INSTRUCTION MANUAL

No. 8080-05

WATERPROOF DIGITAL THERMOMETER
(With Print Output)

MODEL SK-1260

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CE

SK SATO KEIRYOKI MFG. CO., LTD.

Introduction

Thank you for purchasing the SK-1260 Waterproof Digital Thermometer.

- This product is designed to measure temperature. Do not use it for other purposes.
- Read this manual thoroughly before using. Keep the manual in a safe place for future references whenever necessary.

Overview

The SK-1260 is a waterproof digital thermometer to which dedicated thermistor sensor probe and dedicated thermocouple (K) sensor probe are connected. Measured data can be stored in the main unit and can be printed on an optional printer.

Features

- **Waterproof Function**
  The main unit connected with probe has a waterproof structure that conforms to IPX 4 (waterproof level 4 : splash-proof type) in JIS C 0920. Even if the main unit is touched with wet hands or is subject to splashes of water, its functions will not be affected.
- **Choice of 2 methods in storage**
  Measured data can be stored in the main unit manually or automatically by the settings. The stored data are output to an optional printer.
  For details, see "In Storage Mode".
- **MAX/MIN Alarm Setting**
  Upper and lower limits can be set. If the temperature reaches the upper or lower limit, the alarm buzzer sounds to alert.
- **Compatibility in the main unit and probes**
  The main unit is fully compatible with both a thermistor sensor probe and a thermocouple (K) sensor probe.

Warning

The SK-1260 is not explosion-proof. Never use it in an atmosphere containing flammable gases.

Beware of explosion!
There is a risk of explosion. Take extreme care.

** If you have any questions, contact the dealer from which the unit was purchased, or our service network.

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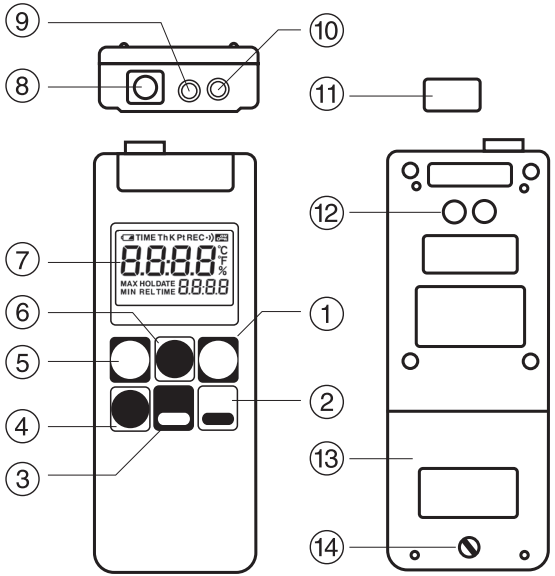
1. Names and Functions of Components



① POWER key

Press this key. The buzzer (beep) sounds and the unit turns on. Press this key again to turn it off.

While the main unit is on, it can be switched to each mode as follows:

- Press the POWER and HOLD/REL keys simultaneously to enter record interval setting mode.
- Press the POWER and TIME keys simultaneously to enter time setting mode.
- Press the POWER and MAX/MIN keys simultaneously to enter management number setting mode.
- Press the POWER and SET/CLEAR keys simultaneously and then press the SET/CLEAR key alone to clear the stored data.

② HOLD/REL key

- Press the HOLD/REL key in normal measurement mode to hold (freeze) temperature readings.
- Press the HOLD/REL key in hold mode to enter REL (fluctuation) measurement mode.
- Press the HOLD/REL key in REL (fluctuation) measurement mode to return to normal measurement mode.

③ MAX/MIN key

- Press the MAX/MIN key in normal measurement mode to enter maximum/minimum storage mode.
- Press the MAX/MIN and SET/CLEAR keys simultaneously to enter the alarm setting mode for upper and lower limits

④ SET/CLEAR key

- Mainly use the SET/CLEAR key to determine the various settings.

⑤ TIME key

- Press the TIME key in normal measurement mode to display the set time.
- While the main unit is on, press the TIME and POWER keys simultaneously to enter time setting mode.

⑥ REC/PRINT key

- Press the REC/PRINT key in normal measurement mode to enter manual storage mode.
- Press the REC/PRINT and MAX/MIN keys simultaneously in normal measurement mode to start auto storage mode.
- While the main unit is on, press the REC/PRINT and POWER keys simultaneously to print the stored data on an optional printer.

⑦ LCD panel

- The LCD panel displays the temperature reading, the current state of settings and characters

⑧ Sensor connector

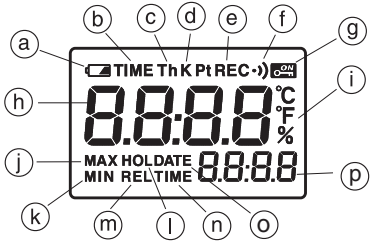
- Connect the dedicated thermistor sensor probe or dedicated thermocouple (K) sensor probe.

⑨ Printer connector

- Connect the cable of the optional printer

⑩ AC adapter jack
・Connect the dedicated AC adapter plug.
⑪ Jack waterproof cover
・When measuring temperature in the environment requiring waterproof level (IPX 4), mount jack waterproof cover on the printer connector and the AC adapter jack.
⑫ Jack waterproof cover hold unit
・When connecting the dedicated printer cable or using the AC adapter, remove the jack waterproof cover and mount it on the cover hold unit.
⑬ Battery lid
⑭ Battery lid fixing screw

Display section



ⓐ Battery mark : Lit when battery power is insufficient
ⓑ TIME : Lit while time is being set
ⓒ Th : Lit while the thermistor sensor probe is connected
ⓓ K : Lit while the thermocouple (K) sensor probe is connected
ⓔ REC : Lit while data being recorded
ⓕ •)) : Lit while upper and lower limits are being set
ⓖ ON : Lit while Auto power-off function is released.
ⓗ Main 7-segment LCD : Displays the measured value and so on
ⓘ Unit of measurement (°C/°F)

ⓙ MAX : Lit while the maximum measured value is being displayed
ⓚ MIN : Lit while the minimum measured value is being displayed
Ⓛ HOLD : Lit while measurement data is being held
ⓜ REL : Lit while variation is displayed in HOLD measurement mode
ⓝ TIME : Lit when the time of recorded data is confirmed
ⓞ DATE : Lit while date is being set
Ⓟ Sub 7-segment LCD : Display current temperature in HOLD, MAX and MIN modes

2. Notes on Use

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

・Do not use this unit as a clinical thermometer.
・Do not drop this unit or apply impact to it. This unit is a precision instrument.
・Never disassemble or modify this unit. Doing so may result in failure.
・Do not use this unit in water.
・Do not use this unit in a place exposed to direct sunlight or near heating equipment. Doing so may result in deformation of the casing or failure.
・Do not use this unit in an environment where electrical noise is generated. Doing so may result in unstable display or errors.
・Do not forcibly pull, bend, or bundle the sensor cord. Placing a heavy object on the sensor cord, heating or scratching the cord may also damage it.
・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.
・The sensors are specially designed for the SK-1260 Water proof Digital Thermometer. Never connect these to another thermometer or a personal computer.
・Do not loosen or tighten the six screws securing this unit. Doing so affects the waterproof characteristics.
・Be sure to use this unit within the specified measuring range. Using the unit outside the specified measuring range will result in failure or damage. When measuring a high temperature, be careful not to burn yourself. Also, after measuring a high temperature, the stainless steel pipe of the sensor remains hot; allow sufficient time for the pipe to cool down before storing it.
・The pointed type sensor has a sharp pointed end so that it can penetrate into the measuring object as this end could cause accidental injuries, handle the sensor with due care.

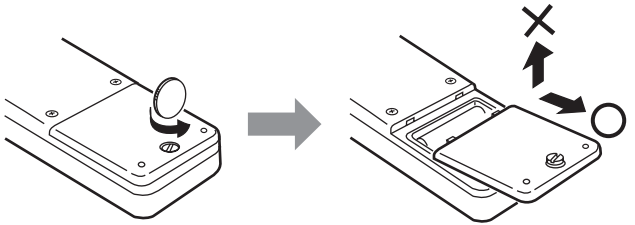
** For repair or calibration, contact the dealer from which the unit was purchased, or our service network.

3. Caution in storage

Leaving this unit inside a car under the full sun in a hot climate will cause it to become extremely hot, possibly resulting in failure.
Do not leave it in such a hot place.

4. Loading Batteries

(1) Rotate the screw on the battery lid on the back of the main unit counterclockwise using a blade screwdriver or a coin until it comes free, then holding both sides of the lid, slide it out horizontally.



Note: Replace all four batteries with new batteries of the same type.

(2) Load four AAA size batteries with correct polarity [(+) (–)] as shown in the battery compartment.
(3) Reinstall the battery lid and secure with the screw in the reverse order of the removal procedure.

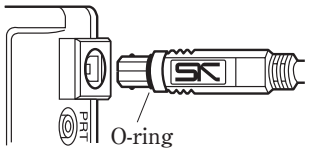
Note: * If the rubber ring comes off when you open the battery lid, insert the rubber ring back into the groove in the main unit. Install the battery lid correctly, otherwise water will get into the main unit, resulting in failure.
* If there are drops of water on the rubber ring, wipe them off.

(4) Low Battery Mark
This mark lights when the battery power becomes insufficient.
a. Battery power is sufficient : Mark does not light
b. Advance notice for insufficient : Mark lights
(Little battery power is left, but it is recommended to replace batteries to new ones)
c. Warning for replacement : Mark slowly blinks
(Battery power has almost exhausted)
d. Measurement impossible : Mark quickly blinks
(Warning buzzer sounds for one second every one minute.)

(5) Be sure to turn the power off before replacing the batteries. Otherwise, all data will be cleared.

5. Connecting the Sensor Probe

Insert the plug of the sensor probe all the way into the connector socket on the main unit until clicks are heard.

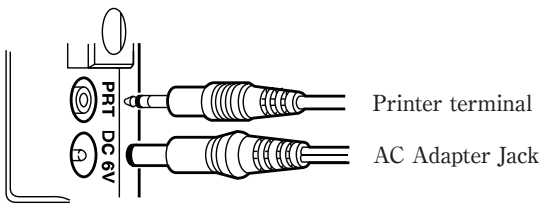


Note: Hold the sensor plug with the SK mark facing up so that it becomes level with the front panel, then insert the plug all the way in. Failure to do so affects the waterproof characteristics, resulting in failure.

⚠ Caution!

* This sensor plug is not a USB-compliant product. Never connect the sensor plug to a personal computer or other peripheral device.
* Make sure to turn the power off before connecting or disconnecting the sensor probe to avoid malfunction.

6. Connecting the Printer Terminal and the AC Adapter Jack



Note: Always fasten the jack waterproof cover back on when not in use.

7. Operating Procedure

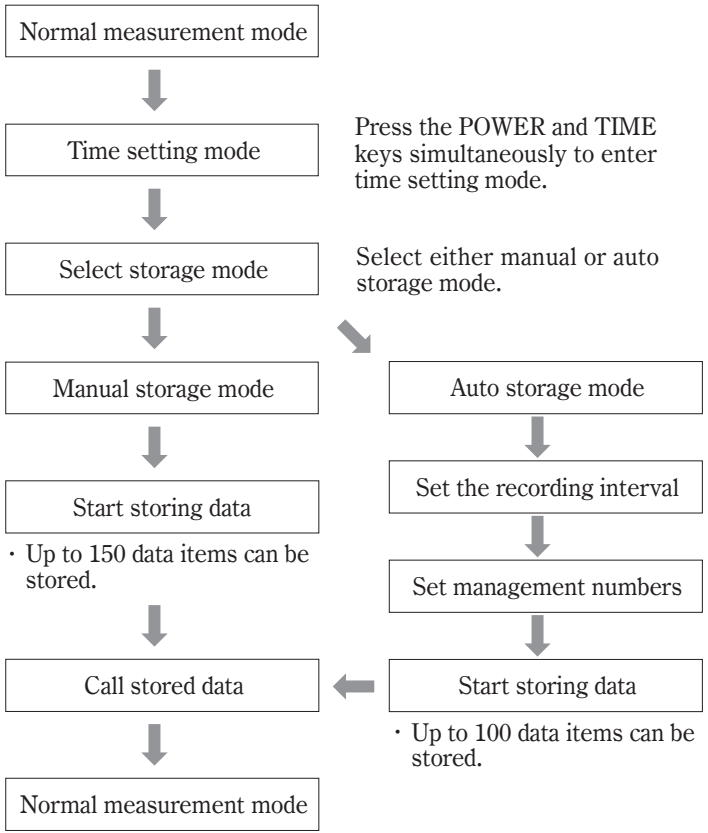
Please refer to flow of the operation that the usage on the SK-1260 digital thermometer.

(1) General temperature measurement

Load batteries in the battery compartment	Four AAA batteries or AC adapter (option)
⬇	
Connect the probe to the main unit	Leave the probe (especially, thermocouple (K) sensor) under the measurement environment for approx. 10 minutes.
⬇	
Press POWER key to turn on	Press the POWER key for at least one second. The unit is in normal measurement mode.
⬇	
Temperature measurement is possible	The current temperature will be displayed. Measure temperature within the permissible temperature range.
⬇	
Use the HOLD/REL and MAX/MIN functions	

(2) Temperature measurement in manual or auto storage mode

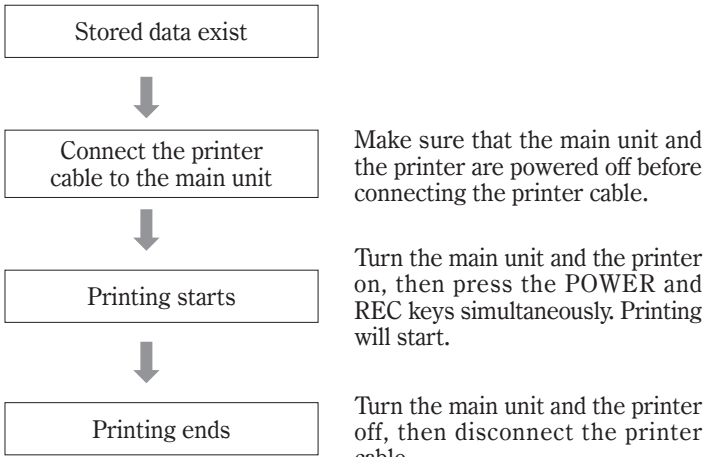
・Displaying stored data on the LCD panel.



Note: If you want to return to storage mode, all the stored data must be erased. To do this, press the POWER and SET/CLEAR keys simultaneously, then press the SET/CLEAR key alone. All the data will be erased.

(3) Printing stored data

・Printing stored data on a dedicated printer (option).



Note: If you want to return to storage mode, all the stored data must be erased. To do this, press the POWER and SET/CLEAR keys simultaneously and "Fclr" is displayed. Then press the SET/CLEAR key alone. All the data will be erased.

Ⅰ General Temperature Measurement Methods

Ⅰ-1. Temperature Measurement Method

(1) Connect the sensor probe to the main unit.

(2) Press the POWER key for at least one second. Test patterns will appear on the entire LCD panel for approximately five seconds, then the currently measured temperature will be displayed in normal measurement mode.

* If the unit is not operated for 30 minutes, the Auto power-off function will be activated, turning the power off automatically.

If the POWER key is pressed for 3 seconds or more when the unit is turned on, Auto power-off function is released and the unit enters normal measurement. In this case, mark is displayed to show that the Auto power-off function is not being set.

Caution!

- When measuring high temperature, be careful not to burn yourself.
- Do not disconnect the sensor probe while the power is on.

(3) When an accurate temperature measurement is needed, insert the sensor into the measuring object to a depth of approximately 15 times the diameter of the sensor stem, regardless of whether the object is a gas, liquid, or semi-solid. For example, if the sensor stem is 2 mm in diameter, insert the sensor into the object to a depth of approximately 30 mm or more from the tip of the stem. This will shield the sensor from the ambient temperature.

(4) Press the POWER key for at least one second in normal measurement mode to turn off the display and main unit.

Ⅰ-2. HOLD/REL Function

(1) Press the HOLD/REL key to hold (freeze) the measured value. If the temperature changes too frequently during measurement, press the HOLD/REL key to hold (freeze) the measurement data on the main 7-segment display for easier reading. The currently measured temperature is continuously displayed on the sub 7-segment display so that you can check the current temperature while holding the necessary temperature reading.

(2) Press the HOLD/REL key again to invoke REL mode in which the fluctuation between the currently measured value and the held value appears on the main 7-segment display. Temperatures lower than -199.9°C are displayed as "OL". Measured values continue to appear on the sub 7-segment display in real-time. Each time measured values change, the difference between the currently measured value and the held value appears on the main 7-segment display.

(3) Press the HOLD/REL key again to return to normal measurement mode.

* Release HOLD and Current temperature (sub 7-segment) display functions

By pressing the SET/CLEAR and the HOLD/REL keys simultaneously in the HOLD function, the HOLD mark and the current temperature displayed on sub 7-segment will disappear. Press HOLD/REL key to appear REL display and press HOLD/REL key again to return to normal measurement mode.

Ⅰ-3. MAX/MIN Function

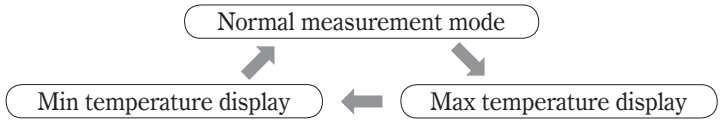
• Displaying the maximum and minimum temperatures

(1) Press the MAX/MIN key once in normal measurement mode, then press the SET/CLEAR key to start MAX/MIN function.

(2) Press the MAX/MIN key to display the lowest temperature since the MAX/MIN function started.

(3) Press the MAX/MIN key to switch back in normal measurement mode then press the MAX/MIN key again to display the highest temperature since the MAX/MIN function started.

(4) The operation mode can be switched in the cycle shown below.



(5) Press the SET/CLEAR key to clear the maximum and minimum temperature values stored in the memory. The unit restarts recording the maximum and minimum temperatures after the stored values have been cleared.

Note : While the maximum or minimum temperature is being displayed, the current temperature is displayed on the sub 7-segment display.

I-4. Alarm Setting of Upper and Lower Limits

(1) Press the SET/CLEAR and MAX/MIN keys simultaneously in normal measurement mode to set upper limit on the sub 7-segment display. Press the SET/CLEAR and MAX/MIN keys simultaneously again to set lower limit. The numerical value can be set by pressing the UP or DOWN keys.
(2) When the SET/CLEAR key is pressed, •)) is displayed in the LCD panel and enters alarm setting mode.
(3) If the temperature reaches the upper or lower limit to be set, the warning buzzer sounds and •)) flashes on the panel.
(4) Press the SET/CLEAR key to release the alarm setting mode and •)) will disappear.
(5) Press the TIME key to return to normal measurement mode.

I-5. °C/°F Switch Function

Press the POWER, MAX/MIN and HOLD/REL keys simultaneously in normal measurement mode to switch the temperature unit Centigrade to Fahrenheit.

I-6. Auto Power-off Function

・The power will be turned off automatically if the unit is not operated for approximately 30 minutes. This function conserves battery power if you forget to turn the power off.
・The following table shows whether the Auto power-off function works in each state.

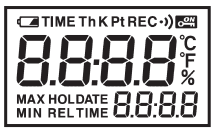
Normal measurement mode	Yes
HOLD mode	No
MAX/MIN display	No
Manual storage mode	Yes
Auto storage mode	No*

* Under auto storage mode, display may disappear depending on the setting of the recording interval.
* The Auto power-off function is activated after 120 data have been stored in auto storage mode.

[Releasing Auto Power-off Function]

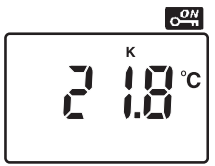
1) Turn the power on.

2) Test pattern will be displayed.



3) While the management number is being displayed for about 2 sec., press the SET/CLEAR key.
ON will appear at upper right in the LCD to show the Auto power-off function is releasing.

4) Current temperature will be displayed.
If the power turns off under the Auto power-off function is releasing, the Auto power-off function mode will switch back.



Ⅱ Methods for Measuring Temperature in Storage Mode

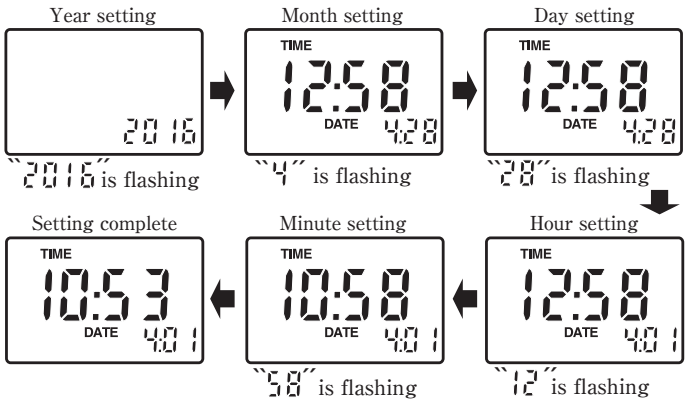
Ⅱ-1. On Setting Modes

When you enter a setting mode, the numerical values that can be set start flashing. The numerical values can be changed by pressing the UP or DOWN key. To select other setting mode or quit the setting mode, press the SET/CLEAR key. The setting mode will switch back to normal measurement mode.

Ⅱ-2. Setting Time

Press the POWER and TIME keys simultaneously while the main unit is on. Set the time with the following procedure. After setting each item, press the SET/CLEAR key to move to set the next item.

• Example: When setting 10:53 am, April 1, 2016



Time setting is required for both manual and auto storage modes.

Note: If manual or auto storage mode is invoked without setting the current time, the factory-set date and time will be recorded in the stored data.

Ⅱ-3. Setting the Recording Interval

Press the POWER and HOLD/REL keys simultaneously while the main unit is on. Set the recording interval with the following procedure.

Note: The recording interval needs to be set for auto storage mode.

• The default recording interval is 1 minute. If, for example, you wish to set the recording interval to 10 minutes, set the value as shown on the right by pressing the UP key. Press the SET/CLEAR key to switch back to normal measurement mode. If the current time is 13:06, the unit will start recording data from 13:10 because recording occurs every 10 minutes on the hour (see the following table).

(min: minute, h: hour)

Recording interval	Recording start timing
1 min	Every minute on the hour
2 min	
3 min	Every 10 minutes on the hour
5 min	
10 min	
30 min	
1 h	Every hour on the hour
2 h	
3 h	
4 h	
6 h	
12 h	
24 h	

Ⅱ-4. Setting Management Numbers

Press the POWER and MAX/MIN keys simultaneously while the main unit is on to set the management number.

• Example of using management numbers:

00 --- Person in charge (00 for Mr. Sato)

99 --- Object measured
(99 for heat insulating box in laboratory)

Note: Management numbers can be used in auto storage mode only. Any two numbers between 00 and 99 can be set.

⚠ Caution!

When entering each setting mode, be sure to press the POWER key and the other necessary key simultaneously. If the POWER key is pressed first, the unit will be turned off.

Ⅱ-5. Manual Storage Mode

Press the REC/PRINT key while the main unit is on to start recording the currently measured value. When the REC/PRINT key is pressed, the file number and the "REC" are displayed on the sub 7-segment display for approximately 0.5 second. If the total number of files exceeds 180, pressing the REC/PRINT key displays "FULL" on the sub 7-segment display and warning buzzer (beep) sounds. Subsequent measured values cannot be stored.

Note: Even if the power is turned off during data storage processing, the data will be retained. When the power is turned on again, the operation will continue from the previously stored data. When you do not need the stored data, be sure to clear the stored data from the memory by pressing the POWER and SET/CLEAR keys simultaneously and then also press the SET/CLEAR key alone. These also apply to auto storage mode.

• Calling Stored Data

In case the stored data is present in the unit, press the TIME key for at least one second to display the stored temperature values on the main 7-segment display and the file numbers on the sub 7-segment display. The temperature values and file numbers are displayed in chronological order starting with the first file. Hold down the TIME key to advance the temperature values and file numbers rapidly.

Press the SET/CLEAR key to switch back to normal measurement mode. To check the stored data again, repeat the above procedure.

Ⅱ-6. Auto Storage Mode

Press the REC/PRINT and MAX/MIN keys simultaneously to start recording measured values while the main unit is on. When recording starts, "REC" is lit and the file number "F xx" and the sampling data count "d xx" are alternately displayed on the sub 7-segment.
If the total file number exceeds 120, pressing the REC/PRINT key displays "FULL" and warning buzzer (beep) sounds. Subsequent measured values cannot be stored.

• Calling Stored Data

In case the stored data is present in the unit, pressing the TIME key for at least one second displays the measured temperature value, maximum value, and minimum value respectively in this order on the main 7-segment display. At the same time, the relative measurement time is displayed on the sub 7-segment display. The measured temperature values and measurement times are displayed in chronological order starting with the first file.

Holding down the TIME key can fast-forward the measured temperature value, maximum value, minimum value and the measurement time.

Press the SET/CLEAR key to switch back to normal measurement mode. To check the stored data again, repeat the above procedure.

Note: If you want to quit auto storage mode to check the stored data in

the middle of recording, press the REC/PRINT key. The REC display and the file number will disappear and the recording will be stopped. When you check the stored data again, perform the above procedure for calling stored data.

Note: To switch auto storage mode to manual storage mode, you must clear stored data from the memory with the procedure below:
- Press the POWER and SET/CLEAR keys simultaneously while in normal measurement mode.
- Press the SET/CLEAR key alone to clear the remaining stored data. You will now be able to enter manual storage mode.

- With the Auto power-off function active, the LCD display will be turned off after approximately 30 minutes since recording started. At every data storing process, the LCD display will be turned on and off. This on-and-off process will continued up until 120 data are stored. The longer the recording interval the longer the time the LCD display is off. This is not malfunction of display.

Note: When auto storage ends, confirm the following procedure.

1. Be sure to turn the main unit off first when the auto storage ended.
2. If the auto storage ends while power is ON and AC adapter is connected with unit, be sure to firstly pull out the jack of AC adapter from the unit. At this time, batteries have been installed in the unit.
3. If the plug of AC adapter is pulled first while power is ON, the stored data will be erased.

Recording interval	Recording start timing	Display interval	Display time
1 min. 2 min. 3 min.	Every min. on the hour	Continuous display	-------
5 min. 10 min.	Every 10 min. on the hour		
30 min.		Every 30 sec.	For about 7 sec.
1 hour	Every hour on the hour	Every 1 min.	
2 hours		Every 2 min.	
3 hours		Every 3 min.	
4 hours		Every 5 min.	
6, 12 and 24 hours		Every 10 min.	

- Be sure to turn the power off by pressing the POWER key in following procedures.
  - Switching the power from batteries to AC adapter.
  - Switching the power from AC adapter to batteries.
  - Replacing batteries.

If the power is turned back on within 50 seconds after the manner, all recorded data are obtained. Switching or replacing the power source without turning the power off may cause malfunctions and errors in display.

Ⅲ Printing Stored Data

Ⅲ-1. Connecting the Main Unit and the Printer

(1) Make sure that both of the thermometer and the printer are turned off, then connect the printer cable between the terminal on the printer and the printer terminal on the main unit.
(2) Thoroughly read the instruction manual of printer provided with the printer.
(3) This is a dedicated printer (option) for the SK-1260. To purchase this printer, contact the dealer from which the SK-1260 was purchased, or our service network.

Ⅲ-2. Printing Stored Data

(1) Confirm that the printer is turned on.
(2) Press the POWER and REC/PRINT keys simultaneously, "Prn" is displayed on the main 7-segment display and starts printing data.
* Holding down the REC/PRINT key for 3 sec. or more can also start printing.
(3) The printer will output all data from the first file to the last file.
(4) After printing, all data still remains in the main unit.

Ⅲ-3. Examples of the Printed Data

Manual storage mode

Measuring Data Print-Date : 2016/9/23
Mes-Code : No. 00-00 (°C)

Rec	Date	Time	Temp
001	9/23	11:52	25. 9
002	9/23	11:58	25. 0
003	9/23	12:35	25. 7
004	9/23	12:37	25. 1
005	9/23	12:45	25. 1
006	9/23	12:46	25. 0
007	9/23	12:47	24. 5
008	9/23	12:48	25. 5
009	9/23	12:58	26. 9

Auto storage mode (Recording interval is set to 2 min.)

Measuring Data Print-Date : 2016/9/23
Sensor : K1, Mes-Code : No. 00-00 (°C)

Rec	Date	Time	Ave	Max	Min
001	9/22	11:31	25. 9	25. 9	25. 0
002	9/22	11:33	25. 0	33. 1	25. 0
003	9/22	11:35	25. 7	25. 7	25. 1
004	9/22	11:37	25. 1	25. 1	25. 0
005	9/22	11:39	25. 1	25. 1	25. 0
006	9/22	11:41	25. 0	39. 9	20. 3
007	9/22	11:43	24. 5	72. 5	24. 5
008	9/22	11:45	25. 5	87. 6	25. 5
009	9/22	11:47	26. 9	32. 4	26. 8

Ⅳ Error Message

• Error massage is displayed on the main 7-segment LCD

Display	Causes	Remedy
Er : Hi	Measured value is higher than measuring range.	Stop measurement and bring the value within the measuring range.
Er : Lo	Measured value is lower than measuring range.	
----	Measured value exceeds the measuring range further. (appears after Hi or Lo displayed)	
	Probe is not connected.	Connect the probe.
	Sensor is disconnected.	Poor connection of probe connector or disconnection inside the probe. If disconnection seems to be the cause, stop using the thermometer.
	Short-circuits inside the probe.	Stop using the thermometer.

Ⅴ Specifications

Product	No. 8080-05 Waterproof Digital Thermometer
Model	SK-1260
Measuring range	Thermistor : -30.0 to 199.9°C K Thermocouple : -99.9 to 1250°C
Resolution	Thermistor : 0.1°C at -30.0 to 199.9°C K Thermocouple : 0.1°C at -99.9 to 199.9°C : 1°C at 200°C to 1250°C
Accuracy	Thermistor Main unit : ± 0.2°C Sensor : ±(0.1%rdg + 0.2°C) at 0.0 to 150.0°C : ±(0.2%rdg + 0.4°C) at -30.0 to -0.1°C, 150.1 to 199.9°C K Thermocouple Main unit : ±(0.1%rdg+0.3°C) at 0.0 to 199.9°C : ±0.5°C : at -99.9 to -0.1°C : ±(0.2%rdg +1°C) at 200 to 1250°C SK-100K Sensor (range -100 to 300°C) : JIS class 1 : ±1.5°C at -40 to 375°C : ±0.004•|t| at 375 to 1000°C
Number of Stored data	Manual storage mode : 180 data Auto storage mode : 120 data
Waterproof protection grade	Conforming to JIS C 0920 (Protection class 4) ----Equivalent to IPX4 rated----
Sensors	Thermistor / K Thermocouple
Power requirements	6VDC (AAA size battery× 4 pcs.) or AC adaptor (option)
Battery life (continuous use)	Manganese batteries : about 180 hours Alkali batteries : about 280 hours
Materials	Main unit : ABS resin Probe : Sensing stem : Stainless steel (SUS316) Grip : ABS resin (heat-resistant type)
Dimensions	Main unit : 66(W) × 175(H) × 25(D)mm
Weight	approx. 200 g (main body including batteries)
Standard Accessories	SK-S100K standard probe, soft pouch with neck strap, 4 manganese AAA size batteries

Ⅵ Optional Accessories

No. 8009-50 Dedicated printer Model DPU-414
Power requirements: AC adapter or built-in battery
Accessories: 1 ea. of roll paper, cable, AC adapter in 100 to 240VAC use

No. 8008-90 Dedicated AC Adapter Model AD-0601000-1
Output: 6VDC, 1A

Ⅶ Warranty Policy

Our products are warranted to be free from defects in materials and workmanship for a period of one year from date of shipment. 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.

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.