

## Operational Description

The 5800STAT uses a single chip transmitter which contains a: reference oscillator, a divide by 32 divider, phase detector, and carrier oscillator, these all combine to form a phase locked loop. the carrier oscillator is fed into the PA stage, which is also part of the chip. There are a minimum of external components used. C2 is the bypassing for the chip, crystal Y1 is the frequency determining element of the reference oscillator (  $10.78125 \text{ Mhz.} \times 32 = 345.00 \text{ Mhz.}$  ). C6 and L2 tune the PA, while C11 bypasses the tank circuit. L1 and C14 serve to further reduce harmonics, while C3 couples energy into the printed antenna. the network R1, R3 / C1, shapes the input data. The TX gate and Data come from the standard ADEMCO encoder chip. It should be reiterated, that the 5800STAT only sends COMANDS to run a heating, cooling system, or fan and NOT the actual temperature data itself.