

eLight ZERO



Rev.

TEXA

ENGLISH.....	5
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1 REVISION OF THE MANUAL

This document is the technical manual for the product: eLIGHT ZERO

Document Review Number: 01

Date of Issue: 11/02/2022

INFORMATION



Read this manual before using the product.

Read the documents carefully whenever the General Risk symbol is shown.

2 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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3 LEGEND OF THE SYMBOLS USED

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

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

INFORMATION

This is not a safety symbol.
It indicates important information.

4 SAFETY RULES

The technology used for the design and manufacturing control of **eLIGHT ZERO** makes it a reliable, simple and safe device to use.

The personnel in charge of using the diagnostic and measuring tools is required to follow the general safety rules, to use **eLIGHT ZERO** for its intended use only and carry out the maintenance properly as described in this manual.

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

- *Labour inspectorate.*
- *Trade associations.*
- *Vehicle manufacturers.*
- *Anti-pollution regulations.*

4.1 Glossary

Device:eLIGHT ZERO

Operator:qualified person in charge of using the device

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.

4.2 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 and not take drugs nor drink alcohol before or when using the device.*
- *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.

4.3 Operator Safety

WARNING



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:

- Move the device only as indicated in this manual.
- Do not move the device on rough or uneven floors.
- Avoid moving the device on excessive slopes as much as possible.

WARNING



The device was designed and built so as to minimise the possibility of crushing due to moving parts.

Unsuitable clothing for the work environment and carelessness when using the device may put the operator at risk of injury.

Safety Measures:

- Use the necessary safety equipment.
- Always wear appropriate clothing for the work environment.
- Be careful when adjusting the moving parts of the device.

WARNING



The base of the device may be an obstacle that could cause you to stumble.

Safety Measures:

- Be careful when operating near the device.

WARNING



For a correct positioning of the device, for the purpose of the photometric analysis, specific laser pointers must be used.

Looking directly at the laser beam is not dangerous as long as the blink reflex is maintained, which allows limiting the cornea exposure to a time below 0.25 seconds.

Taking medications or alcohol may delay the blink reflex response, exposing the eye to irreversible damage.

Safety Measures:

- Use laser protection glasses if you are undergoing treatment with medications.
- Do not consume alcohol before or while using the device.
- Do not look directly at the laser beam, not even while wearing protective glasses.

WARNING



The accessible laser radiation is harmless to the eye as long as no optical tools (e.g. magnifying glasses, lenses, telescopes) are used in front of the laser opening.

An optical tool positioned in front of the laser opening reduces the cross-section of the laser beam, making the accessible radiation harmful to the eye.

Safety Measures:

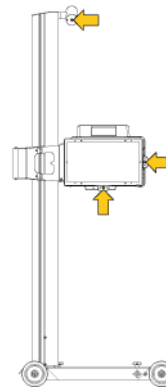
- Do not position any type of optical tool in front of the laser opening.
- Do not point the laser beam towards people, especially the face and eyes
- Do not point the laser beam towards reflecting surfaces.
- If possible, cover or eliminate any possible reflecting surfaces near the laser beam.

WARNING



The beam of a Class 2 laser product may cause: dazzle, flash blindness and afterimages, particularly in poor ambient lighting conditions.

This may cause indirect consequences on general safety, which result in temporary visual impairment or reactions of fear / surprise.



Safety Measures:

- Do not point the laser beam towards people, especially the face and eyes
- Do not look directly at the laser beam, not even while wearing protective glasses.

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.*

4.4 Device Safety

NOTICE



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

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.*
- *Keep the device at a minimum distance of 1 metre from the walls.*
- *Do not expose or use the device close to heat sources.*
- *Do not use corrosive chemicals, solvents or harsh detergents to clean the device.*

NOTICE



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

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.*
- *The device must be moved on its own wheels only.*
- *Adjust the position of the optical box only through the specific handle.*
- *Do not use the optical box as a supporting surface.*
- *Pay the utmost attention not to damage the Fresnel lens in any way.*

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.

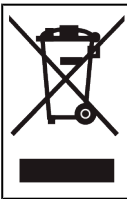
Safety measures:

- *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.*

** WARNING**

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

5 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.
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6 REGULATORY INFORMATION

Simplified EU Declaration of Conformity

	The manufacturer, TEXA S.p.A., declares that the radio equipment type eLIGHT ZERO is compliant with the following directives: • <i>EMC 2014/30/EU</i> • <i>LVD 2014/35/EU</i> • <i>RoHS 2011/65/EU, Delegated Directive (EU) 2015/863</i> The complete text of the EU declaration of conformity is available at the following Internet address: http://www.texa.com
	The manufacturer, TEXA S.p.A., declares that the radio equipment type eLIGHT ZERO is compliant with the following directives: • <i>Electromagnetic Compatibility Regulations 2016 (S.I. 2016/1091)</i> • <i>The Electrical Equipment (Safety) Regulations 2016</i> • <i>Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (S.I. 2012/3032)</i> The complete text of the EU declaration of conformity is available at the following Internet address: http://www.texa.com

7 eLIGHT ZERO

The **eLIGHT ZERO** headlight testers are tools specifically designed to optimise the photometric analysis and headlight adjustment on all types of vehicles.



The device is designed as a stand-alone tool, i.e. it can carry out the photometric analysis autonomously without needing to be connected to a display unit.

The device is equipped with a solid and lightweight aluminium frame that allows easily and safely moving the headlight tester on its rubber wheels.

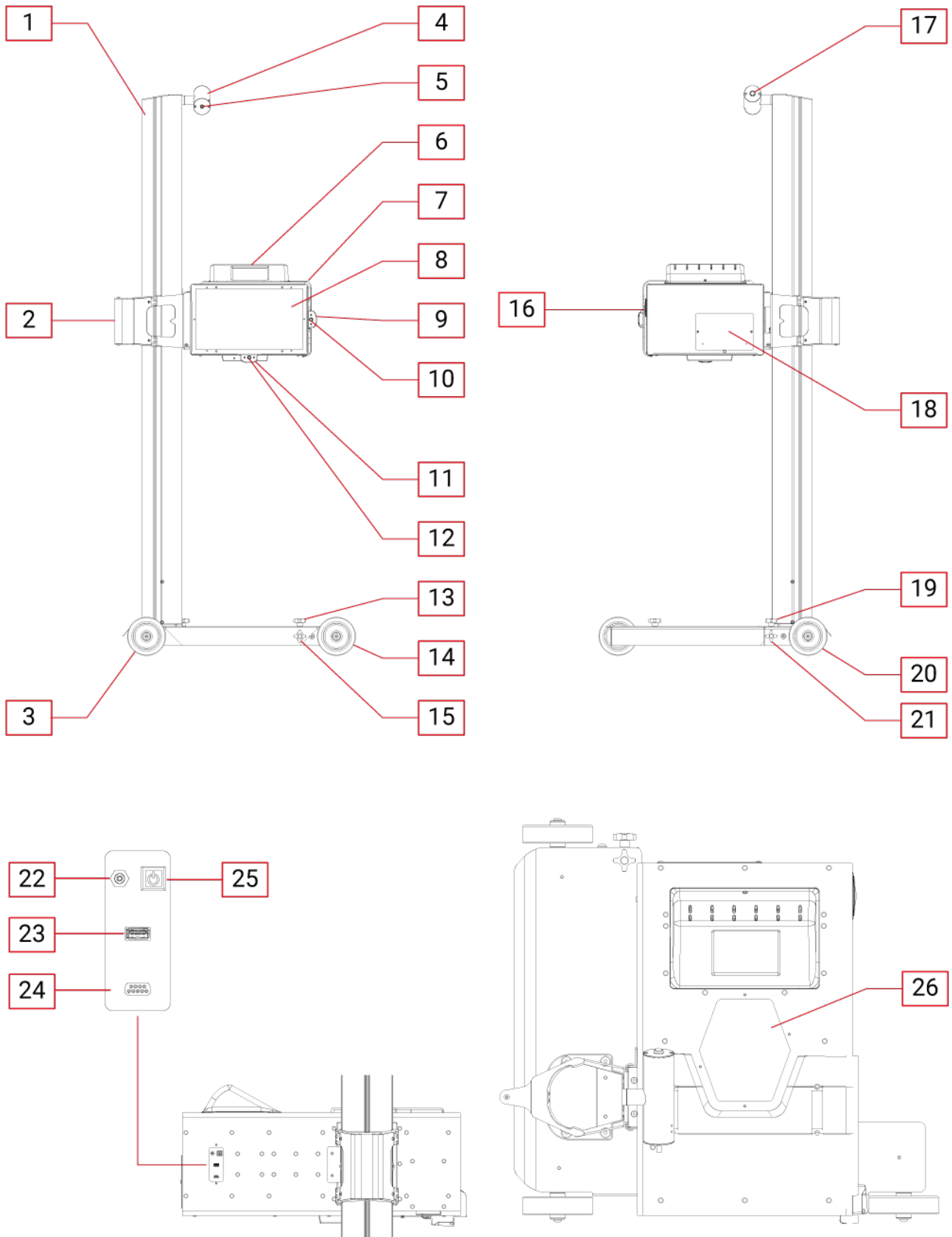
The headlight tester can also be installed as a fixed photometric station, with longitudinal movement on rail.

The column on which the optical box is installed can rotate by approximately 15° for better alignment with the vehicle.

The optical box can be adjusted in height thanks to a sliding system based on rollers that allows positioning it at the desired height.

The large Fresnel lens allows carrying out correct analyses even on large, irregularly-shaped headlights.

8 DESCRIPTION

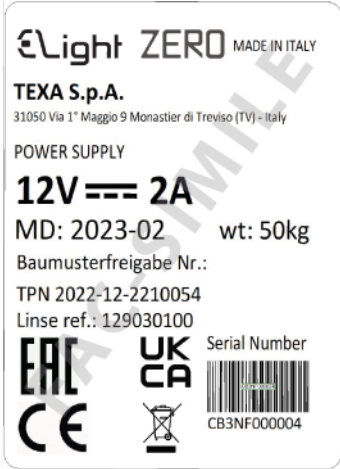


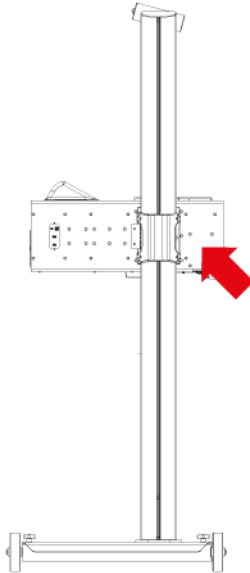
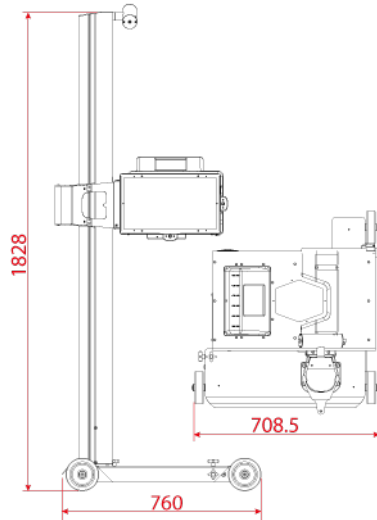
1. Column (with centimetre scale)
2. Handle
3. Rubber wheel
4. Adjustable laser pointer
5. Laser opening
6. Touchscreen
7. Optical box
8. Fresnel lens
9. Laser pointer
10. Laser opening
11. Laser pointer
12. Laser opening
13. Levelling screw
14. Rubber wheel
15. Position locking screw
16. Printer⁽¹⁾
17. Adjustable laser pointer ON button
18. Service compartment panel⁽²⁾
19. Levelling screw
20. Rubber wheel
21. Position locking screw
22. Power supply connector
23. USB connector
24. RS-232 connector
25. Power ON/OFF button
26. Round level (inside the optical box)

⁽¹⁾Optional

⁽²⁾Reserved for assistance operations

9 TECHNICAL FEATURES

Manufacturer:	TEXA S.p.A.
Product name:	eLIGHT ZERO
Power supply (battery):	Lead acid battery 12 V, 7 Ah
Charger:	• Type: external • Model: LC-2533 • Input: 100-240 Vac 50/60 Hz 200 mA • Output: 12 Vdc 800 mAh • Socket: Europlug CEE 7/16
Power supply connector:	5.5 / 2.1 mm jack
Absorption:	2 A max
Adjustable laser pointer power supply	3 AA 1.5 V batteries
Acceptable emission limit / laser classification:	Class 2
Laser safety label:	
Labelling:	

Label position:	
Micro-camera:	CMOS 5 Mpx
Wired communication:	• <i>USB x1</i> • <i>RS-232 x1</i>
User interface:	• <i>Touchscreen TFT 5.7" 320 x 240</i> • <i>LED</i>
Operating temperature:	5 °C ÷ 45 °C
Storage temperature:	-25 °C ÷ 45 °C (non-condensing humidity ≤ 95%)
Storage and operation moisture:	20% ÷ 80% without condensation
Dimensions [mm]:	
Weight:	50 kg
Environmental conditions	• <i>Use: Internal</i> • <i>Altitude: up to 2000 m</i> • <i>Atmospheric pressure: 0,7 ÷ 1,04 atm</i> • <i>Supply voltage fluctuations: ± 10%</i> • <i>Overvoltage category: II</i> • <i>Pollution degree: 2</i>

Protection degree:	IP20 (casing)
Directives:	EMC 2014/30/UE LVD 2014/35/UE RoHS 2011/65/EU, Delegated Directive (EU) 2015/863
Electromagnetic compatibility:	EN 61326-1
Electrical safety:	EN 61010-1 EN 50581-1: 2013-05
Safety of the laser devices:	EN 60825-1

9.1 Measurement

PROPERTY	VALUE
Vertical orientation (upward and downward):	0 ÷ 600 mm/10 m
	0 ÷ 6 %
	0 ÷ 3,432 °
Horizontal orientation (to the right and to the left):	0 ÷ 1000 mm/10 m
	0 ÷ 10 %
	0 ÷ 5,720 °
Luminous intensity:	0 ÷ 150000 lx/1 m
	0 ÷ 240 lx/25 m
Luminous intensity:	0 ÷ 150000 cd/25 m
Height of the optical centre from the ground:	240 ÷ 1450 mm

10 PREPARING FOR USE

The device is supplied unassembled.

The assembly instructions are provided together with the device, inside the packaging.

CAUTION



An imprecise or incorrect assembly may compromise the functionality and safety of the device, exposing the operator to the risk of injury.

The product must be assembled by properly trained personnel, following the indications provided in the specific assembly instructions.

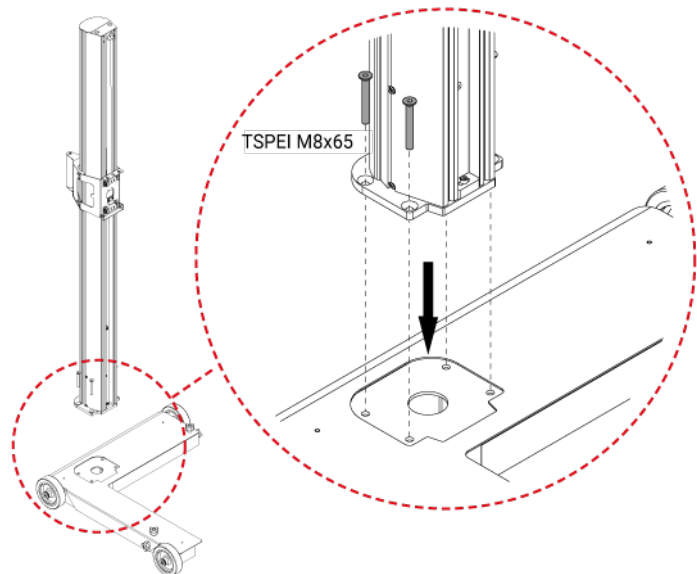
Do not try to repair the device if parts are missing or if defects or damages are detected.

Contact Technical Assistance indicating the model, code and serial number of the device.

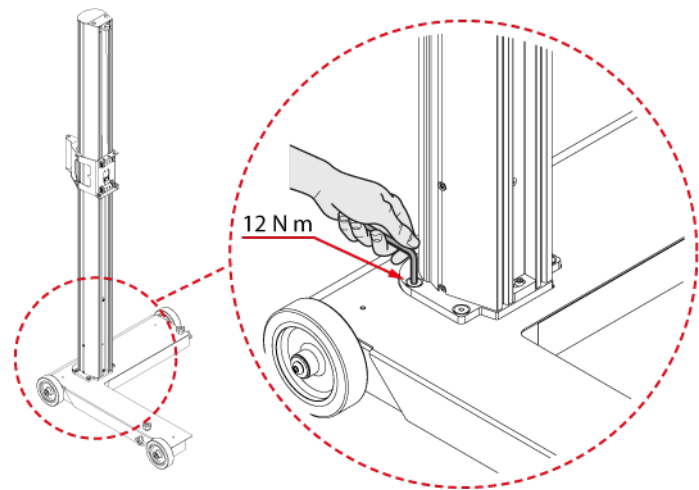
Keep the packaging, complete with all the original packaging material, should you need to send the product back to the manufacturer.

Proceed as follows:

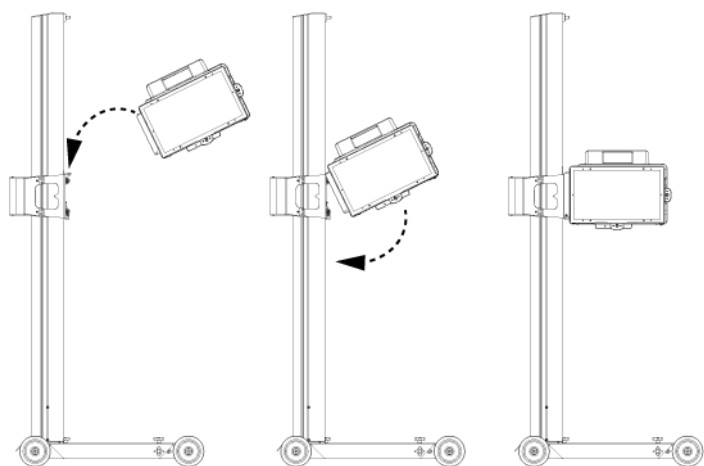
1. Place the wheeled base on the surface.
2. Fasten the column to the base using the specific screws.



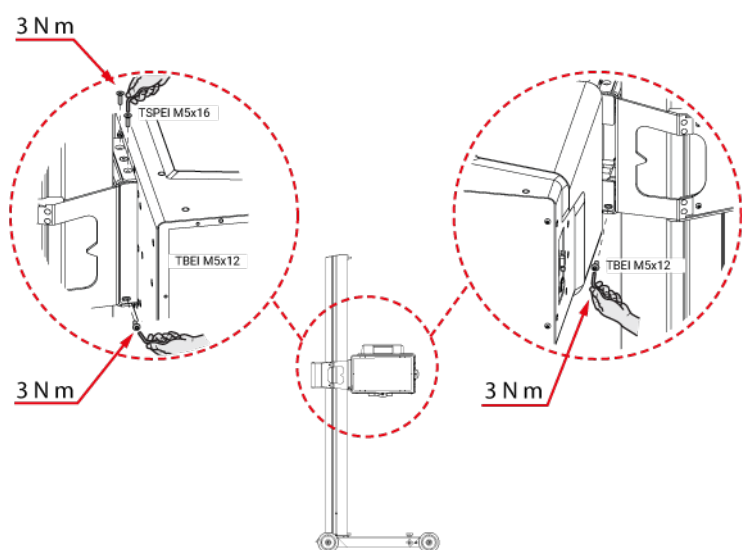
3. Tighten the screws with a torque of 12 Nm.



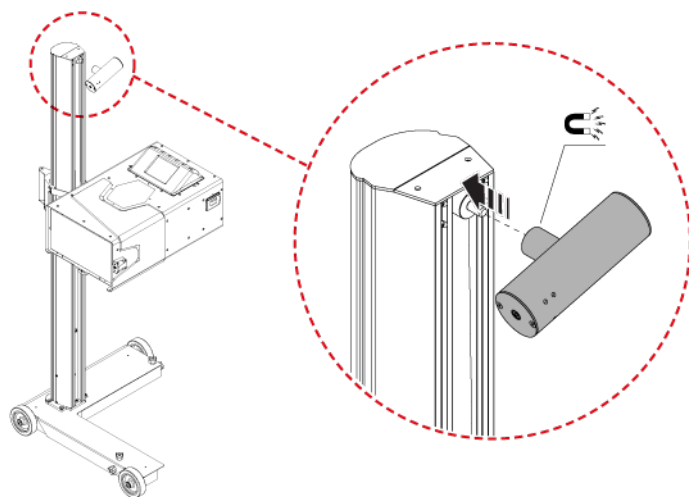
4. Fasten the optical box to the specific support from above and then rotate it as illustrated.



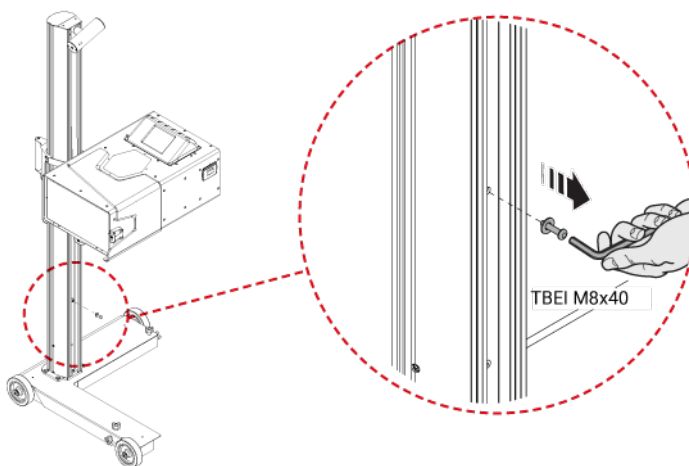
5. Secure the optical box to the support by tightening the specific screws with a torque of 3 Nm.



6. Position the adjustable laser pointer on the specific magnetic pin.



7. Remove the counterweight's safety screw.



10.1 Display Positioning

The display can be mounted in the following ways:

- "Adjust": the display is facing forward, towards the vehicle.
- "PTI": the display is facing rearward, towards the operator.

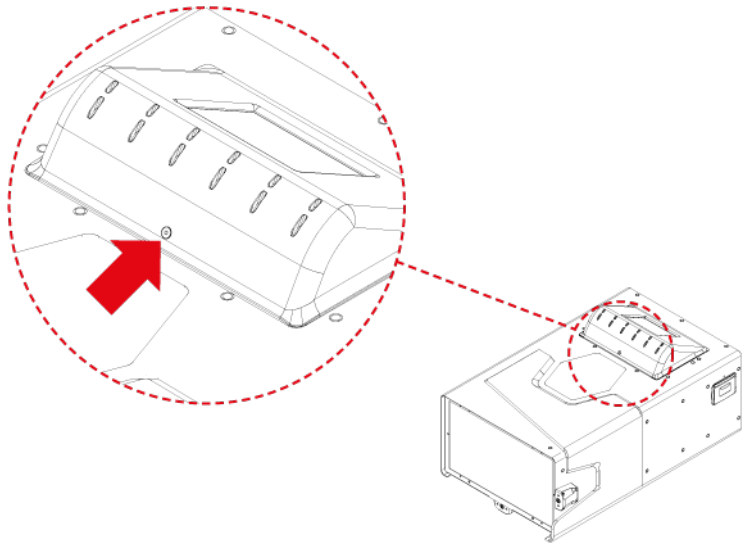
CAUTION

The operations described below must be carried out with the device off and disconnected from the mains.

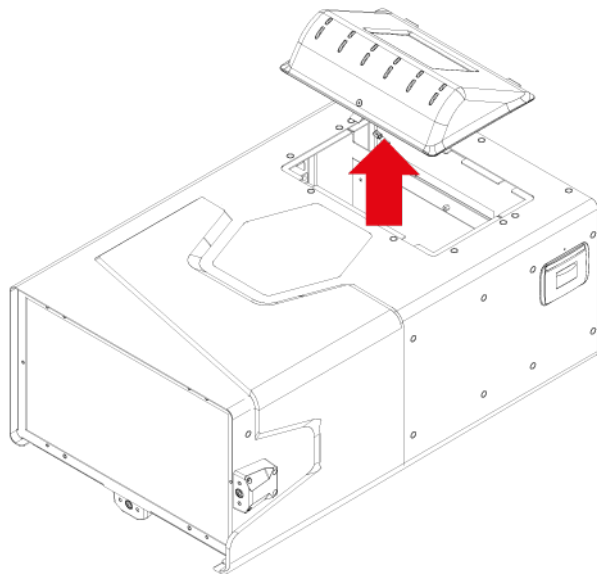


Proceed as follows:

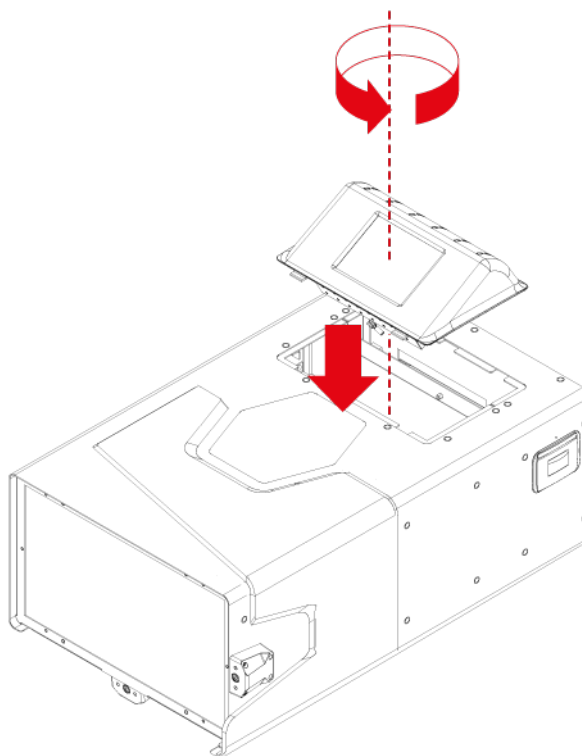
1. Unscrew the screw on the base of the display frame.



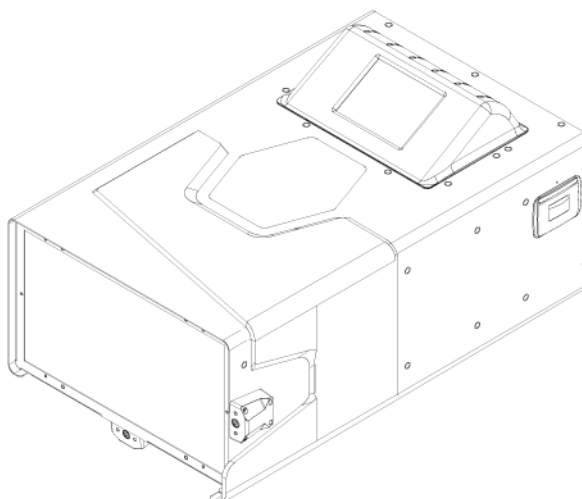
2. Carefully lift the display and the frame it is inserted in, being careful not to damage any wiring or connector.



3. Carefully rotate and lower the display and the frame it is inserted in, being careful not to damage any wiring or connector.



4. Screw the previously removed screw in the display frame base.



NOTICE

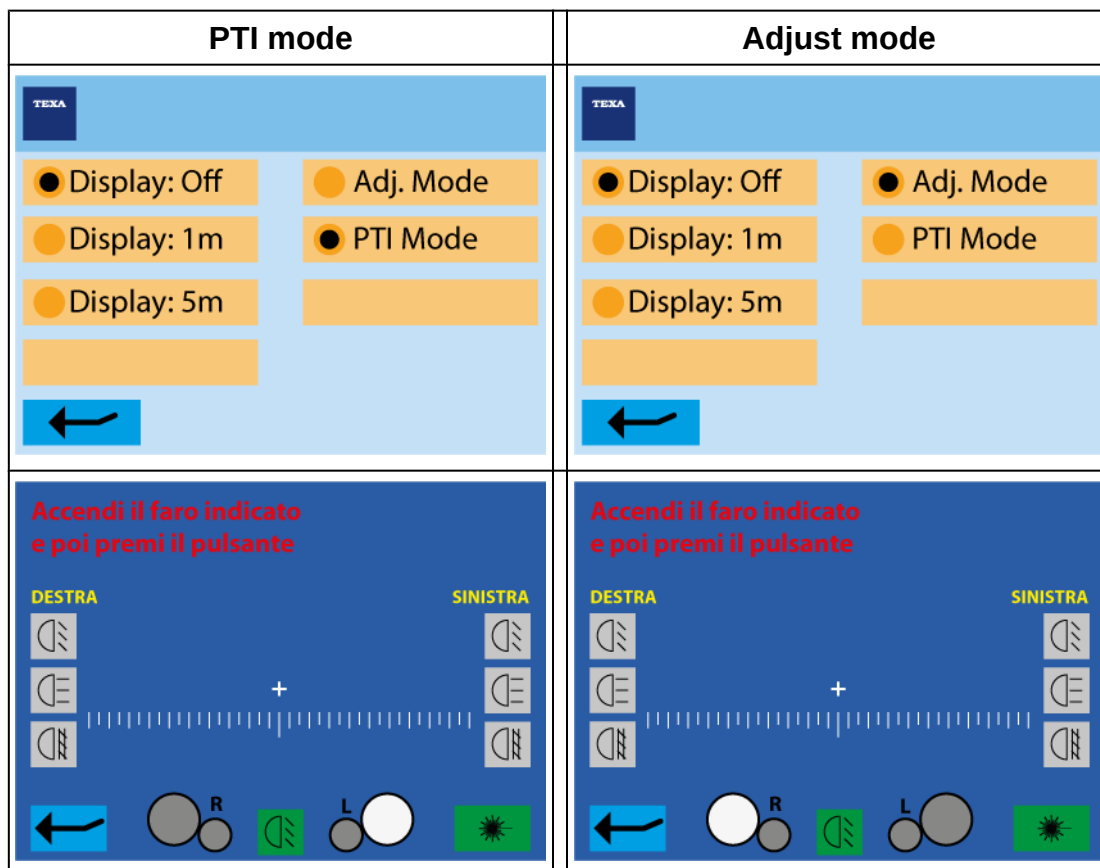
The software settings must be changed whenever the display orientation is changed.

Failure to correct the settings may cause an improper headlight calibration.

Proceed as follows:

1. Turn on the device.
2. Press **OPTIONS**.
3. Press **DISPLAY**.
4. Select the mode (**Adjust** or **PTI**) according to the display orientation.

5. Press .



NOTICE

The buttons to select the headlight that must be tested always refer to the direction of travel.

In the Adjust mode, the headlight selection buttons are the other way around, however the marks (right/left) do not change.

11 POWER SUPPLY AND RECHARGE

The device is powered by an internal rechargeable lead-acid battery.

The battery is charged by means of a specific charger.

CAUTION

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

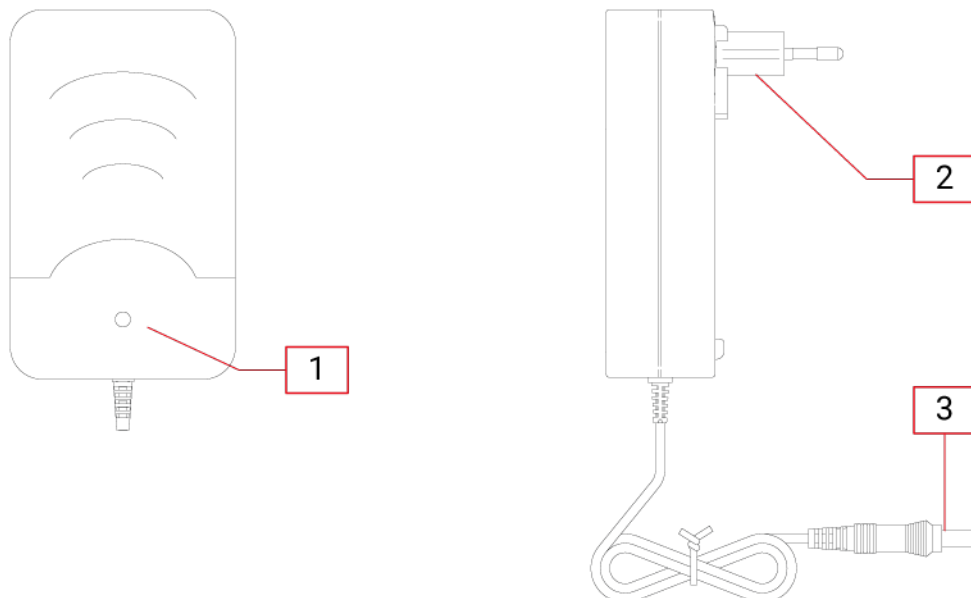
If the device is not used as specified by the manufacturer, the protection provided by the tool may be altered.

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:LC-2533
- Code:39xxxxx



1. LED
2. Plug
3. Power supply jack

NOTICE



The charger is supplied with a set of plugs that are suitable for the various power socket types.

Using a plug in a non-compatible socket may damage the charger.

Only use the appropriate plug for the type of outlets in your workshop.

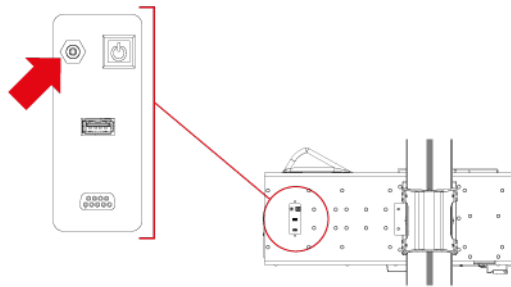
The charger has a LED that shows the charging status:

LED	STATUS	MEANING
-----	--------	---------

Red	ON	Charge in progress
Green	ON	Charge complete

Proceed as follows:

1. Insert the appropriate plug into the connector until the locking mechanism clicks into place.
2. Connect the charger's jack to the connector located on the side of the device.



3. Connect the charger's jack to the connector located on the side of the device.
4. Connect the charger to a power socket.
5. Wait approximately 3 hours for the internal battery to be fully charged.

INFORMATION

The battery is fully charged in approximately 3 hours and ensures an autonomy of 7 - 8 hours approx.

Charge the battery when the device is turned off.

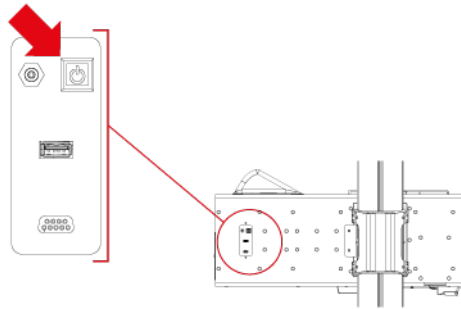
If the device is turned on, the charger keeps the current charge level.

The software that equips the device indicates the battery state of charge through a specific icon in the display.

Icon	State of charge
	Battery completely charged (green edge), charger connected.
	Battery completely charged.
	Battery low.
	Battery completely discharged (red edge).

12 POWER ON/OFF

The device can be powered ON and OFF through the specific button on its side.



Proceed as follows:

1. *Press the power ON/OFF button.*
2. *Wait for the software home screen to appear in the display.*

The device is now ready for use.

To turn off the device, proceed as follows:

1. *Press and hold the power ON/OFF button.*
2. *Wait for the device to emit a series of quick audible signals.*
3. *Release the button.*

The device is off.



For further information, see the software operating manual.

13 COMMUNICATION

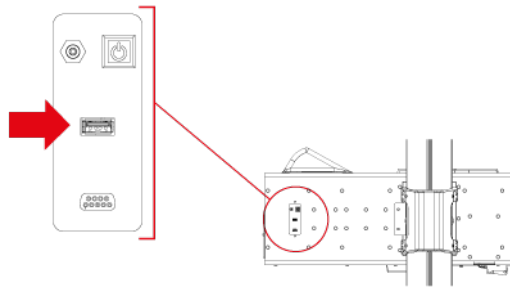
The device is equipped with:

- *USB*
- *RS-232*

13.1 USB

The USB port is used for:

- *installation of firmware updates*
- *assistance operations*



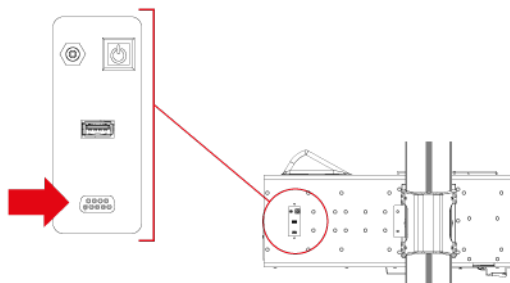
INFORMATION

The updates must be downloaded from the Internet through specific software.

13.2 RS-232

The wired connection via RS-232 serial cable is used for:

- *connection to PC Station when carrying out official tests*
- *installation of software updates.*



Proceed as follows:

1. Connect the serial cable to the RS-232 connector on the device.
2. Connect the serial cable to the RS-232 connector on the PC Station.

3. Turn on the device.

The software that equips the device indicates the connection status through a specific icon in the display.

Icon	Connection status
	Connection to PC Station active.
	Connection to PC Station not active.

14 PRELIMINARY OPERATIONS

The measurement and equipment actuation modes are compliant with the provisions of the standard:

- *ISO 10604*

INFORMATION

The methods to perform the Official Test may vary based on the country the test is performed in.

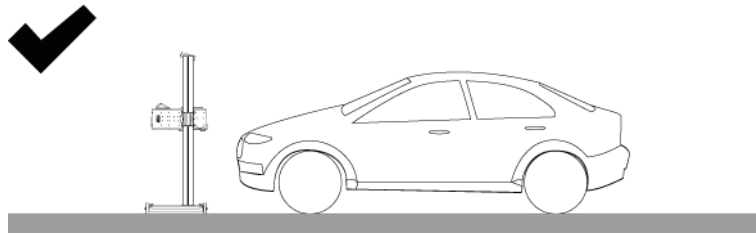
In any case, observe the provisions, laws and regulations in force in the country you are working in.

For a correct photometric analysis:

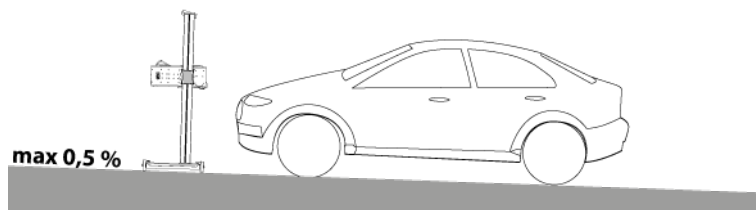
- *the device and the vehicle must be positioned on a suitable work surface;*
- *the vehicle must be in conditions which will not jeopardise the results of the analysis;*
- *the device must be level with the work surface;*
- *the device must be positioned correctly with respect to the vehicle;*
- *the device and the vehicle must be correctly aligned with respect to each other.*

14.1 Work Surface

For a correct photometric analysis, the device and the vehicle must be positioned on a flat work surface.

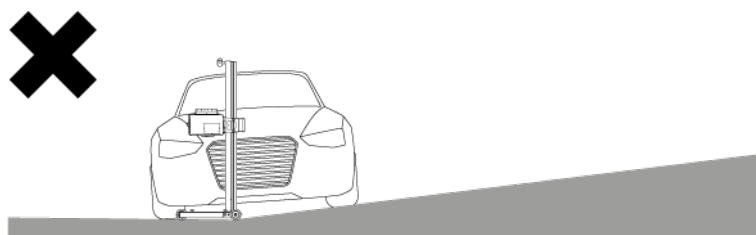
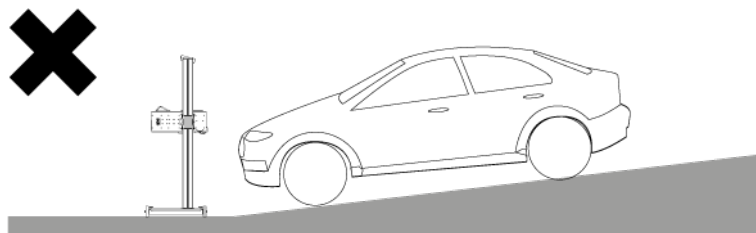


The photometric analysis can also be performed on a slope, as long as the device and vehicle are positioned on the same surface and the slope is equal to or lower than 0.5%.



NOTICE

The results of the analysis are not reliable if the device and vehicle are positioned on uneven or not perfectly flat surfaces.



14.2 Vehicle Preparation

Before proceeding with the photometric analysis, make sure the vehicle is in suitable conditions so that the result will not be jeopardised by external factors.



Make sure the parking brake remains engaged throughout the operations on the vehicle.

Make sure that:

- *the headlights are clean and dry;*
- *the vehicle wheels are straight;*
- *there are not any elements that may compromise the correct vehicle conditions (e.g. mud, snow, ice, etc.);*
- *there are not any chassis distortions;*
- *the tyre pressure is set to the value indicated by the manufacturer;*
- *the vehicle manufacturer's indications are respected (e.g. full tank, person on the driver seat, etc.);*
- *the vehicle is on a flat surface.*

LIGHTING DEPTH

In the vehicles with **manual control** of the lighting depth:

- *set the controller to "0".*

In the vehicles with **automatic control** of the lighting depth:

- *no adjustments required.*

INFORMATION

*In the vehicles with **pneumatic suspensions**, leave the engine running for approximately 5 minutes before starting the analysis and keep the engine running throughout the test, even while adjusting the headlights.*

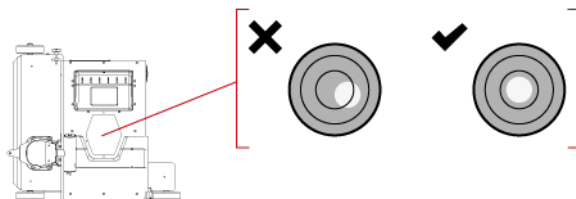
14.3 Device Preparation

Before positioning the device in front of the vehicle, a horizontal levelling operation is required in order to set the device level with the work surface.

The correct levelling can be checked with the round level inside the optical box.

Proceed as follows:

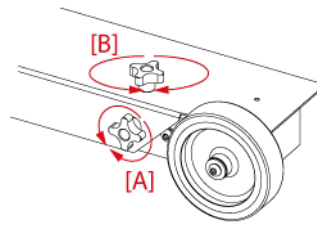
1. Position the device in the selected work area.
2. Check the correct levelling with the round level.



3. If the device is not levelled:

I. *Loosen the position locking screws [A].*

II. *Adjust the inclination of the device by acting on the adjustment screws [B].*



IV. *Using the round level, make sure the device is levelled.*

V. *If necessary, repeat the operations above.*

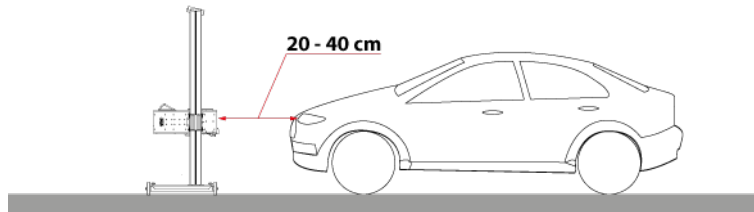
4. Tighten the position locking screws once the correct horizontal level has been reached.

14.4 Device Positioning

For a correct photometric analysis, the device must be positioned correctly with respect to the vehicle being tested.

Proceed as follows:

1. Position the device in front of the headlight, at approx. 20 - 40 cm.

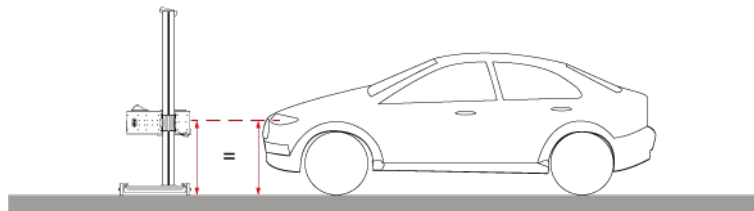


2. Set the optical box at the same height as the headlight, trying to align the optical centres.

INFORMATION

For this operation you can use the centimetre scale on the column and the laser pointers installed on the optical box.

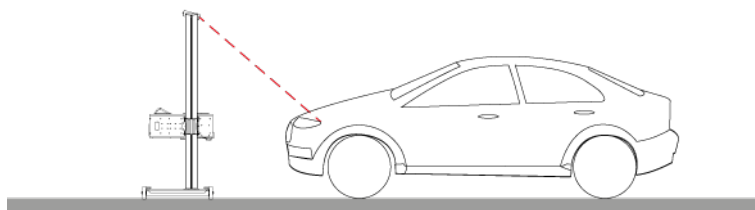
These laser pointers are powered ON and OFF via software.



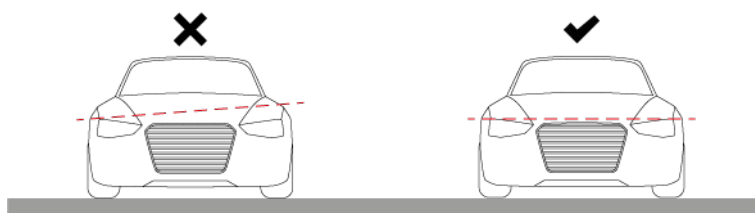
14.5 Alignment with the Vehicle

For a correct photometric analysis, the device and vehicle must be properly aligned. Proceed as follows:

1. Find two symmetrical elements in the front part of the vehicle, to be used as reference points (e.g. vehicle body parts or the headlights themselves).
2. Turn on the adjustable laser pointer using the specific button.
3. Adjust the laser pointer towards the selected reference points.



4. Rotate the optical box until the beam projected by the pointer touches both reference points.



15 PHOTOMETRIC ANALYSIS

For a correct photometric analysis, the working surface, the device and the vehicle must comply with the indications provided in the **Preliminary Operations** chapter.

WARNING



Failure to comply with the indications provided in the Preliminary Operations chapter may cause incorrect results and, as a consequence, the vehicle headlights may be adjusted improperly.

An incorrect headlight adjustment may blind the other drivers.

WARNING



An incorrect headlight adjustment may blind the other drivers.

The headlight adjustment operations aimed at correcting the projected light beam must comply with the vehicle manufacturer's provisions.

NOTICE

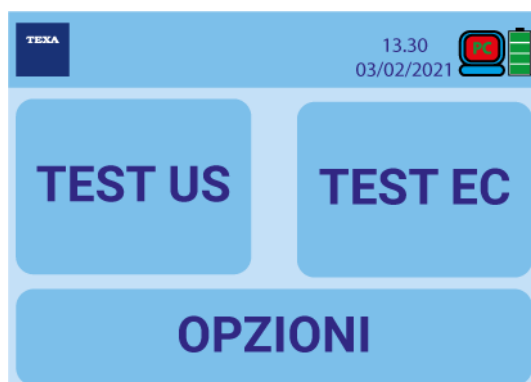
Changing the height of the optical box or the distance from the vehicle while moving the device from one headlight to another may compromise the analysis results.

Be very careful while moving the device, so as to keep these parameters unchanged as much as possible.

Proceed as follows:

1. Turn on the device.
2. Turn the vehicle's ignition key on ON (instrument panel on).
3. Turn on the PC Station (if applicable).

The software home screen is displayed.



US TEST	It allows you to run an official test based on the SAE regulation indications.
EC TEST	It allows you to access the tests based on the EC regulation.
OPTIONS	It allows you to access the device settings.

4. Select the type of analysis to carry out.

16 EC TEST

This function allows you to access the tests based on the EC regulation.



Official test	It allows you to run an official test based on the EC regulation indications.
Free test	It allows you to run a test not strictly based on the EC regulation indications.
License plate	It allows you to display an alphanumeric keyboard that can be used to enter the vehicle's license plate (10 digits max).
Options	It allows you to access the device settings.

INFORMATION

The "Official test" icon can be clicked on only if the device is connected to a PC Station.

Select the desired function.

16.1 Official Test

This function allows you to run an official test based on the EC regulation indications.

The PC Station transmits the vehicle settings to the device, allows saving and printing the test results.

The Official test requires that all light beams be tested in a specific order.

The software provides the correct sequence of individual tests.



For further information, see the software operating manual.

16.2 Free Test

This function allows you to run a test not strictly based on the EC regulation indications.

The function allows you to select which light beam must be tested and in which sequence to test the other light beams.



PARAMETER	SELECTABLE VALUE	NOTES
Vehicle	Auto Motorcycle Motorcycle Trucks	--
Beam	EU asymmetric	geometry:
	Symmetric	geometry:
	UK asymmetric	geometry:
	EU asymmetric 90°	geometry:
	UK asymmetric 90°	geometry:
	DLA	"Intelligent" headlights.
	MX (1st generation Matrix)	
	ILS	
	MX2 (2nd generation Matrix)	
Light	Halogen Xenon Bi-Xenon LED Bi-LED	--
Tilt	-6 ÷ 6 %	Beam tilt on the vertical axis. All types of light.
Deviation	-2 ÷ 2 %	Beam deviation on the horizontal axis. Only for LED and Bi-LED light.
Beam height	0 ÷ 150 cm	--

Proceed as follows:

Select the desired parameter.

Use / to select the desired value.

INFORMATION

In the Beam parameter, the "intelligent" headlights can be selected by pressing .

INFORMATION

In case of LED and Bi-LED lights, the Deviation parameter can be selected by pressing **Inclinaz.**

Repeat the operations described for all the parameters in the screen.

Press **OK** to move on to the next screen.



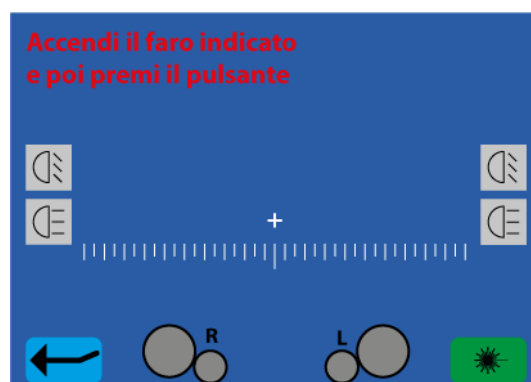
PARAMETER	SELECTABLE VALUE	NOTES
Fog lights (presence)	No Yes	--
Tilt	-6 ÷ 6 %	--
Beam height	0 ÷ 150 cm	--
Light	Halogen LED	--

Select the parameter.

Set the value desired

Press **OK** to move on to the next screen.

The pairs of light beams selected in the previous screens will be displayed.



Place the device near the light beam that must be tested.

E.g.:right low beam.

Press . The cross laser pointer will turn on.

INFORMATION

The icon will change colour: green --> red.

The laser activation is confirmed by an audible warning.

Use the laser beam to align the optical box with the centre of the light beam.

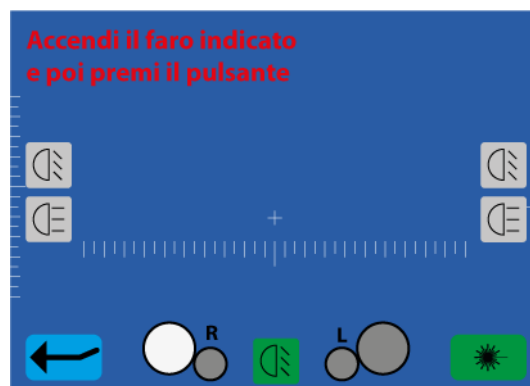
Press . The cross laser pointer will turn off.

Press on the icon corresponding to the light beam that must be tested: .

Press .

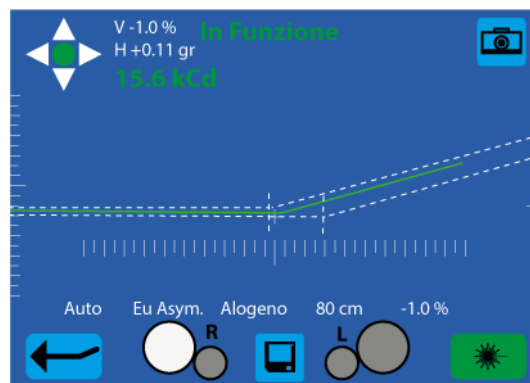
INFORMATION

The icon that allows starting the test appears on the bottom of the screen and varies according to the selected type of light beam.



The analysis is started.

A **graphical representation** of the light beam is displayed.



The area within which the light beam must be (acceptance area) is marked by dashed lines.

The measured value is represented by a continuous line.

The line colour indicates whether the light beam is within the acceptance area:

Colour	Meaning	Action
GREEN	Beam inside the acceptance area.	No light beam adjustments required.
RED	Beam outside the acceptance area.	Light beam correction required.

The colour of the arrows on the top left part of the screen provides further information on the type of correction that must be done:

Arrow	Colour	Action
Up / Down	WHITE	No adjustments required.
	RED	Yaw angle correction required.
Right / Left	WHITE	No adjustments required.
	RED	Roll angle correction required.

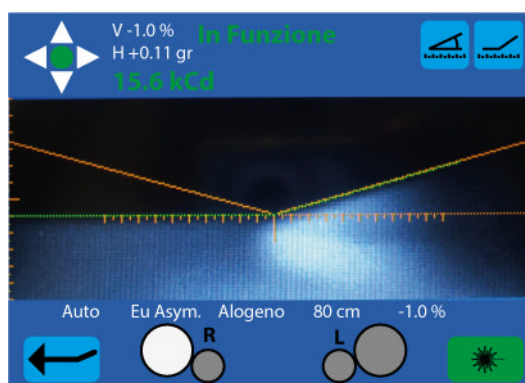
INFORMATION

Press  to move on to the **"snapshot" view** of the light beam.

A snapshot of the light beam will be displayed.

The image is overlapped with:

- **Orange lines:** standard reference grid.
- **Green lines:** graphical representation of the measured value.



It allows you to display the roll angle and yaw angle values. These angles are also represented graphically by yellow segments overlapping the snapshot.



It allows you to go back to the graphical representation of the light beam.

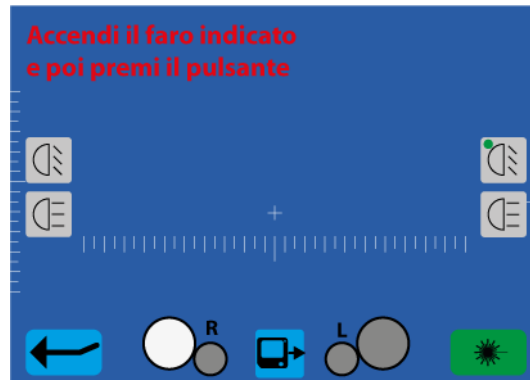
Carry out any corrections to the light beam as required so that the whole continuous line representing the beam's geometry is green and within the acceptance area.

NOTICE

The light beam correction operations must be performed following the vehicle manufacturer's indications.

Press .

The result of the analysis on the individual light beam is displayed.



ICON	Meaning	Action
	Success	No light beam adjustments required.
	Negative result	Light beam correction required.

Select the next light beam.

Repeat the operations described above.

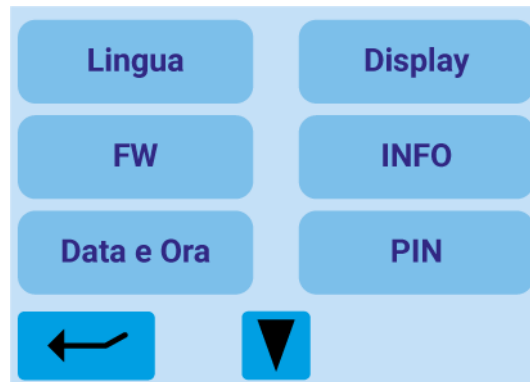
Press  to display the overall test report.

INFORMATION

If the printer (optional) is installed on the device, pressing  allows you to print a copy of the report.

16.3 Options

This function allows you to access the device settings.



Language	It allows you to set the display language of the software.
FW	It allows you to update the firmware of the device. ⁽¹⁾
Date and time	It allows you to set the date and time for the device.
Display	It allows you to set: • <i>Display mode</i>⁽²⁾ • <i>Adjust</i> • <i>PTI</i> • <i>Display timeout</i>: • <i>Off</i> • <i>1 minute</i> • <i>5 min.</i>
INFO	It allows you to view information related to the device, such as: • <i>model</i> • <i>serial number</i> • <i>firmware version</i> • <i>etc.</i>
PIN	It allows you to set the request for a PIN code when the device is turned on.
Service	It allows you to access the service functions of the device. ⁽³⁾
Laser Cal.	It allows you to access the laser calibration function. ⁽³⁾

⁽¹⁾The device must be connected via RS-232 to a PC where specific software is installed.

⁽²⁾For further information see the chapter *Preparing for Use*.

⁽³⁾This function is reserved for assistance operations.

17 MAINTENANCE

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

- *carefully follow the instructions provided in this manual;*
- *keep the device clean using non-aggressive products;*
- *periodically inspect the fastening screws and tighten them if necessary;*
- *immediately replace any damaged parts;*
- *only use original spare parts or spare parts approved by the manufacturer;*
- *cover the device with the specific cloth if it is not used for a long period of time.*

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.

INFORMATION

For further help, contact your Retailer or the Technical Assistance service.

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

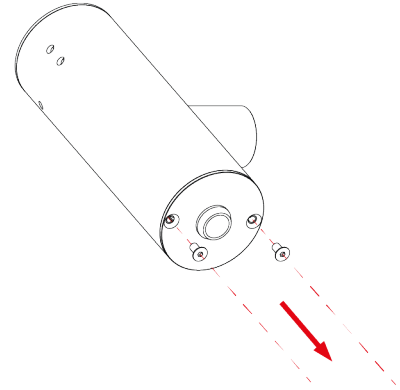
17.1 Adjustable Laser Pointer Battery Replacement

The adjustable laser pointer is powered by 3 AA 1.5 V batteries.

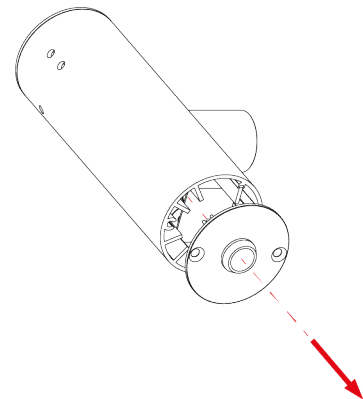
The batteries must be replaced when the intensity of the laser beam decreases.

Proceed as follows:

1. Turn off the adjustable laser pointer.
2. Remove the screws on the sides of the laser ON button.



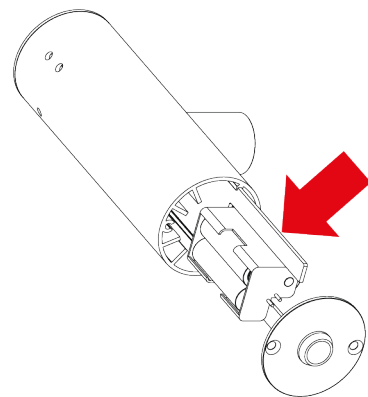
3. Carefully remove the cover where the ON button is installed.



NOTICE

Pay the utmost attention not to damage the electrical connections.

4. Carefully remove the battery-housing slide.
5. Replace the batteries with new ones of the same size and voltage, being careful to respect the polarity.
6. Close the adjustable laser pointer, being careful not to damage any electrical connection.



18 LEGAL NOTICES

TEXA S.p.A.

Via 1 Maggio, 9 - 31050 Monastier di Treviso - ITALY

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.