

### THEORY OF OPERATION

The transmitter board, which is purchased from LINEAR CORPORATION, generates a 300 MHZ signal. There are 10 rocker or slide switches on a dip socket which selects the pattern of transmission.

The board that we attach to the transmitter is called the pulse extender board. Its purpose is to extend the pulse train of the transmitter board. A wall switch is used to activate the pulse extender.

When an activation device is initiated, 9 VDC is momentarily placed across the 220 uf capacitor. This will cause the transistor to turn on, which will start the transmitter board to begin sending its 300 MHZ signal toward its receiver. The transistor will stay in the on state for approximately two seconds. At this point, the capacitor will have discharged to the point where the emitter-base voltage falls below the voltage needed to keep the transistor conducting (turned on). This turns off the 300 MHZ transmitter.