

Honeywell TR22

Honeywell TR22 Room Temperature Sensor User Manual

MODEL: TR22

1. Introduction

The Honeywell TR22 is a robust room temperature sensor designed for precise environmental control. It features a 20K Ohm thermistor for accurate temperature measurement and includes F/C relative setpoint adjustment capabilities, making it suitable for various HVAC applications. The unit is equipped with a network jack for seamless integration into compatible building management systems.

2. Safety Information

- **Electrical Hazard:** This device operates on 230 Volts. Installation and servicing must be performed by qualified personnel in accordance with all local and national electrical codes.
- **Disconnect Power:** Always disconnect power to the system before installing, servicing, or removing the sensor to prevent electrical shock or equipment damage.
- **Proper Mounting:** Ensure the sensor is mounted securely to prevent it from falling, which could cause injury or damage to the unit.
- **Environmental Conditions:** Do not expose the sensor to extreme temperatures, humidity, or corrosive environments beyond its specified operating range.

3. Package Contents

Verify that all components are present before beginning installation:

- Honeywell TR22 Room Temperature Sensor Unit
- Adjustable Rotary Knobs (Quantity: 3)
- Installation Guide (if applicable, not included in this manual)



The image displays the Honeywell TR22 Room Temperature Sensor unit, which is a white rectangular device with a central circular opening for a rotary knob. To the left of the main unit are three separate white circular knobs, each with numerical markings (e.g., 15, 20, 25 for temperature, and 60, 70, 80 for another scale), indicating they are likely for setpoint adjustment.

4. Setup and Installation

Installation of the TR22 sensor should be performed by a qualified HVAC technician or electrician.

4.1. Mounting Location

Select a central location on an interior wall, away from direct sunlight, drafts, heat sources (e.g., lamps, appliances), and exterior walls. Ensure the mounting height is typical for room temperature sensing, usually around 1.5 meters (5 feet) from the floor.

4.2. Wiring

1. **Disconnect Power:** Turn off all power to the HVAC system at the circuit breaker before beginning wiring.
2. **Access Wiring Terminals:** Open the sensor casing to expose the wiring terminals.
3. **Connect Wiring:** Follow the wiring diagram provided with your specific HVAC control system. Connect the sensor wires to the appropriate terminals. The TR22 typically uses two wires for temperature sensing and additional wires for setpoint adjustment and network communication.

4. **Network Connection:** Connect a standard network cable to the integrated network jack for communication with compatible building automation systems.
5. **Secure Wiring:** Ensure all wire connections are secure and properly insulated.

4.3. Knob Installation

Once the sensor is mounted and wired, carefully align and press the desired rotary knob onto the central shaft of the sensor. Ensure it clicks into place securely.

5. Operating Instructions

The Honeywell TR22 sensor primarily provides room temperature data to a connected control system. The rotary knobs allow for local adjustment of the relative setpoint.

5.1. Temperature Sensing

The sensor continuously monitors the ambient room temperature and transmits this data to the connected HVAC controller. No direct user interaction is required for basic temperature sensing.

5.2. Relative Setpoint Adjustment

The installed rotary knob allows occupants to make minor adjustments to the desired temperature setpoint relative to the system's programmed setpoint. Rotate the knob clockwise to increase the setpoint and counter-clockwise to decrease it. The markings on the knob indicate the relative adjustment or a specific temperature range, depending on the knob type installed.

6. Maintenance

The Honeywell TR22 sensor requires minimal maintenance.

- **Cleaning:** Periodically wipe the exterior of the sensor with a soft, dry cloth to remove dust. Do not use abrasive cleaners, solvents, or spray liquids directly onto the sensor.
- **No User-Serviceable Parts:** The sensor contains no user-serviceable parts. Do not attempt to open or repair the unit yourself. Refer all servicing to qualified personnel.

7. Troubleshooting

If the sensor is not functioning as expected, consider the following common issues:

- **No Temperature Reading/Incorrect Reading:**
 - Verify that power to the HVAC system is on.
 - Check all wiring connections for looseness or damage.
 - Ensure the sensor is not exposed to direct drafts, sunlight, or heat sources that could skew readings.
 - Confirm the sensor is compatible with the connected control system.
- **Setpoint Adjustment Not Responding:**
 - Ensure the rotary knob is correctly installed and seated on the shaft.

- Verify that the control system is configured to accept setpoint adjustments from the sensor.

For persistent issues, contact a qualified HVAC technician or Honeywell customer support.

8. Specifications

Brand	Honeywell
Model Number	TR22
Sensor Type	Room Temperature Sensor (20K OHM)
Control Type	Button Control (Rotary Knob)
Voltage	230 Volts
Product Dimensions	30"D x 8"W x 6"H (Approximate)
Item Weight	0.26 Pounds (Approximate)
Features	F/C Relative Setpoint, Network Jack

9. Warranty Information

For detailed warranty information regarding your Honeywell TR22 Room Temperature Sensor, please refer to the official warranty documentation provided at the time of purchase or visit the official Honeywell website. Warranty terms and conditions may vary by region and product.

10. Support

If you require further assistance with your Honeywell TR22 sensor, please contact Honeywell customer support or your local authorized Honeywell distributor. You can find contact information on the official Honeywell website.

Honeywell Official Website: www.honeywell.com