

DOPPLER SIMULATOR



Rev.

TEXA

ENGLISH.....5

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1 Revision of the Manual

This document is the technical manual for the product:SIMULATORE DOPPLER

Document Review Number:06

Date of Issue:26/02/2021

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 specialised in the automotive field only. Reading and understanding the information in this manual cannot replace adequate specialised 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.

The original manual was written in Italian, every other language is a translation of the original manual.

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2 LEGEND OF THE SYMBOLS USED

	Toxic material hazard		Risk of crushing hands
	Explosive material hazard		Floor level obstacle warning
	Electric shock hazard		Laser beam hazard
	Electromagnetic field hazard		Low temperature danger - freezing
	Flammable material hazard		General Risk
	Hot surface hazard		Obligation to read the instructions
	Corrosive substance hazard		Safety glasses required
	Risk of noise level above 80 dB(A)		Protective gloves required
	Moving Parts Risk		Disconnect mains plug from electrical outlet

	This is not a safety symbol. It indicates a hazardous situation which, if not avoided, will result in serious permanent injury or death.
	This is not a safety symbol. It indicates a hazardous situation which, if not avoided, may result in serious permanent injury or death.
	This is not a safety symbol. It indicates a hazardous situation which, if not avoided, may result in minor injury.
	This is not a safety symbol. It indicates a hazardous situation which, if not avoided, may result in material damage.
	This is not a safety symbol. It indicates important information.

3 SAFETY RULES

The technology used in designing and inspecting the production of the **DOPPLER SIMULATOR** units makes it a simple device, reliable and safe to use.

The personnel in charge of using the diagnostic tools are required to follow the general safety rules and to use the **DOPPLER SIMULATOR** devices for their intended use only. Furthermore, they are required to carry out the maintenance as described in this manual.

All the requirements based on the following must be assessed and applied:

3.1 Glossary

Operator:qualified person in charge of using the device.

Device:DOPPLER SIMULATOR

INFORMATION

The definition of "operator" cannot be applied to minors or to people with reduced physical, sensory or mental capabilities or without any experience or knowledge required.

3.2 General Rules



The operator must carefully read and understand the information and instructions in the technical documents provided with the device.If the operator is not able to read this manual, the operating instructions and safety indications must be read and discussed in the operator's native language.

- *The operator that works on vehicles must have basic qualifications and knowledge of mechanics, automotive engineering, vehicle repairing and of the potential dangers that may arise during self-diagnosis operations.*
- *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 follow all the instructions provided in the technical documents.*
- *The operator is required to wear adequate personal protective equipment (PPE) at all times when using the device.*
- *The operator must monitor the device during the operating phases wherever this is possible in compliance with the safety measures indicated below.*
- *The operator must periodically check the electrical connections of the device, making sure they are in good condition and immediately replacing any damaged cables.*
- *The operator must periodically check the parts that are subject to wear and replace them if necessary, using only original spare parts or spare parts approved by the manufacturer.*
- *The operator must stop using the device immediately should any failure occur, and promptly contact the technical assistance.*
- *Contact your retailer for extraordinary maintenance operations.*
- *Do not remove or damage the labels and the warnings on the device; do not in any case make them illegible.*
- *Do not remove or tamper with any safety devices the device is equipped with.*

3.3 Operator Safety

CAUTION



The device was manufactured to be electrically safe and to work with specific supply voltage levels.

Improper use may expose the operator to the risk of electric shock, even though of low intensity.

Safety Measures:

- *Wear adequate personal protective equipment during all the operating phases.*
- *Do not handle or touch the device or any accessories (e.g. cables) with wet hands.*

WARNING



The current used during the operating phases generates Electro-Magnetic Fields (EMF) near the device.

Even though of low intensity, these fields may interfere with medical prostheses, such as pacemakers.

Safety Measures:

- *Keep away from the device after launching the operating phases.*
- *If you have a medical prosthesis (e.g.: pacemaker), check with your doctor as to the appropriateness of using the device or being near it.*

CAUTION



The device was designed and built to be stable and solid once installed correctly.

Severe impacts may compromise its stability other than its functionality.

Safety Measures:

- *Use the necessary safety equipment.*

3.4 Device Safety

NOTICE



The device was designed to be used in the environmental conditions indicated in the Technical Features chapter.

The device is suitable for indoor use only.

Using the device in environments with temperatures and humidity that differ from those specified may impair its efficiency.

Safety measures:

- *Always place the device in a dry area.*
- *Do not expose or use the device close to heat sources.*
- *Do not use corrosive chemicals, solvents or harsh detergents to clean the device.*
- *Do not use the device outdoors.*

NOTICE



The device was designed to be mechanically tough and suitable for use in a workshop.

The device is protected against solid objects with a diameter of 12.5 mm and against access with a finger (IP20).

The device is provided sealed by screws.

Careless use and excessive mechanical strain may impair its efficiency.

Safety measures:

- *Do not drop, shake or knock the device.*
- *Do not carry out any type of intervention that may damage the device.*
- *Do not open or disassemble the device.*

NOTICE



The device was manufactured to be electrically safe and to work with specific supply voltage levels.

Failure to comply with the specifications related to the power supply may impair the device's efficiency.

Safety measures:

- *Do not wet the device with water or other liquids.*
- *The device's power supply must always be connected following the indications provided in this manual.*
- *Do not use an external batteries to supply the device.*
- *Power the device using only a charger model that is indicated in the 'Technical Features' chapter.*
- *If replacing it, only use a fuse model that is indicated in the 'Technical Features' chapter.*
- *Make sure the device's power plug can always be accessed so that it is possible to disconnect it from the mains at any time.*

! WARNING



The electromagnetic compatibility tests carried out on the device guarantee that it can be adapted to the technologies normally used on vehicles (e.g. engine control, ABS, airbag, etc.). Nevertheless, if malfunctions occur, contact the vehicle's dealer.


4 ENVIRONMENTAL INFORMATION



Do not dispose of this product with other undifferentiated solid waste.
For information regarding the disposal of this product please see the pamphlet supplied.

5 NORMATIVE INFORMATION

Simplified EU Declaration of Conformity

	<p>This device is in conformity with the essential requirements and other relevant provisions of DIRECTIVE 2014/30/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (recast) - in short: EMC directive.</p> <p>The user can see this directly from the CE marking.</p> <p>The full text of the EU declaration of conformity is available at the manufacturer.</p>
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6 DOPPLER SIMULATOR

The TEXA **DOPPLER SIMULATOR** is a device that allows calibrating the sensors that make up the **ADAS (Advanced Driver Assistance System)**.



Calibrating the sensors is needed in situations such as:

- *when replacing one or more sensors that make up the system;*
- *when repairing the rear side of the vehicle;*
- *after removing and repositioning the rear bumper.*

The calibration requires using:

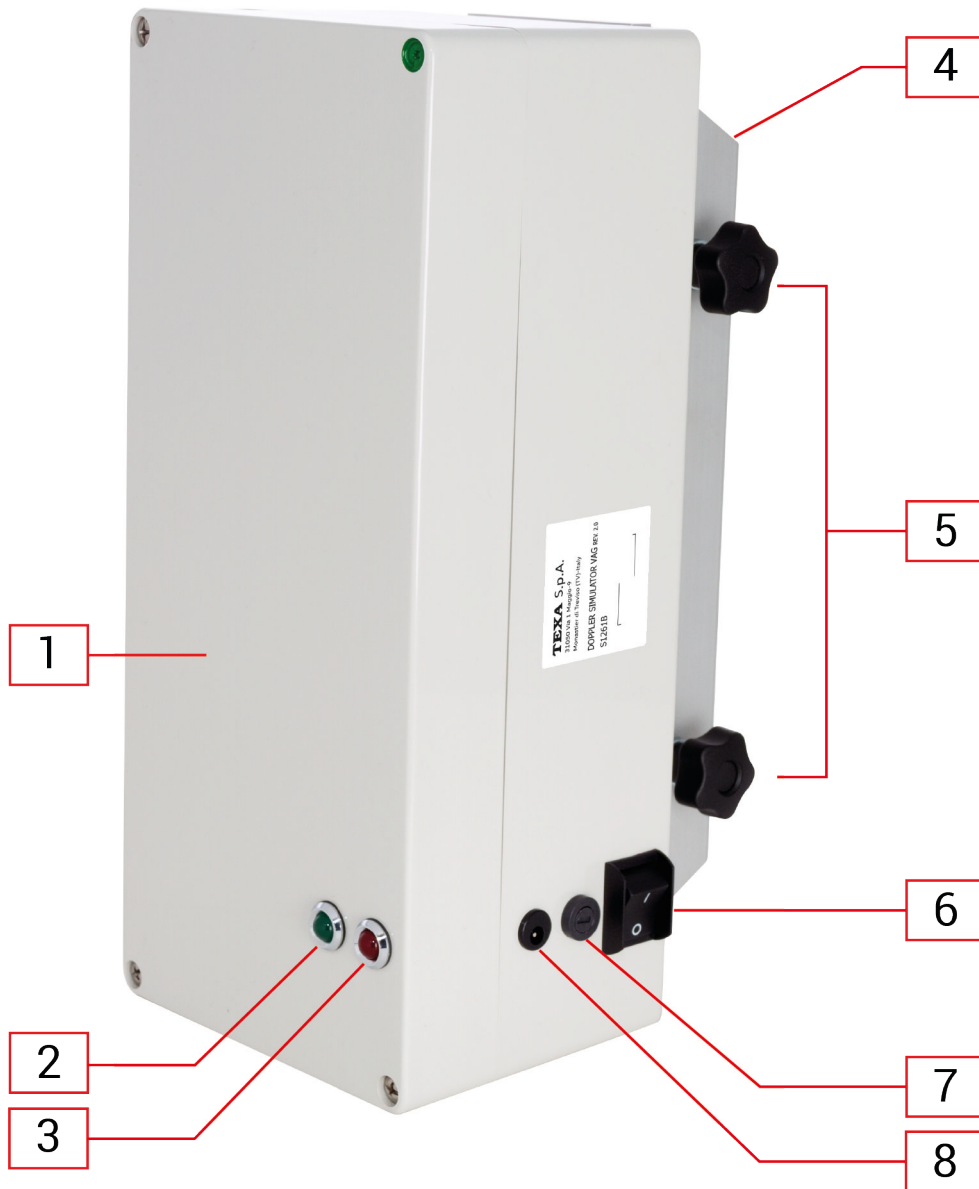
- *a diagnostic tool connected to the vehicle;*
- *the calibration panel indicated by the diagnostic software;*
- **DOPPLER SIMULATOR;**
- *specific support for the **DOPPLER SIMULATOR**.*

The calibration procedure is completely guided by the software.




For further information see the specific help sheets available in the diagnostic software.

7 DESCRIPTION



1. Emitter side
2. Green LED
3. Red LED
4. Sliding guide
5. Fixing screws
6. ON / OFF switch
7. Protection fuse
8. Connector for external power adapter

8 TECHNICAL FEATURES

Manufacturer:	Heicks Industrieelektronik GmbH
Model:	V00263 - Dopplersimulator MDS 24
Brand:	TEXA S.p.A.
Product name:	DOPPLER SIMULATOR
Power supply:	Only by approved external power adapter
Charger:	External power adapter FRIWO FW8030/24 <ul style="list-style-type: none"> • <i>Input: 100 - 240 V, 50/60 Hz, 600-300 mA</i> • <i>Output: 24 V ---, 1,25 A, 30 W</i>
Fuse:	IEC 60127-2, 250 VAC, Inert T 0.5A, 5mm x 20mm
Main switch:	ON / OFF switch
Operating lights:	Green LED Red LED
Operating temperature:	5 °C ÷ 30 °C
Storage and operation moisture:	10% ÷ 80% without condensation
Dimensions [mm]:	340x150x175
Weight:	2,97 kg
Environmental conditions:	<ul style="list-style-type: none"> • <i>Use: indoors</i> • <i>Maximum relative humidity: 80 %</i>
Protection level:	IP20
<p>[1] Etichetta TEXA</p> <p>[2] Data Plate</p>	 <div data-bbox="1077 1332 1348 1556"> <p>[1] TEXA S.p.A. 31050 Via 1 Maggio-9 Monastier di Treviso (TV)-Italy DOPPLER SIMULATOR VAG REV.2.0 S1261B</p> </div> <div data-bbox="949 1668 1348 1892"> <p>[2] Dopplersimulator MDS 24 Heicks-Artikel-Nr. V000263 SN: 565840001 / G 1.1 Baujahr: 2020 Heicks Vertriebs-GmbH Am Schwarzen Weg 25 - 31 59590 Geseke</p> <p>VORSICHT: STROMSCHLÄGGEFAHR NUR AN TROCKENEN ORTEN VERWENDEN CAUTION: RISK OF ELECTRICAL SHOCK DRY LOCATION USE ONLY</p> <p>Heicks Vertriebs-GmbH</p> <p>CE</p> </div>

9 PREPARING FOR USE

To carry out the calibration, the device must be installed on a specific pillar forming part of a calibration unit.

INFORMATION

Based on the pillar the device must be fastened to, you may have to replace the nuts pre-installed on the fixing screws with the ones supplied.

The height at which the panel must be positioned is adjustable.

CAUTION

Do not use different fastening systems other than the one specifically indicated in the manual.

Proceed as follows:

1. *Make sure the nuts pre-installed on the fixing screws are suitable for the grooves on the pillar where you wish to install the device; replace them with the supplied ones if necessary.*
2. *Insert the sliding guide in the designated pillar.*
3. *Position the device at the desired height.*
4. *Tighten the fixing screws until the device is secured in place.*



10 POWER SUPPLY

The device is powered by the mains through an external charger provided with the device.

⚠ CAUTION

The use of different chargers other than the one indicated can damage the device and expose the operator to the risk of injuries.

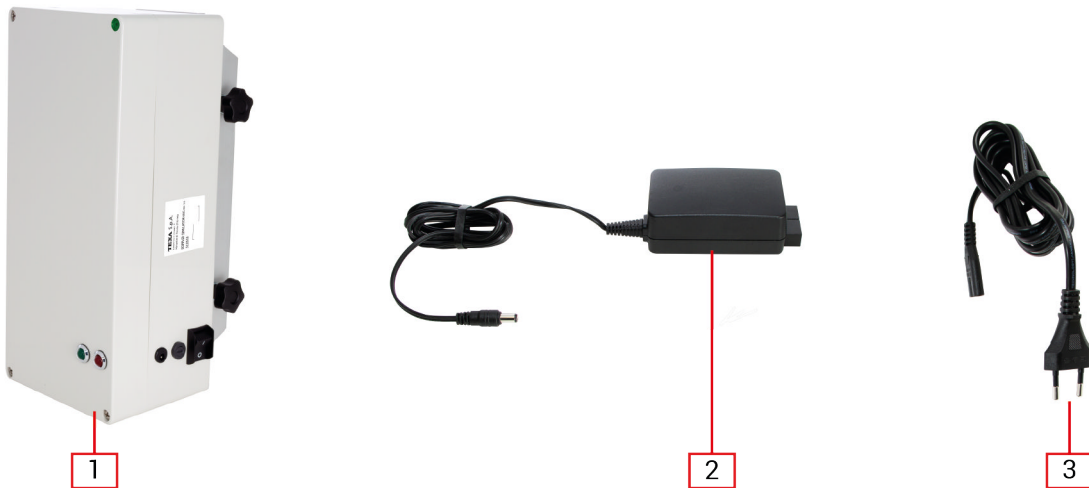
If the device is not used as specified by the manufacturer, the protection provided by the device may be altered.

The mains plug must be used to disconnect from the mains.

Do not position the device so that it becomes difficult to disconnect it from the mains.

Only use the power adapter:

- Model:FW8030/24
- Code:3911668



1. Device
2. Power adapter
3. Power cable

Proceed as follows:

1. Connect the external charger's jack to the connector located on the side of the device.
2. Connect the power supply cable to the external power adaptor.
3. Connect the power cable's plug to the mains.

11 POWER ON/OFF

The switch on the side of the device is its power switch.

Proceed as follows:

1. *Set the switch to position I (ON).*

The red LED turns on solid for approximately 5 seconds.

Once this time has elapsed, the red LED will turn off and the green LED will turn on.

The device can now be used.

To turn off the device you must operate the switch.

Proceed as follows:

1. *Set the switch to position O (OFF).*

NOTICE



Turning off in other ways rather than the ones indicated may damage the device.

Do not turn off the device by disconnecting it from the mains.

12 NOTIFICATIONS VIA LED

The device uses the LEDs it is equipped with to communicate with the operator.

LED		DURATION	STATUS
Red	Green		
Solid on* <i>(*) when the switch is set from 0 (OFF) to 1 (ON)</i>	Off	about 5 seconds	power ON
Off	Solid on	--	operational
Solid on** <i>(**) during operation</i>	Off	--	failure

NOTICE



If the rotational speed of the fan inside the device drops below the tolerance limit, the green LED will turn off and the red LED will turn on.

Turn off the device and disconnect it from the mains.

Contact your retailer or the Technical Assistance service.

13 PERFORMING A TEST / CALIBRATION

The **DOPPLER SIMULATOR** must be used by qualified personnel.

CAUTION

The device's electrical protection may change if used in a different way than the one specified by the manufacturer.



Proceed as follows:

1. *Make sure the device is securely anchored.*
2. *Connect the diagnostic device to the vehicle's diagnostic socket.*
3. *Start the specific software function for calibrating the sensors.*
4. *Arrange the panels for calibrating the sensors as indicated by the diagnostic software.*
5. *Position the device as indicated in the help sheet available in the diagnostic software.*
6. *Set the ignition switch to I (ON).*
7. *Wait for the green LED to turn on solid.*
8. *Follow the on-screen instructions provided by the software.*

NOTICE

If the rotational speed of the fan inside the device drops below the tolerance limit, the green LED will turn off and the red LED will turn on.



Turn off the device and disconnect it from the mains.

Contact your retailer or the Technical Assistance service.



For further information see the diagnostic device's Technical Manual and the software's Operating Manual.

14 MAINTENANCE

This product does not require special maintenance. However, we recommend the following:

- *carefully follow the instructions provided in this manual;*
- *keep the product clean;*
- *periodically inspect the electrical connections making sure they are in good conditions;*
- *immediately replace any damaged cables;*
- *only use original spare parts or spare parts approved by the manufacturer;*
- *contact your retailer for extraordinary maintenance operations;*

NOTICE



The use of spare parts and accessories that are not approved by the manufacturer may compromise the product's efficiency and safety.

Only use spare parts and accessories that are approved by the manufacturer.

Contact your retailer for any maintenance operation that is not described below.

You can see the list of authorised retailers at the following address: <https://www.texa.com/sales-network>

14.1 Fuse Replacement

If blown, the cartridge fuse [F] must be replaced with one with the same technical features:

- *IEC 60127-2, 250 VAC, Inert T 0.5A, 5mm x 20mm*



With the power cable connected to the mains, possible indications of the damage may be:

- *the red LED does not turn on when the switch is set to I (ON);*
- *the green LED turns off and the red LED does not turn on while the device is working.*

WARNING



Disconnect the power adapter from the device and from the mains before carrying out any of the operations described.

Proceed as follows:

1. *Set the switch to position O (OFF).*
2. *Pull out the fuse housing.*
3. *Remove the blown fuse.*

4. *Replace the fuse with one that has the same technical features.*
5. *Reinsert the fuse housing.*

15 TROUBLESHOOTING

For any technical problem contact your distributor/retailer.

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

PROBLEM	PROBABLE CAUSE	POSSIBLE SOLUTION
The device is not switching on.	The protection fuse is blown.	Replace the fuse with an identical one.
The calibration is not successful.	The device is not levelled.	Adjust the feet to make the device become perfectly even.
	The distances and positioning indicated by the software were not met.	Position the device as indicated by the software. Repeat the procedure.
	The fan rotation is incorrect. Green LED off. Red LED solid on.	Turn off the device and disconnect it from the mains. Contact your retailer or the Technical Assistance service.

16 LEGAL NOTICES

TEXA S.p.A.

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Tax Code - Company Register of Treviso ID No. - VAT No.: 02413550266

Single-shareholder company subject to the direction and coordination activities of Opera Holding S.r.l.

Paid-up share capital 1,000,000 € - R.E.A. (Economic Administrative Index) No. 208102

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