

**uxcell a18112200ux0641**

# uxcell 15K NTC Thermistor Probe Instruction Manual

Model: a18112200ux0641

## 1. INTRODUCTION

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This manual provides essential information for the proper installation, operation, and maintenance of your uxcell 15K NTC Thermistor Probe. This high-accuracy temperature sensor is designed for reliable temperature measurement in various applications, including household appliances and temperature control systems.

## 2. SAFETY INFORMATION

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- Ensure power is disconnected from any system before installing or removing the thermistor probe.
- Do not exceed the specified operating temperature range of  $-30^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$ .
- Avoid bending the probe wire sharply or applying excessive force to the probe tip.
- This product is not intended for medical or life-support applications.
- Keep out of reach of children.

## 3. PRODUCT OVERVIEW

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The uxcell 15K NTC Thermistor Probe features a stainless steel waterproof probe for durability and fast temperature conduction. It comes with a 500mm (19.7 inch) wire and an XH2.54-2P plug for easy connection.

Resistor: 15K

Total Length: 50cm / 19.7"



Figure 1: Overall view of the uxcell 15K NTC Thermistor Probe, showing the stainless steel tip, the 19.7-inch (50cm) cable, and the XH2.54-2P connector.



Figure 2: Detailed view of the stainless steel waterproof probe tip, measuring 5mm in diameter and 25mm in length.

## 4. SETUP

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To set up your NTC Thermistor Probe, follow these steps:

1. Identify the appropriate temperature sensing location within your application (e.g., air conditioner, refrigerator, greenhouse).
2. Ensure the probe tip is in direct contact with the medium whose temperature you wish to measure. The stainless steel casing is waterproof, allowing for immersion in liquids if required by your application.
3. Connect the XH2.54-2P plug of the thermistor probe to the corresponding port on your temperature control circuit or device. Ensure the connection is secure.
4. Route the 500mm (19.7 inch) wire carefully, avoiding areas where it might be pinched, cut, or exposed to excessive heat or mechanical stress.

## 5. OPERATING INSTRUCTIONS

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The uxcell 15K NTC Thermistor Probe operates by changing its electrical resistance in response to temperature variations. This resistance change is then interpreted by a compatible temperature monitoring or control system.

- Once connected to a compatible circuit, the thermistor will provide resistance readings corresponding to the ambient temperature at its probe tip.
- The sensor is designed for high-accuracy temperature measurement within the range of  $-30^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$  to  $+221^{\circ}\text{F}$ ).
- Refer to the documentation of your specific temperature control system for details on how to read and interpret the thermistor's output.

## 6. MAINTENANCE

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The uxcell 15K NTC Thermistor Probe requires minimal maintenance to ensure long-term performance.

- **Cleaning:** Periodically inspect the stainless steel probe tip for any buildup of dirt or debris. Clean with a soft, damp cloth if necessary. Avoid abrasive cleaners or solvents that could damage the probe or cable insulation.
- **Inspection:** Regularly check the cable and connector for any signs of wear, damage, or corrosion. Replace the probe if any damage is observed.
- **Storage:** When not in use, store the thermistor probe in a clean, dry environment, away from extreme temperatures and direct sunlight.

## 7. TROUBLESHOOTING

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If you encounter issues with your thermistor probe, consider the following common troubleshooting steps:

- **Incorrect Temperature Readings:**
  - Verify the probe tip is correctly positioned and in good thermal contact with the object or environment being measured.
  - Check the connection to your control circuit. A loose or corroded connection can lead to inaccurate readings.
  - Ensure your control system is calibrated for a 15K NTC thermistor. Using an incorrect thermistor type setting will result in erroneous readings.
- **No Reading/Open Circuit:**
  - Inspect the cable for any cuts, breaks, or damage.
  - Check the XH2.54-2P connector for proper seating and pin integrity.
  - Test the thermistor's resistance with a multimeter (if you have the appropriate equipment and knowledge) to confirm it is within expected values at room temperature.
- **Short Circuit:**
  - Check for any exposed wires or damage to the probe insulation that could cause a short.

If problems persist after attempting these steps, contact uxcell customer support for further assistance.

## 8. SPECIFICATIONS

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Feature	Specification
Model Number	a18112200ux0641
Thermistor Type	NTC 15K
Temperature Range	-30°C to +105°C (-22°F to +221°F)
Probe Material	Stainless Steel
Probe Dimensions	5mm Diameter, 25mm Length
Wire Length	500mm (19.7 inches)
Connector Type	XH2.54-2P
Item Weight	0.282 ounces

## 9. WARRANTY AND SUPPORT

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For warranty information or technical support, please refer to the purchase documentation or contact uxcell customer service directly. Keep your purchase receipt or order number handy for faster service.