

**Instruction Manual of
Digital Thermohygrometer Model PC-7300GTI**

This product is designed to measure indoor temperature and humidity. Do not use it for other purposes. Read this manual thoroughly before use, and keep it for future reference.

Important Notices



Beware of Explosion

PC-7300GTI is not explosion-proof. Never use it in an atmosphere containing flammable gases.



Cautions

To use PC-7300GTI properly, follow the instructions below.

- . Use the device only in a normal atmosphere.
- . The device is not waterproof. Do not get it wet.
- . If the device runs with condensation, remove batteries immediately and dry the device in room temperature.
- . Do not disassemble or customize the device, or it may cause a fatal malfunction.
- . Do not drop or give a shock to the device, as it is a sensitive instrument.
- . Do not leave the device in a place like an automobile on a fine summer day, or the extreme heat may damage it.
- . Do not use the device under direct sunlight, wind, or aside a heat source or a machine which causes condensation.
- . Do not use the device under electrical noise. Otherwise, the display becomes unstable or the measuring error increases.
- . Do not measure temperature or humidity out of the measurable range, or it may result in malfunction.
- . Do not wash or wipe the device with alcohol, thinner, or other organic solvents. If the device becomes dirty, wipe it with a tightly-wrung towel that has been dipped in warm water with neutral detergent.
- . For repair or calibration, or if the device is broken before use, contact us or a retailer from which you have purchased.

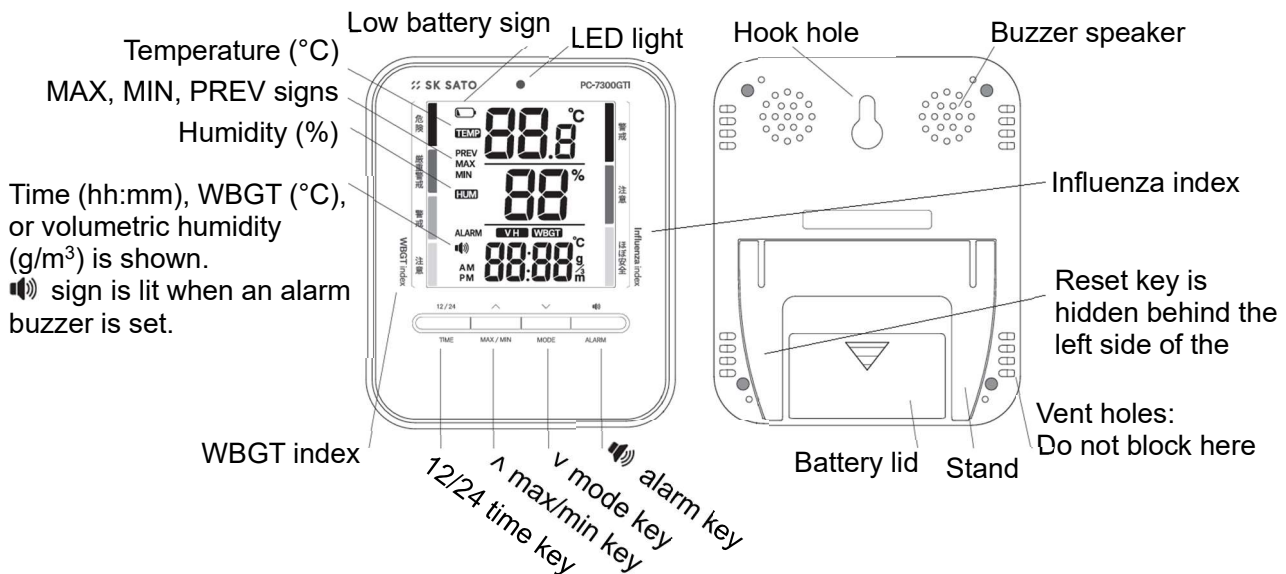


Notice


PC-7300GTI does not directly protect you from heat stroke or influenza.

The device displays WBGT, or wet bulb globe temperature index which is referred to as an estimation of a risk of heat stress, and the influenza index which is based on volumetric humidity to visualize the dryness of the air. A high level of each index indicates a high risk of heat stress and influenza respectively, but note that the triggers of the symptoms are not limited to these indexes.

Names of Sections



Battery Replacement

To install batteries before an initial use or when the low battery sign  is displayed, follow the description below.

1. Slide down the battery lid to remove.
2. Remove old batteries if inserted, then put two new identical AAA batteries according to the polarity marks in the battery box.
3. Place the battery lid back. Maximum, minimum, and alarm data are initialized after replacing batteries.



Cautions Related to Batteries

- Do not burn, disassemble, solder, short-circuit, or heat batteries.
- Keep batteries insulated with tapes or such to dispose of or store them.
- For environmental conservation purposes, dispose of batteries in compliance with local rules and regulations.
- Keep batteries away from children. If they are swallowed accidentally, consult a doctor immediately.
- Remove batteries if not used for a long period.
- When the battery fluid is attached to clothing or skin, rinse it with clean water. If the fluid contacts with eyes, rinse it with water and consult a doctor immediately.

How to Use




1. After referring to the section of Battery Replacement, follow the sections of WBGT Alarm and Clock described later.
2. Place the device in a stable position where the vent holes are not blocked, and wait for more than 30 minutes until it adapts to the ambient environment. The reading updates every 30 seconds.
3. Press v mode key to change what is shown on the bottom row in the screen.






WBGT Alarm

To configure WBGT alarm, press v mode key to display WBGT first.

WBGT Alarm On/Off

1. Press  alarm key for 2 seconds. The sign of “ALARM **WBGT** °C” blinks, and the alarm setting is unlocked.
2. Adjust the threshold by pressing ^ max/min key or v mode key between 0 and 50°C in steps of 1°C.
3. Press  alarm key to confirm the threshold WBGT. Pressing no keys for 30 seconds also confirms the value.
During WBGT alarm is on, the screen displays a sign of “ALARM ” unless the clock or volumetric humidity is shown.

WBGT Alarm Sound On/Off

1. Press  alarm key once to turn off the alarm buzzer. The sign of “” is removed, and the alarm is notified only by LED.
 2. Press  alarm key again to turn on the alarm buzzer.
- When WBGT becomes equal to or exceeds the threshold, an alarm buzzer and LED are activated for 30 seconds. After then, the device snoozes for 2 seconds per interval of 10 minutes as long as WBGT exceeds the threshold.
 - To stop the buzzer and LED forcibly, press any key on the device.
 - WBGT alarm is suspended when the device is in a configuration mode or activating a clock alarm.


Clock

To configure clock time and alarm, press v mode key first until the clock is displayed.




Adjusting Clock Time

1. Press 12/24 time key for 2 seconds.
2. Press ^ max/min key or v mode key to adjust the hour segment while it blinks, then press 12/24 time key.
3. Press ^ max/min key or v mode key to adjust the minute segment while it blinks, then press 12/24 time key again to finalize the time. Pressing no keys for 30 seconds also confirms the value.
The device internally counts the last moment when ^ max/min key or v mode key is pressed as zero seconds.
4. To switch between 12-hour and 24-hour clock, press 12/24 time key.

Adjusting Clock Alarm Time

1. Press  alarm key for 2 seconds.
2. Adjust the clock alarm time by the same procedure as the section of Adjusting Clock Time, 2 and 3.
3. Proceed to the next section to switch on the alarm.

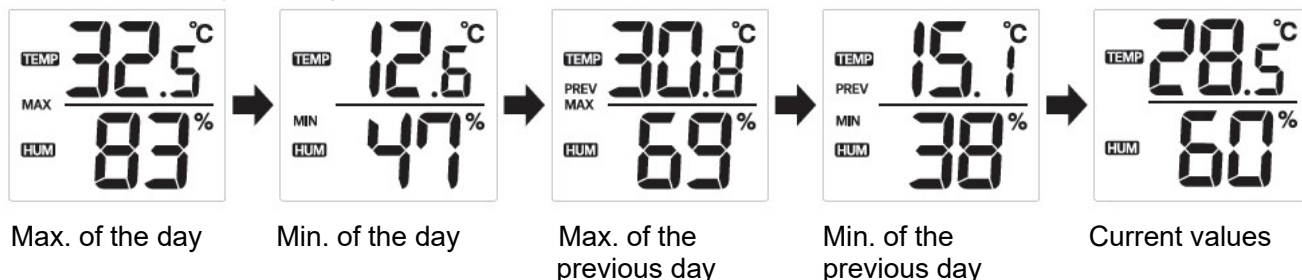
Clock Alarm On/Off

1. Press  alarm key once to turn on clock alarm. During clock alarm is on, the screen displays a sign of “” unless WBGT or volumetric humidity is shown.
 2. Press  alarm key again to turn off the alarm.
- The clock alarm rings at the configured time for 1 minute.
 - To stop the buzzer forcibly, press any key on the device.

Maximum and Minimum Data

PC-7300GTI memorizes and displays the highest and lowest values of temperature and humidity of the day and the previous day.

Press Δ max/min key to navigate to the data shown as follows.



Pressing no keys for 30 seconds makes the device revert to measurement.

This function does not apply to WBGT or volumetric humidity.

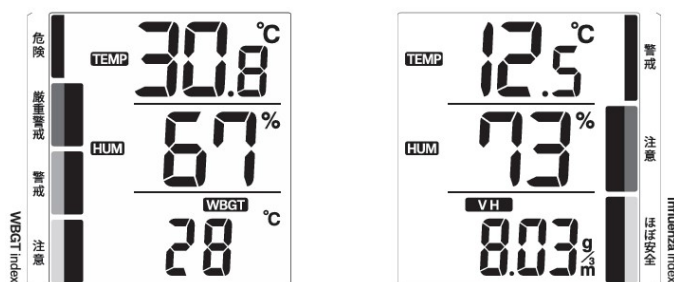
Initializing Maximum and Minimum Data

- To initialize maximum and minimum data of the day, press Δ max/min key for 2 seconds.
- To initialize all data, replace batteries or press the reset key. The device reboots then.

WBGT and Influenza Index

PC-7300GTI displays a four-step bar of WBGT index and a three-step bar of influenza index in the left and the right on the screen respectively, calculated from measured temperature and humidity.

Each bar flashes if the index level is “danger” according to the status described below.



WBGT index

Influenza index

WBGT Index and Countermeasures

WBGT	Color on screen	Type of physical activity to be warned	Countermeasures
Danger 31°C or more	Red	Any physical activity	Risk of heat stress is high for the elderly, even when they rest. Avoid going out and stay in a cool room.
Severe warning 28 to 31°C	Orange		Avoid direct sunlight outdoors and watch for any rise in room temperature indoors.
Warning 25 to 28°C	Yellow	Moderate to vigorous physical activity	Take adequate rest regularly when exercising or doing vigorous work.
Caution Less than 25°C	Green	Vigorous physical activity	Low in risk basically, but watch out when doing vigorous exercise or heavy labor.

Note that the bar display of WBGT index is a rough estimation to help consider air conditioning and health management.

Individual differences in response exist.

The description above is cited from *Heat Stress Prevention Guidelines for Daily Life Ver. 4* by Japanese Society of Biometeorology.

Indicated levels may vary from an official alert from governmental meteorological authorities.

Influenza Index and Countermeasures

Volumetric humidity	Color on screen	Survival rate of viruses	Environment for viruses	Countermeasures
Danger 7 g/m ³ or less	Red	20%	Suitable for viruses. High risk of infection	Increase temperature and humidity by using a humidifier.
Warning 7 to 11 g/m ³	Orange	5%	Viruses can survive. Be cautious of infection	Avoid a decrease in temperature and humidity.
Mostly safe 11 to 17 g/m ³	Yellow	Nearly 0%	Viruses cannot survive	Keep temperature and humidity at a reasonable level.

Influenza index is a barometer of the probability of epidemics of seasonal influenza according to a report of *Absolute Humidity as a Deterministic Factor Affecting Seasonal Influenza Epidemics in Japan* by Makoto Shoji, based on volumetric humidity which is mass of water vapor contained in a unit volume of air.

Note that it is not designed to forecast epidemics of COVID-19.

Error Messages

Either one of error messages, “Hi,” “Lo,” or “--” is displayed when a measured value drops off from the measuring range, or any abnormality occurs.

If the malfunction remains even after the reset key is pressed and the ambient temperature and humidity come back within the measuring range, contact us or a retailer from which you have purchased.

Specifications

Product name	Digital Thermohygrometer Model PC-7300GTI
Catalog no.	1079-00
Measuring range	−9.9 to 50.0°C, 20 to 95%rh
Accuracy	±1.0°C (10 to 40°C), ±2.0°C (other) ±5%rh (40 to 80%rh, 20 to 30°C), ±8%rh (other)
Resolution	Temperature 0.1°C, Humidity 1%rh, WBGT 1°C, Volumetric humidity 0.01 g/m ³
Sampling time	Approx. 30 seconds
Sensor	Thermistor for temperature, Resistive polymeric humidity sensor for humidity
Alarm range	Settable in 1°C steps between WBGT 0 and 50°C
Operating ambient	−10 to 50°C, less than 95%rh without condensing
Storage ambient	0 to 50°C, less than 85%rh without condensing
Power	AAA battery x 2 (3VDC)
Battery life	Approx. 18 months, with alkaline batteries, beeping once a day Attached batteries are for test purpose and may last shorter.
Material	ABS resin, Acrylic glass
Dimensions	100 (W) x 120 (H) x 18 (D) mm
Weight	151 g including batteries
Accessories	AAA battery x2, Instruction manual

Specifications and appearance are subject to change for improvement.

Visit our website <https://www.sksato.co.jp/en/> for the latest information.

Warranty Policy

Our products are warranted to be free from defects in materials and workmanship for a period of one year from date of delivery. If repair is necessary and has not been the result of misuse, force majeure, or transportation arranged by yourself within the one-year period, please return the products on freight prepaid basis. Correction of the defect will be made without charges. We alone will determine if the product problem is due to deviations or customer misuse.

Out-of-warranty products will be repaired for a fee.

Before returning, request for our acknowledgement first.

For details, contact us or a retailer from which you have purchased.

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