



User Manual

PCE-LRF 500 Laser Distance Meter



User manuals in various languages (français, italiano, español, português, nederlands, türk, polski, русский, 中文) can be found by using our product search on: www.pce-instruments.com

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1 Safety notes

Please read this manual carefully and completely before you use the device for the first time. The device may only be used by qualified personnel and repaired by PCE Instruments personnel. Damage or injuries caused by non-observance of the manual are excluded from our liability and not covered by our warranty.

- The device must only be used as described in this instruction manual. If used otherwise, this can cause dangerous situations for the user and damage to the meter.
- The instrument may only be used if the environmental conditions (temperature, relative humidity, ...) are within the ranges stated in the technical specifications. Do not expose the device to extreme temperatures, direct sunlight, extreme humidity or moisture.
- Do not expose the device to shocks or strong vibrations.
- The case should only be opened by qualified PCE Instruments personnel.
- Never use the instrument when your hands are wet.
- You must not make any technical changes to the device.
- The appliance should only be cleaned with a damp cloth. Use only pH-neutral cleaner, no abrasives or solvents.
- The device must only be used with accessories from PCE Instruments or equivalent.
- Before each use, inspect the case for visible damage. If any damage is visible, do not use the device.
- Do not use the instrument in explosive atmospheres.
- The measurement range as stated in the specifications must not be exceeded under any circumstances.
- Non-observance of the safety notes can cause damage to the device and injuries to the user.
- Never point the laser beam at people or animals.
- Never look directly into the laser beam.

We do not assume liability for printing errors or any other mistakes in this manual.

We expressly point to our general guarantee terms which can be found in our general terms of business.

If you have any questions please contact PCE Instruments. The contact details can be found at the end of this manual.

2 Specifications

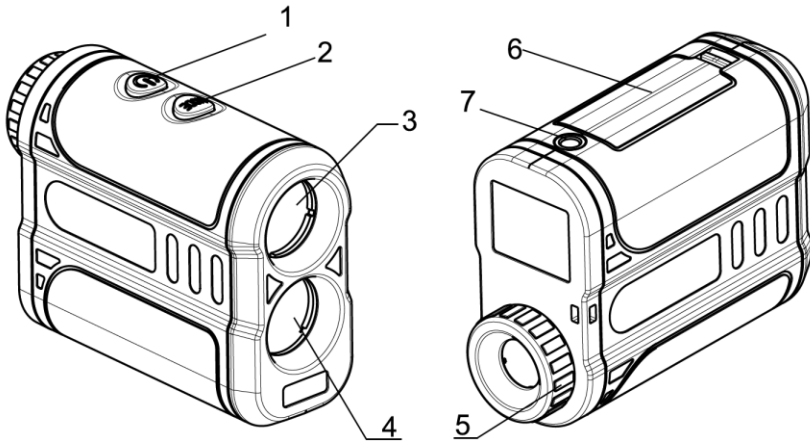
Specification	Description
Measuring function distance measurement	
Measurement range	0 ... 600 m / 0 ... 1,968 ft
Resolution	0.1 m // 0.3 ft
Accuracy	±1 m // 3.3 ft
Measuring function speed	
Measurement range	0 ... 300 km/h
Resolution	0.1 km/h
Accuracy	±5 km/h
General	
Zoom	6 x
Eyepiece diameter	16 mm
Lens diameter	25 mm
Power supply	2 x 1.5 V AAA
Operating conditions	-10 ... 40 °C
Weight	approx. 175 g
Dimensions	106 x 82 x 40 mm

3 Delivery scope

- 1 x laser distance meter PCE-LRF 500
- 1 x carrying strap
- 2 x 1.5 V AAA battery
- 1 x microfibre cloth
- 1 x user manual

4 System description

4.1 Device description



① ON key

② MODE key

③ Lens / laser output

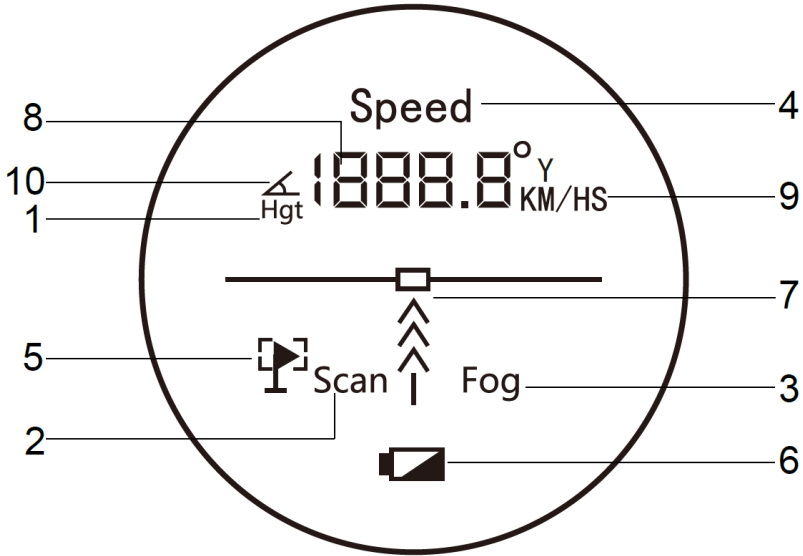
④ Laser input

⑤ Eyepiece with dioptric adjustment

⑥ Battery compartment

⑦ Tripod thread

4.2 Display description




- | | |
|-----------------------------|-------------------------|
| ① Measuring mode height * | ⑥ Battery indicator |
| ② Continuous measuring mode | ⑦ Target cross |
| ③ Measuring mode fog | ⑧ Measured value |
| ④ Measuring mode speed | ⑨ Measurement parameter |
| ⑤ Measurement mode mast | ⑩ Angle measurement * |

Attention: The measuring modes marked with "*" are not available with the PCE-LRF 500.

5 Getting started

Open the battery compartment on the bottom side of the unit and insert two 1.5 V AAA batteries in the correct position.

Close the battery compartment. Make sure that the cover locks in place properly. The battery capacity is sufficient for approx. 5000 measurements.

Replace the batteries when the battery indicator shows the following icon: "  ".
Remove the batteries if you are not going to use the unit for a long time.

6 Operation

6.1 Measurement information

The reflective properties and surface structure of the target can influence the measurement.

Poor reflective properties (coarse textured, wavy, moving, surfaces), fog, rain, snow, direct sunlight or too large a measuring angle can reduce the measuring distance and increase the response time.

For speed measurements, the angle to the target should not be more than 10°.

Use a tripod for smaller and / or distant measurement targets.

The unit has an automatic power-off that cannot be deactivated. Manual power-off is not possible.

6.2 Distance measurement

- Switch on the meter by briefly pressing the "ON" key.
- Adjust the focus on the eyepiece if necessary.
- Press and hold the "MODE" key to switch between the units metres or yards.
- To trigger the measurement, press the "ON" key again.
- Read the measurement result.

6.3 Continuous measurement

- Switch on the meter by briefly pressing the "ON" key.
- Adjust the focus on the eyepiece if necessary.
- Press and hold the "MODE" key to switch between the units metres or yards.
- For continuous measurement, keep the "ON" key pressed during the measurement.
- "SCAN" flashes in the display to confirm the continuous measurement.
- Read the measurement result.

6.4 Mast measurement

- Switch on the meter by briefly pressing the "ON" key.
- Adjust the focus on the eyepiece if necessary.
- Press and hold the "MODE" key to switch between the units metres or yards.
- Press the "MODE" key repeatedly until "I - Scan" is displayed in the viewfinder.
- Keep the "ON" key pressed during the measurement.
- "SCAN" flashes in the display to confirm the continuous measurement.
- Move the mast to the right and left in the viewfinder a few times.
- Read the measurement result.



6.5 Distance measurement in fog

- Switch on the meter by briefly pressing the "ON" key.
- Adjust the focus on the eyepiece if necessary.
- Press and hold the "MODE" key to switch between the units metres or yards.
- Press the "MODE" key repeatedly until "FOG" is displayed in the viewfinder.
- To trigger the measurement, press the "ON" key again.
- Read the measurement result.

6.6 Speed measurement

- Switch on the meter by briefly pressing the "ON" key.
- Adjust the focus on the eyepiece if necessary.
- Press the "MODE" key repeatedly until "SPEED" is displayed in the viewfinder.
- Press and hold the "MODE" key to switch between the units km/h or M/S.
- To trigger the measurement, press the "ON" key again.
- In the viewfinder, the rectangle in the target cross flashes to confirm the speed measurement.
- Follow the target object with the target cross.
- Read the measurement result.

7 Warranty

You can read our warranty terms in our General Business Terms which you can find here: <https://www.pce-instruments.com/english/terms>.

8 Disposal

For the disposal of batteries in the EU, the 2006/66/EC directive of the European Parliament applies. Due to the contained pollutants, batteries must not be disposed of as household waste. They must be given to collection points designed for that purpose.

In order to comply with the EU directive 2012/19/EU we take our devices back. We either re-use them or give them to a recycling company which disposes of the devices in line with law.

For countries outside the EU, batteries and devices should be disposed of in accordance with your local waste regulations.

If you have any questions, please contact PCE Instruments.



PCE Instruments contact information

Germany

PCE Deutschland GmbH
Im Langel 4
D-59872 Meschede
Deutschland
Tel.: +49 (0) 2903 976 99 0
Fax: +49 (0) 2903 976 99 29
info@pce-instruments.com
www.pce-instruments.com/deutsch

United Kingdom

PCE Instruments UK Ltd
Unit 11 Southpoint Business Park
Ensign Way, Southampton
Hampshire
United Kingdom, SO31 4RF
Tel: +44 (0) 2380 98703 0
Fax: +44 (0) 2380 98703 9
info@pce-instruments.co.uk
www.pce-instruments.com/english

The Netherlands

PCE Brookhuis B.V.
Institutenweg 15
7521 PH Enschede
Nederland
Telefoon: +31 (0)53 737 01 92
info@pcebenelux.nl
www.pce-instruments.com/dutch

United States of America

PCE Americas Inc.
1201 Jupiter Park Drive, Suite 8
Jupiter / Palm Beach
33458 FL
USA
Tel: +1 (561) 320-9162
Fax: +1 (561) 320-9176
info@pce-americas.com
www.pce-instruments.com/us

France

PCE Instruments France EURL
23, rue de Strasbourg
67250 Soultz-Sous-Forets
France
Téléphone: +33 (0) 972 3537 17
Numéro de fax: +33 (0) 972 3537 18
info@pce-france.fr
www.pce-instruments.com/french

Italy

PCE Italia s.r.l.
Via Pesciatina 878 / B-Interno 6
55010 Loc. Gragnano
Capannori (Lucca)
Italia
Telefono: +39 0583 975 114
Fax: +39 0583 974 824
info@pce-italia.it
www.pce-instruments.com/italiano

China

PCE (Beijing) Technology Co., Limited
1519 Room, 6 Building
Zhong Ang Times Plaza
No. 9 Mentougou Road, Tou Gou District
102300 Beijing, China
Tel: +86 (10) 8893 9660
info@pce-instruments.cn
www.pce-instruments.cn

Spain

PCE Ibérica S.L.
Calle Mayor, 53
02500 Tobarra (Albacete)
España
Tel. : +34 967 543 548
Fax: +34 967 543 542
info@pce-iberica.es
www.pce-instruments.com/espanol

Turkey

PCE Teknik Cihazları Ltd.Şti.
Halkalı Merkez Mah.
Pehlivan Sok. No.6/C
34303 Küçükçekmece - İstanbul
Türkiye
Tel: 0212 471 11 47
Faks: 0212 705 53 93
info@pce- cihazlari.com.tr
www.pce-instruments.com/turkish

Hong Kong

PCE Instruments HK Ltd.
Unit J, 21/F., COS Centre
56 Tsun Yip Street
Kwun Tong
Kowloon, Hong Kong
Tel: +852-301-84912
jyi@pce-instruments.com
www.pce-instruments.cn