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Inkbird ITC-308, ITH-20

Inkbird ITC-308 Digital Temperature Controller and ITH-20 Digital Thermometer with Temperature and Humidity Monitor Bundle User Manual

Model: ITC-308, ITH-20

Brand: Inkbird

INTRODUCTION

This user manual provides comprehensive instructions for the Inkbird ITC-308 Digital Temperature Controller and the Inkbird ITH-20 Digital Thermometer with Temperature and Humidity Monitor. This bundle offers precise environmental control and monitoring, suitable for various applications such as home brewing, terrariums, greenhouses, and general indoor climate monitoring.



Image: The Inkbird ITC-308 Digital Temperature Controller (right) and the Inkbird ITH-20 Digital Thermometer and Humidity Monitor (left) shown together as a bundle.

PRODUCT OVERVIEW

Inkbird ITC-308 Digital Temperature Controller

The ITC-308 is a dual-relay temperature controller capable of managing both heating and cooling devices. It features a clear digital display for current and set temperatures, and a temperature probe for accurate readings.



Image: The Inkbird ITC-308 temperature controller, showing its main unit with digital display, the dual power outlet for heating and cooling devices, and the wired temperature probe.

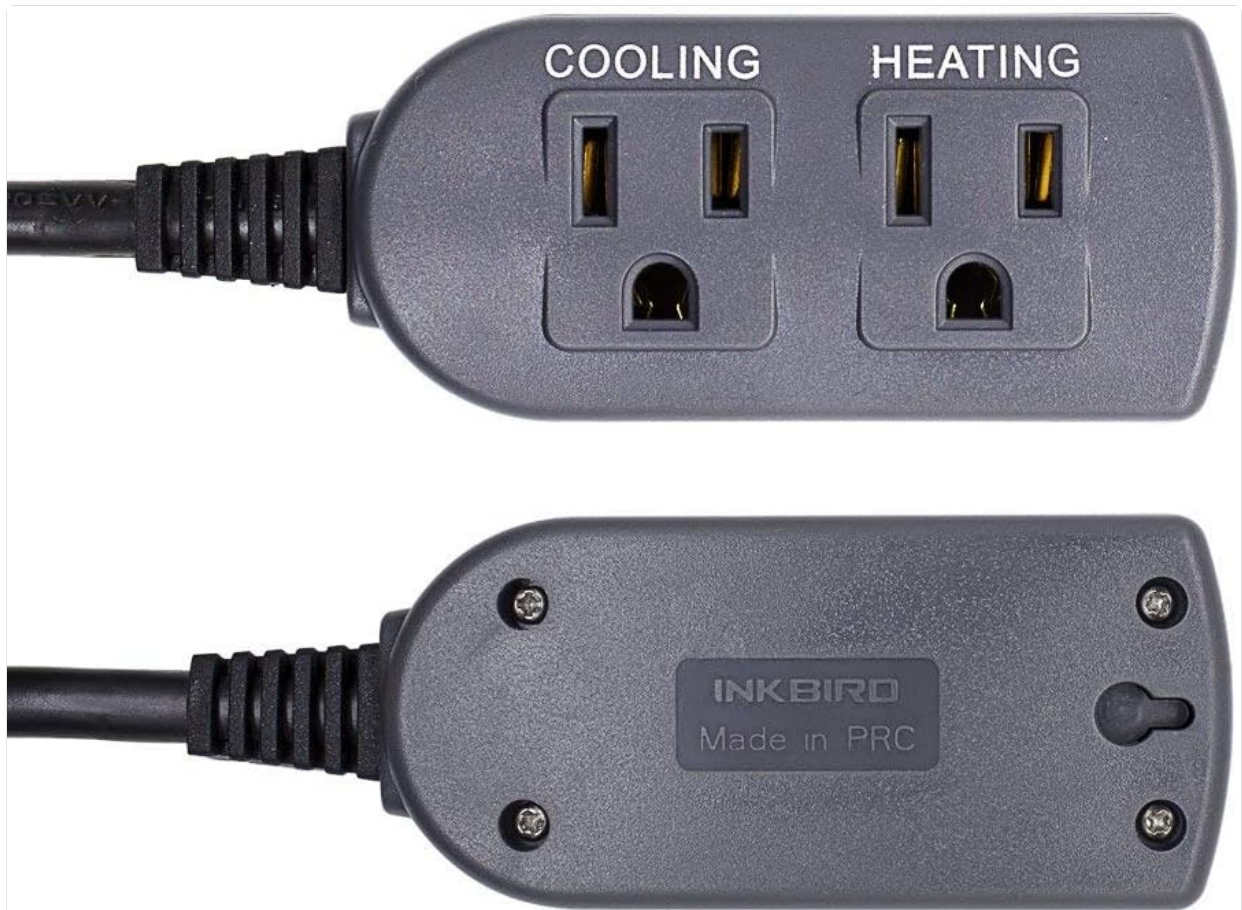


Image: A close-up view of the Inkbird ITC-308's power outlets, clearly labeled for "HEATING" and "COOLING" appliances, and the back of the unit indicating "INKBIRD Made in PRC".

Inkbird ITH-20 Digital Thermometer with Humidity Monitor

The ITH-20 is a compact device that displays both temperature and humidity. It includes a comfort indicator and can record maximum and minimum values, providing a comprehensive overview of your environment.



Image: The Inkbird ITH-20 digital display showing current temperature (78.8°F), current humidity (56%), and the maximum/minimum recorded values for both temperature and humidity. The comfort indicator shows "COMFORT".

KEY FEATURES

- **Easy to Use:** Supports both Celsius (°C) and Fahrenheit (°F) display for temperature readings.
- **Dual Relay Control (ITC-308):** Capable of powering both refrigeration and heating equipment based on set conditions.
- **Comfort Indicator (ITH-20):** LCD display with separate sections for temperature and humidity. A humidity level icon indicates air conditions (DRY/COMFORT/WET), providing quick insight into high, ideal, or low air conditions.
- **Two Mounting Options (ITH-20):** Designed for both tabletop placement and wall-mounting, offering flexible installation in various rooms.
- **High Reliability & Accuracy:** Precise temperature and humidity measurements with specified ranges and sampling periods.

SETUP

ITC-308 Digital Temperature Controller Setup

1. **Placement:** Position the ITC-308 unit in a stable location near the area where temperature control is needed.
2. **Probe Installation:** Insert the temperature probe into the environment you wish to monitor and control (e.g., fermenter, terrarium, greenhouse). Ensure the probe tip is fully immersed or positioned to get an accurate reading.
3. **Connect Heating/Cooling Devices:** Plug your heating appliance into the "HEATING" outlet and your

cooling appliance (if applicable) into the "COOLING" outlet on the ITC-308's power strip.

4. **Power On:** Plug the ITC-308's main power cord into a standard electrical outlet. The display will illuminate, showing the current temperature.

ITH-20 Digital Thermometer Setup

1. **Unpack:** Remove the ITH-20 from its packaging. No batteries are required as it is self-powered or comes with pre-installed batteries.
2. **Placement:** Choose a suitable location for monitoring temperature and humidity. Avoid direct sunlight or areas with extreme drafts, which could affect readings.
3. **Mounting Options:**
 - **Tabletop:** Use the integrated kickstand to place the unit on a flat surface.
 - **Wall-Mount:** Utilize the hanging hole on the back of the unit to mount it on a wall using a nail or screw.



Image: The Inkbird ITH-20 thermometer/hygrometer demonstrating its two mounting options: "BRACE" for tabletop use with its integrated stand, and "SUSPENSION" for wall-mounting using the hanging hole.

OPERATING INSTRUCTIONS

Operating the ITC-308 Digital Temperature Controller

1. **View Current Temperature:** The large red digits on the display (PV) show the current temperature measured by the probe.
2. **Set Temperature (SV):** The smaller green digits (SV) show the set temperature. To adjust:
 - Press the "SET" button once. The SV display will flash.
 - Use the "UP" (▲) or "DOWN" (▼) arrows to adjust the desired temperature.
 - Press "SET" again to confirm and exit, or wait a few seconds for it to auto-save.
3. **Heating/Cooling Indication:** The "HEATING" and "COOLING" indicators on the display will light up when the respective outlets are active.
4. **Temperature Unit Switch:** Refer to the full ITC-308 manual for detailed instructions on switching between Celsius and Fahrenheit, and advanced settings like differential and calibration.

Operating the ITH-20 Digital Thermometer

1. **Reading Display:** The large digits at the top show the current temperature, and the large digits at the bottom show the current humidity.
2. **Max/Min Records:** The smaller digits on the right display the maximum (MAX) and minimum (MIN) recorded temperature and humidity values since the last reset or power cycle. These values update automatically.
3. **Comfort Indicator:** The "DRY", "COMFORT", and "WET" indicators at the bottom of the display provide a quick visual cue for air conditions:
 - **DRY:** Relative humidity below 40% RH.
 - **COMFORT:** Temperature between 20-30°C (68-86°F) and relative humidity between 40-70% RH.
 - **WET:** Relative humidity above 70% RH.
4. **Reset Max/Min:** There is typically a small button on the back or side to reset the MAX/MIN values. Consult the device for its specific location.

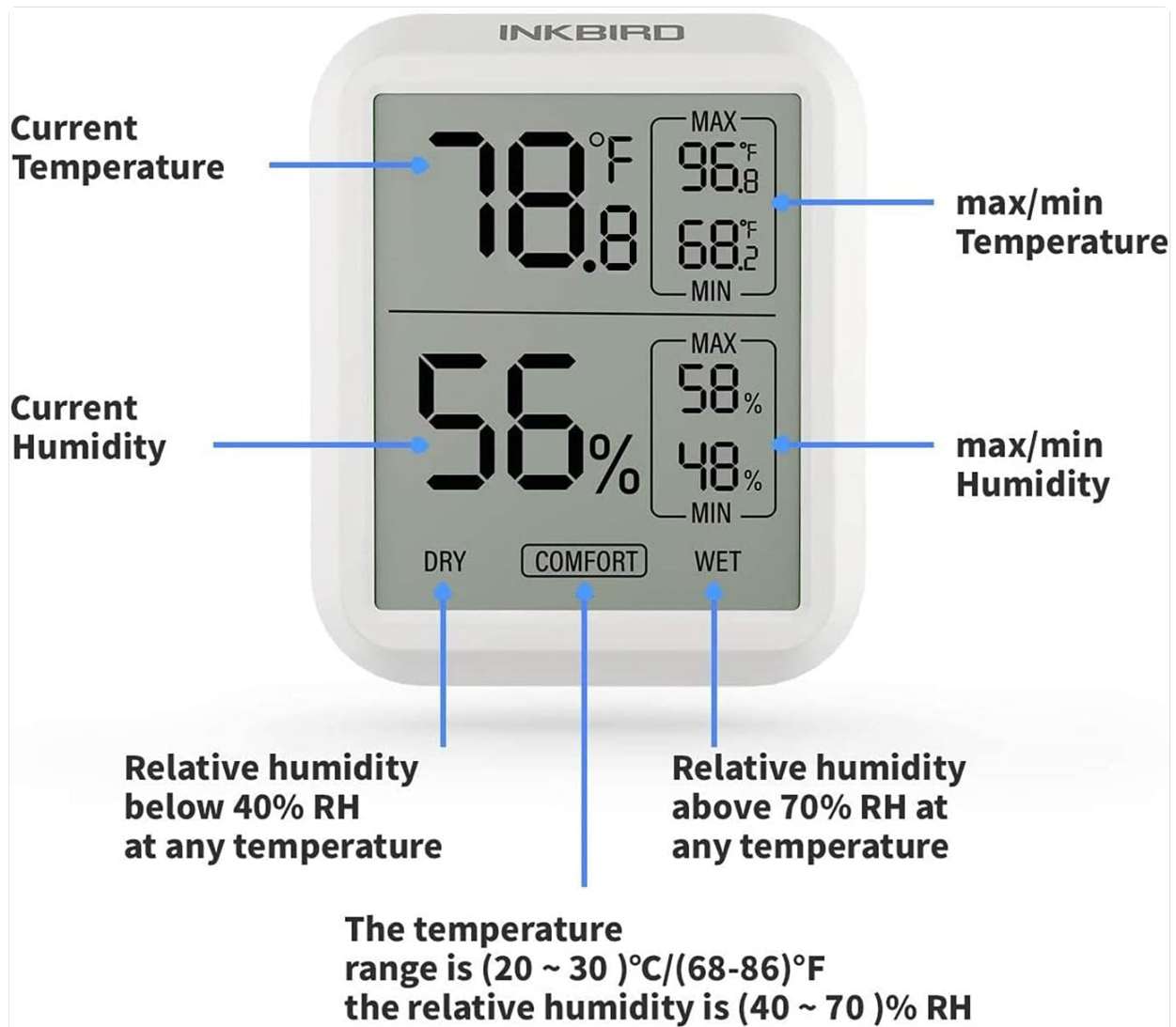


Image: A detailed breakdown of the Inkbird ITH-20 display, labeling "Current Temperature", "Current Humidity", "max/min Temperature", "max/min Humidity", and explaining the conditions for "DRY", "COMFORT", and "WET" humidity indicators.

SPECIFICATIONS

Inkbird ITC-308 Digital Temperature Controller

- **Temperature Measurement Range:** -50°C to 99°C (-58°F to 210°F) (Typical range for ITC-308, not explicitly in provided data, but common for this model).
- **Temperature Resolution:** 0.1°C / 0.1°F
- **Temperature Accuracy:** ±1°C (±2°F)
- **Input Power:** 100~240Vac, 50Hz/60Hz
- **Output:** Max 10A, 1200W (120Vac) / 2200W (220Vac)
- **Dual Relay:** Heating and Cooling

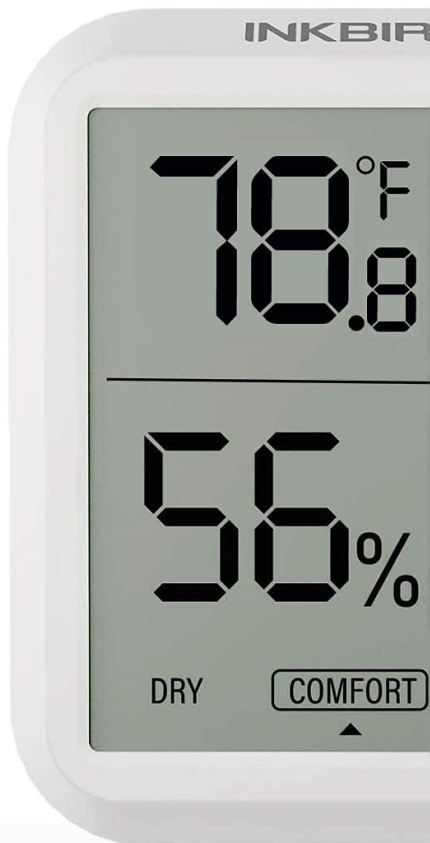
Inkbird ITH-20 Digital Thermometer with Humidity Monitor

- **Dimensions:** 64mm x 75mm x 20mm (2.56in x 2.95in x 0.91in)
- **Temperature Measurement Range:** -10°C ~ 50°C (14°F ~ 122°F)
- **Humidity Measurement Range:** 10% ~ 99%
- **Temperature Display Accuracy:** 0.1°C (0.1°F)

- **Temperature Measurement Accuracy:** $\pm 1.0^{\circ}\text{C}$
- **Humidity Measurement Accuracy:** $\pm 5\%$
- **Humidity Display Accuracy:** 1%
- **Temperature and Humidity Sampling Period:** 10 seconds
- **Mounting Type:** Tabletop, Wall Mount
- **Battery Description:** No batteries required (implies pre-installed or long-life, non-replaceable).



Image: The Inkbird ITH-20 digital thermometer and humidity monitor with its dimensions clearly marked: 2.56 inches (6.5 cm) wide, 2.95 inches (7.5 cm) high, and 0.91 inches (2.3 cm) deep.



Temperature Measurement Range:
-10°C~50°C (14°F~122°F)

Humidity Measurement Range:
10%~99%

Temperature Display Accuracy:
0.1°C (0.1°F)

Temperature Measurement Accuracy:
±1.0°C

Humidity Measurement Accuracy:
±5%

Humidity Display Accuracy:
1%

**Temperature and humidity
sampling period:**
10 seconds

Image: A graphic detailing the specifications of the Inkbird ITH-20, including Temperature Measurement Range (-10°C~50°C / 14°F~122°F), Humidity Measurement Range (10%~99%), Temperature Display Accuracy (0.1°C / 0.1°F), Temperature Measurement Accuracy (±1.0°C), Humidity Measurement Accuracy (±5%), Humidity Display Accuracy (1%), and Temperature and humidity sampling period (10 seconds).

MAINTENANCE

- **Cleaning:** Wipe the units with a soft, dry cloth. Do not use abrasive cleaners or immerse the units in water. For the ITC-308 probe, ensure it is clean and free of debris for accurate readings.
- **Storage:** When not in use for extended periods, store the devices in a cool, dry place away from direct sunlight and extreme temperatures.
- **Probe Care (ITC-308):** Handle the temperature probe carefully. Avoid bending or kinking the cable excessively.

TROUBLESHOOTING

ITC-308 Troubleshooting

Problem	Possible Cause	Solution
Display is blank	No power	Check power connection; ensure outlet is functional.
Temperature reading inaccurate	Probe issue or improper placement	Ensure probe is fully inserted and clean. Avoid placing probe near heat sources or drafts not representative of the environment.
Heating/Cooling not activating	Settings incorrect or device malfunction	Verify set temperature and differential. Check if heating/cooling appliance is plugged in correctly and functional.

ITH-20 Troubleshooting

Problem	Possible Cause	Solution
Inaccurate readings	Improper placement or environmental factors	Relocate the unit away from direct sunlight, vents, or extreme temperature fluctuations. Allow time for readings to stabilize.
Display not showing Max/Min	Not enough time passed or values reset	Allow the unit to operate for a period to record values. Ensure you haven't accidentally pressed the reset button.

SCOPE OF APPLICATION

The Inkbird ITC-308 and ITH-20 bundle is versatile and can be used in a wide range of environments requiring precise temperature and humidity monitoring and control. Common applications include:

- **Office:** Maintain comfortable and productive working conditions.
- **Wine Cellar:** Ensure optimal temperature and humidity for wine storage.
- **Greenhouse:** Regulate climate for plant growth.
- **Warehouse:** Monitor conditions for sensitive goods.
- **Bedroom:** Optimize sleep environment.
- **Baby Room:** Ensure a safe and comfortable environment for infants.
- **Music Room:** Protect musical instruments from humidity fluctuations.
- **Basement:** Monitor for dampness and temperature extremes.
- **Nursery, Hatchery, Cellar:** Other specialized environments requiring climate control.

SCOPE OF APPLICATION



Image: A collage illustrating the broad "SCOPE OF APPLICATION" for the Inkbird ITH-20, depicting its use in an office, wine cellar, greenhouse, warehouse, bedroom, baby room, music room, and basement.

WARRANTY AND SUPPORT

Inkbird products are designed for reliability and performance. For specific warranty information and technical support, please refer to the official Inkbird website or contact their customer service directly. Keep your purchase receipt as proof of purchase for warranty claims.

Official Inkbird Store: Visit the Inkbird Store on Amazon