

ZigBee Wireless Battery Powered Remote Thermostat

The WZ_WRT_B Wireless Remote Thermostat is used to add temperature measurement and setpoint control to areas currently without thermostats. This permits the central controller to better calculate the average room temperature and to detect motion in other parts of a room.

The WZ_WRT_B uses the ZigBee wireless protocol. It wirelessly connects to a central station for inclusion as part of a larger system. It is powered by three AA batteries for up to 5 years between battery changes.

Advanced software techniques are used to estimate a room's heat gain/loss and predict the amount of heat required to be added or removed, resulting in extremely stable room temperatures. The WZ_WRT_B is nevertheless very responsive to sudden changes in heating/cooling demand.



Benefits

- Reduced heating/cooling costs.
- Consistent, accurate temperature.
- Adds temperature measurement and setpoint control in convenient locations.
- Allows for room temperature averaging.

Features

- **ZigBee Radio** - connects to a central controller through a wireless, self healing mesh network.
- **Digital Signal Processing** - uses advanced digital techniques to even out heating/cooling cycles for a consistent, accurate room temperature.
- **Multiple setpoints** - stored locally for stand alone mode in case of loss of radio reception to the controller.
- **Multiple schedules** - separate settings for day/night and 7 days of the week.
- **Min/max temperature** - prevents users from setting the temperature too high or too low.
- **Programmable** - simple yet powerful programming language for creating complex heating/cooling algorithms.
- **Motion sensor** - reduces the heat when the room is not in use.
- **Simple installation** - doesn't require additional control lines.
- **Battery powered** - up to 5 year battery life on 3 x AA batteries.
- **Warranty** - 3 years.

Specifications

Input Characteristics

Operating Voltage	Battery Life
4.5VDC (3xAA)	Up to 5 years

Motion Detect

Type	Max Viewing Range	Max Viewing Angle
Infrared	5m	135°

Temperature Characteristics

Sensing Range	Setpoint Range	Accuracy
-10°C~120°C	15°C~27°C	0.5°

Communication Ports

Type	Connection	Baud Rate/Frequency	Max Distance
RS232	3 Pin	9.6Kbps	15m
ZigBee	Wireless	2.4GHz	25m