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AXONE DIRECT TECHNICAL MANUAL

Introduction

Dear car repairer,

thanks for choosing one of our device for your car repair shop. We are sure that you will be completely satisfied with this and that it will be very useful for your work.

Please read carefully the instruction within this Operating Manual and preserve it for future consultancy whenever necessary.

The data, features and descriptions given in this manual are purely informative; they aren't binding for the producer, who reserves the right to modify the tool, when necessary and without notice, to improve the product or for any manufacturing and trading requirements.

Integral or partial reproduction of this manual in any form whatsoever without written authorization from the produce is strictly forbidden.

© **copyright and database rights 2007-2008**. The material included in this publication is protected by copyright and database rights. All rights are reserved according to law and to the international conventions.

This manual shows and describes optional and standard features of the product. The tool you bought probably is not equipped with some features or elements described in this document.

This manual is additional part of the device to which it is referred and if the device is sold it must be forwarded to the new owner of the device.

Reading and understanding this manual is essential to avoid damages to things and injuries persons due to an improper use of the tool but they cannot replace or complete the skill of the professionals to which the tool is addressed.

The topics of this manual can be modified without notice and it must be considered that guidelines and information given are not exhaustive.

TEXA S.p.a. is not responsible for damages to things or persons coming from changes performed according wrong or incomplete instructions contained in this manual.

Integral or partial reproduction of this manual in any form whatsoever without written authorization from the produce is strictly forbidden.



It indicates a hazardous condition which, if not avoided, may cause serious or fatal injuries.



Indicates a hazardous condition which if not avoided can cause light or limited damages or injuries.



With no alarm symbol, it indicates a potentially hazardous condition which, if not avoided, may cause light or limited damage.



It indicates a generically hazardous situation due to power sources that can cause burns or electrical shocks.

Main Regulations for Operator's Safety

This product has been designed and developed to be used by technical personnel qualified for automotive environment, like car electricians, mechanics, technicians and engineers with an automotive specialization.

Do not allow unqualified personnel to use this appliance, in order to avoid accidents to people or damaging to the instrument or to electronic systems of the vehicle to which it is connected.

Before operating, connecting and using AXONE DIRECT, it is highly recommended to carefully read and understand the safety, installation and use instructions contained in this manual.

The knowledge and respect of the operating conditions and procedures described in the manual allow operators to work in a safe way for your own physical integrity and for the integrity of the instrument and of the vehicles on which you operate.



1. Do not locate the possible interfaces for the connection to the vehicle from AXONE DIRECT, in the area over an airbag or near an airbag in its expansion zone. Airbags swell with high strength. If located in the expansion zone of an airbag and the airbag swells, the appliance can be projected with high strength and cause serious damage to the occupants of the vehicle



2. Position the appliance in order to guarantee their correct ventilation. Do not locate the appliances near heat sources or surfaces and/or parts with high temperature.



3. The checks related to the electromagnetic compatibility of AXONE DIRECT guarantee its compatibility with technologies normally used on the vehicles (e.g.: engine, Abs, Airbag, Climate Control, Navigator, Car radio, Hi-fi system check); however, in case of malfunctioning, you have to contact the dealer of the vehicle.

WARNING

- Do not touch the antenna and do not cover the antenna with any objects
4. during use; this could compromise the correct operation of the appliance and operate it with a power higher than necessary.

WARNING

- Use only with the antenna provided together with the product or with
5. another antenna which is authorized by Texa S.p.A; unauthorized antennas could damage the appliance.

WARNING

6. Do not wet the AXONE DIRECT device, because rain, humidity and all kinds of liquid or moist can damage the electronic circuits.

WARNING

7. Do not open the AXONE DIRECT device. Any possible interventions, if performed by unqualified personnel, can damage the device.

WARNING

8. Do not drop, beat or shake the appliance, because the internal circuits could be irreparably damaged. Do not use any corrosive chemical products, any solvents or aggressive detergents for cleaning the AXONE DIRECT device.

Work environment



DANGER

The place of work must be dry, with sufficient light and good ventilation. Particularly, the operations of car diagnosis which require running the engines must be done in a place equipped with exhaust fan system.

We remind you that the inhalation of carbon monoxide (odourless) can cause serious injury to the organism.

When working on engines or other vehicle parts

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- *Adequately wear protective cloths and behave in a manner to prevent accidents.*
- *Before proceeding, be sure that the vehicle gear is in neutral (or in parking position if the vehicle has automatic gear). Apply the security or parking brake of the vehicle tested and be sure that the wheels are locked.*
- *Protect face, hands and feet and avoid contact with hot surfaces as sparking plugs, exhaust ducts, radiators, and cooling system joints.*
- *Do not smoke or light flames when you work on the vehicle.*
- *Be sure that every electrical connection is insulated and well soldered.*
- *Do not look directly from a too close distance at the intake pipe of the carburettor when the engine is on.*
- *Keep hands and hair away from the moving parts.*
- *Do not wear ties, wide clothes, wrist jewels and watches when you are working on a vehicle, in particular if the engine is on.*
- *Stay away from the fan, the cooling fan is controlled by a thermal switch related to the cooling liquid temperature: disconnect fan cables while working on a hot engine, to prevent the unexpected start up even if the engine is switched off.*
- *Do not pour the fuel directly into the carburettor for facilitating the engine ignition.*
- *Do not unscrew the radiator cap before the engine temperature is lowered along with the pressure in the cooling system.*
- *Do not touch the high voltage cables when the engine is on.*
- *Handle with care the portable lamps and use only those with metal protection.*
- *Wear accident prevention glasses to protect eyes against fuel, dust or metals.*
- *You have to remember that the catalytic muffler reaches very high temperatures, able to cause serious burns or fire beginnings.*

Therefore be careful that there are not oil spots, dusters, paper or other inflammable materials near the muffler.

When you operate on the batteries



Car batteries contain sulphuric acid and produce explosive gas; therefore pay attention to the following instructions:

- *Always wear protective glasses.*
- *Never leave tools on the battery, because they could cause accidental contacts.*
- *Before proceeding with the test or the recharge, cover the openings of the battery with a wet cloth in order to suffocate explosive gas.*
- *Avoid the sparking when cables are connected to the battery.*
- *Avoid splashes of electrolyte on skin, eyes and clothes, as it is a corrosive and highly toxic compound.*

While working with equipments supplied with mains voltage.



- *Check the ground connection of the equipment.*
- *Remove the power supply voltage before connecting or disconnecting cables.*
- *Avoid the contact with wet hands.*
- *Operate in conditions of insulation from ground.*

Operation of the tool's radio devices



Position the instrument in order to ensure a correct operation of the radio devices it is equipped with. In particular, do not cover it with any shielding material or, in general, with any metallic material; do not put the instrument into the vehicle boot, into the engine casing or into the glove compartment; if positioned inside the vehicle, make sure that the glasses are not screened.

Functioning of the Instrument's Radio Devices

WARNING



Wireless connectivity with Bluetooth, WiFi and GPRS technology

The wireless connectivity with the Bluetooth, WiFi and GPRS technology is a technology that supplies a standard, reliable method to exchange information between different devices, using radio waves. Adding to TEXA instruments, many more products use this technology, such as cellular phones, portable devices, Computers, printers, photo cameras, Pocket PCs etc.

The Bluetooth, Wi-Fi and GPRS interfaces look for the compatible electronic devices after the radio signal they emit and establish a connection between them. The TEXA instruments select and propose only the TEXA compatible devices. This does not exclude the presence of any further sources of communication or disturbance.

THE EFFICIENCY AND THE QUALITY OF THE BLUETOOTH, WiFi AND GPRS COMMUNICATION CAN BE INFLUENCED BY THE PRESENCE OF RADIO DISTURBANCE. THE COMMUNICATION PROTOCOL IMPLIES THE MANAGEMENT OF ERRORS; HOWEVER, POSSIBLE COMMUNICATION ERRORS CAN SOMETIMES REQUIRE TRYING A NEW CONNECTION.

SHOULD THE WIRELESS CONNECTION BE CRITICAL AND COMPROMISE A REGULAR COMMUNICATION, IT IS NECESSARY TO DETECT THE SOURCE OF THE ENVIRONMENTAL MAGNETIC DISTURBANCE AND TO REDUCE ITS INTENSITY.

Position the instrument in order to ensure a correct operation of the radio devices it is equipped with. In particular, do not cover it with any shielding materials or, in general, with any metallic materials.

Warnings

The use of the AXONE DIRECT product is subject to the acceptance of the following conditions:

1. Responsibility

Customers are responsible of the use of any tool and of any software program produced by TEXA S.p.A. and sold by the reseller.

The customer commits to indemnify and guarantee TEXA S.p.A. and its retailer, responsible for any damage arising out of wrong use of the products, software and the information contained in it because of their utilization not in accordance to all indications, sequences and operational phases indicated in the program and in the instructions manual.

The customer must use all the data and information provided by TEXA S.p.A. or by the dealer directly or through programs and user manuals, knowing that these may be incomplete and that they must always be used as an integration to his own professional knowledge. The customer is also aware of the importance of the product upgrade in order to ensure immediate adaptation to the requirements of a continuously evolving market.

2. Copyright

As far as the software license is concerned, please see the text displayed when beginning its installation.

3. Warranty

HARDWARE: The reseller grants that the product is protected by factory problems or faults identified and recognized by the TEXA S.p.A. assistance network for the 24 months starting from the delivery date or from the date of activation of the software. This warranty consists in the obligation of the reseller and/or of the service centre to reset the functions of the products by replacing or repairing the faulty components for free.

This warranty does not cover any faults or malfunctions due to: a) bad maintenance or wrong or inadequate calibrations; b) any software, interfaces, consumable parts or materials not provided by the official sales and assistance network of TEXA S.p.A; c) unauthorized modifications or improper use; d) use of the products in an environment the values of which do not fall within the specified range of the product; e) wrong preparation or maintenance of the operating environment where the instruments are used.

SOFTWARE: Even if they took all possible precautions to grant the accuracy of the information contained in or viewed from the software, TEXA S.p.A. do not guarantee that the software or any information contained or viewed in it, meets all customer requirements, that it is error free, that it can work without any time limits or that all possible software faults can be corrected. Various kinds of data and materials, contained in the programs and in the database to which they access, can derive from different sources, such as: original documents distributed by different manufacturers, material supplied to TEXA S.p.A. by specialised companies. However, the original documents have been edited for publishing in Europe and to be used on vehicles built according to European specifications. The users should know that in non-European Countries the names, descriptions and specifications of models can be different from those listed and proposed by the programs and in the tools related with this manual. This warranty does not cover possible software conflict problems, for is installed on hardware platforms different from those produced by TEXA S.p.A. (ex. common personal computers, pocket PCs, tablet PCs). An example, though it can't be exhaustive, of problems not covered by warranty is the one of problems arising from incompatibility between the Texa programs and a software environment lacking the necessary requirements, or protected by an anti-virus system that hinders the regular installation and operation of the program. One more example are environments damaged by bugs or supported by inadequate hardware sources.

PLACE WHERE THE WARRANTY ASSISTANCE IS PERFORMED: Every repair under warranty, except different written agreement must be performed at TEXA S.p.A. head office or of the authorized TEXA S.p.A. assistance centre. All costs for transport of the product to be repaired from the customer's seat to the one of the assistance centre and/or for the transfers of TEXA S.p.A. service personnel or of the assistance centre to the customer's address must be paid by the customer.


TRANSPORT: Damage due to transport or breaking caused by improper or careless packaging carried out by the customer when sending products to be repaired are not covered by warranty.

MAINTENANCE: Before being delivered to the customer, the product has been tested by TEXA S.p.A. and by the dealer (if so established). However, the products always need to undergo regular maintenance like, for instance, a systematic check of the good conditions of the condensation filterers and smokes within the "gas analyser", cleaning of the smokes

chamber within the opacimeter, or the good condition of the battery charge within the portable products, etc.). The right of performance under warranty can be lost if not all of the minimum maintenance interventions prescribed in the manual provided with the product have not been performed.

Information about Regulations

Compliance declaration

	Texa S.p.A. hereby declares that the AXONE DIRECT complies with the essential requirements and with all further provisions defined by the 1999/5/EC regulation.
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A copy of the complete Compliance Declaration can be obtained at

TEXA S.p.A., Via 1 Maggio 9, 31050 Monastier di Treviso (TV), Italy

Antenna

This product has been designed and checked for operating with the provided antenna.

In order to guarantee the compliance with the above-mentioned arrangements and regulations, use the appliance only with the provided antenna or with another antenna which is authorized by Texa S.p.A.

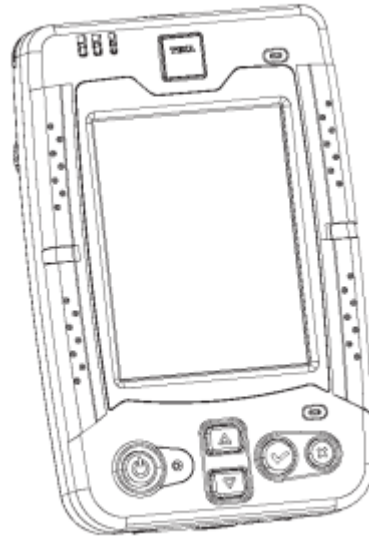
To use AXONE DIRECT correctly

For a correct use of your AXONE DIRECT you have to conform to the following rules:

- *The appliance must be positioned in a dry place, avoiding exposure to heat sources or operating close to heat sources.*
- *Do not expose AXONE DIRECT to shocks.*
- *Do not wet AXONE DIRECT with water or other liquids.*
- *Do not put any objects on the cables and do not bend them at right angle.*
- *When using terminals or connection cables to the vehicle be very careful to the quality of the connection to avoid wrong contacts and/or erroneous cable connection to metallic parts of the same vehicle. Use gummy plugs (if necessary) to protect unused terminals. Carefully follow instruction indicated by the program*
- *AXONE DIRECT display is formed by a glass that can be broken or can be damage due to strong impact;*
- *Do not place any object on AXONE DIRECT.*
- *Do not seat on AXONE DIRECT.*
- *Use only the provided pen. If the pen gets lost or broken, order a spare one.*
- *To clean the screen do not use soap or other cleaners that can damage the screen. Clean the screen and the case with a soft cloth moistened with water.*

1 AXONE DIRECT DESCRIPTION

AXONE DIRECT is a new display and processing unit integrating several system to optimize the use of tools, information, messages and management.



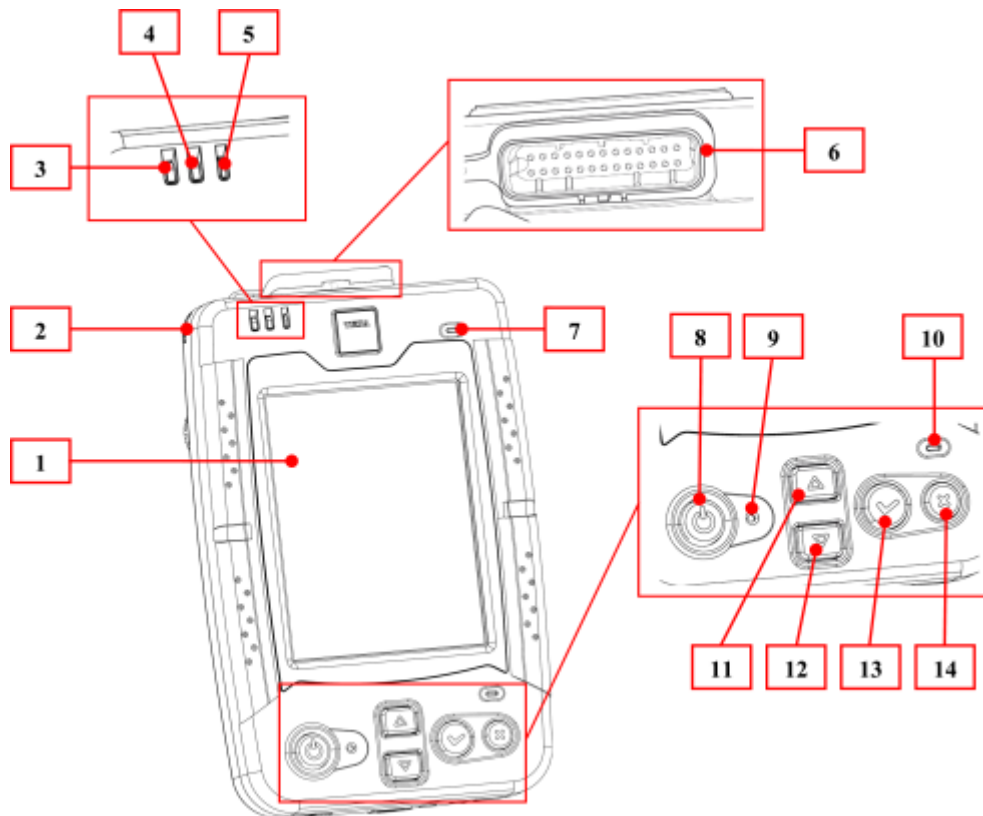
Vehicle test can be performed in two ways:

- **Direct connection** to the vehicle through EOBD cable to be connected to the device.
- **Bluetooth connection** to external devices.

The external devices that can ben connect are, for example: **NAVIGATOR series, TRIBOX MOBILE, Autopower** tools.

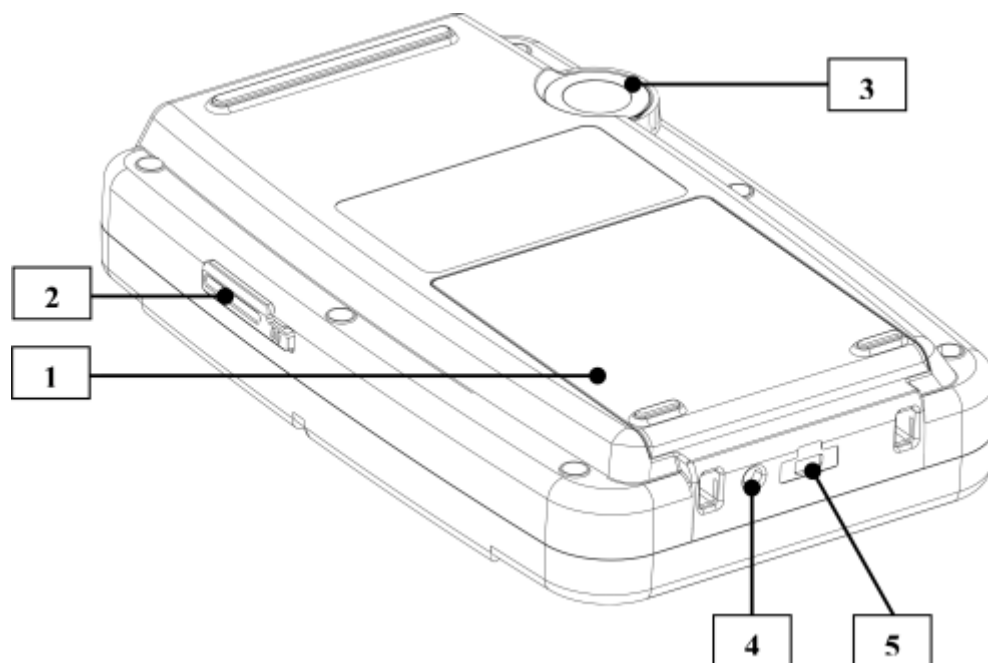


1.1 Front view of the instrument



1. **Touch Screen:** *direct selection of the software options.*
2. **Pen and pen seat.**
3. **Bluetooth connection status LED:** *indicates the status of the Bluetooth connection.*
4. **Wi-Fi connection status LED:** *indicates the status of the Wi-Fi connection.*
5. **Brightness sensor:** *adjusts light according to the ambient.*
6. **Diagnosis cable connector.**
7. **Speaker.**
8. **Turning on/off button (ON/OFF).**
9. **Unit reset button.**
10. **Microphone.**
11. **Arrow Up button:** *to scroll in the up direction the vertical menus proposed by the software.*
12. **Arrow Down button:** *to scroll in the down direction the vertical menus proposed by the software.*
13. **OK button:** *to confirm selection.*
14. **ESC button (Cancel):** *cancel selection/bring back to previous menu.*

1.2 Rear view of the instrument



1. **Batteries compartment.**
2. **Secure Digital card slot: *slot for the memory card.***
3. **VGA mini-camera.**
4. **Recharge connector.**
5. **I/O connector.**

1.3 How to supply the AXONE DIRECT

According to unit use and to optional elements use the AXONE DIRECT can work with different energy sources:

1. **Internal battery supply** (*this is the main power supply for normal use*).
2. **Power supply from the mains using a docking station or through adapter** (*this is recommended to recharge and update the unit*).

When using AXONE DIRECT normally the internal battery grants 8 hours of operation.

Operation changes according to use (i.e. Bluetooth transmission, brightness, etc.).

To recharge the unit use (point 2) an "AC adapter" type 100-240 Vac, 50/60 Hz, 5.25 Vdc, 3 A .

During the charge from the mains (point 2) you can normally use the tool.

WARNING

During first activation completely charge the unit through the serial adapter provided. Charge time is generally about 4 hours.

WARNING

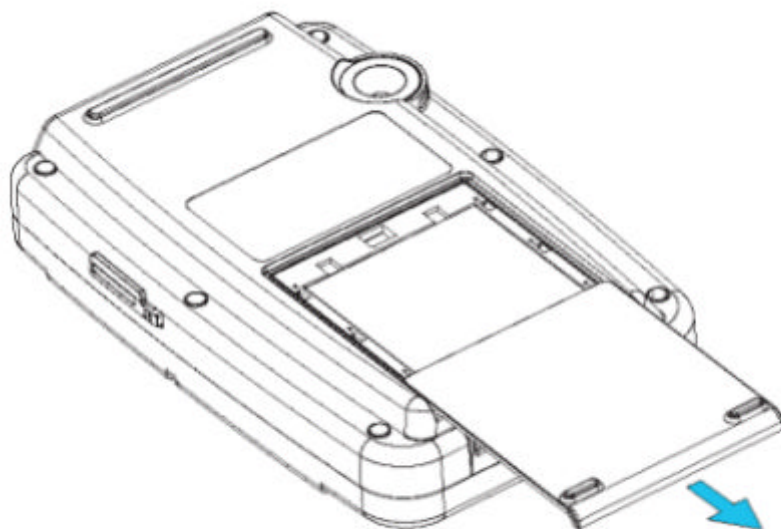
After use leave the unit ALWAYS connected to the charge system (adapter or docking station).

This step is very important to auto-update the software during night.

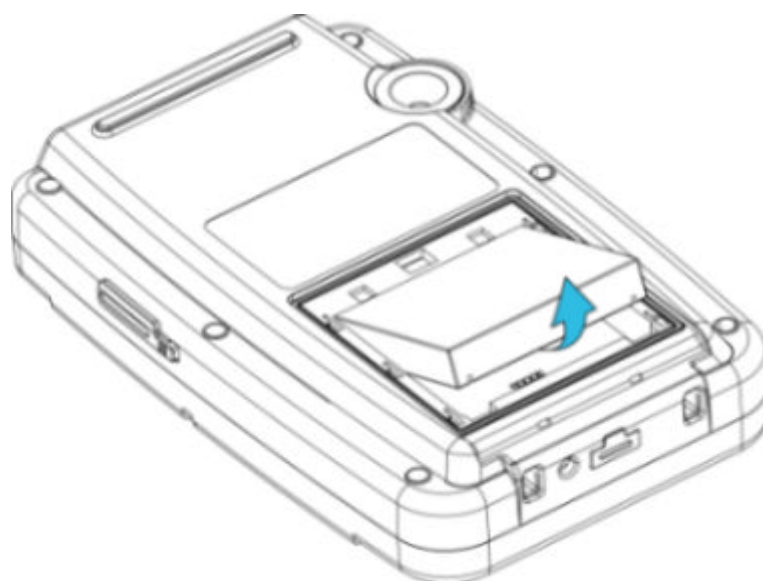
1.4 Battery replacement

To replace the unit battery do the following:

1. Slightly press and slide the cover of the battery compartment toward outside (see figure) .
2. Remove the cover.



3. Rise the battery pulling out the tag.
4. Remove the battery.

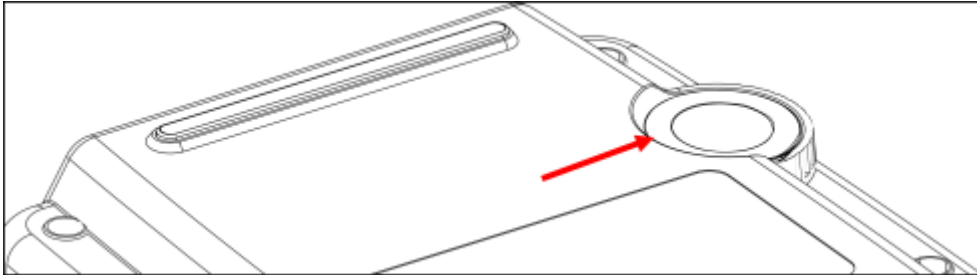


5. Replace the battery pack with a new one and close the compartment with its cover.

To grant a correct operation connect AXONE DIRECT to the mains.

To completely charge the unit you need about 4 hours.

1.5 AXONE DIRECT and Webcam



In the previous figure it is showed the webcam.

The webcam is used for specific operation of the AXONE DIRECT program.

1.6 AXONE DIRECT and Docking

The docking station for AXONE DIRECT can be used to charge and connect the optional units.

It can be used to preserve the unit at the end of the day and to update it.



By inserting AXONE DIRECT on the docking station it is directly supplied through the mains adapter.

Thanks to the docking station are available:

- **a USB port** (*useful to link the unit to the PC*)
- **Host USB port** (*useful to link a USB memory pen*)
- **a RS232 serial port.**

2 OPERATION OF THE CENTRAL UNIT

2.1 Power on

To power on AXONE DIRECT use the main button ON/OFF on the above side of the unit.

To turn the unit on, do as follows:

1. Press the **ON/OFF** button
2. Await till the button lights on.
3. Release the **ON/OFF** button
4. Wait for the system to start (about 11 seconds).

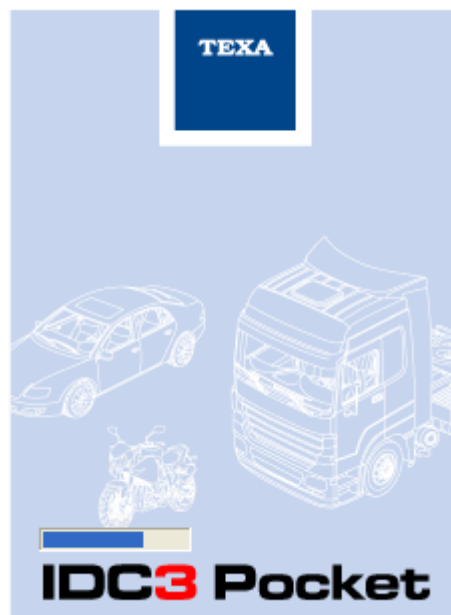
Now, the tool is ready to be used.

When activating for the first time input the **Secure Digital** containing the program in the links side field.



By inserting the memory card you can install and start the TEXA program.

The first screen indicates the installation in progress.



Once the start-up phase is performed, the main screen of the new IDC3 operating environment appears.

Then it goes on with the software activation process.

2.2 Switch-off

To turn the AXONE DIRECT off correctly hold the **ON/OFF** button pressed for at least 2 seconds.

Now you can choose among the menu items:



- **Interrupt:** to bring AXONE DIRECT in a low consumption mode, to turn the screen off and to turn some peripherals off. AXONE DIRECT can be turned on again using the normal turning on procedure.
- **Restart:** restarts the initial program.
- **Turn off:** to correctly and automatically turn off the system. No other manual operation is present.
- **Back:** the program come back to the operating program page.

2.3 Reset

There are many ways to control again a blocked tool and these can be used according to the type of block generated.

These ways are:

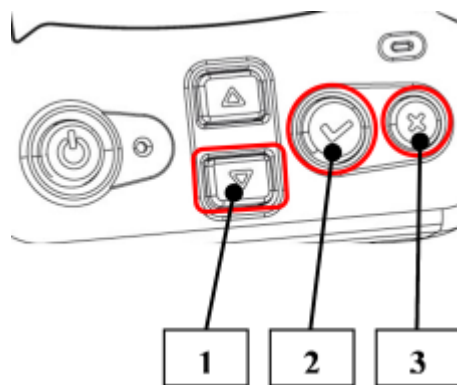
1. By using the **turning off button** (see previous chapter).
2. Forced turning off of the system by pressing some **buttons**.
3. By pressing the **hide button Reset**

2.3.1 Reset from keyboard

This reset mode turns off the system in a forced way.

Press the buttons shown in the figure all together.

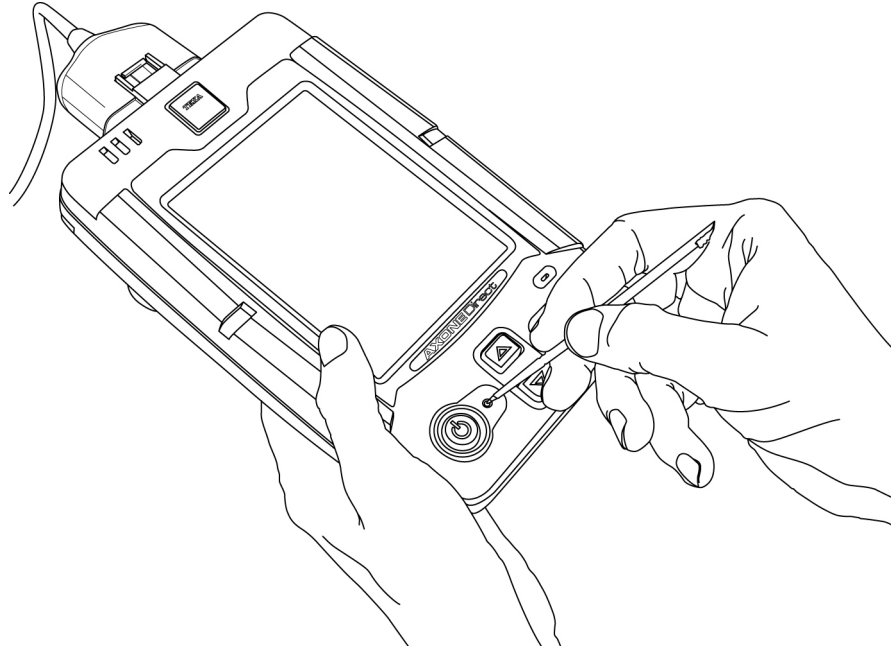
“Arrow down (1)” + “OK (2)” + “ X (3)”



This type of action **does not cancel date and time**.

2.3.2 Reset using the button

This reset mode can be used every time the operating program does not react to the controls and the unit does not perform the recovery action described previously.



1. *Insert the pen in the appropriate point (see figure).*
2. *Press slightly on the pen till the internal click of the button.*

WARNING

The reset button acts on a basis level, such a turning off and then on the battery.

By pressing this button the system is completely restarted. It is then **necessary to reset date, time and other settings configured by the user.**

2.4 Selection

AXONE DIRECT is provided with a touch-screen system to use immediately and in an intuitive way the software.

You can press the provided pen directly on the items and on the icons of the program to launch the relative function.

WARNING

Use the touch-screen only with the pen provided with the device. Any other tipped object can damage the touch-screen.

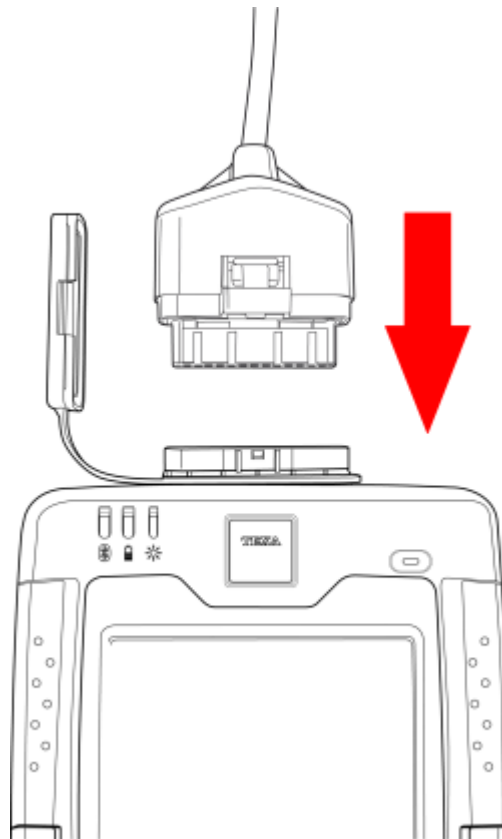
3 COMMUNICATION

3.1 Direct connection

AXONE DIRECT is provided standard with an diagnosis module built-in. Thanks to this module and by using appropriate cables and adapters, you can connect directly to the vehicle control unit without using other diagnosis tools.

To connect the diagnosis cable to the tool, do as follows:

1. *Remove the gummy cap from the tool diagnosis connector*
2. *Connect the cable/adapter and the tool as shown in the figure.*



3.1.1 Connection to the vehicle

The position and the type of the diagnosis connector on the vehicles is different according to brand and model.

The diagnosis program provides you with all information about this topic.

WARNING

Follow with attention the information provided by the program.

To connect to the vehicle through diagnosis cable, do as follows:

1. *Find the control unit connector following information (images and films) provided by the operating program in use.*
2. *Connect the cable indicated by the program to the vehicle diagnosis plug.*

Now you can continue with the electronic system analysis.

The analysis will be performed by using the functions and procedure available with the auto-diagnosis tool in use.

3.2 Bluetooth connection

AXONE DIRECT is provided standard with a Bluetooth module built-in.

Thanks to this module you can use other special diagnosis units.

Thanks to this type of connection the unit can "speech" with different tools and interfaces (i.e. outpower analysis line, NAVIGATOR series).

The configuration of the connection type to the various peripherals is determined by the initial configuration.



AXONE DIRECT is designed to be connected with Bluetooth toward the TEXA diagnosis modules.

To activate the dialogue with the modules use in the workshop you can simply use the software procedure to search and recognize the Bluetooth devices.

For further information see the operating manual of the IDC3 Pocket software.

3.3 *Wi-Fi internet connection*

AXONE DIRECT is provided standard with a Wi-Fi module built-in.

This module enables you to connect AXONE DIRECT to Internet using an ADSL Wi-Fi access point.

Through the access point you can use different services provided by TEXA, for example the "SEARCH" function and the software auto-update.

The SEARCH function of the IDC3 Pocket software enables you to search looking to the solution of a specific problem or to the additional information acquisition.

The searches are performed directly within the central TEXA databases, using the searching system of the Google engine.

For further information see the operating manual of the IDC3 Pocket software.

The use of the Wi-Fi connection is very simple if you use the access point proposed by TEXA.

In this case the configuration of AXONE DIRECT and of the Wi-Fi access point have already been set during production.

4 UPDATE / RESET

AXONE DIRECT is provided with a memory card (Secure Digital) containing the program necessary to its operation.

If it is necessary to reprogram the memory (to update or reset) you must use the CD and the smart card player which come with the tool.

Proceed as follows:

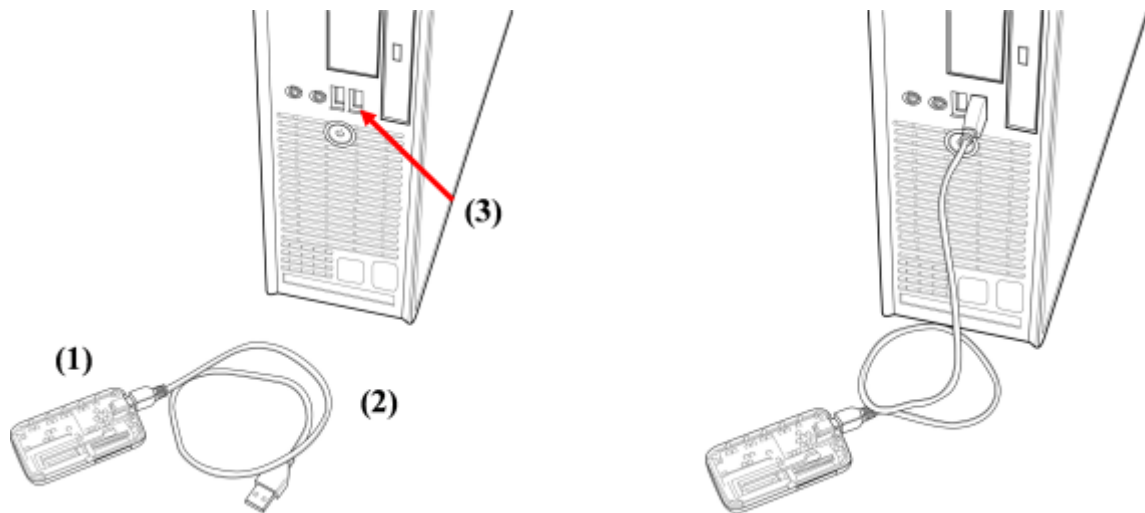
1. When the tool is turned off, eject the memory card from its slot.



ATTENTION: Leave the protection lever in its position.

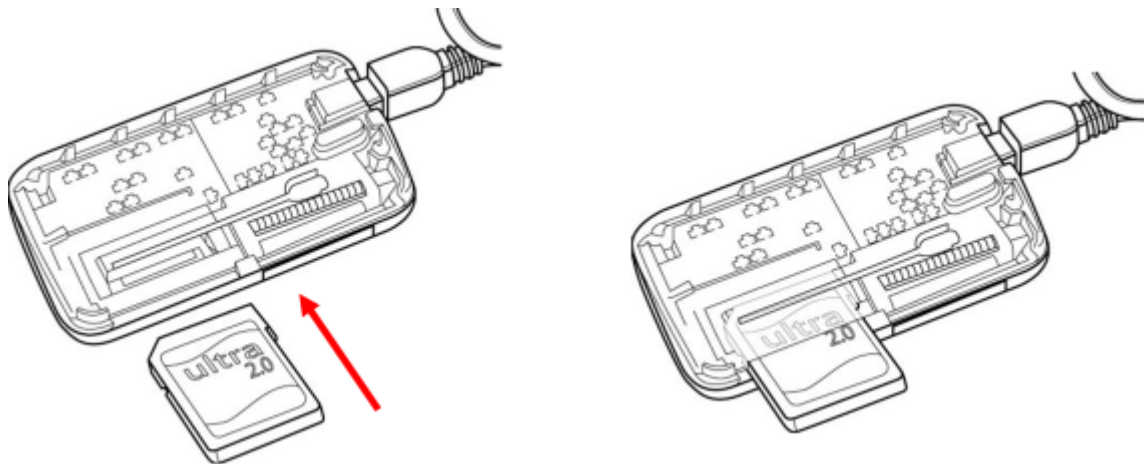


2. Connect the smart card **player (1)** through the specific **cable (2)** to a PC with a **USB (3)** port.



3. Insert (without using too much pressure) the Smart Card in the specific player slot.

ATTENTION: The SD Card, as showed in the next figure, even if correctly inserted, prolongues itself from the player.« »



4. Launch the specific TEXA program and follow the instructions displayed on the screen.

For further information about update and reset operarion see the operating manual of the IDC3 Pocket software

5 CLEANING AXONE DIRECT

To optimize the operation of the pointing system with touch-screen it is necessary that the screen surface is always clean.

Dust accumulated on the surface must be removed without bringing it or foreign objects toward the external edge of the screen (see figure).

We recommend to spray an eventual cleaner **on** a cloth, to clean the screen.

Do not spray directly on the screen, to avoid some liquid from penetrating in the gap between glass/frame.



6 IDC3 POCKET SOFTWARE USE

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To use and configure the IDC3 Pocket software provided with AXONE DIRECT, refer to the **IDC3 Pocket operating manual**, contained on the CD delivered with the unit.



7 TECHNICAL FEATURES

- **Processor:** *Intel X-Scale PXA270 520MHz.*
- **SDRAM:** *128Mbytes low power mobile on bus at 32bits.*
- **Strata Flash:** *128MBytes on bus at 32bits.*
- **Operating system:** *Windows CE 5.0.*
- **Touch-screen:** *resistive 4 wires.*
- **Display:** *LCD-TFT resolution: QVGA 320x240 pixels, 5.7 inches, 65536 colours.*
- **Audio codec:** *AC97 .*
- **Microphone and speaker:** *built-in.*
- **Accelerometer:** *at 3 axeses.*
- **Battery pack:** *lithium polymeres 3.7VDC, 5000 mAh, typically 480 minutes of charge (according to use).*
- **Backup battery:** *lithium rechargeable (3 V, 11 mAh) .*
- **Webcam CMOS with resolution VGA (640x480).**
- **Bluetooth module:** *built-in with internal antenna.*
- **Wi-Fi module:** *802.11b/g built-in, with internal antenna.*
- **Slot for SDIO-card.**
- **I/O connector:** *to input the external power supply, USB-Device, Host USB, RS232 serial,*
- **Communication:** *Bluetooth, WiFi (802.11b/g), RS232, USB 1.1 (Host and Device).*
- **Power jack:** *to direct connection to the wall adapter.*
- **External power supply (wall-adapter):** *100-240VAC, 50/60Hz, 5.25VDC 3A.*
- **Consumption:** *0,8 A.*
- **Operational specification:** *IP 44.*
- **Dimensions:** *238 x 146 x 47 mm.*
- **Weight:** *860 grammes*
- **Operating temperature:** *0 °C / 45 °C.*

7.1 Supported communication protocols

- **Blink codes**
- **K, L, (with current protection) ISO9141-2, ISO14230;**
- **CAN, ISO11898, ISO11519-2;**
- **SAE J1850 PWM;**
- **SAE J1850 VPW.**

8 GLOSSARY-Terms Meaning

- **Click:** *action linked to the pressure of the link button of the mouse*
- **Cursor:** *fixed or flashing indicator, rectangular or vertical line, indicating to the user the place where the letters and digits input through keyboard are displayed*
- **Default:** *referred to a configuration, a value, a setting which is fundamental or already defined by the program. The default value can be replaced by your choice.*
- **Download:** *the action to transfer in the tool programs, information and in general data. This operation needs an Internet connection*
- **Firmware:** *program (in a low level language) inserted in the hardware elements (microprocessors – storage) of an electronic system.*
- **Hardware:** *a diagnosis tool or a processing and viewing system and is referred to the electrical, electronic and mechanical components of the device.*
- **Icons:** *small screen areas where there are buttons, keys, soft keys, with symbols reminding the function to which they are associated to*
- **Interface:** *term referred both to an hardware system and to a software system and indicating an element through which two different systems can exchange information.*
- **Mouse:** *selection device allowing to place a pointer (little arrow) on the screen. Normally provided with two buttons, left and right. With the left button you select or confirm a choice, a selection, an option etc... With the right button you usually access to auxiliary functions related to the performed selection.*
- **Browsing or browse:** *term indicating the action of moving from one function to another one, from one information to another one, from one scheme to another one, to a tool etc. More in general it indicates the path followed by the program starting from the initial screen where the user activates the search up to reaching the final screen where the research ends.*
- **Peripherals:** *all the secondary devices and tools, with respect to the main unit, that speech with the latter sending and receiving data. Peripheral examples are: printers, gas analysers, exhaust gases, self-diagnosis module, DVD player, etc.*
- **Pointer:** *generally represented by a little arrow. The pointer moves on the screen with the movement of the mouse for interacting with the program functions.*
- **Software:** *a diagnostic instrument or an elaboration and displaying system. It indicates programs allowing the use of hardware parts in several modes.*
- **Wireless:** *a connection mode between two electric systems established without using electrical cable connections.*