Matrix Product Development 10-2-07 djp

User Manual TP550

Introduction: The TP550 is battery operated, wireless temperature probe. It is designed to operate in conjunction with a TP1000 Base Station.

Technical Specifications:

Battery: 3.6V or 3.9V Single cell lithium Temp Range: -20C to +100C Life Span: ~2yrs, depending on how often Probe transmits. Frequency: 433MHz Case Material: Polycarbonate

Basic Operation:

The TP550 (Probe) is turned on via an on-board reed switch using external magnet. To turn on, hold a magnet up to the TP550 (Probe), in a parallel fashion, for 3-5 seconds. To turn off, repeat the same process as above.

When the TP550 gets woken up with an external magnet it immediately sends out a packet to the TP1000.

The transmit sequence is as follows: The Probe will transmit a packet every 5 seconds for up to one minute until it receives an acknowledge from the Base. If the Probe receives an acknowledge prior to one minute it will revert to it's standard operating mode. In standard operating mode the Probe will transmit once every 55 seconds.

If the Probe *does not* receive an acknowledge within one minute of power up it enters into a retry mode in which the Probe will continue trying to transmit it's packet *up to three times* every 55 seconds.

The packet is roughly 16.66ms long. It's contents include temperature, RSSI value, tag ID, and etc...

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.