

DSC® Power432™

4 - 32 Zone Hybrid Security System

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Architect's Specifications

The contractor shall provide a complete electrically supervised, battery backed-up, fire and burglary alarm system. The system shall be complete with a multi-zone alarm system with the capacity of up to 8 burglar or Class B fire zones of which up to 32 may be wireless zones. All zones shall be supervised and be capable of operating listed heat detectors, smoke detectors, alarm contacts, motion detectors, glassbreak detectors, vibration detectors, and other listed fire and burglary alarm detection devices. The system shall have 1 low current voltage output and 1 high current voltage output. All outputs shall be programmable to activate for 1 of 20 options. System shall be complete with a 4 wire unshielded (QUAD) communications bus that allows system modules and keypads to be added anywhere on the bus up to 1,000 feet (330m) per leg from the main control panel. Bus shall be able to withstand temporary shorts of up to +12V without control panel damage. The system shall be capable of providing 550mA of 12VDC auxiliary power for alarm devices.

The alarm panel shall be capable of digital communications via regular telephone line, LINKS cellular, LINKS long range radio, and DVACS to two separate monitoring stations or locations with 2 account numbers and 3 telephone numbers. LINKS cellular communication shall be capable of backup or sole communications to monitoring stations and for upload/download operations. The system communicator shall be capable of communicating in all major formats including SIA and Contact ID. Events transmitted shall be programmable to include: fire alarms, burglary alarms, trouble alarms, supervisory conditions, alarm restoral codes, opening (disarming) and closing (arming) codes, partial closing codes, and opening after alarm codes. The system shall be capable of paging personnel on the occurrence of any of the above events selected by the owner. The system shall be capable of transmitting a test code to the monitoring station(s) on a programmable daily, weekly or monthly frequency at a regular time of day.

There shall be a 700mA, PTC protected, supervised bell/siren circuit that will drive a bell/siren until reset or silenced. Siren output shall be programmable as steady or pulsed for each zone.

The alarm panel shall be equipped with EEPROM memory to retain all program information even if all AC and battery power is lost, and shall have integral static and lightning protection circuitry.

To prevent false alarms and unnecessary transmissions to monitoring stations, the alarm panel shall have SIA false alarm prevention features, programmable swinger shutdown by zone, audible exit delay, audible exit fault, opening after alarm reporting, arm/disarm bell squawk, urgency on entry delay, "quick exit", programmable

transmission delay by zone, and transmission delay on AC failure, TLM trouble, low battery, recent close code, and cross zone police code,

The system shall have stay/away and stay arming capability to allow the user to remain on the premises while the system is armed. A quick-arm feature shall allow users without access codes to arm the system and exit. A door chime feature shall cause the keypad to beep when a selected door is opened or closed.

The system shall support any combination of up to 8 dual-language and LED type keypads with backlit displays. Keypads shall be surface-mounted and capable of fully programming and operating the system. Each keypad shall be assignable to operate the entire system. Dual-language keypads shall be complete with 32 character liquid crystal display (LCD) to provide plain language programming instructions, operating instructions, and display of all alarms and supervisory conditions. They shall be capable of toggling between languages by pressing a keypad key combination. LED keypads shall have 8 zone indicators. All keypads shall have keypad-activated emergency alarms for panic, emergency, fire, and duress; 5 programmable function keys or programmable keypad functions; LED indicators for Ready, Armed, and Trouble or System; and shall be equipped with a piezo buzzer to provide audible feedback for correct key entries, pre-alert, and trouble.

Each keypad shall have one zone input to allow a zone detector to be wired directly to the keypad.

The system shall allow 39 access codes including 32 user codes, 1 master code, 2 duress codes, 2 supervisor codes, 1 installer code, and 1 maintenance code.

The system shall be uploadable/downloadable to allow programming and operation from a directly connected local computer, or from a remote computer over a telephone line or LINKS cellular communications equipment. Remote access shall be controlled by the owner to prevent unauthorized access.

The system shall support a 300, 1200, 2400 or 4800 bps serial printer connected to the communications bus up to 1,000 feet (330m) from the control panel. The printer shall log all system events and transactions with time and date stamp. Information shall be stored in the system's 128 event buffer which can be examined from the LCD keypad or via DLS software.

The system shall meet UL standards as required for relevant type of application.

The Power432 brings remarkable new technology and product design together in a system that is ideal for residential, commercial, and institutional applications. More than a burglar alarm, the Power432 is a complete life safety and security system offering the latest advances in hybrid wireless/hardwired burglary and fire protection.

While the Power432 provides superior electronic protection of life and property, it also supplies a full range of system control options that can be fully customized to meet the exact requirements of the system owner.

Exceptional quality, complete design flexibility, fully customized system control, and the reliable peace-of-mind security your customers can count on for years to come – it all adds up to the new Power432 from DSC.

4-32 Zones Hardwired or Wireless

- 4 programmable panel zones expandable to 8 zones using keypad zone inputs (1 zone per keypad) or wireless zones

Wireless

- PC5132-433 - wireless receiver module
- LCD5501Z32-433 - connect up to 32 wireless zones

Up to 8 Keypads

- up to 8 hardwired keypads
- 3 hardwired keypad models available...
 - PC1555RKZ eight zone LED keypad with zone input
 - PC5508Z eight zone LED keypad with zone input
 - LCD5500Z alphanumeric keypad with zone input
- added wireless control is provided by...
 - WLS918-433 - wireless panic pendant
 - WLS919-433 - wireless key

2 Programmable Voltage Outputs

- PGM1 and PGM2 with 20 programmable options

Advanced Communications

- supports all major formats including SIA and Contact ID
- supports Skyroute™ cellular communicator
- DVACS using PC5400DV-SG in place of PC5400 printer module
- event-initiated personal paging
- 3 phone numbers (3rd backs up primary number)
- 2 account numbers

Efficient Installation

- 4 wire communications bus (KEYBUS)
 - connect keypads and modules up to 1000' (330m) from control panel

Power432 Main Control Panel

- **up to 8 fully programmable zones**
 - use any combination of :
 - ...4 hardwire zones on main control panel
 - ...8 keypad input zones (1 per keypad)
 - ...32 wireless zones using PC5132 wireless receiver
 - all zones programmable as burglary or fire⁽¹⁾
 - zone wiring options include... Normally Closed, Single End of Line (EOL) resistor, and Double EOL resistor⁽¹⁾
 - ⁽¹⁾*keypad zones cannot be programmed as fire zones if Double EOL resistor supervision is enabled*
 - 27 programmable zone types, 8 programmable zone attributes

- **128 event buffer**
 - all events automatically stored with time and date stamp to buffer
 - events can be printed on-site, viewed through the LCD Keypad or DLS software

- **alarm output**
 - bell output - 700mA @ 12VDC, PTC protected

- **2 programmable voltage outputs**
 - PGM1.....low current, 50mA @ 12VDC
 - PGM2.....low current, 50mA @ 12VDC
 - 20 programmable options

- **local PCLINK™ and remote upload/download capability**
 - PCLINK allows direct connection of PC to alarm panel
 - program system using DLS software
 - view status and trouble conditions
 - view 128 event buffer

- **1.5A regulated power supply**
 - auxiliary power... 12VDC, 550mA
 - positive temperature coefficient (PTC) AUX & Bell output protection
 - electronically protected from KEYBUS faults
 - supervision for AC power loss and low battery
 - internal clock locked to AC power frequency

- **battery required** : 12V, 4Ah, rechargeable sealed lead-acid

- **transformer required** : 16.5VAC, 40VA

System Operation

- **39 access codes**
 - 32 user codes, 1 master code, 2 duress codes, 2 supervisor codes, 1 installer code, and 1 maintenance code
 - individual open/close reporting by user
- **‘no code required for Bypassing’ option**
 - allows users to bypass zones without entering an access code
- **‘quick arm’ and ‘quick exit’**
 - allows users to arm and exit easily
- **‘stay/away’ zones and ‘stay’ arming**
 - security of perimeter arming while premise is occupied
- **automatic arming**
 - program system to auto-arm at a specific time every day
- **‘activity delinquency’ code**
 - signals monitoring station if no activity is sensed in premise for a programmable period of time
- **door chime**
 - programmable by zone
 - monitor a door by having keypad beep when the door is opened or closed

False Alarm Prevention Features

- **audible exit delay**
- **audible exit fault**
- **arm/disarm bell squawk**
- **urgency on entry delay**
- **quick exit**
- **programmable swinger shutdown by zone**
- **programmable transmission delay by zone**
- **AC failure, TLM trouble, and Low Battery transmission delays**
- **recent close code transmission**
- **cross zone police code transmission**
- **opening after alarm code transmission**

Full Supervision

Trouble conditions are displayed on all keypads and can also be communicated to central station for :

- **battery trouble**
- **AC failure**
- **zone low battery**
- **auxiliary power trouble**
- **zone tamper**
- **zone fault**
- **system tamper**
- **fire trouble**
- **siren circuit trouble**
- **arming delinquency**
- **general system trouble**
- **failure to communicate**
- **event buffer 75% full**
- **loss of system time**
- **telephone line trouble - (via Skyroute™ cellular communicator)**
- **general system supervisory trouble**... reports when system fails to communicate with any module on the KEYBUS

LED & LCD Keypads

Plain Language LCD5500Z Keypad

The Power432 security system is fully programmable from the attractive, easy to use dual-language LCD5500Z keypad :

- **connect up to 8 keypads, combination LED and/or LCD**
- **zone input**
 - connect detector to keypad to replace one of 4 main panel zones or increase total zones up to 8 with 4 keypads
- **dual-language** (*languages vary according to country*)
 - simple key entry to toggle between languages while viewing keypad
- **large 32 character display**
 - zone identification
 - system instructions
 - system status
 - 128 event buffer
 - trouble conditions
- **plain language operating instructions**
 - menu for user functions
 - what key to press for specific functions
 - steps for programming functions

- **5 programmable function keys with 15 options such as Home Arm, Away Arm, Quick Exit etc.**

- **4 keypad-activated alarms : Fire, Auxiliary, Panic, and duress**

- **3 LED indicators : Ready, Armed and Trouble**
 - allow system status to be viewed at a glance

- **backlit display**
 - display and keys backlit for easy viewing in low light conditions
 - adjustable brightness and contrast
 - *Backlighting Boost* provides extra high key lighting when any key is pressed

- **piezo buzzer**
 - provides audible feedback for correct key entries, pre-alert, and system trouble status
 - select from 21 different buzzer tones

- **connect to 4 wire KEYBUS up to 1000' (330m) from control panel**

- **specifications**
 - current draw : 90mA with backlighting boost
 - dimensions : 5.75” x 4.5” x 1” deep (144 x 114 x 25mm)

LED Keypads

Four keypads are available...*with zone input* :

PC1555RKZ... 8 zone LED keypad

PC5508Z... 8 zone LED keypad

PC5516Z... 16 zone

PC5532Z... 32 zone

- **zone input**
 - connect detector to keypad to replace one of 4 main panel zones or increase total zones up to 8 with 4 keypads

- **5 keypad functions with choice of 15 programmable options**
 - separate function keys on PC5508Z

- **connect to 4 wire KEYBUS up to 1000' (330m) from control panel**

- **LED indicators** :

PC1555RKZ	Ready, Armed, System
PC5508Z	Ready, Armed, Trouble, Memory, Bypass, Fire, Program
PC5516Z	Ready, Armed, Trouble, Memory, Bypass, Fire, Program
PC5532Z	Ready, Armed, Trouble, Memory, Bypass, Fire, Program

- **4 keypad-activated alarms... Panic, Auxiliary, Fire, and Duress**

- **backlit display**... with *Backlighting Boost* to provide extra high key lighting when any key is pressed

- **piezo buzzer**... provides audible feedback for correct key entries, pre-alert, and system trouble status

- **specifications** : current draw... 90mA with backlighting boost
 - **PC1555RKZ**... 5.5"W x 4.5"H x 1"D (140 x 114 x 25 mm)
 - **PC5508Z**... 5.75"W x 4.5"H x 1"D (144 x 114 x 25 mm)
 - **PC5516Z**... 5.75"W x 4.5"H x 1"D (144 x 114 x 25 mm)
 - **PC5532Z**... 5.75"W x 4.5"H x 1"D (144 x 114 x 25 mm)

PC5400 - RS232

Serial Printer Interface Module

- **allows serial printer connection for report of events logged to the Power432 event buffer**
- **supports any 300, 1200, 2400 or 4800 bps serial printer**
- **multiple languages available**
- **module connects to 4 wire KEYBUS up to 1000' (330m) from control panel**
- **c/w DB-25 modular connector for easy connection**
- **current draw** : 65 mA
- **maximum one module per system**... **PC5400DV-SG DVACS module may be substituted for full DVACS communications capability** (*see separate DVACS spec sheet*)

Wireless Security

PC5132-433 Wireless Receiver

- **connect up to 32 DSC wireless detectors**
- **433 MHz technology, fully supervised for communication integrity**
- **64 minute supervisory time**
- **connect to 4 wire KEYBUS up to 1000' (330m) from control panel**
- **current draw** : 125mA

Wireless Devices & Detectors

WLS904PL-433 PIR With Pet Immunity

- **Vertical beam shaping lens***

- **Coverage up to 40'L x 40'W (12.2 x 12.2m)**

- **Immunity for multiple pets - 60lbs (27.3kg) total**

- **Good false alarm immunity and catch performance**

- **High traffic shutdown to preserve battery life**

- **2 lithium batteries (supplied)**

WLS906-433 Photoelectric Smoke Detector

- **Exclusive (patented) smoke chamber design provides:**

- maximum smoke detection

- exceptional resistance to dust, insects and air turbulence, thereby reducing false alarms

- **90° smoke detection pattern**

- **Red solid-state LED indicator**

- **Loud 85dB alarm horn**

- **6 AA batteries (supplied)**

WLS912L-433 Glassbreak Detector

- **Exceptional microphone frequency range provides excellent sound capture at low sound levels and distances up to 25ft (7.6m)**

- **Detects breakage of all common types of framed glass including plate, float, wired, tempered, and laminated**

- **2 lithium batteries (supplied)**

WLS907T-433 Low Temperature Sensor

- **Sends an alarm when a pre-defined low temperature is reached**

- **The pre-defined temperature points at which an alarm and restoral condition are sent are:**

- Alarm: 43°F ± 3°F (6°C ± 2°C)

- Restoral: 48°F ± 3°F (9°C ± 2°C)

- **Fully supervised**

- **3 AAA batteries (supplied)**

WLS925L-433/WLS935L-433 Mini Door/Window Contact

- **A magnetic door or window contact**

- **Complete with surface-mount magnet**

- **Terminal connection for an external contact**

- **1 lithium battery (supplied)**

- **Available with a wall tamper switch**

WLS919-433 Wireless Keys

- **WLS919-433 features a slide cover, preventing accidental activation**

- **4 programmable function buttons...**

- Preprogrammed for 'STAY' arm, 'AWAY' arm, Disarm, and Panic

- **Supervised for low battery**

- **Water-resistant**

- **2 long-life lithium batteries**