

## **Functional Operation**

The Seeker Hand Held Reader and Tags are designed to provide a simple and low cost RFID system. A commercially available Personal Digital Assistant (PDA) and a custom transceiver card will comprise a Hand Held Reader. The Hand Held Reader has the ability to display through a custom graphical user interface (GUI) the tags in its immediate vicinity. The custom receiver card receives a signal from the tags on an internationally recognized frequency of 433 MHz.

The Hand Held Reader is used to “search” an area for “tags” which are attached to various pieces of equipment. The tag is programmed with two ‘3-digit’ codes and attached to the equipment to be tracked. The tag will audibly ‘chirp’ and broadcast its code in response to the proper signal from the reader to both identify and determine tag status.

The primary use for the Seeker is finding assets within a hospital environment. In this application the reader is used to determine if an individual tag is within the range of the reader, thus creating a simple finder application.

Another possibility for use is in inventorying assets. The Hand Held Reader applications could include inventorying tags in lumberyards or utility storage areas. The driver of a vehicle could drive through the lot and create an inventory through the reader.

The reader would integrate with the PinPoint Mobile Resource Manager (MRM) through its sync cradle. When the user returns from the field they would place the PDA in its cradle and the data it most recently acquired would be downloaded into the MRM database. The MRM integration would also include the ability to enter tag information through the MRM Tag Builder application and have tag information uploaded to the PDA.