

Application Notes



1.21 Partition Programming (PC1616/1832/1864 V4.2)

Panels:

POWER SERIES (PC1616/1832/1864 V4.2)

Overview:

The PC1616 supports 2 true partitions. The PC1832 supports 4 true partitions. The PC1864 supports 8 true partitions. Each partition can have individual user codes, keypads, zones, entry and exit delay times, and account numbers if Contact ID or Pulse format is programmed. Sirens can be partitioned using PGMs or a common siren could be used for all partitions if it is connected to the Main Bell Output.

Configuring partitions is a six-step process:

- Program user codes to partition 1 – 8
- Program keypads to partition 1 – 8
- Program zones to partition 1 – 8
- Program entry/exit delay times to partition 1 – 8
- Program separate sirens to partition 1 – 8 (*Optional*)
- Enter separate account numbers for partition 1 – 8 (*Contact ID and Pulse Format Only*)

Step 1 – Program User Codes to Partition 1 – 8

1. Enter Access Code Programming

To enter Access Code Programming, perform the following:

Enter [*][5][Master Code] Enter Access Code Programming

LED keypads will turn ON the appropriate LED if the user code is programmed. PK5500 keypads will indicate which codes are programmed by displaying the letter 'P' beside each. PK5501 keypads will flash the number of all access codes programmed.

2. Enter the Access Code Number

Enter the Access Code Number:

[01] – [39]	Regular User Codes
[41] – [95]	Regular User Codes
[40]	Master Code

3. Enter the Arm/Disarm Code

Enter the new four-digit code.

Note: To delete a code, press the [*] key instead of entering a 4-digit code.

PK5500(Z) keypad:

Master	User can enter User Code Programming section with this code
Duress	Duress Reporting Code is sent whenever this code is entered
Zone Bypass	Zone Bypass enable/disable
Phone Access	ESCORT5580 Access enable/disable
Bell Squawk	Bell Squawk enable/disable (1 Squawk Arm, 2 Squawk Disarm)
Temporary	Temporary Code (One Time Use)

When finished program access code attributes, press [#] to exit.

Note: Attributes [5] – [6] are for future use.

Note: After the attributes are programmed for the user code and [#] is pressed, the keypad will go back to regular access code programming.

Step 2 – Program Keypads to Partition 1 – 8

1. Partition 2 – 8 Enable

Partitions 2 through 8 must be enabled before keypads assigned to a partition 2 – 8 will operate. To enable partition 2 to 8, perform the following:

Enter [*][8][Installer's Code]	Enter Installer's Programming
Enter [201]	Enter Partition 1 to 8 Enable
Press [2] to turn ON option [2]	Enable Partition 2
Press [3] to turn ON option [3]	Enable Partition 3
Press [4] to turn ON option [4]	Enable Partition 4
Press [5] to turn ON option [5]	Enable Partition 5
Press [6] to turn ON option [6]	Enable Partition 6
Press [7] to turn ON option [7]	Enable Partition 7
Press [8] to turn ON option [8]	Enable Partition 8

2. Keypad Assignment

Program the Partition Assignment and Slot of each keypad. To assign the keypad, perform the following:

Enter [*][8][Installer's Code]	Enter Installer's Programming
Enter [000]	Enter Keypad Assignment Section
Enter [0]	Enter Partition and Slot Section

Enter a two-digit number. The first number represents the partition assigned to the keypad:

Enter data [0]	for Global Mode
Enter data [1]	for Partition 1
Enter data [2]	for Partition 2
Enter data [3]	for Partition 3
Enter data [4]	for Partition 4
Enter data [5]	for Partition 5
Enter data [6]	for Partition 6
Enter data [7]	for Partition 7
Enter data [8]	for Partition 8

The second digit represents the supervisory slot. Each keypad MUST have a different slot number:

Enter data [1] to [8] for supervisory slot #1 to #8

The same procedure must be performed on each keypad.

Note: Keypads must each be assigned to a specific slot for the keypads to be properly supervised.

Note: If a PK5500Z keypad is connected to the panel, it must be assigned to slot #8 for downloading purposes. In addition, only one PK5500(Z) can be assigned to Slot 8. If LCD programming changes are made using the DLS software, the keypad assigned to slot #8 will transmit the changes to all the other PK5500Z keypads on the system after the download is complete.

3. Module Supervisory Reset

Since all modules are automatically detected and supervised by the panel within the first minute after being connected, a Module Supervisory trouble condition may occur after keypad slot assignments are changed. After all keypads have been assigned to a Partition and Slot, perform the following to perform a Module Supervisory Reset:

Enter [*][8][Installer's Code]
Enter [902]

Enter Installer's Programming
Enter Module Supervision Reset

Wait 1 minute.

To verify what modules are present, perform the following:

Enter [903]

Enter Module Supervision Display

The keypad will display the modules present.

Note: LED keypads will be limited to the number of modules it can display. To determine which LED represents which module, refer to the Installation Manual, Section [903].

Step 3 – Program zones to partition 1 – 8

1. Programming Zone Definitions

Zones must be defined before they will operate. On the POWER SERIES, 39 different zone definitions are available. Enter the correct section and program the 2-digit number corresponding to the required zone definition.

Section [001] – Zones 1 to 16

Section [002] – Zones 17 to 32

Section [003] – Zones 33 to 48

Section [004] – Zones 49 to 64

2. Programming Zone Attributes (Optional)

Zone attributes are used to customize the operation of each zone. There are 64 sections available, Section [101] for zone 1 to Section [164] for zone 64. Each Section has 9 toggle options. Turn the appropriate option ON or OFF depending on the required operation.

Option [1] – Zone audible/silent

Option [2] – Steady bell output/pulsing bell output

Option [3] – Door chime enable/disable

Option [4] – Manual bypass enable/disable

Option [5] – Force arm enable/disable

Option [6] – Swinger shutdown enable/disable

Option [7] – Transmission delay enable/disable

Option [8] – Wireless zone enable/disable

Option [9] – Cross Zone enable/disable

Option [14] – NC Zone Wiring loop

Option [15] – EOL Zone Wiring loop

Option [16] – DEOL Zone Wiring loop

Note: Options 14, 15, 16 apply to first 8 zones only. If more than one of these options are enabled then lowest numbered option is enabled. E.g., If Option 14 and option 15 are enabled then the zones are configured as normally closed loops.

Note: The zone attributes for the zone will reset to the default settings if the zone definition is changed. A chart of the default settings for each zone definition is available in the Programming Worksheets.

3. Partition Zone Assignment

Zones will not function until they are enabled. Enable all zones being used by turning ON the appropriate option in Section [202] to [265].

Section [202] – [209]	Partition 1 zones 1 to 64 enable/disable
Section [210] – [217]	Partition 2 zones 1 to 64 enable/disable
Section [218] – [225]	Partition 3 zones 1 to 64 enable/disable
Section [226] – [233]	Partition 4 zones 1 to 64 enable/disable
Section [234] – [241]	Partition 5 zones 1 to 64 enable/disable
Section [242] – [249]	Partition 6 zones 1 to 64 enable/disable
Section [250] – [257]	Partition 7 zones 1 to 64 enable/disable
Section [258] – [265]	Partition 8 zones 1 to 64 enable/disable

Note: If zones are assigned to additional partitions, ensure the partitions are enabled in Section [201].

Step 4 – Program entry/exit delay times to partition 1 – 8

1. Enter System Time Section

On the POWER SERIES, each partition has its own entry and exit delay times. Enter the System Times section [005] followed by the 2-digit partition number corresponding to the required system times.

[005] followed by [01] for Partition 1
[02] for Partition 2
[03] for Partition 3
[04] for Partition 4
[05] for Partition 5
[06] for Partition 6
[07] for Partition 7
[08] for Partition 8

2. Enter Entry/Exit Delay Times

Enter 001 – 255 for Entry Delay#1
Enter 001 – 255 for Entry Delay#2, (000 if not used)
Enter 001 – 255 for Exit Delay
Press [#] to exit the section

Step 5 – Program separate sirens to partition 1 – 8 (Optional)

1. Program the PGM 1 – 14 definition

On the POWER SERIES the BELL+/- terminals activate when any partition enters alarm however each partition can have its own siren output. To have separate sirens, wire the (+) of the siren to the AUX+ terminal and the negative of the siren to the PGM terminal. A DSC-RM1 Relay may be required if the siren current draw exceed the PGM current limit. PGM 1, 3-10 can provide 50mA of current. PGM 2 can provide 300mA of current. PGM 11-14 can provide 1amp of current.

The PGMs will not function until they are programmed as [01 – Burg and Fire]. Enter all PGMs being used for siren outputs as [01] in sections [009] – [011].

Section [009] PGM 1 – PGM 2
Section [010] PGM 3 – PGM 10 (PGMs on a PC5208 Expander)
Section [011] PGM 11 – PGM 14 (PGMs on a PC5204 Expander)

2. Partition the PGM

PGMs will activate on Partition 1 at default. To have the PGM activate on another partition you will need to disable Partition 1 (option 1) and enable another partition (option 2-8). Enter Section [551] – [564] and toggle options 1-8 to partition the PGM to that partition.

PGM1 Partition Assignment is Section [551]
PGM2 Partition Assignment is Section [552]
PGM3 Partition Assignment is Section [553]
PGM4 Partition Assignment is Section [554]
PGM5 Partition Assignment is Section [555]
PGM6 Partition Assignment is Section [556]
PGM7 Partition Assignment is Section [557]
PGM8 Partition Assignment is Section [558]
PGM9 Partition Assignment is Section [559]
PGM10 Partition Assignment is Section [560]
PGM11 Partition Assignment is Section [561]
PGM12 Partition Assignment is Section [562]
PGM13 Partition Assignment is Section [563]
PGM14 Partition Assignment is Section [564]

Step 6 – Enter separate account # for partition 1 – 8 (*Contact ID and Pulse format Only*)

1. Program the Telephone Number

Program the central station phone number in Section [301].

2. Program the System Account Number

Program the system account number in Section [310].

Note: For Contact ID and Pulse, program a HEX digit [A] for any digit '0' in the account number.

3. Program the Partition Account Numbers (*Contact ID and Pulse Only*)

Program the partition 1 to 8 account number in Section [311] – [318].

Note: For Contact ID and Pulse, program a HEX digit [A] for any digit '0' in the account number.

4. Program the Communication Format

Program [01] – [04] in Section [350] for telephone number 1.

Enter [01] for Pulse format 1400Hz handshake format
Enter [02] for Pulse format 2300Hz handshake format
Enter [03] for DTMF Contact ID format
Enter [04] for SIA-FSK format

5. Step 5 (*Optional*) – Program the Communicator Call Direction Options

Communicator Call Direction options are used to determine which events will be reported to which phone number. By default option [1] is ON in all Sections and all events will transmit using phone number 1. To disable the reporting of a group of codes (i.e. openings and closings) turn option [1] OFF in the correct Section.

Section [351] – [358]	Alarm/Restoral for Partitions 1 - 8
Section [359] – [366]	Tamper Alarm/Restoral for Partitions 1 - 8
Section [367] – [374]	Opening/Closing for Partitions 1 - 8
Section [375]	Maintenance Alarms/Restorals
Section [376]	Test Transmission

6. Program the Reporting Codes (*Optional*)

The panel will automatically transmit the correct Contact ID reporting code for all events if the reporting code for the event is anything other than data [00]. By default, all reporting codes are programmed as data [FF], which means the panel will report all possible events. It is important to disable the reporting of unwanted events by programming data [00] for those events.

Section [320] – [349]	Reporting Codes
Section [601] – [608]	Reporting Codes

Technical Tips:

1. Ensure all the partitions have been enabled in programming section [201].

Quick Test Procedure:

First, violate/secure zone on specific partitions and verify on the keypad that the appropriate zone only show open on the appropriate partition keypads. Second, program user codes on specific partition and ensure they only arm the appropriate partition on the appropriate partition keypads.