CROSS button to close the Activation Code window and go back to the EASY screen





## Release update

If you are updating the E.A.S.Y. diagnosis software installed on the Panasonic PC to release 3.1, follow the procedure described below:

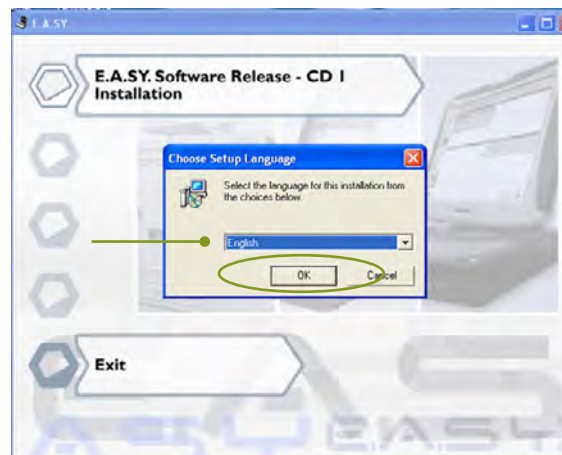
1. put CD 1 of the E.A.S.Y. software in the CD-R/RW drive (►► unit 1)> select the CD-R/RW drive with a double click: the setup.exe application is run automatically; if the operation fails, examine the contents of the CD and select the Setup.exe file to start set-up
2. select the language in which you want to install the E.A.S.Y. software
3. select the E.A.S.Y. SOFTWARE RELEASE - CD 1 INSTALLATION button;  
wait...



### Caution

The exit button, when available, allows you to EXIT the set-up environment.

4. choose the installation language from the drop-down menu and press the OK button  
software set-up begins; wait...



5. select the flag corresponding to the language in which you want to install the E.A.S.Y. sw; it is possible to choose more than one language; continue selecting the NEXT button



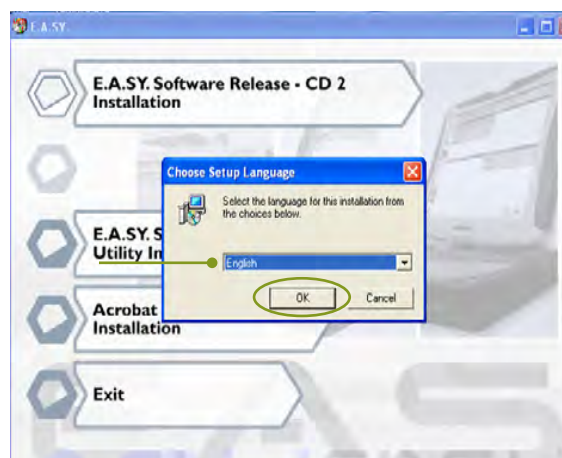
| registration | connection | activating - first time of use | activating - new ECI module | **release update** |

wait... a message tells you that it is necessary to insert the second CD; follow the instructions on the screen;

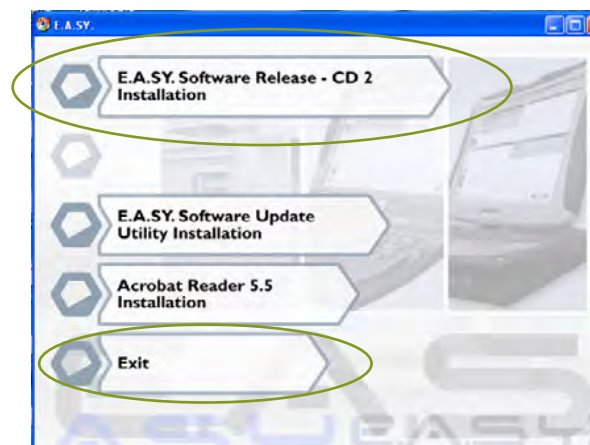
6. press the EXIT button; eject CD I and insert CD2



7. choose the installation language from the drop-down menu and press the OK button



8. select the E.A.S.Y. SOFTWARE RELEASE - CD 2 INSTALLATION button



...wait for the end of set-up

9. press the EXIT button to exit the set-up environment and eject the CD.

#### An example for a possible diagnosis path:

Sw interface

Acceptance

ECU diagnosis

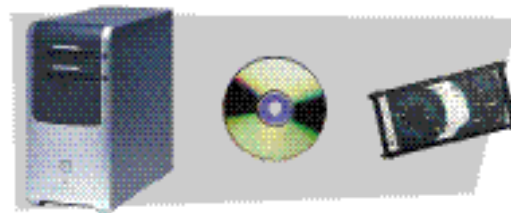
Select the E.A.S.Y. - SOFTWARE UPDATE UTILITY INSTALLATION button to install the automatic utility update.

Select the ADOBE READER INSTALLATION button to set-up the PDF file reader; it is necessary to consult all the documentation attached.



## e.a.sy. light configuration

user's own PC + ECI module + E.A.SY. sw.





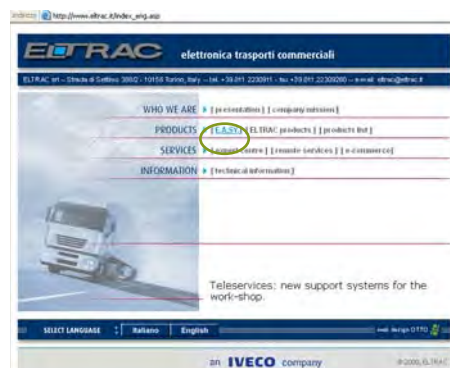
Installation of the E.A.S.Y. diagnosis software requires the following operations:

1. registration of the E.A.S.Y. system
2. set-up of the E.A.S.Y. software
3. installation of the USB driver of the ECI module, if the PC in use has never been connected to an ECI module:
4. entry of the activation code to enable the PC for use of the ECI module

## I. Registration

To use the E.A.S.Y. diagnosis system + ECI module it is firstly necessary to register the E.A.S.Y. system in use and ask for the activation code:

1. connect to site [www.eltrac.it](http://www.eltrac.it)
2. from the home page go to the specific E.A.S.Y. section



3. select E.A.S.Y. REGISTRATION



4. a form to be completed on line appears



5. enter the data required
6. select the SEND button to send the completed form

### Caution

The activation code received will be requested the first time you run the E.A.S.Y. software.

7. within 48 h from forwarding, the code for activating the E.A.S.Y. software will be notified to the user e-mail address specified in the form (►► Activation)

## Registration form

Registration allows you to obtain the activation code. In the registration form you should indicate the customer, logistic and technical information concerning your E.A.S.Y. system. In particular you are required to state the following:

| INFORMATION ABOUT THE E.A.S.Y. SYSTEM CHOSEN |   |
|--|---|
| SYSTEM CHOSEN                                | state whether E.A.S.Y. or E.A.S.Y. Light, choosing from the drop-down menu                                    |
| ACTIVATION REQUESTED                         | select the corresponding check-box  |
| ECI SERIAL NUMBER                            | the serial number is type<br>× × - # # # # # - # # - # # - # # ;<br>to be found on the back of the ECI module |
| INFORMATION ABOUT PC (IF E.A.S.Y. LIGHT)     |   |
|  | technical information about the PC on which E.A.S.Y. is to be installed                                       |
|  |   |
| INFORMATION ABOUT PRODUCTS OWNED             |   |
|  | Modus, IT2000, IWT or other; stating the serial numbers   |



The registration form must be completed online; at the end select the SEND button to end the operation.

if you are not able to connect to the above indicated site, print the form contained on the CD. After having filled in the form, fax it to Eltrac Field Service (+39-11-22309281); this procedure will last more time

## 2. E.A.SY. software set-up

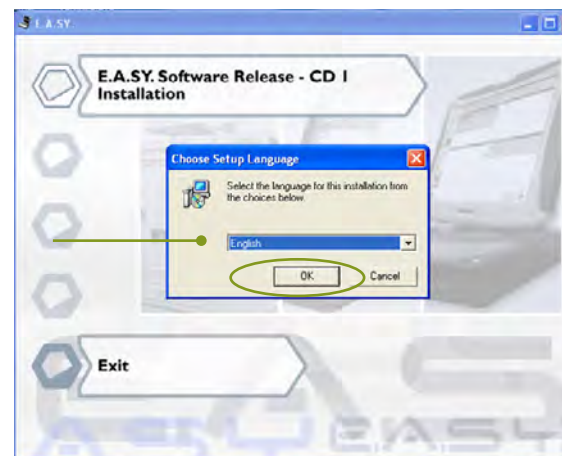
1. put CD 1 of the E.A.SY. software in the CD-R/RW drive > select the CD-R/RW drive with a double click: the **setup.exe** application is run automatically; if the operation fails, examine the contents of the CD and select the **Setup.exe** file to start set-up
2. select the language in which you want to install the E.A.SY. software
3. select the E.A.SY. SOFTWARE RELEASE - CD 1 INSTALLATION button; wait...



### Caution

The exit button, when available, allows you to EXIT the set-up environment.

4. choose the installation language from the drop-down menu and press the OK button software set-up begins; wait...



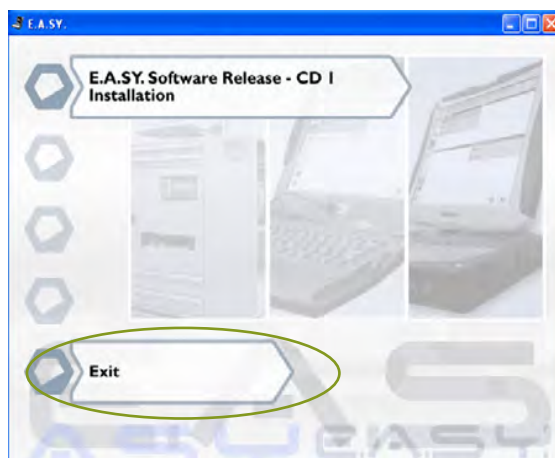
5. select the flag corresponding to the language in which you want to install the E.A.SY. sw; it is possible to choose more than one language; continue selecting the NEXT button



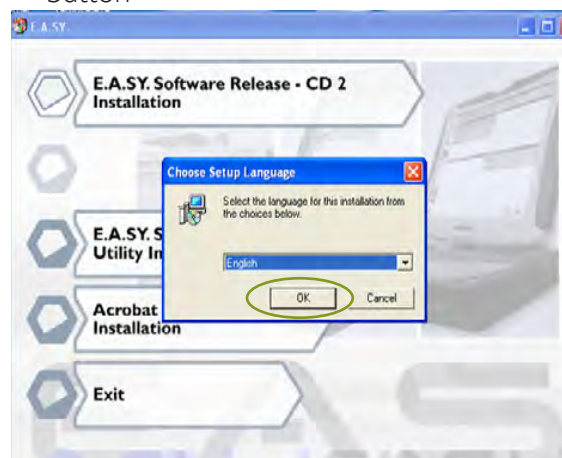
| registration | EASY sw set-up | connection | ECI driver set-up | first activation | activating new ECI module | release update |

wait... a message tells you that it is necessary to insert the second CD; follow the instructions on the screen;

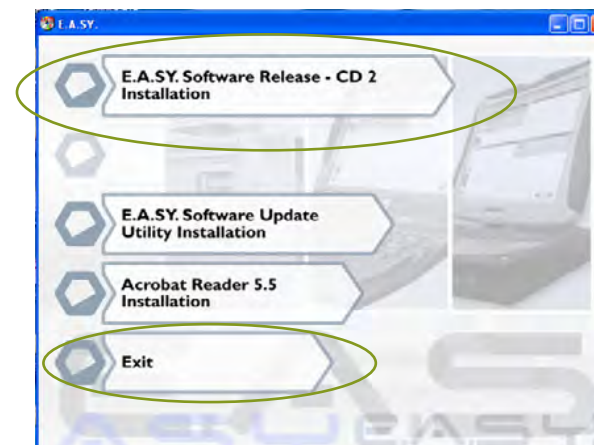
6. press the EXIT button; eject CD1 and insert CD2.



7. choose the installation language from the drop-down menu and press the OK button



8. select the E.A.S.Y. SOFTWARE RELEASE - CD 2 INSTALLATION button



...wait for the end of set-up

9. press the EXIT button to exit the set-up environment and eject the CD.

An example for a possible diagnosis path:

Sw interface

Acceptance

ECU diagnosis

Select the E.A.S.Y. - SOFTWARE UPDATE UTILITY INSTALLATION button to install the automatic utility update.

Select the ADOBE READER INSTALLATION button to set-up the PDF file reader; it is necessary to consult all the documentation attached.

## Connection

1. connect the ECI module to the vehicle using the diagnosis cable

*note*  
the ECI module is supplied by the diagnosis cable; therefore  
it must be connected to the vehicle to be able to work



2. connect the ECI module to the PC, using one of the two USB cables provided with the module
3. switch the PC on, if necessary

**For further details read the information below indicated:**

Recognize the supplied accessories

Sw interface

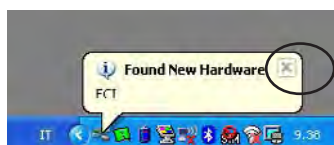
Bluetooth Device



### 3. ECI module USB driver set-up

This operation is required only if the PC in use has never been connected to an ECI module:

1. check that the ECI module is correctly connected to the PC via the USB cable
2. the PC acknowledges the presence of a new hardware component; press the CROSS button to continue



3. automatically (Windows XP) the procedure starts to set-up the driver; select the *Install from a list or specific location* option; select the NEXT> button to continue



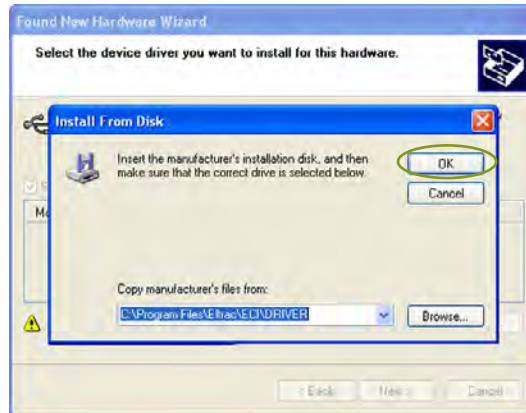
4. select the *Don't search. I will choose the driver to install*; select the NEXT> button to continue



5. select the HAVE DISK...> button to continue



6. enter the path: **ProgramFilesEltracEClDriverECl.sys**;  
select the OK button



7. select the NEXT> button to continue

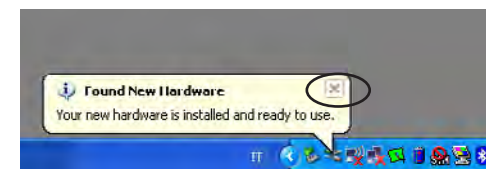


8. driver set-up begins... wait

9. the procedure is completed; press the FINISH button



10. the system informs that the new hardware has been correctly installed; select the CROSS button to continue



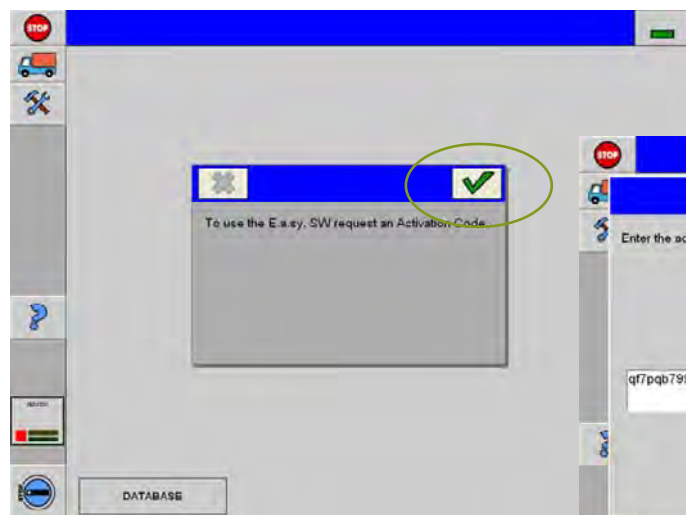
11. re-start the PC.



#### 4. First activation (first time of use of E.A.SY. software + ECI module)

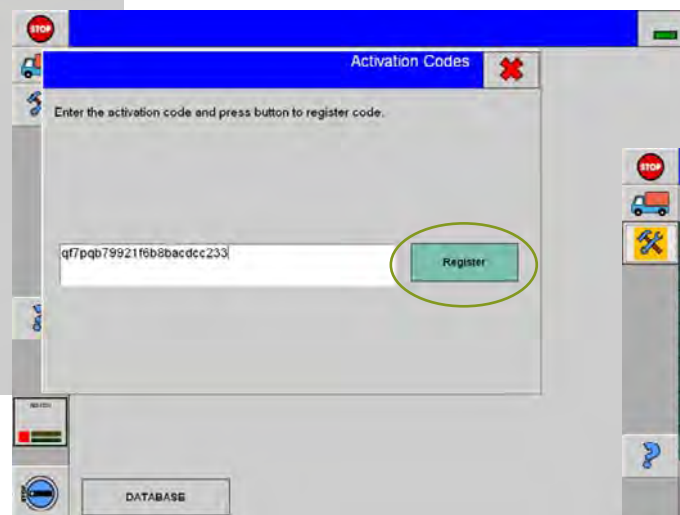
The first time the E.A.SY. Diagnosis System release 3.1 is used, it is necessary to follow the procedure described below:

1. make sure you have received the activation code from Field Service
2. connect the ECI module to the Panasonic PC and to the vehicle using the USB cable
3. start the PC
4. the system asks you to enter the activation code received from Field Service (►► Registration); select the TICK button

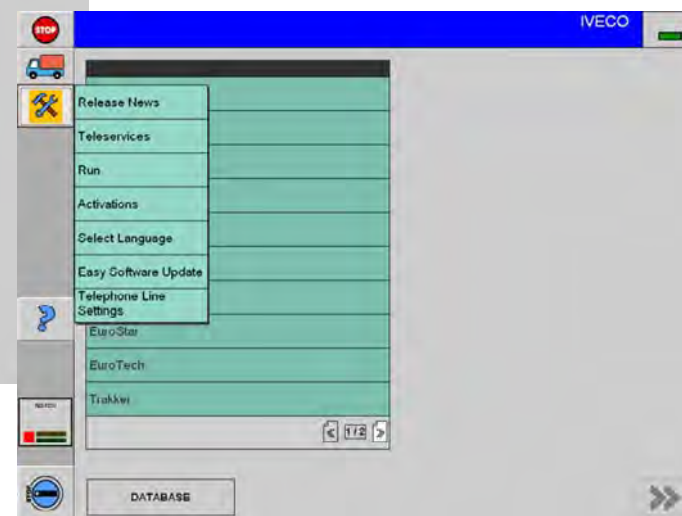


5. enter the activation code received from Field Service

6. select the REGISTER button; a message confirms that registration has taken place



7. select the CROSS button to close the Activation Code window and go back to the E.A.SY. screen

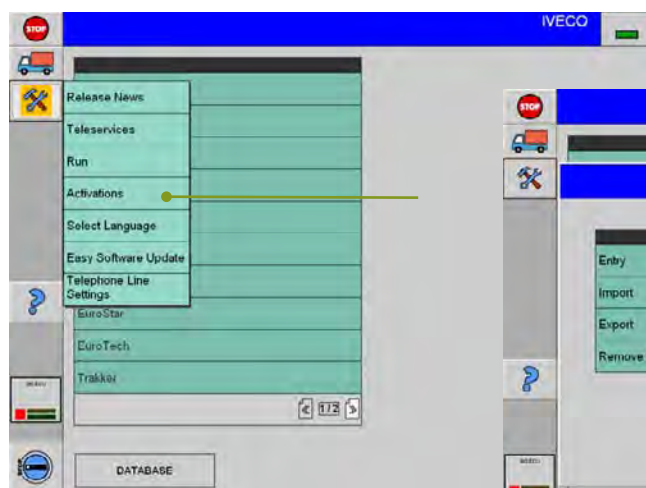


8. select the stop button and restart E.A.SY.  
Now all the software functions are available.

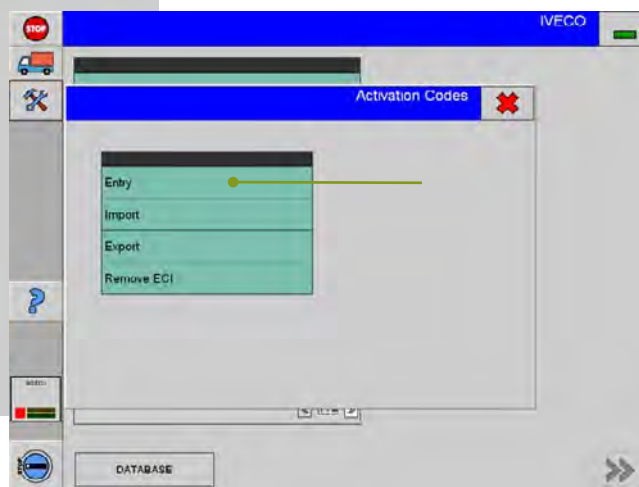
## Activating a new ECI module

The activation procedure is necessary every time you want to use an ECI module that has not yet been paired to the E.A.S.Y. diagnosis system in use; follow the operations described below:

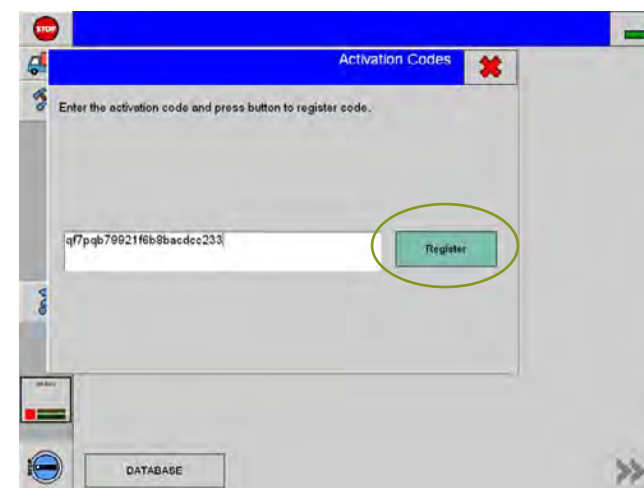
1. make sure you have requested and obtained the activating code for the ECI module (►► registration)
2. connect the ECI module to the Panasonic PC and to the vehicle using the USB cable
3. start the E.A.S.Y. software: double click on the E.A.S.Y. icon on the PC desktop
4. select the TOOLS>ACTIVATIONS button



5. select the ENTRY button



6. enter the activation code received from Field Service
7. select the REGISTER button; ...a message confirms that registration has taken place

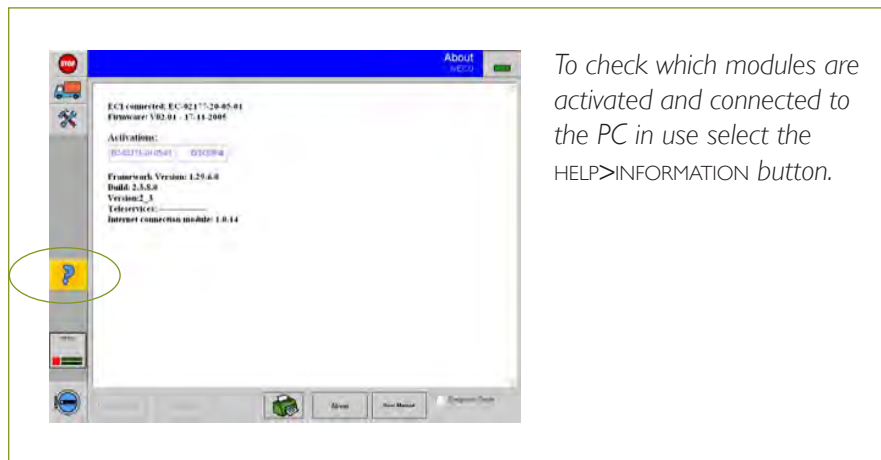
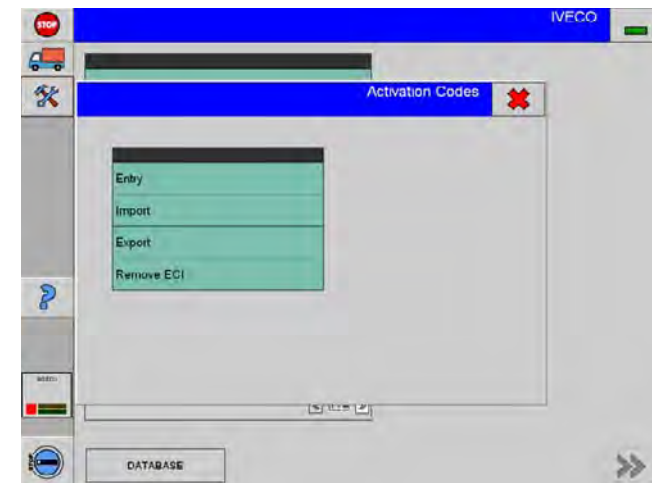


8. select the CROSS button to end activation
9. re-start the E.A.S.Y.

## Activation Codes menu functions

Functions are available for easily handling the activation codes. Selecting tools>activations the activation code window appears which allows access to the activation code management functions:

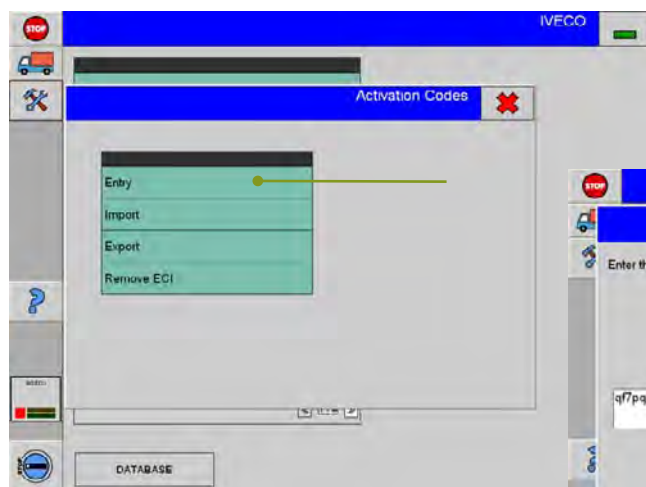
- ◆ ENTRY select to enter the activation code received from Field Service
- ◆ IMPORT allows you to import the files containing the activation codes
- ◆ EXPORT allows you to export the files containing the activation codes
- ◆ REMOVE ECI allows you to deactivate an ECI module activated previously on the PC in use.



## Activation Codes > Entry menu functions

This allows you to enter the activation code received from Field Service

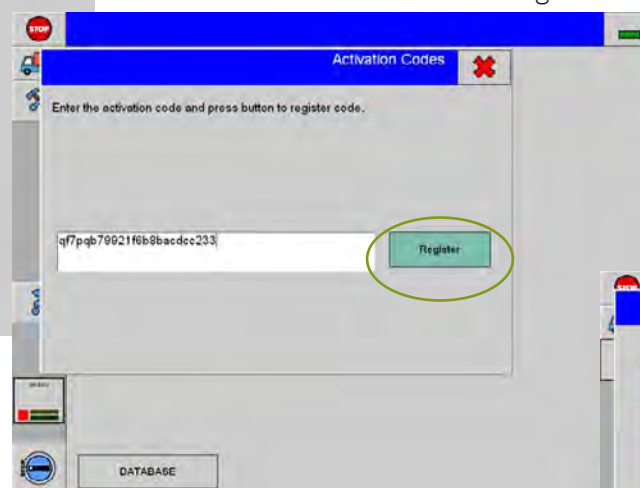
1. select ENTRY



2. select the active field and use the keyboard to enter the activation code

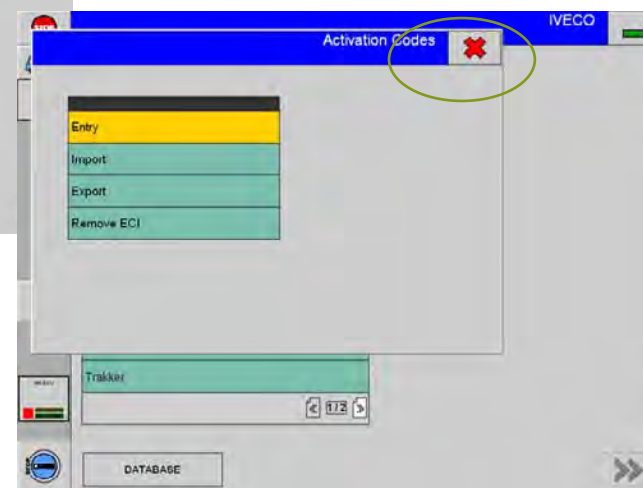
3. select the REGISTER button

4. if the activation code is wrong a message will confirm so



5. select the CROSS button to close the *Activation Code* window and go back to the E.A.S.Y. screen

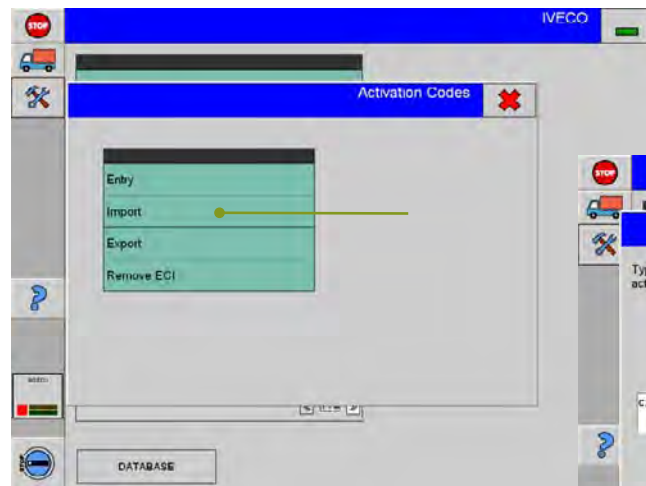
6. re-start the E.A.S.Y. software to make activation effective



## Activation Codes > Import menu functions

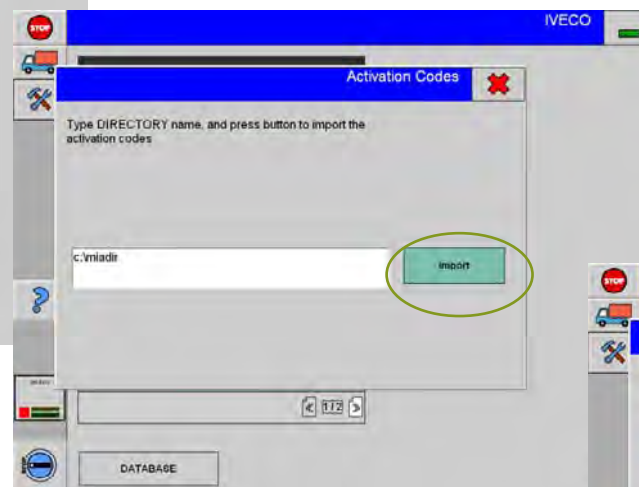
This allows you to import the files containing the activation codes provided by Field Service or coming from a previous export:

1. create a folder that will hold the files containing the activation codes, for example folder **c:\myadir**
2. copy the files with the activation codes (**actCodes.txt** and **ECIs.txt**) in the c:\myadir folder



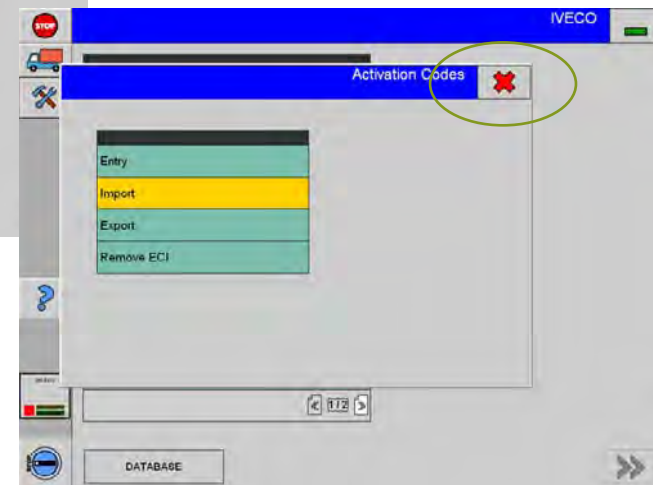
3. select IMPORT

4. select the active field and, using the keyboard, enter the folder name including the path, **c:\myadir**



5. select the IMPORT button  
a message confirms that import has taken place

6. select the CROSS button to close the *Activation Code* window and go back to the E.A.SY. screen

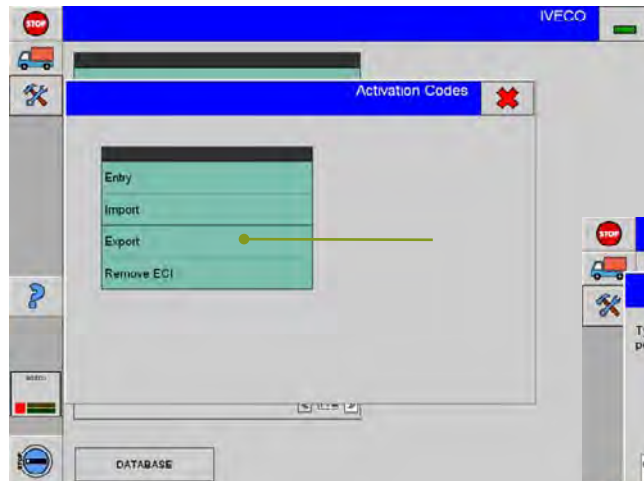


7. re-start the E.A.SY. software to make activation effective

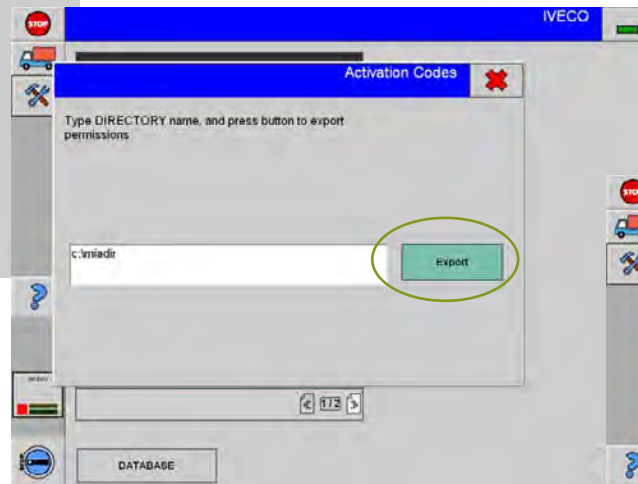
## Other functions of the Activation Codes > Export menu

This allows you to export the files containing the activation codes:

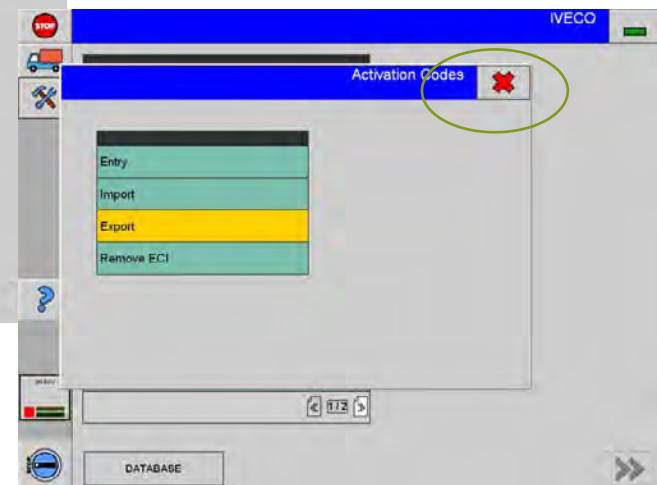
1. create a folder that will hold the files containing the activation codes, for example folder **c:\myadir**
2. select EXPORT



3. select the active field and using the keyboard, enter the folder name including the path, **c:\myadir**
4. select the EXPORT button  
a message confirms that export has taken place



5. select the CROSS button to close the *Activation Code* window and go back to the E.A.S.Y. screen

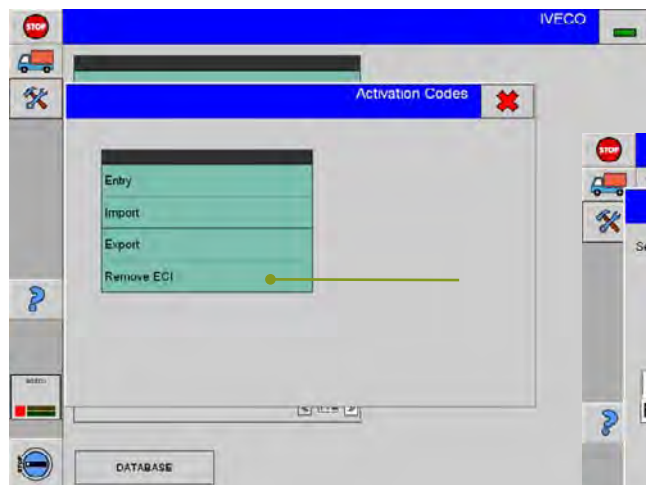




## Other functions of the Activation Codes > Remove ECI

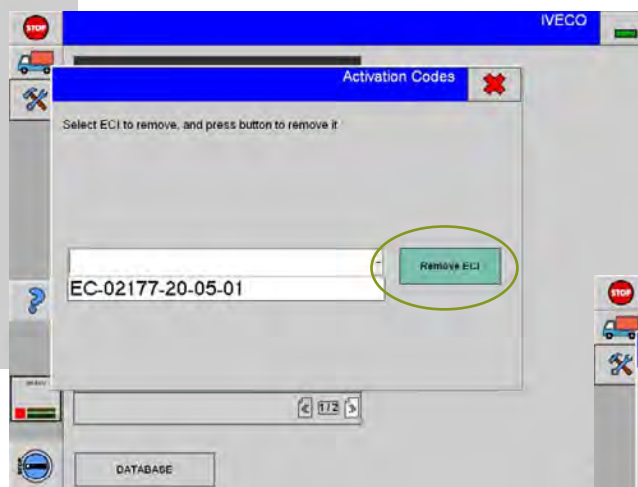
This allows you to deactivate an ECI module activated previously on the PC in use:

1. select REMOVE ECI

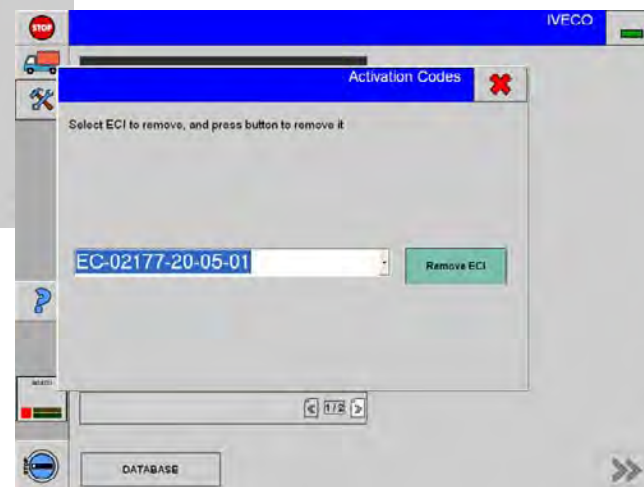


2. using the drop-down menu choose the ECI module you want to deactivate

3. select the REMOVE ECI button



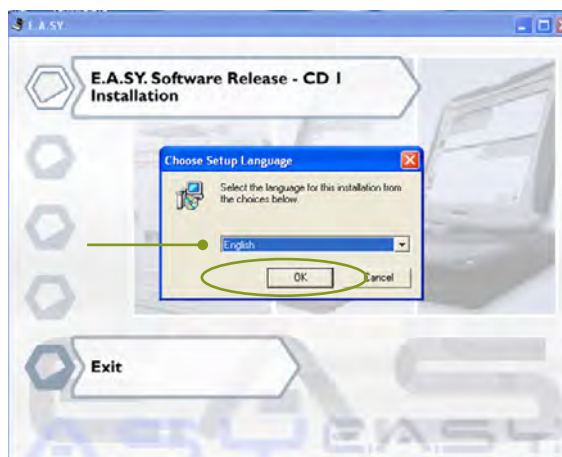
4. select the CROSS button to close the Activation Code window and go back to the EASY screen



## Release update

If you are updating the E.A.S.Y. diagnosis software installed on the PC to release 3.1, follow the procedure described below:

1. put CD 1 of the E.A.S.Y. software in the CD-R/RW drive > select the CD-R/RW drive with a double click: the [setup.exe](#) application is run automatically; if the operation fails, examine the contents of the CD and select the [Setup.exe](#) file to start set-up
2. select the language in which you want to install the E.A.S.Y. software
3. select the E.A.S.Y. SOFTWARE RELEASE - CD 1 INSTALLATION button; wait...
4. choose the installation language from the drop-down menu and press the OK button  
software set-up begins; wait...



5. select the flag corresponding to the language in which you want to install the E.A.S.Y. sw; it is possible to choose more than one language; continue selecting the NEXT button



### Caution

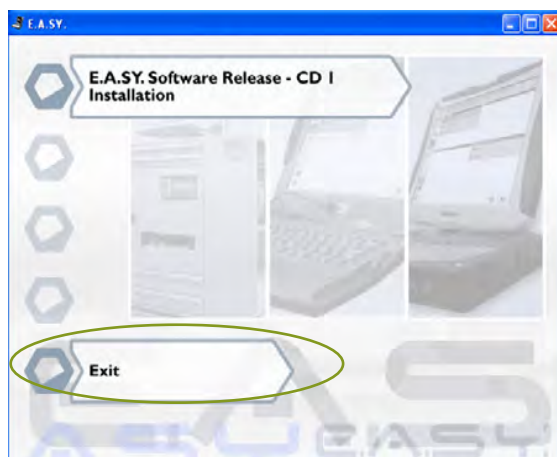
The exit button, when available, allows you to EXIT the set-up environment.



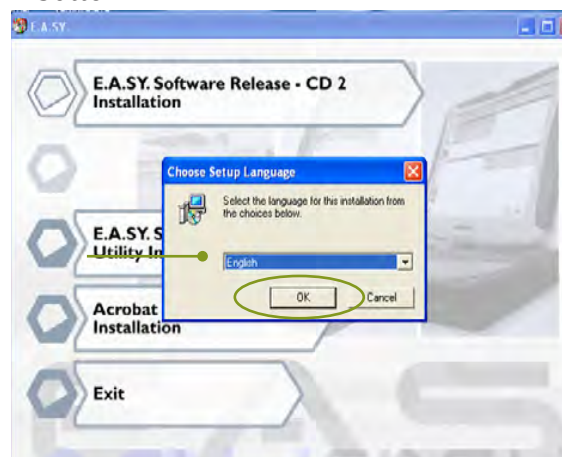
| registration | EASY sw set-up | connection | ECI driver set-up | first activation | activating new ECI module | [release update](#) |

wait... a message tells you that it is necessary to insert the second CD; follow the instructions on the screen;

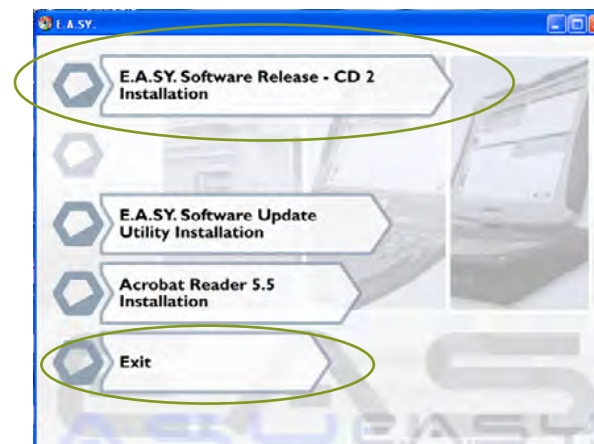
6. press the EXIT button; eject CD I and insert CD2.



7. choose the installation language from the drop-down menu and press the OK button



8. select the E.A.S.Y. SOFTWARE RELEASE - CD 2 INSTALLATION button



...wait for the end of set-up

9. press the EXIT button to exit the set-up environment and eject the CD.

#### An example for a possible diagnosis path:

Sw interface

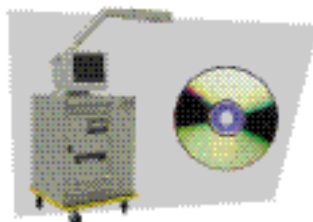
Acceptance

ECU diagnosis

Select the E.A.S.Y. - SOFTWARE UPDATE UTILITY INSTALLATION button to install the automatic utility update.

Select the ADOBE READER INSTALLATION button to set-up the PDF file reader; it is necessary to consult all the documentation attached.

## Modus Station / IT 2000 Tester + E.A.SY. sw user



## E.A.SY. software update - release 3.1

To use the E.A.SY. Diagnosis software - release 3.1 follow the procedure described below:

1. switch on the Modus Station / IT 2000 Tester
2. put CD 1 of the E.A.SY. software in the CD-R/RW drive; the **set-up.exe** application is run automatically
3. select the language in which you want to install the E.A.SY. software
4. select the E.A.SY. SOFTWARE RELEASE - CD 1 INSTALLATION button; wait...



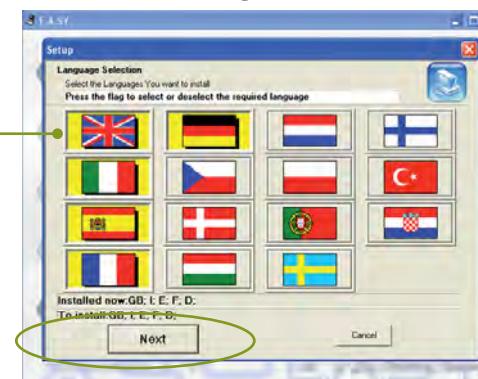
[to set-up the new software on an IT2000 tester without CD\_R drive, select the COPY CD 1 BUTTON ON THE IT2000 before software set-up from IT2000]



5. choose the installation language from the drop-down menu and press the OK button  
software set-up begins; wait...



6. select the flag corresponding to the language in which you want to install the E.A.SY. software; it is possible to choose more than one language; continue selecting the NEXT button



### Caution

The exit button, when available, allows you to EXIT the set-up environment.

wait... a message tells you that it is necessary to insert the second CD; follow the instructions on the screen;

7. press the EXIT button; eject CD I and insert CD2.



8. choose the installation language from the drop-down menu and press the OK button



9. select the E.A.S.Y. SOFTWARE RELEASE - CD 2 INSTALLATION button



...wait for the end of set-up

[to set-up the new software on an IT2000 tester without CD\_R drive, select the COPY CD 2 button ON THE IT2000 before software set-up from IT2000]

10. press the EXIT button to exit the set-up environment and eject the CD.

### An example for a possible diagnosis path:

Sw interface

Acceptance

ECU diagnosis

Select the E.A.S.Y. - SOFTWARE UPDATE UTILITY INSTALLATION button to install the automatic utility update.

Select the ADOBE READER INSTALLATION button to set-up the PDF file reader; it is necessary to consult all the documentation attached.

## unit 3

### Sw interface

#### ATTENTION!

This software may cause chassis movements and/or engine start-up.  
Be extremely careful.

The user is responsible for the correct use of the E.A.S.Y. software so as not to cause injury to people or damage to items.

The user is also responsible for complying with all the rules relating to vehicle security and activities in the workshop.

Carefully read the user manual before using the diagnostic tool and follow the instructions displayed on the screen.

#### GENERAL RULES FOR USE

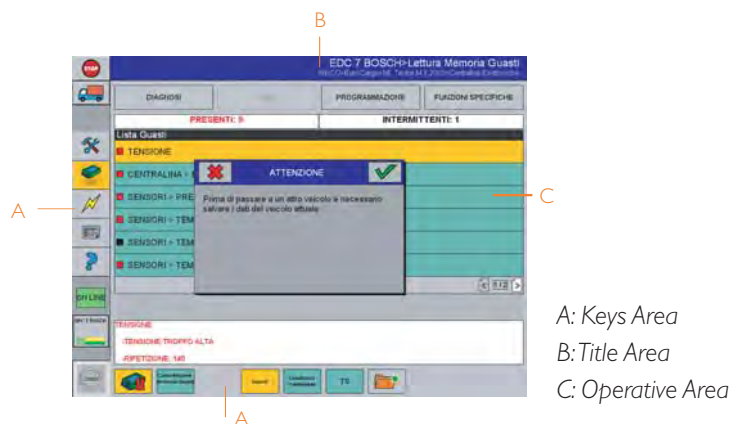
The following instructions should always be strictly followed:

- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheel chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).

| to go from one environment to another | detail of buttons area |

The E.A.S.Y. software interface is designed to facilitate access to tools, view functions and make diagnostic procedures clear and adaptable to various needs. All windows follow the same design with additional features which depend on the specific working environments. Each window presents three main areas to which specific functions are univocally associated:

- Keys Area
- Title Area
- Operative Area



The Keys area contains Keys for accessing the operative environments and the functions to which they are associated. The Title area shows the selected function under test and previous choices by which you arrived. The Operative area contains available system and function list referred to the intervention area.

An example for a possible diagnosis path:

- ►► Sw interface
- ►► Acceptance
- ►► ECU diagnosis

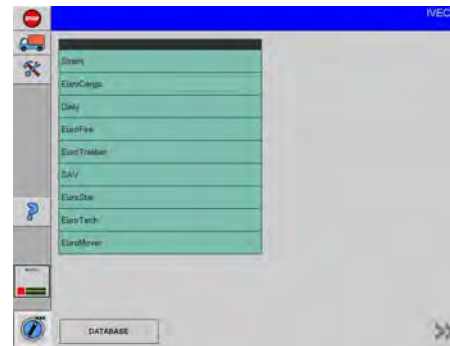
| to go from one environment to another | detail of buttons area |

## To go from one environment to another

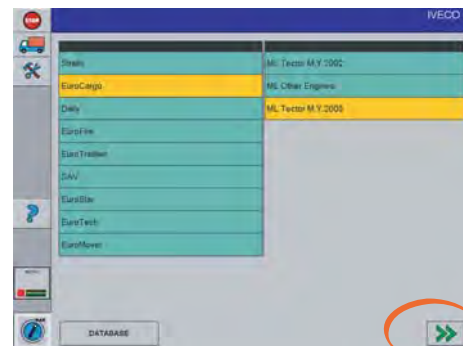
1 the *Start Window* shows the GROUP

*Start Window: it is possible to select a new vehicle (►► illustrated below) or to choose it from the DataBase (📖 unit 4 - acceptance)*

2 select the **GROUP**, the **CATEGORY**, the **CLASS** and the **SYSTEM** under test to which the vehicle belongs



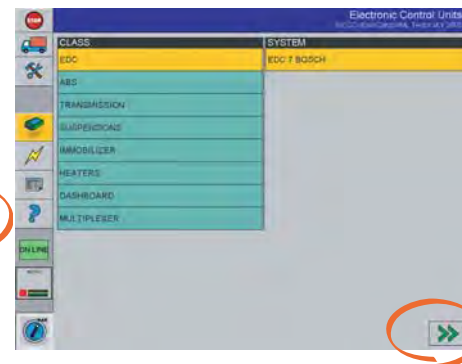
Window Choose Vehicle



Observe the Lists area: green identifies a pull-down menu; the electronic system has been initialised; yellow identifies a selected item in a pull-down menu.

Select the **CATEGORY** and then press the **NAVIGATION** key to proceed.

Select the **SYSTEM** and then press the **NAVIGATION** key to proceed.



### NAVIGATION KEYS



They allow you to go from one environment to another. Enabled keys are displayed in green and disabled keys are displayed in grey



NAVIGATION key  
FORWARD enabled

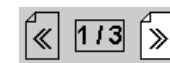


NAVIGATION key  
BACK enabled



NAVIGATION key  
FORWARD disabled

### BROWSE KEY



To scroll long lists which cannot be contained in a single window.

### DATABASE KEY

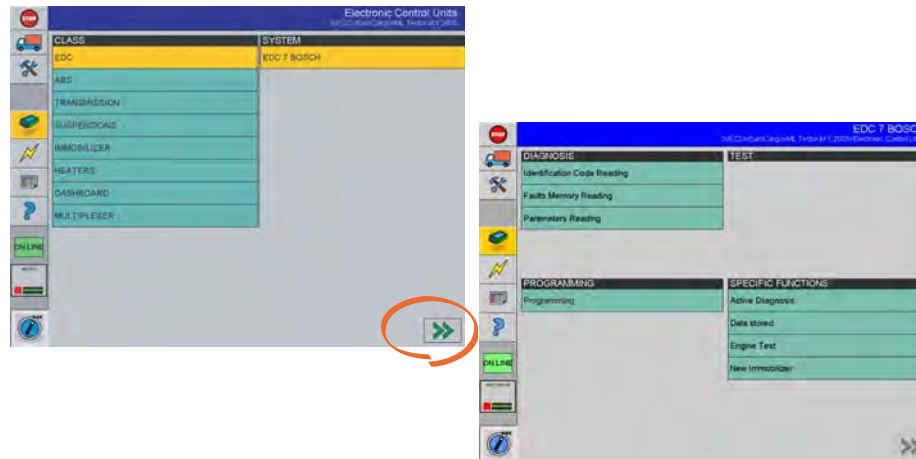


It allows you to access the Data-base environment.



| to go from one environment to another | detail of buttons area |

- 3 select the SYSTEM to which the vehicle belongs and then press the NAVIGATION key (it is enabled and shown in green)
- 4 the window *Choose Activity* appears; it is here possible to choose from four lists:



window *Choose Activity*  
it is now possible to choose:

- diagnosis
- test
- programming
- specific functions

For further details read the information below indicated:

- ►► ECU diagnosis

The working environment (diagnosis, test, programming and specific functions) is characterised by the possibility of going from one activity to another at any time by pressing the corresponding keys.





| to go from one environment to another | [detail of buttons area](#) |

## Detail of Keys area

In the *Start Window* the Keys area contains the Keys for accessing the functions which are always available:



**STOP key**  
To quit E.A.S.Y. application at any time.

**UTILITIES key**

When selected the Key background will be yellow and allows you to access a menu.



**Release News**

**RELEASE NEWS key**  
It allows you to know the Release News.

**Teleservices**

**TELESERVICES key**  
It allows you to access the remote connections services.

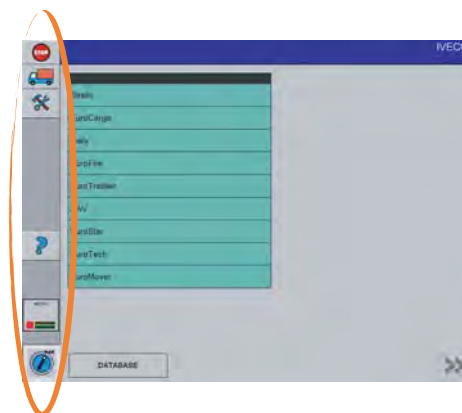
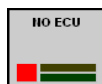
**Select Language**

**SELECT LANGUAGE key**  
To change the language; restart the application to make the setting operational.

**COMMUNICATION key**

It indicates that the communication with the ECU is active or that the ECU is not present (no ecu).

The lower leds indicate the communication state of the electronic system as shown below:  
Square LEDs: two states (green/red); green indicates that communication with the electronic system has been initialised; if red indicates the communication has been interrupted.  
Rectangular LEDs: blinking indicate that data exchange between electronic system and diagnostic system is in progress.



**IGNITION key**

To operate vehicle ignition directly via the diagnostic tool (in vehicles where fitted).  
Two positions (stop and mar) and three states (enabled stop, disabled stop, enabled mar) are possible

**IGNITION KEY OFF key**



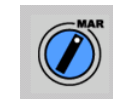
ACTIVE

**IGNITION KEY OFF key**



NOT ACTIVE

**IGNITION KEY ON key**



ACTIVE

For further details read the information below indicated:

- ►► ECU diagnosis

| to go from one environment to another | [detail of buttons area](#) |

In the *Start Window* select the GROUP and the CATEGORY; by pressing the NAVIGATION key FORWARD it is possible to access the next window. New icons appear in the Keys area for accessing specific functions:



VEHICLE key

*It allows you to return to the Vehicle Selection screen page.*



ELECTRONIC CONTROL UNITS key

*It allows you to access the Electronic Ecu's environment.*

*The key appears on a yellow background (default status, environment Electronic Control Units enabled) or on a grey background (environment Electronic Control Units disabled).*



*If you want to work at the same time with more Ecu's, select the key ENVIRONMENT ELECTRONIC ECU'S>ADD ECU.*



ELECTRICAL DIAGRAMS key

*It refers to a CLASSES list for which an electrical diagram is available. The key appears on a yellow background (environment Electrical Diagrams enabled) or on a grey background (environment Electrical Diagrams disabled).*



*To enter the Electrical Diagrams environment select the key ELECTRICAL DIAGRAMS AREA.*



REPORT key

*It allows you to access the Report environment.*

*The key appears on a yellow background (environment Report enabled) or on a grey background (environment Report disabled).*



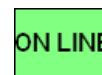
*To access the report environment select the REPORT key.*



GUIDE TO DIAGNOSIS key

*It allows you to access the environment Guide to Diagnosis (only available for some ranges).*

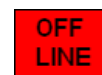
*It is available in the Electrical Control Units environment.*



ON/OFF-LINE key

*It can be on-line or off-line.*

*The on-line key indicates that the E.A.SY. SW uses the ECI/PC module connection.*



ON/OFF-LINE key

*The off-line key indicates the E.A.SY. SW is working in simulated mode.*

*To change the status select the key.*

## unit 4

### acceptance

#### ATTENTION!

This software may cause chassis movements and/or engine start-up.  
Be extremely careful.

The user is responsible for the correct use of the E.A.S.Y. software so as not to cause injury to people or damage to items.

The user is also responsible for complying with all the rules relating to vehicle security and activities in the workshop.

Carefully read the user manual before using the diagnostic tool and follow the instructions displayed on the screen.

#### GENERAL RULES FOR USE

The following instructions should always be strictly followed:

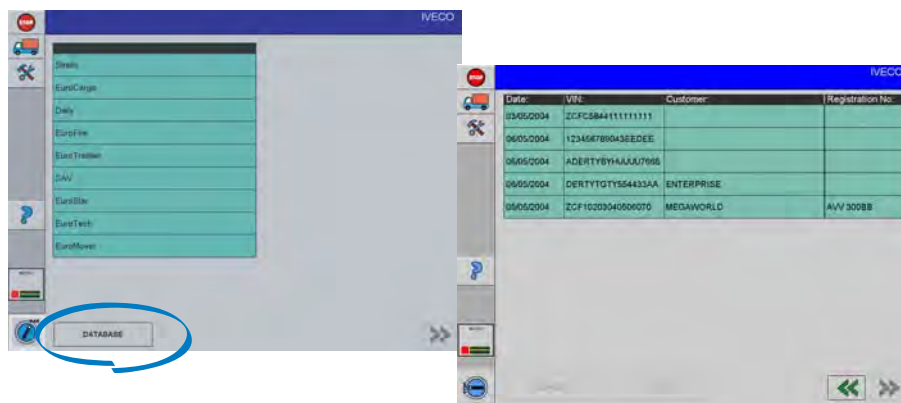
- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheel chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).

| [environment DataBase](#) | [environment Report](#) | [acceptance](#) | [automatic acceptance](#) |

## Environment DataBase

From the E.A.S.Y. *Start Window* it is possible to select a new vehicle or to select it from the DataBase<sup>1</sup>.

1 select the ARCHIVE button: you access the *DataBase* environment (it contains the list of accepted vehicles)

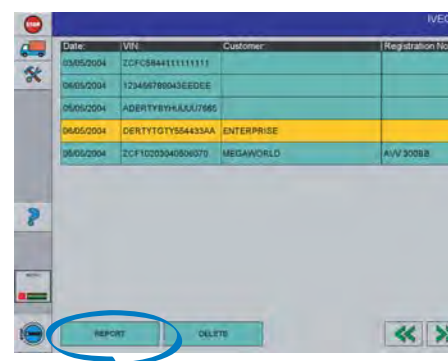


2 the *DataBase* environment shows:

- the list of accepted vehicles (identified by DATE, VIN, CUSTOMER and REGISTRATION NO)
- the NAVIGATION button FORWARD
- the NAVIGATION button BACK
- the REPORT button (enabled after selecting a vehicle)

3 select a vehicle from the list (the background is yellow); it is possible:

- to analyse vehicle data (report button)
- to return to the start window (NAVIGATION button BACK)
- to start again the diagnosis procedure on the vehicle (NAVIGATION button FORWARD)



1. This unit describes how to choose a vehicle from the DataBase; for the selection of a new vehicle [unit 5 - ECU Diagnosis](#).

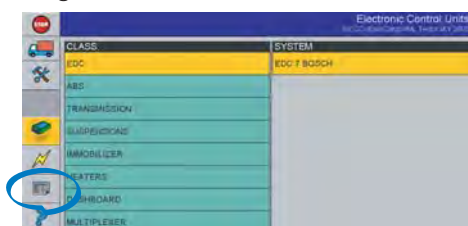
| environment DataBase | [environment Report](#) | acceptance | automatic acceptance |

## Environment Report

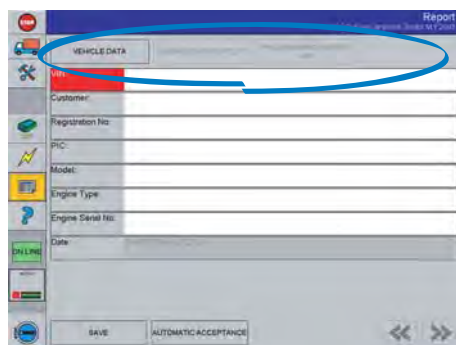
In the *Report* environment the sheet of the vehicle under test has been saved: the vehicle has been accepted.

You access the *Report* environment in the following ways:

- from the *DataBase* environment by selecting the required vehicle and the report button
- from the Buttons area at any time by selecting the corresponding button



The *Report* environment presents three areas:



- VEHICLE DATA: identification vehicle data (VIN, univocal and mandatory, PIC, engine serial number, engine type, etc.); the fields can be always changed (with the exception of the VIN code)
- DIAGNOSIS REPORT: summary of all performed diagnosis operations
- PROGRAMMING REPORT: summary of all performed programming operations

**Note:** it is possible to access the three areas by using the buttons displayed on the picture

*Report* environment buttons

KEY SAVE

SAVE

it allows you to save the vehicle sheet (to accept it)

KEY AUTOMATIC ACCEPTANCE

AUTOMATIC ACCEPTANCE

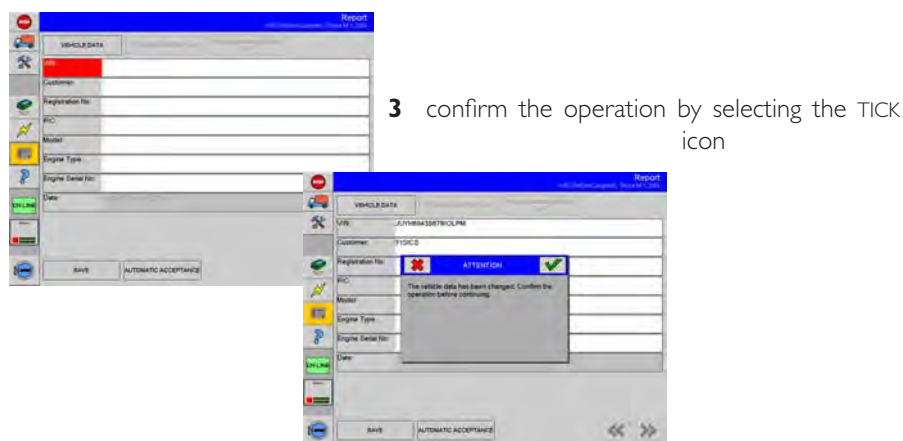
it allows you to read the VIN directly from the engine ECU (enabled only if the communication is active)

| environment DataBase | environment Report | acceptance | automatic acceptance |

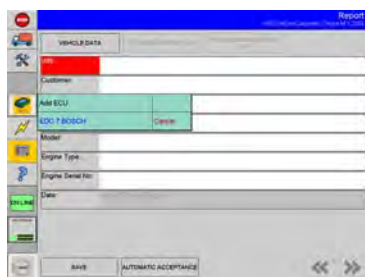
## Acceptance

The acceptance (sheet saving) is *mandatory* when *important* operations are performed (read or cancel faults memory, programming).

- 1 read or cancel the faults memory or carry out a programming and then select from the corresponding environment [the REPORT button](#); you enter the *Report* environment
- 2 enter data



- 4 save the sheet by selecting the SAVE button
- 5 from the Buttons area select the button of the operation you want to perform



When you read or cancel the faults memory or carry out a programming it is NOT possible to return directly to the [window Choose Vehicle](#); by selecting the vehicle button the following windows are displayed:

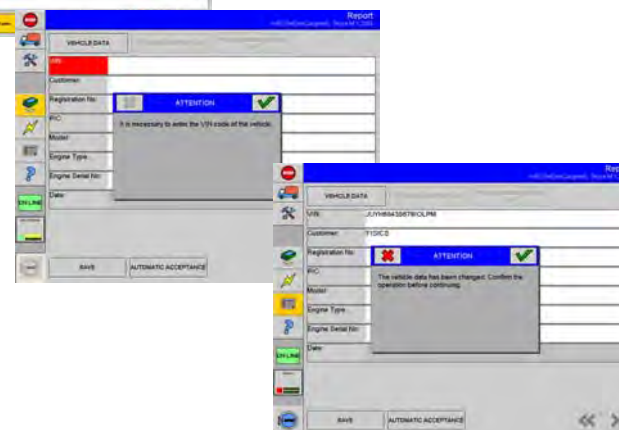
- A select the TICK icon; the *Report* environment appears



- B enter data: the VIN is mandatory

- C confirm the operation by selecting the TICK icon

- D save the sheet by selecting the SAVE button



it is now possible to return to the [window Choose Vehicle](#)

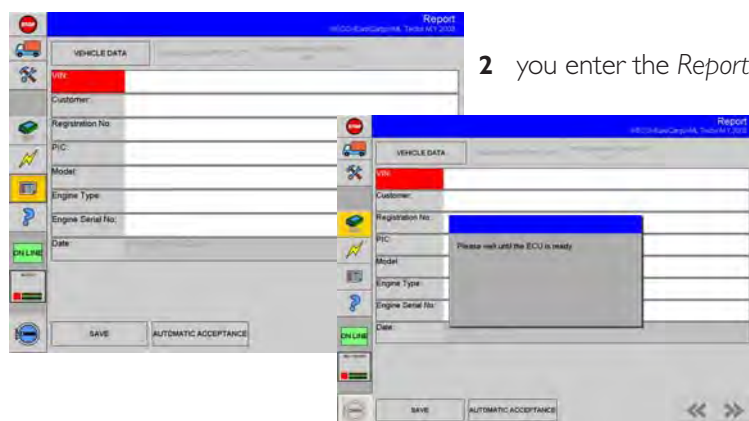
| environment DataBase | environment Report | acceptance | [automatic acceptance](#) |

## Automatic Acceptance

From the *Report* environment it is also possible to accept the vehicle automatically (the system enters the VIN).

**Note:** *this operation is only possible if the communication with the system has been activated.*

1 read or cancel the faults memory or carry out a programming and then select from the corresponding environment [the REPORT button](#)



2 you enter the *Report* environment

3 select the button AUTOMATIC ACCEPTANCE

4 E.A.S.Y. system presents a pop-up window where to select the *automatic* or the *manual* activation of the ignition key; select the required mode

5 confirm the displayed message by pressing the TICK icon; wait until the ECU is ready

6 by means of the automatic acceptance the system tries to communicate with the engine ECU of the vehicle (or other ECU's containing vehicle data) or to read the following vehicle information:

- VIN<sup>1</sup>
- PIC
- Engine type
- Engine Serial Number

7 select the SAVE button

1. the VIN must be univocal in the DataBase; if the VIN of the vehicle you are saving is already present in the DataBase a window appears asking the following: "The VIN Code of this vehicle has been already stored in the DataBase. If you continue these data will be added to those already present". It is possible to CONFIRM the operation (the data of the new vehicle will be added to sheet already present in the DataBase) or to CANCEL (the entered VIN must be changed in order to save the operation)

## unit 5

### ECU diagnosis

#### ATTENTION!

This software may cause chassis movements and/or engine start-up.  
Be extremely careful.

The user is responsible for the correct use of the E.A.S.Y. software so as not to cause injury to people or damage to items.

The user is also responsible for complying with all the rules relating to vehicle security and activities in the workshop.

Carefully read the user manual before using the diagnostic tool and follow the instructions displayed on the screen.

#### GENERAL RULES FOR USE

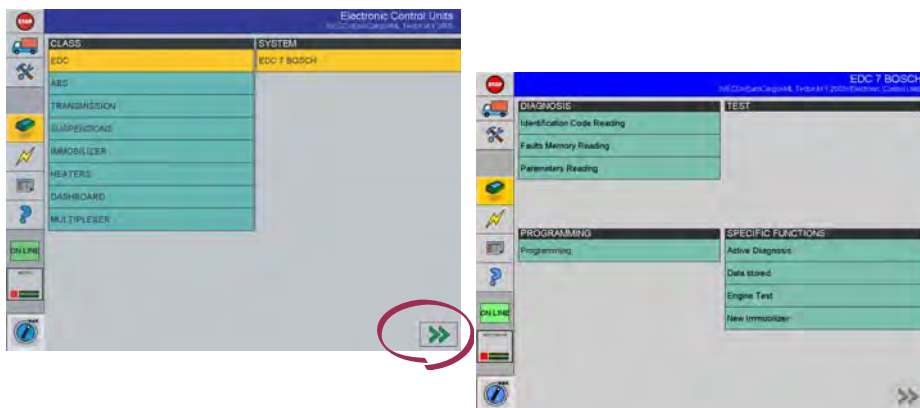
The following instructions should always be strictly followed:

- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheel chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).



| identification code reading | read faults memory | parameters reading |

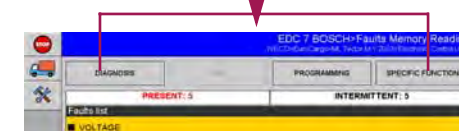
- 1 select the GROUP, the CATEGORY, the CLASS and the SYSTEM under test to which the vehicle belongs
- 2 press the NAVIGATION button FORWARD (enabled, shown in green)
- 3 the window *Choose Activity* appears; it is here possible to choose from four lists:



window *Choose Activity*  
it is now possible to choose:

- diagnosis
- test
- programming
- specific functions

The working environment  
(diagnosis, test,  
programming and specific  
functions) is characterised by  
the possibility of going from  
one activity to another at  
any time by pressing the  
corresponding buttons.



- 4 the present Repair Guide describes the DIAGNOSIS environment and the specific functions to which it is associated:

| DIAGNOSIS                   |
|-----------------------------|
| Identification Code Reading |
| Faults Memory Reading       |
| Parameters Reading          |

three possible activities can be carried out in the DIAGNOSIS environment:

- Identification Code Reading
- Read Faults memory
- Parameters Reading

For further details:

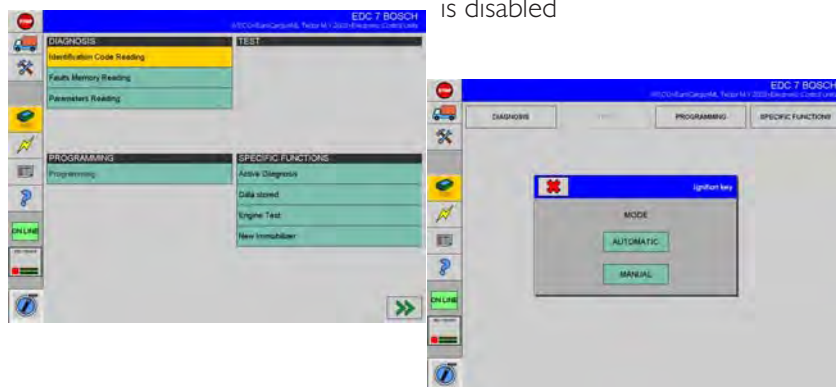
- ►► Sw interface

Each function associated to the Diagnosis is described below.

| identification code reading | multitasking option | ignition key button modes - ON-LINE / OFF-LINE |

## Identification code reading

- 1 to access the *Read Identification* environment select the item Read Identification from the DIAGNOSIS list and then press the NAVIGATION button FORWARD
- 2 E.A.S.Y. system presents a pop-up window where to select the *automatic* or the *manual* activation of the ignition key; select the required mode; the KEY button is disabled



under the *automatic* mode all activation of the ignition key are controlled by the diagnosis instrument (*KEY button working*)

under the *manual* mode all activation of the ignition key are controlled by the operator

two new buttons appear:

the CROSS key



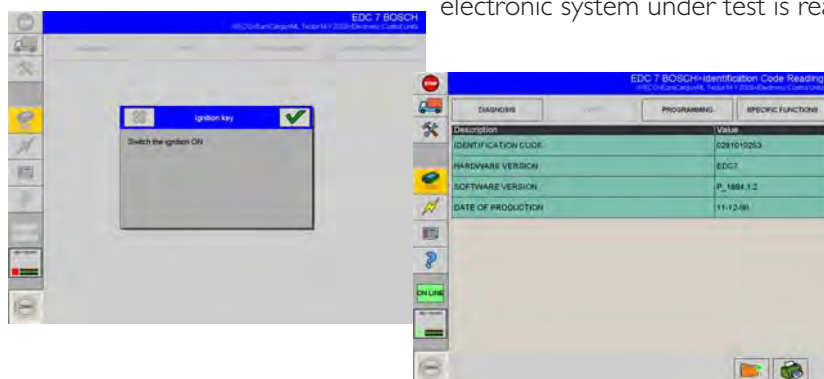
it allows you to cancel the running operation

the TICK key



it allows you to continue with the running operation; it is necessary to confirm the displayed message

- 3 confirm the new message by pressing the TICK icon; wait until the ECU is ready; the general information about the electronic system under test is read:



- identification code
- HW version
- SW version
- production date
- ...

| identification code reading | multitasking option | ignition key button modes - ON-LINE / OFF-LINE |

## Identification code reading

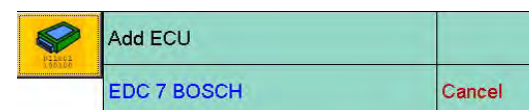
After identification code reading it is possible to carry out other activities (▶▶step 4) or to return to the window Choose vehicle (▶▶step 6).

**4** to access the other activities from the environment Identification Code Reading, select the CHOOSE ACTIVITIES buttons



*the CHOOSE ACTIVITIES buttons are shown in yellow when selected*

**6** to exit the diagnosis of the vehicle under test select the button ECU's AREA>ECU UNDER TEST>CANCEL



**5** choose an activity; the system automatically access the selected activity without showing a warning message

For further details read the information below indicated:

- ▶▶ Sw interface
- ▶▶ Acceptance

| identification code reading | [multitasking option](#) | ignition key button modes - ON-LINE / OFF-LINE |

## Multitasking option

E.A.S.Y. introduces a very important news: it is possible to associate more ECU's to the family of vehicle under test.

### ADD AN ECU

It is possible to interrupt the diagnosis with an ECU and to start the procedure with another one.

- 1 select the button ECU'S AREA>ADD ECU; the Choose Vehicle window will appear, where you can select the desired ECU

*the selected ECU appears in the list of connected ECU's*


|   |             |        |
|---|-------------|--------|
|  | Add ECU     |        |
|   | EDC 7 BOSCH | Cancel |

### MANAGING MORE ECU'S

It is possible to operate with two or more connected ECU's at the same time.

- 1 select the button ECU'S AREA>[DESIRED ECU](#)

The activity remains interrupted for the not selected ECU's and can be started again at any time.

|  |                             |               |
|--|-----------------------------|---------------|
|  | Add ECU                     |               |
|  | <a href="#">EDC 7 BOSCH</a> | Cancel<br>ECU |
|  | ABS 2X KNORR-BOSCH          | Cancel        |

### CANCEL AN ECU


it is possible to stop the activity on one of the connected ECU's.

- 1 select the button ECU'S AREA>[REQUIRED ECU](#)>[CANCEL](#)
- 2 select the required ECU

## Ignition Key Button Modes – ON LINE/OFF LINE

At the system start up the ON/OFF button is ON-LINE if the ECI module is activated and connected to the PC, otherwise is disabled (OFF-LINE).

### ON LINE MODE

The ON-LINE mode is possible for both the *automatic* and *manual* activation; the ignition key window appears after selecting a function ( [Identification Code Reading](#)).

The *automatic* activation depends on the type of vehicle; make sure the vehicle supports the function before selecting automatic mode.

- 1 after selecting the automatic mode a test procedure is carried out
- 2 a window appears asking to switch the ignition off
- 3 a message warns that the vehicle chassis may move

The E.A.S.Y. SW activates the ignition key and displays a screen page in which it asks to check the dashboard; if it is turned “on” the diagnosis procedure can be continued; otherwise the system asks for position of the key to ON in manual mode.

The *manual* mode activation has been described in the previous pages ([see Identification Code Reading](#)).

Manual and automatic mode:

- 1 before ignition key activation a message is always displayed: request (manual mode) or warning (automatic)
- 2 when the ECU is cancelled a message indicates that it is necessary to interrupt the communication and then to confirm the operation
- 3 the chosen mode remains until the vehicle under test is changed

### OFF LINE MODE

The basis diagnosis is simulated and it is possible to read some information about the electronic system under test.

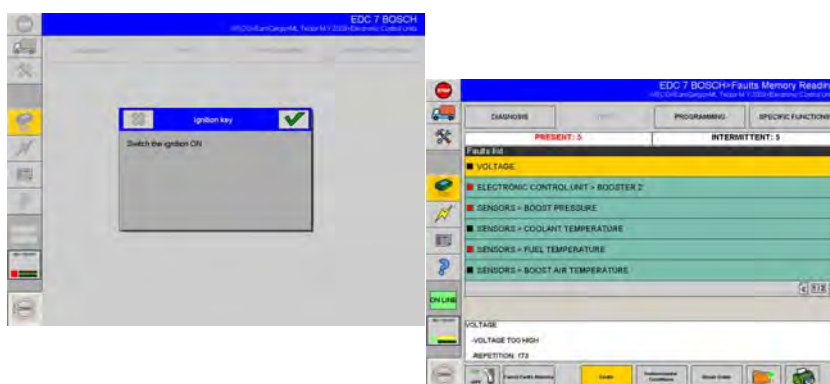
| [read faults memory](#) | detail of buttons area of the faults memory area | how to get information about a fault |

## Read Faults Memory

- 1 to access the *Read Faults Memory* environment select the item Read Faults Memory from the list DIAGNOSIS and then press the NAVIGATION button FORWARD
- 2 E.A.S.Y. system presents a pop-up window where to select the *automatic* or the *manual* activation of the ignition key; select the required mode; the key button is disabled



- 3 confirm the new message by pressing the TICK icon; wait until the ECU is ready; the list and faults type occurred during the working are displayed



There are two types of failures:

- Failures present during the reading procedure (red)
- Intermittent failures not present during the reading operation but which occurred at least once before (black)

| read faults memory | [detail of buttons area of the faults memory area](#) | how to get information about a fault |

## detail of Buttons area of the Faults Memory area

New icons appear in the window Read Faults Memory for accessing specific functions:



**ON key**  
the communication between the system and the ECU is active: select the button to interrupt the reading  
it performs again the Faults Reading; it updates the ECU communication



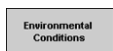
**OFF key**  
the communication with the ECU has been interrupted;  
select the button to start again the electronic system reading



**CANCEL FAULTS MEMORY key**  
it cancels the faults selected in the list; it is possible to cancel a fault at a time;  
the cancel operation will be effective when you confirm it by pressing the TICK icon displayed in the next pop-up-window



**FAULTS key**  
it allows you to access the Faults environment; it can be yellow (the faults list is displayed) or green (environment Faults disabled)



**ENVIRONMENTAL CONDITIONS key**  
This is used to examine environmental conditions when the failure occurred.  
it can be green (default status) or yellow (when selected)



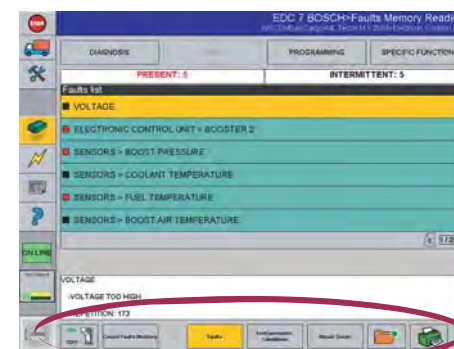
**REPAIR GUIDE key**  
it gives an analysis of the fault selected from the list; in particular other information (blink code, failure code and fault mode) is available



**PRINT key**  
it allows you to print the displayed window



**SAVE REPORT key**  
it allows you to save the report of carried out operations  
it is also possible to access it from the Report environment (button diagnosis report)



To go from one function to another (faults, environmental conditions, troubleshooting) select the corresponding button.

Operations like Read and Cancel Faults Memory are very important: they are automatically stored and need the vehicle acceptance ([unit 4 - acceptance](#)).



| read faults memory | detail of buttons area of the faults memory area | [how to get information about a fault](#) |

## how to get information about a fault

1 interrupt the communication with the ECU (button ON/OFF) and select an item from the FAULTS LIST: the fault is described in the below blank area; in particular the following information is available:

- the fault
- the signal type
- the repetition type



**Note:** the button *FAULTS* appears on yellow background because it is selected

The Cancel Faults Memory deletes from the ECU faults memory all faults which are not present at the moment; if a fault is PRESENT on the vehicle, it remains always displayed.

2 select the button ENVIRONMENTAL CONDITIONS



it examines the present environmental conditions at time of the fault

**Note:** the *ENVIRONMENTAL CONDITIONS* button appears on yellow background, because it is selected; select the faults button to return to the Faults List

3 select the REPAIR GUIDE button; the following information is available:

- the blink code
- the failure code (DTC)
- the failure mode (FMI)

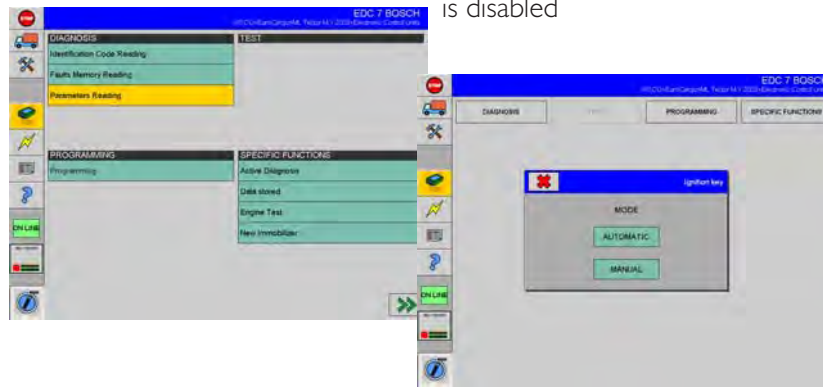


**Note:** the *REPAIR GUIDE* button is shown in yellow because it is selected

| parameters reading | detail of parameters buttons area |

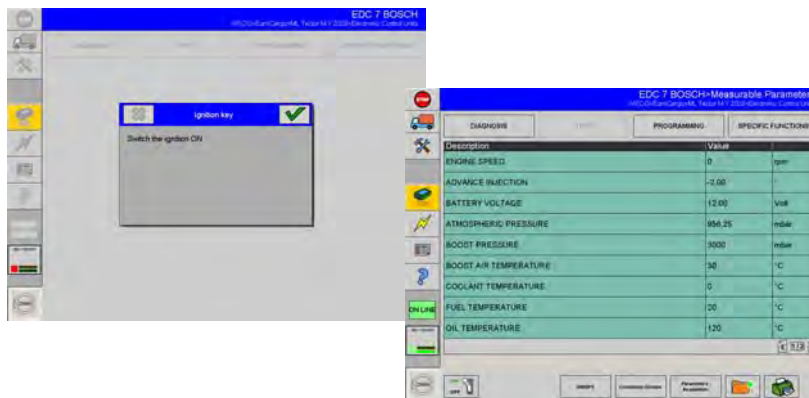
## Parameters Reading

- 1 to access the *Parameters Reading* environment select the item parameters reading from the DIAGNOSIS List and then press the NAVIGATION button FORWARD
- 2 E.A.S.Y. system presents a pop-up window where to select the *automatic* or the *manual* activation of the ignition key; select the required mode; the KEY button is disabled



*pay close attention to the displayed messages and wait*

- 3 confirm the new message by pressing the TICK icon; wait until the ECU is ready; the values assumed by parameters are read



*two new icons appears on the window; their function is described below*

| parameters reading | [detail of parameters buttons area](#) |

## detail of parameters buttons area

New icons appears on the window Parameters Reading for accessing specific functions:



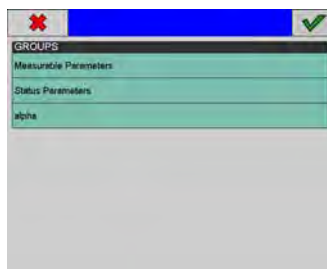
**ON key**  
the communication between the system and the ECU is active:  
select the button to interrupt the reading



**OFF key**  
the communication with the ECU has been interrupted;  
select the button to start again the electronic system reading



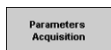
**GROUPS key**  
it opens the window **GROUPS**, a list of parameters group; to access a group select it from the list (shown in yellow)



confirm by pressing the OK button; the selected group of parameters can be accessed



**CUSTOMIZE GROUPS key**  
it allows you to create new customized parameters, identified by the desired parameters



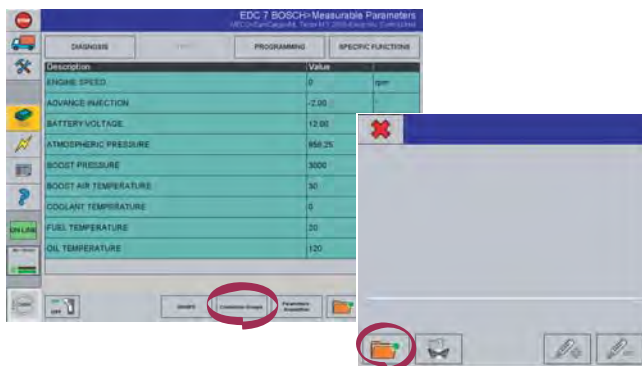
**PARAMETERS ACQUISITION key**  
it allows to record the trend in time of the measurable parameters



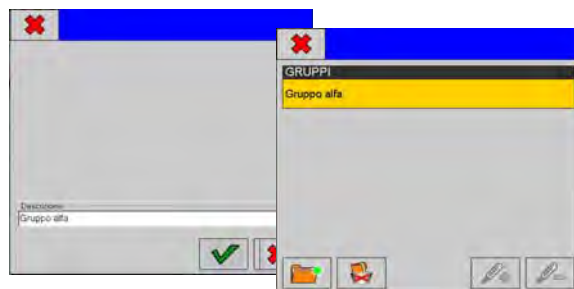
In the next page the function of the button [CUSTOMIZE GROUPS](#) is described.

| parameters reading | detail of parameters buttons area |

- select the button CUSTOMIZE GROUPS; a new window appears; select the button NEW FOLDER



- to describe the group you want to create; confirm by pressing the TICK icon, the GROUPS window appears and in the list the name of the created group appears



- the new group is empty; return to PARAMETERS GROUP; select a group and the desired parameters (a multiple selection is possible)
- return to the button CUSTOMIZE GROUPS, select the just created group; the button ADD PARAMETER is enabled, select it; the system add to the group the chosen parameter

NEW FOLDER key



it allows you to create a new parameters group

CANCEL GROUP key



it cancels the selected group from the list  
it can be disabled (default) or enabled (if the group to be cancelled is selected)

ADD PARAMETERS key



it allows you to add in the created group one or more parameters, which have been previously selected from the other group  
it can be disabled (default) or enabled (if the parameters to be added are selected)

CANCEL PARAMETERS key



it allows you to cancel from the created group one or more parameters, which have been previously selected  
it can be disabled (default) or enabled (if the parameters to be cancelled are selected)

## unit 6

### programming

#### ATTENTION!

This software may cause chassis movements and/or engine start-up.  
Be extremely careful.

The user is responsible for the correct use of the E.A.S.Y. software so as not to cause injury to people or damage to items.

The user is also responsible for complying with all the rules relating to vehicle security and activities in the workshop.

Carefully read the user manual before using the diagnostic tool and follow the instructions displayed on the screen.

#### GENERAL RULES FOR USE

The following instructions should always be strictly followed:

- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheels chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).

| the consultation can be started | programming environment | data reading | programming > change the configuration | programming > ECU programming |

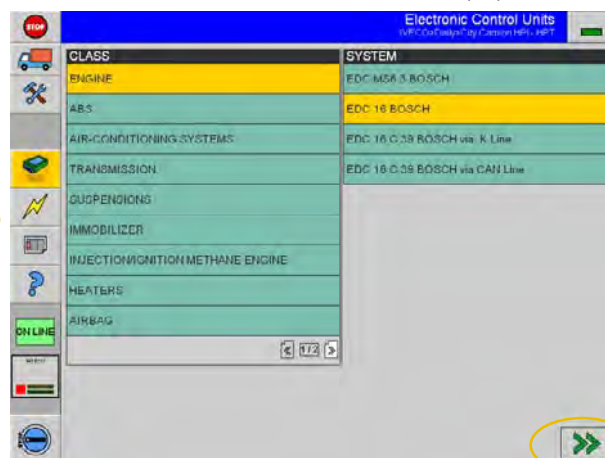
To access the programming area of the ECU under test proceed as follows:

1. select the GROUP, the CATEGORY;  
select the FORWARD NAVIGATION key (it is active, displayed in green)



FORWARD NAVIGATION key

2. select the CLASS and the System under test to which the vehicle belongs;  
select the FORWARD NAVIGATION key (it is active, displayed in green)



3. select the PROGRAMMING option from the PROGRAMMING list; select the FORWARD NAVIGATION key (it is active, displayed in green)

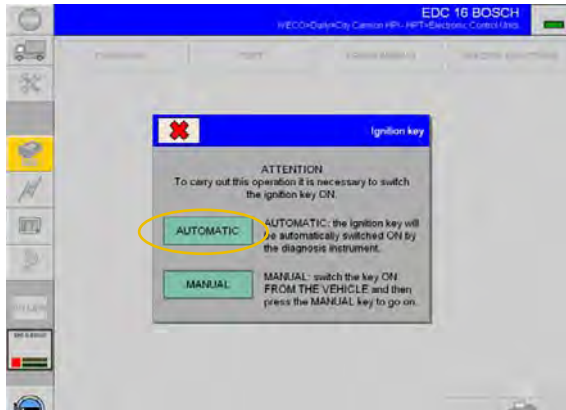


### Caution

It is possible to carry out a PROGRAMMING only in online mode. In case of error check the connections ECU/ECU/E.A.S.Y

| the consultation can be started | programming environment | data reading | programming > change the configuration | programming > ECU programming |

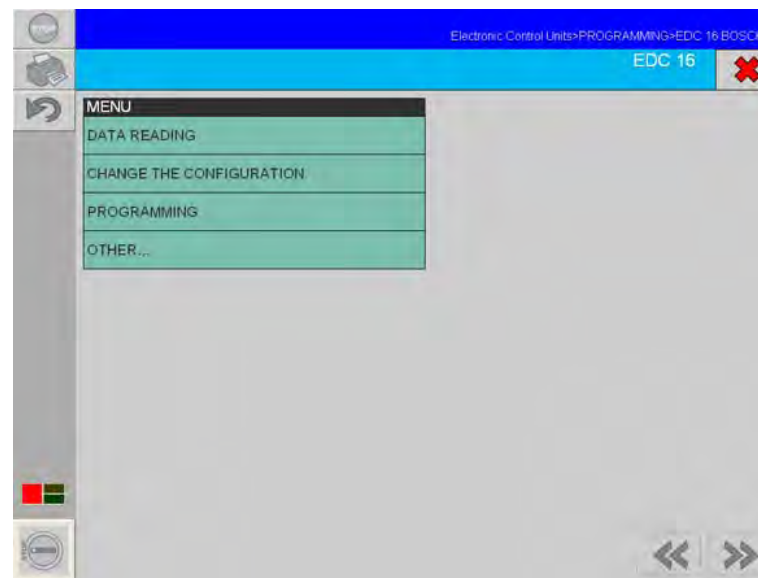
4. select the ignition key management (automatic/manual):  
if the electronic vehicle under test is fitted with this function, select the AUTOMATIC key



- ♦ E.A.S.Y. shows the running activities
  - ♦ the ignition key ON is automatically activated
  - ♦ the connection to the ECU starts
5. read the displayed messages and select the green TICK icon to continue
  6. at the end the system permits access to the *Programming* environment; the components list is displayed, on which tests can be carried out

#### Caution

During the programming do not disconnect the USB cable.  
Before carrying out the ECU programming verify the charge left in the computer's battery.  
It is recommended to plug the PC in (connect it to the vehicle or to the mains supply).



Programming environment



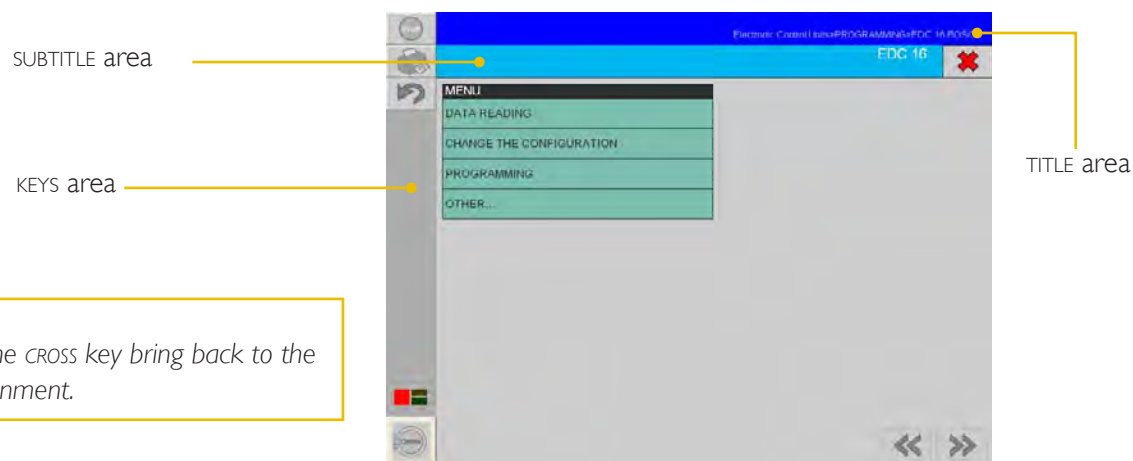
I the consultation can be started I [programming environment](#) I data reading I programming > change the configuration I programming > ECU programming I

## Programming environment

It is possible to use specific functions, by selecting the corresponding key:

1. Data Reading
2. Change the configuration
3. Programming
4. PTO (only for the EASY full version SW)

The available function types are determined according to the type of ECU under test.



### Caution

In this case the cross key bring back to the Activity environment.

The Keys area contains the buttons for accessing the functions specific for the *Programming* environment.

The Title area contains the work-path.

The Subtitle area contains the name of the current area and the CROSS key.

## Keys in the Programming environment

CANCEL key



if enabled, select to re-establish a configuration

PRINT key



if enabled, select to print a report

NAVIGATION keys



if enabled, select to move between different environments

CROSS key



if enabled, select to cancel an operation

I the consultation can be started I programming environment I data reading I programming > change the configuration I programming > ECU programming I

## Data Reading

This is used to view the data concerning the ECU and the respective programming state; tampering attempts are shown.

- ♦ station type and number
- ♦ programming date
- ♦ ECU software release



Please use the SCROLL keys to view all the ECU's data.



The system views the following data classes:

- ♦ supplying data
- ♦ factory data (never updated)
- ♦ service data (updated after each programming event)

Keys of the environment  
Programming > Data Reading

SCROLL keys



if enabled, select to scroll the list step by step

FAST SCROLL keys



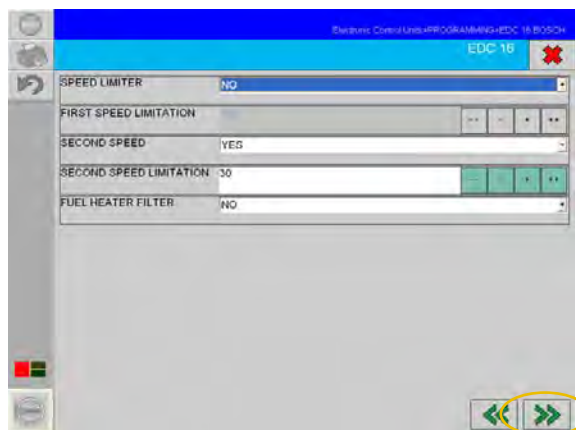
if enabled, select to scroll the list step by step

I the consultation can be started I programming environment I data reading I [programming > change the configuration](#) I programming > ECU programming I

## Programming > Change the configuration

This is used to edit some ECU options, e.g. to install different elements which respect to the original version.

The type of intervention and their configuration possibilities depend on the type of ECU and can be univocally identified by the alphanumeric code which appears using the *ECU's data reading* function.



To modify the parameters you can:

- ♦ select the given options (ie YES/NO) from a menu-list;
- ♦ select a numerical value by using the PLUS-MINUS keys available beside the active area



- ♦ select the NAVIGATION FORWARD key to continue
- ♦ a summary screen appears: select the NAVIGATION FORWARD key to continue
- ♦ a summary label appears on a new screen: select the PRINT key to print the label  
select the NAVIGATION FORWARD key to continue

Keys of the environment

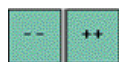
Programming > Change the configuration

keys PLUS-MINUS



if enabled, they allow to adjust  
(increase or decrease) the value.

keys PLUS-MINUS FAST



if enabled, they allow to adjust  
(increase or decrease) the value.

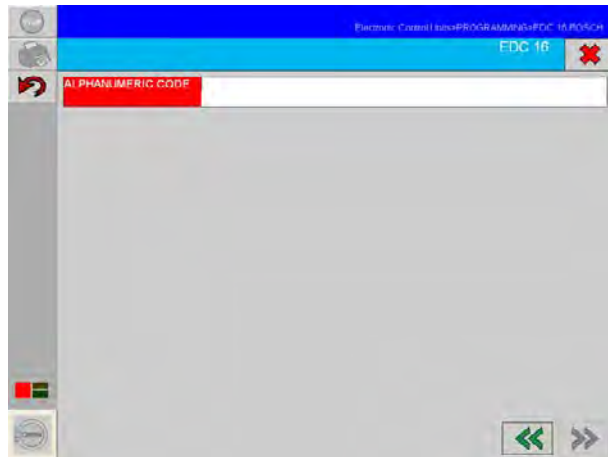


| the consultation can be started | programming environment | data reading | programming > change the configuration | programming > ECU programming |

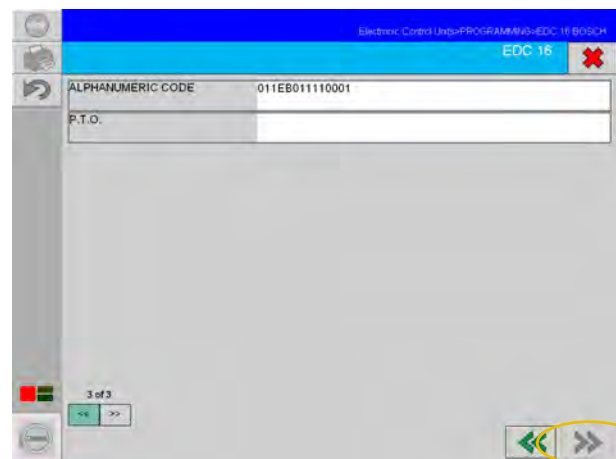
## Programming > ECU Programming

This is used to program elements of the ECU under test in encoded mode.

The ECU programming procedure starts by entering the alphanumeric programming code using the keyboard on the screen.



1. select the active field and enter the alphanumeric code
2. select the NAVIGATION FORWARD key



A summary label appears on a new screen:

3. select the PRINT key to print the label
4. select the NAVIGATION FORWARD key



### Caution

It is not possible to select the STOP key in the Programming environment: you are not allowed to interrupt the program during a programming procedure.

## unit 7

### active diagnosis

#### ATTENTION!

This software may cause chassis movements and/or engine start-up.  
Be extremely careful.

The user is responsible for the correct use of the E.A.S.Y. software so as not to cause injury to people or damage to items.

The user is also responsible for complying with all the rules relating to vehicle security and activities in the workshop.

Carefully read the user manual before using the diagnostic tool and follow the instructions displayed on the screen.

#### GENERAL RULES FOR USE

The following instructions should always be strictly followed:

- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheels chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).

## To start the Active Diagnosis

1. select the GROUP, the CATEGORY;  
select the FORWARD NAVIGATION key (it is active, displayed in green)



2. select the CLASS and the SYSTEM under test to which the vehicle belongs;  
select the FORWARD NAVIGATION key (it is active, displayed in green)



3. from the SPECIFIC FUNCTIONS list select the option *Active Diagnosis*;  
select the FORWARD NAVIGATION key (it is active, in green displayed)

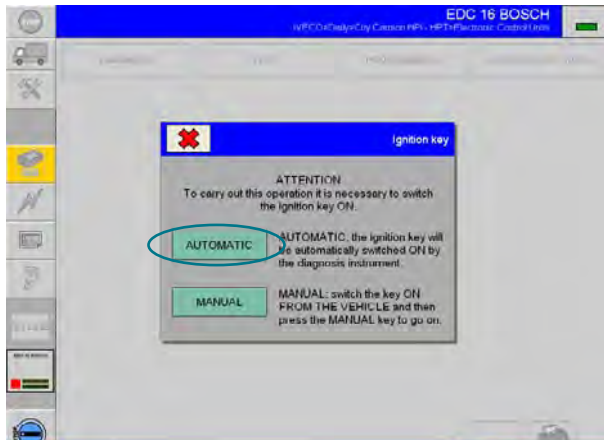


### Caution

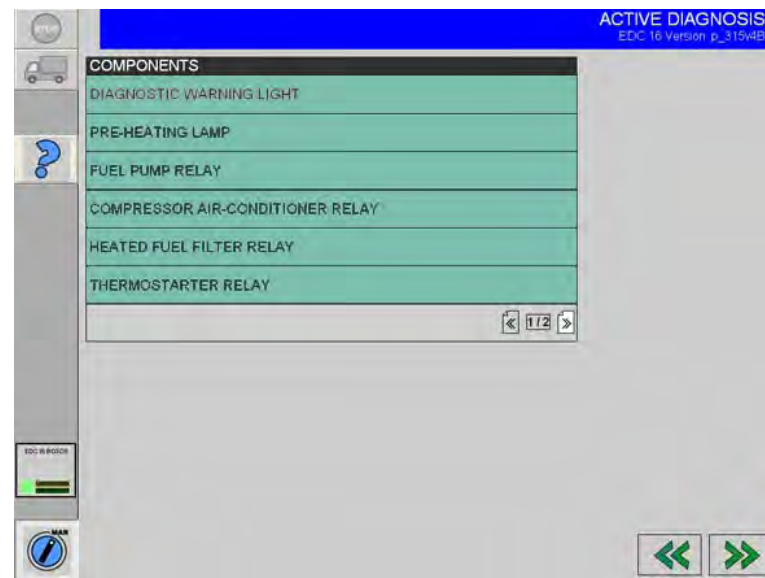
It is possible to carry out an ACTIVE DIAGNOSIS only in online mode. In case of error check the following connections ECU/ECU/EASY.

I to start the Active Diagnosis | Active Diagnosis environment | Active Diagnosis examples |

4. select the ignition key management (automatic/manual):  
if the electronic vehicle under test is fitted with this function, select the automatic key



- ◆ E.A.S.Y. displays some information about the activity in progress
  - ◆ the ignition key ON is automatically activated
  - ◆ the ECU connection starts
5. read the displayed messages and select the green TICK icon to continue
  6. at the end the system permits access to the *Active Diagnosis* environment; the components list is displayed, on which tests can be carried out



Active Diagnosis Environment



## Active Diagnosis Environment

The components of the selected electronic system are indicated in a list; use the browse keys to display all the elements of the list

1. select the COMPONENT on which the test will be carried out
2. select the FORWARD NAVIGATION key to continue and carry out the test



The BACK NAVIGATION key allows you to move one step back; if selected at this level it allows you to exit the *Active Diagnosis* environment.

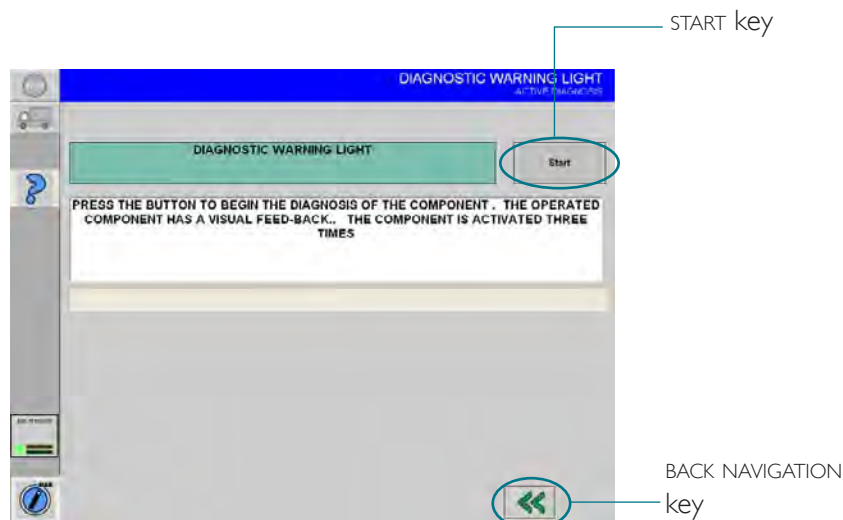
## Active Diagnosis examples

The type of the electronic system under test determines the components type where it is possible to carry out an active diagnosis.

Different tests are prepared for different components. Significant examples are indicated below.

### EDC Warning light

1. select the START key and follow the instructions
2. select the BACK NAVIGATION key to choose another test

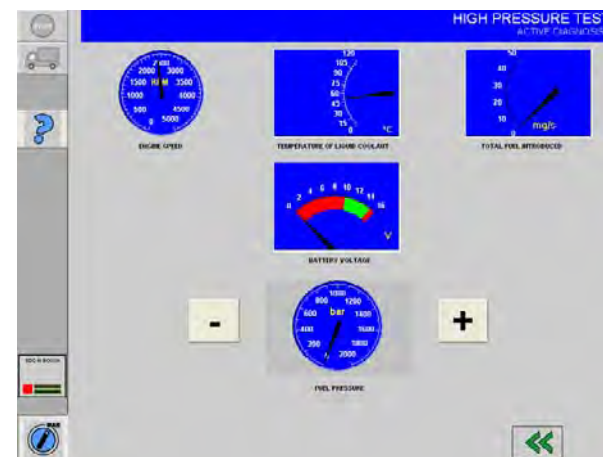


### Fuel Pressure Set

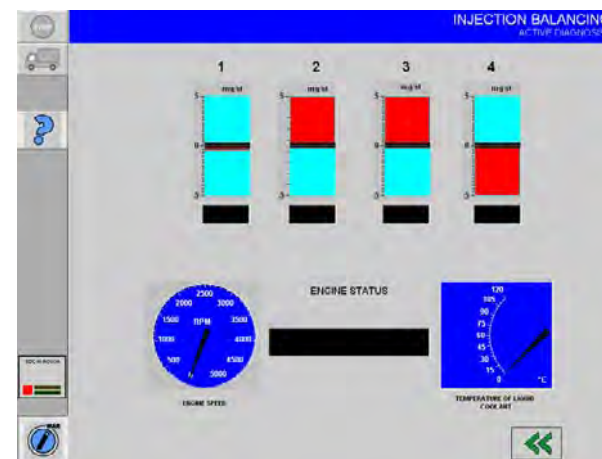
Check the security regulations.

The on-screen displayed instructions help during the test execution.

At the end of the operation select the BACK NAVIGATION key to choose another test



### Fuel Pressure Set



The on-screen displayed instructions help during the test execution.

At the end of the operation select the BACK NAVIGATION key to choose another test.

## unit 8

### engine test

#### ATTENTION!

This software may cause chassis movements and/or engine start-up.  
Be extremely careful.

The user is responsible for the correct use of the E.A.S.Y. software so as not to cause injury to people or damage to items.

The user is also responsible for complying with all the rules relating to vehicle security and activities in the workshop.

Carefully read the user manual before using the diagnostic tool and follow the instructions displayed on the screen.

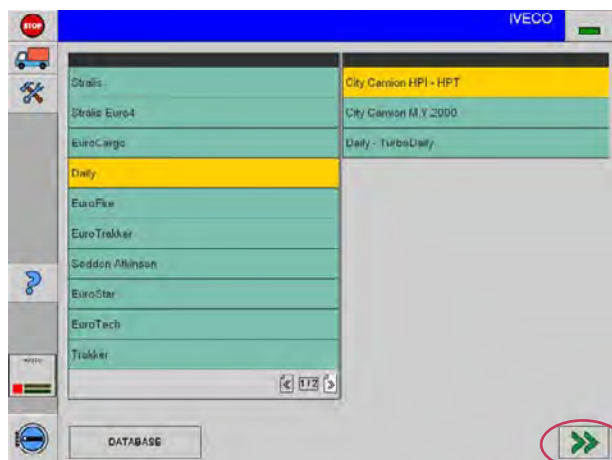
#### GENERAL RULES FOR USE

The following instructions should always be strictly followed:

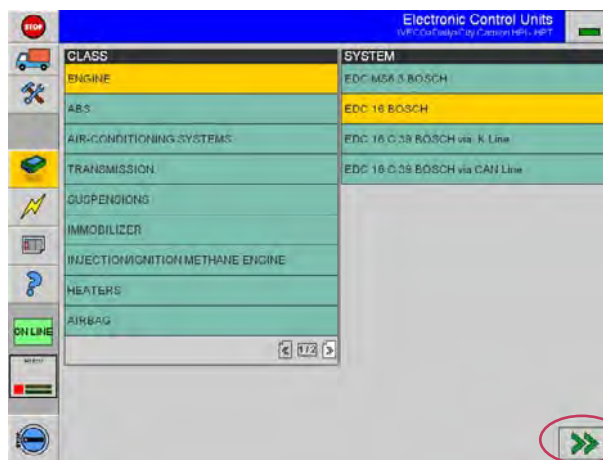
- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheels chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).

## To start an Engine Test

1. select the GROUP, the CATEGORY;  
select the FORWARD NAVIGATION key (it is active, displayed in green)



2. select the CLASS and the SYSTEM under test to which the vehicle belongs;  
select the FORWARD NAVIGATION key (it is active and displayed in green)



3. select the *Engine Test* option from the Specific Functions list; select the FORWARD NAVIGATION key (it is active, in green displayed)



### Caution

It is possible to carry out an engine test only in online mode.  
In case of error check the ECU/ECU/E.A.S.Y. connections.

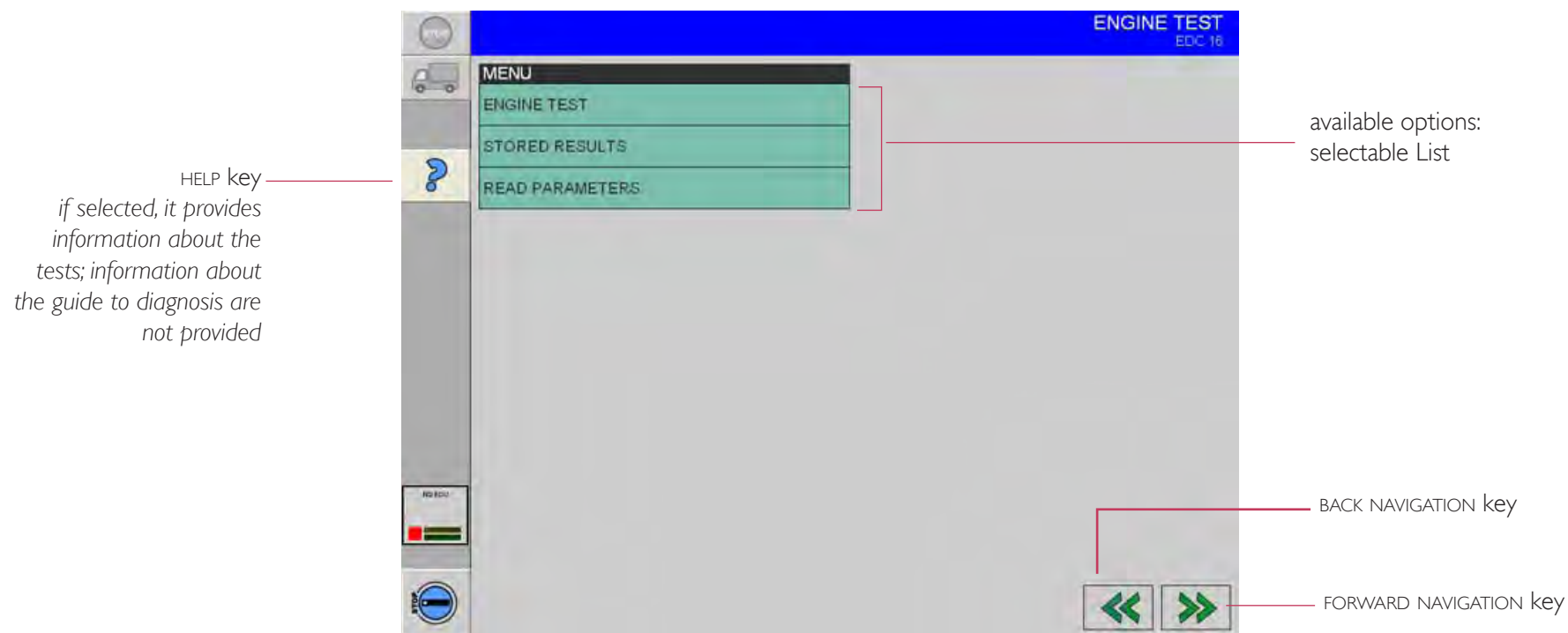
4. you access the *Engine Test* environment where the list of available tests is displayed

## Engine Test environment

It is possible to carry out a test of a specific function, to read the set parameters values or to consult the tests results of previous tests.

The options are displayed in a selectable List:

1. **engine test:** select to carry out the test; the electronic system under test determines the components type on which the test can be carried out.
2. **stored results:** select to analyze the results of previous tests which have been saved in a file
3. **read parameters:** select to carry out the test of set parameters



The BACK NAVIGATION key allows you to move one step back; if selected at this level it allows you to exit the *Engine Test* environment.

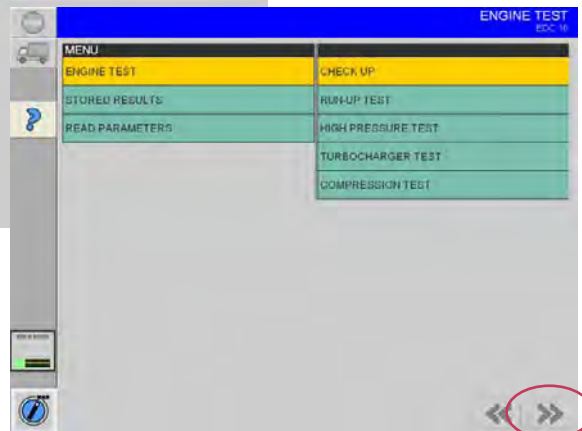
## Engine Test

1. select the *Engine Test* option



2. select the test you want to carry out or the *Check Up* option

3. press the FORWARD NAVIGATION key (enabled, shown in green)



FORWARD NAVIGATION key

- ♦ the system displays information about the activities in progress
- ♦ the ignition key ON is automatically activated
- ♦ the ECU connection starts

4. read the displayed messages and select the TICK icon to continue.



The on-screen displayed instructions help during the test execution.

At the end the system displays the results.

Select the BACK NAVIGATION key to choose another test

I to start an Engine Test | Engine Test environment | Help key in the engine test environment |

## Stored Results

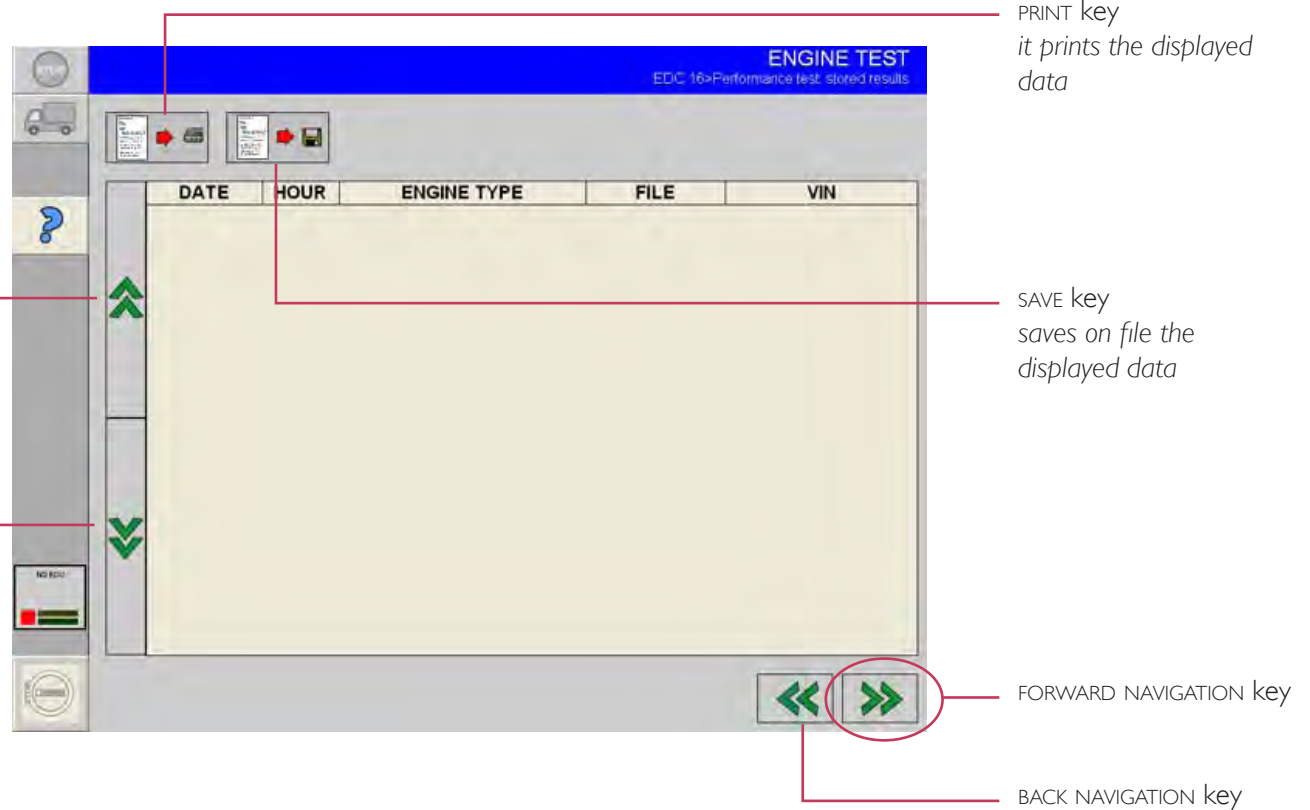


1. select the *Stored Results* option
2. select the test for which you want to analyse the saved data of a previous test
3. press the FORWARD NAVIGATION key (enabled, shown in green)

The requested data are showed in the *Stored Data* window.

UP/DOWN key  
to scroll up and down  
long lists which cannot  
be contained in a single  
window

Stored Results Window





| to start an Engine Test | [Engine Test environment](#) | Help key in the engine test environment |

## Read Parameters

1. select the *Read parameters* option to carry out an interactive test of set parameters



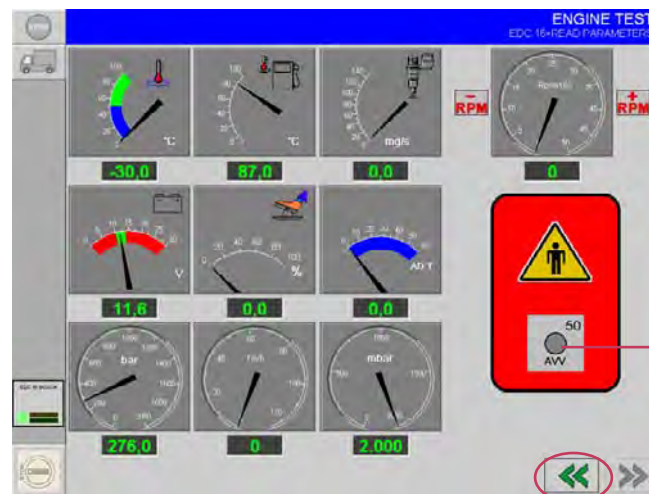
2. press the FORWARD NAVIGATION key (enabled, shown in green)

- ♦ the system displays information about the activities in progress
- ♦ the ECU connection starts

3. after the connections with the ECU the parameters acquisition starts

## Parameters Acquisition

|    |                            |
|----|----------------------------|
| 1  | coolant temperature        |
| 2  | fuel temperature           |
| 3  | injected fuel              |
| 4  | Engine rpm                 |
| 5  | battery voltage            |
| 6  | accelerator pedal position |
| 7  | advance injection          |
| 8  | rail pressure              |
| 9  | Vehicle speed              |
| 10 | boost pressure             |



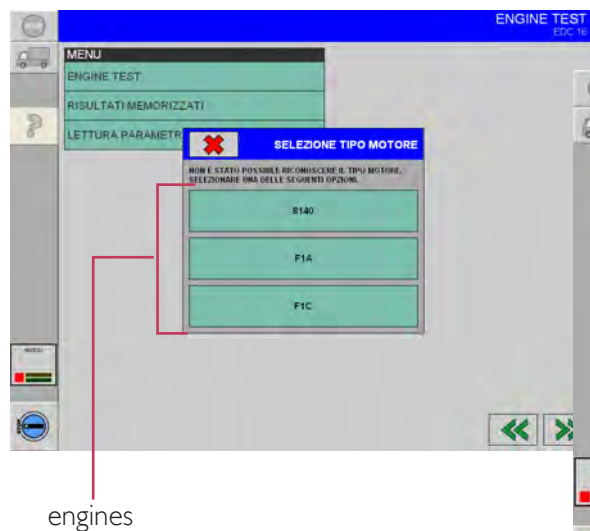
EMERGENCY button

*in case of emergency press it to stop the engine and interrupt every activity.*

Select the BACK NAVIGATION key to return to the acquisition and choose another activity.

## The help key in the engine test environment

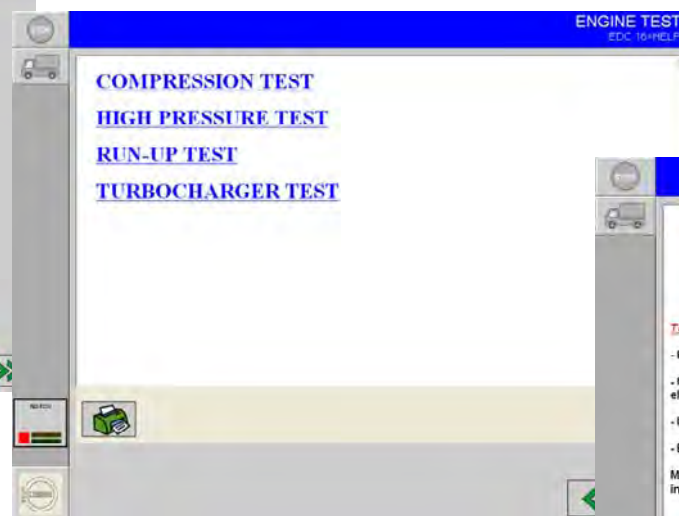
1. select the HELP key
2. if necessary, the system requires to select the used engine type
3. select the engine type; you access the help
4. select the test type for which you want to read the help



engines

For each test some information is given about

- ♦ how to carry out the test
- ♦ the results estimate
- ♦ the intervention to be carried out when a value exceeds the normal range



5. select the BACK NAVIGATION key to exit the help.



BACK key

select to consult another help

BACK NAVIGATION key

select to exit the help

## unit 9

### electrical diagrams

#### ATTENTION!

This software may cause chassis movements and/or engine start-up.  
Be extremely careful.

The user is responsible for the correct use of the E.A.S.Y. software so as not to cause injury to people or damage to items.

The user is also responsible for complying with all the rules relating to vehicle security and activities in the workshop.

Carefully read the user manual before using the diagnostic tool and follow the instructions displayed on the screen.

#### GENERAL RULES FOR USE

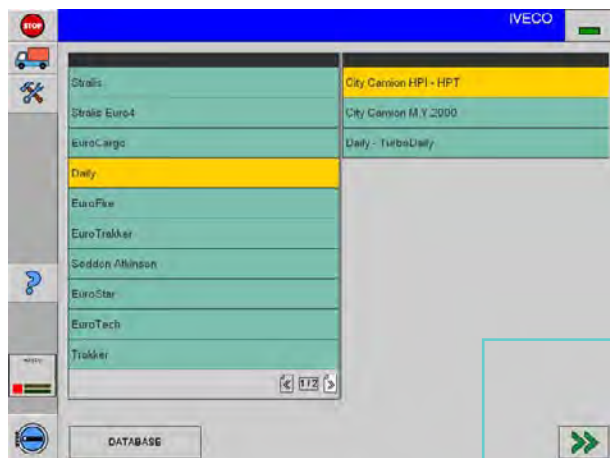
The following instructions should always be strictly followed:

- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheels chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).

I the consultation can be started I connection diagrams area I information about a component I to highlight a component I

To access the consultation area of the connection diagrams of the vehicle under diagnosis proceed as follows:

1. select the GROUP, the CATEGORY;  
select the FORWARD NAVIGATION key (it is active, displayed in green)  
to continue

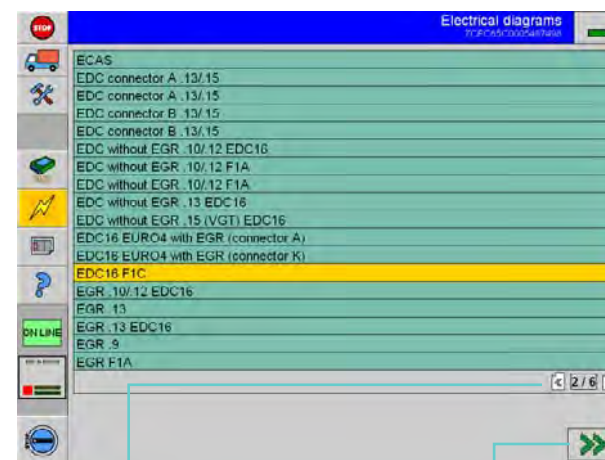


ELECTRICAL DIAGRAMS key  
the key is enabled after selecting the vehicle; it is always possible to consult the same connection diagram of a diagnosis path, if the the CONNECTION DIAGRAMS AREA key is available

2. select the CONNECTION DIAGRAMS AREA on the Keys Area



3. select the system or the component for which you want to consult the connection diagram; use the BROWSE keys to show all the elements of the list



BROWSE keys

NAVIGATION key FORWARD

4. select the NAVIGATION key FORWARD to confirm the selection and continue

E.A.S.Y. shows the required connection diagram.

| the consultation can be started | [connection diagrams area](#) | information about a component | to highlight a component |

## Connection diagrams area

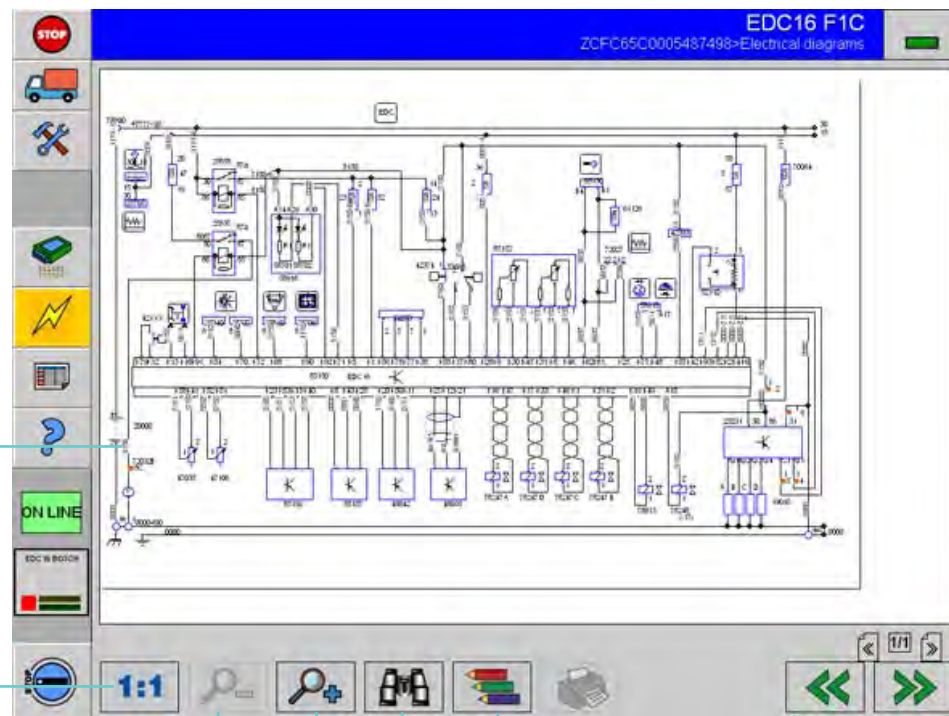
The connection diagram of the system or of the selected component is displayed. The connection diagram area can be selected.

The following operations can be carried out:

1. scroll the diagram
2. expand or reduce the display of the connection diagram
3. highlight on the connection diagram a specified component
4. obtain information about a selected component
5. colour display the connection diagram (COLOUR key)

### Scroll the diagram

select a point of the diagram  
and, without releasing the pointer,  
(mouse/touch screen pen) drag the  
selection in the desired direction



key 1:1

displays the diagram in scale 100%:  
select it when you want to return to  
the initial display

ZOOM OUT key  
reduces the enlargement of  
the diagram display  
is active only after the  
enlargement

ZOOM IN key  
increase the enlargement of  
the diagram display

SEARCH key  
allows to highlight a selected component  
on the connection diagram

COLOUR key

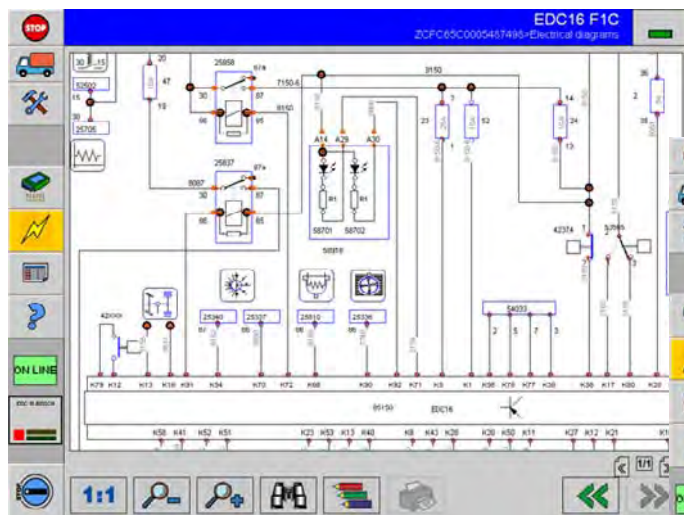
NAVIGATION key  
BACK/FORWARD



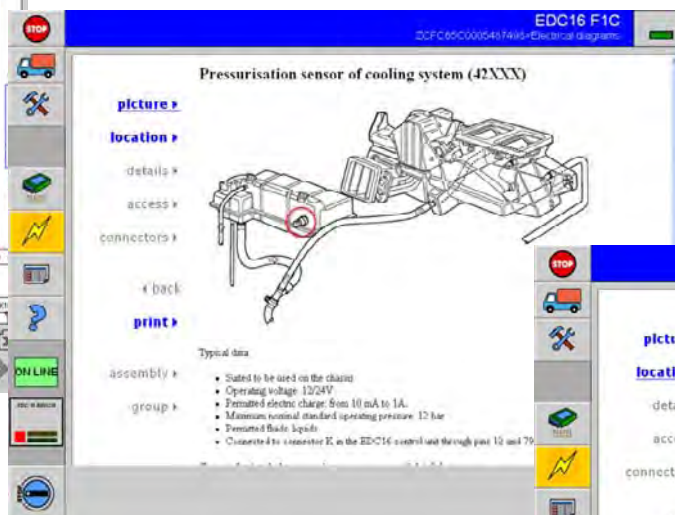
I the consultation can be started I connection diagrams area I information about a component I to highlight a component I

## information about a component of the connection diagram

1. select the component on which you want information



2. the available information are displayed  
(the information type depends on the examined component)



3. select the information type you want to consult



Information type available for the connetion components

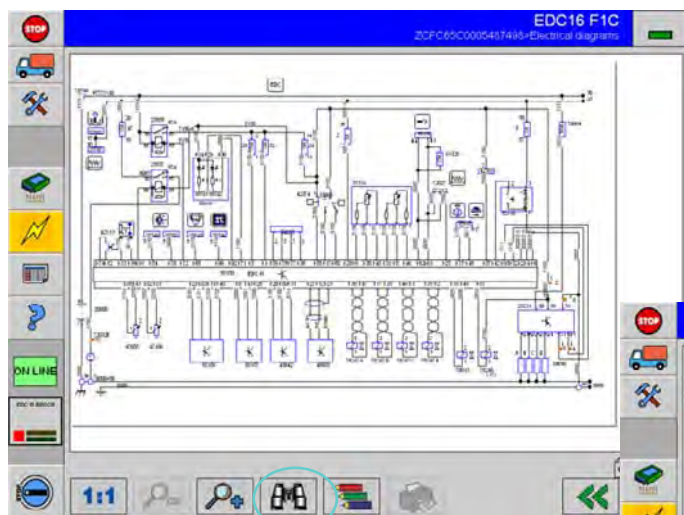
|                                 |  |
|---------------------------------|--|
| <a href="#">image</a>           | picture of the component                     |
| <a href="#">location</a>        | position of the vehicle                      |
| <a href="#">details</a>         | info about the component                     |
| <a href="#">access</a>          | way to access the component                  |
| <a href="#">connectors</a>      | pin-out                                      |
| <a href="#">general diagram</a> | system diagram                               |
| <a href="#">group</a>           | components list belonging to a same category |

4. select the NAVIGATION key BACK to return to the display of the connection diagram

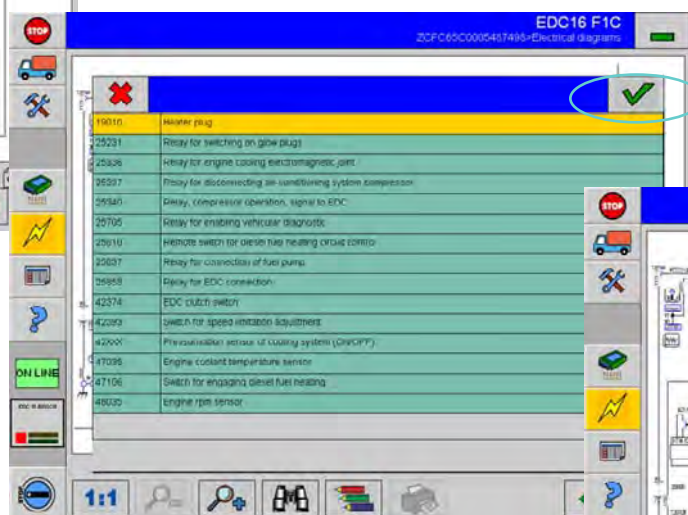
| the consultation can be started | connection diagrams area | information about a component | to highlight a component |

## Highlight a component on the diagram

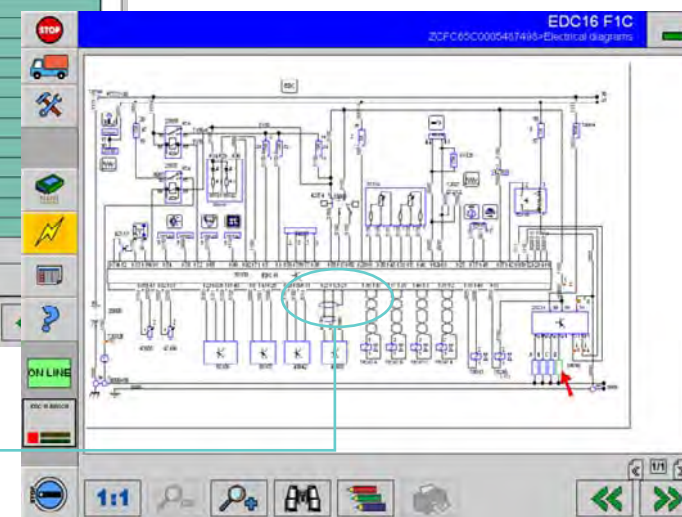
1. select the SEARCH key



2. scroll the list of the components (which appear on the examined diagram); use the BROWSE keys to display all elements of the list
3. select the component you want to position on the diagram



4. confirm by selecting the TICK icon



The position of the selected component is indicated on the connection diagram by a red arrow

## unit 10

### diagnosis guide (GAD)

#### ATTENTION!

This software may cause chassis movements and/or engine start-up.  
Be extremely careful.

The user is responsible for the correct use of the E.A.S.Y. software so as not to any cause injury to people or damage to items.

The user is also responsible for complying with all the rules relating to vehicle security and activities in the workshop.

Carefully read the user manual before using the diagnostic tool and follow the instructions displayed on the screen.

#### GENERAL RULES FOR USE

The following instructions should always be strictly followed:

- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheels chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).



## GAD CHARACTERISTICS

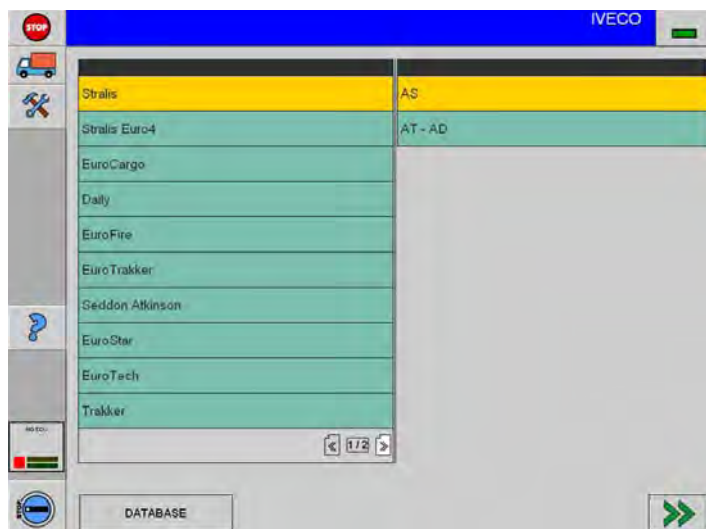
The Diagnosis Guide (GAD) guides the user through the diagnosis, programming and test operations of a vehicle. It is the result of an analysis process, conducted through a sequence EVENTS & QUESTIONS. The process may consist of one or more sequences (what must I do? what can I obtain?) as well as the use of measuring instruments and/or the reading of documentation.

## GAD FUNCTIONS

- supply diagnosis strategies
- to support the technicians in the workshop by detecting the fault(s) with a symptom (not all faults are stored in the fault memory of the ECU!)

## TO START

From EASY, by selecting the Group and the vehicle category, you can directly access the Diagnosis Guide.

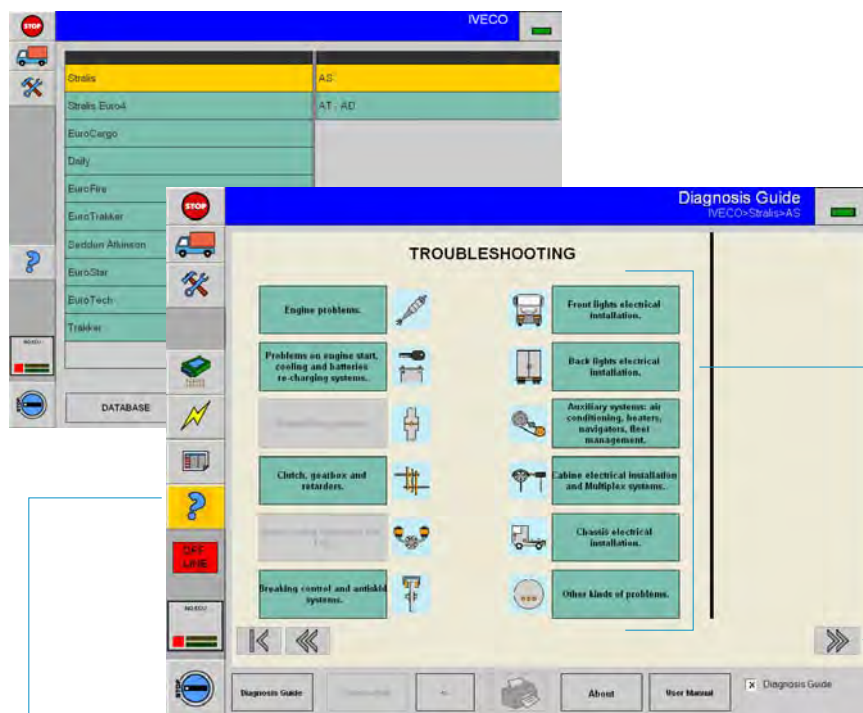


### Note

It is possible to suspend the activity of the GAD environment by selecting another key from the control bar. It is sufficient to select the DIAGNOSIS GUIDE key again (highlighted in the picture) to return to the corresponding environment. In this way all the running activities are retained.

## STEP BY STEP DIAGNOSIS

From EASY select the vehicle Group>Category. The system automatically accesses the Diagnosis Guide (GAD), if available for the selected vehicle. From any point of the diagnostic path you can also access the Diagnosis Guide by selecting the DIAGNOSIS GUIDE key (highlighted in the picture). The GAD opening screen presents 12 macro-areas which can be selected.



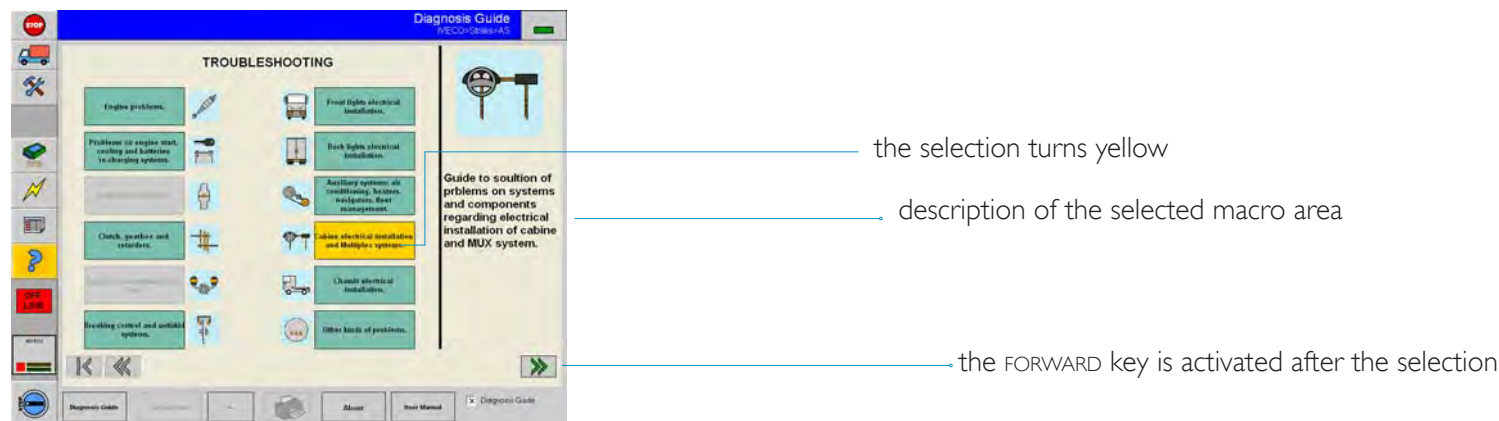
these MACRO AREAS make it possible to access the fault areas to solve the problem on the vehicle and are the same for all vehicle categories (the key is active if there are any available themes)

if the FORWARD key is green it is active, if gray then no option can be selected from the list

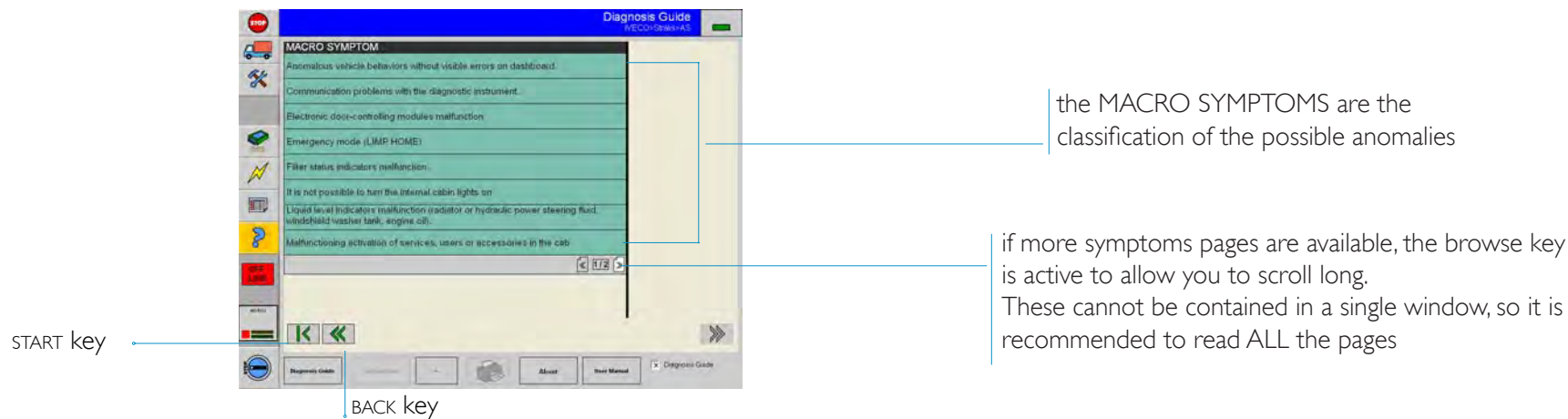
GUIDE TO DIAGNOSIS key

The DIAGNOSIS GUIDE key in the corresponding environment remains selected.

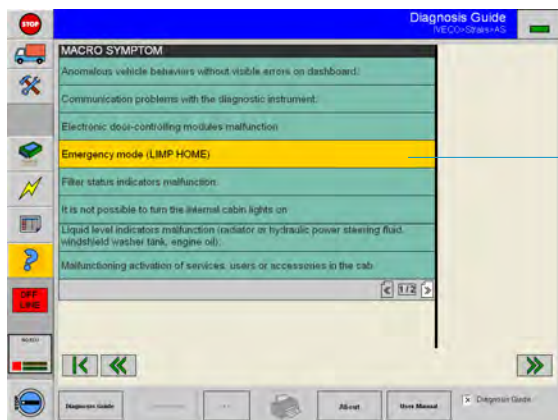
- I. identify and select the desired macro area and confirm by selecting the FORWARD key, which is now active



The next screen displayed is: the list of macro symptoms for the repair area.



2. identify and select the macro symptom and confirm by selecting the FORWARD key which is now active

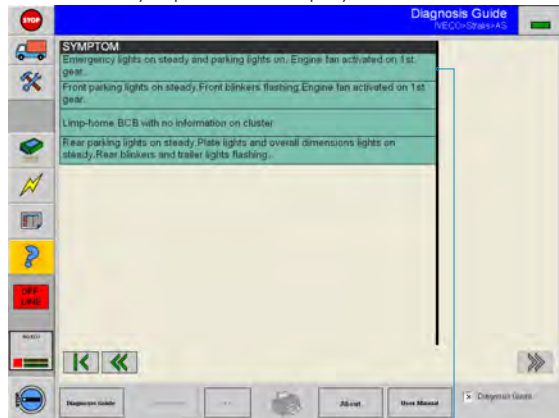


the selection turns yellow

the FORWARD key is activated after the selection

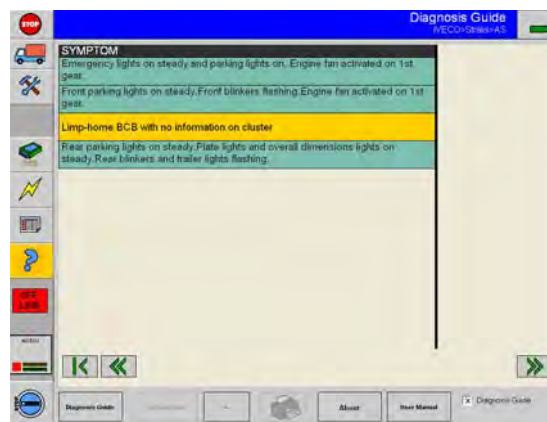
**Caution**  
if there is no further choices available, from the selection of the macro symptom the system directly accesses the fault area screen (from point 2 to point 4)

The list of symptoms is displayed.



list of symptoms

3. identify and select the symptom and confirm it by selecting the FORWARD key which is now active



the FORWARD key is activated after the selection

4. the fault area screen opens for the selected symptom (to continue with the diagnosis path go to point 5; the details of the environment are listed below)

The Diagnosis Guide guides the user through diagnosis until the detected problem is solved.

When viewing the fault screen, a step by step diagnosis path is performed. Some paths consist of one step only (and the fault is easily solved), others consist of additional steps. Each step of the investigation (or NODE) is defined by an id code (investigation area), and characterised by a recommended repair related question.

The screenshot displays the 'Diagnosis Guide' interface for an IVECO Stralis AS. The interface is divided into several sections: 'SYMPTOM', 'CHECK AREA', 'ACTION', and 'QUESTION'. The 'SYMPTOM' section shows 'Limp-home BCB with no information on cluster (7.6.1)'. The 'CHECK AREA' section shows 'Short circuit on the bus CAN B.C.B. frame section'. The 'ACTION' section shows 'Disconnect ST63'. The 'QUESTION' section asks 'Have the windscreen wipers stopped? (LIMP-HOME function off)' with 'Yes' and 'No' options. The 'Yes' option is highlighted in yellow. The interface includes a sidebar with icons for 'STOP', 'SYMPTOM', 'CHECK AREA', 'ACTION', 'QUESTION', 'OFF LINE', and 'MEASUREMENTS'. The bottom of the screen features navigation keys: 'START key' (returns you to the opening window), 'the BACK key' (allows you to return to previous item), 'ATTACHMENTS key' (displays attachment pop-ups), and 'MEASUREMENTS key' (displays measurement pop-ups). The 'Diagnosis Guide' title bar is at the top right, and the 'Diagnosis Guide' button is at the bottom right.

symptom identification code:

- name of the NODE (or symptom)
- description
- identification code

focusing the investigation area

repair operation

question/answer to access the next step

select an item of the list to continue (the FORWARD key is active)

ATTACHMENTS key (displays attachment pop-ups)

MEASUREMENTS key (displays measurement pop-ups)

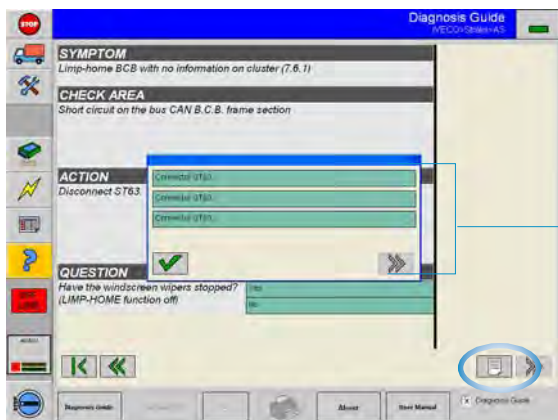
START key (returns you to the opening window)

the BACK key (allows you to return to previous item)

5. when viewing the fault area screen, and the  ATTACHMENTS key is displayed, further documentation is available to assist in the analysis of the symptom;

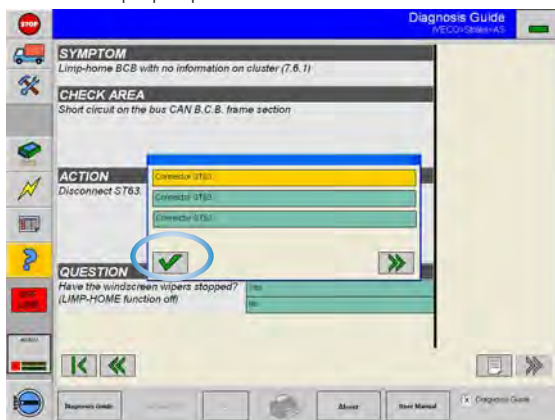
select the key

The attachment pop-up opens



*the pop-up presents a list of available documentation in pdf format*

6. in the attachment pop-up, select the desired document and confirm by selecting the FORWARD key which is now active



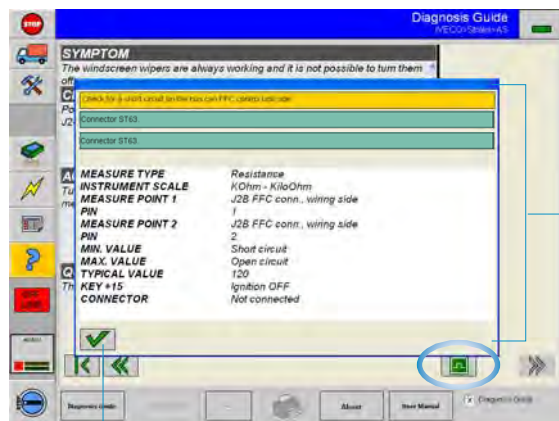
*the document can be read with the Reader program*

7. after reading the document, return to EASY and select the GREEN TICK icon (highlighted in the picture) closing the attachments pop-up



8. if the MEASUREMENTS  key is displayed it is necessary to carry out some measurements to assist in the analysis of the symptom; select the key.

The measurement pop-up opens



the pop-up shows a list of possible measurements together with an instructional area containing some suggestions about the selected measurement

in the displayed list the option has already been selected and the green tick icon is active

GREEN TICK icon

9. carry out the measurements according to the indicated sequence



10. from EASY select the green tick icon to close the measurement pop-up

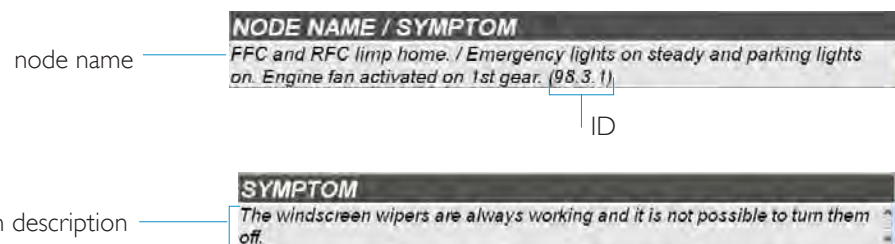
11. return to the diagnosis; carry out the repairs and answer the questions, according to the information indicated (ALWAYS read the documents or measurements associated to the recommended repair)



end of the diagnosis process

## FAQ

- \* *if during the diagnosis guide, I realise that the selected macro area does not define the correct diagnosis, may I change it?*
- \* *by selecting the START key  you can return to the opening GAD screen, from where it is possible to choose a new macro area*
- \* *if during the diagnosis path I realise that the macro symptom is not correct?*
- \* *by selecting the BACK key  you return to the previous step (use it until you return to the macro symptoms list)*
- \* *what is the function of the ABOUT key?*
- \* *the ABOUT key  opens the information window (ECI connection, Activations, Framework version)*
- \* *what is the function of the USER MANUAL?*
- \* *the USER MANUAL key  allows you to access the user manual (pdf format)*
- \* *why are some descriptions coloured in blue?*
- \* *because they indicate keys already used*
- \* *what does symptom identification mean?*
- \* *the identification of the symptom is defined by  
the name of the symptom (or the node name)  
identification code (ID)  
description (it appears after the first selection)*





**CAUTION**

The Eltracscope module is to be purchased separately from Iveco Spares p.n. 99327084.

## unit I I

# Eltracscope

**ATTENTION!**

This software may cause chassis movements and engine start-up. Be extremely careful.

The user is responsible for the correct use of the E.A.SY software in order to not cause damage to people or things.

The user is also responsible for complying with all security rules for vehicle activities in the workshop.

Carefully read the user manual before using the diagnostic tool and follow the on-screen displayed instructions.

**GENERAL RULES FOR USE**

The following instructions should be strictly followed always:

- check that all instruments ensuring safe vehicle parking are present and activated (e.g.: handbrake, wheel blocks, vehicle in neutral, etc...)
- be sure that the ECI module is connected to the diagnosis socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software with the vehicle, there are no people near the vehicle you are working with
- if it is necessary that more than one person work near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).

| the kit | sw installation | connections | hw installation | interface |

## the kit



The Kit comprises a set of portable equipment for checking the electric and electronic systems on the vehicles.

The main item of the Kit is the software that allows the PC to be used as digital oscilloscope.

### Base

oscilloscope ADC-212 PC  
600A CA/CC current clamp  
60A CC current clamp  
attenuator 20:1  
multimeter probes and point probes  
small crocodile clamps

### Cover

TA000 test cable  
USB connection cable  
parallel connection cable  
parallel/USB adapter  
220V power supply unit  
2 Eltracscope connection cables/  
measurement points  
cigar lighter supply cable  
CD with manual in electronic format  
set-up guide



*suitcase contents*

| the kit | sw installation | connections | hw installation | interface |

## il kit>components

base

|                                    |
|------------------------------------|
| oscilloscope ADC-212 PC            |
| 600A CA/CC current clamp           |
| 60A CC current clamp               |
| attenuator 20:1 (2 pieces)         |
| multimeter probes and point probes |
| small crocodile clamps             |



Cover

|  |
|--|
| TA000 test cable                                   |
| USB connection cable                               |
| parallel connection cable                          |
| parallel/USB adapter                               |
| 220V power supply unit                             |
| 2 Eltracscope connection cables/measurement points |
| cigar lighter supply cable                         |
| CD with manual in electronic format                |
| set-up guide                                       |



## sw installation

The first operation is to set-up the software. Insert the Oscilloscope Software CD in the special drive: software set-up begins.

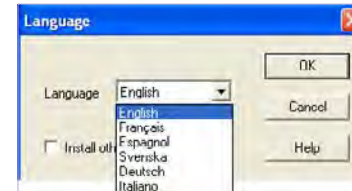
1. choose the language used during set-up



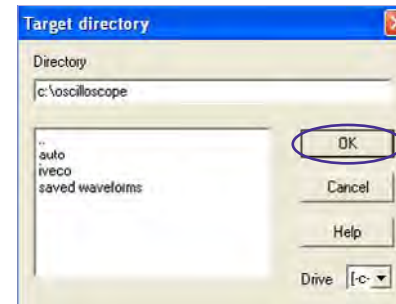
2. confirm by pressing the INSTALL button



3. select the software installation language and confirm (ok)



4. the software will be set up in the directory: c:\oscilloscope; select OK



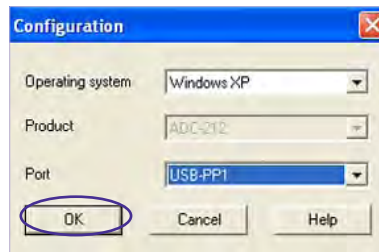
the name of the hard disk (C:) may be different according to system configuration

| the kit | [sw installation](#) | connections | hw installation | interface |

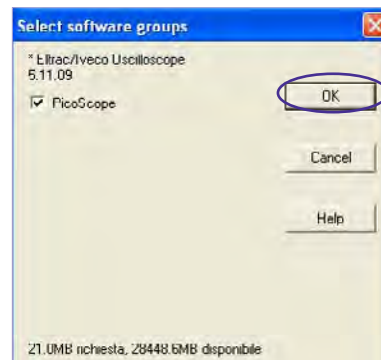
5. scroll the menu using the side bar arrows and select the USB-PP1 port



6. confirm (OK)



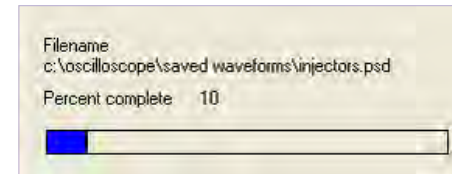
7. follow the instruction given and press OK



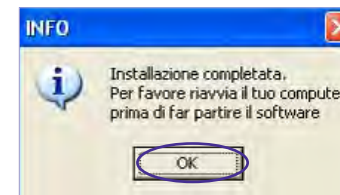
8. the following path has been created  
Programmes>Iveco-Eltrac> Eltracscope: select OK to continue



9. software set-up begins; wait for it to end



10. re-start the computer to make set-up effective



| the kit | sw installation | [connections](#) | hw installation | interface |

## connections

Once the software has been set up, connect the oscilloscope firstly to the power supply unit and then to the PC; then to the measuring instruments.

OSCILLOSCOPE



parallel port

supply socket

PARALLEL/USB ADAPTER (to connect the oscilloscope to the pc)



USB cable adapter/PC

parallel cable/adapter  
parallel/oscilloscope



channel A

channel B

external trigger

coaxial connectors for the measuring  
instruments (probes, sensors, clamps, ...)

LATER



example of connection with  
ammeter clamp

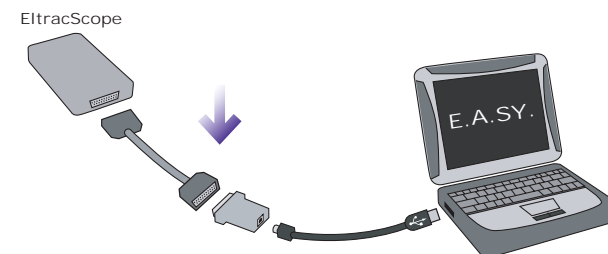


| the kit | sw installation | connections | [hw installation](#) | interface |

## hw installation

Then set up the hardware.

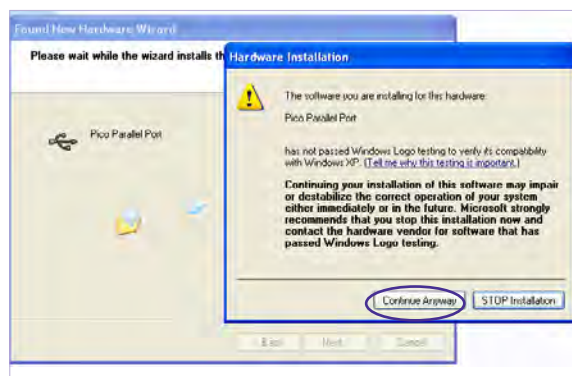
Connect the parallel-USB adapter to the oscilloscope and to the PC (see fig. opposite): a new hardware is acknowledged.



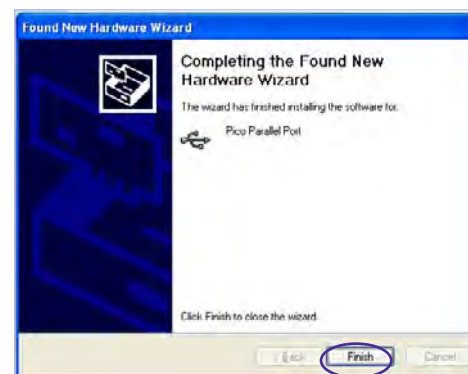
1. guided set-up of the new hw begins: select NEXT> to continue



2. continue by pressing the CONTINUE ANYWAY button



3. the device has been correctly installed; press FINISH



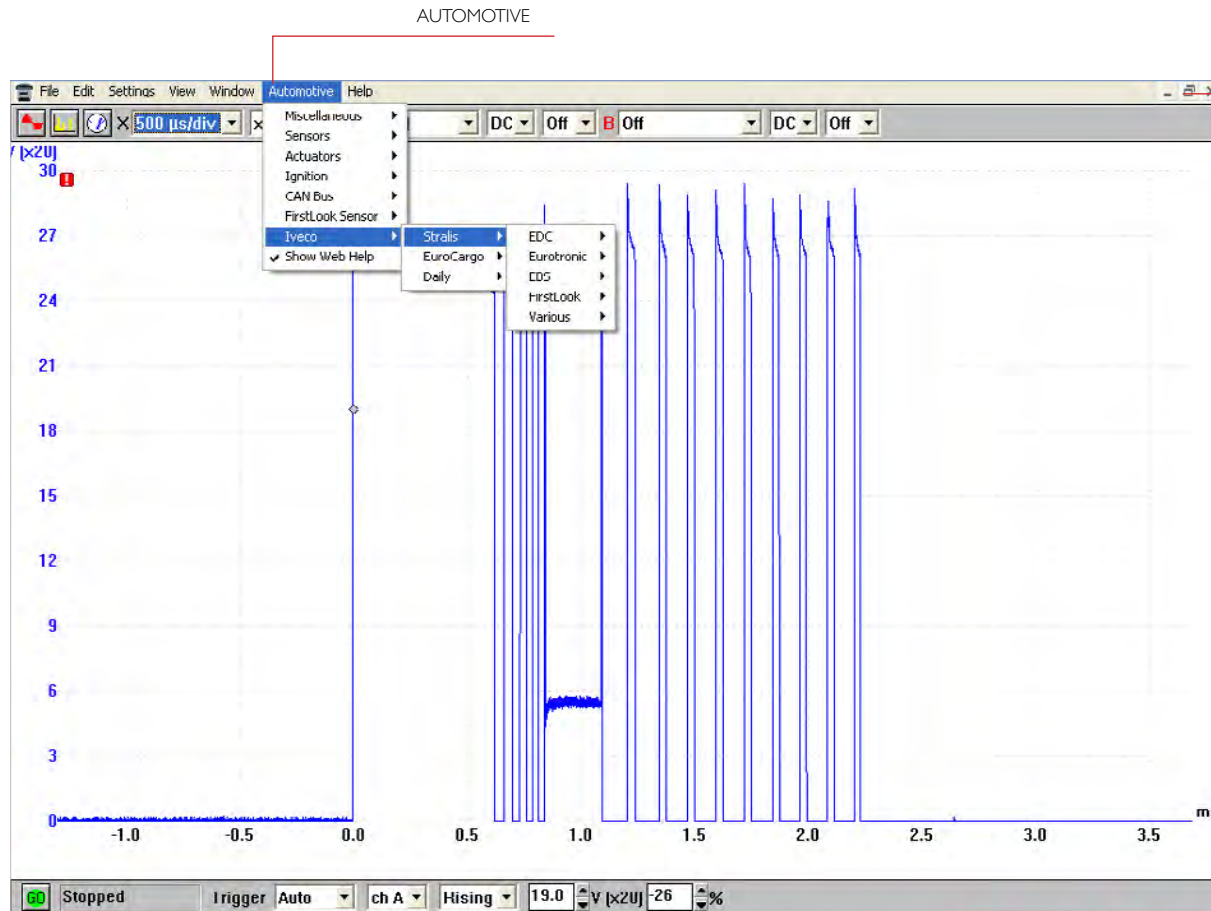
4. to start the Eltracscope click on Start>Iveco-Eltrac> Eltracscope





| the kit | sw installation | connections | hw installation | interface |

## User-interface>menu bar>Automotive function



MENU BAR

In the **MENU BAR**, under item **Automotive>Iveco**, models of wave shapes are available, classified by range (Stralis, EuroCargo, Daily) and by electronic system (EDC, Eurotronic, ...).

The models represent the type of signal to be acquired and are fundamental in facilitating the operator in acquisition.



The user:

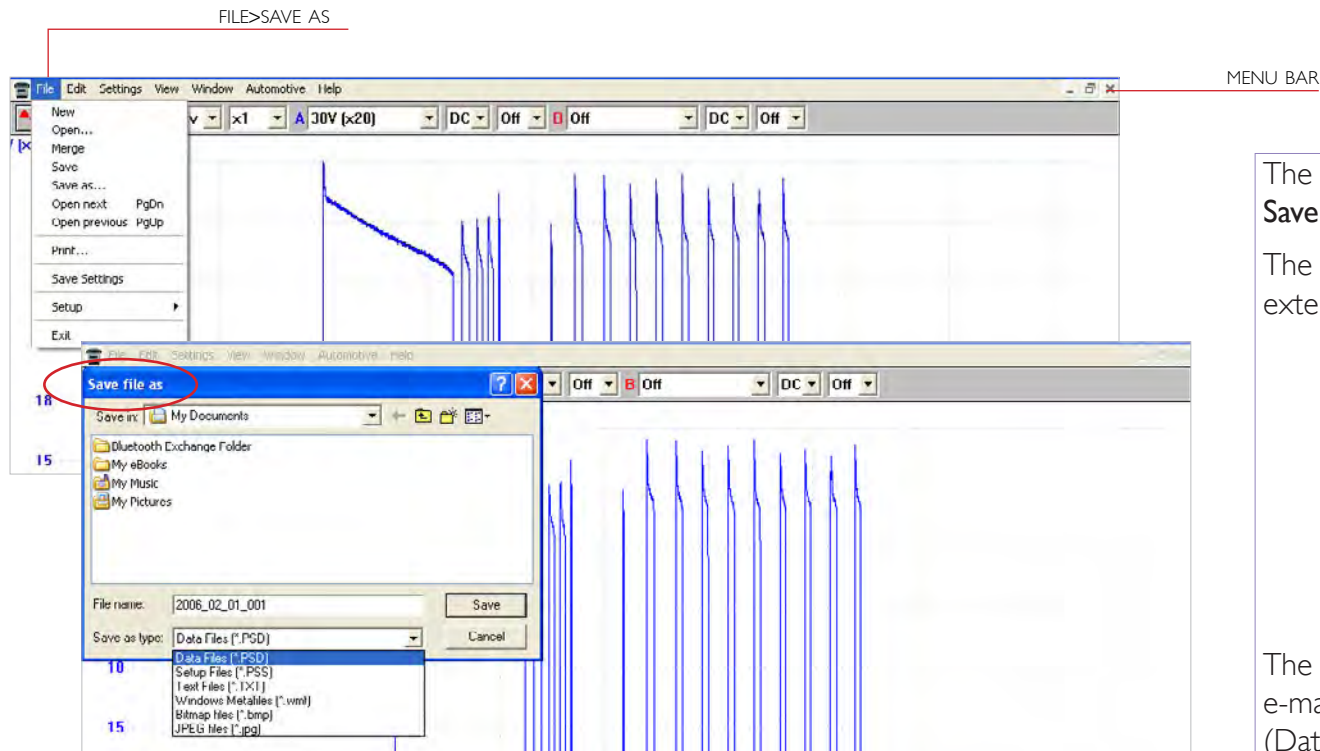
- downloads the wave shape from the Iveco menu (Automotive>Iveco>Stralis...)
- connects the Eltracscope to the vehicle
- selects the GO button (shown opposite) to read the vehicle signal, **WITHOUT** having to set the Eltracscope

cont.d >>

GO/STOP (starts or stops the oscilloscope)

| the kit | sw installation | connections | hw installation | interface |

## User-interface>menu bar>File function>Save as



The user can save the acquisition using the **Save as** command from the **File** Menu.

The **Save as** command allows the following extensions:

- PSD (saves the wave shape and the Eltracscope settings)
- PSS (only saves the Eltracscope settings)
- txt
- wmf
- bmp
- jpg

The PSD format, in particular, can be sent by e-mail to the Centro Esperto Teleservizi (CET) (Data Communication Services Expert Centre) or to the Technical Help Desk (THD), who - in turn - process it and return it to the sender as PSS file. The workshop downloads the PSS format and then performs correct acquisition (see indications opposite).

In particular instances, intervention of the CET may prove to be determinant.

CET and THD send the PSS file to the workshop via e-mail, as attachment.  
The user:

- saves the attachment (select the path preferred)
- start the Eltracscope
- from the Eltracscope select File>Open (be careful to define the File Type, which must be PSS)
- the Eltracscope automatically takes the correct values for signal acquisition
- simply press GO to start acquisition

| the kit | sw installation | connections | hw installation | [interface](#) |

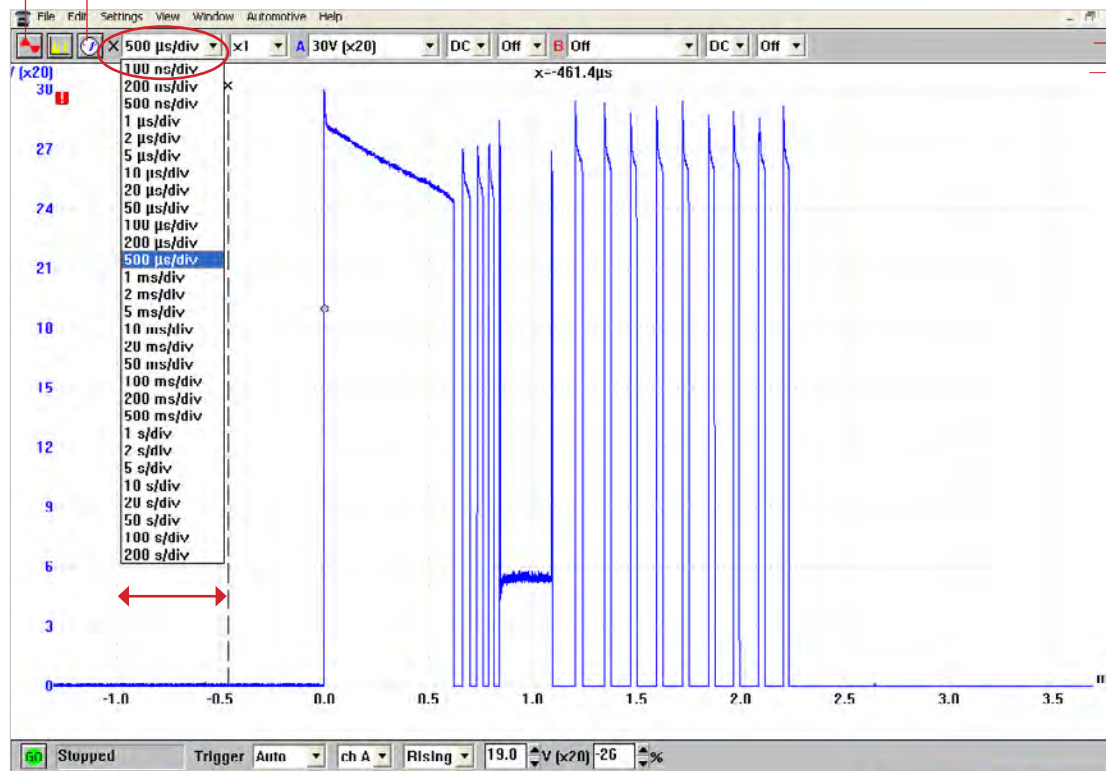
## User-interface>tool bar>measurement functions

The **TOOLBAR** contains functions with which the user can optimise viewing of the signal.  
Below the main measurement functions are examined.

**X 500  $\mu$ s/div**  
TIME BASE

OSCILLOSCOPE button: opens a new Eltracscope window

MULTIMETER button: opens a new multimeter window



TOOLBAR

Eltracscope display

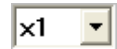
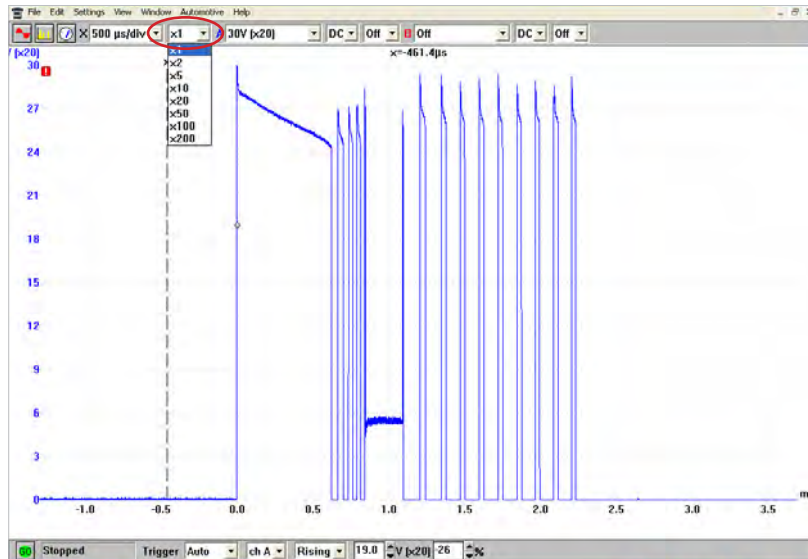
The **TIME BASE** function is circled in the figure.

The time base checks the interval of time along the Eltracscope display (time by division). On the screen (axis x) there are 10 divisions, so the time interval represented is 10 times the time base (as indicated by the double red arrow, below and opposite).

↔ = **X 500  $\mu$ s/div**

| the kit | sw installation | connections | hw installation | [interface](#) |

## User-interface>tool bar>measurement functions



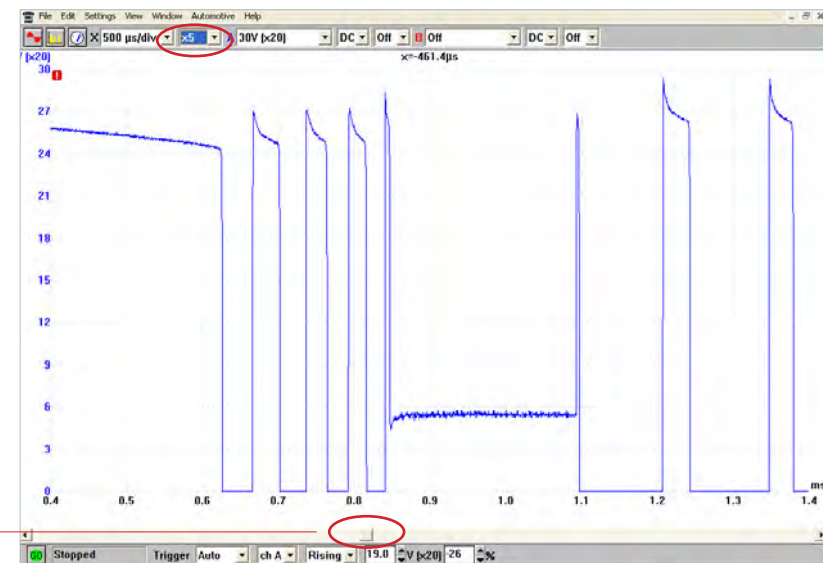
MULTIPLIER  
(AXIS X)

The **MULTIPLIER** function is circled in the figure

The multiplier zooms on the time base.

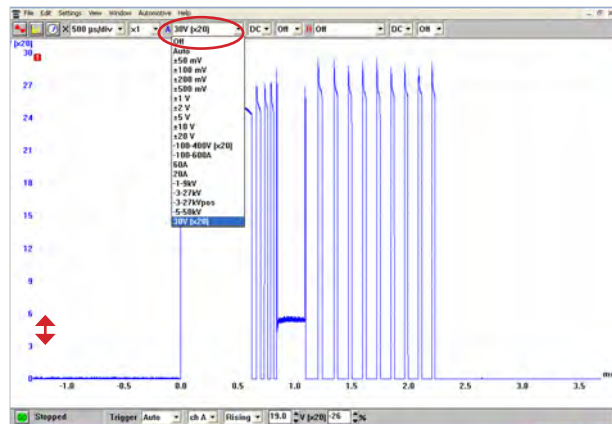
If it is fixed at x1 (as in the figure opposite), the acquisition is shown completely on the display. If it is fixed at values other than 1 (x5, for example, as in the figure below), only a part of the acquisition is shown but with more detail.

a space bar appears to check the detail being viewed  
to use the bar to get detailed information about other areas of the acquisition



| the kit | sw installation | connections | hw installation | [interface](#) |

## User-interface>tool bar>measurement functions



The channel A RANGE function is circled in the figure.

The range allows you to specify the input value range; it indicates the interval of the signal to be measured (amplitude along the vertical axis, as shown by the double red arrow). Choose AUTO to automatically adjust the input range to the signal amplitude. Choose OFF if you do not want to view the acquisition on the channel.

if the signal is >20V, the input range needs to be adjusted to the signal: use the attenuator (see figure below)

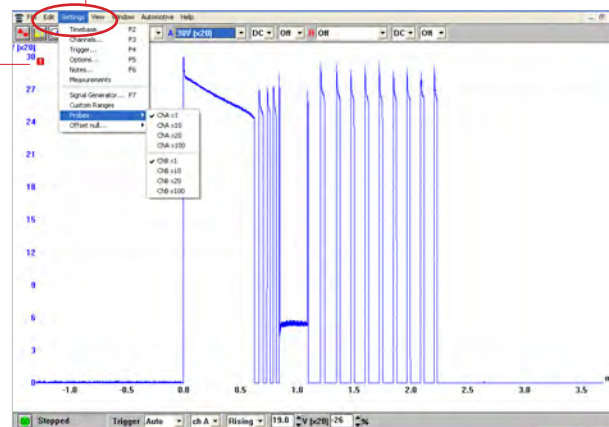
**Settings>Probes...** (select the channel and the option, in the example below channel at option x20)

**A 30V (x20)**

CHANNEL A: RANGE

*note*  
channel A is coloured in blue, as wave shape detected on channel A

channel A: 30V (x20)  
the **I** icon indicates that the signal is out of scale  
present range:  
0, 30 (x20)



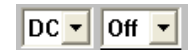
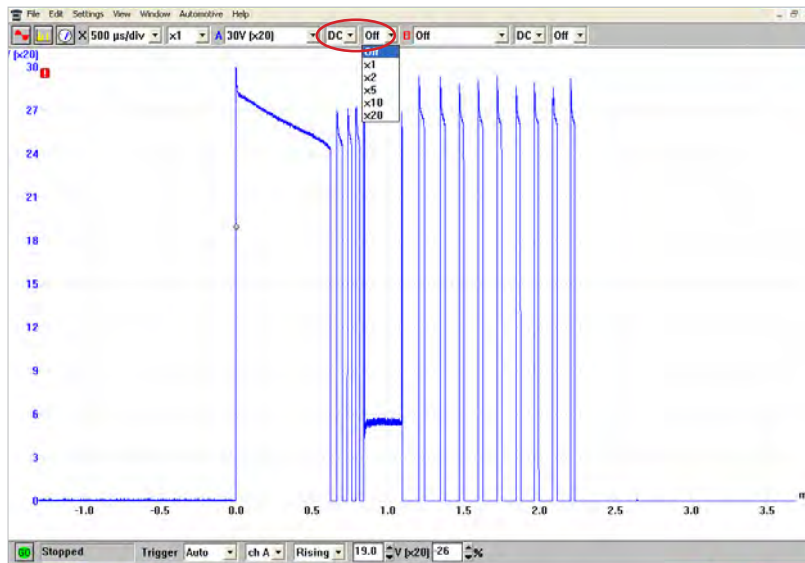
channel A:  $\pm 20$   
attenuator: x20  
 $\pm 20 \times 20 = \pm 400$

the values have been changed via the attenuator  
present range: -400, +400



| the kit | sw installation | connections | hw installation | interface |

## User-interface>tool bar>measurement functions



CURRENT // MULTIPLIER (AXIS Y)

The MULTIPLIER CURRENT functions are circled in the figure

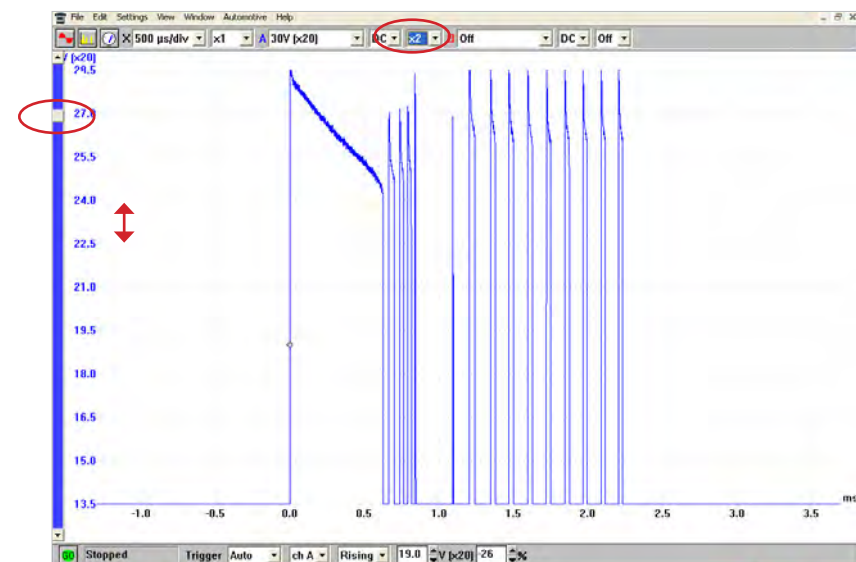
The current can take two values: DC (direct current) and AC (alternate current):  
With vehicles always use direct current (DC).

The multiplier zooms on the amplitudes along axis y. If it is fixed on OFF, the input interval is shown completely in the window (vertical dimension).

In the figure at the top the increase in every division on axis y is 3.

In the figure opposite, as the multiplier is set at x2, the increase is 1.5 (i.e. 3:2).

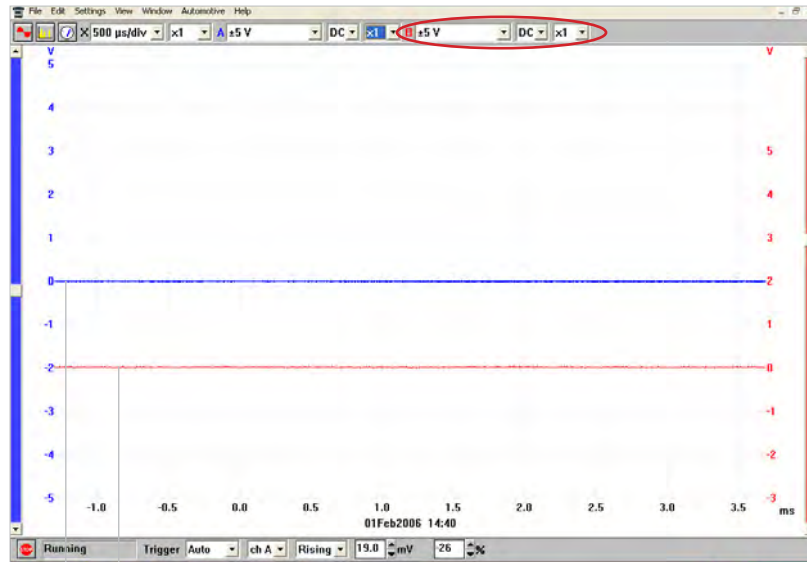
Use the slider bar to view hidden details.





| the kit | sw installation | connections | hw installation | [interface](#) |

## User-interface>tool bar>measurement functions



tracing B: coloured in red, like the numerical values that define it (see axis of the ys, on the right in the example)

tracing A: coloured in blue, like the numerical values that define it (see axis of the ys, on the left in the example)

The **channel B** functions are circled in the figure

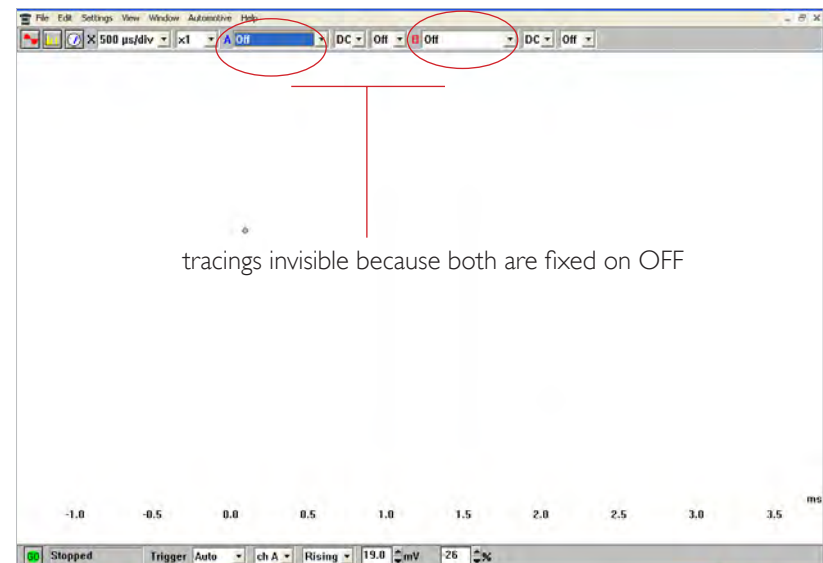
The range allows you to specify the signal input value interval. Choose AUTO to automatically adjust the input range to the signal. Choose OFF if you do not want to view the acquisition on the channel.

For the other functions, see page 13.



**CHANNEL B: RANGE, MODE, MULTIPLIER**  
Preferably choose DC.

*note*  
channel B is coloured in red, as wave shape detected on channel B



tracings invisible because both are fixed on OFF



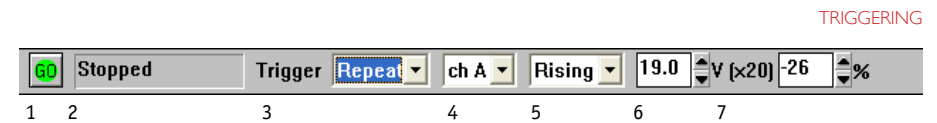
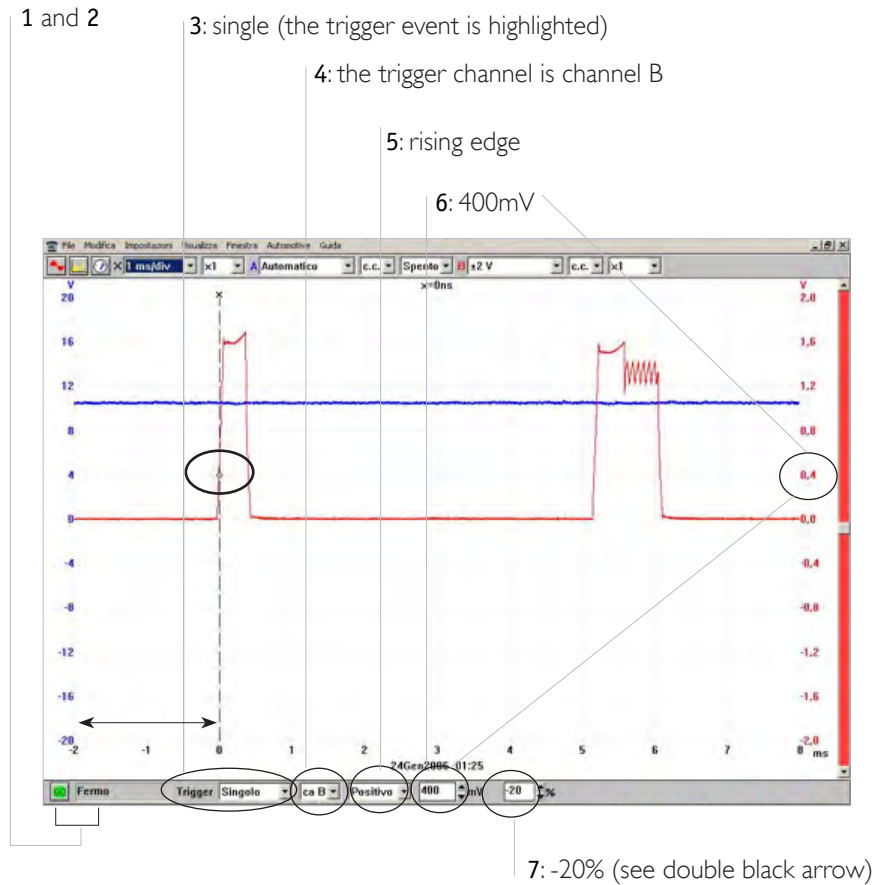
| the kit | sw installation | connections | hw installation | [interface](#) |

## User-interface>tool bar>measurement functions

The trigger event is an instant taken as reference by the Eltracscope to make acquisition start.

The Eltracscope starts to collect the data immediately after the trigger instant or before/after a certain interval of time (function 7).

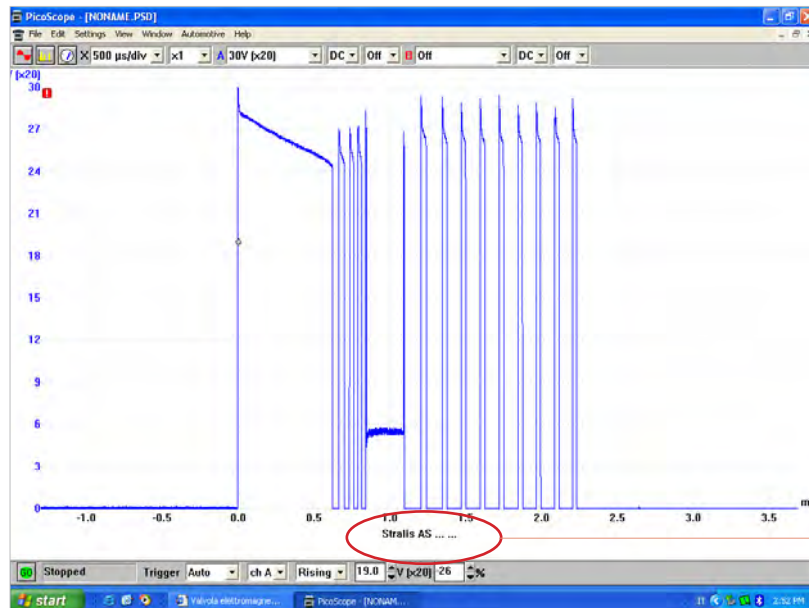
*Note: triggering is preset if the wave shape models of the Automotive>Iveco menu are used.*



|   |  |
|---|--|
| 1 | go/stop: starts or stops the Eltracscope     |
| 2 | stopped/running in progress                  |
| 3 | trigger modes                                |
| 4 | trigger channels                             |
| 5 | trigger direction (falling edge/rising edge) |
| 6 | trigger threshold (trigger movement)         |
| 7 | delay after trigger/pre-trigger              |

| the kit | sw installation | connections | hw installation | interface |

## User-interface>tool bar>measurement functions



SIGNAL ACQUISITION  
if the default value is left, acquisition is slow



accelerated acquisition is possible:

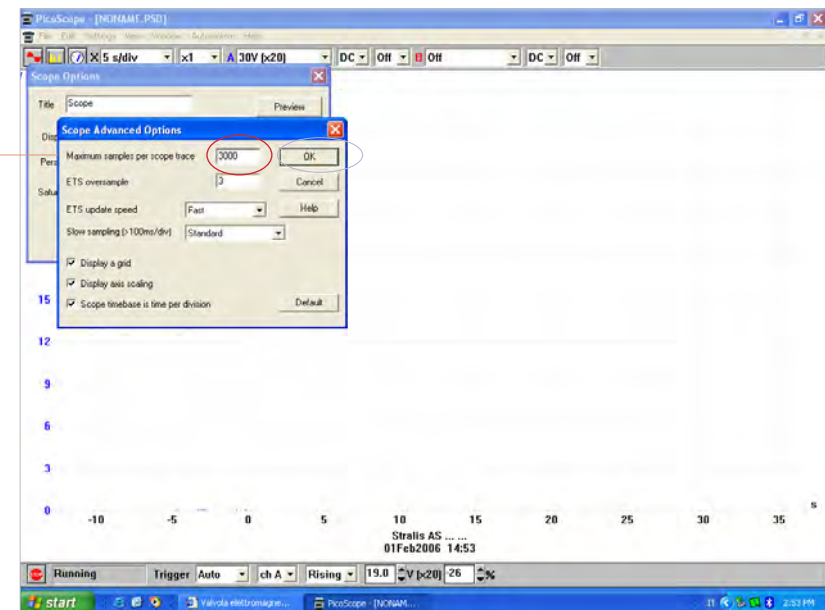
- select Settings>Options>Advanced

the Advanced Options window opens

- change the numerical value at the top to 3000/Standard sampling
- confirm by pressing the ok button

it is possible to customise the acquisition entering notes at the bottom of the display (above the triggering menu bar):

- select Settings>Notes



## unit 12

# Bluetooth Device user and installation manual

### ATTENTION!

This software may cause chassis movements and/or engine start-up.  
Be extremely careful.

The user is responsible for the correct use of the E.A.S.Y. software so as not to any cause injury to people or damage to items.

The user is also responsible for complying with all the rules relating to vehicle security and activities in the workshop.

Carefully read the user manual before using the diagnostic tool and follow the instructions displayed on the screen.

### GENERAL RULES FOR USE

The following instructions should always be strictly followed:

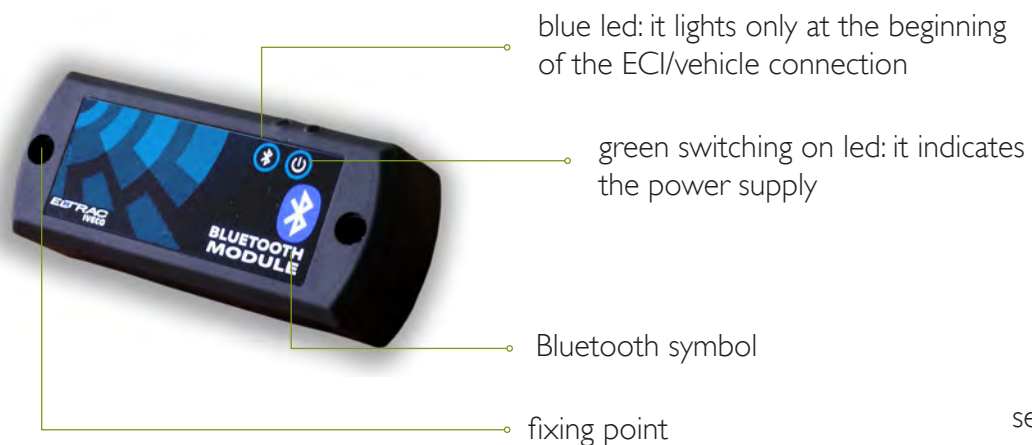
- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheels chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).

| [hardware characteristics](#) | security and use conditions | system configuration | Hw installation | eci-bluetooth session step by step | faq | troubleshooting |

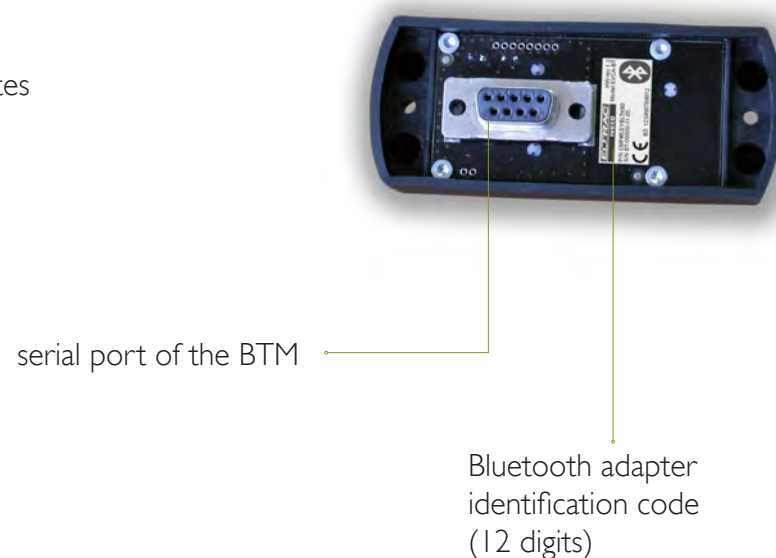
## hardware characteristics

Thanks to the BTM you will be able to connect the E.A.SY diagnosis system to any ECI module connected to any vehicle in the IVECO range, equipped with 30-pole diagnosis socket without cables (wireless mode). The following technical information will be very useful.

FRONT



REAR



### TECHNICAL DETAILS

|                         |                     |                             |                     |
|-------------------------|---------------------|-----------------------------|---------------------|
| WEIGHT                  | 70 grams            | TEMPERATURE OPERATING RANGE | from 0°C to +70°C   |
| DEGREE OF PROTECTION    | IP40                | STORAGE OPERATING RANGE     | from -30°C to +85°C |
| RESISTANCE TO THE FALLS | 1 metre on concrete | HUMIDITY WITHOUT CONDENSATE | from 0 to 90%       |

| hardware characteristics | [security and use conditions](#) | system configuration | Hw installation | eci-bluetooth session step by step | faq | troubleshooting |

## security and use conditions

Some simple security arrangements to ensure the correct and safe use of the ECI - Bluetooth module:

- ◆ do not power the ECI module during the assembly / disassembling phases of the BTM
- ◆ place the connection cable between the ECU and the ECI module in a stable and safe position and avoid trapping it
- ◆ avoid placing obstacles and metallic objects within the range of the two bluetooth modules because they can adversely affect the communication
- ◆ do not insert foreign bodies into the connectors because the device could be damaged
- ◆ do not use the device at temperature and humidity rates higher than those ones indicated in the TECHNICAL DETAILS

Check that:

- ◆ the ECI module is connected to the diagnosis socket of the vehicle on which work is to be carried out
- ◆ check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheels chocked and with gearbox in neutral, etc...)
- ◆ that while using the software, there is nobody working on or near the vehicle you are working with

Furthermore always strictly follow the instructions displayed on the screen.

At the end of the activities always disconnect the ECI-Bluetooth module from the vehicle.

| hardware characteristics | security and use conditions | [system configuration](#) | Hw installation | eci-bluetooth session step by step | faq | troubleshooting |

## system configuration

Thanks to the new BTM you will be able to connect the E.A.S.Y. diagnosis system without cables (wireless mode) to any vehicle in the IVECO range, which is equipped with the 30-pole diagnostic socket.

To connect an IVECO vehicle to the E.A.S.Y. diagnosis system proceed as follows:

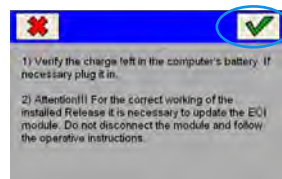
- update the E.A.S.Y. sw to the version 3\_1
- the firmware of the ECI module must also be updated



1. from E.A.S.Y. select the **TOOLS>ECI MANAGEMENT** key
2. select **TEST AND PROPERTIES** to check the update status of the ECI module
3. select the **USB** key and then the **PROPERTIES** key
4. select the **TICK** icon
5. select the red **CROSS** key to end the enable the procedure of the ECI module and to operate with the Bluetooth

If the ECI module is to be updated, E.A.S.Y. automatically runs the EFU application.

a. read the warning message



- b. select the green **TICK** icon to continue with the update
- c. select the **START** key and follow the instructions displayed on-screen

Wait for the end of the procedure.

- d. at the end select the **EXIT** key to continue

| hardware characteristics | security and use conditions | [system configuration](#) | Hw installation | eci-bluetooth session step by step | [faq](#) | [troubleshooting](#) |

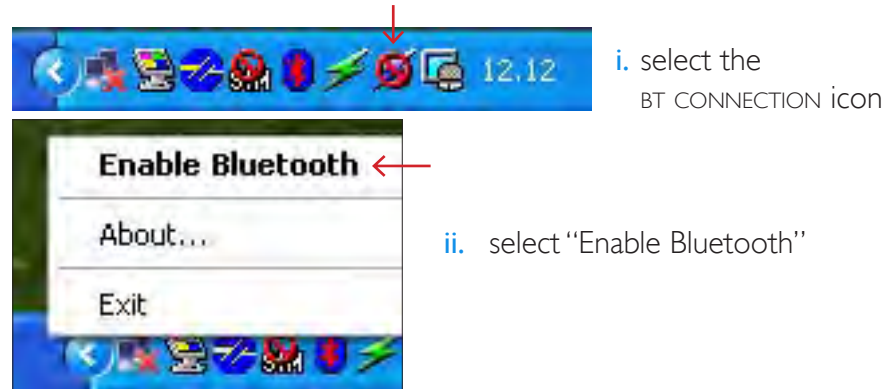
Before starting the search carefully check that:

- the E.A.S.Y. Bluetooth device is enabled

On the Windows tools bar check that the Bluetooth connection icons are displayed as indicated below:



If the BT connection is not enabled:



#### Conditions of the BT SYMBOL icon

|  |       |   |
|--|-------|---|
|  | white | BT function installed, connection enabled     |
|  | red   | BT function installed, connection disabled    |
|  | green | BT function installed, connection in progress |

#### Conditions of the BT CONNECTION icon

|  |                        |
|--|------------------------|
|  | BT connection enabled  |
|  | BT connection disabled |

If on the Windows tools bar the Bluetooth symbol icon is not displayed:



Select the Windows XP start button, then Programs>Startup>BTTray





| hardware characteristics | security and use conditions | system configuration | [Hw installation](#) | eci-bluetooth session step by step | faq | troubleshooting |

## Hw installation

To connect the BTM to the ECI module carefully remove the protection caps placed on the fixing screws.



### Caution

Do not connect the ECI module to a PC during the assembly / disassembling phases of the BTM.

1. unscrew the two outer screws of the ECI module connectors using a torx screwdriver tip  
*attention: some ECI models are equipped with cross head screws, therefore please use the appropriate tool to remove them*
2. position the BTM on the ECI module aligning the serial ports of the two instruments



3. insert the new Torx screws supplied with the BTM (longer than the normal ones) in the fixing holes (see page 2) and tight them
4. finally refit the protection caps to avoid contact with dirt or water of the ECI modules metallic parts

| hardware characteristics | security and use conditions | system configuration | Hw installation | **eci-bluetooth session step by step** | faq | troubleshooting |

## eci-bluetooth session step by step

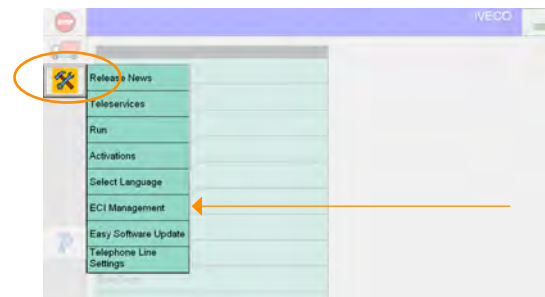
ECI MANAGEMENT > TEST AND PROPERTIES

FIRST INSTALLATION

START CONDITIONS

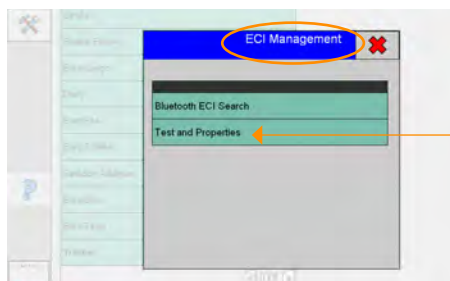
ECI POWER SUPPLIED BY THE VEHICLE AND CONNECTED TO E.A.S.Y. VIA USB

1. from E.A.S.Y. select the **TOOLS>ECI MANAGEMENT** key

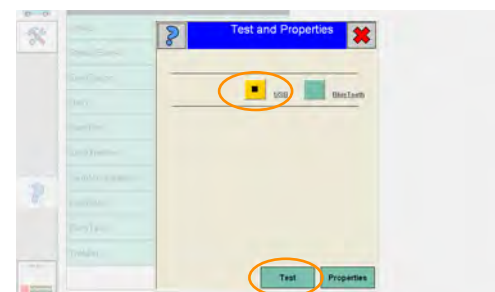


for normal session  
☞ point 20

2. the window *ECI Management* is displayed; select **TEST AND PROPERTIES**

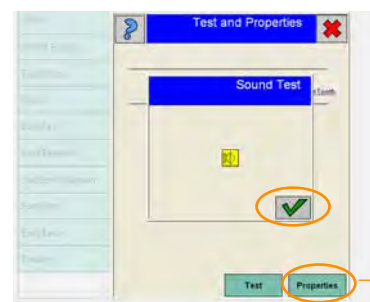


3. select the **USB** key (if it has not been selected) and then the **TEST** key



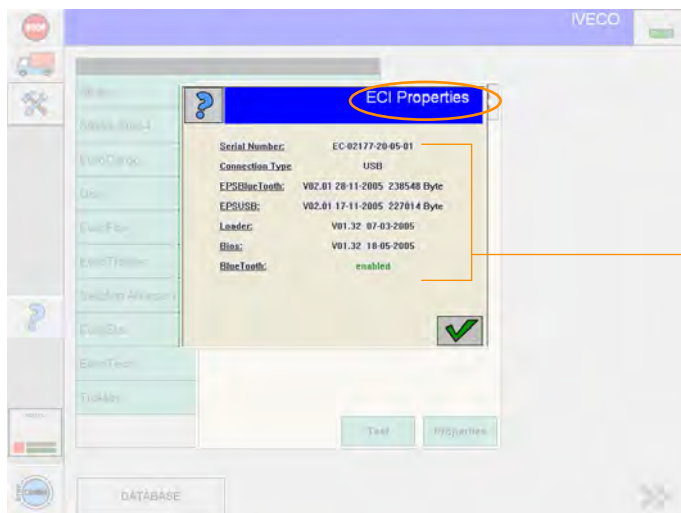
| hardware characteristics | security and use conditions | system configuration | Hw installation | **eci-bluetooth session step by step** | faq | troubleshooting |

4. the Test checks the E.A.S.Y. connection with the ECI module (during the check the ECI emits a continuous beep); select the green TICK icon to complete the test



PROPERTIES key

5. select the PROPERTIES key: you access the *ECI Properties* environment where the ECI module properties are analyzed



When you contact the service assistance this information must be provided.

According to the connection type (USB or Bluetooth) the ECI Properties window displays different information (see detail).

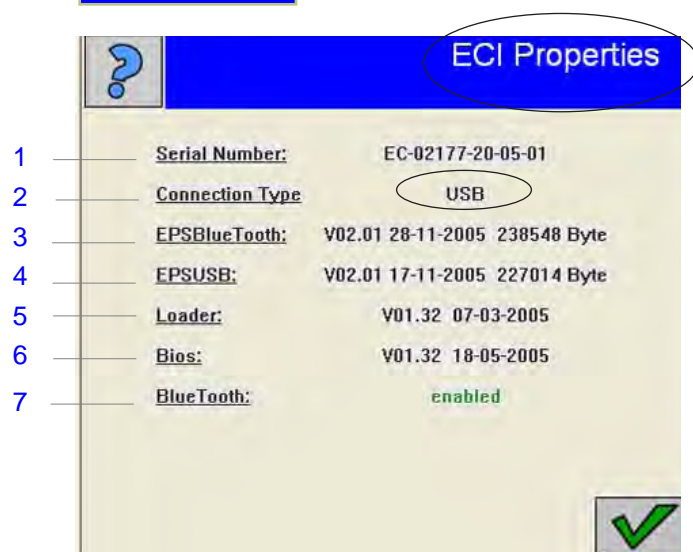
ECI Properties details

→ next page

6. select the green TICK icon (*ECI Properties* environment) and then the CROSS icon (*Test and Properties* environment)

| hardware characteristics | security and use conditions | system configuration | Hw installation | [eci-bluetooth session step by step](#) | faq | troubleshooting |

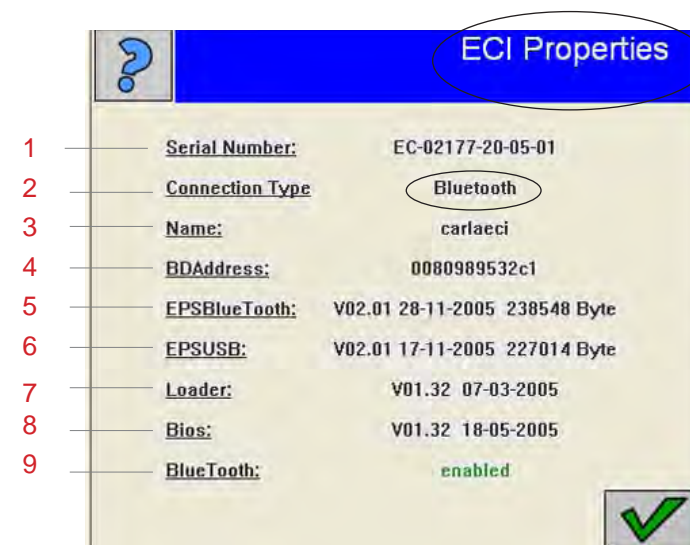
### USB CONNECTION



- |   |   |
|---|---|
| 1 | ECI module serial number: the number is also indicated on the rear part of the instrument           |
| 2 | USB connection  |
| 3 | firmware version of the Bluetooth ECI   |
| 4 | firmware version of the ECI USB   |
| 5 | Loader  |
| 6 | Bios  |
| 7 | enable status<br><i>if the ECI is not enabled for the BTM, update the ECI firmware (see page 4)</i> |



### BLUETOOTH CONNECTION

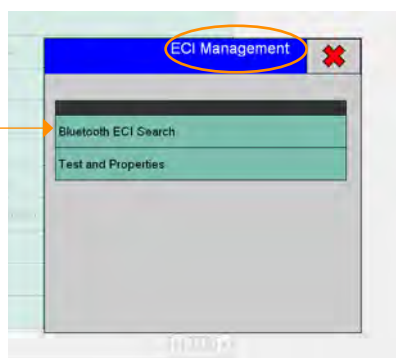
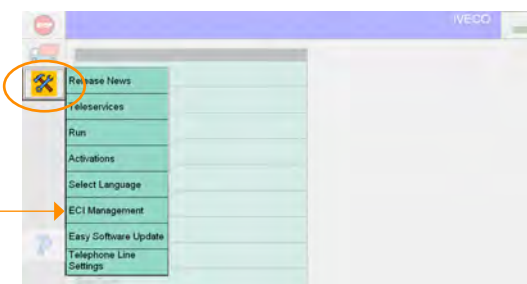


- |   |                                       |
|---|---------------------------------------|
| 1 | ECI module serial number              |
| 2 | Bluetooth connection                  |
| 3 | ECI module name                       |
| 4 | Bluetooth adapter identification code |
| 5 | firmware version of the Bluetooth ECI |
| 6 | firmware version of the ECI USB       |
| 7 | Loader                                |
| 8 | Bios                                  |
| 9 | enable status                         |

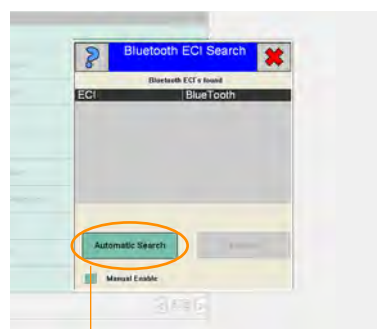
| hardware characteristics | security and use conditions | system configuration | Hw installation | **eci-bluetooth session step by step** | faq | troubleshooting |

# ECI MANAGEMENT > BLUETOOTH ECI SEARCH

7. disconnect the ECI module from the vehicle
8. remove the USB connection cable between the ECI module and the E.A.S.Y. diagnostic system
9. fit the BTM
10. connect the ECI module to the vehicle by using the appropriate cable
11. verify that both the leds on the BTM switch on and then the blue one switches off
12. from the E.A.S.Y. program select the **TOOLS** key and then **ECI MANAGEMENT**
13. select **BLUETOOTH ECI SEARCH**



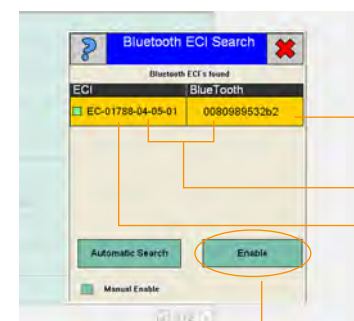
14. select the **AUTOMATIC SEARCH** key



AUTOMATIC SEARCH key

if the automatic search is not correctly carried out  
→ 15a

15. at the end of the search procedure E.A.S.Y. lists the ECI-Bluetooth modules found; select the ECI-BTM you want to communicate with and then press the **ENABLE** key



unique id code of the BT adapter for ECI (see page 2)

ECI-BTM associa-

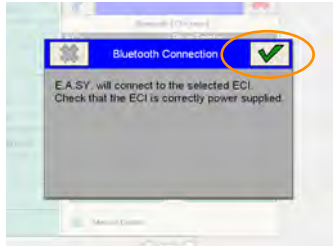
ECI module serial number (see page 9)

ENABLE key

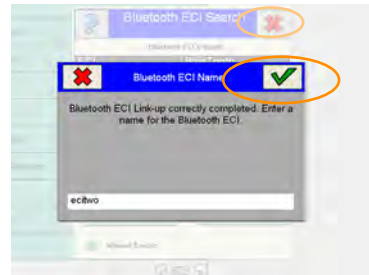
Before starting check that:  
the Bluetooth ECI is switched on and connected to the vehicle  
the Bluetooth ECI starts beeping  
the E.A.S.Y. Bluetooth is enabled (see page 5)

| hardware characteristics | security and use conditions | system configuration | Hw installation | [eci-bluetooth session step by step](#) | faq | troubleshooting |

**16.** select the TICK icon (*Bluetooth Connection* window) to confirm the connection and continue the association procedure



**17.** enter the name for the ECI-BT (maximum 8 digits)

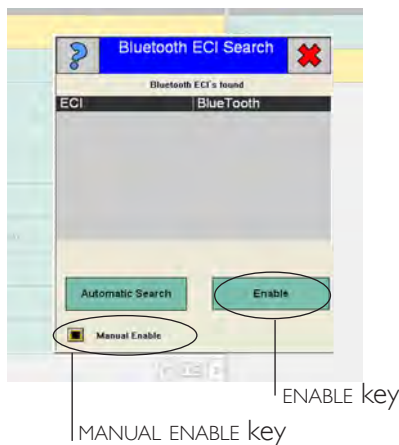


**18.** select the TICK icon to complete the association procedure (and close the window *Bluetooth ECI NAME*)

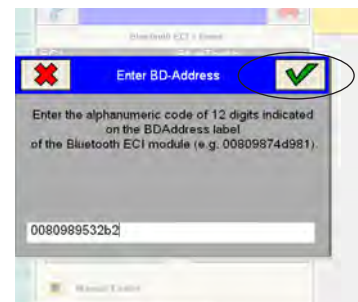
**19.** select the CROSS icon to complete the search process (and close the *Bluetooth ECI SEARCH* window) ■

#### MANUAL ENABLE (15a)

- i. if the automatic search procedure is not carried out correctly (more than 2 times), it will be necessary to run the manual search procedure
- ii. select the MANUAL ENABLE option
- iii. select the ENABLE key to start the manual search procedure



iv. read the identification code on the label supplied with the package and enter the identification code (12 digits) of the BT adapter



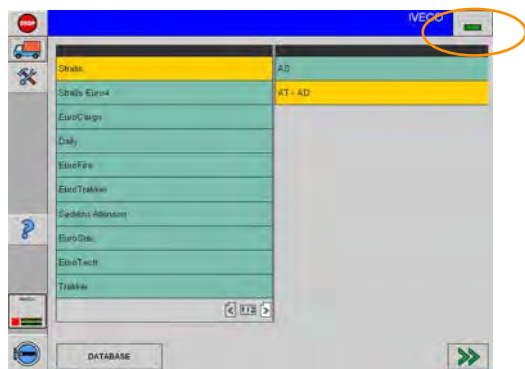
v. confirm by selecting the green TICK icon

vi. follow the instructions shown

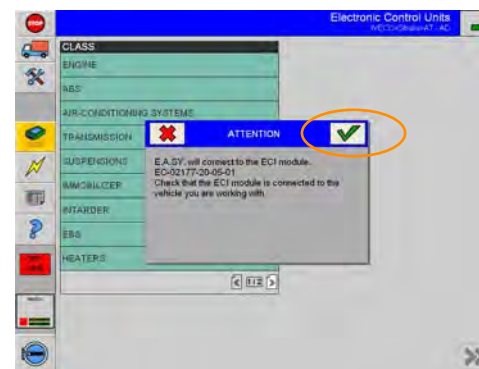
| hardware characteristics | security and use conditions | system configuration | Hw installation | [eci-bluetooth session step by step](#) | faq | troubleshooting |

## E.A.S.Y. NORMAL OPERATION

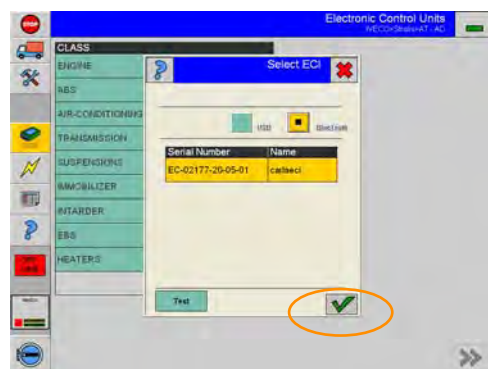
- 20.** after selecting the vehicle range and type of the vehicle you want to work with, select the FORWARD key



- 22.** check that the ECI and Bluetooth are near the vehicle you want to work with; confirm by selecting the green TICK icon



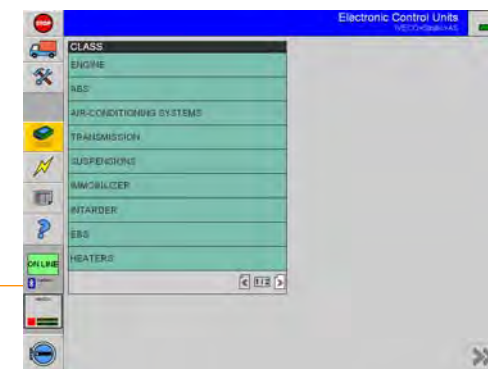
- 21.** if you are using the Bluetooth the system requires you to confirm before connecting to the ECI (no confirmation is required for the usb connection); select the green TICK icon



The diagnosis can be started.

symbol of the connection mode between the Panasonic PC and the ECI module

*If the connection is via Bluetooth, the name of the used ECI-BT is also displayed near the BT symbol: check that it is the right module.*



during the Bluetooth connection the blue BTM led (see page 2) remains on



| hardware characteristics | security and use conditions | system configuration | Hw installation | eci-bluetooth session step by step | [faq](#) | troubleshooting |

## faq

### 1. I want to change the ECI-BT recognition name

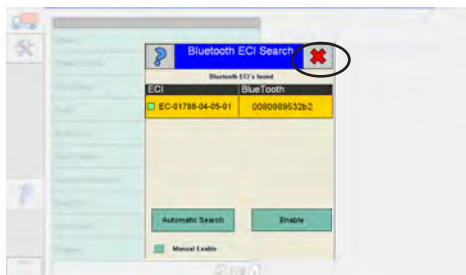
#### Solution

It is necessary to carry out the automatic search procedure again.

### 2. You do not want to continue with the ECI-BT association

#### Solution

Select the CROSS icon to delete the running procedure.



### 3. I would like to replace the ECI or the BTM module

#### Solution

It is necessary to carry out the automatic search procedure again (see p. 10).

### 4. The system does not display the windows to select the ECI module

#### Solution

It is not an error; it means that the Panasonic PC is connected to an ECI module only via USB cable; no ECI-BT is connected to the PC.

### 5 I would like to use a different ECI module



#### Solution

- select the ON/OFF LINE key on the E.A.S.Y. tools bar to operate in OFF-LINE mode
- select the VEHICLE key on the E.A.S.Y. tool bar
- select the BLUETOOTH key to display the ECI-BT modules available or the USB key to display the USB mode modules
- select the desired module
- select the TICK icon to confirm the option

E.A.S.Y. is now ready to operate in the ON-LINE mode and to continue with the diagnosis session.

| hardware characteristics | security and use conditions | system configuration | Hw installation | eci-bluetooth session step by step | faq | [troubleshooting](#) |

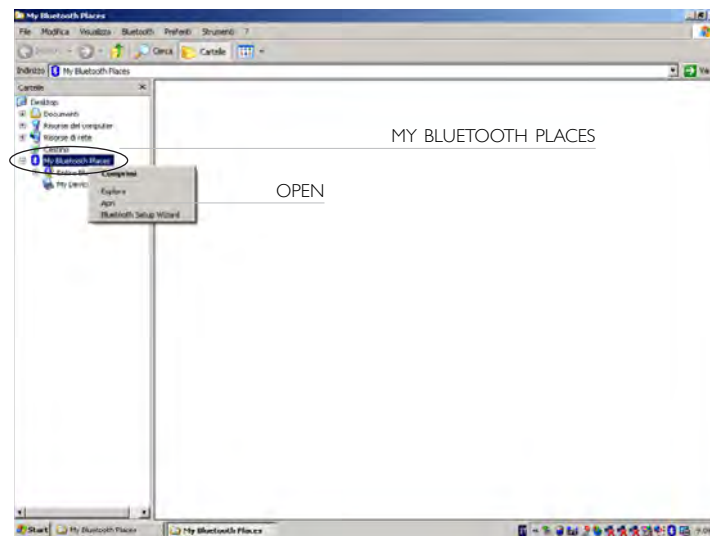
## troubleshooting

1. If the operating mode is changed (from OFF-LINE to ON-LINE)  
the Bluetooth device displays a communication fault.

### Solution

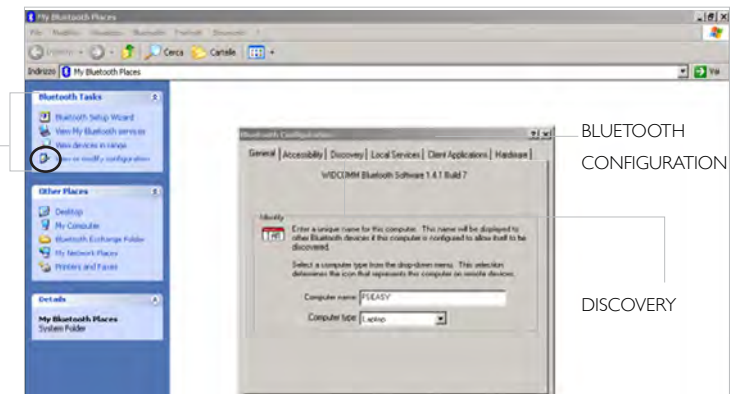
Check the Bluetooth configuration.

- exit the E.A.S.Y. program
- open *Windows Explorer*
- look for *My Bluetooth Places*, select it with the right button and click on OPEN

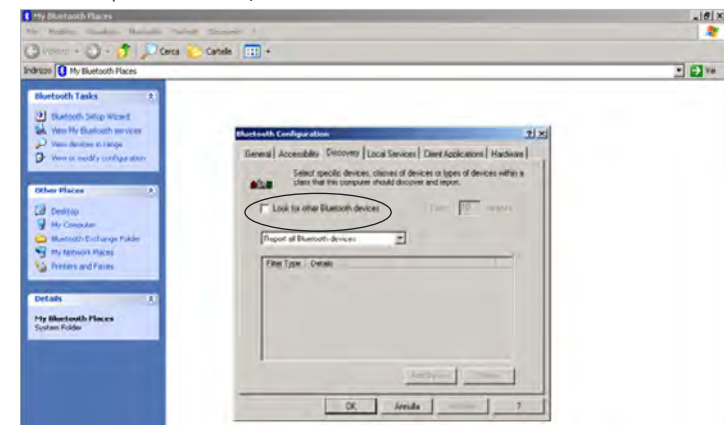


- the menu *Bluetooth Tasks* opens; select the last option of the menu: *View or Modify Configuration* (see picture)

- from the *Bluetooth Configuration* window select *Discovery*



- disable the option *Look for other Bluetooth devices*



| hardware characteristics | security and use conditions | system configuration | Hw installation | eci-bluetooth session step by step | faq | [troubleshooting](#) |

## 2. During Active Diagnosis/Engine Test some communication faults occur.

### Solution 1

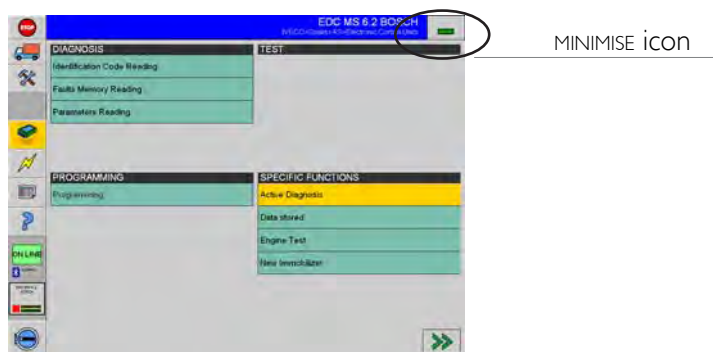
Check the following conditions:

- did you select the OFF-LINE key to change to the ON-LINE mode?
- is the Bluetooth blue key switched off?  
from E.A.S.Y. select the OFF-LINE mode and then ON-LINE
- are the Bluetooth ECI blue and green LEDs switched off?  
check that the battery isolator is ON

### Solution 2

Before carrying out the Engine Test or the Active Diagnosis disable the antivirus.

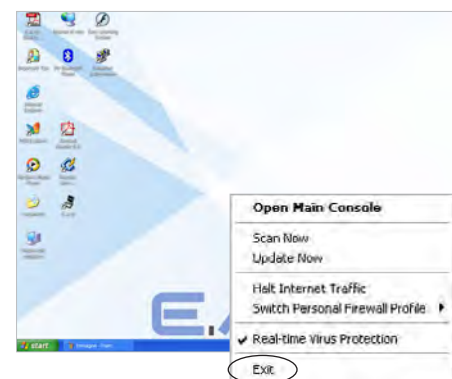
- minimize the E.A.S.Y. program, by selecting the MINIMISE icon



- from the applications bar select with the right button the ANTIVIRUS icon



- select EXIT

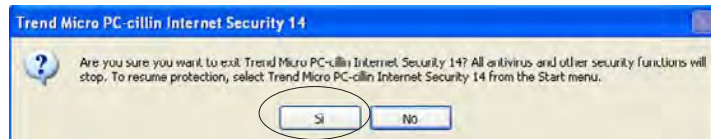


Do NOT carry out this operation during the connection to:

- Internet
- EASY sw update
- RSS

| hardware characteristics | security and use conditions | system configuration | Hw installation | eci-bluetooth session step by step | faq | [troubleshooting](#) |

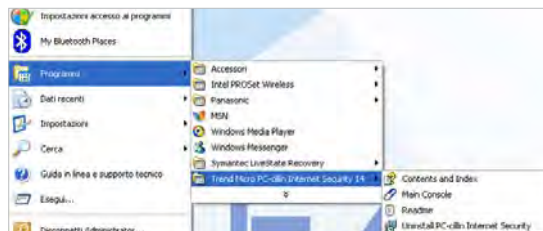
- d. the *Trend Micro PC-cillin Internet Security 14* window opens; select YES



- e. check that the antivirus icon is not displayed on the applications bar and continue working with E.A.S.Y.



- f. at the end of the operations, enable the antivirus as indicated below:  
Programs>Trend Micro PC-cillin Internet Security 14>Main console



- g. the *Trend Micro Application* opens



- h. the antivirus is active: close the window of the application to return to the Windows desktop



### Solution 3

If you are using the bluetooth printer, be sure that no documents are waiting to be printed:

- a. minimize the E.A.S.Y. program, by selecting the MINIMISE icon



| hardware characteristics | security and use conditions | system configuration | Hw installation | eci-bluetooth session step by step | faq | [troubleshooting](#) |

- b. on the applications bar check that the PRINTER icon is displayed



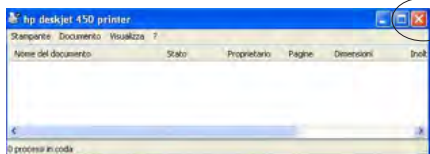
- c. if the icon is present, open the printer window



- d. select the option *Cancel all documents*

- e. confirm (select YES and if these are your documents)

- f. close the *Printer* window



## eci-bluetooth session step by step

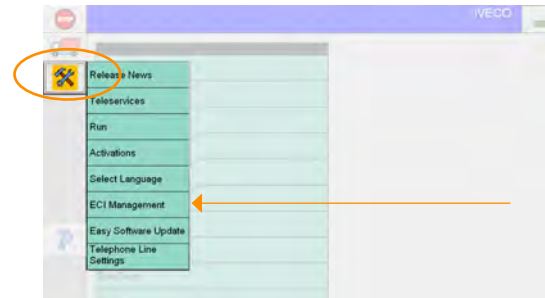
ECI MANAGEMENT > TEST AND PROPERTIES

FIRST INSTALLATION

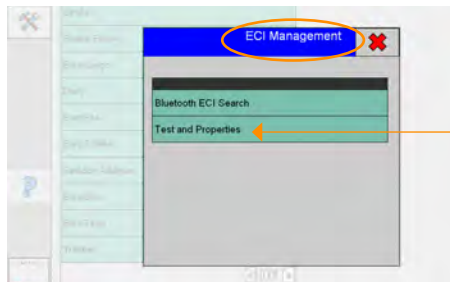
START CONDITIONS

ECI POWER SUPPLIED BY THE VEHICLE AND CONNECTED TO E.A.S.Y. VIA USB

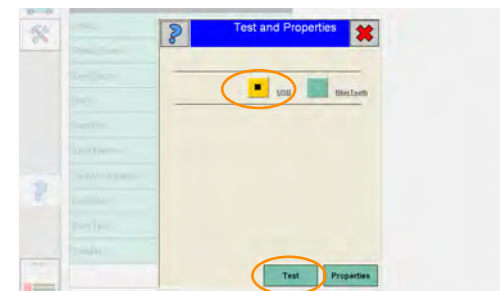
1. from E.A.S.Y. select the **TOOLS>ECI MANAGEMENT** key



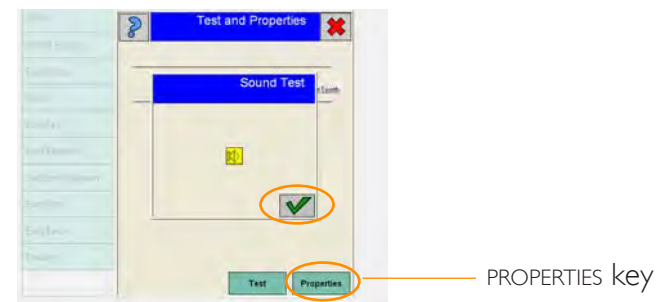
2. the window *ECI Management* is displayed; select **TEST AND PROPERTIES**



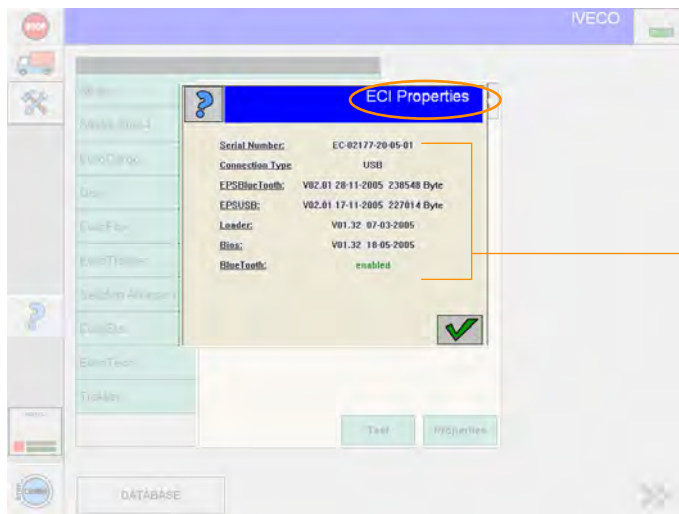
3. select the **USB** key (if it has not been selected) and then the **TEST** key



4. the Test checks the E.A.S.Y. connection with the ECI module (during the check the ECI emits a continuous beep); select the green TICK icon to complete the test



5. select the PROPERTIES key: you access the *ECI Properties* environment where the the ECI module properties are analyzed



*When you contact the service assistance this information must be provided.*

*According to the connection type (USB or Bluetooth) the ECI Properties window displays different information (see detail).*

6. select the green TICK icon (*ECI Properties* environment) and then the CROSS icon (*Test and Properties* environment)



## USB CONNECTION

**ECI Properties**

|   |                        |                               |
|---|------------------------|-------------------------------|
| 1 | <b>Serial Number:</b>  | EC-02177-20-05-01             |
| 2 | <b>Connection Type</b> | USB                           |
| 3 | <b>EPSBlueTooth:</b>   | V02.01 28-11-2005 238548 Byte |
| 4 | <b>EPSUSB:</b>         | V02.01 17-11-2005 227014 Byte |
| 5 | <b>Loader:</b>         | V01.32 07-03-2005             |
| 6 | <b>Bios:</b>           | V01.32 18-05-2005             |
| 7 | <b>BlueTooth:</b>      | enabled                       |

- |   |   |
|---|---|
| 1 | ECI module serial number: the numer is also indicated on the rear part of the instrument            |
| 2 | USB connection  |
| 3 | firmware version of the Bluetooth ECI   |
| 4 | firmware version of the ECI USB   |
| 5 | Loader  |
| 6 | Bios  |
| 7 | enable status<br><i>if the ECI is not enabled for the BtM, update the ECI firmware (see page 4)</i> |



## BLUETOOTH CONNECTION

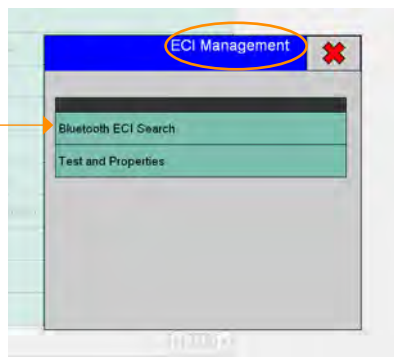
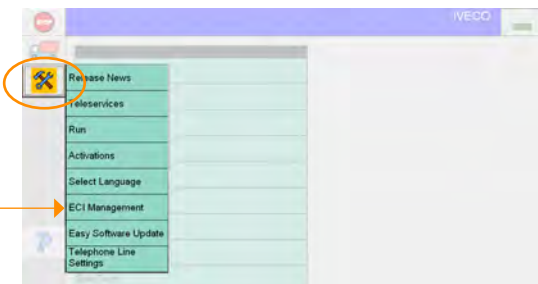
**ECI Properties**

|   |                        |                               |
|---|------------------------|-------------------------------|
| 1 | <b>Serial Number:</b>  | EC-02177-20-05-01             |
| 2 | <b>Connection Type</b> | Bluetooth                     |
| 3 | <b>Name:</b>           | carlaeci                      |
| 4 | <b>BDAddress:</b>      | 0080989532c1                  |
| 5 | <b>EPSBlueTooth:</b>   | V02.01 28-11-2005 238548 Byte |
| 6 | <b>EPSUSB:</b>         | V02.01 17-11-2005 227014 Byte |
| 7 | <b>Loader:</b>         | V01.32 07-03-2005             |
| 8 | <b>Bios:</b>           | V01.32 18-05-2005             |
| 9 | <b>BlueTooth:</b>      | enabled                       |

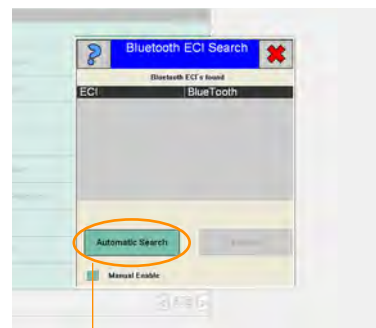
- |   |                                       |
|---|---------------------------------------|
| 1 | ECI module serial number              |
| 2 | Bluetooth connection                  |
| 3 | ECI module name                       |
| 4 | Bluetooth adapter identification code |
| 5 | firmware version of the Bluetooth ECI |
| 6 | firmware version of the ECI USB       |
| 7 | Loader                                |
| 8 | Bios                                  |
| 9 | enable status                         |

ECI MANAGEMENT > BLUETOOTH ECI SEARCH

7. disconnect the ECI module from the vehicle
8. remove the USB connection cable between the ECI module and the E.A.S.Y. diagnostic system
9. fit the BtM
10. connect the ECI module to the vehicle by using the appropriate cable
11. verify that both the leds on the BtM switches on and suddenly the blue one switch off
12. from the E.A.S.Y. program select the TOOLS key and then ECI MANAGEMENT
13. select BLUETOOTH ECI SEARCH



14. select the AUTOMATIC SEARCH key

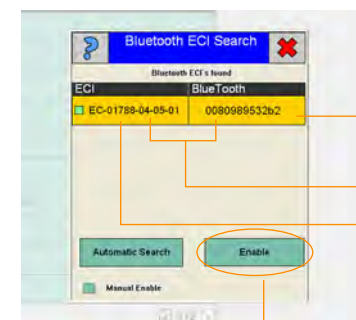


AUTOMATIC SEARCH key

Before starting check that:  
the Bluetooth ECI is switched on and connected to the vehicle  
the Bluetooth ECI emits some beeps  
the E.A.S.Y. Bluetooth is enabled (see page 5)

if the automatic search is not correctly carried out  
➡ 15a

15. at the end of the search procedure E.A.S.Y. lists the ECI-Bluetooth modules found; select the ECI-BtM you want to associate and then press the ENABLE key



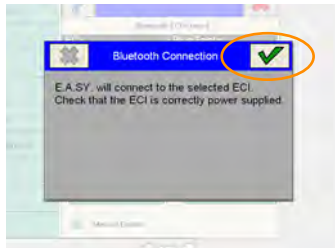
unique id code of the BT adapter for ECI (see page 2)

ECI-BtM association

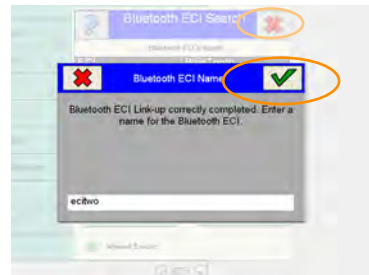
ECI module serial number (see page 9)

ENABLE key

16. select the TICK icon (*Bluetooth Connection* window) to confirm the connection and continue the association procedure



17. enter the name for the ECI-BT (maximum 8 digits)

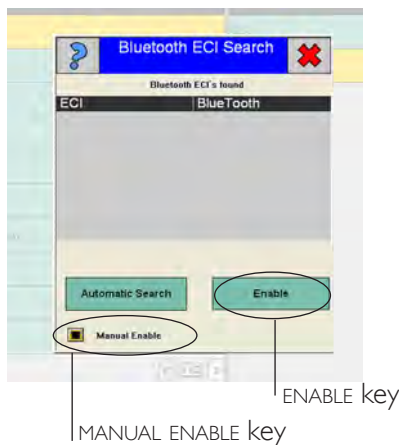


18. select the TICK icon to complete the association procedure (and close the window *Bluetooth ECI NAME*)

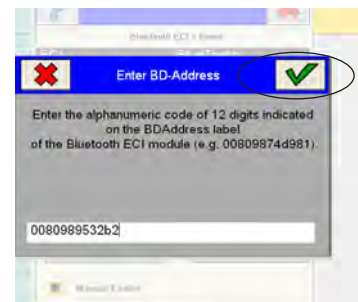
19. select the CROSS icon to complete the search process (and close the *Bluetooth ECI SEARCH* window) ■

#### MANUAL ENABLE (15a)

- i. if the automatic search is not correctly carried out for more than twice, it is necessary to run the manual search procedure
- ii. select the option MANUAL ENABLE
- iii. select the ENABLE key to start the manual search procedure



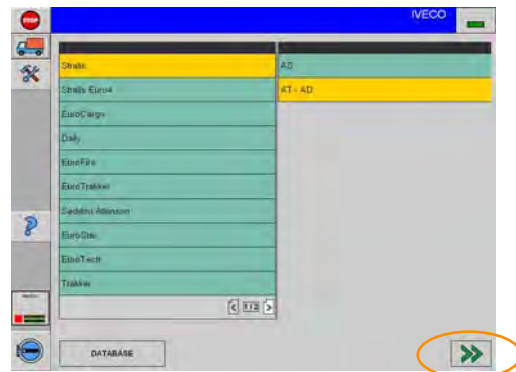
- iv. read the identification code on the label supplied with the package and enter the identification code (12 digits) of the BT adapter



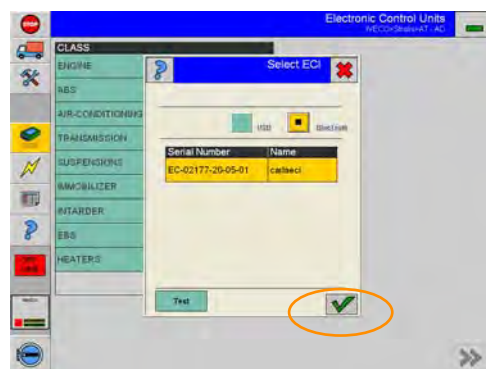
- v. confirm by selecting the green TICK icon
- vi. follow the indicated instructions

## E.A.S.Y. NORMAL WORKING

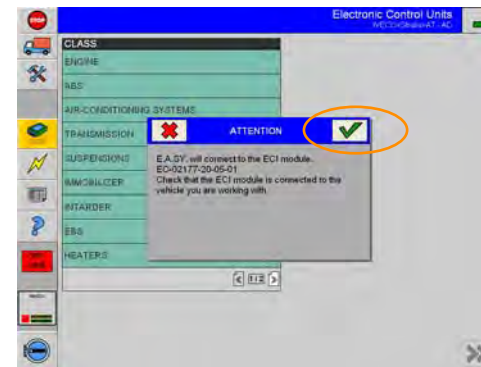
- 20.** after selecting the family and type of the vehicle you want to work with, select the FORWARD key



- 21.** if you are using the Bluetooth the system requires to confirm before connecting to the ECI (no confirmation is required for the usb connection); select the green TICK icon



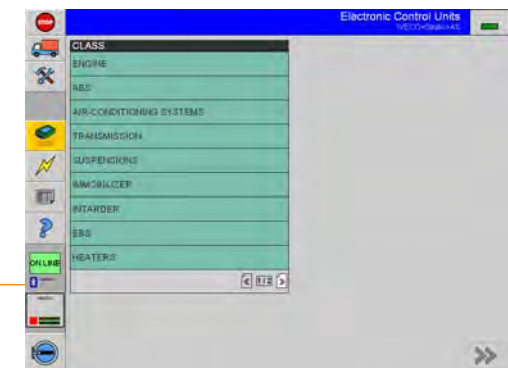
- 22.** check that the ECI and Bluetooth are near the vehicle you want to work with; confirm by selecting the green TICK icon



The diagnosis can be started.

symbol of the connection mode between the Panasonic PC and the ECI module

*If the connection is via Bluetooth, the name of the used ECI-BT is also displayed near the BT symbol: check that it is the right module.*



during the Bluetooth connection the blue BTM led (see page 2) remains on

## unit 13

### E.A.SY. software automatic updating

#### ATTENTION!

This software may cause chassis movements and/or engine start-up.  
Be extremely careful.

The user is responsible for the correct use of the E.A.SY. software so as not to cause injury to people or damage to items.

The user is also responsible for complying with all the rules relating to vehicle security and activities in the workshop.

Carefully read the user manual before using the diagnostic tool and follow the instructions displayed on the screen.

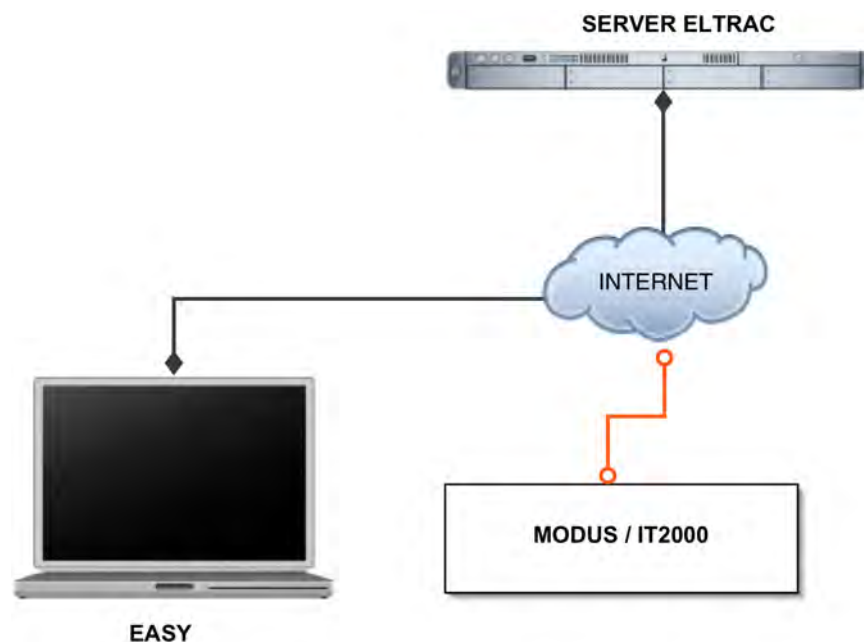
#### GENERAL RULES FOR USE

The following instructions should always be strictly followed:

- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheel chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).

## REQUIREMENTS

Automatic updating of the E.A.SY. applications requires an Internet connection to the Eltrac server.



Connection to the Internet can be done in one of the following ways:

- 1 via modem to the local provider
- 2 via local network or via ADSL
- 3 via modem to the Eltrac pop in Italy

The above three connection types are described below.

The Release installation is different according to the diagnosis instrument used (E.A.SY. and E.A.SY: LIGHT or Modus/IT 2000):

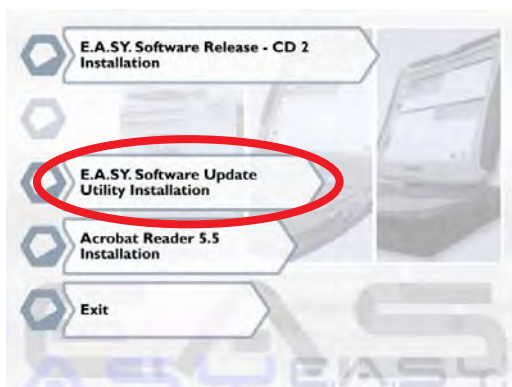
*follow the instructions about the instrument you are using.*

### Note

*The E.A.SY. system is set for connection to the Eltrac pop via modem (Option 3). The configuration of Options 1 and 2 are to be taken care of by the workshop (under the guidance of specialized IT personnel).*

## E.A.SY. SW UPDATE UTILITY INSTALLATION

After inserting the second CD Software Release the system automatically opens the following window:



- 1 Select E.A.SY. INSTALLATION FOR SOFTWARE UPDATE UTILITY .This allows you to install the functionality for the updating of the diagnosis system through the Web.

### Note

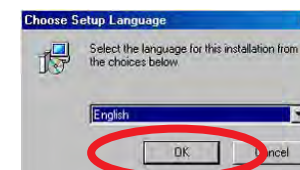
Select the EXIT button to exit the application (without carrying out the installation).

### Note

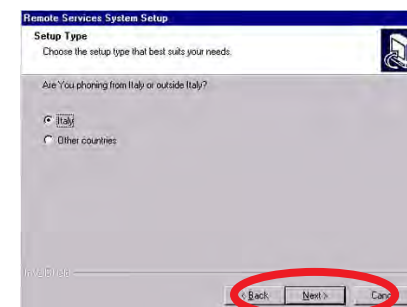
Both CD's are equipped with Autorun mode. If this function is not available, select the SETTINGS Icon and from the list and select the RUN option.

Then enter the following path E:\setup.exe and confirm by selecting the GREEN TICK icon.

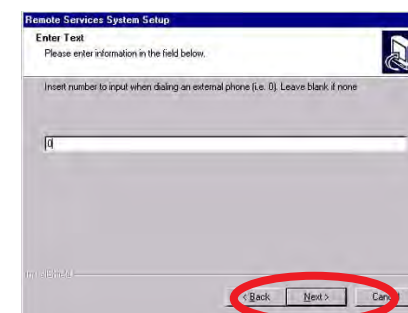
- 2 Select the installation language and press the OK key.



- 3 Select the country. Proceed by selecting the NEXT> key.



- 4 Type in the number to dial to before dialling (for switchboard) leave the field blank if no number is required. Press the NEXT> key.





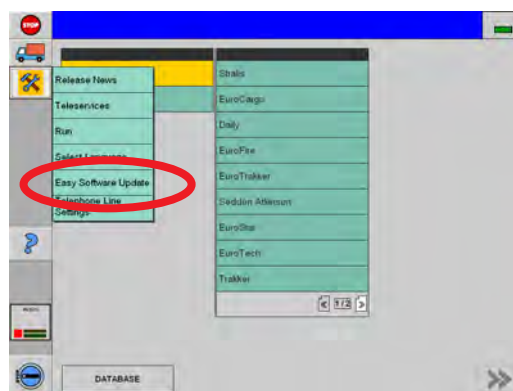
## First use > Connection

To carry out automatic updating of the E.A.SY software: follow the operations described below

1 Start E.A.SY.

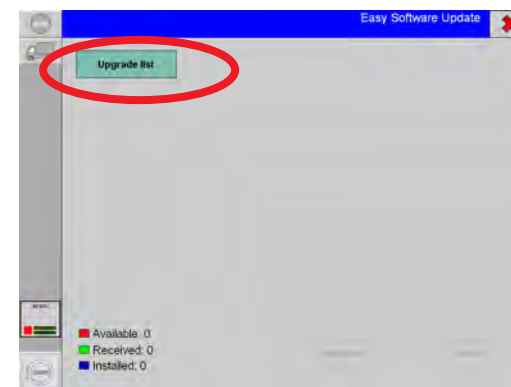


2 Select the TOOLS > E.A.SY. Software Update key.



3 The *Update Software* screen is shown.

4 Select the UPGRADE LIST key



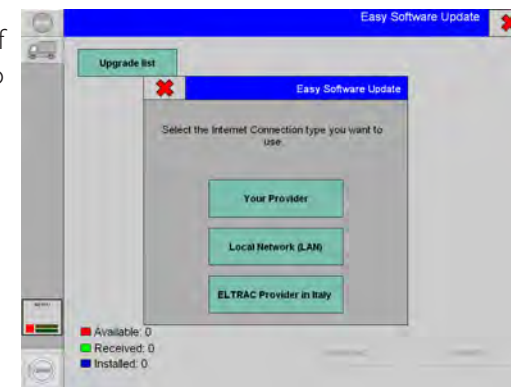
Software Update Screen

### Note

To edit the calling location and the external line access code you can also select the TOOLS > Telephone line setting key

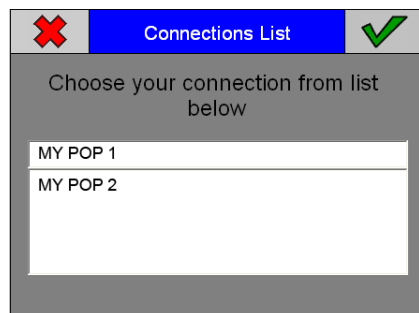
5 At this point only it is necessary to choose the type of option with which you intend to connect your computer to the Internet.

6 Connect the system to the Internet selecting one of the options indicated.



## I. YOUR PROVIDER

The following picture is displayed



Select your personal connection and then the TICK key.

After having pressed the TICK key, communication with the Eltrac server has been established.

## 2. LOCAL NETWORK (LAN)

Communication with the Eltrac server is automatically activated, providing the instrument has been correctly configured for the Internet connection.

## 3. ELTRAC PROVIDER IN ITALY

in Italy: by using a telephone provider enabling the call no. 702, the local call rate will be applied, from anywhere in Italy

otherwise (by calling the telephone no. 011), a call rate for a trunk call will be applied (local call rate if you are calling from anywhere in Turin)

in other countries:

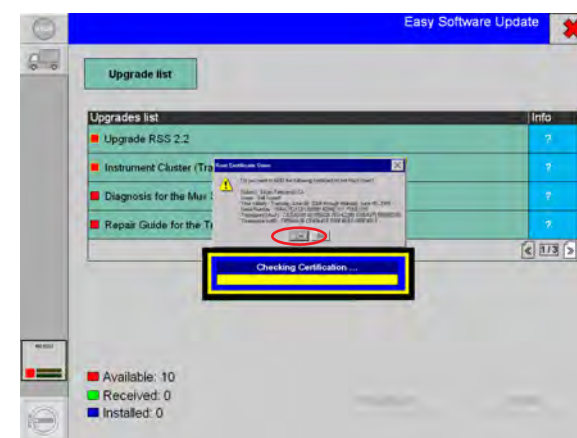
the international call rate will be applied

The communication to the server is established.

When the connection to the Eltrac server has been established, the available updates are shown on the screen.

## Warning

If the connection (whatever connection type has been activated) is activated for the first time, the Eltrac server sends and installs the security certificate for the station; confirm by selecting the YES key.

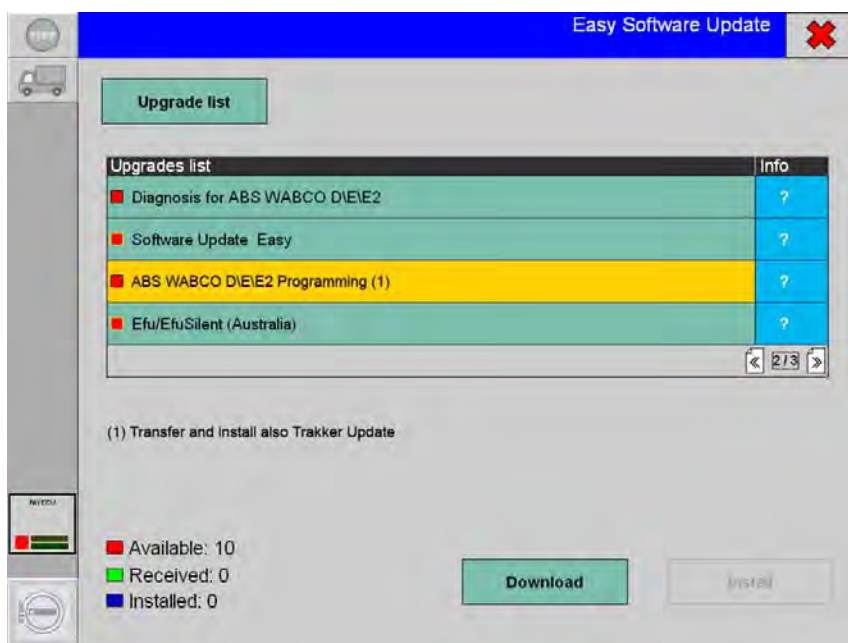


Security certificate.

## Software Update Screen

The Operative area of the Software Updating Screen contains the following active elements

- UPGRADE LIST key  
sends the ELTRAC server the request to update the list of the applications available; it is always active.
- DOWNLOAD key  
transfers the applications requested from the ELTRAC server to the user; it becomes active in response to the selection of an available application.



- INSTALL key  
installs the available applications already transferred from the ELTRAC server to the user; it becomes active in response to the selection of an application transferred without errors.
- List Area with navigation keys between page  
This list is selectable and contains the list of the applications needed to upgrade the E.A.SY. software.  
A led indicates the application availability status according to the rules below:
  - red: the application is available for transfer
  - green: the application has been transferred and transfer has been completed with no errors; the application is ready for installation
  - blue: the application has been installed on the computer
 Selecting the question mark on the INFO column obtains information about the application.

The Title area contains the CROSS key; when selected, this closes the E.A.SY. Software Updating environment.

### Pay Attention to the notes

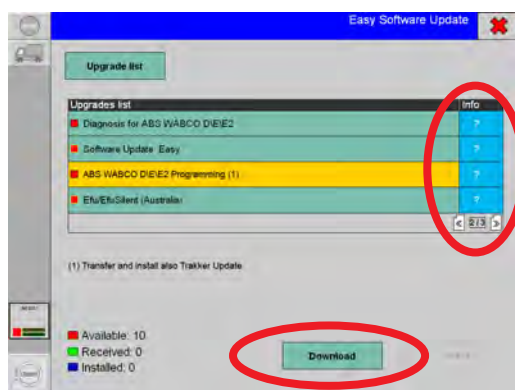
The notes inform you that in order to use an application other programs also need to be transferred and installed on which the application chosen depends.

*In the figure, note 1 associated with the ABS Programming application, informs you that to install the ABS Programming application, the TrakkerUpdate program needs to have been transferred and installed.*

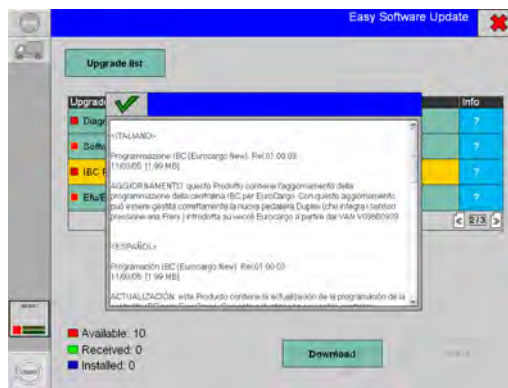
## First use > Transferring the updates

The request for the available updates has been sent to the ELTRAC server (selecting the UPGRADE LIST key) which acknowledges the unit in use through the activation code, stores the configuration, processes the request and transmits the list of the possible updates.

- 1 The list of the available updates (red led) is displayed in the lists area



- 2 Select the QUESTION MARK related to the application you wish to download: the corresponding information, any dependence on other programs and the size of the application are displayed
- 3 Select the required updates among those available (red led)
- 4 The DOWNLOAD key has become active; select the DOWNLOAD key



The request for download is sent to the ELTRAC server, which processes the request and transfers the files. The ELTRAC server updates the memory with the transfers performed by the unit in use.

- 5 It is possible to download one or more updates simultaneously.
- 6 At the end of transfer, if the result has been successful, the led that indicates the file status becomes green (application received)

## Dependent applications

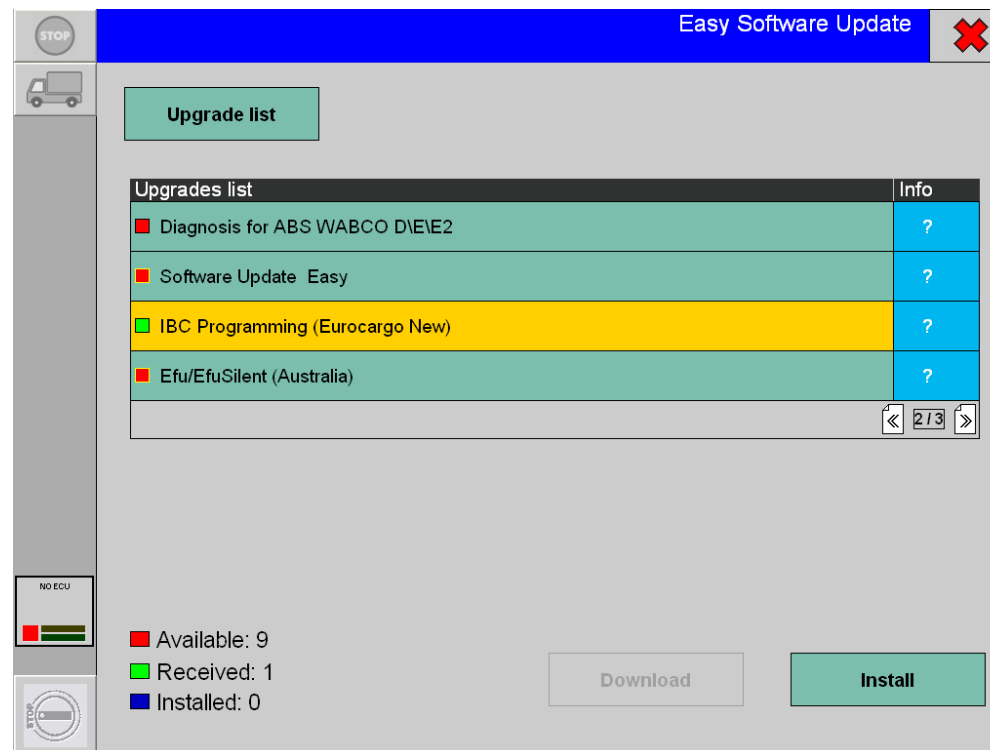
Certain applications cannot be installed without firstly transferring and installing other programs. These are known as dependent or subordinate applications. When a subordinate application is selected (also mentioned in the notes) a message alerts the user that it is necessary to also download the programs on which the application depends. If the user confirms the transfer, the subordinating programs are transferred automatically.

## First use > Installation of the updates

- 1 Select an update transferred and received without errors (green led - received)
- 2 Select the INSTALL key to carry out installation of the software

If the application selected is subordinated to another program not present on the computer yet, the system asks to install the subordinating program before proceeding with the installation of the application chosen.

*It is always possible to download a package that has already been downloaded again. A message warns the user*



## E.A.SY. SW UPDATE UTILITY INSTALLATION

The Modus Station or the IT 2000 tester must possess a subscription to the teleservices updated to version 2.1 or subsequent one (Release 2.1 RSS Manual).

After inserting the second CD Software Release the system automatically opens the following window:



MODUS

IT 2000

- 3 Select E.A.SY. INSTALLATION FOR SOFTWARE UPDATE UTILITY .This allows you to install the functionality for the updating of the diagnosis system through the Web.

### Note

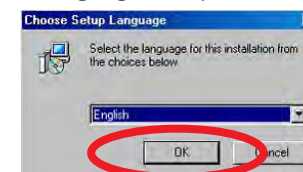
Select the EXIT button to exit the application (without carrying out the installation).

### Note

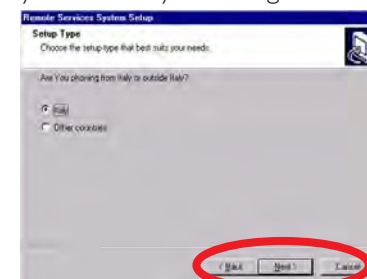
Both CD's are equipped with Autorun mode. If this function is not available, select the SETTINGS Icon and from the list and select the RUN option.

Then enter the following path E:\setup.exe and confirm by selecting the GREEN TICK icon.

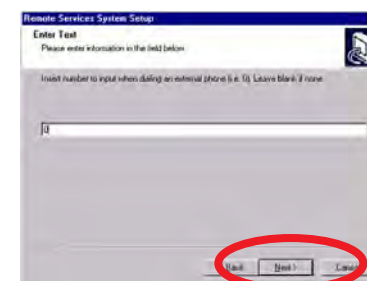
- 1 Select the installation language and press the OK key.



- 2 Select the country. Proceed by selecting the NEXT> key.



- 3 Type in the number to dial to before dialling (for switchboard) leave the field blank if no number is required. Press the NEXT> key.



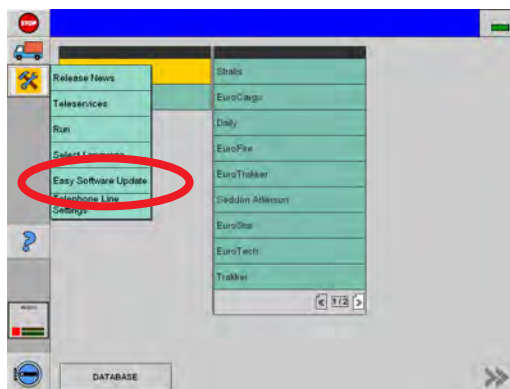
## First use > Connection

To carry out automatic updating of the E.A.SY software: follow the operations described below

1 Start E.A.SY.

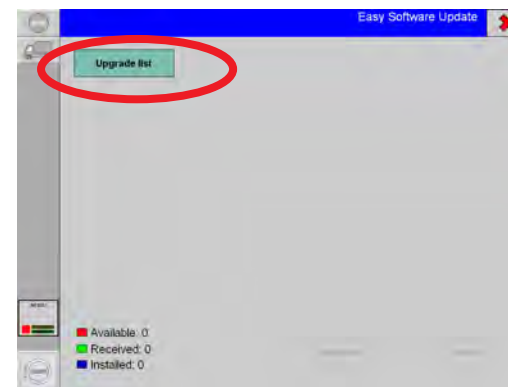


2 Select the TOOLS > E.A.SY. Software Update key.



3 The *Update Software* screen is shown.

4 Select the UPGRADE LIST key



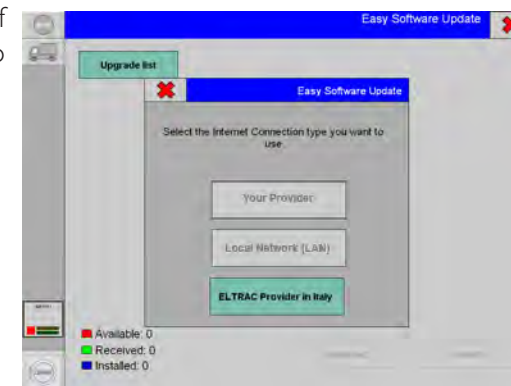
Software Update  
Screen

### Note

To edit the calling location and the external line access code you can also select the TOOLS > Telephone line setting key

5 At this point only it is necessary to choose the type of option with which you intend to connect your computer to the Internet.

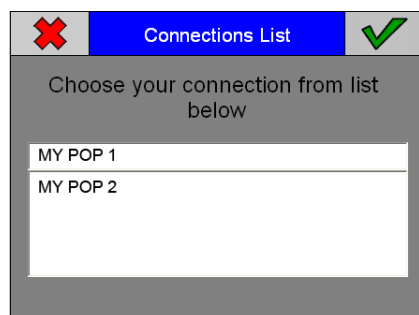
6 Connect the system to the Internet selecting one of the options indicated.





## I. YOUR PROVIDER

The following picture is displayed



Select your personal connection and then the TICK key.

After having pressed the TICK key, communication with the Eltrac server has been established.

## 2. LOCAL NETWORK (LAN)

Communication with the Eltrac server is automatically activated, providing the instrument has been correctly configured for the Internet connection.

## 3. ELTRAC PROVIDER IN ITALY:

in Italy: by using a telephone provider enabling the call no. 702, the local call rate will be applied, from anywhere in Italy

otherwise (by calling the telephone no. 011), a call rate for a trunk call will be applied (local call rate if you are calling from anywhere in Turin)

in other countries:

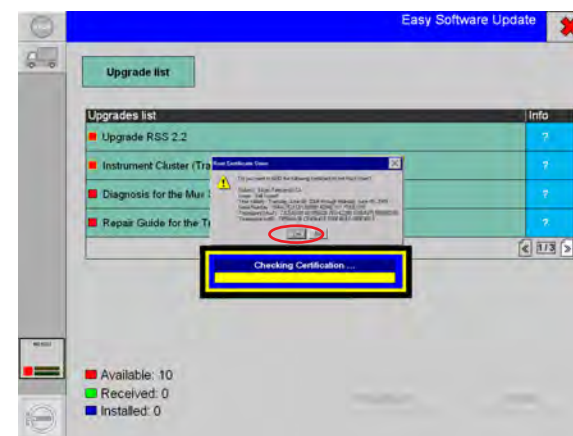
the international call rate will be applied

The communication to the server is established.

When the connection to the Eltrac server has been established, the available updates are shown on the screen.

## Warning

If the connection (whatever connection type has been activated) is activated for the first time, the Eltrac server sends and installs the security certificate for the station; confirm by selecting the YES key.

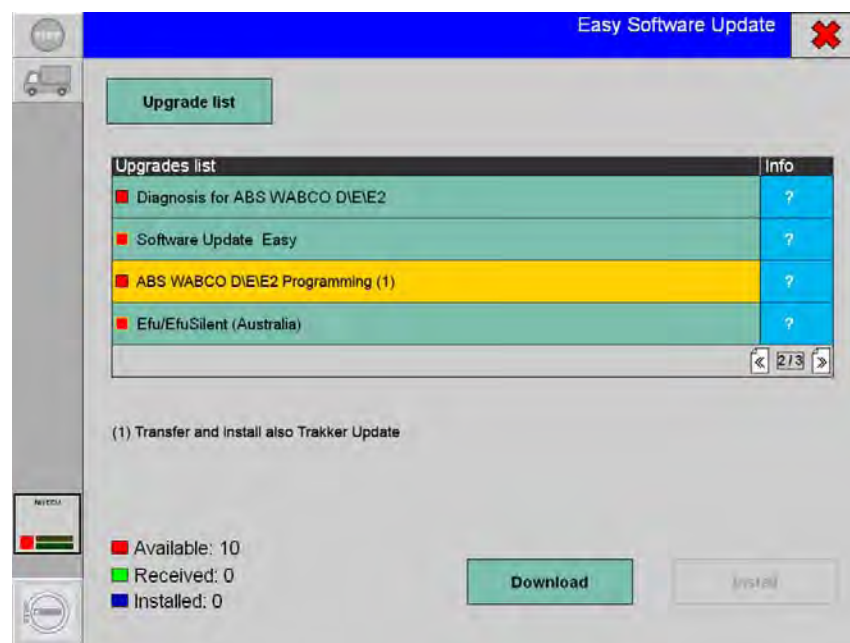


Security certificate.

## Software Update Screen

The Operative area of the Software Updating Screen contains the following active elements

- UPGRADE LIST key  
sends the ELTRAC server the request to update the list of the applications available; it is always active.
- DOWNLOAD key  
transfers the applications requested from the ELTRAC server to the user; it becomes active in response to the selection of an available application.



- INSTALL key  
installs the available applications already transferred from the ELTRAC server to the user; it becomes active in response to the selection of an application transferred without errors.
- List Area with navigation keys between page  
This list is selectable and contains the list of the applications needed to upgrade the E.A.SY. software.  
A led indicates the application availability status according to the rules below:
  - red: the application is available for transfer
  - green: the application has been transferred and transfer has been completed with no errors; the application is ready for installation
  - blue: the application has been installed on the computer
 Selecting the question mark on the INFO column obtains information about the application.

The Title area contains the CROSS key: when selected, this closes the E.A.SY. Software Updating environment.

### Pay Attention to the notes

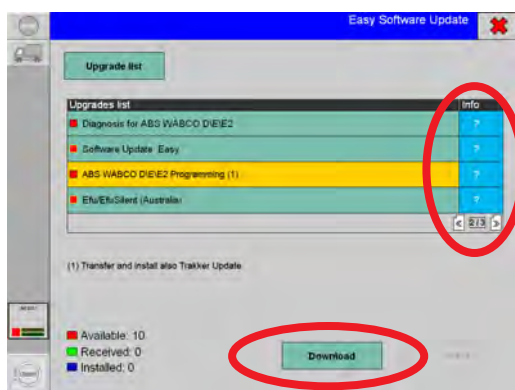
The notes inform you that in order to use an application other programs also need to be transferred and installed on which the application chosen depends.

*In the figure, note 1 associated with the ABS Programming application, informs you that to install the ABS Programming application, the TrakkerUpdate program needs to have been transferred and installed.*

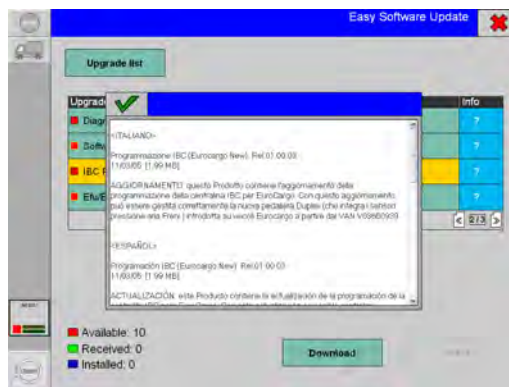
## First use > Transferring the updates

The request for the available updates has been sent to the ELTRAC server (selecting the UPGRADE LIST key) which acknowledges the unit in use through the activation code, stores the configuration, processes the request and transmits the list of the possible updates.

- 1 The list of the available updates (red led) is displayed in the lists area



- 2 Select the QUESTION MARK related to the application you wish to download: the corresponding information, any dependence on other programs and the size of the application are displayed
- 3 Select the required updates among those available (red led)



- 4 The DOWNLOAD key has become active; select the DOWNLOAD key

The request for download is sent to the ELTRAC server; which processes the request and transfers the files. The ELTRAC server updates the memory with the transfers performed by the unit in use.

- 5 It is possible to download one or more updates simultaneously.
- 6 At the end of transfer, if the result has been successful, the led that indicates the file status becomes green (application received)

## Dependent applications

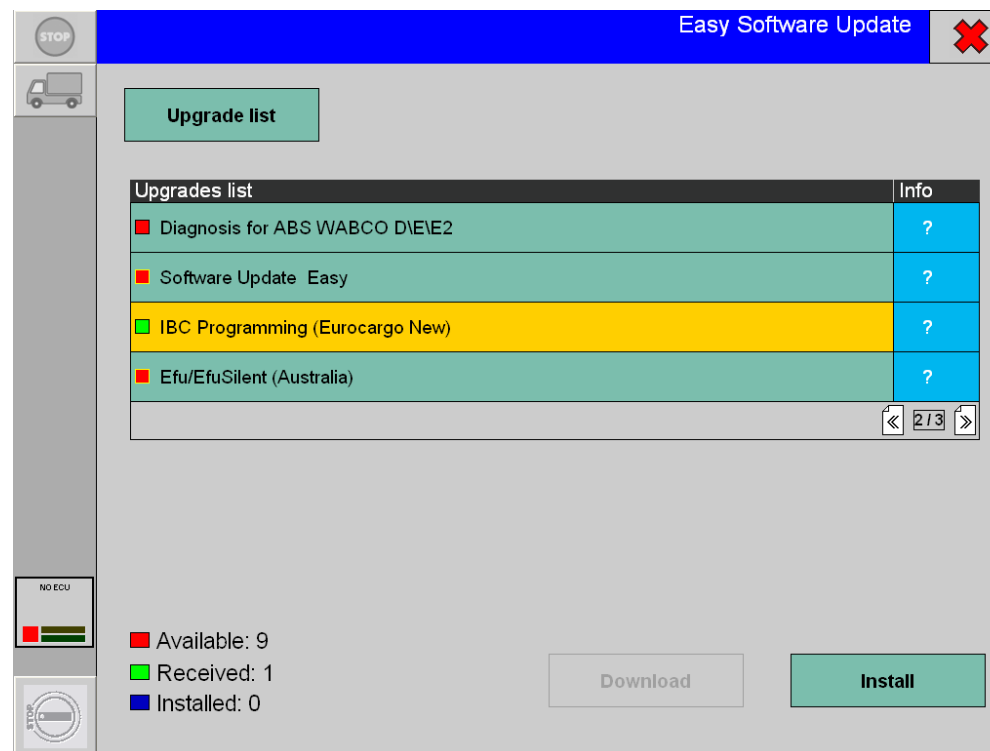
Certain applications cannot be installed without firstly transferring and installing other programs. These are known as dependent or subordinate applications. When a subordinate application is selected (also mentioned in the notes) a message alerts the user that it is necessary to also download the programs on which the application depends. If the user confirms the transfer, the subordinating programs are transferred automatically.

## First use > Installation of the updates

- 1 Select an update transferred and received without errors (green led - received)
- 2 Select the INSTALL key to carry out installation of the software

If the application selected is subordinated to another program not present on the computer yet, the system asks to install the subordinating program before proceeding with the installation of the application chosen.

*It is always possible to download a package that has already been downloaded again. A message warns the user*



## unit 14

### certifications

#### ATTENTION!

This software may cause chassis movements and/or engine start-up.  
Be extremely careful.

The user is responsible for the correct use of the E.A.S.Y. software so as not to any cause injury to people or damage to items.

The user is also responsible for complying with all the rules relating to vehicle security and activities in the workshop.

Carefully read the user manual before using the diagnostic tool and follow the instructions displayed on the screen.

#### GENERAL RULES FOR USE

The following instructions should always be strictly followed:

- check all instruments and ensure the vehicle is parked safely (e.g.: handbrake on, wheels chocked and with gearbox in neutral, etc...)
- ensure that the ECI module is connected to the diagnostic socket of the vehicle on which work is to be carried out
- in case of emergency, disconnect the ECI module from the vehicle or disconnect the USB cable
- ensure that while using the software, there is nobody near the vehicle you are working on
- if it is necessary for more than one person to be working on or near the vehicle, they are all responsible for complying with security regulations of the workshop
- we strongly suggest that the ECI modules be visibly and uniquely identified (for example by using coloured adhesive tape, labels with names, etc...).

| CE conformity | C-Tick conformity | RAEE conformity |

## ECI MODULE DECLARATION OF CONFORMITY



ELTRAC s.r.l.  
Strada di Settimo 388/2  
10156 Turin  
ITALY

Declares that this product complies with the provisions of the following community directives:

### **89/336/EEC**

Conformity with these directives means that the following harmonised standards have been applied:

- |                           |   |
|---------------------------|---|
| <b>EN 55022: 1998</b>     | Equipment for information technology - Radio disturbance characteristics - Limits and methods of measurement                                      |
| <b>EN 61000-6-2: 2001</b> | Electromagnetic Compatibility Directive (EMC) - Section 6-2: General rules - Immunity for industrial environments (IEC 61000-6-2: 1999 (Amended)) |

I CE conformity | C-Tick conformity | RAEE conformity |

## BLUETOOTH MODULE DECLARATION OF CONFORMITY



Declares that this product complies with the provisions of the following community directives:

**89/336/EEC**

**1999/5/CE** R&TTE Directive

Conformity with these directives means that the following harmonised standards have been applied:

|                             |   |
|-----------------------------|---|
| <b>EN 60950-1:2001</b>      | Equipment for information technology - Safety - Section 1: general requirements   |
| <b>EN 50371-:2002</b>       | Human exposure to electromagnetic fields (10 MHz - 300GHz) - General Standard for proving the conformity of low power electronic and electric equipment with the base limits established for the population.  |
| <b>EN 301 489-17 V1.2.1</b> | Electromagnetic compatibility and questions concerning the radio frequency spectrum (ERM); Electromagnetic compatibility standard (ERC) for radio equipment and services - Section 17: Specific conditions for broadband transmission systems in the 2.4GHz band and high performance RLAN equipment in the 5GHz band.                  |
| <b>EN 300 328-2 V1.2.1</b>  | Electromagnetic compatibility and questions concerning the radio frequency spectrum (ERM); broadband transmission systems; equipment operating in the 2.4GHz ISM band and which use broad spectrum modulation techniques - Section 2: Harmonised European standard on the essential requirements of section 3.2 of the R&TTE directive. |



I CE conformity I C-Tick conformity I RAEE conformity I

## DECLARATION OF CONFORMITY



Declares conformity with the essential requirements for C-Tick markings certified by compliance with the following standards and rules:

### **AS/NZS 4771:2000 including amendment no. 1**

Technical characteristics and test conditions for data transmission equipment operating in the 900MHz, 2.4GHz and 5.8 GHz band using broad spectrum modulation techniques.

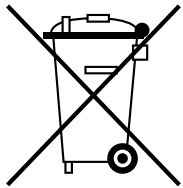
### **Radiocommunications (Spread spectrum devices)**

Class Licence 2002 of 11 December 2002. (The Australian Communications Authority issues this Class Licence under sub-section 132(1) and section 135 of the 1992 Radiocommunications Act).

| CE conformity | C-Tick conformity | **RAEE conformity** |

## INFORMATION FOR USERS ABOUT THE DISPOSAL OF OBSOLETE ELECTRIC AND ELECTRONIC EQUIPMENT

This symbol on the products and/or shipping documents means that the used electric and electronic products must not be mixed with generic waste.



For correct treatment, recovery and recycling, take these products to the designated collection points.

Correct disposal of this product will help to save precious resources and avoid potential adverse effects on human health and on the environment, which could otherwise result from inappropriate disposal.

In the event of incorrect disposal of this material, sanctions may be applied according to national laws.

### Information for disposal outside the European Union

This symbol is valid within the European Union only. If you want to dispose of this product, contact the local authorities or dealer and ask for information on how to do so correctly.