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**The Temperature Logger
(Button-typed)**

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Instruction Manual

HIOKI

Data Pico

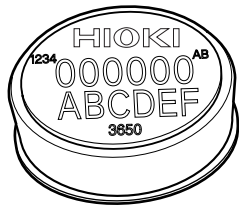
Thank you for the purchase of our product.
Before using this system, read this User's Manual
for the proper operation.

This manual should be retained along with the
Operation Manual.
Those documents will be surely helpful for the
future use.

□

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HIOKI E. E. CORPORATION

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※The product is shipped after the careful examination. If any defect is found, contact with the
dealer or the user support.

3650 Temperature Logger	1		1
Holder (Large)	1		1
Holder (Small)	1		1
Magnet	1		1
Screws for fixing holders	2		2
3650 Instruction Manual (this document)	2		2

Take out the user's manual and make sure that the following items are included in your package.
Check the Packaging

Before Use

Safety Instructions

- Before using, read this 'Safety Instructions' thoroughly for the proper operation.
- Safety Instructions written in this manual are intended for the proper use of our product to prevent the risk of harming or damaging people. Safety instructions are divided into two sections: WARNING and CAUTION. WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. CAUTION also indicates such a hazardous situation which, if not avoided, could result in serious consequences in some cases.

Warning Indicates a potentially hazardous situation which could result in death or serious injury when the product is not handled properly.

Caution Indicates a potentially hazardous situation which could result in serious consequences in some cases when the product is not handled properly.

- The mark within a black circle denotes the required procedure.
- After reading this manual, keep it in a place where anyone can have access at any time.

Instructions for Use

Warning

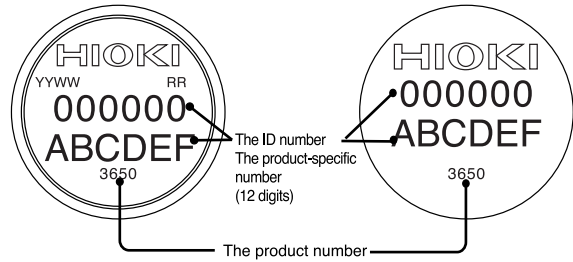
DO NOT attempt to disassemble or service the products. Such an act may cause abnormal overheating or fire disaster. Refer to the qualified service personnel.
DO NOT expose the magnet directly to food. It may violate the Food Sanitation Law.

DO NOT put the product in the mouth. Keep it away from children to avoid accidental swallowing. If such a case happens, Contact a doctor immediately.

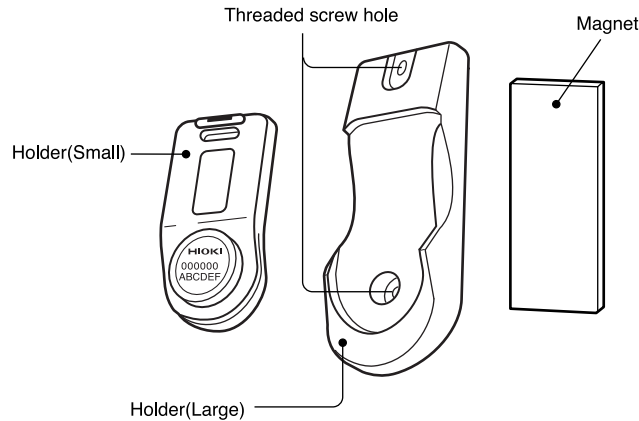
DO NOT keep the product with other metals or batteries.

Part Names and Functions

Main body



Holder



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Features

Measuring temperature: Measures the temperature of the environment where the 3650 is placed.

Measuring temperature range: The measuring temperature range is as follows.
3650 : -40°C to +85°C

Recording Duration

The following table shows the number of data that can be recorded in the memory when the temperature is continuously measured.

Measuring Time Interval	Data Counts
1 minute	1.4 day
3 minutes	5.2 days
5 minutes	7 days
10 minutes	14 days
30 minutes	42 days
1 hour	85 days

Possible recording counts: Over 500 thousand times

The usage in a place where the ambient temperature is over 50 may reduce the defined recording counts.

The data recorded in the 3650 can be retrieved with the 3920-01 Data Reader

Operation Instruction 1

1. Before use

Set the 3650 in preparation for the start of measurements (3650 Initial Settings)
The 3920-01 Data Reader (not included in this system) and a personal computer are used for the 3650 to start measuring temperature.
Refer to the 3920-01 Instruction Manual and the Software Operation Manual in details.

2. Initial settings 1 to start measuring temperature

- Basic Information
The ID number of the 3650 is unique throughout all the 3650s.
The number will be used when the analysis software reads the data.
Write down the number in advance before the setting.
- Items to set
 - Set the Date and Time
The 3650 internal clock is displayed. Mark off the checkbox next to "Adjust to PC Time" to adjust to the clock of computer.
 - Set the Date to Start Measuring
Set the date and time to start measuring temperature.
 - Set the Measuring Interval
Set the time interval between the consecutive measurements of temperature.
 - Set the Recording Mode
The 3650 can record two thousand and forty eight (2048) data at maximum. There are two possible modes to choose from in the recording.
Enable memory overwriting
"Yes" :Record the newest data until now (max. 2048)
"No" : Record the oldest data from start of measuring (max. 2048)
 - Set the Temperature Alarm Warning
Set the warning temperature when measuring temperature.
Data outside of this range will be recorded as the alarm temperature time.

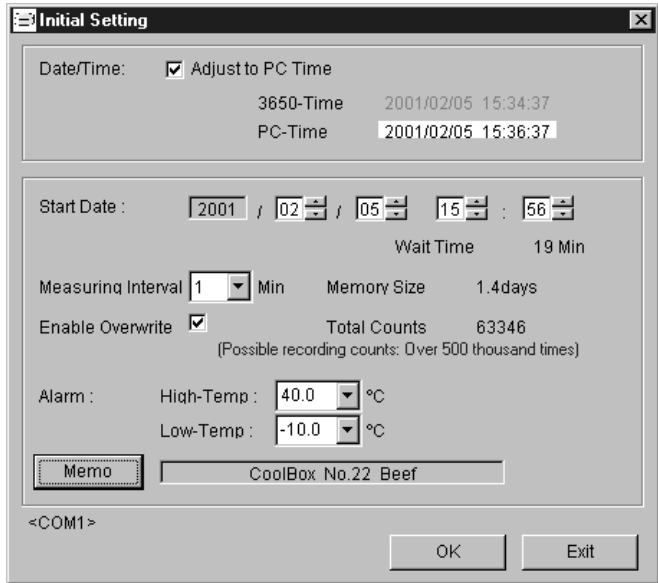
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Operation Instruction 2

3.Initial settings 2 to start measuring temperature

(Example) The setting screen to start measuring temperature using the analysis software for Windows (3920-01)

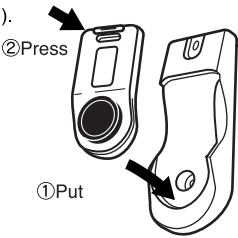
- Adjust the date and time to the computer.
- Set the starting date and time to 19 minutes later than the current time.
- Set the Measuring Time Interval to 1 minute.
- Set the High Temperature alarm at 40.0 and the Low Temperature at -10.0 .



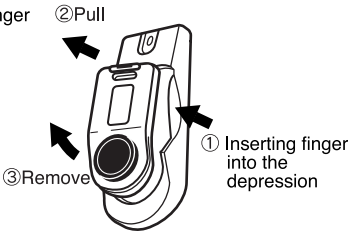
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Operation Instruction 3

- Fitting in the Holder
 - ① Fit the holder (Small) in the frame.
 - ② Press the protruding part of the holder (Small).

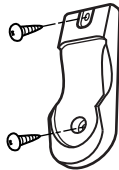
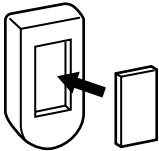


- Removing the Holder
 - ① Take hold of the holder with your finger inserting into the depression of the either side of the holder.
 - ② Pull the holder (Small) toward you.
 - ③ Remove the holder (Small).



The included magnet or screws are used depending on the place to fix the holder.

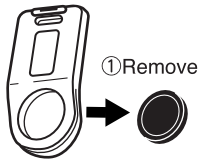
- Attaching the magnet
 - Use the scotch tape at the back of the magnet to attach to the frame at the back side of the holder (Large) firmly.
- Fixing with screws
 - Screw the holder (Large) as illustrated below.



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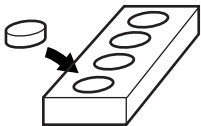
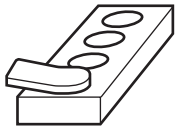
Operation Instruction 4

- Remove the 3650 out of the holder when used without the holder.
- Removing the 3650

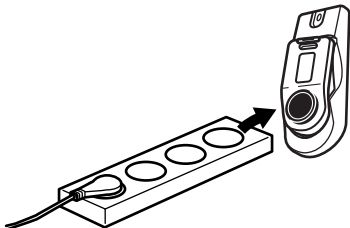


Connect to the 3920-01 Data Reader

- Used with the holder
 - Connect to the 3920-01 Data Reader with the 3650 in the holder (Small)
- Used without the holder
 - Remove the 3650 from the holder and connect to the 3920-01 Data Reader



- Connect to the 3920-01 Data Reader
 - Connect the 3920-01 Data Reader with the 3650 fit in the holder (Large)



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Specifications

Product Name	Temperature Logger (button-typed)
Model Name	3650
Measuring Temperature Count	1
Measuring Temperature Range	- 40℃ to 85℃
Operating Temperature Range	- 40℃ to 85℃
Storage Temperature Range	- 40℃ to 85℃
Resolution	0.5℃
Maximum Measuring Counts	Over 500,000 (The usage in a place where the ambient temperature is over 50℃ may reduce the specified count)
Accuracy of measurements	- 40.0℃ to -10.5℃ ±2℃ - 10.0℃ to 30.0℃ ±1.5℃ 30.5℃ to 85.0℃ ±2℃
Accuracy of clock	0℃~45℃ ±1 minute per month other - 8minutes per month max.
Resistance to water	Ordinary water resistance
Conformity	EN61326 1 : 1997, A1: 1998

Dimension	17.35 mm across and 5.89 mm thick
Weight	3.3g

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Declaration of C onformity

HIOKI

DECLARATION OF CONFORMITY

Manufacturer's Name: HIOKI E.E. CORPORATION
Manufacturer's Address: 81 Koizumi, Ueda, Nagano 386-1192, Japan
Model Number and Product Name:
3650 TEMPERATURE LOGGER
3921 DATA CHECKER

The above mentioned products conform to the following product specifications:

EMC: EN 61326-1:1997+A1:1998
Class B equipment
Portable test and measurement equipment.

Model Number and Product Name:
3920-01 DATA READER

The above mentioned product conforms to the following product specifications:

EMC: EN 55022:1998 class B
EN 50082-1:1992

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 89/336/EEC, but is not applicable to the Low Voltage Directive 73/23/EEC.

8 September 2000

HIOKI E.E. CORPORATION

Yuji Hioki
President

3650A999-00

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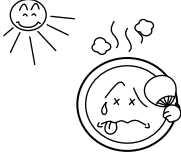
Precautions for Use

Precautions for Use

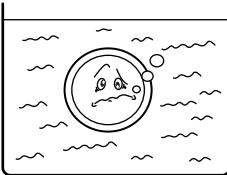
Avoid using the 3650 in any place where it will be subject to vibration. Otherwise, it may cause failure.



Avoid exposing the 3650 directly to the sun or using it near fire. Otherwise, it may cause failure.



Avoid using the 3650 in water. Otherwise, it may cause failure.



Avoid using or storing the 3650 in any place exposed to rain. Otherwise, it may cause failure.



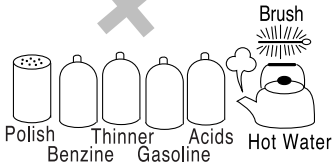
● Before Use

Before you use the 3650 for a long time, be sure to check the total counts. If the count is close to five hundred thousand, the battery may wear out before the measurements are complete. Before you use the 3650, it is also recommended that it be tested in a normal temperature for several times to confirm its proper operation.

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Maintenance

- Regular cleaning is recommended to keep the 3650 clean all the time.
- Don't wipe with polish, powder soap, benzene, oil or hot water. Those substances may damage coating or plastics.



1 Holder, the 3650

Stop the operation of the 3650 and wipe with a dry cloth.

2 Check after the maintenance

After finishing the maintenance, check the following items for a proper operation.

- There is no fissure in the holder.
 - No equipment is abnormally heated.
- If anything seems to be wrong, feel free to ask to the store where you purchased this product or the service center.

The management of the solid wastes

Instructions for disposal

⚠ Attention

- ! Dispose the wastes as noncombustible. However, under various state and local laws, it may be illegal to dispose of the wastes that way. Check with your local solid waste officials for details in your area for proper disposal.

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