



ELECTRICAL INNOVATION SINCE 1909

Time Switches / Interval Timers/ Transfer Switches / Panelboards

Reliance Controls Corporation “The Home Protectors” Model THP 203 RF Strobe Warning System Wireless Remote Flood or Freeze Warning Flasher

Theory of Operation

The Model THP 203 RF Strobe Warning System is designed to detect freezing or flooding conditions and provide an alert via radio frequency signal that is received remotely and annunciated visually.

The transmitter module includes an internal temperature sensor and an external water sensor. When either of the sensors is activated, the alert code generator is activated. It reads the alert code from the code selector and synthesizes the code to be transmitted. It also triggers the power amplifier to the on-state for a brief period of time (~ 0.5 sec), at which time the oscillator signal is modulated by the alert code, and the resultant is amplified and provided to the transmitting antenna for transmission. The transmitting antenna consists of a circuit board trace. No external antenna is used.

The receiver module includes an integral antenna consisting of a circuit board trace. No external antenna is used. When the receiver receives a signal, it passes the signal to the demodulator, amplifies it, and sends it to the alert code decoder. If the decoded signal matches the alert code as set in the code selector, the decoder latches the delay timer into the on-state. The delay timer then drives the LED display alternately on and off until the power source fails or is manually cycled off.

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11/10/04



ELECTRICAL INNOVATION SINCE 1909

Time Switches / Interval Timers/ Transfer Switches / Panelboards

Reliance Controls Corporation “The Home Protectors” Model THP 204 RF Audible Warning System Wireless Remote Flood or Freeze Warning Alarm

Theory of Operation

The Model THP 204 RF Audible Warning System is designed to detect freezing or flooding conditions and provide an alert via radio frequency signal that is received remotely and annunciated audibly.

The transmitter module includes an internal temperature sensor and an external water sensor. When either of the sensors is activated, the alert code generator is activated. It reads the alert code from the code selector and synthesizes the code to be transmitted. It also triggers the power amplifier to the on-state for a brief period of time (~ 0.5 sec), at which time the oscillator signal is modulated by the alert code, and the resultant is amplified and provided to the transmitting antenna for transmission. The transmitting antenna consists of a circuit board trace. No external antenna is used.

The receiver module includes an integral antenna consisting of a circuit board trace. No external antenna is used. When the receiver receives a signal, it passes the signal to the demodulator, amplifies it, and sends it to the alert code decoder. If the decoded signal matches the alert code as set in the code selector, the decoder latches the delay timer into the on-state. The delay timer then drives the sonic alarm alternately on and off until the power source fails or is manually cycled off.

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