

INSTRUCTION MANUAL
PRECISION HAIR HYGROMETER
WITH DIGITAL THERMOMETER

SATO KEIRYOKI MFG.CO.,LTD. **CE**

Introduction

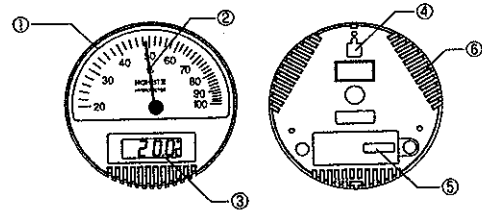
- Thank you for purchasing the precision hair hygrometer.
- This product is designed to measure temperature and humidity of atmosphere being mounted on a wall. Do not use it for other purposes.
 - Read this manual carefully before use. Keep the manual in safe place for future reference.

General

Human hair bundle is used in this hygrometer as a humidity sensor. The human hair extends and contracts in response to the changes of humidity. These movements are magnified and the pointer sensitively indicates the value of humidity.

The temperature sensor is a thermistor. Temperature is indicated with a large and easy-to-read digital display.

Name of Section



- | | |
|-------------------|--------------------------------------|
| ①Scale plate | : Minimum graduation is 2%RH |
| ②Pointer | : Indicates current humidity |
| ③Thermometer | : Temperature is digitally indicated |
| ④Hook | : Used to mount the unit on a wall |
| ⑤Battery lid | : One manganese battery is used |
| ⑥Ventilation hole | : Needed for accurate reading |

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Care in use

1. Care in installation

- Never use the instrument in the environments that contain corrosive gas and in a place subject to much dust. Otherwise, the humidity sensor (human hair) may deteriorate.
- Do not use it near the air conditioner or in direct sunlight. It may result in malfunctions.
- Refrain from using it at a door, window or wall exposed to the air.
- Mount it on the vertical wall free from vibration.

2. Care in use

- About 15 to 30 minutes will be required until the instrument shows correct value of temperature and humidity in a room after it has been taken out of the box.
- Never disassemble the instrument. Disassembling will be the cause of trouble.
- This is a precision instrument. If you drop or hit it, it will not function correctly.
- There are holes for ventilation in the instrument. Do not stop up the holes for accurate reading.
- In the time of dry as in winter, it may show the humidity less than 20%, but this is not a trouble.
- When condensed, it may show the humidity more than 100%, but this is not a trouble.
- Never use the instrument at a place subject to water splash. Never wholly cover the instrument with vinyl etc. Correct value will not be measured.
- Don't use the instrument in other than the range (0-50°C).
- Keep the battery away from infants.
- Never put the used battery on a fire.
- Make sure the polarities (+) (-) are correct. Otherwise, the instrument may become defective.

3. Maintenance

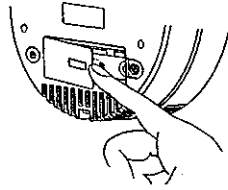
- When the instrument is stained, wipe it clean with a soft cloth. Never use thinner, benzine, alcohol etc. Use of them will be the causes of discoloration and crack.

How to use

The battery is factory set in the instrument. So the display may become dim in a short period of time after use. In that case, replace it with the new battery attached.

1. Replacement of battery

- Open the lid at the back of instrument and insert the AA battery. The positive (+) and negative (-) poles are shown at the bottom of the battery compartment.



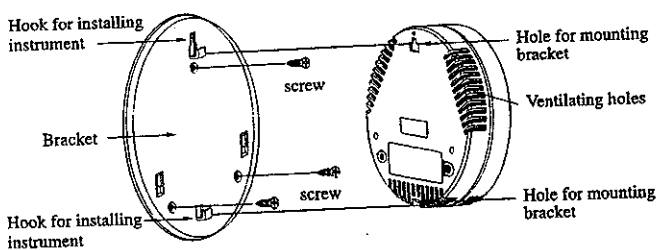
- The battery life is about one year, but replace it with the new one when the LCD has become dim.

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2. Installation

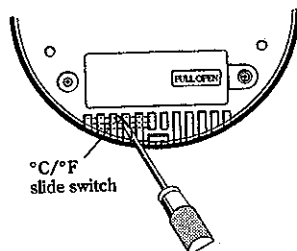
Mount the instrument with a bracket.

- Secure the bracket on a wall with the attached screws at three points.
- Slide the bracket over the instrument so that the bracket hooks are inserted in the holes on the back of instrument.



* Alternation of unit temperature
°C - °F

- All instruments are factory set to indicate °C.
- To indicate °F slide the slide switch to the left from the hole at the bottom with use of a screw driver, etc.
- To return to °C indication slide the slide switch to the right using the third hole from the left.



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Specifications

Product name		Precision Hair Hygrometer with Digital Thermometer
Model number		No.7542-00
Humidity	Humidity sensor	Human hair bundle
	Measuring range	20 to 100%rh
	Display	Analog
	Min. Graduation	2%rh
	Accuracy	± 4%rh (40%rh ~ 80%rh, at 20 ± 5°C) ± 7%rh (other than above range)
Temperature	Temperature sensor	Thermistor
	Measuring range	0 to 50°C
	Display	LCD digital display
	Resolution	0.1°C
	Accuracy	± 1.0°C (at 0°C ~ 40°C) ± 2.0°C (other than above range)
	Sampling frequency	every 10 seconds
	Battery life	About one year under normal temperature
Storage ambient		0 to 50°C, 20 to 100%rh, Non-condensing (It is desirable to store the instrument in 0 to 40°C and 20 to 80%rh)
Materials of case and bracket		ABS resin
Dimensions		Instrument: φ 135 × 33 (D) mm Bracket: φ 160 × 4 (D) mm
Weight		about 0.35kg
Standard accessories		Instruction manual Bracket w/ 3 screws 2 manganese AA batteries (one piece is factory set)

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Warranty

- This product is warranted to be free from defects in materials and workmanship in the period of one year from the delivery date to the original purchaser. If repair or adjustment is necessary and has not been the result of abuse or misuse within the one year period, please contact our distributor. Out-of-warranty products will be repaired on charge basis.

- On the following conditions, products will be repaired on charge basis even within the warranty period.

- Defect due to misuse, abuse or mishandling.
- Defect due to calamities, such as fire, earthquake, theft etc.
- Defect due to improper repair, alteration and abnormal voltage.
- Defect of external view, such as damages caused when the instrument is in use.
- Replacement of consumables and accessories.

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