



testo 440 – Climate Measuring Instrument

Short Manual



Safety and waste disposal

About this document

- The instruction manual is an integral part of the instrument.
- Pay particular attention to the safety instructions and warning notices in order to prevent injuries or damage to the product.
- Keep this documentation to hand so that you can refer to it when necessary.
- Always use the complete original instruction manual.
- Hand this documentation on to any subsequent users of the product.

Safety

General safety instructions

- Only operate the product properly, for its intended purpose, and within the parameters specified in the technical data.
- Do not apply any force.
- Do not operate the instrument if there are signs of damage on the housing mains unit or feed lines.
- Dangers may also arise from the systems to be measured or from the measuring environment: Always comply with the locally valid safety regulations when carrying out measurements.
- Do not store the product together with solvents.
- Do not use any desiccants.
- Only perform that maintenance and repair work on this instrument which is described in the documentation. Follow the prescribed steps exactly when doing the work.
- Use only original spare parts from Testo.
- Maintenance work that is not described in this documentation must only be carried out by trained service technicians.
- Temperature information given on probes/sensors relates only to the measuring range of the sensor technology. Do not expose handles and feed lines to temperatures in excess of 70 °C (158 °F), unless they are expressly authorised for use at higher temperatures.

- Do not perform contact measurements on non-insulated, live parts.
- Transport and store the device only in its packaging to prevent damage to the sensor.

Batteies and accus

- Improper use of batteries may cause destruction of the batteries, injuries due to current surges, fire or the escape of chemicals.
- Only use the batteries supplied in accordance with the instructions in the instruction manual.
- Do not short, take apart or modify batteries.
- Do not take the batteries apart and do not modify them.
- Do not expose the batteries to heavy impacts, water, fire or temperatures above +140 °C or below -20 °C.
- Do not store unused batteries in the proximity of metal objects.
- Do not use any leaky or damaged batteries and accus.
- In the event of improper function or signs of overheating, immediately remove the rechargeable battery from the measuring instrument/charging station. Caution: Rechargeable battery may be hot!!
- In the event of contact with battery acid: rinse affected areas thoroughly with water, and if necessary consult a doctor.
- Remove the battery from the device when not in use for a long time, in order to avoid a deep discharge.

Warning notices

Always pay attention to any information marked with the following warning notices along with warning pictograms. Implement the specified precautionary measures!

DANGER

Risk of death!

WARNING

Indicates possible serious injury.

WARNING

Indicates possible minor injury.

CAUTION

Indicates possible damage to equipment

Disposal

- Dispose of spent batteries in accordance with the relevant legal specifications.
- At the end of its useful life, deliver the product to the separate collection point for electric and electronic devices (observe local regulations) or return the product to Testo for disposal..

Specifications

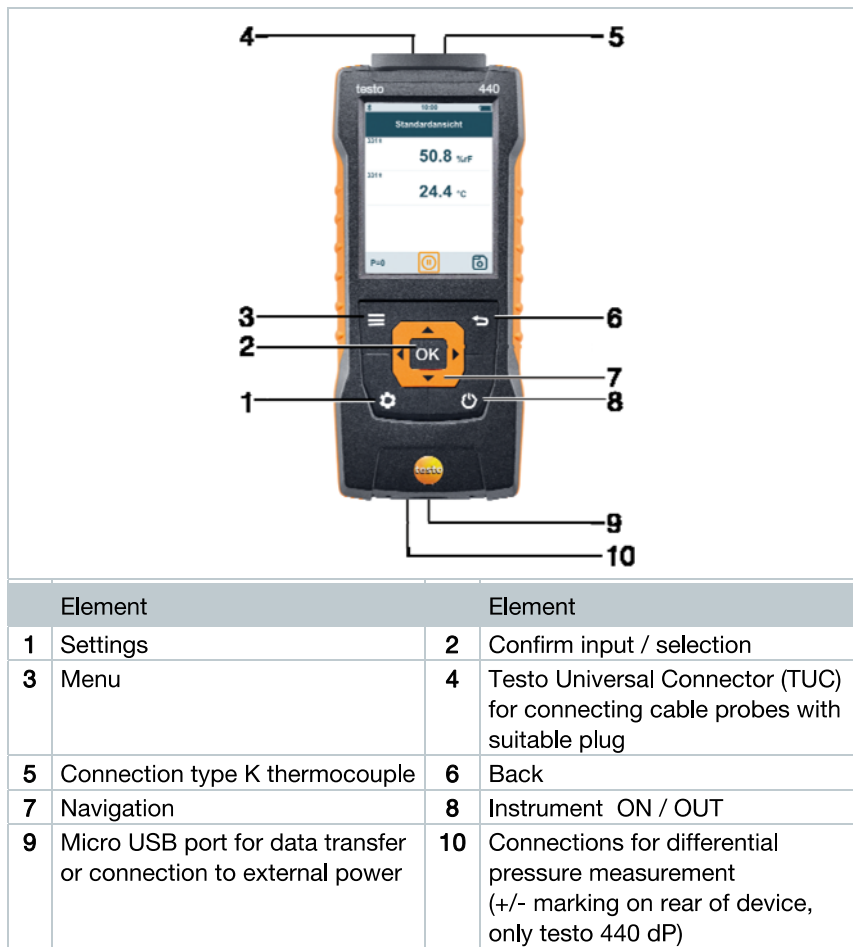
Use

The testo 440 is a measuring instrument for measuring climate-related parameters. The testo 440 is ideal for comfort level measurements for the workplace evaluation and flow measurements in and at ventilation and air-conditioning systems.

The instrument is only to be used by qualified expert personnel.


The product must not be used in explosive environments!

Overview testo 440



Use testo 440

Commissioning


 The testo 440 will be delivered with inserted batteries. The batteries are secured with a battery fuse strip.


- 1 Open the battery cover.
- 2 Remove the battery fuse strip.
- 3 Close the battery cover.
- ▶ testo 440 is ready for use.




testo 440 switch on / switch off


First- time switch on

 The first- time set menu will be opened when testo 440 is switched on for the first time, or after reset the device. After testo 440 is switched on in normal operation, the opened menu by last time will be shown.


Language	Date/Time	Units
Deutsch (German)	<div>DateTime</div>	<div>Units</div>
Englisch 	<div>Year 2017</div> <div>Month 12</div> <div>Day 01</div>	<div>Preview</div> <div>ISO: 20.6 °C</div> <div>2.5 m/s</div>
Čeština (Czech)		
简体中文 (Chinese)		
繁體中文 (Chinese trad)		
Dansk		
	Next	Finish

- 1 Please press .
- ▶ Menu **first- time set menu** will be shown.
- 2 Please make the following settings successively:
 - Language [**Language**]
 - Date (Year/Month/Day) and Time (Format, Time) [**Date /Time**]
 - System of units (ISO/US) [**Units**]
- ▶ The basic **settings** are fixed. You can adjust the settings every time.




Switch on

- 1 Please press .
- ▶ The last **activated** menu will be shown after testo 440 is switched on.



Switch off




- 1 Please press  and hold at least 3 seconds.
- ▶ testo 440 is switched off.

Bluetooth® connection establishing

- ✓ testo 440 is switched on.
- 1 Please press  and  at the same time for at least 3 seconds.
- ▶ Bluetooth® will be activated or deactivated and  appears or disappears in display.

or

- ✓ Please go into the **setting** menu.
- 1 Choose  **Bluetooth**.
- 2 Switch on  **Bluetooth**.

- ▶ Bluetooth® will be activated or deactivated and  appears or disappears in display.
- 3 Press  or  to leave the menu.

Technical data

Temperature (NTC)	testo 440	testo 440 dP
Measuring range	-40 ... +150 °C	
Accuracy (±1 Digit) at 22 °C	$\pm 0,4 \text{ °C}$ (-40 ... -25,1 °C) $\pm 0,3 \text{ °C}$ (-25 ... +74,9 °C) $\pm 0,4 \text{ °C}$ (+75 ... +99,9 °C) $\pm 0,5 \text{ % v. Mw. (remaining measuring range)}$	
Resolution	0,1 °C	

Temperature (TE)	testo 440	testo 440 dP
Measuring range	-200 ... +1370 °C	
Accuracy (±1 Digit)	$\pm (0,3 \text{ °C} + 0,1 \text{ % of meas. val.})$ $\pm 0,5 \text{ °C}$ for cold junction	
Resolution	0,1 °C	

Pressure	testo 440	testo 440 dP
Measuring range	-	-150 ... +150 hPa
Accuracy (±1 Digit) at 22 °C		$\pm 0,05 \text{ hPa}$ (0 ... +100 hPa) $\pm 0,2 \text{ hPa} + 1,5 \text{ % of meas. val. (100,1 bis 150 hPa)}$
Resolution		0,01 hPa

Probe connections	testo 440	testo 440 dP
Connection Type K Thermocouple	1x	
Testo Universal Connector (TUC) for connecting cable probes with suitable plug	1x	

Probe connections	testo 440	testo 440 dP
Bluetooth®-probe	1x digital Bluetooth®-Probe or testo Smart Probe	
Differential pressure	-	+
Technical data	testo 440	testo 440 dP
Operating temperature	-20 ... +50 °C	
Storage temperature	-20 ... +50 °C	
Bluetooth® reach (testo latest-generation climate probes with Bluetooth®)	20 m Free field	
Bluetooth®-Reichweite (Smart Probes)	3 m Free field	
Battery type	3 x Mignon, Typ AA	
Battery life	12 h	
Weight	250 g	
Dimensions	154 x 65 x 32 mm	


Approvals (Example)

Please note the following country specific product approval information.



The use of the wireless module is subject to the regulations and stipulations of the respective country of use, and the module may only be used in countries for which a country certification has been granted. The user and every owner has the obligation to adhere to these regulations and prerequisites for use, and acknowledges that the re-sale, export, import etc. in particular in countries without wireless permits, is his responsibility.

Product	Mat.-No.	Date
0560 440X	0560 440X	06.12.2017

Country	Comments
Australia	 E 1561
Canada	Product IC ID: 6127B-05560440X IC Warnings

Country	Comments
Europa + EFTA	 <div>  The EU Declaration of Conformity can be found on the testo homepage www.testo.com under the product specific downloads. </div> <p>EU countries: Belgium (BE), Bulgaria (BG), Denmark (DK), Germany (DE), Estonia (EE), Finland (FI), France (FR), Greece (GR), Ireland (IE), Italy (IT), Latvia (LV), Lithuania (LT), Luxembourg (LU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Sweden (SE), Slovakia (SK), Slovenia (SI), Spain (ES), Czech Republic (CZ), Hungary (HU), United Kingdom (GB), Republic of Cyprus (CY).</p> <p>EFTA countries: Iceland, Liechtenstein, Norway, Switzerland</p>
Japan	  201-171021 Japan Information
Turkey	Approved
USA	Product FCC ID: WAF-0560440X FCC Warnings

Country	Comments	
Bluetooth-Module	Feature	Values
	Bluetooth Range	< 20 m (free field)
	Bluetooth type	L Series BLE module (08 May 2013) based on TI CC254X chip
	Qualified Design ID	B016552
	Bluetooth radio class	Class 3
	Bluetooth company	LSD Science & Technology Co., Ltd
	RF Band	2402-2480MHz
	Output power	0 dBm

IC Warnings

RSS-Gen & RSS-247 statement:

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Caution: Radio Frequency Radiation Exposure

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets the IC radio frequency (RF) Exposure Guidelines.

Co-Location:

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Attention : exposition au rayonnement de radiofréquences

Cet équipement est conforme aux limites d'exposition aux radiofréquences IC fixées pour un environnement non contrôlé et aux Lignes directrices relatives à l'exposition aux radiofréquences (RF).

Co-location

Ce transmetteur ne peut pas être installé en colocation ou être utilisé avec une autre antenne ou transmetteur, quel qu'en soit le type.