



## **SP6000 CONTROL PANEL**

### **ARCHITECTURAL AND ENGINEERING SPECIFICATIONS**

## TABLE OF CONTENTS

<b>SCOPE OF THIS DOCUMENT .....</b>	<b>2</b>
<b>SYSTEM DESCRIPTION .....</b>	<b>2</b>
GENERAL SYSTEM OVERVIEW.....	2
PROGRAMMING METHODS .....	2
ACCESSORIES .....	2
<b>SECURITY .....</b>	<b>3</b>
ZONES.....	3
KEYSWITCHES.....	3
PROGRAMMABLE OUTPUTS (PGMS) .....	3
REPORTING FEATURES .....	3
ARMING AND DISARMING FEATURES .....	4
ALARM FEATURES .....	4
USER CODES .....	4

## 1.0 SCOPE OF THIS DOCUMENT

The following document is formatted for the use in a tender specification for a security system using Paradox Security Systems products. This document does not detail any specifications required for the installation of equipment or programming of devices.

The document covers control panel version 2.6 and may be revised according to new developments or changes in the released product. For the latest A&E Specifications, please review online documentation at [www.paradox.com](http://www.paradox.com). Paradox Security Systems reserves the right to change this document without notification.

## 2.0 SYSTEM DESCRIPTION

The supplied security system, hereafter referred to as “the system”, shall meet or exceed the requirements detailed within this section.

### 2.1 General System Overview

- [2.1.1] The system shall be a modular-based system equipped with alarm monitoring and a 256 event buffer.
- [2.1.2] The system shall provide 8 on-board zone inputs that can be doubled to 16 with the zone doubling feature. The system shall be expandable to 32 zones that can be assigned to one of the 2 partitions.
- [2.1.3] The system shall be expandable to up to 15 modules that connect to the 4-wire communication bus using 18AWG up to 750feet (230m) from the control panel for modules or 250feet (76m) for keypads.
- [2.1.4] An installer code, system master code, 2 master codes and 29 user codes shall be included in the system. User codes shall be of four or six digits in length.
- [2.1.5] A telephone line shall be connected directly to the control panel or through a RJ31. The telephone line shall be supervised. The control panel shall include a digital CTR-21 approved dialer.
- [2.1.6] The control panel shall include a 1.1A switching power supply, a power input for a 16.5Vac 20/40VA 50-60Hz transformer and input for one 12Vdc backup battery.
- [2.1.7] All control panel and module programming shall be retained in the device's non-volatile memory in the event of complete battery and AC power loss in the system.
- [2.1.8] Keypads shall display partition and zone status, the alarm memory and any troubles in the system.
- [2.1.9] The control panel shall include a serial port connector, a memory key connector, an ebus connector, and a dialer connector.

### 2.2 Programming Methods

- [2.2.1] The control panel shall be manually programmed by any keypad.
- [2.2.2] A memory key shall be available for copying and downloading control panel programming to compatible devices.
- [2.2.3] An uploading/downloading software shall be available for installers for control panel and module programming, on-line monitoring, searching and displaying events and printing reports. The software shall provide on-site connection at 9600bauds, or remote connection either via a modem (off-site) at 300bauds or through a IP network. The software shall be available in several languages such as English, French, Spanish and Italian.

### 2.3 Accessories

- [2.3.1] The keypads shall include one keypad zone and AC, and locate, network fault, status and trouble indicators. The on-board tamper switch shall not occupy a zone and tamper supervision shall be done through the communication network. The keypads shall provide three keypad-activated panic alarm keys, five installer function keys, individually programmable chime zones and keypad muting.
- [2.3.2] By using voice-prompts, a voice assisted arm/disarm module connected on the panel shall enable users to arm or disarm the system, activate or deactivate a PGM and verify system status via a telephone.

- [2.3.3] The system shall support up to 3 eight-zone hardwire expansion modules.
- [2.3.4] The system shall support a wireless tranceiver module that will permit the use of multiple wireless accessories.

## **3.0 SECURITY**

This section covers the security features of the system.

### **3.1 Zones**

- [3.1.1] The system shall include the following zone definitions: two Entry Delays, two Full Arm Entry Delays, Follow, Follow (Sleep/Full Arm), Follow (Full Arm), Instant, Instant (Sleep/Full Arm), Instant (Full Arm), Instant Fire, Delayed Fire, Instant Fire Silent, Delayed Fire Silent, 24hr. Buzzer, 24hr. Burglary, 24hr. Hold-up, 24hr. Gas, 24hr. Heat, 24hr. Water, 24hr. Freeze, 24hr. Panic, Instant No Pre-Alarm and Follow. Each zone shall be assigned to one of the two partitions.
- [3.1.2] Zones shall include the following options: Auto Zone Shutdown, Bypassable Zone, Audible Alarm, Pulsed Alarm, Silent Alarm, Report only, Intellizone, Delay Before Alarm Transmission, and Force Zone.
- [3.1.3] The 32 zones shall be continually supervised. The system shall restrict arming on tamper or battery trouble or failure. The system shall be monitored for power, bell, communication, tamper and zone wiring failure, module tamper, fire loop, timer loss, module supervision loss, or keypad fault troubles.
- [3.1.4] The input speed for on-board zones shall be set between 10 and 2550 milliseconds.

### **3.2 Keyswitches**

- [3.2.1] The system shall have 16 keyswitch zones. Each keyswitch shall be assigned to one of the partitions.
- [3.2.2] The system shall include the following keyswitch definitions: disabled, momentary and maintained. Keyswitches shall also include the following options: arm only, stay arming, regular arming, disarm only, disarm and disarm only if stay armed.

### **3.3 Programmable Outputs (PGMs)**

- [3.3.1] The control panel shall have two on-board 100mA low current programmable outputs. Two additional optional outputs shall be available if requested.
- [3.3.2] The PGM Programming table shall provide at least 1000 options. The programmable outputs shall be activated by programming a range of events. PGM deactivation shall be determined by the PGM Deactivation option: by following a programmed range of events, or a timer set in minutes or seconds.
- [3.3.3] The system shall support up to 16 PGMs.

### **3.4 Reporting Features**

- [3.4.1] The system shall support Ademco Contact ID, SIA, pager and most standard report code formats.
- [3.4.2] Each partition shall have an account number. Control panel events shall be divided into three event groups for each partitions and two global event groups. Each event group shall be programmed to dial up to three monitoring station telephone number, with the third one used as a backup. The control panel shall dial the backup telephone number after every failed attempt to contact the Monitoring Station or only after the maximum dialing attempts to one monitoring telephone number has failed.
- [3.4.3] Several reporting features shall be provided by the system, such as recent close delay, pager delay, power failure delay, disarm reporting options, zone restore report options and auto report code programming.
- [3.4.4] The Auto Test Report feature shall transmit a report code at a specified time over a cycle of several days, at the same time every hour, or at regular intervals while the partition is armed or disarmed.

### **3.5 Arming and Disarming Features**

- [3.5.1] The system shall be able to provide no movement and timed automatic regular, sleep or stay arming, one-touch commands, keypad lockout and bell squawk options for disarming and arming.
- [3.5.2] An armed follow zone shall be able to switch to an entry delay if the follow zone opens without an entry being triggered.
- [3.5.3] The system shall include two exit delay timers from 1 to 255 seconds with the following features: exit delay termination or no exit delay on stay or sleep arming.

### **3.6 Alarm Features**

- [3.6.1] The control panel shall be able to toggle the on-board bell/alarm output for each partitions. The bell cut-off timers shall be set by partitions between 1 and 255 minutes with each providing no bell cut-off on fire alarm, re-verification of zone status during an alarm and a recycle delay.
- [3.6.2] False alarm prevention shall be achieved by the following features: audible exit delays, bell squawk options for disarming and arming, rapid keypad beeping during last 10 seconds of the exit delays, automatic zone shutdown, alarm transmission delay, exit delay termination, recent closing delay, delayed fire zones, stay delays, programmable input speeds, switch to stay arming, follow zone switches to entry delay, power failure report delay and stay arming with delay.

### **3.7 User Codes**

- [3.7.1] User codes shall be programmable with the following options: system master, master, duress, bypass, arm only, stay/sleep arming, force arming, regular arming and PGM activation only.
- [3.7.2] Users shall be able to access all the partitions assigned to their user codes.
- [3.7.3] Users shall be assigned to one or more partitions and can only arm, disarm and view the status of the partitions assigned to their user codes.

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