1.0 DESCRIPTION

The DXS-36AF is a one channel miniature transmitter operating at a frequency of 315 MHz. The DXS-36AF is intended for use in security applications for protection of doors and windows. The transmitter may be used with Alarm Force consoles. Each transmitter comes from the factory sequentially coded. Power is supplied by a single CR2450 3 Volt battery. Battery life is estimated at a minimum of 5 years under typical conditions.

2.0 OPERATION

The DXS-36AF is typically activated by opening an internally mounted magnetic reed switch. Terminals for an external normally closed glass break switch are also provided. For testing purposes a carbon button push switch may be used to initially set up the transmitter. A tamper switch is provided if the case top is removed.

Upon activation, the LED illuminates and power is provided to IC U3 which outputs a 315 MHz crystal stabilized signal to the antenna. The frequency of U3 is stabilized at a 9.84375 MHz crystal Y1 (315 MHz / 32 = 9.94375 MHz). Data output at U1-6 modulates the input of U3 which transmits the pulse-modulated carrier via the antenna.

The transmitter is supervised. It will send a status transmission about every 1.2 hours to show the current status of the battery and contact switches. Any door/window transmission or manually activated transmission will reset the internal status timer back to zero and the transmitter will wait another 1.2 hours to send the next transmission.

The test transmission push button requires the use of a special tool (a small pin or wire probe) to access the hidden push button.

The test push button or tamper switch is considered to be a manually activated transmission. As such it may operate continuously. However, due to battery limitations, the microprocessor IC has an internal clock that limits manually activated transmissions, even if the switch is held down, to no longer than 10 seconds. Only after the switch is released and then pressed again may another transmission cycle begin.

On a brief momentary pressing of the test, tamper or door/window contacts, the microprocessor will power up and complete a minimum of 8 words in the RF data message. This transmission will take approximately 0.8 second. FCC Rules 15.231 (a)(1) allows no longer than 5 seconds upon the release of a manually activated transmitter push button.

U2 is a voltage detector IC that sends a low battery signal to the microprocessor U1 if the battery is below 2.5 VDC.

3.0 SPECIFICATIONS

Product Identification:	DXS-36AF mini transmitter (SST00127).
Encoding Format:	DX Code for Alarm Force.
Encoding Technique:	Each transmitter is programmed with the sequential serial transmitter ID number.
Number of Channels:	One
RF Carrier Frequency:	315.0 ± 125 KHz
Power Requirements:	CR2450 - 3 Volt battery.
Visual Indicator:	LED.
Operating Temperature:	0° C to +70° C. Tested –20° C to 70° C.
Size:	2.4" x 1.1" x 0.59".
Current Consumption:	7 mA (average) transmitting, 6 uA standby

All specifications are nominal unless specified.