EV-DW319 door sensor Operational Description

The EV-DW319 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 volt battery. It is designed to operate on a single fixed frequency at 319.5 MHz. See the attached block diagram and schematic.

There are 3 switches trigger the integrated circuit (U2) which produces the digital control signals and will modulate the carrier signal (ASK). The carrier signal is generated by a I C (U1) oscillator/amplifier circuit comprised of a 4.99 MHz crystal (X1). The modulated output of the RF stage is coupled to the strip antenna. The antenna is off-board soldered, around 160mm.

The sensor is operated by the triggered 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.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.
(2) This device must accept any interference received: including interference that may cause undesired operation.

Note: The manufacturer is not responsible for any radio of TV interference caused by unauthorized modification to this equipment. Such modification could void the user' authority to operate the equipment.