



English

Instruction Manual

PCE-DT 50 Tachometer



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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Table of Contents

Introduction	1
Safety Information	1
Specification	2
Technical Data	2
Scope of Delivery.....	2
System Description	2
Device	3
Display Description	3
Operation	4
Power On/Off:.....	4
Measurement	4
Hold Function	4
Max/Min/Avg Measured Value	4
Display Illumination / Switch On/Off	4
Auto Measurement Function.....	4
Recording Function:	4
Measuring interval in recording mode	4
Battery	4
Warranty	5
Disposal	5

1. Introduction

Thank you for purchasing the PCE-DT 50 from PCE Instruments.

have decided. The hand tachometer PCE-DT 50 is excellent for the fast suitable for speed control. The PCE-DT 50 non-contact measures the rotational speed from moving objects such as drives, shafts, pinions, etc. It uses a laser to do this, which emits light, and a receiving diode which detects the light-dark contrast of the reflected light. Light recognizes.

2. Safety information

Please read this User's Manual carefully and completely before using the unit for the first time. for the first time. The device may only be used by carefully trained personnel. personnel. Damage caused by non-observance of the instructions in the operating instructions are created, are exempt from any liability.

- This measuring instrument may only be used in the manner and for the purpose described in this operating manual. can be used in this way. If the meter is used for other purposes, it may cause dangerous situations.
- In order to avoid injuries to the eyes of humans and animals, the laser must never be used in in the appropriate direction.
- Use the meter only when the environmental conditions (temperature, humidity, etc.) are not suitable, humidity, ...) are within the limits specified in the specifications. Do not expose the unit to extreme temperatures or direct sunlight, extreme humidity or wetness.
- Do not expose the device to shocks or strong vibrations.
- Opening the device housing may only be carried out by qualified personnel of PCE Germany. GmbH can be made.
- Never use the meter with wet hands.
- No technical changes may be made to the device.
- The device should only be cleaned with a cloth. Do not use Abrasives or cleaning agents containing solvents.
- The device may only be used with the accessories offered by PCE Deutschland GmbH. or equivalent replacement.
- Before each use, check the housing of the measuring instrument for visible Damage. If visible damage should occur, the device must not be can be used.
- The measuring instrument must not be used in an explosive atmosphere.
- The measuring range specified in the specifications must not be exceeded under any circumstances. will be exceeded.
- If the safety instructions are not observed, it may result in damage to the device and injury to the operator.

We assume no liability for misprints and errors in the contents of this manual.

We expressly draw your attention to our general warranty conditions, which you can find in our General Terms and Conditions.

If you have any questions, please contact PCE Americas. You will find the contact details at the End of this manual.

3. Specifications

3.1 Technical data

Measuring range 2.5 ... 99,999 rpm (RPM)

Measuring accuracy $\pm 0.02\%$ + 1 digit

Resolution 2.5 ... 999 rpm: 0.1 rpm

1000 ... 99,999 rpm: 1 rpm

Measuring distance 50 ... 500 mm

Measuring rate 0.5 s (over 120 rpm)

Memory 60 Individual data memory

Automatic switch-off after 20 s

Power supply 9 V block battery

Operating conditions 0 ... 50 °C / 10 ... 90 % r. h.

Storage conditions -10 ... 60 °C / 10 ... 75 % r. h.

Dimensions 145 x 90 x 35 mm

Weight approx. 120 g incl. battery

3.2 Scope of delivery

1x hand tachometer PCE-DT 50

1x 9 V block battery

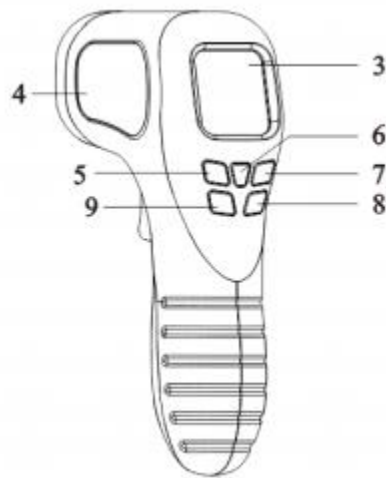
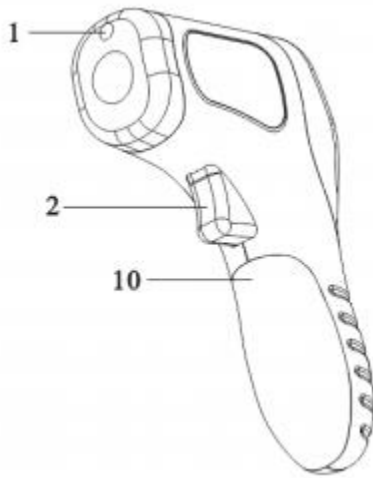
1x instruction manual

1x reflective tape approx. 20 cm

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4. System Description

3.1 Device



- 1. laser
- 2. measuring key/trigger key
- 3. LC display
- 4. product name
- 5. display illumination
- 6. on/off button
- 7. auto button
- 8th Max/Min/Avg key
- 9. recording button
- 10. battery compartment

3.2 Display description



- 1. measurement indicator
- 2. HOLD symbol
- 3. laser symbol
- 4. battery indicator
- 5. MAX/MIN/average value
- 6. measured value

7. measuring unit

8. number of data records

9. automatic mode

10. recording icon

11. data call

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5. Operation

5.1 Switching on and off:

- Press the On/Off button (6) to turn on the unit.
- After approx. 20 s without use, the unit switches itself off automatically.
- Press the On/Off button (6) to turn off the unit.

5.2 Measurement

- Apply approx. 1-2 cm of reflective tape to the measuring object that is not yet rotating.
- A bright environment has a negative effect on reflection and the measurement result.

If necessary, shade the area to be measured and avoid direct sunlight.

Sunlight.

- To take a measurement, press the measuring button (2) and point the laser at the rotating object.
- Watch out! Rotating components are dangerous!

5.3 Hold function

- The instrument automatically switches to the hold function after the measurement.

5.4 Max/Min/Avg measured value

- Press the Max button (8) once to read the maximum value of the measurement.
- Press the Max button (8) twice to read the minimum value.
- Press the Max button (8) three times to read the average value (AVG).

5.5 Turning on the display illumination

- Press the light button (5) to switch on the display illumination.
- Press the light button (5) again to turn off the backlight.

5.6 Auto measurement function

- Press the Auto button (7) to start an automatic measurement. Press the button again to exit Auto mode.
- Note: The laser is permanently active in Auto mode, the trigger key (2) does not have to be pressed. can be operated.

5.7 Recording function

- In Auto mode, press the REC button (9) to start the measurement recording.
- A maximum of 60 measured values can be stored.
- Press the REC key (9) again to pause the measurement.

5.8 Measuring interval in recording mode

- Press and hold the REC button (9) and turn the meter on to display the Set the recording interval.
- While holding down the REC button (9), press the backlight button (5) to adjust the recording interval. Interval time or the Auto button to increase the time.
- The time interval can be set from 1-99 sec.

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5.9 Battery

- If the meter does not turn on or the battery indicator is lit, replace the meter. the 9 V battery as soon as possible.
- To do this, press the arrow symbol of the battery compartment and slide it down. After inserting a new battery, close the cover again. Note the correct polarity.

5 Warranty

You can read our warranty conditions in our general terms and conditions.

which you can find here: <https://www.pce-instruments.com/f/t/us/terms-conditions.htm>

6 Disposal

Recycle rechargeable batteries and cell phones and help protect our environment and conserve the Earth's natural resources. Many stores and cities offer free, recycling for rechargeable batteries and other hazardous waste. Learn More About the Call2Recycle Program, at <http://www.call2recycle.org/>, to find a local recycling center.