testo 622

Scientific Ambient Monitor

Instruction manual

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2 Safety and the environment

2.1. About this document

Use

> Please read this documentation through carefully and familiarize yourself with the product before putting it to use. Pay particular attention to the safety instructions and warning advice in order to prevent injuries and damage to the products.

> Keep this document to hand so that you can refer to it when necessary.

> Hand this documentation on to any subsequent users of the product.

Symbols and writing standards

Representation	Explanation
⚠	Warning advice, risk level according to the signal word: **Warning!** Serious physical injury may occur. **Caution!** Slight physical injury or damage to the equipment may occur. > Implement the specified precautionary measures.
🛈	Note: Basic or further information.
1. ... 2. ...	Action: more steps, the sequence must be followed.
> ...	Action: a step or an optional step.
- ...	Result of an action.
Menu	Element of the instrument or instrument display.
[Set]	Control keys of the instrument.
... | ...	Functions/paths within a menu.
"..."	Example entries

2.2.   Ensure safety

> Do not store the product together with solvents. Do not use any desiccants.

> Only use the device in closed, dry rooms and protect it from rain and moisture.

> Only operate the product properly, for its intended purpose and within the parameters specified in the technical data. Do not use any force.

2.3.   Protecting the environment

> Dispose of faulty rechargeable batteries/spent batteries in accordance with the valid legal specifications.

> At the end of its useful life, send the product to the separate collection for electric and electronic devices (observe local regulations) or return the product to Testo for disposal.

3   Specifications

3.1.   Use

The instrument is a display instrument that was developed for monitoring ambient conditions in laboratories during test setups and calibrations.

The parameters of temperature, humidity and pressure can be viewed at a glance on the display.

The instrument can be mounted on the wall or placed on the workbench.

3.2.   Scope of delivery

The delivery of the testo 622 includes:

- Measuring instrument testo 622 (art. no. 0560 6220)
- Instruction manual
- Calibration report
- Mounting material
- Guarantee card
- 4 batteries (AA)

3.3.   Technical data

Characteristic	Values
Parameters	Temperature / Humidity / Absolute pressure
Units	°C/°F
	% RH, td, wb
	hPa, mbar, kPa, in Hg, in H2O, psi
Resolution	Temperature: 0.1 °C
	Humidity: 0.1 %RH
	Absolute pressure: 0.1 hPa
Measuring range	Temperature: -10 to +60 °C
	Humidity: 0 to 100 % RH (non-dewing)
	Absolute pressure: 300 to 1200 hPa
Accuracy	Temperature: ± 0.4 K + 1 digit
	Humidity: ±2 %RH + 1 digit at 25 °C (10 to 90 %), ±3 % RH rest of range
	Absolute pressure: ±3 hPa + 1 digit
Measuring rate	10 s
Operating temperature	-10 to +60 °C
Storage temperature	-20 to +60 °C
Battery type	4 x AA
Battery life	at least 12 months
Housing material	ABS
Protection class	IP 30
Weight	approx. 240 g (without batteries)
Dimensions (LxWxH in mm)	185x105x36
	185x112x47 (mounting clip folded out)

Characteristic	Values
Warranty	24 months, warranty conditions: see website www.testo.com/warranty
EC Directive	2004/108/EC

4 Product description

4.1. Overview

① Keypad

Key	Function
Max	Display max. value
Min	Display min. value
%rH	Set unit for humidity
hPa	Display pressure settings
▲	Change settings
▼	Change settings
Set	Confirm settings
Esc	Cancel input
■Alarm■	Acknowledging an alarm

② Sensors

③   Attachment device

④   Battery compartment and instrument interface

⑤   Mounting clip and wall fixture (integrated into housing)

4.2.   Basic properties

Power supply

The instrument is powered optionally by:

•   4 batteries / rechargeable batteries, type AA

Wall mounting

The distance between the upper and lower drill hole is 63 mm.

5   First steps

Removing the protective film

>   Remove the protective film from the display

Inserting batteries/rechargeable batteries

1. Open the battery compartment on the rear of the instrument.
2. Insert batteries/rechargeable batteries (observe the polarity!)

3. Close the battery compartment.

6 Using the product

6.1. Commissioning

The date and time must be set on commissioning.

1. Select the required function with **[Set]**.

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i If no button is pressed > 30 sec, the testo 622 changes to Measuring Mode. To perform additional settings, press and hold **[Set]** for 2 sec.

> The adjustable parameter flashes.

2. Set values with **[▲]** or **[▼]** and confirm entry with **[Set]** (for settings, see following table).

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i To scroll rapidly forward and back in the relevant menu, press and hold **[▲ or ▼]**.

Press **[Esc]** to cancel settings without saving them.

Hold **[Set]** down for 2 s to save previously set values and leave the menu.

- Instrument returns to the display.

Display	Function	Setting option
DD.MM.YYYY flashes or **MM.DD.YYYY** flashes	Set date format	**DD.MM.YYYY** = day, month, year **MM.DD.YYYY** = month, day, year
Year flashes	Set year	2009 - 2099
Month flashes	Set month	01 - 12
Day flashes	Set day	01 - 31
24H or **12H (AM/PM)** flash	Set time format	24h/12h
Hour flashes	Set hour value	00 - 23 or 01 - 12
Minute flashes	Set minute value	00 - 59
Second flashes	Set second value	00 - 59
°C flashes	Set unit for temperature	°C/°F

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i If the power supply is interrupted the settings are being

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saved for at least 3 min.

6.2. Setting the limits

Temperature

When changing the temperature unit from °C to °F, the set limit values are converted

Humidity

When changing the humidity unit (%, td, wb), the set limit values are not converted. The limit values must be reset via the Setup menu.

Pressure

It is not possible to set the limit values.

6.3. Performing settings

1. Press and hold **[Set]** for 2 s.

> Display flashes.

2. Select the required function with **[Set]**.

> The adjustable parameter flashes.

3 Set values with **[▲]** or **[▼]** and confirm entry with **[Set]** (for settings, see following table).

- Instrument changes to the next display function

$\mathbf{i}$ To scroll rapidly forward and back in the relevant menu, press and hold **[▲ or ▼]**.

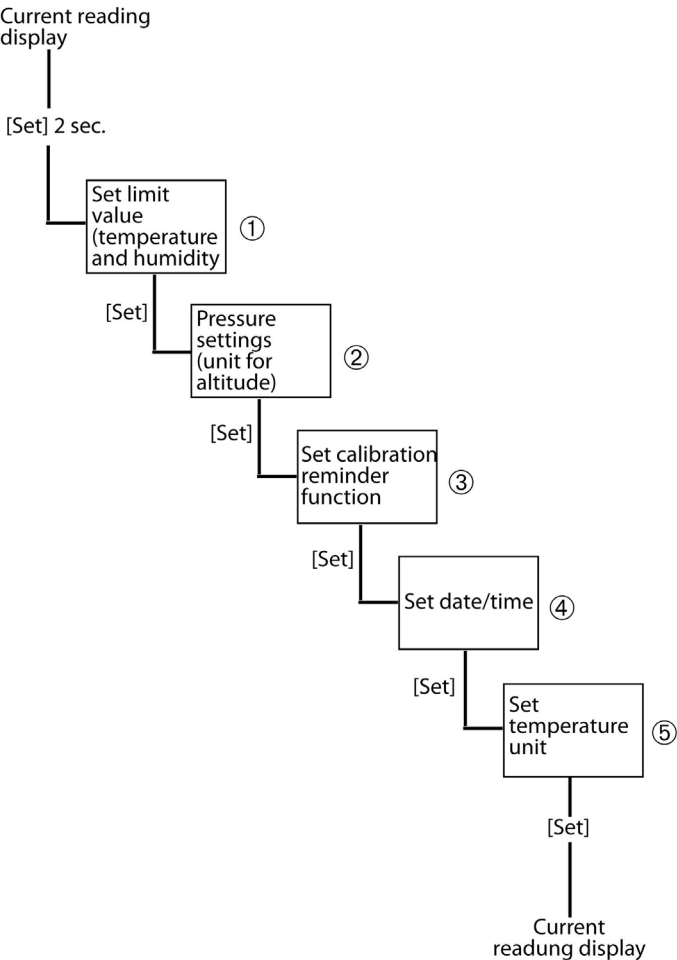Press **[Esc]** to cancel settings without saving them.

Hold **[Set]** down for 2 s to save previously set values and leave the menu.

If the entire Setup menu is run through, the settings made are automatically stored.

If no key is pressed within 30 s, the screen reverts to the current reading display automatically. No settings are saved.

- Instrument changes to the next display function

6.4.   Flowchart

Current reading
display

|

[Set] 2 sec.

Set limit
value
(temperature   ①
and humidity

[Set]   Pressure
settings
(unit for   ②
altitude)

[Set]   Set calibration
reminder   ③
function

[Set]   Set date/time   ④

[Set]   Set
temperature   ⑤
unit

[Set]

Current
readung display

A detailed description of the points ①, ②, ③, ④, ⑤ can be
found on the following pages.

No.	Display	Function	Setting option/value

No.	Display	Function	Setting option/value
①	⬆ and **°C/°F** light up, **ON** or **OFF** flashes	Activate or deactivate display for upper temperature limit alarm	Deactivate: **OFF** Activate: **ON**
	Only if **ON** is selected Upper limit value flashes	Set value for upper temperature limit alarm	-
	⬇ and **°C/°F** light up, **ON** or **OFF** flashes	Activate or deactivate display for lower temperature limit alarm	Deactivate: **OFF** Activate: **ON**
	Only if **ON** is selected Lower limit value flashes	Set value for lower temperature limit alarm	-
	⬆ and **%** light up, **ON** or **OFF** flashes	Activate or deactivate display for upper humidity limit alarm	Deactivate: **OFF** Activate: **ON**
	Only if **ON** is selected Upper limit value flashes	Set value for upper humidity limit alarm	-
	⬇ and **%** light up, **ON** or **OFF** flashes	Activate or deactivate display for lower humidity limit alarm	Deactivate: **OFF** Activate: **ON**
	Only if **ON** is selected Lower limit value flashes	Set value for lower humidity limit alarm	-
②	Pressure unit flashes	Select unit for pressure	**mbar**, **hPa**, **kPa**, **inHg**, **inH2O**, **psi**

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No.	Display	Function	Setting option/value
	Altitude lights up, height unit flashes	Select unit for height above sea level	**m**, **ft**
	2 flashes	Set value for height above sea level	For unit in m: 0 to 9000 m For unit in ft: 0 to 29,527 ft
③	**Calibration!** lights up, **ON** or **OFF** flashes	Activate or deactivate calibration reminder function	Deactivate: **OFF** Activate: **ON**
	Only if **ON** is selected **Calibration!** lights up, Year flashes	Set year	2009 - 2099
	Only if **ON** is selected **Calibration!** lights up, Month flashes	Set month	01 - 12
④	**Update date & time?** lights up, **No** flashes	Set date and time No change	Select **Yes** Select **No**
	Only if **Yes** is selected **DD.MM.YYYY** flashes or **MM.DD.YYYY** flashes	Set date format	**DD.MM.YYYY** = day, month, year **MM.DD.YYYY** = month, day, year
	Only if **Yes** is selected Year flashes	Set year	2009 - 2099

No.	Display	Function	Setting option/value
	Only if **Yes** is selected Month flashes	Set month	01 - 12
	Only if **Yes** is selected Day flashes	Set day	01 - 31
	Only if **Yes** is selected **24H** or **12H (AM/PM)** flash	Set time format	24h/12h
	Only if **Yes** is selected Hour flashes	Set hour value	00 - 23 or 01 - 12
	Only if **Yes** is selected Minute flashes	Set minute value	00 - 59
	Only if **Yes** is selected Second flashes	Set second value	00 - 59
⑤	**°C** flashes	Set unit for temperature	**°C/°F**

i If the power supply is interrupted the settings are being saved for at least 3 min.

6.5. Measuring

i With max./min., the time that it occurred and the corresponding value (°C/% RH) is shown.

Displaying max. values

To change the display between the current reading, max. temperature value and max. humidity value:

> Press **[Max]**.

To reset the max. value:

1. Select the max. temperature value or max. humidity value.

2. Press and hold **[Max]** for 2 s.

- The max. temperature value or max. humidity value is reset.

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i   If the **[Max]** key is not pressed for >30 s, the screen reverts to the current display automatically

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Displaying min. values

To change the display between the current reading, min. temperature value and min. humidity value:

> Press **[Min]**.

To reset the min. value:

1. Select the min. temperature value or min. humidity value.

2. Press and hold **[Min]** for 2 s.

- The min. temperature value or min. humidity value is reset.

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i   If the **[Min]** key is not pressed for >30 s, the screen reverts to the current display automatically

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Displaying humidity values

To change the display between % relative humidity, dewpoint and wet bulb:

> Press **[%RH]**.

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i   If the limit values for % relative humidity are activated, no limit values for dewpoint and wet bulb will be shown when the **[% RH]** key is pressed.

      If the limit values for dewpoint or wet bulb are activated, no limit values for % relative humidity will be shown when the **[% RH]** key is pressed.

Displaying pressure values and set height above sea level

To change the display between absolute pressure, barometric pressure and set height above sea level:

> Press **[hPa]**.

Acknowledging an alarm

Alarm was triggered:

- LED flashes

- The alarm value that was exceeded or undershot flashes

To clear an alarm:

> Press **[Alarm]**.

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- Alarm is cleared

> **i** With the alarm activated and a change to the setup menu, the current alarm is acknowledged.

7 Maintaining the product

Changing batteries/rechargeable batteries

CAUTION
Incorrectly inserted batteries / rechargeable batteries can damage the instrument!
> Observe the polarity when inserting the batteries / rechargeable batteries.

1. Open the battery compartment on the rear of the instrument.
2. Remove spent batteries / rechargeable batteries from the battery compartment and insert new batteries / rechargeable batteries (type AA)
- Instrument turns on automatically.
3. Close the battery compartment.

> **i** If the power supply is interrupted the settings are being saved for at least 3 min.

> **i** If the instrument is not used over a longer period, the batteries/rechargeable batteries should be removed from the instrument to prevent damage to the instrument and the batteries/rechargeable batteries.

Cleaning the instrument

> If the housing of the instrument is dirty, clean it with a damp cloth.

Do not use any aggressive cleaning agents or solvents! Weak household cleaning agents or soap suds can be used.

> **i** Do not clean the instrument with compressed air, otherwise the sensor may be damaged.

8 Tips and assistance

8.1. Accessories and spare parts

Description	Article no.
Calibration and adjustment software incl. USB cable	0554 6230
DKD humidity calibration certificate, electronic hygrometer; calibration points 11.3 % RH and 75.3 % RH at 25 °C	0520 0206
ISO humidity calibration certificate, calibration points 11.3 % RH and 75.3 % RH at 25 °C	0520 0006

8.2. Questions and answers

Question	Possible causes
Instrument displays **LO**	Below -20 °C
Instrument displays **HI**	Above +70 °C
Instrument displays 🔋	Battery life is approx. 1 month

If we could not answer your question, please contact your dealer or Testo Customer Service. For contact details see the rear side of this document or the web page www.testo.com/service-contact