

**SOLDERING IRON THERMOMETER**

**HS-30K**

# Instruction Manual

AE-100182  
First Edition  
May 2008

Please read this manual thoroughly before using the product, and use the device properly so as to fully take advantage of its functions.

### **Precautions**

1. This product does not come equipped with a probe. Please select a probe beforehand that fits the soldering iron that you use. Using an incorrect probe will hinder a correct measurement and dramatically shorten its life.
2. Please be careful as the LCD can deteriorate from direct sunlight or radiation. Furthermore, please avoid strong impact.
3. Do not disassemble this device for any reason. In the event that damage or trouble was caused by disassembling or altering the device, using it for any other reason than temperature measurement, or another reason beyond our control, repairs may not be conducted free of charge despite whether it is still within the warranty period.

Please abide by the following warnings in order to ensure your safety, prevent product damage, and ensure correct measurements.

### **Warnings**

### **In order to safely use this product, please:**

- Do not use this product for any purpose other than measuring temperature.
- Immediately cease using this device if you feel any abnormality, and contact a retail shop or Anritsu Meter.
- Do not disassemble or alter this product.
- The probe becomes hot when measuring.  
Do not directly touch the probe as it may result in burn or injury.

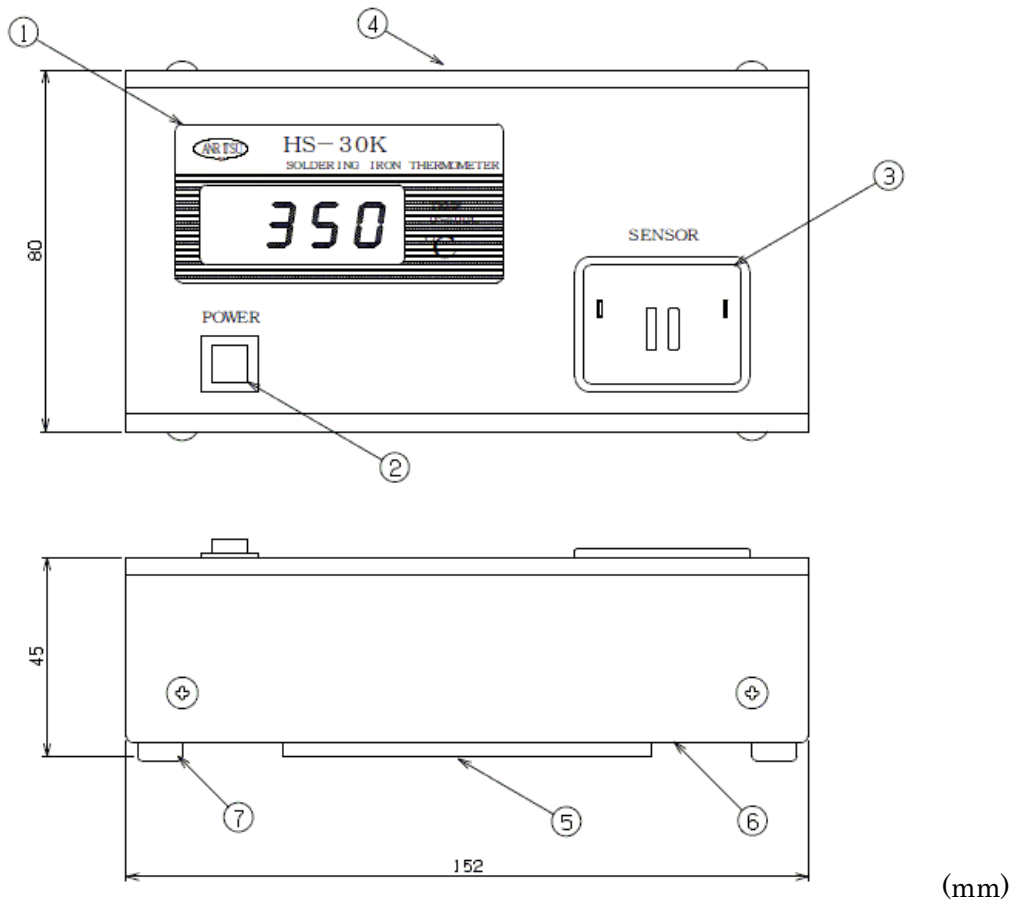
### **Cautions**

### **Batteries**

- Please use the specified batteries with this device.
- Insert + and – polarity correctly.
- Remove the batteries when they die or when you are not going to use the device for a long time.
- Do not mix new and old batteries or battery types when using.

- Battery life varies greatly based on environmental temperature.
- Throwing batteries into fire, short-circuiting them, disassembling them, or heating them is strictly prohibited.

## Part Names



- |    |                |    |                   |
|----|----------------|----|-------------------|
| 1: | Display        | 5: | Battery box       |
| 2: | Power key      | 6: | Management number |
| 3: | Probe mount    | 7: | Legs              |
| 4: | Usage warnings |    |                   |

## Functions and Handling

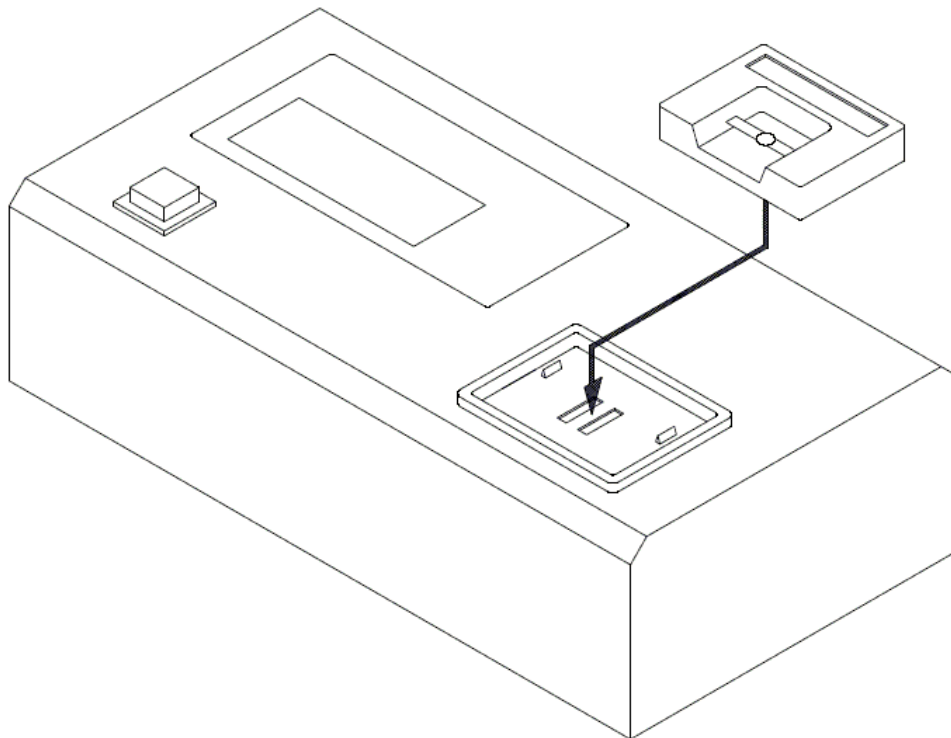
1. Affix the probe unit (sold separately) to the device's probe mount.

Make sure to pinch around the probe unit with your fingers when affixing and removing it. The probe unit is attached by a magnet, so it can be easily removed.

\* Warning

The probe may become misaligned or detached upon strong impact, so please take into consideration an environment where the device will not be dropped or endure impact.

Pushing or pinching the metal portion of the probe unit's central part with force may damage the unit.



2. Turn on the power using the **POWER** key. Normally, the surrounding room temperature will be displayed.

-Normal

25°C

-Disconnected probe

- \*\*\* °C

Display at app. -300 to 400°C.

\* The display may show a negative figure when the probe temperature is near 0°C.

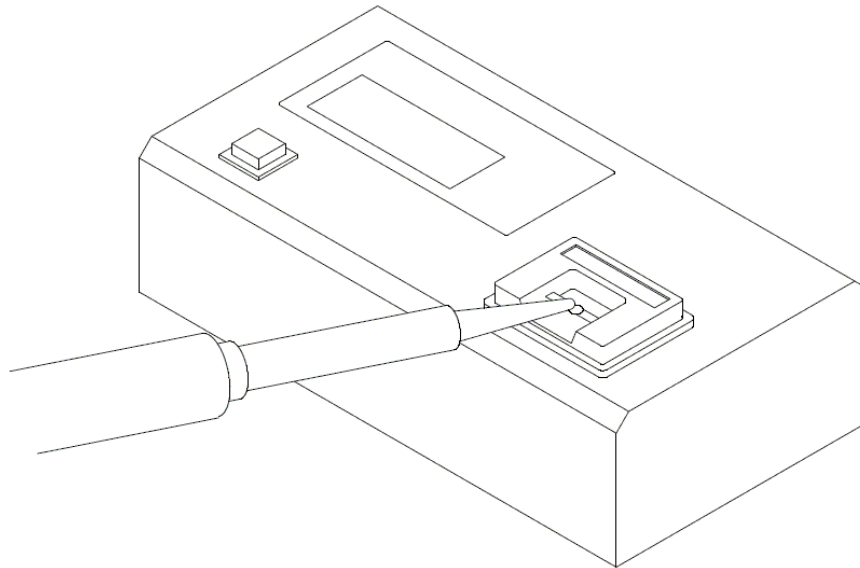
3. Affix a proper amount of solder to the soldering iron that you are measuring and then lightly touch the tip to the probe.

\* Warning

Touching or rubbing the probe with the tip too strongly will dramatically reduce the probe's life and durability. Simply place the tip on the probe and it will respond adequately.

Also, please avoid measuring at high temperatures for long periods of time.

The probe becomes hot when measuring, so do not touch it directly with your hand and keep flammable objects away.



4. Display when changing batteries

When “LOBAT” is shown on the top-right part of the display, please turn off the power and replace all the batteries with new ones.

Confirm the battery's polarity and replace them correctly.

## Trouble and Maintenance

Confirm the following points in the event of malfunction. If symptoms do not improve, promptly cease use of the product and contact a retail shop or Anritsu Meter.

- Display malfunctions
  - The batteries may have died. Please replace them with new batteries.  
Also, please check that the batteries are inserted in the correct direction.
  - Please confirm the power key.
  
- Variances in the displayed temperature
  - The batteries may have died. Please replace them with new batteries.
  - Confirm that the probe unit is correctly set on the probe mount.
  - The display becomes unstable after a sudden change in environmental temperature.  
Please accustom the device to the environment for approximately 10 to 30 minutes.
  - A malfunctioning probe. Please replace the probe.
  
- Light display
  - The batteries may have died. Please replace them with new batteries.
  - The display becomes unstable after a sudden change in environmental temperature.  
Please accustom the device to the environment for approximately 10 to 30 minutes.
  
- Regarding maintenance
  - Do not directly touch the polar zone of the probe mount (where the probe unit is affixed).
  - Clean probe units when they become dirty with solder residue and flux.
  - When not using the device for long periods of time, please remove and store the batteries.

## Specifications

### • Unit Specifications

Model	HS-30K
Thermocouple Type	Type K (CA)
Measurement Range	0 to 500°C    Display: -1999 to 1999 (liquid crystal segment display)
Resolution	1°C
Accuracy	0 to 500°C    ± (0.3% of reading +1°C)
Temperature Coefficient	± 0.03% of full scale °C
Reference junction compensation accuracy	±0.5°C
Signal source resistance	MAX 500Ω (acceptable value of special probe)
Linearizer	Analogue linearizer method (compliant with JIS C 1602-1995)
Display	7 segment LCD
Operation Conditions	between 10 to 40°C, 0 to 85% RH (no condensation)
Storage conditions	between 0 to 50°C, 0 to 85% RH (no condensation)
Power	4 alkali AA batteries (LR6 × 4)
Continuous use	Approx. 180 hours (when using alkali AA batteries)
Dimensions	152 (W) × 80 (D) × 45 (H) mm
Weight	App. 460 g
Accessories	4 alkali AA batteries (LR6), this manual *Probes are sold separately.

### • Probe (sold separately)

Model	Recommended tip size
CR-31K	MAX Φ1.5 mm
CR-32K	MAX Φ1.5 to 4 mm
*Pb-free solder is affixed to the area of contact on probes when shipped. Probe units must be purchased separately as they are consumable goods.	



## ——Warranty Policy——

Anritsu Meter products are shipped after undergoing a thorough in-house inspection. However, if for some reason you discover malfunctions due to manufacturing defects or accidents while shipping, please contact the retail store where you purchased the device or Anritsu Meter directly.

The warranty period for our products is one year after the date of delivery. If it is determined that the cause of any trouble during that period is clearly Anritsu Meter's responsibility, we will conduct repairs free of charge.

Please be aware that the warranty does not apply to trouble caused by any of the following reasons:

- Trouble or damage caused by natural disasters such as fire, earthquake, or flood, or from abnormal voltage
- Trouble or damage caused by inappropriate handling by the customer, such as being dropped or suffering impact while being transported
- Trouble or damage caused by repairs made by anyone other than a Anritsu Meter repairman or from alterations
- Trouble caused by any device other than this thermometer; such as a powerful surrounding magnetic field or connected device
- Trouble caused by handling that goes against what is written in the product's manual or warnings
- As a general rule, repairs are made in-house at Anritsu Meter Co., Ltd. and repairmen are not dispatched. Customers are accountable for all shipping costs when sending the product to us.
- This warranty is only valid in Japan.
- The temperature probe is a consumable goods and thus it does not carry warranty.

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Retailer
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