

TA-100 Operational Manual

Introduction

TA-100 is a proximity sensor targeted at securing valuables such as laptops, Cell-phones, IPODs, etc. TA100 is comprised of a tag that is attached to the valuable to be tracked and a monitor that is carried by the owner of the asset. When the distance between the tag and the monitor exceeds a set range, it sounds an alarm.

Principles of Operation

The tag is a transmitter that transmits short bursts of information very few seconds. The bursts are 4 milliseconds long. The receiver receives the bursts from the transmitter and decides whether to sound an alarm based on the quality of the received signal. The system uses 915 MHz and uses FSK signaling. The receiver is a super-heterodyne receiver with a local oscillator at 904.3 MHz.

Operation

The TX continuously transmitting once the battery is put in. The Receiver turns on using an on/off switch that is also used to choose one of two range setting. The LED lets the user know that the receiver is on. The push button allows the user to “snooze” for 10 minutes. When pressed, the receiver does not alarm for 10 minutes.