# Simon™

## Security System Control Panel

**Interactive Technologies, Inc.**

W I R E L E S S

Security
Automation
Access Control

**ITI Part # 60-776-95R/60-776-01-95R**

## Overview

The Simon ™ Security System is designed to provide a low cost security panel that can monitor wireless sensors. It installs easily and will provide years of reliable burglary and fire protection and home automation control.

With its built-in touchpad and status speaker, and voice messages for user feedback, Simon is well-suited for homes, apartments, and condominiums.

Simon is designed to be a monitored security system and/or send messages to a numeric pager.

The user can arm and disarm the system, activate latchkey, activate no entry delay, toggle lights, or check the system status using remote phone control.

With its latchkey capabilities, the panel can be programmed to call the home-owner's pager if children don't arrive home and disarm the system as pre-scheduled.

Simon is quick and easy to install thanks to ITI's patented Learn Mode™ tech-nology, which eliminated cumbersome sensor programming. The system can be installed faster than a conventional hardwired system, without the usual inconvenience and potential for property damage.

The wall-mounted wireless Simon Touchtalk 2-Way RF Touchpad combines a conventional ITI Learn Mode**™** touchpad with an RF receiver, speech chip, and voice amplification circuit.

Simon includes built-in capabilities for easy system expansion. By adding optional modules, the user can control lighting and open a garage door.

Simon can be installed with or without audio verification on-board the control panel. One remote audio verification module may be added to the security system to give the user additional security and emergency contact with the central monitoring station.

## Features

**Simon features include the following:**

ν  24 individual sensor zones with options for up to 2 hardwire zones
ν  319.5 MHz SAW receiver will support all of ITI's sensor line (SAW and Crystal devices)
ν  5 user-programmable access codes
ν  Chime feature for monitoring door and window activity
ν  Up to 8 Individual light or appliance control units can be installed and con-trolled from touchpads (requires optional X-10® Lamp Modules)
ν  Indoor and outdoor motion sensors
ν  Central station and/or numeric pager reporting
ν  Event buffer with a time stamp
ν  Panel voice and panel beeps can be disabled
ν  The control panel can be programmed off-site using the ITI ToolBox
ν  SAW sensors which allow the home owner to change the alkaline batter-ies
ν  Four button keychain touchpad capability

## Power Supply

| | |
|---|---|
| **Required Transformer** | Class II, 9 VAC, 60 Hz (22-091-ITI) |
| **Backup Batteries** | 9 VDC, 1.2 Ah UltraLife Lithium (34-037) - 24 hours (fully charged) |
| | 7.2 VDC, 1 Ah Nickel Metal Hydride Rechargeable (34-052) - 30 hours - UL approved |
| | 7.2 VDC, 650mAH Nickel Metal Hydride Rechargeable (34-051) - 18 hours - not UL approved |
| **Battery Test** | 15 seconds under load every 4 hours |
| **Fuse** | Non-replaceable transformer fuse |

## Radio Receiver

| | |
|---|---|
| **Type** | SAW-Controlled Superheterodyne |
| **Frequency** | 319.5 MHz |
| **Bandwidth** | 350 kHz |
| **Sensitivity** | -112 dBm nominal |
| **Nominal Range** | 500 ft (150 m) open-air receiving range |

## Telephone/Modem

| | |
|---|---|
| **Dialing** | DTMF or pulse |
| **Modem** | Modified Bell 103 (110 or 300 bps) |
| **Telephone Interface** | Line seizure relay |

## Inputs/Outputs

| | |
|---|---|
| **Total Input Zones** | 24 |
| **Auxiliary Power** | Regulated, fused 7-12 VDC output at 250 mA (maximum) |
| **Siren Outputs** | Hardwire Interior Siren (HIS) output and Hardwire Exterior Siren (HES) output (7-12 V) |

## Microprocessor

| | |
|---|---|
| **Processor Type** | Mitsubishi M38024M6-SP |
| **Processor Clock** | 7.68 MHz |
| **System ROM** | 24 kilobytes |
| **System RAM** | 640 bytes |
| **Memory Retention** | Unlimited duration (512 bytes EEPROM) |

## Digitized Voice

| | |
|---|---|
| **Digitization Type** | Linear Predictive Coding (LPC) |
| **Playback Rate** | 16,000 bits/second (varies by word) |
| **Vocabulary Size** | 212 words (approximately 90 seconds) |

## Environmental

| | |
|---|---|
| **Operating Temperature** | 32°F (0°C) to 122°F (50°C) |
| **Maximum Humidity** | 85% relative humidity, noncondensing |
| **Standards** | FCC Part 15, FCC Part 68 |
| | UL Listings 985, 1023 |

## Physical Description

| | |
|---|---|
| **Color** | Belgian Gray |
| **Dimensions** | 7.5 in wide x 9.5 in length x 1.5 in high |
| **Weight** | 1 lbs,9.6 oz |
| **Installation** | Wall and table mounting |
| **Chassis Material** | ABS |