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Introduction

Dear Customer,

We would like to thank you for choosing a TEXA product for your workshop.

We are certain that you will get the greatest satisfaction from it and receive a great deal of help in your work.

Please read through the instructions in this manual carefully and keep it for future reference.

Reading and understanding the following manual will help you to avoid damage or personal injury caused by improper use of the product to which it refers.

TEXA S.p.A reserves the right to make any changes deemed necessary to improve the manual for any technical or marketing requirement; the company may do so at any time without prior notice.

This product is intended for use by technicians specialized in the automotive field only. Reading and understanding the information in this manual cannot replace adequate specialized training in this field.

The sole purpose of the manual is to illustrate the operation of the product sold. It is not intended to offer technical training of any kind and technicians will therefore carry out any interventions under their own responsibility and will be accountable for any damage or personal injury caused by negligence, carelessness, or inexperience, regardless of the fact that a TEXA S.p.A. tool has been used based on the information within this manual.

Any additions to this manual, useful in describing the new versions of the program and new functions associated to it, may be sent to you through our TEXA technical bulletin service.

This manual should be considered an integral part of the product to which it refers. In the case it is resold the original buyer is therefore required to forward the manual to the new owner.

Reproduction, whole or in part, of this manual in any form whatsoever without written authorization from the producer is strictly forbidden.

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ABOUT THE MANUAL

In this document the terms "**tool**" and "**device**" refer to the purchased product, subject of this manual.












Any other specific term is explained in the text.

This manual is divided into the following chapters:

1. **Legend of the Symbols:** *provides the description of the symbols used in the manual.*
2. **Glossary:** *provides the meaning of the technical terms used in the manual.*
3. **General Safety Rules:** *provides important information concerning the safety of the operator and its workplace.*
4. **Specific Safety Rules:** *provides important information concerning the safety of the operator in relation to the use of the product.*
5. **Environmental information:** *provides indications related to the disposal of the purchased tool/device.*
6. **Operation of the Radio Devices:** *provides information concerning the wireless connectivity of the tool/device.*
7. **Normative information:** *reports the declaration of conformity of the tool/device*
8. **Description:** *describes the tool/device, the technical features, the equipment.*
9. **Operation:** *explains all the functions and operation modes of the tool/device.*
10. **Maintenance:** *provides indications on the maintenance of the tool/device.*
11. **Solutions to problems:** *suggests "what to do when..." and gives information on our client help service.*
12. **Legal Notes:** *provides indications related to the guarantee of the purchased tool/device.*

1 LEGEND OF THE SYMBOLS USED

The symbols used in the manual are described in this chapter.

	Asphyxiation Risk
	Explosion Risk
	High Voltage Hazard
	Fire / Burn risk
	Poisoning Hazard
	Corrosive Substances Risk
	Noise Hazard
	Moving Parts Risk
	Crushing Risk
	General Risk
	Important information

2 GLOSSARY

This chapter provides the meaning of the technical terms used in the manual:

- **Diagnosis/diagnostic socket:** *female connector mounted on the vehicle that allows the connection with the control unit of the vehicle.*
- **OBD socket:** *diagnosis socket specific for the OBD protocol.*
- **Diagnosis/diagnostic connector:** *male connector mounted on the diagnosis tool or as end part of a cable to be connected to the diagnosis tool.*
- **OBD connector:** *diagnosis connector specific for the OBD protocol.*
- **Diagnosis/diagnostic cable:** *cable that allows connecting the diagnosis cable to the diagnosis socket.*
- **OBD cable:** *diagnosis cable specific for the OBD protocol.*
- **Display unit:** *device equipped with a screen (PC, mobile device, etc.) on which the special software is mounted that allows communicating with the tool, configuring it, processing and displaying the data collected by it.*
- **Device connector:** *USB connector used to connect to the device.*
- **Host connector:** *USB connector used to connect to the display unit.*

3 GENERAL SAFETY REGULATIONS

3.1 Glossary

- **Operator:** *qualified individual, in charge of using the device/tool.*
- **Machine/device/tool:** *the product purchased.*
- **Workplace:** *the place where the operator must carry out her/his work.*

3.2 Operator Safety Regulations

3.2.1 General Safety Regulations

- *The operator must be completely clear-headed and sober when using the device; taking drugs or alcohol before or when operating the device is strictly forbidden.*
- *The operator must not smoke during device operation.*
- *The operator must carefully read all the information and instructions in the technical documents provided with the device.*
- *The operator must follow all the instructions provided in the technical documents.*
- *The operator must always watch over the device during the various operating phases.*
- *The operator must make sure she/he is working in environment which is suitable for the operations that must be carried out.*
- *The operator must report any faults or potentially hazardous situation in connection with the workplace or the device.*
- *The operator must carefully follow the safety regulations required for the workplace in which she/he is working and required by the operations she/he has been asked to carry out.*

3.2.2 Risk of Asphyxiation



Exhaust gas from internal combustion engines, whether they may be petrol or diesel, are hazardous to your health and can cause serious harm to your body.

Safety Precautions:

- *The workplace must be equipped with an adequate ventilation and air extraction system and must be in compliance with standards according to current national laws.*
- *Always activate the air extraction system when working in closed environments.*

3.2.3 Risk of Impact and Crushing




The vehicles which are undergoing A/C system recharging operations and the devices, must be properly blocked using the specific mechanical brakes/blocks, while being service.

Safety Precautions:

- *Always make sure that the vehicle is in neutral gear (or that it is set in parking position in case of a vehicle equipped with automatic transmission).*
- *Always activate the hand brake or parking brake on the vehicle.*
- *Always block the wheels on the vehicle with the specific mechanical blocks.*
- *Make sure the device is stable, on a flat surface and the wheels are locked with the specific brakes.*



3.2.4 Hazards Caused by Moving Parts

	<p>Vehicle engines include parts that move, both while running and not running (eg: the cooling fan is controlled by a thermal switch in connection with the coolant temperature and become activated even when the vehicle is off), that can injure the operator.</p>
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Safety Precautions:

- *Keep hands away from moving parts.*
- *Disconnect the engine cooling fan each time the engine you are working on is still hot. This will avoid the fan from becoming activated unexpectedly even when the engine is off.*
- *Do not wear ties, loose clothes, wrist jewellery or watches when working on a vehicle.*
- *Keep connection cables, probes and similar devices away from the moving parts of the engine.*


3.2.5 Risk of Burning or Scalding

 	<p>The parts that are exposed to high temperatures in engines that are moving or have just stopped could burn the operator.</p> <p>Remember that catalytic mufflers reach very high temperatures, able to cause serious burns or even start fires.</p> <p>Acid in the vehicle batteries is another potential hazard.</p>
--	--

Safety Precautions:

- *Protect your face, hands, and feet by using suitable protection.*
- *Avoid contact with hot surfaces, such as spark plugs, exhaust pipes, radiators and connections within the cooling system.*
- *Make sure there are no oil stains, rags, paper or other inflammable material near the muffler.*
- *Avoid splashing electrolyte on skin, eyes and clothes, as it is a corrosive and highly toxic compound.*

3.2.6 Fire and Explosion Hazard

	<p>The following are potential fires and/or explosion hazards:</p> <ul style="list-style-type: none">• <i>The types of fuel used by the vehicle and the vapours released by these fuels.</i>• <i>The refrigerants used by the A/C system.</i>• <i>The acid in the vehicle batteries.</i>
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Safety Precautions:

- *Let the engine cool.*
- *Do NOT smoke near the vehicle.*
- *Do NOT expose the vehicle to open flames.*
- *Make sure that the electrical connections are all well insulated.*
- *Collect any fuel that might have spilled.*
- *Collect any refrigerant that might have spilled.*
- *Make sure you are always working in an environment equipped with a good ventilation and air extraction system.*
- *Always activate the air extraction system when working in closed environments.*
- *Cover the openings of the batteries with a wet cloth in order to stifle the explosive gases before proceeding in testing or recharging.*
- *Avoid causing sparks when connecting cables to the battery.*

3.2.7 Noise Hazard



Loud noises that may occur within the workplace, especially during service operations may damage the operator's hearing.

Safety Precautions:

- *Protect your ears with suitable protective ear wear.*

3.2.8 High Voltage Hazard



The voltage supply from the mains that powers the devices in the workplace and the voltage within the vehicle starter system is a potential shock hazard to the operator.

Safety Precautions:

- *Make sure the electrical system in the workplace is compliant to current national standards.*
- *Make sure the device being used is connected to ground.*
- *Cut off the power supply voltage before connecting or disconnecting cables.*
- *Do NOT touch the high voltage cables when the engine is on.*
- *Operate in conditions of insulation from ground.*
- *Work with dry hands only.*
- *Keep conductive liquids away from the engine while working.*
- *Never leave tools on the battery in order to avoid accidental contacts.*



The hoses used to extract the refrigerants can release toxic gases, dangerous to the operator if exposed to temperatures higher than 250 °C or in case of a fire.

Safety Precautions:

- *Contact a doctor immediately should you inhale these gases.*
- *Use neoprene or PVC gloves when eliminating combustion deposits.*

3.3 General User and Maintenance Warnings

When using the device or carrying out scheduled maintenance (eg. fuse replacement) on the device, carefully follow the information provided below.

- *Do not remove or damage the labels/tags and the warnings on the device; do NOT in any case make them illegible.*
- *Do not remove, or block, any safety devices the device is equipped with.*
- *Only use original spare parts or spare parts approved by the manufacturer.*
- *Contact your retailer for any non-scheduled maintenance.*
- *Periodically check the electrical connections of the device, making sure they are in good condition and replacing any damaged cables.*
- *Check parts that are subject to wear periodically and replace if necessary.*
- *Do not open or disassemble the device.*

4 NAVIGATOR NANO USER SAFETY

The technology used for the design and inspection of the manufacture of the NAVIGATOR NANO diagnostic tools, make them reliable, simple and safe to use.

Personnel in charge of using the diagnostic tools is required to follow the general safety regulations and use the NAVIGATOR NANO devices for their intended use only. Furthermore, they are required to carry out the maintenance as described in this manual.

4.1 Glossary

Operator: qualified person responsible for using the diagnosis tool.

Tool/device: any NAVIGATOR NANO device.

4.2 General Rules

- *The operator must have basic knowledge in mechanics, automotive, car repairs and potential dangers that can occur during the auto-diagnosis operations.*
- *The operator must carefully read all the information and instructions in the technical documents provided with the tool.*

4.3 Operator Safety



Airbags inflate with great force; a tool placed in their expansion area may be projected towards the occupants of the vehicle causing serious harm.

Safety Measures:

- *DO NOT position the tool in the airbag expansion area.*



Some auto-diagnosis operations allow enabling/disabling certain actuators and safety systems in the vehicle.

Safety Measures:

- *Do not allow unqualified personnel using the tool, in order to avoid accidents to people or damages to the tool or to electronic systems of the vehicle to which it is connected.*
- *Follow the instructions provided by the software closely and carefully.*

4.4 Tool Safety



The tool was designed for the use in specific environmental conditions.

The use of the tool in environments with temperature and moisture characteristics different from those specified may impair its efficiency.

Safety Measures:

- *Place the tool in a dry place.*
- *Do not expose or use the tool near heat sources.*
- *Position the tool making sure it can be properly ventilated.*
- *Do not use corrosive chemicals, solvents or harsh detergents to clean the tool.*



The tool was designed so as to be mechanically tough and suitable for use in a workshop.

Carelessness in the use and excessive mechanical stresses may impair its efficiency.

Safety Measures:

- *Do not drop, shake or subject the tool to shocks.*
- *Do not place objects over the cables and do not bend them.*
- *Do not perform any kind of intervention that may damage the tool.*
- *Do not open or dismantle the tool.*



The tool was designed so as to be electrically safe and to work with specific power supply voltage levels. Failure to comply with the specifications related to the power supply may impair the tool efficiency.

Safety Measures:

- *Do not wet with water or other liquids.*
- *If not otherwise specified, use the tool on vehicles with a 12V DC power supply and the chassis connected to the negative pole.*
- *The connection for the power supply of the tool should always occur with the battery system of the concerned vehicle.*
- *Do not use external batteries to supply the tool unless it is explicitly required by the software.*
- *Pay particular attention to battery terminals and cables when setting up a connection to the vehicle. This will avoid false contacts and/or avoid accidentally connecting the cables to metallic parts of the vehicle being tested.*
- *Unused terminals must be covered and protected by the appropriate rubber plugs.*



Electromagnetic compatibility tests on the tool ensure that it can be adapted to technologies normally used on vehicles (e.g.: engine check, ABS, airbag etc.). Nevertheless, if malfunctions occur you need to contact the retailer.

5 ENVIRONMENTAL INFORMATION



For information regarding the disposal of this product please refer to the pamphlet accompanying your tool.

6 OPERATION OF THE TOOL RADIO DEVICES



Wireless connection 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 the TEXA instruments, many more products use this technology, such as cellular phones, portable devices, Computers, printers, photo cameras, Pocket PCs etc.

The Bluetooth, WiFi and GPRS interfaces look for compatible electronic devices according to the radio signal they emit and establish a connection between them. TEXA tools select and only prompt you with compatible TEXA devices. This does not exclude the presence of other sources of communication or disturbance.


THE EFFICIENCY AND THE QUALITY OF BLUETOOTH, WiFi AND GPRS COMMUNICATION MAY BE INFLUENCED BY THE PRESENCE OF RADIO DISTURBANCE SOURCES. THE COMMUNICATION PROTOCOL HAS BEEN DEVELOPED TO MANAGE THESE TYPES OF ERRORS; HOWEVER, IN THESE CASES COMMUNICATION MAY BECOME DIFFICULT AND CONNECTION MAY REQUIRE SEVERAL ATTEMPTS.

SHOULD THE WIRELESS CONNECTION BE CRITICAL AND COMPROMISE A REGULAR COMMUNICATION, THE SOURCE OF THE ENVIRONMENTAL ELECTROMAGNETIC DISTURBANCE MUST BE IDENTIFIED AND ITS INTENSITY MUST BE REDUCED.

Position the tool so that the radio devices it is equipped with can work properly. In particular, do not cover it with any shielding materials or with any metallic materials in general.

7 NORMATIVE INFORMATION

Compliance declaration

	TEXA S.p.A hereby declares that the NAVIGATOR NANO unit complies with the essential requirements and provisions of the Directive 1999/5/EC.
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A complete copy of the Declaration of Conformity 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 tested to operate with the antenna provided.

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

FCC Notice (U.S. Only)

FCC Class B - Applicable only to Limited Feature connections

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

NOTICE: The FCC regulations provide that changes or modifications not expressly approved by TEXA S.p.A. could void your authority to operate this equipment.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the system with respect to the receiver.
- Move the system away from the receiver.
- Plug the system into a different outlet so that the system and the receiver are on different branch circuits.

If necessary, consult a representative of TEXA S.p.A. or an experienced radio/television technician for additional suggestions.

The following information is provided on the device or devices covered in this document in compliance with the FCC regulations:

- Product: NAVIGATOR NANO
- Company: TEXA S.p.A.

To access the radio module, unscrew the screws located in the back and lift the rear plastic cover; this way the module with the FCC ID printed on it is visible.

The minimum required separation distance between the radio module's antenna and the human body shall be at least 20 cm to comply with the RF exposure limits for mobile devices.

8 INTRODUCTION

NAVIGATOR NANO an advanced self-diagnostic device for cars, motorcycles and commercial vehicles equipped with an OBD socket.



NAVIGATOR NANO has been developed according to TEXA's "two-unit diagnosis" approach (diagnostic device used in combination with a display unit), in order to optimize the practicality and versatility of portable wireless solutions.

This device is compatible with the following Texa display units only: **AXONE 4**, **AXONE DIRECT**, **AXONE PAD**, **AXONE PALMTOP** and **MULTIPEGASO**.

NAVIGATOR NANO has been designed to be connected directly to the vehicle OBD socket; however, thanks to special cables and adapters it can be connected to other types of sockets as well (non-OBD cars and motorcycles).

9 DESCRIPTION

This chapter describes the general features of the **NAVIGATOR NANO** diagnostic interface.

9.1 Image of the device



1. **PV**: a connector that may be required when the control unit that you will be reprogramming requires auxiliary power.
2. **USB connector**: USB connector used to connect to the viewing unit.
3. **Green LED**: indicates if the tool is being powered and indicates the status of communication with the control unit.
4. **Blue LED**: indicates the Bluetooth communication status.
5. **LED light on button**.
6. **Diagnosis connector**: OBD diagnosis connector.

7. **LED light:** LED for lighting up the work area.

9.2 Technical Features

Processor:	CORTEX M3 STM32F103 72MHz
External SRAM memory:	8 MBits organized 512 KBytes x 16 bits
NAND Flash external memory:	132 MBits on 8-bits bus
Internal battery:	Lithium polymer, single cell, 3.7 V 120 mA/h
Vehicle Battery:	12 VDC Systems management
External power supply:	8 ÷ 16 V
Wireless connection:	Bluetooth class1 (30 m)
Diagnostic connector:	OBD
Supported protocols:	<ul style="list-style-type: none">• Blink codes• K, L, (with current protection 60 mA) ISO9141-2, ISO14230• CAN ISO11898, ISO11519-2• SAE J1850 PWM and VPW• EOBD (all protocols): SAE1979, SAEJ2534-1, ISO15031-5, ISO15765-4
Power Supply Connector:	OBD
Visual warnings:	1 green LED, 1 blue LED

Maximum current drawn:	Normal operation: 200 mA@12V standard, 500mA@12V maximum
Operating temperature:	0 ÷ 50 °C
Stocking temperature:	-20 ÷ 60 °C
Operating moisture:	10% ÷ 80% without condensation
Dimensions:	23x45x87 mm
Weight:	62 g
Standards:	<ul style="list-style-type: none"> • Directive: 1999/5/CE • Safety: EN 60950-1 • Electromagnetic compatibility: EN 55022, EN 55024, EN 301 489-1 • Radio systems: EN 301 489-17, EN 300 328-2

10 HOW TO USE THE DEVICE

NAVIGATOR NANO must be used by qualified personnel.

TEXA S.p.A. offers its clients professional training courses.

In these training courses the technicians are followed step by step by specialized personnel. Their goal is to give these technicians as much familiarity with the tools and their software as possible. This way the technicians will learn how to make the best use of TEXA S.p.A. products.

For more information regarding training courses offered by TEXA S.p.A. go to our website www.texa.it.

10.1 Location of the OBD Socket

The images below indicate where the diagnosis connector may be located.

We always recommend checking the location of the OBD socket in the vehicle user manual.



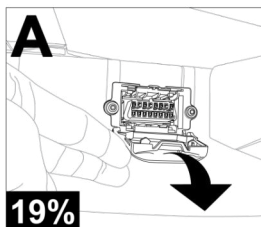
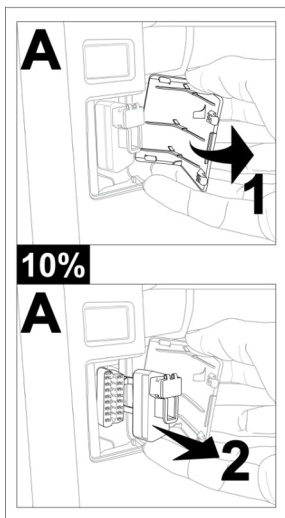
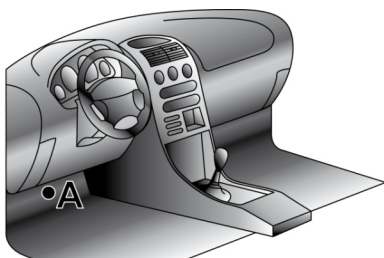
The percentages indicated in each image refer to how often the manufacturers install the socket in that specific area.

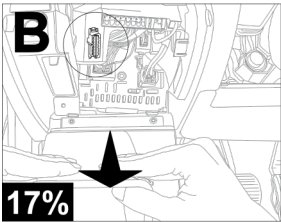
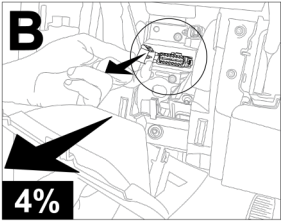
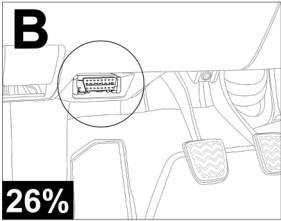
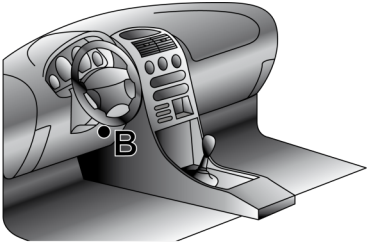


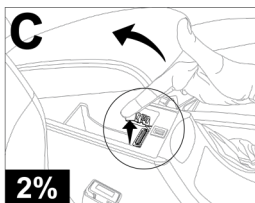
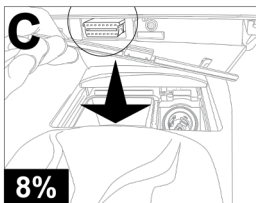
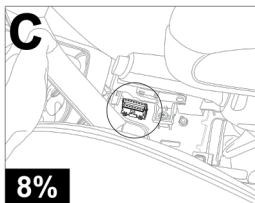
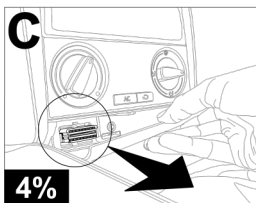
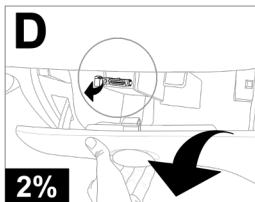
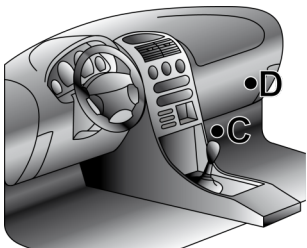
The OBD socket is often located near plastic or metal elements and/or cables in general which could be damaged if you are not careful when you install the device.



Do not force the device or the connectors and take the utmost care when connecting and disconnecting them.







10.2 Powering the Device

The internal battery within the device powers the LED light only; make sure the device is powered correctly during diagnosis.

The device can be powered in any of the following three ways:

- **via the diagnosis connector**
- **directly from the battery**
- **through lighter cable**

The **green LED** remains on (does not flash) if the device is being powered properly.



Do not use external batteries that are not electrically connected to the vehicle you are working on.

10.2.1 Powering the Device via the OBD Socket

The device can be powered via the OBD socket of the vehicle being tested.



For more information on how to connect the device to the vehicle diagnostic socket consult the chapter "Connecting to the Control Unit".

The **green LED** remains on (does not flash) if the device is being powered properly.

10.2.2 Power Directly from Battery

Power can be drawn **directly from the vehicle battery** via specific adapters and cables.



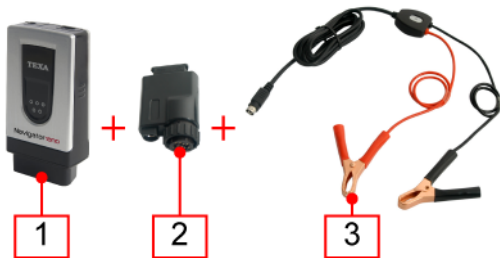
If the battery is in the rear of the vehicle, we recommend connecting the tool directly to the power supply points coming from the battery, available near the area in which you are operating.



Only use the battery power when specifically requested to do so by the software.

JACK CONNECTOR

The device can be powered via a suitable cable that can be connected directly to the car adapter.



- *Device*
- *Car adapter*
- *Battery clamps (with jack connector)*

Proceed as follows:

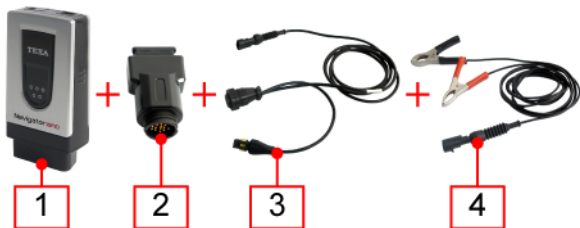
1. *Connect the device to the adapter.*
2. *Connect the clamps to the adapter.*
3. *Connect the clamps to the vehicle battery.*

The **green LED** remains on (does not flash) if the device is being powered properly.

In this case the **green LED** on the **junction box** of the clamps will also turn on.

POWER SUPPLY CABLE

The tool can be powered via a **power supply cable** connected to specific diagnosis cables.



1. Device
2. Motorcycle adapter
3. Diagnosis cable
4. Battery clamps (with superseal connector)

Proceed as follows:

1. Connect the device to the adapter.
2. Connect the diagnosis cable to the adapter.
3. Connect the clamps to the cable.
4. Connect the clamps to the vehicle battery.

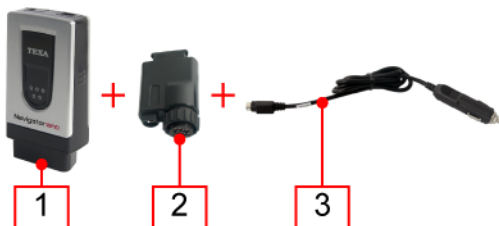
This power supply mode can also be used on cars and commercial vehicles using suitable adapters and diagnosis cables.

The same connection procedure applies to all.

10.2.3 Power Supply Through Lighter Cable

The device may also be powered by the battery of the vehicle being tested, thanks to an appropriate cable which can be connected to the car adapter via a jack.

The connection through the lighter socket (if available) is possible only by using an appropriate cable.



1. Device
2. Car adapter
3. Connection cable for the cigarette lighter socket

Proceed as follows:

1. Connect the device to the adapter.
2. Connect the connection cable for the cigarette lighter socket to the adapter.
3. Connect the cable to the cigarette lighter socket.

The **green LED** remains on (does not flash) if the device is being powered properly.

In this case the **green LED** on the **connector for the lighter socket** will also turn on.



If using the cigarette lighter socket within the vehicle make sure power is continuously being supplied (therefore not just with the ignition key on the ON

position). Use an external battery only when indicated; in these cases connect the negative pole of this battery to the ground of the vehicle being diagnosed.

10.3 Recharging the Internal Battery

The device is equipped with an internal battery that powers the LED light only.

To charge the internal battery simply power the device using the vehicle battery or connect the display unit via USB.

We suggest powering the display unit using the mains when charging the device via USB.

10.4 How to Communicate with the Viewing Unit

The tool is not equipped with a user interface and the data acquired is sent to an appropriate viewing unit.



Before starting the communication with the display unit, you must perform the special configuration procedure.

The connection of the tool to the display unit can occur in the following modes:

- *Bluetooth*
- *USB*

To best exploit the potential of the tool, you must use the Bluetooth connection.



Power, connect and turn on the tool before starting up the programs which will be used to interface with it. If this procedure is not followed communication errors could occur.

While the tool is turning on it **automatically detects the communication mode** through which it is connected to the display unit.

For example: the Bluetooth communication mode (active by default) is disabled when the USB cable is connected.



To change the communication mode between the tool and the viewing unit you must first turn off the tool and then choose the mode you prefer.

10.4.1 Connecting via Bluetooth

The wireless connection eliminates the communication cable with the display unit, making the tool more practical to use.



The serial number to use in order to configure Bluetooth communication can be found on the label behind the OBD connector.

The **blue LED** flashes:

- *During the configuration phase of the Bluetooth communication.*
- *During communication between the tool and the viewing unit, during data transmission.*



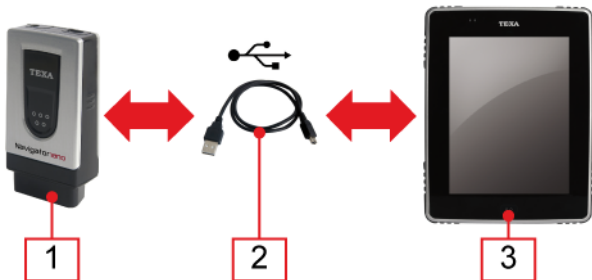
For a correct configuration we recommend powering the tool (making sure the green LED is on) before launching the configuration procedure of the software.

For more information regarding the configuration procedure consult the Software Operating Manual.

10.4.2 Connection via USB

In order to connect via USB use the USB cable provided or, if necessary, use cables on which "**USB HIGH SPEED**" is specifically indicated.

This powering mode is recommended during control unit reprogramming operations.



1. Device
2. USB cable
3. Display unit

Proceed as follows:

1. Connect the USB mini connector of the USB cable to the device.
2. Connect the USB connector of the USB cable to the display unit.
3. Continue with the communication software configuration.

The internal battery of the device will be charged when the display unit is connected via USB.

For more information regarding the configuration procedure consult the Software Operating Manual.

10.5 Blink Code

The LEDs on the devices flash to indicate the various states of the devices themselves, both while they are connecting to the display unit and when they are connecting to the vehicle.

LED		STATUS
GREEN	OFF	Device not powered.
	ON	Device powered.
	Blinking	Tool in communication with the vehicle control unit.
BLUE	Off	No Bluetooth communication.
	ON	--
	Blinking	Device in communication with the display unit.

10.6 Connecting to the Control unit

To carry out self-diagnosis you are required to connect the tool to the diagnosis socket of the vehicle and activate the connection between the tool and control unit via the software.



Proceed as follows:

1. Via the **software** select the vehicle and the system on which you wish to carry out the self-diagnosis.
2. Locate the **diagnostic socket** using the information (images or short video) provided by the **software**.
3. Connect the **tool** to the **control unit** using, when required, the **appropriate cables and adapters** indicated by the **software**.

A **flashing green LED** indicates that the vehicle **control unit** and the **device** are communicating correctly.

The position and the type of the socket on the vehicles vary according to the make and model; this is why the software provides the information required to locate it.



Carefully follow the instructions provided by the software.



If not otherwise specified, supply the tool directly by the connection with the diagnostic socket of the vehicle.

For further information see the operating manual of the software.

10.6.1 LED Light

The LED light allows you to light up the diagnosis connector and the work area.

Proceed as follows:

Press and hold the on button.

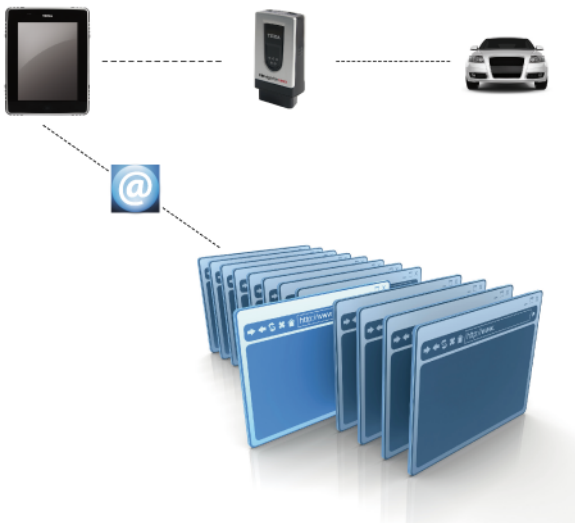
The LED light turns on.

Release the button to turn off the LED light.

10.7 Pass-Thru

Thanks to **NAVIGATOR NANO** and a simple Internet access you can carry out all the repairs that require the original reprogramming of the vehicle control units once they have been replaced.

In compliance with protocol SAE J2534 Pass-Thru, vehicle manufacturers must offer independent repair shops the possibility to carry out reprogramming on vehicle control units.



You need an active and working Internet connection. (ADSL is strongly recommended).



The type of Internet connection required may vary depending on the manufacturer's specific requirements.



When using Pass-Thru, auxiliary power may be required in order to recharge the vehicle battery.



The activation date, the actual availability, the type, the cost and the procedures regarding the use of the Pass-Thru service(s) are specifically determined by the individual manufacturer; costs, performance, and procedures may therefore vary independently from what TEXA S.p.A establishes.



TEXA S.p.A. is not under any circumstance liable for repair and maintenance work carried out on vehicles; by using the technical information and/or the service(s) offered by the specific websites of individual manufacturers, in this sense, Pass-Thru procedures are subject to the acceptance of specific liability regulations defined by the individual vehicle manufacturer.

10.8 Self-diagnosis

The data acquired by the tool are displayed on the viewing unit via the software.

The software provides functions that allow you, for instance, to do the following:

- *monitor the engineering parameters*
- *view and delete the errors detected by the control unit*
- *check the various states within the control unit (ex.: engine running/not running, low beams on/off)*
- *view the information related to the control unit*
- *test the operation of the devices driven by the control unit (actuators)*
- *carry out permanent adjustments on certain devices*

Furthermore, the software provides technical sheets useful in diagnosis and provides step by step procedures to carry out particular operations (ex.: resetting warning lights).

All the configuration operations of the tool are performed via the software.

For more information about the installation of the software and its use, please refer to the Setup Manual and the Operation Manual.

11 MAINTENANCE

The tool does not require special maintenance.

For a longer life of the tool, keep it clean and follow the instructions provided in this manual carefully.

If necessary, contact your Dealer or the Technical Assistance Service.

12 SOLUTIONS TO PROBLEMS

For any technical problem contact your retailer/distributor.

Below you will find a list of simple instructions that the client can carry out without having to ask for technical assistance.

PROBLEM	PROBABLE CAUSE	POSSIBLE SOLUTION
The device is not communicating with the control unit.	The tool / diagnostic cable is not connected properly.	Connect the tool / diagnostic cable properly.
	The adapter being used is not suitable.	Use a suitable adapter.
	The diagnostic cable is damaged.	Change the diagnostic cable.
	The diagnosis connector is damaged.	Contact Technical Assistance.
	The vehicle is off.	Turn on the vehicle.
The tool cannot communicate with the display unit/ Bluetooth peripherals.	The Bluetooth peripheral/display unit is turned off.	Turn on the Bluetooth peripheral/display unit.

PROBLEM	PROBABLE CAUSE	POSSIBLE SOLUTION
The tool cannot communicate with the display unit/ Bluetooth peripherals.	The Bluetooth peripheral/display unit is not within the tool's range.	Move the Bluetooth peripheral/display unit into the tool's range.
		Move the tool into the range of the Bluetooth peripheral/display unit.
	The device has not been properly configured.	Perform the configuration through the special function in the software.
	The tool has been placed near shielding materials.	Place the tool away from shielding materials.
	The presence of other wireless communications disturbs the signal.	Move away from possible sources of interference.
		If possible, turn off the devices that cause interference. Wait and repeat the communication attempt.

13 LEGAL NOTICES

For information regarding the legal notices, please refer to **International Warranty Booklet** provided with the product in your possession.