

Operational Description

Basically- the explanation is as follows:

A trigger from the reed relay (when the magnet is removed), or from the external input, activates the transmitter, which emits (RF) an alarm message. The alarm message (36 bits long) consists of the transmitter ID and "Alarm" signal.

If the battery is low, the alarm message will include also a "low battery" bit.

If the tamper is operated, "tamper" signal is sent.

2. Every hour a short "supervision" message whose duration 580 msec is emitted (RF).

The type of RF transmission in ON/OFF Keying, in other words every bit of the bit causes the RF carrier to be either fully ON or fully OFF.

The RF part is an ASK (On/Off, Keying) transmitter with integral antenna.

It has three inputs/ports :GND, VCC, DATA.

A Colpits type oscillator with a SAW resonator creates the carrier of 315 Mhz. When only GND and VCC is supplied, the transmitter is in standby mode (does not oscillate).

With every DATA pulse the Oscillator generate a carrier of 315MHz. This is ASK or ON/OFF keying modulation.

From the Oscillator the RF signal is fed/driven through matching circuit to the integral antenna.