

WS4965 door sensor Operational Description

The WS4965 door sensor is a low powered, which is installed in house to detect door/window for home security and other features. See the function descriptions in attached. The sensor is powered by a 3.3 volt battery. It is designed to operate on a single fixed frequency at 433.92 MHz. See the attached block diagram and schematic.

There are 3 switches trigger the integrated circuit (IC1) which produces the digital control signals and will modulate the carrier signal(ASK). The carrier signal is generated by a I.C (IC1) oscillator/amplifier circuit comprised of a 13.56 MHz crystal (X1) . The modulated output of the RF stage is coupled to the strip antenna. The antenna is off-board soldered, around 160mm.

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