HIOKI
HIOKI E. E. CORPORATION

HEAD OFFICE
81 Koizumi, Ueda, Nagano 386-1192, Japan
TEL +81-268-28-0562 / FAX +81-268-28-0568
E-mail: os-com@hioki.co.jp

HIOKI USA CORPORATION
6 Corporate Drive, Cranbury, NJ 08512, USA
TEL +1-609-409-9109 / FAX +1-609-409-9108

◎User Memo

Write the followings when you purchase this product.
This memo will be surely helpful to send the product to service.

Product name	
Purchased date	
Shop Name	
	Phone

1FC6P11000740

Data Checker

HIOKI

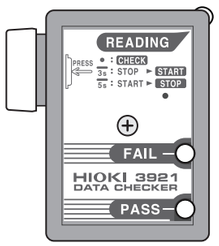
Model Name 3921

Instruction Manual

Data Pico

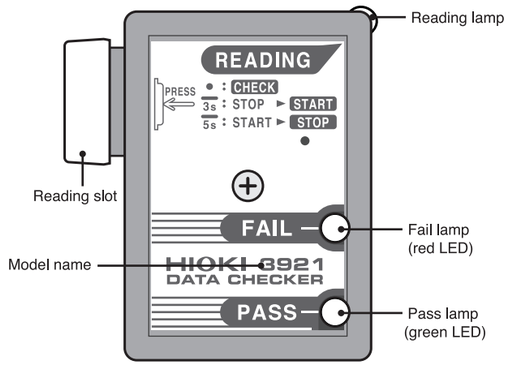
Thank you purchasing the Data Checker 3921. Please read the Instruction Manual carefully before using the system for proper operation and keep it in a safe place where anyone can have access for reference.

Contents



HIOKI E. E. CORPORATION

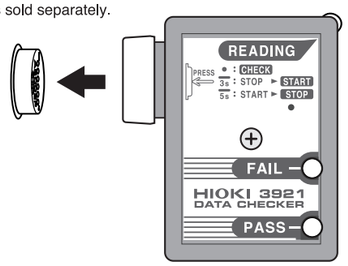
Name of Parts and Functions



≪ Bringing into Contact with a 3 6 5 0 ≫

In bringing the data checker into contact with a 3 6 5 0 , make sure that the reading slot is oriented as shown below.

* The 3 6 5 0 is sold separately.



Functions List

If 3 6 5 0 temperature measurement is in progress

Themperature alarm detection

You can bring the data checker into contact with a 3 6 5 0 during temperature measurement to check for a temperature alarm instantly. (For more details, see "2. Temperature Alarm Detection Function.")

Temperature measurement pause function

You can stop temperature measurement in progress by bringing the data checker into contact with the 3 6 5 0 . (For more details, see "3. Temperature Measurement Pause Function.")

If 3 6 5 0 temperature measurement is stopped

Temperature measurement restart function

You can restart temperature measurement by bringing the data checker into contact with the 3 6 5 0 , without needing to use a data reader. (For more details, see "4. Temperature Measurement Restart Function.")

Tip

Temperature alarm detection in the 3 6 5 0 does not work while temperature measurement is stoppd.

≪What is a 3 6 5 0 Temperature Alarm≫

If an higher-limit temperature and a lower-limit temperature are preset at 3 6 5 0 startup, a high temperature alarm is generated if the measurement exceeds the higher-limit temperature setting or a lower thermal alarm is generated if the measurement falls below the lower-limit temperature setting.

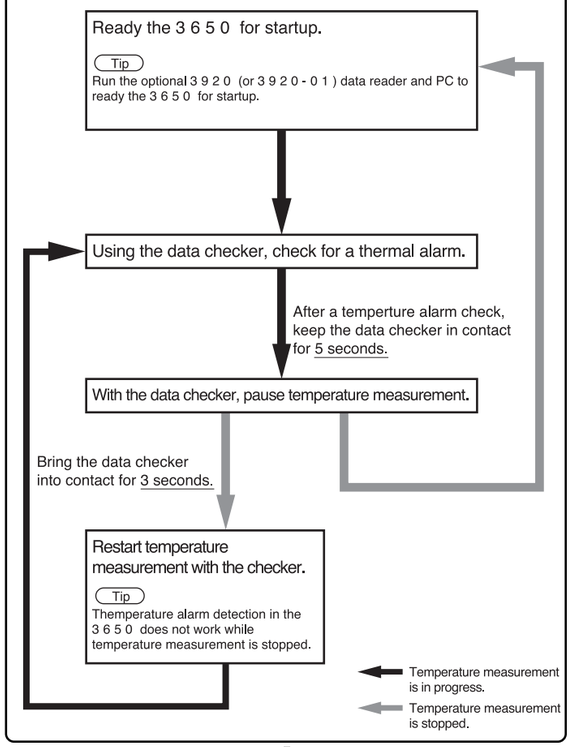
Tip

Run the optional 3 9 2 0 (or 3 9 2 0 - 0 1) data reader and PC to ready the 3 6 5 0 for startup. For more details refer to the 3 9 2 0 (or 3 9 2 0 - 0 1) data reader user's guide and the software manual.

Operating Instruction 1

1. Introduction

A typical flow of data checker usage is introduced below.



Operating Instruction 2

2. Temperature Alarm Detection Function

You can bring the data checker into contact with a 3 6 5 0 during temperature measurement to check for a temperature alarm instantly. There is no need to stop temperature measurement for the 3 6 5 0 .

[Operation]

When you bring the data checker reading slot into contact with the 3 6 5 0 , the READING lamp flashes, and a LED lamp lights (for 3 seconds) to indicate the detection result, with a beep tone. The LED lamps have the following meaning:

PASS lamp (green LED) : No temperature alarm has been detected during measurement.
FAIL lamp (red LED) : A temperature alarm has been detected during measurement.

Tip

When performing thermal alarm detection for continuously, separate the data checker from the 3 6 5 0 once for at least 1 second and then bring it contact into with the 3 6 5 0 again.

3. Temperature Measurement Pause Function

You can stop temperature measurement in progress by bringing the data checker into contact with the 3 6 5 0 to keep valuable data from being overwritten and prevent battery exhaustion.

[Operation]

After having checked for a temperature alarm, keep the data checker in contact with the 3 6 5 0 for 5 seconds and the READING lamp will flash five times before the temperature measurement for the 3 6 5 0 stops.

Before Using Data Checker

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

Data checker	1	
Instruction manual (this document) (Japanese and English each)	2	
	2	
Simplified operating instructions seal (Japanese and English each)		

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

Safety Instructions

- Before using, read this "Safety Instructions" thoroughly for proper operation.
- Safety Instructions written in this manual are intended for the proper use of our product to prevent the risk of harming or injuring people. Safety instructions are divided into two sections of WARNING and CAUTION. WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. CAUTION also indicates such 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 procedure which must be executed.
- After reading this manual, keep it in a place where anyone can have access at any time.

Precautions for Use

⚠Warnings

DO NOT attempt to disassemble or service the products other than replacing the battery. Such an act may cause abnormal overheat or fire disaster. (No Disassembling)	DO NOT expose the product directly to food. It may violate the Food Sanitation Law.

Operating Instruction 3

4. Temperature Measurement Restart Function

You can restart temperature measurement by bringing the data checker into contact with the 3650, without needing to use a data reader. The following tips should deserve special notice:

Tip
- The memory will be cleared at temperature measurement restart. (Save valuable data to the PC or other storage media before restarting temperature measurement.)

Tip
- Temperature alarms will be cleared at temperature measurement restart. (Save valuable data to the PC or other storage media before restarting temperature measurement.)

Tip
- The same set of temperature measurement conditions (measurement interval, memory overwrite, higher-limit and lower-limit temperature, etc.) as used in the last run of temperature measurement will be resumed at temperature measurement restart.

Tip
- The temperature start date and time are set automatically (with the Residual Waiting time: 0 minute).

[Operation]

Keep the data checker in contact with the 3 6 5 0 for 3 seconds and the READING lamp will flash five times before the temperature measurement for the 3 6 5 0 restarts. The restart process completes if the PASS and FAIL lamp light (for about 2 seconds) with a beep tone.

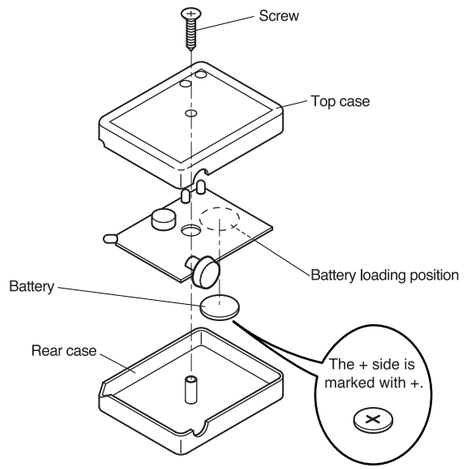
Tip

When restarting temperature measurement after the temperature measurement stop, separate the data checker from the 3 6 5 0 once for at least 1 second and then bring it contact into with the 3 6 5 0 again.

Replacing the Battery

Load a battery.

1. Loosen the screw on the surface of the unit and open the top case.
2. Insert the battery (CR2032) into the battery loading position with the + side facing down.
3. Close the cases completely tight.
4. Retighten the screw.



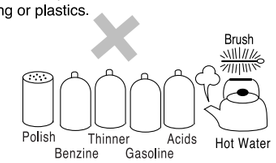
Tips

Clearances in the contact of the cases can cause lead to dew condensation or failure. Be sure to close the cases completely tight. In loading the battery, observe the correct polarity to avoid failure. To avoid malfunctioning, replace the battery while the unit is fully dry. Take also notice of the additional precautions in battery handling to assure safety.

Maintenance

⚠Warning DO NOT splash water to the product or wash it in running water. It may cause short circuit or electric shock.

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



1 Main unit

Wipe off with a soft, dry cloth.

2 Check after the maintenance

After finishing the maintenance, check the following items for a proper operation.
- There is no fissure or crack on the case.
- No abnormal heat of the product is recognized.

If anything seems to be wrong, feel free to ask the store where you purchased this product or the service center.

Disposal of Wasted Battery

Instructions for disposal

⚠Caution

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

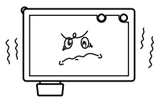
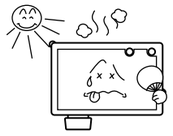
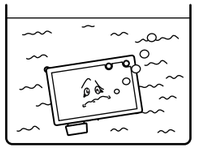
Specifications

Product name	Data checker
Model name	3 9 2 1
Ambient temperature range	-20℃ to 50℃
Ambient humidity range	Less than 85% relative humidity (No condensation is recognized.)
Power source	Coin-type lithium battery CR2032 (Changeable)
Number of measurement cycles	200,000 times (maximum) * Service life of the battery is about four years taking into consideration the natural discharging. * Change the battery with the new one if brightness of the LED lamp decreased.
Conformity	EN61326 1 : 1997, A1: 1998

Dimensions	40 (H) x 57.5 (W) x 18.75 (D) mm (The slot for reading is excluded.)
Weight	45 g

Precautions for Use

Precautions for use

Avoid using the product in any place where will be subject to violation. Otherwise, it may cause failure.	Avoid exposing the product directly to the sun or using it near fire. Otherwise, it may cause failure.
	
Avoid using the product in water. Otherwise, it may cause failure.	Avoid using or storing the product in any place exposed to rain. Otherwise, it may cause failure.
	

Safety Precautions in Handling Batteries

Lithium primary batteries contain inflammable substances, such as a lithium metal and an organic solvent. Improper handling can cause the batteries to heat, explode, ignite or otherwise misbehave, resulting in physical injury or fires. Be sure to abide by these precautions (warnings and cautions) to prevent these accidents.

Precautions for Use

⚠Warnings

Do not short or recharge the battery or force its discharge. In loading the battery, observe the correct polarity. Contact between the plus and minus terminals of the battery or with metallic parts can short the battery, inducing such large current flow to heat the battery to the point of leakage, explosion and firing. Recharging a lithium primary battery or forcing its discharge can generate a gas inside the battery, causing swelling, heating, leakage, and fire.	Do not heat the battery, dispose of the battery in fire or solder it directly. If the battery is heated to 100℃ or higher or a connection is directly soldered to the battery body (package), plastic materials, such as the gasket and separator, will be impaired, causing the battery to leak, or internally short and then build up heat, resulting in explosion or fire. The battery may blast or combust intensely if it is disposed of in fire.
Do not swallow the battery. Keep the battery out of reach of babies. In the event of swallowing, obtain medical care immediately.	Do not use the battery for other than its intended use. If the battery is used for an unintended use, it may fire, explode or impair the equipment.
Do not disassemble or deform the battery under pressure. If the battery is disassembled, a gas may be generated irritating the throat or the internal lithium battery may heat causing fire. If the battery is deformed under pressure or hit severely or otherwise impacted, the sealed part of the battery may be deformed, causing the battery to leak or short internally, resulting in swelling, heating, explosion or fire.	

⚠Cautions

Do not through the battery in water. Electrolytic corrosion may occur or a flammable gas may be generated.	Discontinue using the battery when it is found to swell, leak, heat or otherwise misbehave.
Do not leave the battery in a place exposed to direct sunlight or rainwater. Store the battery in a dry place that is not exposed to direct sunlight, with little temperature change. The quality and useful life of the battery can be degraded if it is left in a high-temperature, high-humidity condition or wetted with rainwater or the like.	Read the user's guide or instructions carefully before using the battery. After reading, keep them in a safe place for ready reference.

Declaration of Conformity

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.

HIOKI E.E. CORPORATION

8 September 2000

Yuji Hioki
President

3650A999-00