TARUS WIRELESS HANDHELD CONTROL

The unit continually scans and transmits to the receiver the state of seventeen switches and two potentiometers. This is acomplished by a microcontroller (Microchip P/N PIC16F877). The microcontroller captures the state (on or off) of the switches and the position of the pots. A preamble is added along with a checksum. This is then sent to the Lynx Technologies HP2 transmitter module in a binary format. The frequency used to transmit the data is determined by the the setting of switches one and two of dip switch SW1. At startup the microcontroller reads these switches and applies them to the HP2 transmitter. The ground plane used for the transmitter is the common of the circuit board to which it is attached.

At the receiver any of the seventeen switch that was detected as ON will turn on an open collector output. Depending on the position of the pots, the output voltage for the two will vary from zero to ten volts.