CIRCUIT DESCRIPTION

RECEIVER UNIT

RF Amplifier

The RF Signal is amplified by Q1

310MHz Receiver

It is a super regenerated system, The oscillation is generated by Q2.

Amplified and comparator

The output is amplified by IC U1A and the shape of the incoming signal is reformed by comparator IC U1B.

Decoder

The comparator outputs is fed into the pin9 of CPU U1,Decoder is built in the CPU U1.

Fan/Light control

Pins 1,2,18 of IC U1 is the output for the fan ON/OFF and speeding ,pins 7 of IC U1 is the output for the controlling of light ON/OFF and DIMMER control.

REMOTE TRANSMITTER

RF OSCILLATOR

It is a L-C oscillator generated by Q1.

Encoder and code selector

IC U1 is the encoder and the code is selected by clip switch SW1 ,The clock rate of encoder is determined by R1.When pin14 of IC U1 goes low , Pin17 sends out chairs different pulse that the widths according to the code , So Q1 turns on and off the RF transmitter ,and modulating the RF Signal.

Data selection

When you press the button ,it sends different data code.