

Instruction Manual
No. 7650-10 Mini Anemometer
Model PC-52D

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URL: <http://www.sksato.co.jp/english/>

Introduction

Thank you for purchasing the Mini Anemometer PC-52D.

- This product is designed to measure wind speed and temperature. Do not use it for other purposes.
- Read this manual before use. Keep this manual in a safe place for future reference.



Warning

- As the device is not explosion resistance, do not measure the explosive atmosphere.



Caution

- Except for m/s (meter/second), values in the other units are displayed for reference purpose only.
- Use this anemometer only in standard atmosphere (air composition).
- This anemometer isn't waterproof construction. Do not get wet the unit.
- Do not use the device out of the specified measurement range. If so, it results in failure.
- If condensation occurs in the device, immediately turn the power off and dry it naturally at normal temperature.
- Use of the device in electrically noisy environments results in instable display and error may occur.
- If the device is left in a car during summer time, heat from sunlight may result in failure. Do not leave it such a place.
- Do not measure the wind speed by holding the device out of an automobile window while driving. It is very dangerous.
- Do not disassemble, modify the device or use wrong battery. Doing so result in inaccurate measurement or failure.
- Do not drop the device or apply impact to it. This device is a precision instrument,
- Do not wash or wipe this unit with alcohol, thinner, or other organic solvents. If the unit becomes dirty, wipe it with a tightly-wrung towel or the like that has been dipped in warm water with a neutral detergent.
- If the device is not going to be used for a long time, remove the battery. Otherwise, the battery power will be drained and the battery fluid may leak, resulting in failure.
- Keep batteries out of reach of children. If you swallow a battery accidentally, consult a doctor immediately.
- For repair or calibration, contact the store from which the device was purchased or our service network.

Overview

The PC-52D is a compact and lightweight portable anemometer. It conveniently fits in the pocket, and so can easily be carried for measuring outdoors, such as when mountain climbing, camping, fishing, yachting, windsurfing or gliding.

Features

- Pocket-size, easy to carry

- Auto power-off function

The power of the device is automatically turned off to conserve battery power.

- Easy reading

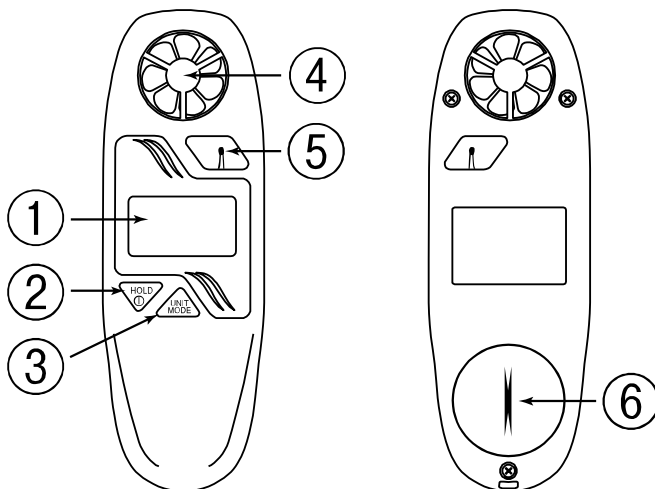
Hold function holds the measured value.

- Various units of measurement

In addition to ordinary units such as m/s (meter/second), ft/min (feet/minute), knot, the wind chill factor and Beaufort wind scale can be displayed.

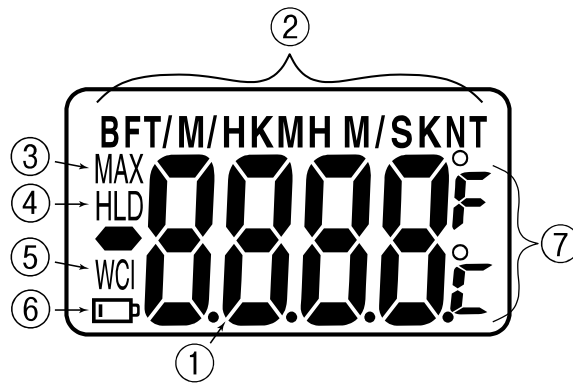
1 Names and Functions of Components

Main unit



- ① LCD display pane: Display measured values and the operating status of the device.
- ② ON/OFF/HOLD key: Pressing this key turns the power on or off. While the device is on, pressing and holding the key holds (freezes) the readings.
- ③ UNIT/MODE key: Use to switch the measured unit or measurement mode.
- ④ Wind velocity sensor (vane, propeller):
Wind velocity is measured by monitoring the revolving vane (propeller).
- ⑤ Temperature sensor: Temperature is measured by this thermistor-type sensor.
- ⑥ Battery lid: This lid covers the coin cell battery (CR2032) compartment.

LCD display panel



- ① 7-segment display (wind velocity):
Displays the measured wind velocity value, wind max value, temperature and wind chill.
- ② Unit of measurement (wind velocity): Unit of measurement for wind velocity
BF (beaufort scale), FT/M (feet/minute), M/H (mile/hour)
KMH (kilo meter/hour), M/S (meter/second), KNT (knot)
- ③ MAX: Lit while the maximum value of wind velocity is displayed.
- ④ HLD: Lit while the measured values of wind velocity and temperature are held and displayed.
- ⑤ WCL: Lit while the wind chill mode.
- ⑥ Low battery: Lit while the battery is low.
- ⑦ Unit of measurement (temperature): Unit of measurement for temperature (°C and °F)

2. Installing or Replacing the Battery

Replace the battery as follows before using the device for the first time or when low battery mark is displayed.

- (1) Remove the battery lid by turning it counterclockwise (direction of the arrow on the lid) using a coin or the like.
- (2) Take out the used battery in case of replacing a battery.
- (3) Insert the new coin cell battery (CR2032) facing upward the positive terminal (+).
- (4) Reinstall the battery lid in the reverse order of removal.

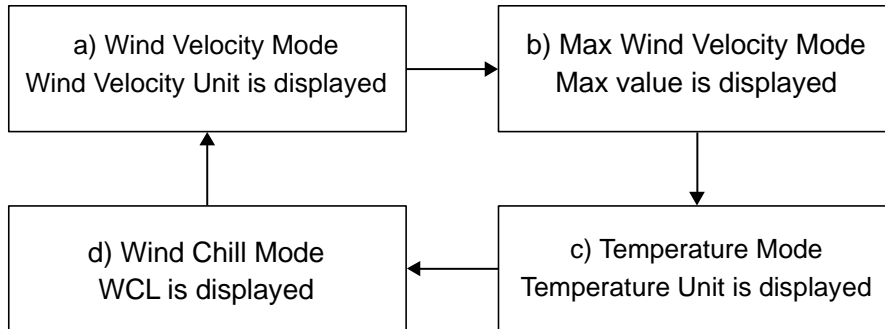


Caution

- If the low battery mark is displayed, replace the battery immediately with a new one (CR2032).
- Measurements while the battery power is insufficient may result in faulty operation.
- Always use the new battery
- Do not throw the used battery in a fire
- For environmental preservation dispose the used batteries according to the regulation of each local government

3. Measuring Procedures

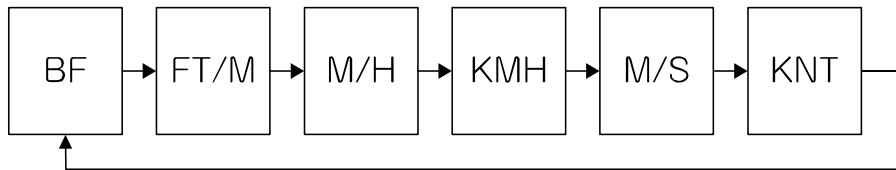
- (1) Press the HOLD/① key. After lit the whole area of the display, it is ready to measure the wind and temperature.
- (2) Press the UNIT/MODE key and choose the Mode to measure.
Each time the UNIT/MODE key is pressed, the measurement mode is switched in order of Wind Velocity Mode, Max Wind Velocity Mode, Temperature Mode and Wind Chill Mode as in following diagram.



a) Wind Velocity Mode

Wind Velocity Mode is to measure the wind velocity.

In the display of the wind velocity, while hold the HOLD/① key, press the UNIT/MODE key, the unit set is cycled as follows. Choose the unit displayed



b) Max Wind Velocity Mode

Keep updating maximum value of wind velocity and displaying the value.
The maximum value is reset as the device is turned off.

c) Temperature Mode

Temperature Mode is to measure the temperature.

While the device is in the Temperature Mode, each time the HOLD/① key is pressed, unit of temperature measured switch between Celsius(°C) and Fahrenheit(°F).

d) Wind Chill Mode

Wind Chill Mode is to measure the Wind Chill.

While the device is in the Wind Chill Mode, each time both HOLD/① key and the UNIT/MODE key are pressed at same time, unit of temperature measured switch between Celsius(°C) and Fahrenheit(°F).

- (3) Direct the device in the way that the wind measured comes through the device from back (the side which serial number is printed) to front.
- (4) Turn off the device by pressing the HOLD/① key more than 3 seconds after use.



Caution

- If the device is used in the environment beyond the specified condition, the unit may be damaged. Do not use the device in such a manner.
- Measurement outside the specified range may result in failure or damage of the device.
- The rapid changes of ambient temperature might affect measurement accuracy. To assure measurement accuracy, wait while until the device adapts the ambient temperature.

4. Hold Function

In case that measured value fluctuate very much, press the HOLD/① key to hold the value so that reading the value becomes easier.

- How to activate hold function

- (1) While the device is measuring a value, press the HOLD/① key. The HOLD character is lit on and displayed value is held.
- (2) To release Hold function, press the HOLD/① key again. Light is turned off and the device is back to previous state.

5. Auto power-off function

If the device is not operated for approximately 5 minutes, the power is turned off automatically. This function conserves battery power even if you forgot to turn the power off.

- How to release the auto power-off function

- (1) While the device is power-off, keep pressing the HOLD/① key for more than 3 seconds.
- (2) When the entire display is lighted-up and the character “n” is displayed, release the HOLD/① key. Then the character “n” is disappeared and the device is in measurement mode.
- (3) To turn the power off, keep pressing the HOLD/① key for more than 3 seconds

Caution: Once the device is turned off, auto power-off function is activated again.

In case auto power-off function is unwanted, release the auto power-off function each time starting up the device.

6. Error message

Measurement Target	Error Code	Cause	Solution
Wind velocity	Hi	Measured value exceeds measuring range	Use the device within measurement range. If error message is still displayed, stop using it and contact the store from which the device was purchased or our service network
Temperature	Hi	Measured value exceeds measuring range	
	Lo	Measured value is lower than measuring range	
	Err	Temperature sensor has something wrong	

7. Specifications

Name	Mini Anemometer		
Model	PC-52D		
Catalog No.	7650-10		
Measurement range	Temperature	0.0 to 50.0°C	
	Wind velocity	m/s (meter/second) Ft/min (feet/minute) knot kilo meter/hour mile/hour (beaufort scale)	1.1 to 15.0m/s 60 to 2952FTM 2.1 to 29.1KNT 4.0 to 53.9KMH 2.5 to 33.5M/H 1 to 7
	Temperature	±1°C	
	Wind velocity	±1.1 m/s (1.1 to 10.0m/s) ±2.0m/s (others)	
	Temperature	0.1°C	
Resolution	Wind velocity	m/s (meter/second) Ft/min (feet/minute) knot kilo meter/hour mile/hour (beaufort scale)	0.1 1 0.1 0.1 0.1 (1)
	Temperature	0.1°C	
	Wind velocity	±1.1 m/s (1.1 to 10.0m/s) ±2.0m/s (others)	
	Temperature	0.1°C	
	Wind velocity	m/s (meter/second) Ft/min (feet/minute) knot kilo meter/hour mile/hour (beaufort scale)	
Sampling time	about 1 second		
Sensing elements	Temperature: Thermistor Wind velocity: Vane (propeller)		
Ambient Temp.	0 to 50°C (no condensation)		
Storage Temp.	-10 to 50°C (no condensation)		
Power	Lithium button battery (CR2032) x 1		
Battery life	about 50 hours (continuous use)		
Materials	Main unit : ABS resin Vane: ABS resin		
Dimensions	Main unit: 44(W) x 130 (H) x 16(D) mm		
Weight	about 54g (including a battery)		
Accessory	Lithium coin cell battery (CR2032) x 1 Manual x 1 Hand strap x 1		

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