



USER MANUAL

LASER DISTANCE METER LX40

X SCOPE OF DELIVERY



SOLAFLEX MEASURING SET LASER DISTANCE METER LX40

- X Laser Distance Meter LX40
- X Belt Pouch
- X 360° Smartphone Arm Holder
- X Centering Aid ZX0
- X Touchpen
- X 2x AAA 1.5 V Batteries
- X Quick Starter



SOLAFLEX MEASURING SET PROFESSIONAL

- X Digital Tape Measure RX5
- X Laser Distance Meter LX40
- X Belt Pouch Tape Measure
- X Belt Pouch for Laser Distance Meter
- X 360° Smartphone Arm Holder
- X Centering Aid ZX0
- X Touchpen
- X Charging Cable USB-C for
Tape Measure RX5
- X Chalk Line SX30
- X Laser Plano 3D green
- X 2x Li-ion Battery Cells 18650,
Li-ion Charger and Power Plug fo
Laser Plano 3D green
- X 2x AAA 1.5 V Batteries for
Laser Distance Meter LX40
- X Laser Safety Glasses LB green
- X SOLA Deep Hole Marker TLM2
- X Replacement Refills SC TLM2
- X Quick Starter for Tape Measure RX5
and Laser Distance Meter LX40



USER MANUAL LX40

ABOUT THIS MANUAL

Congratulations on purchasing your new Solaflex LX40!

You have acquired a Solaflex measuring device, which will make your work easier, more precise, and faster. To fully utilize the features of this measuring device and ensure safe operation, please follow these instructions:

- ➔ Read this user manual thoroughly before using the device.
- ➔ Keep the user manual stored with the device at all times.
- ➔ Always provide the user manual when passing the device on to others.
- ➔ Never obscure the attached warning labels.



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1. GENERAL INFORMATION

1.1 SIGNAL WORDS AND THEIR MEANING

DANGER

For an imminent hazard that will lead to serious injury or death.

WARNING

For a potentially hazardous situation that could lead to serious injury or death.

CAUTION

For a potentially hazardous situation that could result in minor injury or property damage.

NOTE

For application instructions or other useful information.

1.2 PICTOGRAMS AND ADDITIONAL INFORMATION

1.2.1 WARNING SIGNS



General hazard warning

1.2.2 SYMBOLS



Read the user manual before use



Do not look into the laser beam



Device complies with Laser Class 2



Do not dispose of batteries and devices in household waste



Do not throw batteries into fire



Do not expose batteries to temperatures above 60°C

2. DESCRIPTION

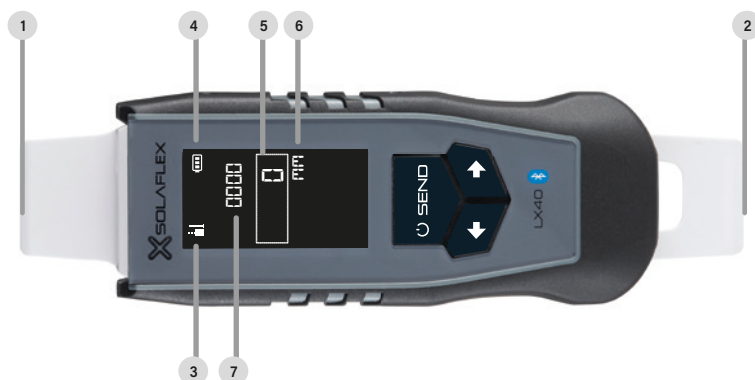


2.1 FUNCTION BUTTONS

1. Press for 2 seconds > Turn tape measure ON/OFF
Press once > Measure and send
2. Press both arrow buttons for 2 seconds > Switch measurement reference point front/rear-
Press arrow button once > Change measurement direction/next point

2.2 DISPLAY

1. Front reference point
2. Rear reference point
3. Display of reference point
4. Battery status
5. Measurement value
6. Unit
7. Last measured value



2.2 INTENDED USE

The device is designed for measuring distances. The display shows the measurement value, settings, and device status.

A laser beam emitted by the device is reflected back to the laser distance meter from a reflective surface, allowing the distance to be calculated. The range depends on the model, the reflectivity, and the surface quality of the reflective target.



3. TECHNICAL DATA

3.1 GENERAL

Measurement Range	0,2 – 40 m*
Accuracy	± 2 mm**
Measurement Unit	mm, cm, m
Laser Class	2
Laser Type	630 - 670nm, < 1 mW
Protection Class	IP 54
Automatic Laser Shutdown	40 s
Automatic Device Shutdown	300 s
Operating Duration	up to 5000 measurements***
Battery Type	2 x AAA 1,5 V
Operating Temperature	0 – 40 °C
Storage Temperature	-10 – 60 °C
Dimensions (H x W x D)	150 x 43 x 28
Weight with Batteries	90 g

*Under optimal conditions like white and diffusely reflective target (e.g., white-painted wall), low background lighting, and moderate temperatures. The range of the visible laser point depends on environmental conditions.

**Accuracy applies from 0.2 – 10 m. At distances between 10 m and 40 m, the maximum tolerance may worsen by 0.1 mm/m. Under unfavorable conditions (e.g., direct sunlight, poorly reflective surfaces, or measurements on glass or shiny surfaces), the tolerance may worsen by 0.15 mm/m.

***Operate at room temperature

3.2 FUNCTIONS

- ➔ Option to select between mm and cm display
- ➔ Ability to switch between front and rear measurement reference points.



4. SAFETY INSTRUCTIONS

4.1 RESPONSIBILITY AREAS

4.1.1 MANUFACTURER

Solaflex is responsible for the safe delivery of the product, including the user manual and original accessories.

4.1.2 OPERATOR

The operator is responsible for the proper use of the product, employing trained personnel, providing instructions, and ensuring operational safety.

- ➔ Understands the safety information on the product and the instructions in the user manual.
- ➔ Adheres to local workplace safety and accident prevention regulations, as well as employee protection laws and regulations.
- ➔ Immediately notifies Solaflex of any safety issues with the product or its application.
- ➔ Ensures that defective products are taken out of service and repaired professionally.

4.2 PROHIBITED USE

- ➔ Using the device or accessories without proper instruction.
- ➔ Using third-party accessories or additional equipment.
- ➔ Operating outside the specified limits (see Chapter 3/Technical Data).
- ➔ Operating under extreme temperature fluctuations without proper acclimatization.
- ➔ Disabling safety features or removing warning labels.
- ➔ Unauthorized opening of the device.
- ➔ Making modifications or alterations to the device or accessories.
- ➔ Deliberately aiming the laser at others.
- ➔ Failing to secure the operating area adequately.

4.3 OPERATIONAL LIMITS

The Solaflex LX40 is suitable for use in surroundings permanently habitable by humans.

- ➔ Do not use the product in explosive or aggressive environments.
- ➔ Contact local safety authorities before working in hazardous areas, near electrical installations, or in similar conditions.

4.4 USAGE HAZARDS

4.4.1 GENERAL



WARNING

Missing or incomplete instructions can lead to improper or incorrect use, resulting in accidents with serious personal, property, financial, or environmental damage.

- Follow the manufacturer's safety instructions and operator's directives
- Protect the device and accessories from access by children.



WARNING

Laser beam glare can indirectly lead to serious accidents, especially for persons operating vehicles or machinery. Do not look into the laser beam.

- Do not align the laser beam or laser plane at eye level or aim it at individuals.



CAUTION

Falls, prolonged storage, transportation, or other mechanical impacts can lead to incorrect measurement results. Check the device for damage before use. Do not use damaged devices.

- Repairs should only be carried out by Solaflex.
- Verify the accuracy of the device before use (see Chapter 7/ Operation).

4.4.2 BATTERIES



DANGER

Severe mechanical impacts can cause batteries and accumulators to leak, ignite, or explode, potentially releasing toxic substances.

- Do not open or expose batteries to mechanical stress.
- Repairs should only be carried out by Solaflex.



WARNING

High ambient temperatures or submersion in liquids can cause batteries to leak, ignite, or explode, releasing toxic substances.

- Protect batteries during transport against mechanical impacts.
- Do not overheat batteries or expose them to fire.
- Avoid moisture ingress into batteries.
- Do not use damaged batteries; dispose of them properly (see Chapter 10/Disposal).



WARNING

Short circuits or improper use of batteries can lead to overheating, posing risks of injury or fire.

- Do not carry or store batteries in clothing pockets.
- Avoid contact of battery terminals with jewelry, keys, or other conductive items.
- Do not recharge non-rechargeable batteries.
- Do not discharge batteries via short circuit.
- Do not solder batteries inside the device.
- Do not mix old and new batteries or use batteries from different manufacturers.



WARNING

Improper disposal can cause severe injuries or environmental pollution. Burning plastic parts emits toxic gases, and batteries can explode if damaged or overheated, causing injuries or contamination. Improper disposal may enable unauthorized persons to misuse the product.

- Do not dispose of the product and accessories, especially batteries, in household waste. Dispose of them properly.
- Protect the product from unauthorized access, especially by children.

4.5 ELECTROMAGNETIC COMPATIBILITY (EMC)

Electromagnetic compatibility refers to the ability of products to function properly in an environment with electronic radiation and electrostatic discharge, without causing electromagnetic interference in other devices.

4.5.1 INTERFERENCE WITH OTHER DEVICES BY LX40

Although the products meet the stringent requirements of relevant directives and standards, Solaflex cannot entirely rule out the possibility of interference with other devices (e.g., when using the product in combination with third-party devices such as field computers, PCs, radios, mobile phones, various cables, or external batteries).

- When using computers and radios, follow the manufacturer-specific information regarding electromagnetic compatibility.
- Only use original Solaflex equipment and accessories.

4.5.2 INTERFERENCE WITH LX40 BY OTHER DEVICES

Although the product meets the stringent requirements of relevant directives and standards, Solaflex cannot entirely rule out the possibility that intense electromagnetic radiation in the immediate vicinity of broadcast transmitters, two-way radios, diesel generators, etc., may distort measurement results.

- In such cases, verify the plausibility of the measurement results.



5. LASER SAFETY / CLASSIFICATION

The LX40 emits a visible laser point.

The product complies with Laser Class 2 according to DIN EN 60825-1:2014.

Laser Class 2:

For laser devices of Class 2, the eye is protected against accidental, short-term exposure by the blink reflex and/or aversion responses.



WARNING

Looking directly into the laser beam with optical instruments (such as binoculars or telescopes) can be hazardous.

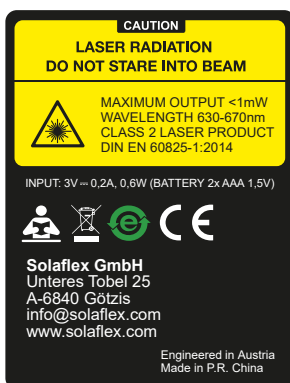


WARNING

Looking into the laser beam can be harmful to the eye.

- Do not look into the laser beam directly.
- Do not aim the laser beam at other people.

The labeling on the device:



- Do not remove this label



6. INITIAL SETUP

6.1 BATTERIES

1. Open the battery compartment cover on the back of the device.
2. Insert the batteries correctly into the device.
3. Close the battery compartment cover.

Only use 1.5V Mignon (AAA) batteries!

If the device will not be used for an extended period, remove the battery

6.2 BELT POUCH

The laser device can be stored in a belt pouch for transport.
For measurements, the laser distance meter must be removed from the pouch.



7. BEDIENUNG

7.1 OPERATION

7.1.1 SWITCH ON / OFF

ON / Press the measurement button for 2 seconds to turn on the laser device.

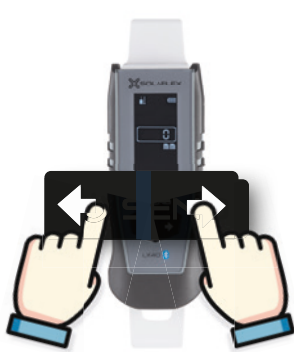
OFF / Press the erase button for 2 seconds to turn the laser device off.



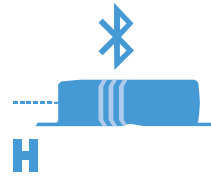
2 seconds

7.1.2 CHANGING THE MEASUREMENT REFERENCE POINT

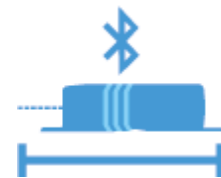
Press both arrow buttons for one second to switch between the front measurement reference point and the rear measurement reference point.



2 seconds



FRONT



REAR

7.1.3 CHANGING THE UNIT OF MEASUREMENT

If the LX40 is not connected to the Solaflex App, the unit of measurement can be changed by pressing one of the two arrow buttons. You can choose between mm, cm, and m.

If the LX40 is connected to the Solaflex App, the unit can be changed in the App's system settings – the change in the App will update the LX40 settings.

Each time the device is restarted, the unit of measurement is reset to mm.

7.2 WORKING INSTRUCTIONS

During measurement, the laser device should not be moved. It is recommended to use a fixed support surface with a stop. The laser emission field and the reception area must not be covered during measurement.

Depending on the measurement surface, faulty measurements may occur. Surfaces that are structured, reflective, transparent, or porous should be avoided.

THE DIFFERENT MEASUREMENT METHODS ARE EXPLAINED IN DETAIL IN THE MANUAL.

MORE INFORMATION:



User Manual
Solaflex-App



Videos &
Tutorials



8. MAINTENANCE, STORAGE AND TRANSPORTATION

8.1 CLEANING

- Wipe off dirt with a soft, damp cloth.
- Regularly check the emission openings of the distance measuring device and clean thoroughly if necessary. Do not touch the glass with your fingers.
- Do not use aggressive cleaning agents or solvents.
- Do not immerse the device in water!
- Clean and dry dirty or wet devices, accessories, and transport containers before packing. Only pack the equipment when it is completely dry.
- Keep connections clean and protect them from moisture.

8.2 STORAGE

8.2.1 GENERAL

- Store the equipment only within the specified temperature range (see Chapter 3/Technical Data).
- After extended storage, check the accuracy of the measuring device before use.

8.2.2 BATTERIES

- Remove the batteries from the device for storage.
- Store at room temperature and in a dry environment (see Chapter 3 / Technical Data).
- Protect from moisture and dampness. Dry wet or moist batteries before storage or use.

8.3 TRANSPORTATION

8.3.1 GENERAL

- The device may be damaged by strong vibrations or a fall.
- Never transport the product without casing. Always use the original packaging or an equivalent transport container.
- Turn off the device before transportation.
- Check the device for any damage before use.

8.3.2 BATTERIEN

When transporting or shipping batteries, the operator is responsible for complying with the applicable national and international regulations and requirements.

- Remove the batteries from the device before shipping.



9. TROUBLESHOOTING

ERROR	POSSIBLE CAUSE	RECTIFY THE ERROR
Err 1	Weak reception signal	Increase the target's reflectivity
Err 3	Low battery charge	Exchange batteries
Err 4	Memory error	Turn the device on and off, and repeat the process.
Err 6	Out of measurement range	If necessary, contact the manufacturer. Observe the measurement range according to the specifications.
Err 9	Bluetooth connection error	check the Bluetooth connection



10. DISPOSAL

Improper disposal can cause serious injury to yourself and others, as well as harm the environment. Burning plastic parts releases toxic fumes that can cause illness. Batteries can explode if damaged or exposed to high heat, leading to poisoning, burns, caustic injuries, or environmental pollution. Careless disposal allows unauthorized persons to misuse the product. Measuring tools, accessories, and packaging must be properly recycled in an environmentally responsible manner.



- The product and accessories – especially batteries – must not be recycled in household waste.
- Dispose of the product and accessories properly. Only recycle empty batteries.
- Follow country-specific recycling regulations.

Your Solaflex dealer will take back batteries and old devices and ensure their proper disposal.



ONLY FOR EU-COUNTRIES

Power tools must not be disposed of with household waste! According to the European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) and its implementation into national law, non-functional electrical and electronic waste must be collected separately and subjected to environmentally sound recycling.



11. MANUFACTURER'S WARRANTY

The manufacturer guarantees to the original buyer (first purchaser) listed on the warranty card, that the device is free from defects for a period of two years from the date of delivery, excluding batteries. The warranty covers repairs and/or replacements, at the discretion of the manufacturer. Defects resulting from improper handling by the buyer or third parties, natural wear and tear, and cosmetic defects that do not affect the use of the device, are not covered by this warranty. Claims under this warranty can only be made if the warranty card, completed by the seller and stamped with date and company seal, is submitted together with the device.

In the event of a warranty claim, the manufacturer will carry the transportation costs. The duration of the warranty is not extended by repairs or replacement parts carried out under the warranty.

Further claims are excluded unless mandatory national regulations dictate otherwise. In particular, the manufacturer is not liable for any direct or indirect damages, losses, or costs associated with the use of, or the inability to use, the device for any purpose. Implied warranties regarding the use or suitability of the device for a particular purpose are expressly excluded.

EU Declaration of Conformity

Declaration of Conformity



We **Solaflex GmbH**, A-6840 Götzis, Austria

declare under our sole responsibility that the product(s)

Solaflex LX40

to which this declarations relates is in conformity with the following standards

EN 60825-1:2014+A11:2021
EN 62368-1:2020+A11:2020
EN 62479:2010
EN 50663:2017
EN 301 489-1 V2.2.3 (2019-11)
EN 301 489-17 V3.2.6 (2023-06)
EN 300 328 V2.2.2 (2019-07)
EN 55032
IEC 61000-4-2
IEC 6100-4-3

following the provisions of Directive(s)

2014/53/EU Radio Equipment Directive (RED)
2014/30/EU Electromagnetic compatibility (EMC)

Solaflex GmbH

Mag. Wolfgang Scheyer CEO

Götzis, 04/2024

