KETOTEK JP-KT3400

KETOTEK Digital Humidity and Temperature Controller Plug User Manual

Model: JP-KT3400

1. Product Overview

The KETOTEK Digital Humidity and Temperature Controller is a versatile device designed to precisely manage environmental conditions. It integrates both humidity and temperature control functions, making it suitable for a wide range of applications such as incubators, greenhouses, reptile habitats, and home environments. This controller features multiple operating modes, alarm functions, and data storage capabilities to ensure stable and reliable operation.

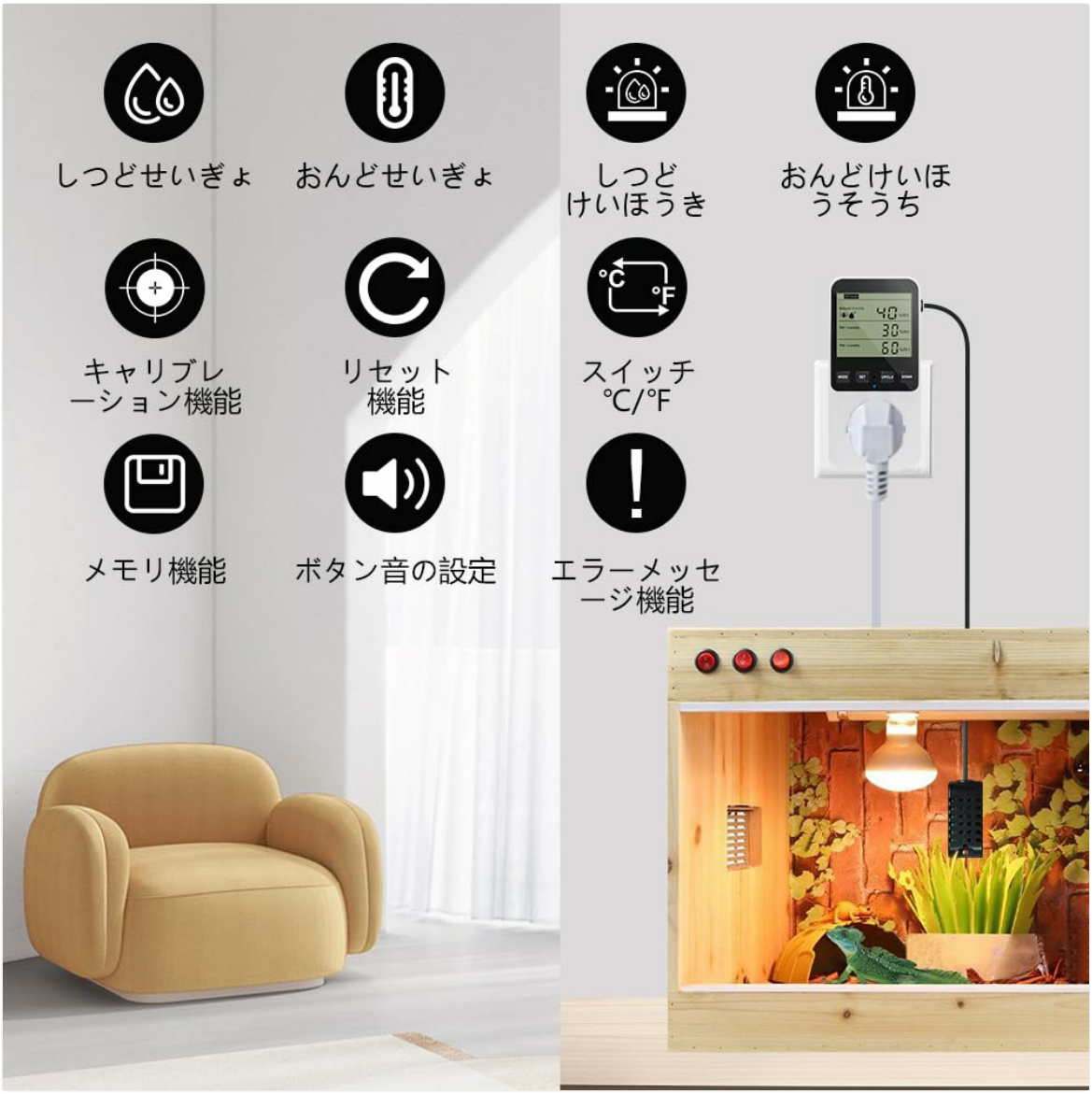

Image 1.1: Overview of the KETOTEK Digital Humidity and Temperature Controller, highlighting its various functions including humidity control, temperature control, alarms, calibration, reset, memory, button sound settings, and error messages.

Key Features:

- **Multi-functional Control:** Supports 4 operating modes: humidification, dehumidification, heating, and cooling.
- **Alarm Functions:** Provides alerts for temperature and humidity deviations.
- **Calibration:** Allows for real-time calibration of humidity and temperature readings.
- **Data Storage:** Retains all settings after a power outage.
- **Unit Switching:** Easily switch between Celsius (°C) and Fahrenheit (°F) for temperature display.
- **Button Sound:** Option to enable or disable button press sounds.
- **Error Notification:** Displays error messages for sensor disconnections, out-of-range measurements, or short circuits.

2. Setup Instructions

2.1 Unpacking and Inspection

Carefully remove the controller from its packaging. Inspect the device and its sensor for any signs of damage. Ensure all components listed in the package contents are present.

2.2 Connecting the Device

1. Plug the KETOTEK controller directly into a standard power outlet.
2. The external sensor is already connected to the main unit. Ensure the sensor cable is not damaged.
3. Place the sensor in the environment where humidity and temperature need to be monitored and controlled. Ensure it is not directly exposed to water or extreme conditions that could damage it.
4. Plug your humidifier, dehumidifier, heater, or cooler into the outlet on the front of the KETOTEK controller.

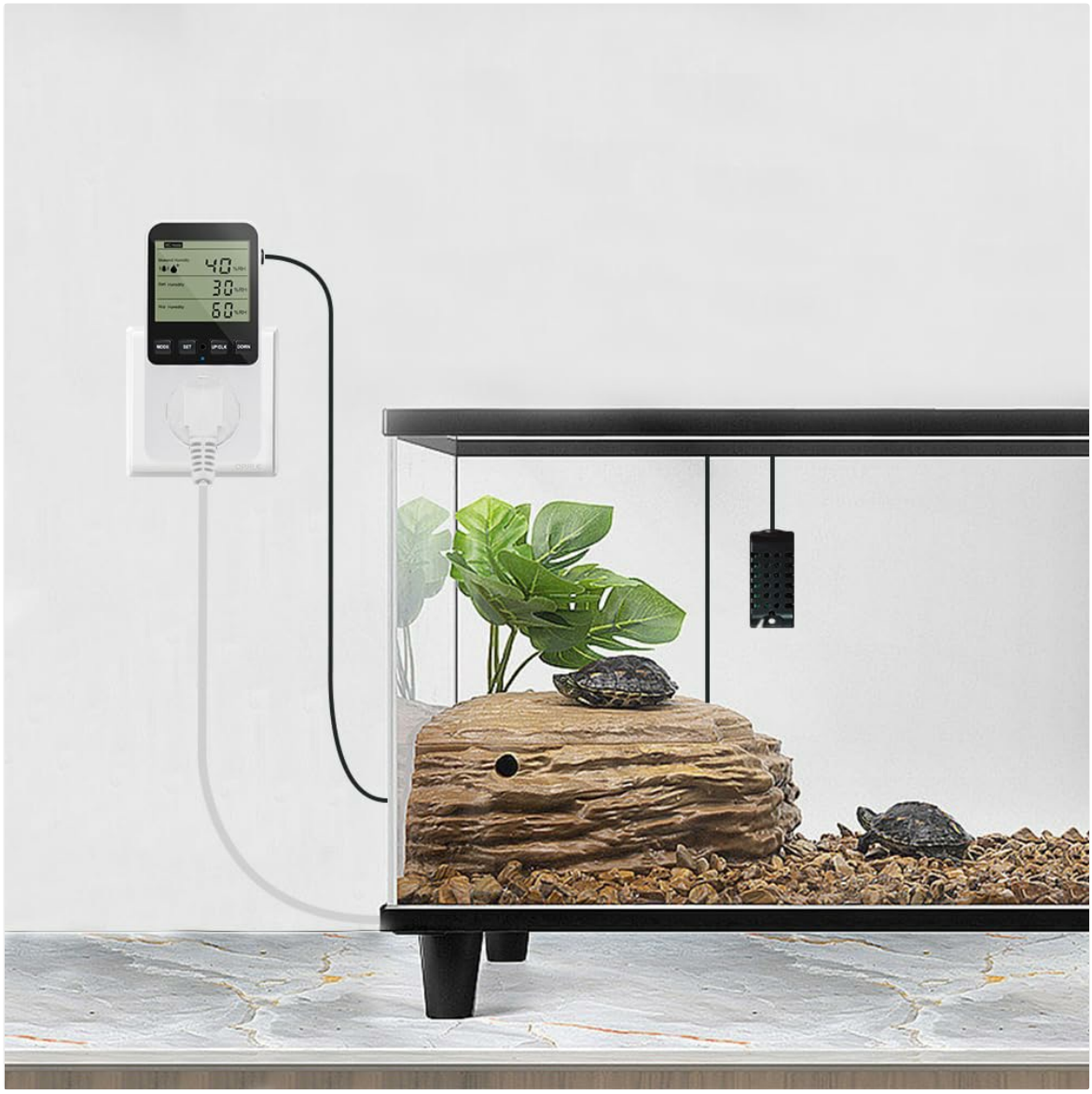

Image 2.1: Proper setup of the controller with the sensor placed inside a terrarium for environmental monitoring.

2.3 Initial Power On

Once plugged in, the display will light up, showing the current measured humidity and temperature. The device is now ready for configuration.

3. Operating Instructions

The controller features a clear digital display and four buttons: **MODE**, **SET**, **UP/CLK**, and **DOWN**. These buttons are used to navigate menus and adjust settings.

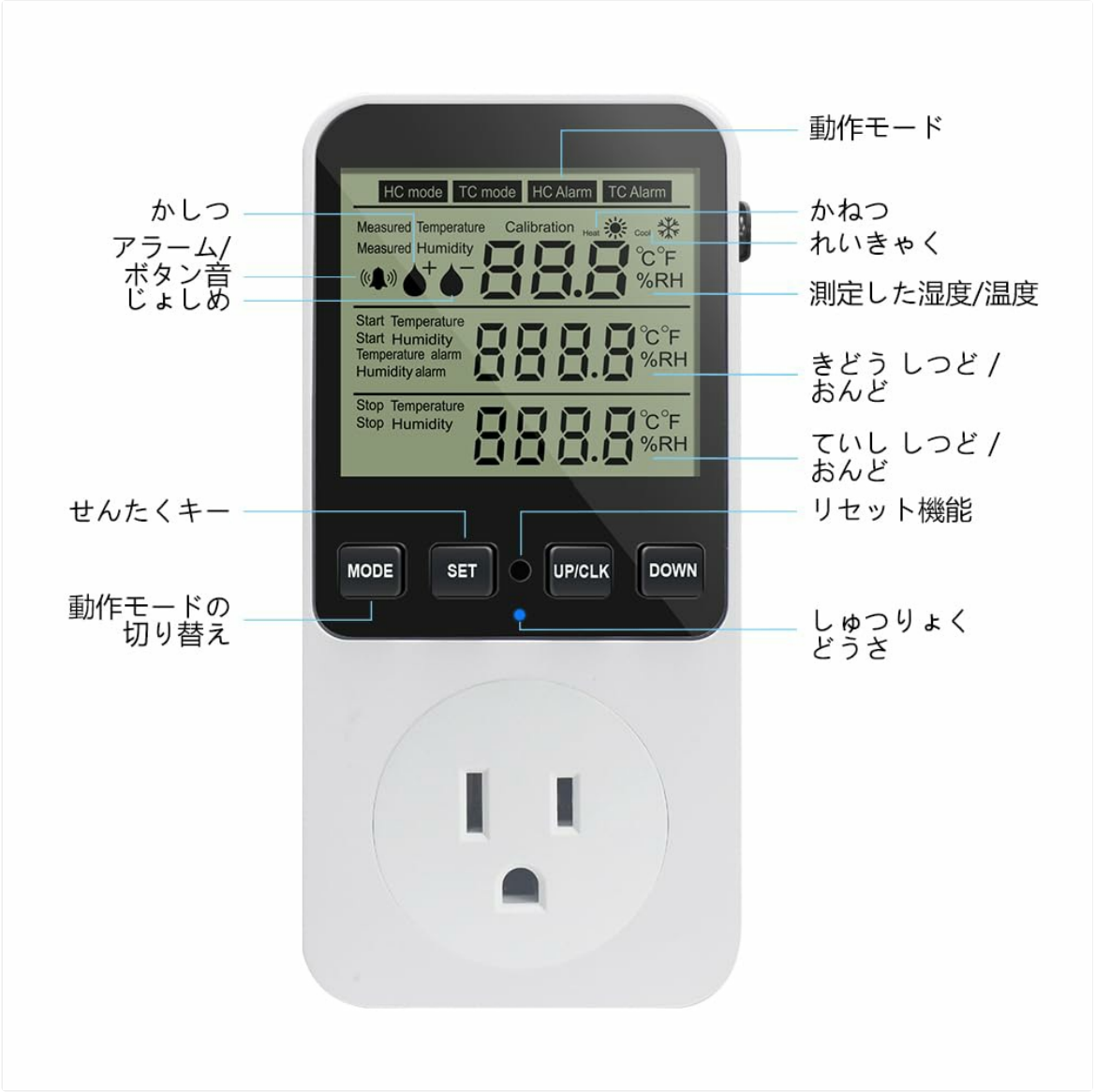

Image 3.1: Detailed view of the controller's display and control buttons.

3.1 Understanding Operating Modes

The controller supports four primary operating modes:

- **Humidification Mode (HC mode):** Activates the connected device when humidity drops below the set start humidity.
- **Dehumidification Mode (HC mode):** Activates the connected device when humidity rises above the set stop humidity.
- **Heating Mode (TC mode):** Activates the connected device when temperature drops below the set start temperature.
- **Cooling Mode (TC mode):** Activates the connected device when temperature rises above the set stop temperature.

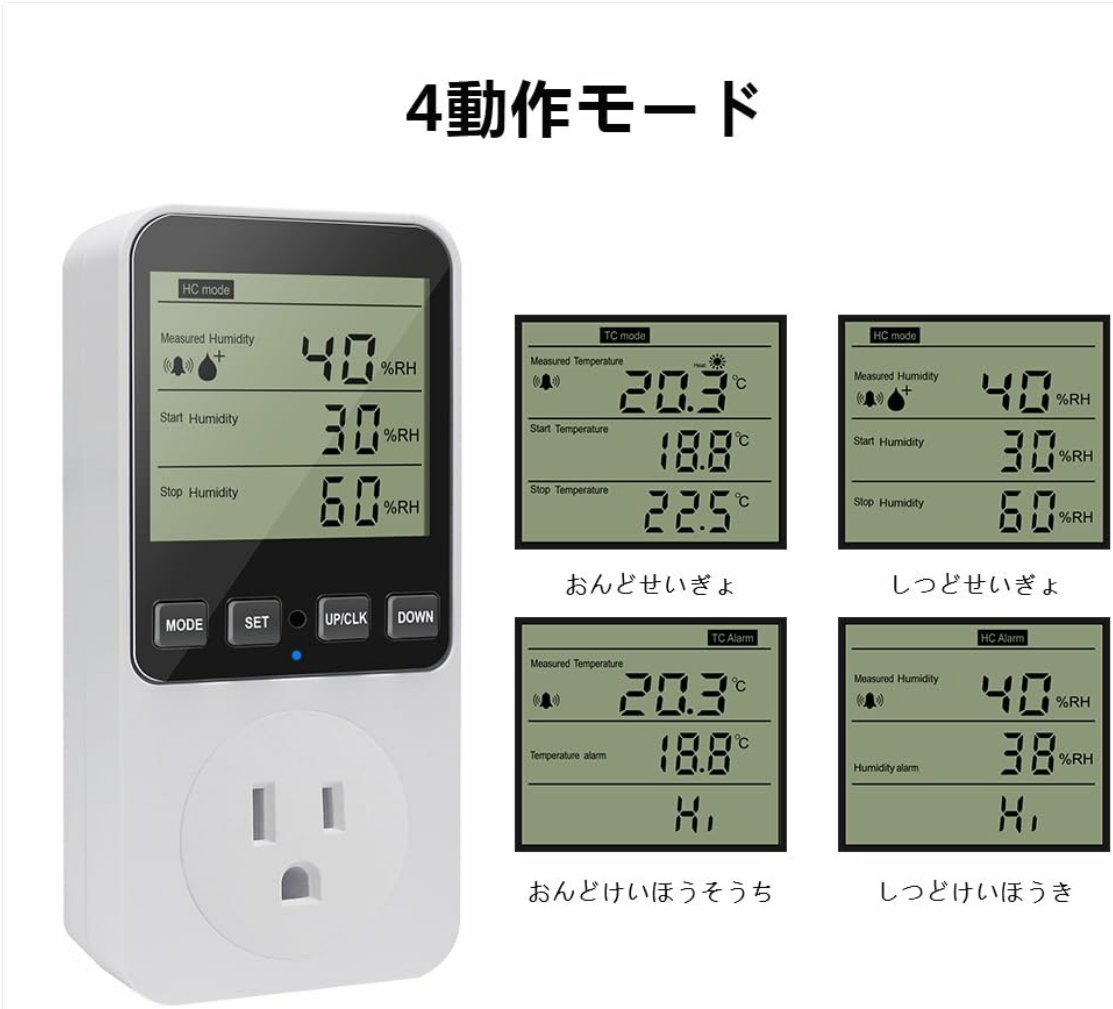

Image 3.2: Visual representation of the four operating modes on the controller's display.

3.2 Setting Humidity Control Parameters

1. Press the **MODE** button to cycle through the modes until "HC mode" is displayed.
2. Press and hold the **SET** button for 3 seconds to enter the setting menu.
3. Use **UP/CLK** or **DOWN** buttons to adjust the "Start Humidity" value. This is the humidity level at which the connected device will turn ON (for humidification) or OFF (for dehumidification).
4. Press **SET** again to move to "Stop Humidity". Adjust this value using**UP/CLK** or **DOWN**. This is the humidity level at which the connected device will turn OFF (for humidification) or ON (for dehumidification).
5. Press and hold **SET** for 3 seconds to save settings and exit.

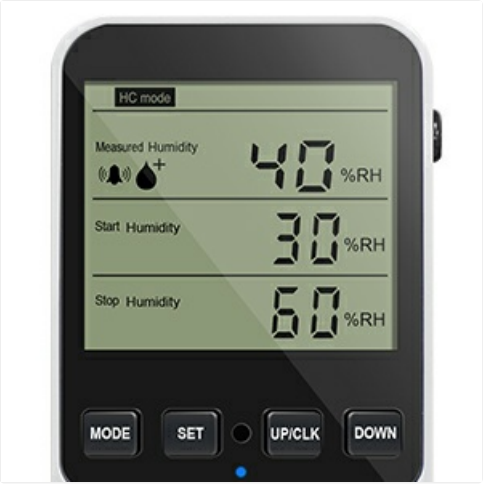

Image 3.3: Example of humidity control settings on the display.

3.3 Setting Temperature Control Parameters

1. Press the **MODE** button to cycle through the modes until "TC mode" is displayed.
2. Press and hold the **SET** button for 3 seconds to enter the setting menu.
3. Use **UP/CLK** or **DOWN** buttons to adjust the "Start Temperature" value. This is the temperature at which the connected device will turn ON (for heating) or OFF (for cooling).
4. Press **SET** again to move to "Stop Temperature". Adjust this value using**UP/CLK** or **DOWN**. This is the temperature level at which the connected device will turn OFF (for heating) or ON (for cooling).
5. Press and hold **SET** for 3 seconds to save settings and exit.

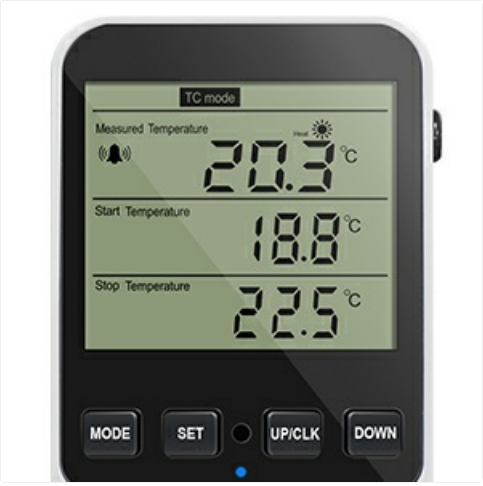

Image 3.4: Example of temperature control settings on the display.

3.4 Setting Alarm Functions

The controller can alert you when humidity or temperature exceeds or falls below set thresholds.

3.4.1 Humidity Alarm (HC Alarm)

1. Press the **MODE** button until "HC Alarm" is displayed.
2. Press and hold the **SET** button for 3 seconds.
3. Use **UP/CLK** or **DOWN** to set the desired humidity alarm threshold.
4. Press and hold **SET** for 3 seconds to save and exit.

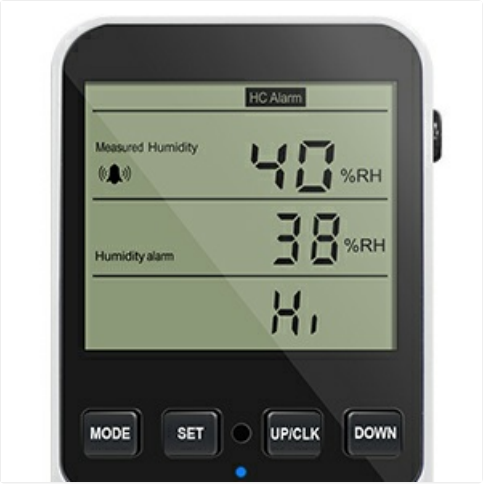

Image 3.5: Humidity alarm setting interface.

3.4.2 Temperature Alarm (TC Alarm)

1. Press the **MODE** button until "TC Alarm" is displayed.
2. Press and hold the **SET** button for 3 seconds.
3. Use **UP/CLK** or **DOWN** to set the desired temperature alarm threshold.
4. Press and hold **SET** for 3 seconds to save and exit.

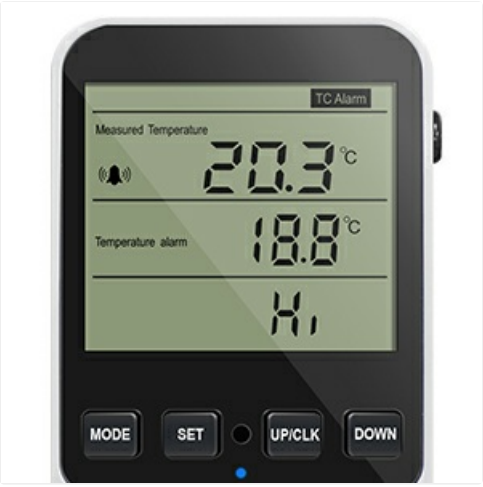

Image 3.6: Temperature alarm setting interface.

3.5 Calibration

To calibrate the humidity or temperature readings:

1. Press and hold the **UP/CLK** and **MODE** buttons simultaneously for 3 seconds to enter calibration mode.
2. Use **UP/CLK** or **DOWN** to adjust the humidity calibration value (range: -10% to +10% RH).
3. Press **SET** to switch to temperature calibration. Adjust the temperature calibration value (range: -9.9°C to +9.9°C) using **UP/CLK** or **DOWN**.
4. Press and hold the **MODE** button for 3 seconds to save the calibration and exit.

3.6 Reset Function

To reset the controller to factory default settings:

1. Locate the reset button (small hole) on the side of the device.

2. Use a thin, pointed object (like a paperclip) to press and hold the reset button for 3 seconds.
3. The device will restart, and all settings will revert to their default values.

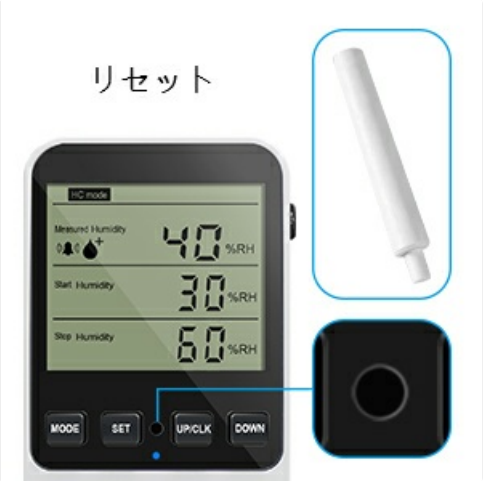

Image 3.7: Location of the reset button.

3.7 Temperature Unit Switching (°C/°F)

To switch between Celsius and Fahrenheit:

- While in normal operating mode, press the**UP/CLK** button briefly. The temperature unit on the display will toggle between °C and °F.

3.8 Button Sound Settings

To enable or disable the button press sound:

- While in normal operating mode, press and hold the**DOWN** button for 3 seconds. The button sound will toggle ON/OFF.

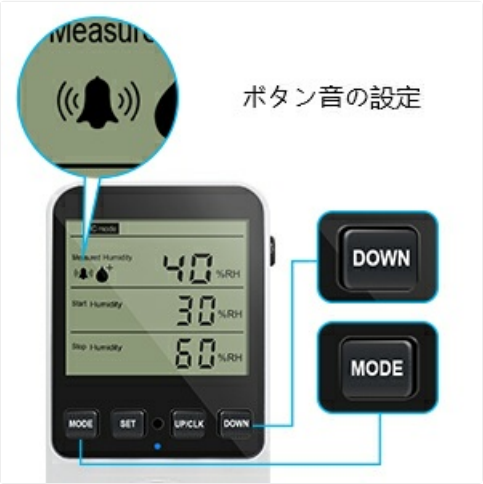

Image 3.8: Button sound setting.

4. Maintenance

4.1 Cleaning the Sensor

To ensure accurate readings, periodically clean the sensor probe. Gently wipe the sensor with a soft, dry cloth. Avoid using abrasive cleaners or submerging the sensor in liquids, as this can damage the

sensitive components.

4.2 General Care

- Keep the controller and sensor away from direct sunlight, high humidity (unless intended for the sensor), and extreme temperatures.
- Ensure the device is unplugged before cleaning or performing any maintenance.
- Do not attempt to open or repair the device yourself, as this will void the warranty and may cause electric shock.

5. Troubleshooting

This section addresses common issues you might encounter with your KETOTEK Digital Humidity and Temperature Controller.

Problem	Possible Cause	Solution
"E1" or "E2" displayed	Sensor disconnected or short-circuited.	Check the sensor connection. Ensure it is securely plugged into the controller. If the error persists, the sensor may be faulty and require replacement.
"HHH" or "LLL" displayed	Measured humidity/temperature is outside the measurable range.	Ensure the environment's conditions are within the controller's operating range (Humidity: 20-95% RH, Temperature: -10°C to 50°C). If the environment is within range, the sensor might be faulty.
Connected device not turning ON/OFF	Incorrect settings, device malfunction, or power issue.	Verify your "Start" and "Stop" humidity/temperature settings. Ensure the connected device is functioning correctly by plugging it directly into a wall outlet. Check if the controller is receiving power.
Inaccurate readings	Sensor dirty, calibration needed, or sensor malfunction.	Clean the sensor as described in the Maintenance section. Perform a calibration as described in section 3.5. If readings remain inaccurate, the sensor may need replacement.
Alarm sounds continuously	Environment conditions are outside the set alarm thresholds.	Check the current humidity/temperature and compare it to your alarm settings. Adjust the environment or the alarm thresholds if necessary.

6. Specifications

Parameter	Value
Model Number	JP-KT3400
Brand	KETOTEK

Parameter	Value
Humidity Control Range	20% ~ 95% RH
Temperature Control Range	-10°C ~ 50°C (14°F ~ 122°F)
Humidity Calibration Range	-10% ~ 10% RH
Temperature Calibration Range	-9.9°C ~ 9.9°C
Measurement Accuracy	±5% RH / ±2°F / ±1°C
Output	Max 15A / 120V
Display Type	Digital
Product Weight	260 g
Package Dimensions	15.8 x 8.2 x 7.9 cm
Included Accessories	1*Humidity Controller, 1*Instruction Manual

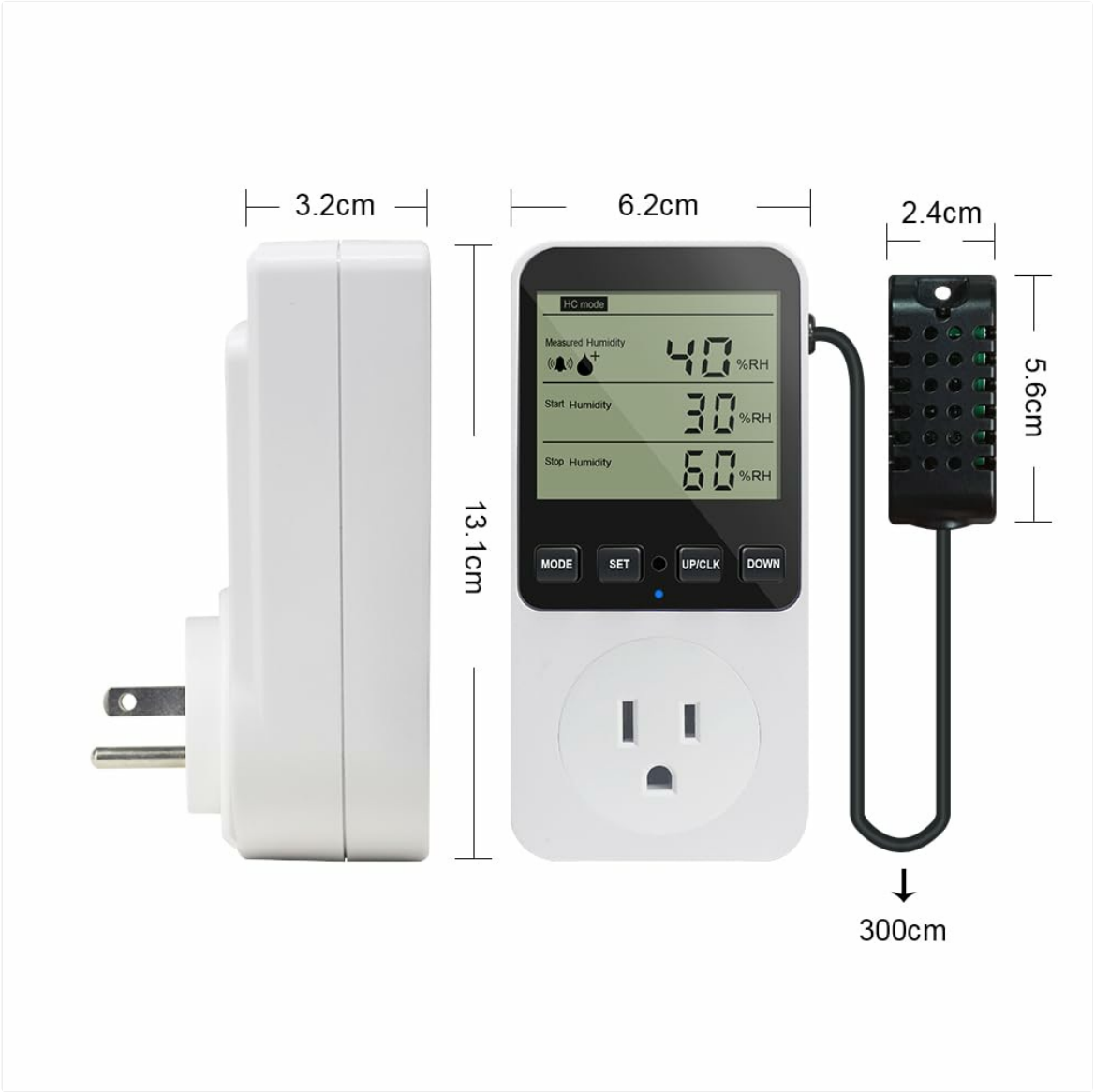

Image 6.1: Physical dimensions of the controller and sensor.

7. Warranty and Support

KETOTEK products are designed for reliability and performance. For warranty information or technical support, please refer to the contact details provided with your purchase or visit the official KETOTEK website. Please retain your proof of purchase for warranty claims.