



**MEADE<sup>®</sup>**  
**INSTRUMENTS**

# **Temperature & Humidity Sensor with LCD**

User Manual  
TS33C-M

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## INTRODUCTION

Thank you for selecting a Meade Instruments Weather Forecaster. This device combines precise time keeping, monitoring and displaying of current temperature and humidity data from up to three remote locations.

Meade Instruments is the world's leading designer and manufacturer of telescopes for professional and amateur astronomers – famous for its innovative, high performance telescopes at affordable prices. Meade Instruments now brings that same passion for innovation and high performance to its own line of precision, feature rich weather stations.

In this package you will find:

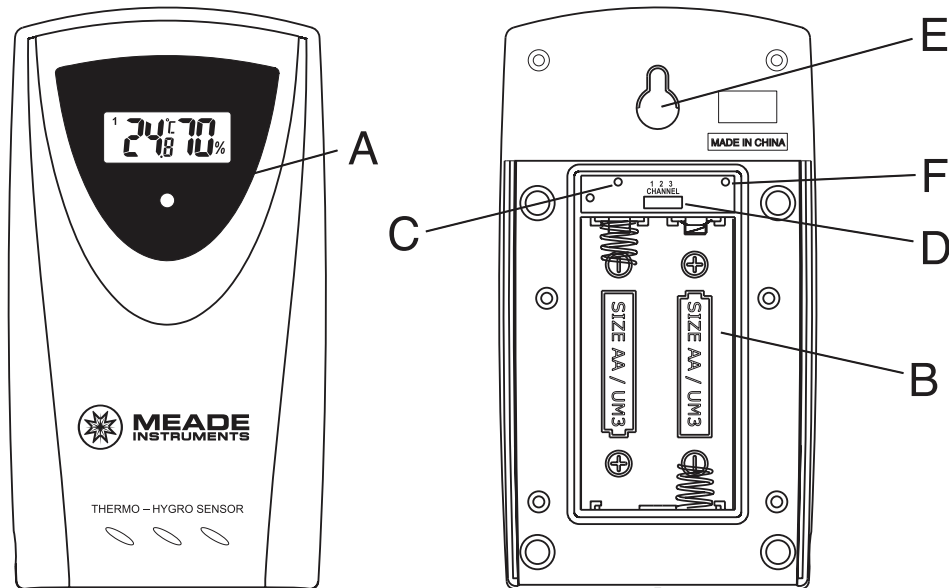
- One (1) remote sensor (transmitter) TS33C-M
- One (1) user manual

Please keep this manual handy as you use your new product. It comes with practical step-by-step instructions, as well as technical specifications and precautions you should know.

# PRODUCT OVERVIEW

## FEATURES

- Remote temperature transmission to the main unit via 433 MHz signal
- Temperature and Humidity LCD display
- Case can be wall mounted using built-in hanger
- 100 feet (30 meters) transmission range without interference
- Selection of the temperature display in Celsius or Fahrenheit
- 
- Reset for all previous readings
- Low Battery Indication



### A LED INDICATOR

- Flashes once when the remote sensor transmits a reading to the main unit.
- Flashes twice when battery power is low.

### B BATTERY COMPARTMENT

- Holds two AA-size batteries.

### C RESET

- Resets all readings.

### D CHANNEL SWITCH

- Selects the desired channel.

### E WALL-MOUNT RECESSED HOLE

- Attaches the remote sensor on the wall.

### F °C/ °F SWITCH

- Selects the temperature display in Celsius or Fahrenheit.

## ***THE TS33C-M SENSOR IS COMPATIBLE WITH ALL MEADE INSTRUMENTS WIRELESS WEATHER STATIONS***

### **BEFORE YOU BEGIN**

- The remote sensor can be placed indoors or outdoors.
- We recommend using alkaline batteries for the remote sensor when temperatures are above 32°F (0°C). We recommend using AA lithium batteries when temperatures are below 32°F (0°C).
- Avoid using rechargeable batteries. (Rechargeable batteries cannot maintain correct power requirements).
- Insert batteries before first use, matching the polarity in the battery compartment.
- **ALWAYS** install batteries in the remote sensor *before* the main unit.
- Press **RESET** after each battery change with a paper clip or similar tool.
- During an initial setup, place the main unit as close as possible to the remote sensor.
- After reception is established (the remote temperature and humidity will appear on the main unit's display), position the remote sensor and the main unit within the effective transmission range of 100 feet (30 meters).

### **NOTE:**

1. Avoid manually setting the time and date on the main unit *before the remote temperature is displayed*.
2. The effective operating range may be influenced by the surrounding building materials and how the receiver (main unit) and transmitter (remote sensor) are positioned.
3. Place the remote sensor so that it faces the main unit (receiver), minimizing obstructions such as doors, walls, and furniture.
4. Though the remote sensors are weather-resistant, they should be placed away from direct sunlight, rain or snow.

**NOTE: When the temperature falls below freezing, the batteries in the outdoor remote sensors may have reduced voltage supply and a shorter effective range. We recommend using lithium batteries at temperature 32°F (0°C) and below.**

## **BATTERY INSTALLATION**

NOTE: Install the batteries; select the channel and temperature in °C or °F before mounting the remote sensor.

- Remove the screws from the battery compartment with a small Phillips screwdriver.
- Avoid manually setting the time and date on the main unit. The switch is located in the battery compartment. Channel 1 is typically selected if only one remote sensor is being used.
- Install 2 “AA” size alkaline batteries (not included) matching the polarities shown in the battery compartment.
- Replace the battery compartment door and secure the screws.
- Secure remote sensor in the desired location.

## **LOW BATTERY WARNING**

A low-battery indicator [  ] will appear on the remote temperature reading line of the main unit, warning that the remote sensor batteries need replacement.

## **PLACEMENT OF THE REMOTE SENSOR**

The remote sensor can be mounted on the wall using the recessed screw hole or placed on a flat surface indoors or outdoors.

## **GETTING STARTED**

After batteries are installed; remote sensor will transmit temperature and humidity readings at 45 second intervals. The main unit may take up to two minutes to receive the initial readings. Upon successful reception, remote temperature and humidity will appear on the main unit's display. The main unit will automatically update readings at 45-second intervals.

## **LOST COMMUNICATION**

If the main unit display line for the remote sensor reading goes blank, refer to the main unit's User Manual to find out the way to begin a new signal search. If the signal still isn't received, please make sure that:

- The remote sensor is in its proper location.
- The distance between main unit and remote sensor is not over 100 feet (30meters).
- The path between units is clear of obstacles. Shorten the distance if necessary.
- Fresh batteries are installed correctly in both remote sensor and main unit.

If there is still no reception, please perform the following steps:

- Bring the main unit and remote sensor close together.
- Remove the four (4) small screws from the back of the remote sensor with small Phillips screwdriver, and open the battery compartment.
- Remove the batteries from the battery compartment and reinstall them in the same manner. The remote sensor LED indicator will flash showing transmission of the signal.
- Remove the batteries from the main unit and reinstall them in the same manner.
- The remote temperature and humidity appeared on the main unit's display will show that transmission is being received successfully.

### **TRANSMISSION INTERFERENCE**

Signals from the other household devices such as wireless doorbells, home security systems and entry control devices, may interfere with this product or cause temporary reception interruption. This is normal and will not affect the general performance of the product. The transmission and reception of the temperature readings will resume once the interference subsides.

### **PRECAUTIONS**

This product is engineered to give you years of satisfactory service if handled carefully. Here are a few precautions:

- Do not immerse the unit in water.
- Do not clean the unit with abrasive or corrosive materials. They may scratch the plastic parts and corrode the electronic circuits.
- Do not subject the product to excessive force, shock, dust, temperature, or humidity, which may result in malfunctions, shorter lifespan, damaged batteries, and damaged parts.
- Do not tamper with the unit's internal components. Doing so will invalidate the warranty and may cause damage. This unit contains no user-serviceable parts.
- Use only fresh batteries. Do not mix new and old batteries.
- Read the user's manual thoroughly before operating the unit.

## **SPECIFICATIONS**

### ***Remote Temperature***

Optimal operating range with alkaline batteries:

-20.0°C to + 70.0°C/-4.0°F to + 158°F

Optimal operating range with lithium batteries:

-38.8°C to + 70.0°C/-38.0°F to +158°F

Temperature resolution: 0.1°C/0.2°F

LCD display of registered temperature and humidity

### ***Remote Humidity***

Optimal operating range: 25% to 95%

Humidity Resolution: 1%

Low battery indicator

RF Transmission Frequency: 433 MHz

Maximum number of transmission channels: three (3)

RF transmission range: Maximum 100 feet (30 meters)

Temperature and humidity transmission cycle:

approximately 45 seconds

### ***Wall Mount or Desktop option***

#### ***Power***

2 AA size (UM-3) 1.5V batteries (not included)

#### ***Dimensions***

2.37(L) x 4(H) x 1(D) inch

## **FCC STATEMENT**

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modification to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment had been tested and found to comply with the limits for a Class B Digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment, installed and used in accordance with the instructions, may cause harmful interference to radio communications.



There is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to improve or correct turning the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

## **DECLARATION OF CONFORMITY**

We

Name: Meade Instruments Corp.  
Address: 27 Hubble, Irvine, CA 92618  
Telephone No.: 1-949-451-1450

declare that the product

Product No.: TS33C-M  
Product Name: Temperature and Humidity Sensor with LCD  
Manufacturer: Hideki Electronics Ltd.  
Address: Unit 2304-06, 23/F Riley House, 88 Lei Muk Road,  
Kwai Chung, New Territories, Hong Kong  
is in conformity with Part 15 of the FCC Rules.  
Operation is subject to the following two conditions:  
This device may not cause harmful interference.  
This device must accept any interference received, including interference that may cause undesired operation.

**The information above is not to be used as a contact for support or sales. Please call our customer service hotline (refer to the Standard Warranty Information) for all injuries instead.**

## **BATTERY SAFETY INSTRUCTIONS**

- Always purchase the correct size (2 x 1.5V AA, 15A/15AC ANSI, LR6 IEC), (2 x ANSI/NEDA-5004LC, IEC-CR2032) and grade of battery most suitable for the intended use.
- Replace all batteries of a set at the same time.
- Clean the battery contacts and also those of the device prior to battery installation.
- Ensure the batteries are installed correctly with regard to polarity (+ and -).
- Remove the batteries from any weather station which is not to be used for an extended period of time.
- Remove used batteries promptly.
- Do not mix old batteries with new batteries.
- Do not mix alkaline, lithium, standard (Carbon Zinc), or rechargeable (Nickel Cadmium) batteries.

### **Caution:**

- If batteries or parts are swallowed, see a doctor immediately.

## **STANDARD WARRANTY INFORMATION**

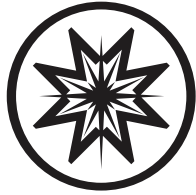
This product is warranted by Meade Instruments Corp. (MIC) to be free of defects in materials and workmanship for a period of ONE YEAR from date of original retail purchase in the U.S.A. MIC will repair or replace the product, or part thereof, found upon inspection by MIC to be defective, provided the defective part or product is returned to MIC, freight prepaid, with proof of purchase. This warranty applies to the original purchaser only and is non-transferable. Meade products purchased outside North America are not included in this warranty.

**RGA Number Required:** Prior to the return of any product or part, a Return Goods Authorization (RGA) number must be obtained by writing to Meade's Customer Service Department or by calling 800-626-3233. Each returned part or product must include a written statement detailing the nature of the claimed defect, as well as the owner's name, address, phone number, and a copy of the original sales invoice.

This warranty is not valid in cases where the product has been abused or mishandled, where unauthorized repairs have been attempted or performed, or where depreciation of the product is due to normal wear-and-tear. MIC specifically disclaims special, indirect, or consequential damages or lost profits, which may result from a breach of this warranty. Any implied warranties which cannot be disclaimed are hereby limited to a term of one year from the date of purchase by the original retail purchaser. This warranty gives you specific rights. You may have other rights which vary from state to state.

MIC reserves the right to change product specifications or to discontinue products without prior notice.

This warranty supersedes all previous Meade product warranties.



**MEADE<sup>®</sup>**  
**INSTRUMENTS**

**Meade Instruments Corp.**

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All user manual contents and information are subject to change.