

CEREM-NC (one button 315Mhz transmitter)Operational Description

The CEREM-NC transmitter is a low powered, hand held unit for remote controlling the home security panic feature. See the function descriptions in attached. The transmitter is powered by a 6 volt battery. It is designed to operated on a single fixed frequency at 315 MHz. See the attached block diagram and schematic.

There is one button trigger the integrated circuit (U1) which produces the digital control signals and will modulate the carrier signal(ASK). The carrier signal is generated by SAW resonator/amplifier circuit comprised of capacitor (C1,C2,C6,VC1) and SAW (X1) and inductor (L1,L2) and npn transmitter (Q1). The modulated output of the RF stage is coupled to the PCB strip antenna. The strip antenna is attached on PCB permanently around 24mm.

The transmitter is manually operated by the buttons pushed momentarily within 0.2 second and will automatically deactivate send signal to receiver. This feature is incorporated by the U1 internally.

All tuning and verification are performed by the manufacture and there are no adjustments can be made by user.