

INTERTEK TESTING SERVICES

EXHIBIT 1

GENERAL DESCRIPTION

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1.0 General Description

1.1 Product Description

The equipment under test (EUT) is a superregenerative receiver of a PIR sensor alarm operating at 312 MHz. The EUT is powered by four 1.5V “AA” batteries. The passive infrared (PIR) motion sensor to detect intruders and activate a built-in alarm. The system’s main unit is operated by console touch keypad or RF remote controller. The superregenerative receiver portion is used to receive the signal from the remote control for controlling the armed & disarmed operation.

The brief circuit description is attached in the following page.

1.2 Related Submittal(s) Grants

This is an application for Certification of a receiver. The FCC ID for the transmitter associated with this receiver is ELY547-49-329-T

Circuit Description

2. Receiver

312 Mhz Receiver

It is a super regenerated system. The oscillation is generated by Q2. The output signal from Q2 is amplified by U3C and shaped by U3D.

Low voltage detection

U3b, Q5 and Q6 are used to detect the battery low.

4x4 Key Matrix

The 4x4 matrix keypad consist of 15 keys. All the setting and operation are activated by this keypad.

PIR Sensor

U5 is a passive infrared detectot which detect human motion. The signal is then be amplified and filtered by U2. When the amplifiled signal higher than the threshold voltage of U3A, U3A will send a pulse the MCU.

Buzzer Amplifier

Q3 and Q4 form a buzzer amplifier which amplify the siren signal generated by the MCU.