

EXHIBIT 2-1 CFS8DL5815MN

Circuit Operation Description.

The 5815MN is constructed on a single PCB. The PCB contains the message encoder chip (U1), a reed switch connected to the loop input, a tamper switch connected to the tamper input, and an RF transmitter (U2) with its output matching components and antenna.

The transmitter consists of a phase locked loop (PLL) and power amplifier (PA) in one chip. The frequency determining element is YL1, a 10.78125 MHz crystal.. The PLL produces an output frequency of $32 \times 10.78125 = 345\text{MHz}$. The transmitter is on-off keyed (AM) by a control signal from the encoder chip. All modulation is done internally. L1 and C6 form the external tank circuit necessary for U2's PA. C3 blocks DC and C7, C8 match the output to the loop antenna.