

## **CP-TX**

### **CIRCUIT DESCRIPTION**

The **CP-TX** remote control transmitter basically consists of an RF oscillator section that is driven and controlled by a single chip microprocessor. (see block diagram)

The RF oscillator / amp section is a simple one stage element composed of integrated circuit IC2 and SAW resonators CR2 & CR3. The operating frequencies are 300MHz and 387MHz.

Microprocessor IC1, upon power up, reads a number of jumpers and switches to determine its operating frequency, function and what ID code data is to be sent. Once this has been determined, the single stage RF section is then AM modulated with the proper data. For the carrier operating frequency of 387MHz, the data is formatted such that a logical "1" is 10KHz and a logical "0" is 20KHz. For the operating carrier frequency of 300MHz, a logical "1" is just simply leaving the carrier on for 1.5mSec and turning it off for 0.5mSec. A logical "0" is reversed from this.