

# **Instruction Manual**

## **Digital Thermohygrometer Model PC-5400TRH**

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# Instruction Manual for Digital Thermohygrometer Model PC-5400TRH

## Introduction

Thank you for purchasing the digital thermohygrometer PC-5400TRH.

- This product is designed to measure temperature and humidity of indoor atmosphere. Do not use it for other purposes.
- Read this manual before use. Keep this manual in a safe place for future references.

## Features

- This instrument is very useful to monitor the surrounding environment. It displays temperature and humidity with maximum and minimum values of each at the same time,
- Alarm function is available for both temperature and humidity  
When a measured temperature and/or humidity value exceeds or goes below any of user-set values, the alarm buzzer sounds and the LED blinks for warning.
- Large easy-to-read LCD  
With its large, easy-to-read digits on the LCD, you can easily read measured values from across the room.



The SK-5400TRH is not explosion-proof. Never use it for flammable materials.



**DANGER**  
**RISK OF EXPLOSION**

For any other inquiries, contact the store where you purchased the instrument or our service network.

## Note on Use

Be sure to observe the following precautions in order to use this unit correctly.

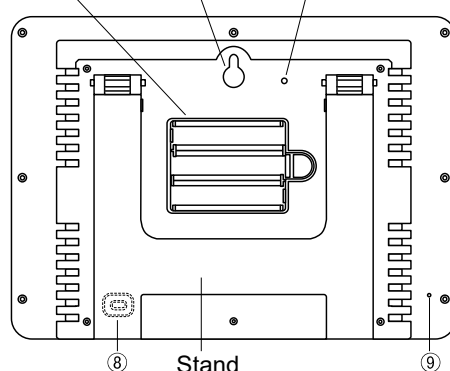
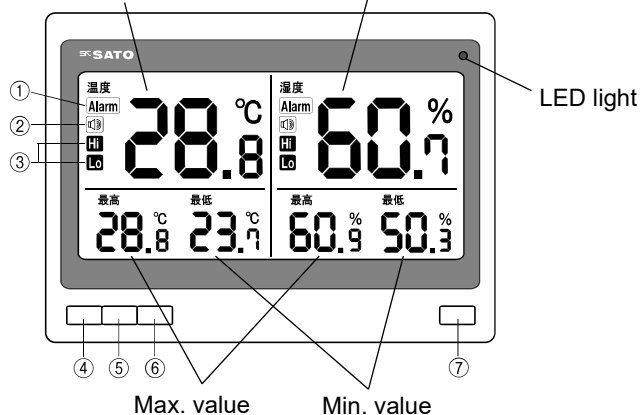
- Use this unit in a normal atmosphere.
- Do not drop this unit or apply impact to it. This unit is a precision instrument.
- This is not waterproof type. Do not use this unit in water nor wet the unit.
- Never disassemble or modify this unit. Doing so may result in failure.
- Do not use this unit in an environment where electrical noise is generated. Doing so may result in unstable display or larger errors.
- If this unit is not to be used for a long time, always remove the batteries from the unit. Otherwise, the batteries may leak fluid, resulting in failure.
- Do not wash or wipe this unit with alcohol, thinner, or other solvents. Also, do not wash it in water. If the unit becomes dirty, wipe it with a tightly wrung cloth that has been dipped in warm water with neutral detergent.
- Be sure to use this unit within the specified measurement range. Using the unit outside the specified measurement range will result in failure or damage.
- Keep the batteries out of reach of children. If swallowed accidentally, consult a medical attention immediately.


## Names of Sections

Temperature display section  
Alarm setting value display

R. humidity display section  
Alarm setting value display

Battery compartment Hole for mount Buzzer

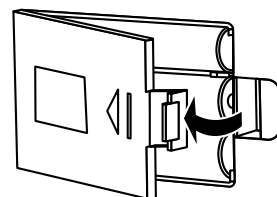


1. **Alarm** mark : lights when the alarm function is active(ON)
2.  mark : lights when the buzzer switch is ON position.
3. **Hi** and **Lo** marks : lights when upper or lower threshold (setting value) is exceeded.
4. Set key : Press this key at alarm setting mode
5. ▲ Key : Press this key to increase the value at alarm setting mode.
6. ▼ Key : Press this key to decrease the value at alarm setting mode.
7. Clear key : Press this key to clear the minimum or maximum value.
8. Buzzer ON/OFF switch : Press this key to turn on or off the buzzer function.
9. Reset button : Press this key to reset the power  
(Use this key when the unit produces improper operation)

## How to Replace Batteries

When the PC-5400TRH is used for the first time, take out the plastic sheet half-inserted in the battery compartment. If the display dims, the volume of buzzer gets smaller or the buzzer does not sound at all, process following procedure to replace batteries.

- ① Open the battery lid as shown on the picture on the right and remove the exhausted batteries.
- ② Load three AA batteries with correct polarity [(+) (-)] as indicated inside of the battery compartment. Close the battery lid.



Note: All displayed contents and set values get reset after replacing batteries.

## **Cautions**

- If the display dims or the volume of buzzer gets smaller or the buzzer does not sound at all, replace batteries immediately. Otherwise accuracy of measured value can be compromised.
- Always use new and the same type of batteries for a battery replacement.
- Do not dispose of exhausted batteries in a fire.
- For environmental conservation, dispose of used batteries in compliance with local rules and regulations.

## How to Measure

- ① Install the instrument on a desk or on a wall where it is stable.
- ② Let the instrument adapt to the surrounding environment for at least 30 minutes before use.
- ③ The current, maximum and minimum values of temperature and humidity are displayed on LCD.

**Note:** The measured values are updated every 30 seconds.

To reset the maximum and minimum values of temperature and humidity, press “CLEAR” key for 2 seconds or more.



### Cautions

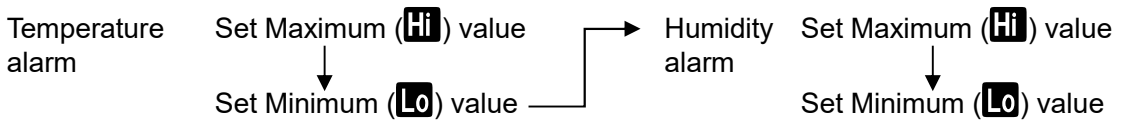
- Install the instrument away from direct sunlight, an air-conditioning system and a humidifier.
- In case of extreme change of temperature, the measuring accuracy could be affected. Let the instrument adapt to the measuring environment before use avoiding condensing of the instrument.

## Alarm Function

The PC-5400TRH has alarm functions for both temperature and humidity. The buzzer sounds and the LED light blinks when a measured value exceeds or goes below a set value.

### ● Setting Alarm Function

You may set the upper and lower alarm values for temperature and humidity separately. Each alarm setting process is as follows:



### Note:

- To disable the alarm function, set each alarm to “OFF”. All alarm functions are “OFF” in factory-set.
- In the alarm setting mode, if there has been no key operation made for longer than 30 seconds, the set values are stored and the display switches back to the measurement mode.

- ① Press “SET” key twice in measurement mode to enter “Alarm Setting Mode”.  
Alarm and Hi marks of temperature will blink.
- ② Press ▲ or ▼ to set the maximum temperature value then press “SET” to confirm.
- ③ Set the minimum temperature value.  
- After setting maximum and/or minimum temperature values, the Alarm mark will light to confirm that the thresholds of temperature are set.  
Note: The minimum set value cannot exceed the maximum set value.
- ④ Set the maximum and minimum values for humidity with the same procedure of temperature. After finishing setting the humidity alarms, the display automatically switches back to measurement mode.

- **Alarm Activation**

When measured value exceeds the maximum set value or goes below the minimum set value, the buzzer sounds and the LED light blinks for 30 seconds.

Also, as for both temperature and humidity, when a maximum set value is triggered, **Hi** mark lights and when a minimum set value is triggered, **Lo** mark lights.

**Caution:** **Alarm** mark is the indication that one or more alarm values are set. It does not mean that the measured value is triggered the set value.

- **Deactivating Alarm**

The alarm is automatically off 30 seconds of alarm activation. If you wish to disarm the alarm beforehand, press any button on the front of the instrument.

- **About **Hi** and **Lo** Marks**


**Hi** or **Lo** mark will still light even after the alarm is disarmed. The reason for that is to know which threshold is being trigger.

To reset the **Hi** and **Lo** marks, press ▲ and ▼ keys simultaneously.

**Note:** The **Hi** and **Lo** marks are also reset when switched to Alarm Setting Mode.

### Setting the Buzzer

It is possible to turn “ON” or “OFF” the buzzer which is triggered with alarm set values and key operations.

- ① Pull out the stand on the back of the unit.
- ② Use the slide switch on bottom left of the unit to either turn “ON” or “OFF” the buzzer. When the switch is turned to “ON” position, you will hear “peep” sound and the  mark will light.

### Error Message

Display	Causes	Remedy
Lo	Measured value exceeds measuring range	Bring the value within the measuring value. Otherwise, contact the dealer from which the product was purchased.
Hi		
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## Specifications

Name	No. 1074-00 Digital Thermohygrometer
Model	PC-5400TRH
Measuring Range	Temperature : 0.0 to 50.0°C Humidity : 20.0 to 95.0% rh
Accuracy	Temperature: ±1°C at 10 to 40°C ±1.5°C at other than above Humidity: ±5% rh at 40 to 70% at 20 to 30°C ±8% rh at other than above
Resolution	Temperature : 0.1°C Humidity : 0.1 %rh
Sampling time	about 30 sec.
Sensing elements	Temperature : Thermistor Humidity : Electric resistance change type
Alarm setting range	Temperature : 0.0 to 50.0°C at 0.1°C step Humidity : 20.0 to 95.0% at 0.1% step
Operating condition	Temperature : 0 to 50°C Humidity : less than 95% no condensing
Storage condition	-10 to 50°C (no condensing)
Power requirements	4.5 VDC ("AAA" size battery x 3 pcs.)
Battery life	about one year (use of alkali batteries. Alarm function actives once a day)
Material of main body	ABS resin, Acryl resin
Dimensions	225 (W) × 165 (H) × 25 (D) mm
Weight	about 480 g (inclusive a battery)
Standard accessories	"AAA" size manganese battery (R6P) x 3 pcs.

### **Warranty**

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 or adjustment is necessary and has not been the result of abuse or misuse within the **one-year-period**, please return the units on - Freight Prepaid – basis and 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 on charge basis.**

### **Warranty during transportation**

The warranty during transportation only applies to the products that we arrange the shipment. The case that the products had been purchased in domestic and were sent to overseas by the purchaser is out of warranty.

### **Return of items**

Authorization must be obtained from us before returning items for any reason. When applying for authorization, please include data regarding the reasons the items are to be returned.

Please note that we reserve the right to make improvements in design, construction and appearance of our products without notice.

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