June 24, 1994
Software Version 1.0

PROGRAMMING MANUAL

DSC
Digital Security Controls

PC4020

Book 2

PROGRAMMING THE PC4020

The PC4020 incorporates a new method of programming which uses a menu system to find a specific program location when it is to be entered.

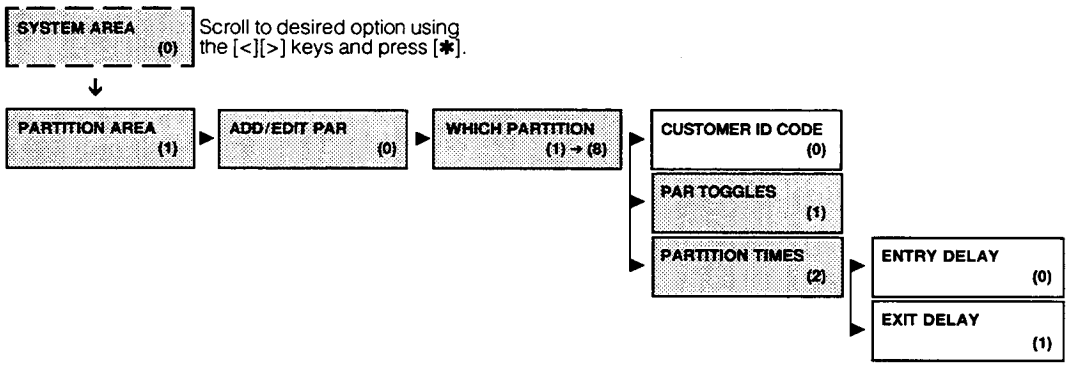
Book 3 contains the programming flow charts for the PC4020. The charts are arranged in such a way as to allow you to quickly find any option and the path required to arrive at the program location. In addition you will be able to see other options also available to you in the program area.

Plain boxes are program areas and shaded boxes are menu selections.

Two methods may be used to select the different menu items to arrive at a program location. With the first, you may use the arrow keys (< >) to scroll through the menu items. When the desired item is displayed press the [*] key. The [*] key is used as an 'ENTER' or 'SELECT' key. The panel will then move you to the next set of options.

The other method incorporates a 'HOTKEY' system. Every menu and program item contains a one or two digit 'HOTKEY' entry. Simply press the number(s) in the menu or program box and the panel will automatically select the item for you. DO NOT PRESS THE [*] AFTER ENTERING THE 'HOTKEY' NUMBER. This second method is much quicker once you become familiar with it.

EXAMPLE: We wish to program the Exit Delay for Partition 4. The following is the flow chart located in Book 3.



Using the first method the arrow keys would have to be pressed many times to scroll to the various items followed by the [*] key to select the item. Twelve keystrokes would be required after entering Installer Programming providing no mistakes are made. The keystrokes required are as follows:

[>], [*] to select PARTITION AREA
[*] to select ADD/EDIT PAR
[>], [>], [>], [*] to select to PARTITION 4
[>], [>], [*] to select PARTITION TIMES
[>], [*] to select EXIT DELAY

Using the second 'HOTKEY' method we require only 5 keystrokes:

[1] to select PARTITION AREA
[0] to select ADD/EDIT PAR
[4] to select PARTITION 4
[2] to select PARTITION TIMES
[1] to select EXIT DELAY

With less keystrokes required, programming is quicker as there is less chance of an error occurring.

At any time you may press the [#] key to exit a section. ANY DATA ENTERED WILL BE CHANGED. THE [#] KEY IS NOT AN ABORT KEY! The [#] key can also be pressed to move you back to the previous menu. Pressing the [#] key several times will exit you from Installer Programming.

To make programming easier the INDEX at the back of the Programming Manual includes the chart number beside every option as well as the page number for a description of the option.

PROGRAMMING TOGGLE OPTIONS

Some program areas contain several toggle options which pertain to the menu item selected. Use the arrow keys (<>) to scroll through the various items. Press the [*] key to toggle between [Y]es and [N]o for each feature. Once all the toggle options have been programmed press the [#] key to save your changes return to the previous menu.

PROGRAMMING HEX DIGITS

Often HEX digits are required for a program item. When a HEX digit is required press the [*] key to enter the HEX menu. You may use the arrow keys to scroll through the HEX digits (A through F) and when the desired letter is displayed press the [*] key.

Another much quicker method for entering HEX digits is to, first, press the [*] key followed by the number corresponding to the HEX letter i.e. A = 1, B = 2, C = 3, up to F = 6. The [*] key must be pressed before entering each HEX digit as the software returns you to decimal programming automatically after each entry.

EXAMPLE: To enter data 'ABCD' on a PC4020 you would enter:
[*], [1], [*], [2], [*], [3], [*], [4]

NOTE - The [*] key is required before every HEX digit entered.

PROGRAMMING MANUAL

The PC4020 Installer's Programming is broken down into 5 major sections:

System Area Area for programming options which affect the operation of the entire system. For example communications, downloading, printer options etc. are options which affect the overall system and are programmed in the system area.

Partition Area Area for programming options which pertain to individual partitions. For example the zone assignment, entry delay time and exit delay time are all options which can be programmed for each of the partitions.

Module Hardware For enrolling and deleting modules.

Event Buffer For the installer to reprint the entire event buffer.

Diagnostics For viewing trouble conditions reported by the modules.

		Page
SYSTEM AREA (0)	INSTALLER OPT'S (00)	4
	EVENT MESSAGES (01)	5
	SYSTEM OPTIONS (02)	6
	DLS SECTION (03)	10
	COMMUNICATOR (04)	12
	SW AUX OUTPUT (05)	28
	MAIN BELL OUTPUT (06)	29
	PGM OUTPUTS (07)	30
	RS-232 OPTIONS (08)	34
	SYSTEM LABEL (09)	35
PARTITION AREA (1)	ADD/EDIT PAR (0)	36
	DELETE PARTITION (1)	42
	COPY PARTITION (2)	42
MODULE HARDWARE (2)	ENROLL MODULE (0)	43
	DELETE MODULE (1)	43
	CONFIRM MODULE (2)	43
EVENT BUFFER (3)	PRN ENTIRE BUFF (0)	44
DIAGNOSTICS (4)	DIAGNOSTICS (0)	45
	BINARY PROGRAM (1)	45
	MEMORIZE VBAT (2)	45
	FACTORY DEFAULT (3)	45

INSTALLER OPTIONS

INSTALLER OPTS (00)

This section contains the Installer's Code, Grand Master Code, 2nd Grand Master Code, Walk Test Code and Installer's Lockout options.

PGM INST CODE (0)

Program Installer's Code. A new Installer's Code can be programmed. The default setting is '4020' for 4 digit option, or '402000' for 6 digit option. Enter a new 4 digit code using numbers from 0 to 9 only. The installer's code is used to enter [*][8] Installer's Programming Commands. This code should be changed from the default setting before programming is complete to ensure the security of the system.
Note: If the installer's code is lost, and installer's lockout is enabled, there is no way to enter installer's programming. The panel will have to return to DSC. Panels returned to DSC with the installer's lockout feature enabled and no other apparent problems will be subject to an additional service charge.

PGM GRAND MASTER (1)

Program Grand Master Code. Master code 001 is the System Grand Master Code. This is the only code which can program other system master codes. The default setting of this code is '1234' for 4 digit option, or '123456' for 6 digit option. This code should be changed from the default setting once programming is complete to ensure the security of the system.

PGM 2ND MAS CODE (2)

The Installer may program a second System Grand Master Code which has the same access as the System Grand Master Code 001. The Second Master Code is not one of the programmable 128 access codes in [*][5] programming and therefore cannot be changed by the user. This code may be used as a Master Key for service and trades people. The default setting of this code is 'AAAA' for 4 digit option, or 'AAAA00' for 6 digit option.

PGM WALK TEST CD (3)

PGM Walk Test Code allows access to the Walk Test Mode [*] [6] [Walk Test Code]. The walk test mode allows testing of zones that walk test is enabled on.
Each partition to be involved in the walk test must have [*] [6] [Walk Test Code] entered on one of its keypads.

INS LOCKOUT OPTS (4)

Installer's Lockout prevents the installer's code and downloading access code from being returned to their default values when a hardware or software default occurs.
Note: Panels returned to DSC with the installer's lockout feature enabled and no other apparent problems will be subject to an additional service charge.

ENABLE LOCKOUT (0)

Selecting this section will enable Installer's Lockout and display the message "Ins Lockout Enabled".

DISABLE LOCKOUT (1)

Selecting this section will disable Installer's Lockout and display the message "Ins Lockout Disabled".

EVENT MESSAGES

EVENT MESSAGES (01)

Event messages are two custom messages programmed by the installer. These messages will be displayed on the keypad when the user fails to arm or an alarm occurs while the system was armed.
A cursor will appear under the first character of the label. The cursor can be moved to left or right using the [<][>] keys. The letters of the alphabet have been divided up among the 1-9 number keys on the keypad.

[1] = A, B, C, 1 [2] = D, E, F, 2 [3] = G, H, I, 3 [4] = J, K, L, 4 [5] = M, N, O, 5
[6] = P, Q, R, 6 [7] = S, T, U, 7 [8] = V, W, X, 8 [9] = Y, Z, 9, 0 [0] = Space

For example, if you press the [4] key, the letter 'J' will appear above the cursor on the display. Press the [4] key again, the letter 'K' will appear above the cursor. Press the [4] key a third time and the letter 'L' will appear above the cursor. Press it again and the number '4' will appear on the display. If a different key is pressed, for example the [6] key, the cursor will automatically move to the right one space, and the letter 'P' will be displayed. To erase a character, move the cursor under the character using the [<][>] keys, and press the [0] key.

While programming the zone label, press the [*] key to call up an options menu. To select an option, either press the corresponding number key, or toggle through the options using the [<][>] keys and press the [*] key to select.

[0] Clear Display [1] Clear to End [2] Change Case [3] ASCII Entry (See appendix A)
[4] Save

[0] Clear Display will clear the entire zone label.

[1] Clear to End will clear the display from the character where the cursor was located to the end of the display.

[2] Change Case will toggle the letter entry between upper case letters (ABC...) and lower case letters (abc...).

[3] ASCII Entry is for entering uncommon characters. There are 255 characters, but 000 to 031 are not used. Use the [<] [>] keys to toggle through the characters or enter a 3 digit number from 032 to 255. Press the [*] key to enter the character into the zone label (see Appendix A for the ASCII characters chart).

[4] Save the label programmed and return to the previous menu.

See [*][6][Master Code][6] User Functions in the System Manual for enabling these messages on each partition.

FAIL TO ARM (0)

The "System Has Failed To Arm" message will appear on every keypad on a partition when a valid code is entered but the system is unable to arm because a zone is not secure.
The message will clear after 5 seconds.
This message can be used to remind the user to check all zones and make sure they are secure before attempting to arm the system.

ALARM WHEN ARMED (1)

The "Alarm Occurred While Armed" message appears when a partition is disarmed after an alarm has occurred. The message will be displayed on all keypads on the partition being disarmed. The message will clear after 5 seconds and display the zone(s) that went into alarm. This message can be used to remind the users of what to do in their situation.

ZONE TAMPER (02)

The "Zone Tamper" message will appear on every partition keypad when a zone using Double EOL is put into the tamper condition (zone open). The message is displayed while viewing open zones.

ZONE FAULT (03)

The "Zone Fault" message will appear on every partition keypad when a zone using Double EOL is put into the fault condition (zone shorted). The message is displayed while viewing open zones.

SYSTEM OPTIONS

SYSTEM OPTIONS (02)

This section contain options that are relevant to the entire system. System Toggle options, Keypad Toggle options, Keypad Lockout options and System Time can all be programmed in this section.

Sys Toggle Options

SYS TOGGLE OPT (0)

Toggle options are in question form. Use the [*] key to toggle between Yes and No to enable or disable the feature. Use the [<] [>] keys to scroll through the options.

CHANGE SYS MAS Y

Changeable System Grand Master Code
YES= System Grand Master Code can be changed by the end user via Grand Master Code.
NO = The System Grand Master Code can only be changed via installer's programming.

POWER UP SHUNT Y

Shunt Zones on Power Up?
YES= All zones are considered non-violated by the main control for the first 2 minutes that power has been applied to the system. This will allow time for the detectors to "settle" without causing false alarms.
NO = The zones are active upon power up.

AC TBL DISP Y

AC Trouble Displayed?
YES= The system will monitor and display an incoming AC power failures from the transformer.
NO = The system will not display the incoming AC power failures.
Note: AC Trouble Displayed must be programmed as YES on UL Listed systems.

60 Hz LINE Y

Is the incoming AC Frequency 60 Hz?
YES = The incoming AC power from the transformer cycles at 60 Hz. The North American standard is 60 Hz.
NO = The incoming AC power cycles at 50 Hz.

XTAL TIMEBASE N

YES= The timebase is the internal crystal oscillator.
NO = The timebase is the AC power input.
Timing for the clock in the PC4020 can come from two sources. The 60/50 Hz frequency of the AC power or a crystal oscillator on the circuit board. The default is to use the frequency of the incoming AC because it normally is very stable. However in some locations, the stability of the AC frequency is less reliable. If this is the case then the crystal oscillator should be used.

AC INHIBIT ARM N

AC inhibits arming?
YES= When an AC trouble condition is present on the main panel or PC4204, the system cannot be armed, except by auto-arm.
NO = Regardless of the presence of an AC Trouble, the system can be armed.

DC INHIBIT ARM N

DC inhibits arming?
YES= When a low battery condition is present on the main panel or PC4204, the system cannot be armed, except by auto-arm.
NO = Regardless of the presence of a low battery condition, the system can be armed.

ALARMS DISP N

Alarm displayed?
YES= When the partition is armed, any zones gone into alarm can be viewed by pressing the [<] [>] keys.
NO = Show alarms after disarming only.

BYPASS DISP N

Bypass displayed?
YES= When the partition is armed, bypassed zones can be viewed by pressing the [<][>] keys.
NO = Shows bypassed zones when disarmed only, by pressing [*][1].
Note: Bypass Displayed must be disabled on UL Listed systems.

BELL SHUT DOWN Y

YES= The bell output will no longer activate for a zone that has reached the swinger shut down threshold. (See 'Swinger Limit' and 'Swgr Shut Down'.)
NO = Every time a zone is violated it will reactivate the bell output.
Note: Bell Shut Down must be programmed as NO on UL Listed systems.

FOLLOWS + ALARMS N

YES= Enables all outputs programmed to follow zones, including PC4216s programmed as 'Follow XX-XX', to also annunciate alarms when those zones are armed. When the zone is disarmed the output will follow the zone status. When the zone is violated the output will activate. When the zone is restored the output will deactivate.

When the zone is armed the output indicates alarm status. The output is not activated until the zone is violated and then remains active. When the zone is disarmed the output remains active to indicate which zone caused the alarm. To get the output to follow the zone status the partition must be armed and disarmed.

NO = Disables the ability to latch alarm status. The output follows zone activity whether armed or disarmed.

6 DIGIT CODES N

YES= All access codes on the system will need to be 6 digits in length except Panel ID code and DLS access code.
NO = Regular 4 digit codes to be used.

HOURLY PRINT Y

YES= Panel will print a line saying 'Hourly Printer Test' with time and date every hour.
NO = Panel will not log "Hourly Printer Test".

MILITARY TIME N

YES= Clock will show in 24 hour time (military time) and date will show as Month/Day/Year (MM/DD/YY). For example, 1:30 pm December 13, 1994 will be displayed as 12/13/94 13:30.
NO = Clock will show in 12 hour time with an 'a' for am or 'p' for pm, and date will show as Month/Day/Year (Mon/DD/YY). For example, 3:30 pm January 5, 1994 will be displayed as Jan 05/94 3:30 p.

KEYPAD TAMPERS N

YES= Keypad Tampers are used. This option should be enabled only if keypad tamper plates are attached to the keypad.
NO = Keypad Tampers are disabled.

GLOB [F] ENAB Y

YES= The [F] key is enabled for global keypads.
NO = The [F] key is disabled for global keypads.

GLOB [A] ENAB Y

YES= The [A] key is enabled for global keypads.
NO = The [A] key is disabled for global keypads.

GLOB [P] ENAB Y

YES= The [P] key is enabled for global keypads.
NO = The [P] key is disabled for global keypads.

GLOB DISP CLK Y

YES= The time and date will be displayed on global keypads instead of the "Enter Your Access Code" message after 10 seconds of no key presses.
NO = No clock display.

GLOB KEYPAD LOCK N

YES= Keypad Lockout is enabled on global keypads.
NO = Keypad Lockout is disabled on global keypads.
(See "Total Bad Codes", "Lockout Duration" and "Lockout Rep Code".)

KYPAD #1 GLOBAL N

YES= Keypad #1 becomes a global keypad.
(See System Manual, Book 1 for further details about "Global Keypads".)
NO = Keypad #1 is not a global keypad.

Notes: Entry/Exit Delay with Urgency will always be present on a global keypad (See "Partition Togggles").

If a keypad is loaned to a deleted partition once Installer's Mode is exited, the keypad will be reassigned to the lowest assigned partition.

TAMPER INHIBIT N

YES= A Zone Tamper requires the Installer's Code entry before the partition can be armed or the Zone Trouble Restoral Code sent.
NO = Zone Tamper Restorals will follow the zone.

Keypad Toggle Options

KEYPAD TOG OPT (1)

Programming the operation of the 3 keypad emergency keys ([F], [A] and [P]). Toggle options are in the form of questions. Use the [*] key to toggle between Yes and No to enable or disable the feature. User the [<][>] keys to scroll through the options. Regardless of programming each key must be pressed for 2 seconds before the alarm will be activated.

[F] BELL Y

[F] key activates the Bell Outputs?
YES= The bell output will activate when the [F] key is pressed.
NO = The bell output will not activate when the [F] key is pressed.
The bell output for the [F] key is any output (Bell, SW Aux or PGM) that is programmed for Fire and Burg, Inv Fire and Burg, Fire Only and Inv Fire Only.

[F] PULSE BELL Y

[F] key pulses the Bell Output?
YES= The bell output, if enabled, will pulse when the [F] key is pressed.
NO = The bell output, if enabled, will be steady when the [F] key is pressed.
The bell output for the [F] key is any output (Bell, SW Aux or PGM) that is programmed for Fire and Burg, Inv Fire and Burg, Fire Only and Inv Fire Only.

[F] BUZZER Y

The keypad beeps when the [F] key is pressed?
YES= The keypad will beep 3 times when the [F] key has been pressed for 2 seconds.
NO = The keypad will not sound when the [F] key is pressed.

[A] SIL BELL Y

The bell is silent when the [A] key is pressed?
YES= The bell output will not activate when the [A] key is pressed.
NO = The bell output will activate when the [A] key is pressed.
The bell output for the [A] key is any output (Bell, SW Aux or PGM) that is programmed for Fire and Burg, Inv Fire and Burg, Burg Only and Inv Burg Only.

[A] STDY BELL Y

The bell is steady when the [A] key is pressed?
YES= The bell output, if enabled, will be steady when the [A] key is pressed.
NO = The bell output, if enabled, will pulse when the [A] key is pressed.
The bell output for the [A] key is any output (Bell, SW Aux or PGM) that is programmed for Fire and Burg, Inv Fire and Burg, Burg Only and Inv Burg Only.

[A] AUD BUZZ N

The keypad beeps when the [A] key is pressed?
YES= The keypad will beep 3 times when the [A] key has been pressed for 2 seconds.
NO = The keypad will not sound when the [A] key is pressed.

[P] SIL BELL Y

[P] key activates the Bell Outputs?
YES= The bell output will not activate when the [P] key is pressed.
NO = The bell output will activate when the [P] key is pressed.
The bell output for the [P] key is any output (Bell, SW Aux or PGM) that is programmed for Fire and Burg, Inv Fire and Burg, Burg Only and Inv Burg Only.

[P] STDY BELL Y

The bell is steady when the [P] key is pressed?
YES= The bell output, if enabled, will be steady when the [P] key is pressed.
NO = The bell output, if enabled, will pulse when the [P] key is pressed.
The bell output for the [P] key is any output (Bell, SW Aux or PGM) that is programmed for Fire and Burg, Inv Fire and Burg, Burg Only and Inv Burg Only.

[P] SILENT BUZ Y

The keypad does not beep when the [P] key is pressed?
YES= The keypad will not sound when the [P] key is pressed.
NO = The keypad will beep 3 times when the [P] key has been pressed for 2 seconds.

Keypad Lockout Options

KYPD LOCKOUT OPT (2)

Keypad Lockout Options
This section contains programming for the keypad lockout feature. After a programmed number of incorrect attempts to enter an access or installer's code the keypad will lockout, preventing the user from performing any function. A message "Keypad Lockout is Active" will be displayed for the lockout duration. See "KYPD LOCKOUT" under "PAR TOGGLES" to enable the keypad lockout feature on a partition.

TOTAL BAD CODES (0)

Enter the number of incorrect code entries (from 000 to 255) required to activate keypad lockout if the option is enabled. See "PAR TOGGLES", "KYPD LOCKOUT" to enable the keypad lockout feature on a partition. The default setting is 005.

LOCKOUT DURATION (1)

This section determines the number of minutes the keypad lockout will activate for. Enter the duration of the keypad lockout. Valid entries are from 000 to 255. The default setting is 015.

System Times

SYSTEM TIMES (3)

They are system times relevant to the whole system.

ZONE RESPONSE (0)

The zone loop response time is the length of time (005 - 255 x 100 ms) a zone must be violated before it is detected. (100 ms = one tenth of a second.) Minimum zone loop response time is 500 ms. The factory default setting is 005 (500 ms).

BELL CUTOFF (1)

Program the amount of time (from 000 to 255 minutes) the bell output will activate when an alarm occurs. The factory default setting is 004 (4 minutes). Bell Cutoff is for any output (Bell, SW Aux or PGM) that is programmed for Fire and Burg, Inv Fire and Burg, Burg Only, Inv Burg Only, Fire Only, and Inv Fire Only.
Note: For UL Listed installations the Bell Cutoff must be a minimum of 15 minutes for commercial burglary applications and 4 minutes for residential burglary and fire applications.

Zone Supervision

ZONE SUPERVISION (4)

NO EOL

The zone is a normally closed loop to ground. The zone will be violated when it is open.

SINGLE EOL

All zones must have a 5600 ohm resistor across them. If the zone is shorted or open, it will be in a violated condition. If the zone is open and programmed as a fire zone, it will be in a trouble condition. See "[✱][2] Trouble Display".
Notes: If zones are programmed for Fire or Links Supervisory, EOL resistors must be used.
All zones must use EOL resistors on UL Listed systems.

DOUBLE EOL

All zones will use Double End Of Line resistors, except Standard Fire zones, Auto Verify Fire zones, Delay Fire Zones, Links Supervisory Zones, Links Answer, and Forced Answer zones. These zones must only be connected using the EOL resistor. Double EOL resistors allows the zone to be capable of detecting zone tampers. The tamper resistor (5600 Ohm) is placed across the alarm activating device, and the single EOL resistor (5600 Ohm) is placed between the alarm contact and the tamper contacts. This configuration will allow the panel to detect zone faults (zone shorted) , zone tampers (open zone), open zones (alarm condition of 11200 Ohms), and restored zones (5600 Ohms).
If the zone is disarmed and placed in the tamper (open) or fault (short) state a buzzer will sound from all partition keypads for the length of Bell Time Out or until an access code is entered. A zone tamper will be sent to the monitoring station if programmed. See Reporting Codes for details. If the zone is armed and the tamper is activated, it will transmit and log both the tamper alarm and the zone alarm. There will be no buzzer sounded if the zone is armed. See the "System Manual" for detail on the hookup procedure.

DOWNLOAD SECTION

DLS SECTION (03)

This section will allow you to program all options related to downloading.

Download Toggles

DLS TOGGLES (0)

Downloading Toggle Options. Toggle options are in the form of questions. Use the [*] key to toggle between Yes and No to enable or disable the feature. Use the [<][>] keys to scroll through the options.

RING DETECT N

YES= The panel will answer after the programmed number of rings.
NO = Ring detect disabled. The only way downloading can occur is by using either the "USER CALL UP" feature or the "PERIODIC CALLUP" feature. Ring detect can be turned on by the end user for 60 minutes if the "USER ENABLE DLS" option is enabled.

USER CALL UP N

YES= The user can cause the panel to call a remote computer by entering the [*][6][Master Code][7] user callup command. (See also "PHONE NUMBER" and "PANEL ID CODE" in the DLS options.)
NO = The feature is disabled.

DOUBLE CALL N

YES= If the panel detects 1 or 2 rings on the first call and then is called again within a variable time of 000 to 255 seconds (programmable - see "2 CALL TIMER"), the panel will answer the second call on the first ring. This is useful for bypassing an answering machine on the same line as the panel.
NO = The panel will only answer after the programmed number of rings is reached. See "# OF RINGS".

DLS CALLBACK N

YES= Callback is enabled. After connection to the panel both the computer and the panel will hang up. The computer will then wait for the panel to call. If there is more than one downloading computer, callback should be disabled.
NO = Callback is disabled. The downloading computer will have immediate access to the control panel once accepted as valid.

PERIODIC DLS N

YES= Periodic Downloading is enabled. Periodic downloading is used to allow the computer to execute batch files. The computer must be waiting for a call for this feature to be useable. See "Periodic Callup" for programming the time of day and the number of days in between periodic downloads.
NO = Periodic Downloading disabled.

USER ENABS DLS Y

User Enables Downloading?
YES= The end user may enable ring detect for 60 minutes to allow a computer to access the control panel. If the "RING DETECT" option has been enabled, this option is overridden.
NO = Option disabled.

DLS Options

PERIODIC CALLUP (1)	Programming the time and number of days between periodic downloads. (See "Periodic DLS" for enabling Periodic Downloading.)
SET CYCLE DAYS (0)	Program the number of days (from 001 to 255 days) between periodic downloads. The default setting is 030.
SET 24HR TIME (1)	Program, in military time, the time of day the panel will call the computer for periodic downloading. The default setting is 0000.
PHONE NUMBER (2)	Enter the telephone number for computer if User Call Up, Periodic DLS, or DLS Callback is enabled. See "PGM TEL NUMBER" for entering a telephone number and options when programming the phone number.
PANEL ID CODE (3)	Panel Identifier Code. This four digit code will allow the computer to identify the panel that is calling. It must be programmed differently for every panel if User Call Up, Periodic DLS or DLS Callback is used. The default setting is 4921.
ACCESS CODE (4)	This 4 digit code must be programmed the same as the computers. If the code is different the panel will NOT allow any uploading or downloading to take place. It is used to help ensure the security of the system. The default setting is 4920.
2 CALL TIMER (5)	This is the maximum allowable time in seconds between two phone calls when the "Double Call" option has been enabled. Valid entries are between 000 and 255 seconds. The default setting is 060. (See "Double Call" for enabling the double call feature.)
# OF RINGS (6)	This is the number of consecutive rings the panel must detect before answering the call. (See "Ring Detect" or "User Enabs DLS" for enabling ring detect.) Valid entries are between 001 and 255 rings. The default setting is 008.

COMMUNICATOR SECTION

COMMUNICATOR (04)

All options concerning communications can be programmed, including phone numbers, reporting codes, account numbers and communicator options.

Main Items - Phone #'s/Comm Format/Dialer Direction

MAIN ITEMS (0)

Handling the phone numbers of monitoring stations or remote areas the panel communicates with.

The PC4020 can call up to 3 different phone numbers when reporting any event to a monitoring station. The second and third numbers can be used as backups if the first or second fail.

Note: Dial Tone Search must be included for a number to backup to its Links Number.

1ST NUMBER (0)

1st Number can report any event program set in the dialer directions. By default all events are sent through the first phone number. See 'Communicator Toggles' for more detail on backups.

2ND NUMBER (1)

2nd Number can report any events programmed if set in the dialer directions and can back up the 1st Number. See 'Communicator Toggles' for more detail on backups.

3RD NUMBER (2)

3rd Number can report any events programmed if set in the dialer directions. It can also be used to back up the first and/or second phone number. See 'Communicator Toggles' for more detail on backups.

PGM TEL NUMBER (0)

Enter the communicator telephone number the way you would dial it on a telephone. The total number of digits including dial tone searches and pauses must not exceed 31. Press the [*] key to enter the telephone entry options menu. A 'D' for dial tone search is already programmed as the first digit.

[0] Save [1] Dial tone [2] Pause 2 Seconds [3] Pause 4 Seconds
[4] DTMF [*] [5] DTMF [#] [6] Previous Menu

[0] Save can be selected for the telephone number to be stored into the panel's memory, or simply press [#] when finished entering the phone number.

[1] Dial tone will add a dial tone search to the telephone number, which will be represented by a 'D' on the display. When the panel does a dial tone search, it looks for dial tone before dialling the programmed telephone number.

[2] Pause 2 Seconds will add a two second pause to the dialing sequence, which will be represented by the letter 'A' on the display.

[3] Pause 4 Seconds will add a four second pause to the dialing sequence, which will be represented by the letter 'E' on the display.

[4] DTMF [*] will input an asterisk, represented by a 'B' on the display. The dialer will output the same frequencies as a touch tone phone would if the [*] key were pressed. (Frequently required to disable call waiting.)

[5] DTMF [#] will add a '#' to the telephone number, represented by the letter 'C' on the display. The dialer will output the same frequencies as a touch tone phone when the '#' key is pressed. (In some instances is used to disable call waiting.)

COMMS FORMAT (1)

There are 19 formats in the PC4020 for communicating with the monitoring station. The system must be programmed to use the same communications format as the receiver at the monitoring station. The default format is (01).

(00) 10 Bps 1400 - Silent Knight, Ademco Slow

(01) 20 Bps 2300 - Sescoa, Franklin, DCI, Vertex

(02) 20 Bps 1400 - Silent Knight Fast

(03) 40 Bps 2300 - Radionics

(04) 40 Bps 1400 - Radionics

(05) 40 Bps 2300 P - Radionics with Parity

(06) 40 Bps 1400 P - Radionics with Parity

(07) 10 Bps 1400 X - Silent Knight, Ademco Slow extended

(08) 20 Bps 2300 X - Sescoa, Franklin, DCI, Vertex extended

(09) 20 Bps 1400 X - Silent Knight, Ademco Fast extended

(10) 40 Bps 2300 X - Radionics Extended

(11) 40 Bps 1400 X - Radionics Extended

(12) 40 Bps 2300 XP - Radionics Extended with Parity

(13) 40 Bps 1400 XP - Radionics Extended with Parity

(14) SIA Fsk Format

(15) Sescoa Super Speed

(16) Sescoa Super Speed ID

(17) DTMF Contact ID

(18) 4/3 DTMF Format - Surgard ***Note: Do not use this format for UL Listed systems.***

Communications Compatibility

All these communication formats are compatible with the Silent Knight SK9000 and Ademco model 685 receivers with the exception of formats (15), (16), (17) and (18). Formats (15) and (16) are compatible with the Linear/Sescoa model 3000C receiver. For UL installations, ensure that the control unit is reporting to one of these receivers.

10, 20 and 40 BPS Formats

10 Bits Per Second is the standard slow format used on Silent Knight and Ademco receivers.
Data = 1900 Hz Kissoff = 1400 Hz Speed = 10 Baud

20 Bits Per Second is the standard fast format used on DCI, Franklin, Sescoa and Vertex receivers.
Data = 1800 Hz Kissoff = 1400/2300 Hz Speed = 20 Baud

40 Bits Per Second is the standard format used on Radionics receivers.
Data = 1800 Hz Kissoff = 1400/2300 Hz Speed = 40 Baud

These formats will send an account code to identify which customer is sending the alarm, and a reporting code to identify the type of alarm. Depending on the receiver, the account code must be either 3 or 4 digits, and the reporting code must be either 1 or 2 digits. If the account code needs to be only 3 digits, program the 'System ID Code' and each partition's 'Customer ID Code' with 3 digits, followed by a '0'. If you wish to send a zero in the account code, program it with a HEX A. For example, if you wish to send 103 as your account code, program the System or Customer ID code with '1A30'. If the reporting code needs to only be 1 digit, program the reporting codes with one digit followed by a '0'. For example, to send a '3', program '30' into the reporting codes. To send a zero, program HEX A into the reporting code. For example, to send 30, enter 3A.

Radionics Format

For conventional 3/1 Radionics format the communications mode should be set to either (10) or (11), the 40 Bps extended format. The following guidelines have been provided to help in configuring the PC4020 for Radionics format.

1. The system ID code and customer ID codes must be only 3 digits with a zero making up the 4th digit (i.e. program 1230 for ID code 123.)
2. The zone alarm reporting codes must all be single digit numerical codes with no extended 2nd round being sent. The zero in the 2nd digit of the reporting code tells the PC4020 not to send an extended code.
3. All other non-alarm reporting codes must be set up to send an extended 2nd round. The 1st digit of the reporting code is used to identify the event while the 2nd or extended digit is used to associate the event with a particular item. (i.e. A reporting code of E3 means restore zone 3 - E for restore and 3 for zone 3.)
4. The following is a list of 1st digit identifiers that should be used with the Radionics format.
   Restorals "E" Example "E3" = Restore zone 3
   Openings "B" Example "B2" = Opening by User 2
   Closings "C" Example "C4" = Closing by User 4
   Troubles "F" Example "F5" = Trouble from Source 5
   Misc "D" Example "D1" = Partial Closing

SIA 1986 Format

The system ID codes and the customer ID codes must be four decimal digits in length. The reporting codes must be 2 digits.

Note: Do not program the keypad lockout reporting code or the printer buffer nearly full reporting code.

The SIA format will transmit a 4 digit account code, a 2 digit identifier code and a 2 digit reporting code. The 2 digit identifier is preprogrammed by the PC4020. The 2 digit reporting code is programmed by the installer with any hex number from 01 to FE.

	Preprogrammed Identifiers
Zone Alarms 1 to 128 - Fire	FA
Zone Alarms 1 to 128 - All others	BA
Zone Troubles 1 to 128 - Fire	FT
Zone Tamper 1 to 128	TA
Zone Restorals 1 to 128 - Fire	FR
Zone Restorals 1 to 128 - All others	BR
Zone Tamper Restorals	TR
Module Tamper Alarm	TA
Module Tamper Restoral	TR
Keypad [F] Key Alarm	FA
Keypad [A] Key Alarm	MA
Keypad [P] Key Alarm	PA
Keypad [F] Key Restore	FR
Keypad [A] Key Restore	MR
Keypad [P] Key Restore	PR
Closing Access Codes 1 to 128	CL
Quick Arm Closing Code	CL
Partial Closing Code	CG
Automatic Arming Closing	CA
Opening Access Codes 1 to 128	OP
Opening After Alarm	OR
System Battery Trouble Alarm	YT
System AC Trouble Alarm	AT
System Bell Trouble Alarm	UT
System AUX Supply Trouble Alarm	UT
System Battery Trouble Restoral	YR
System AC Trouble Restoral	AR
System Bell Trouble Restoral	UR
System Aux Supply Trouble Restoral	UR

	Preprogrammed Identifiers
COMBUS Trouble Alarm	UT
COMBUS Trouble Restoral	UR
System TLM Restoral	LR
System FTC Restoral	UR
Downloading Lead In	RB
Downloading Lead Out	RS
Periodic Test	RP
System Test	RX
4204 Battery Trouble Alarm	YT
4204 AC Trouble Alarm	AT
4204 Aux Supply Trouble Alarm	UT
4204 Battery Trouble Restore	YR
4204 AC Trouble Restore	AR
4204 Aux Supply Trouble Restore	UR
2nd Master Close	CL
2nd Master Open	OP
System TLM Trouble	LT
Links Test	RP
Duress	HA
Auto Arm Abort	CE
Cellular Trouble	LT
Cellular Trouble Restoral	LR
PC4400 Tamper	VT
PC4400 Restoral	VR
Installer's Lead In	LB
Installer's Lead Out	LS

Sescoa Super speed and Sescoa Super Speed ID

The system ID code and customer ID codes must be four decimal digits in length and in the range of 0001 to 3374.

The reporting codes must be 2 digits in length and programmed as follows. All zero's must be replaced with 'A's. For example, to send 20, the PC4020 must be programmed with a 2A. (To disable a reporting code, leave as FF.)

Notes: Do not program the Downloading Lead In reporting code, the Downloading Lead Out reporting code, the Installer's Lead In reporting code, the Installer's Lead Out Reporting Code, the RS-232 Trouble Alarm Rep Code or the RS-232 Trouble Restoral Rep Code.

The keyswitch zones will be identified as the zone number plus 128. For example, if the closing user zone and the closing keyswitch zone numbers are both 002, the closing keyswitch zone will then be identified as 130 (zone number 2 + 128 = 130).

Program different reporting codes for zone tamper and zone alarm for identifying a zone tamper from a zone alarm.

	Code		Code
Zone Alarms 1 to 128	A1 to 9A	Quick Arm Closing Code	CA
Zone Trb./Tamp 1 to 128	A1 to 9A	System Aux Supply Trouble Alarm	13
Zone Trb./Tamp Restoral 1 to 128	A1 to 9A	System Battery Trouble Restoral	E1
Zone Restoral 1 to 128	A1 to 9A	System AC Trouble Restoral	E1
Module Tamper Alarms	92	System Bell Trouble Restoral	F1
Module Tamper Restorals	92	System Aux Supply Trouble Restoral	13
Keypad [F] key Alarm	93	COMBUS Trouble Alarm	97
Keypad [A] key Alarm	94	COMBUS Trouble Restore	97
Keypad [P] key Alarm	95	System TLM Trouble	EE
Keypad [F] key Restoral	93	System TLM Restoral	EE
Keypad [A] key Restoral	94	System FTC Restoral	EE
Keypad [P] key Restoral	95	Periodic Test	1C
Duress	D1	Buffer Near Full	98
Closing Reporting Codes 1 to 128	CA	System Test	1C

	Code		Code
Links Test	1C	4204 Aux Supply Trouble Alarm	13
Partial Closing Code	C1	4204 Battery Trouble Alarm	E1
Auto Arm Abort	C1	4204 AC Trouble Alarm	E1
Automatic Arming Closing	CA	4204 Battery Trouble Restore	E1
Keypad Lockout Code	96	4204 Aux Supply Trouble Restore	13
Opening Reporting Code 1 to 128	BA	2nd Master Close	CA
Opening After Alarm Code	BA	2nd Master Open	BA
System Battery Trouble Alarm	E1	Cellular Trouble	EE
System AC Trouble Alarm	E1	Cellular Trouble Restoral	EE
System Bell Trouble Alarm	F1	Keyswitch Opening	BA
4204 AC Trouble Restore	E1	Keyswitch Closing	CA

Contact ID

The System ID code and 8 Customer ID codes must be 4 decimal digits. The reporting codes must be 2 digits and programmed as follows.

Note: Do not program the Opening After Alarm, Buffer Nearly Full, Installer Lead In and Installer Lead Out reporting codes.

Zone Alarms and Restorals can be programmed to send different messages to the monitoring station. For example, if the Reporting code for zone 5 is programmed with '34', the monitoring station will receive the message '*BURG* - ENTRY/EXIT - 5', where 5 is the number of the zone which has been activated. Different messages to be sent to the monitoring station are:

Code	Message as seen on receiver
Fire Alarms	
1A	*FIRE* - FIRE ALARM - #
11	*FIRE* - SMOKE DETECTOR - #
12	*FIRE* - COMBUSTION - #
13	*FIRE* - WATER FLOW - #
14	*FIRE* - HEAT SENSOR - #
15	*FIRE* - PULL STATION - #
16	*FIRE* - DUCT STATION - #
17	*FIRE* - FLAME SENSOR - #
Panic Alarms	
2A	*PANIC* - PANIC - #
21	*PANIC* - DURESS - #
22	*PANIC* - SILENT PANIC - #
23	*PANIC* - AUDIBLE PANIC - #
Burglar Alarms	
3A	*BURG* - BURGLARY - #
31	*BURG* - PERIMETER - #
32	*BURG* - INTERIOR - #
33	*BURG* - 24 HOUR - #
34	*BURG* - ENTRY/EXIT - #
35	*BURG* - DAY/NIGHT - #
36	*BURG* - OUTDOOR - #
37	*BURG* - TAMPER - #
General Alarms	
4A	*ALARM* - GENERAL ALARM - #
44	*ALARM* - SENSOR TAMPER - #

Code	Message as seen on receiver
24 Hour Non-Burglary	
5A	*ALARM* - 24 HR. NON-BURG - #
51	*ALARM* - GAS DETECTED - #
52	*ALARM* - REFRIGERATION - #
53	*ALARM* - HEATING SYSTEM - #
54	*ALARM* - WATER LEAKAGE - #
55	*ALARM* - FOIL BREAK - #
56	*ALARM* - DAY ZONE - #
57	*ALARM* - LOW GAS LEVEL - #
58	*ALARM* - HIGH TEMPERATURE - #
59	*ALARM* - LOW TEMPERATURE - #
61	*ALARM* - AIR FLOW - #

The rest of the reporting codes must be programmed as follows or left as FF to be disabled.

Fire Zone Troubles	73	System Bell Trouble Restoral	21
Zone Tamper	44	System Aux Supply Trouble Restoral	AA
Module Tamper Alarm	45	COMBUS Trouble Alarm	33
Module Tamper Restoral	45	COMBUS Trouble Restore	33
Keypad [F] key Alarm	15	System TLM Trouble	51
Keypad [A] key Alarm	AA	System TLM Restoral	51
Keypad [P] key Alarm	2A	System FTC Restoral	54
Keypad [F] key Restoral	15	Periodic Test Transmission	A2
Keypad [A] key Restoral	AA	System Test	A1
Keypad [P] key Restoral	2A	Links Tx	A3
Duress	21	Downloading Lead In	11
Access Codes 1 to 128 Closing	A2	Downloading Lead Out	12
Quick Arm Closing	A8	4204 Battery Trouble Alarm	3A
Partial Closing	74	4204 AC Trouble Alarm	3A
Auto Arm Abort	A5	4204 Aux Supply Trouble Alarm	3A
Auto Arm Closing	A3	4204 Battery Trouble Restoral	3A
Keypad Lockout	21	4204 AC Trouble Restoral	3A
Access Codes 1 to 128 Opening	A2	4204 Aux Supply Trouble Restoral	3A
System Battery Trouble Alarm	A2	RS-232 Trouble Alarm	35
System AC Trouble Alarm	A1	RS-232 Trouble Restoral	35
System Bell Trouble Alarm	21	2nd Master Close	A2
System Aux Supply Trouble Alarm	AA	2nd Master Open	A2
System Battery Trouble Restoral	A2	Cellular Trouble Restoral	51
System AC Trouble Restoral	A1	Keyswitch	A9
Cellular Trouble	51		

Surgard 4/3 DTMF Format

This is a 7 digit format sent by DTMF tones and uses a 2300 Hz handshake. Each round pair represents a single event as follows:

SSSSXCC

where, SSSS = 4 digit account code
x = Event descriptor, preprogrammed in the PC4020.
CC = 2 digit reporting code programmed by the installer.

The reporting codes can be programmed with any hex number from 01 to FE (00 or FF will disable the reporting code).
Note that both "0" and "A" will both represent and be received as "0".

Normally the Zone Alarm reporting codes will transmit a "3" as the event descriptor for most zone types, to indicate a burglary alarm. However, if the zone type is a Standard Fire Zone, Delayed Fire Zone or Auto Verify Fire Zone, the PC4020 will transmit a "1" as the event descriptor for these zone types to indicate a fire alarm is being transmitted.

For zones programmed as momentary keyswitch arming or maintained keyswitch arming, the PC4020 will transmit a "4" and the reporting code programmed in the "Zone Alarm" section to indicate a closing (arming) of a partition.

In the Zone Restore reporting codes section, a zone will normally transmit a "9" as the event descriptor for burglary or fire zones to indicate the zone has been restored. However, if the zone has been programmed as a momentary or maintained keyswitch arming zone, when the zone is used to disarm a partition it will transmit a "5" and the reporting code programmed in the zone restoral section to indicate an opening (disarming) of a partition.

PC4020 Reporting Code Section	**Event Descriptor**
Zone Alarms 1 to 128 (Fire Alarms)	1
Zone Alarms 1 to 128 (Keyswitch Arming)	4
Zone Alarms 1 to 128 (All others)	3
Fire Zone Troubles 1 to 128	6
Zone Tamper	6
Zone Tamper Restoral	9
Zone Restorals 1 to 128 (Keyswitch Disarming)	5
Zone Restorals 1 to 128 (All others)	9
Module Tamper Alarm	F
Module Tamper Restoral	9
Keypad [F] key Alarm	1
Keypad [A] key Alarm	7
Keypad [P] key Alarm	2
Keypad [F] key Restore	9
Keypad [A] key Restore	9
Keypad [P] key Restore	9
Duress Code	2
Closing Access Codes 1 to 128	4
Quick Arm Closing Code	4
Partial Closing Code	D
Auto Arm Abort	F
Automatic Arming Closing	4
Keypad Lockout Code	F
Opening Access Codes 1 to 128	5
Opening After Alarm	F
System Battery Trouble Alarm	6
System AC Trouble Alarm	6
System Bell Trouble Alarm	6
System Aux Supply Trouble Alarm	6
System Battery Trouble Restoral	9
System AC Trouble Restoral	9
System Bell Trouble Restoral	9
System Aux Supply Trouble Restoral	9
System TLM Trouble	F
COMBUS Trouble Alarm	6
COMBUS Trouble Restoral	9
System TLM Restoral	9
System FTC Restoral	9
Downloading Lead In	F
Downloading Lead Out	F
Installer's Lead In	8
Installer's Lead Out	8
Periodic Test	0
Links Test	0
Buffer Near Full	F
System Test	0
4204 Battery Trouble Alarm	6
4204 AC Trouble Alarm	6
Cellular Trouble	F
Cellular Trouble Restoral	9

PC4020 Reporting Code Section	Event Descriptor
4204 Aux Supply Trouble Alarm	6
4204 Battery Trouble Restore	9
4204 AC Trouble Restore	9
4204 Aux Supply Trouble Restore	9
RS 232 Trouble	F
RS 232 Restore	9
2nd Master Close	4
2nd Master Open	5

DIALER DIRECTION (2)

This section determines which reporting codes are sent to the selected phone number. All reporting codes can be programmed to communicate to any or all of the phone numbers. By default, all reporting codes are sent to phone number 1 only. See "Comms Toggles" for using phone numbers 2 and 3 as backup phone numbers.

ALARM/RESTORE Y

YES= Alarm and Restoral reporting codes are transmitted to the monitoring station by the selected phone number.
NO = Alarm and Restoral reporting codes are not sent.

The reporting codes are:

- Zone Alarms
- Zone Restorals
- Zone Troubles
- Zone Trouble Restorals
- Duress
- Module Tamper Alarms
- Module Tamper Restorals
- [F] [A] [P] Key Alarms
- [F] [A] [P] Key Restorals
- Cellular Trouble
- Cellular Trouble Restorals

See "Reporting Codes" for a description of these groups of reporting codes.

OPEN/CLOSE Y

YES= Opening and Closing reporting codes are transmitted to the monitoring station by the selected phone number.
NO = Opening and Closing reporting codes are not sent.

The groups of reporting codes, those are Openings and Closings, are:

- Closings by Access Codes 001 to 128
- Misc Closing Reporting Codes
- 2nd Master Close
- Momentary/Maintained arm
- Openings by Access Codes 001 to 128
- Misc Opening Reporting Codes
- 2nd Master Open

See "Reporting Codes" for a description of these groups of reporting codes.

ALL OTHERS Y

YES= All other reporting codes are sent to the selected phone number
NO = All other codes are not sent.

"All other" refer to every other reporting code that is not an alarm or restoral, opening or closing. "All other" groups of reporting codes are:

- System Maintenance Reporting Codes
- 4204 Module Maintenance Reporting codes
- 4400 Module Maintenance Reporting Codes

See "Reporting Codes" for a description of these groups of reporting codes.

SYSTEM ID CODE (3)

When a reporting code is sent to the monitoring station, a four digit account code is also sent to identify the user. Each partition has its own account code (See "Customer ID Code"). But for reporting codes that do not pertain to a particular partition, such as AC line trouble etc., the system ID code is sent to identify the panel/user. The reporting code groups that send the system ID code are:

- Module Tamper Alarms
- Module Tamper Restorals
- 4400 Module Maintenance Reporting Codes
- Duress (global keypads)
- System Maintenance Reporting Codes
- 4204 Module Maintenance Reporting Codes
- [F] [A] [P] Key Alarms (global keypads)
- [F] [A] [P] Key Restorals (global keypads)

See "Reporting Codes" for a description of these groups of reporting codes.
See "Comms Formats" for a description of communication formats and if there are limitations set on what the System and Partition account codes may be programmed as.

Communicator Toggles

COMMS TOGGLES (1)

Selecting options relevant to the communications of the panel. Toggle options given in the form of a question. Use the [*] key to toggle between [Y]es and [N]o to enable or disable the feature. Use the [<][>] keys to scroll through the options.

COMMS ENABLED Y

Communications are enabled?
YES= The communications are enabled.
NO = The communications are disabled. No reporting codes will be transmitted to the monitoring station. Note that downloading can still be accomplished with the communicator disabled.

DTMF DIALING Y

YES= The dialer will use DTMF dialing.
The PC4020 can switch to pulse dialing after a programmed number of attempts at DTMF dialing have failed. See "DTMF Attempts".
NO = The dialer will use pulse dialing.

RESTORE ON BTO Y

Restore on Bell Time Out?
YES= The panel will send the restoral reporting code when both the zone is restored and the bell has timed out (see "BELL CUTOFF" for the time the bell will time out). Note that if the zone is not restored, the restoral will be sent when the partition is disarmed. DO NOT enable this feature if "REST ON DISARM" is enabled.
NO = The panel will send the restoral reporting code when the zone is restored, or if "REST ON DISARM" is enabled, the restoral is sent when the partition is disarmed. (See "REST ON DISARM".)

REST ON DISARM N

Restore on Disarming?
YES= The panel will send a restoral when the partition has been disarmed. The panel will not send another alarm transmission for the zone until the partition is disarmed. DO NOT enable "RESTORE ON BTO" if this feature is enabled. (See "RESTORE ON BTO".)
NO = The panel will send the restoral immediately when the zone is restored, or if "RESTORE ON BTO" is enabled, the restoral is sent when the bell times out. (See "RESTORE ON BTO".)
Note: If Bell Shutdown is to be used, do NOT use "Rest On Disarm" for Shutdown to occur.

SHUT DOWN 24HRS N

Swinger Shutdown reset every 24 hours?
YES= The swinger shutdown counters will be reset everyday at midnight. The swinger shutdown counters keep track of how many alarms have occurred on each zone before entering shutdown, in which the zones will no longer cause an alarm. See "SWINGER LIMIT" and "SWGR SHUT DOWN" to enable swinger shutdown.
NO = The swinger shutdown counters will be reset when the partition is armed.

PC ID N

Partial Closings Identified?
YES= The panel will identify all manually bypassed zones when the partition is armed. The bypassed zones are identified by sending the zone alarm reporting codes for the bypassed zones between the partial closing reporting code and the closing code. The partial closing reporting code must be programmed for this feature to work.
See "MISC CLOSING" to program the partial closing reporting code.
See "PC ID RESTORES" to use zone restoral reporting codes instead of zone alarm reporting codes to identify the bypassed zones.
NO = The panel will only send a partial closing reporting code to tell the monitoring station that zones were bypassed when the partition was armed.

PC ON AUTO ARM Y

Partial Closings on Auto Arming?
YES= The panel will send the partial closing reporting code to the monitoring station when a zone is force armed (temporarily bypassed) by an auto arm. If the option "PC ID" is enabled, the force armed zone will be identified by sending its zone alarm reporting code after the partial closing reporting code. See "FORCE ARM" for an explanation of force arming.
NO = No partial closing reporting code will be sent when zones are force armed during auto arming.

PC ID RESTORES N

Partial Closings Identified send Zone Restorals?
YES= The zone restoral reporting codes are transmitted to the monitoring station instead of the zone alarm reporting codes to identify the manually bypassed zones and force armed zones on auto arm. See "PC ID".
NO = The zone alarm reporting codes are used to identify the bypassed zones.

TLM ENABLED Y

Telephone Line Monitoring Enabled?
YES= The system tests for telephone line faults. If a fault is detected, the trouble is annunciated on the keypads. A telephone line trouble is generated when the line voltage drops below 3 volts for more than 30 seconds.
NO = Does not test for Telephone Line faults.

TLM AUD BELL Y

Telephone Line Monitoring has Audible Bell Alarm?
YES= If there is a Telephone Line trouble and a partition is armed, the bell outputs for the armed partition will be activated, along with the keypad annunciation. The bell outputs are any outputs (Bell, SW Aux or PGM) programmed for "FIRE AND BURG", "INV FIRE/BURG", "BURG ONLY" and "INV BURG ONLY".
NO = If there is a Telephone Line trouble, the panel will annunciate the trouble at the keypad only.

FTC AUD BELL N

Should a Failure to Communicate sound the Bells?
YES= If a partition is armed, the bell outputs for the armed partition will sound when the PC4020 fails to communicate with the monitoring station.
NO = A failure to communicate will not cause the PC4020 to sound the bells.

TLM + ALARM AUD N

Should a Transmission Line Monitoring trouble and an alarm occurring cause the bells to sound?
YES= If a partition is armed, the bell outputs for the armed partition will sound when the PC4020 has both a TLM fault and an alarm occurring.
NO = The TLM and Alarm Audible Function is disabled.

RINGBACK N

Enable Ringback?
YES= The Ringback option is enabled.
A successful communication of a closing to the monitoring station will be annunciated by the keypads beeping 5 times. Only the keypads belonging to that partition will beep. Note that if communications are being sent to more than one telephone number, communications to all numbers must be completed before the ringback will occur.
NO = The Ringback option is disabled.
Note: Ringback must be enabled on a commercial burglar alarm system.

RINGBACK SQUAWK N

YES= Ringback Squawk option is enabled.
NO = Ringback Squawk option is disabled.
If Ringback and Ringback Squawk are both enabled upon a successful communication of a closing, the Fire/Burg, Inv Fire/Burg, Burg and Invert Burg outputs for that partition will squawk 4 times.
Note: Ringback must be enabled for this feature to function.

PERIODIC TX ? N

Periodic Test Transmission?
YES= The panel will send a test transmission to the monitoring station. See "TEST CODE TX" for programming time and frequency the code is sent. See "SYSTEM MAINT" for programming the reporting code.
NO = The panel will not send a test transmission.

EUROPE DIAL N

European Dialling?
YES= When the communicator is pulse dialling, the contact closure to the phone line is made in a 67/33 make/break ratio. This is the European standard method of dialling.
NO = The contact closure to the phone line is made in a 60/40 make/break ratio. This is the American/Canadian standard method of dialling.
Note: European Dialling must be disabled on UL Listed systems.

DEFAULT DIAL Y

Dial if No Dial Tone Present?
YES= If the first attempt by the panel to call the monitoring station fails, on every subsequent attempt the panel will dial regardless of the presence of dial tone.
NO = If a 'D' for dial tone search precedes the phone number, the panel will not dial if dial tone is not present. See "PGM TEL NUMBER" for programming the telephone numbers with dial tone search.

PH 1-2 BACKUP N

Phone #2 back up Phone #1?
YES= The PC4020 will send the reporting code to the 2nd phone number if the 1st phone number fails to communicate with the monitoring station after 10 attempts. Dialer directions for the 2nd phone number should be disabled (set to "N") if the 2nd number is used for backup only, otherwise the reporting codes will be sent to the 2nd phone number whether the 1st number failed or not.
NO = Disabled. The 2nd phone number does NOT back up the 1st phone number.

PH 1-3 BACKUP N

Phone #3 back up Phone #1?
YES= The PC4020 will send the reporting code to the 3rd phone number if the 1st phone number fails to communicate with the monitoring station after 10 attempts. Dialer directions for the 3rd phone number should be disabled (set to "N") if the 3rd number is used for backup only, otherwise the reporting codes will be sent to the 3rd phone number whether the 1st number failed or not.
If "PH 1-2 BACKUP" is enabled when 1st phone number fails, the reporting code will be sent to both the 2nd and 3rd phone number.
NO = Disabled. The 3rd phone number does NOT back up the 1st phone number.

PH 2-3 BACKUP N

Phone #3 back up Phone #2?
YES= The PC4020 will send the reporting code to the 3rd phone number if the 2nd phone number fails to communicate with the monitoring station after 10 attempts. Dialer directions for the 3rd phone number should be disabled (set to "N") if the 3rd number is used for backup only, otherwise the reporting codes will be sent to the 3rd phone number whether the 2nd number failed or not.
If "PH 1-2 BACKUP" is enabled when 1st phone number fails, the reporting code will be sent to the 2nd phone number. If the 2nd phone number fails, the reporting code will then be sent to the 3rd phone number.
NO = Disabled. The 3rd phone number does NOT back up the 2nd phone number.

Communicator Miscellaneous

COMMS MISC (2)

Program other options relating to the communications of the panel including DTMF attempts, swinger shutdown limit, AC failure and zone transmission delay.

DTMF ATTEMPTS (0)

The number of attempts using DTMF dialing (e.g. a touch tone phone) before switching to pulse dialing (e.g. a rotary phone). Enter a three digit number from 000 to 010 attempts. Note that the PC4020 will only call a number 10 times before a Failure to Communicate trouble occurs. By default, the panel will have 2 attempts of DTMF dialing before pulse dialing. If "DTMF DIALING" is not enabled, the panel will only pulse dial.

SWINGER LIMIT (1)

Enter the number of alarm/restore pairs the panel will communicate per zone before communications for that zone shut down. The bell will also shut down if so programmed (see "BELL SHUTDOWN"). Valid entries are from 000 to 255. The default setting of swinger shutdown is 003. Entering 000 in this section will disable swinger shutdown. See "SWGR SHUT DOWN" to enable swinger shut down on each zone.
Note: Swinger Limit must be set to 000 on UL Listed systems.

AC FAIL TX DELAY (2)

Enter the time in minutes, AC trouble on the main panel must be present before the AC trouble reporting code will be communicated. Valid entries are from 000 to 255. The default setting is 030.

ZONE TX DELAY (3)

Enter the time in seconds, the panel will delay communication of an alarm zone. Valid entries are from 000 to 255. The default setting is 000. If the panel is disarmed within the programmed time, no alarm communication will be sent. See "TX DELAY?" under zone toggle options to enable the transmission delay on each zone.
Note: Zone TX Delay must be set to 000 on UL Listed systems.

Test Code Transmission

TEST CODE TX (4)

Test Code Transmission. Programs items regarding the test transmission of the panel. To send a test transmission, the time of day, the number of days between test transmissions and the test transmission reporting codes must be programmed. Also the "PERIODIC TX?" comms toggle options must be enabled.

SET CYCLE DAYS (0)

Enter the number of days between test code communications. Valid entries are from 001 to 255. The default setting is 030.
Note: Set Cycle Days must be set to 001 on UL Listed systems.

SET 24HR TIME (1)

Enter the time of day the test code will be communicated. Times are entered using military format HH:MM. The default setting is 0000.

Reporting Codes

REPORTING CODES (3)

Reporting codes are 2 digit codes which are sent to the receiver at the monitoring station along with the customer ID code for each transmission. They identify the type of alarm to the receiver (See "Comms Format"). Once you have selected which group of reporting codes to program, use the arrow keys to toggle through the reporting codes, and enter in a 2 digit number. If you are sending a 3/1 or 4/1 format where the reporting code needs to only be one digit, program the one digit followed by a "0". For example, if you want to send a "5" to the monitoring station, program "50" into the reporting code. To disable a reporting code, program it with FF (default setting). Pressing the [*] key when entering the code will call up a menu for hex digit entry and to "Save and Exit" from the Reporting Codes menu.
Note: When programming Hex digits, the second * is no longer used as in previous panel versions i.e. PC3000 and PC2550. For example in the PC4020: * 1 * 2 is AB
**** 1 2 is A2***

ZONE ALARM (00)

Alarm Reporting Codes for Zones 001 to 128. Momentary and maintained arm zones will send the reporting code programmed in this section for a closing.

ZONE RESTORE (01)

Restoral Reporting Codes for Zones 001 to 128. See Restore on BTO and Rest on Disarm for when the zone restoral will be sent to the monitoring station. Momentary and maintained arm zones will send the reporting code programmed in this section for an opening.

ZONE TROUBLE (02)

Zone Trouble Reporting codes for zones 001 to 128. The only types of zones that will cause a zone trouble are the standard fire, delayed fire, auto verifying fire and Links supervisory zones. All other zone types will cause a zone tamper condition only if double EOL resistors are used.

ZONE TROB.REST (03)

Zone Trouble Restoral Reporting codes for zones 001 to 128. Standard Fire zones, Auto Verify Fire zones, Delay Fire Zones, Links Supervisory Zones, will transmit the zone trouble restoral if programmed. All other zone types will transmit zone tamper restorals provided double EOL resistors are enabled.

MOD TAMP ALARM (04)

Reporting Codes for Tamper Alarms on Modules. All modules have a tamper zone, if the tamper is activated.

LCD4500 KEYPADS (0)

There are 16 keypad tamper alarm reporting codes, one for each keypad can be enrolled onto the system.

PC4400 RS-232 (1)

There is an RS-232 tamper alarm reporting code.

PC41XX ZONE EXP (2)

There are 16 reporting codes for tamper alarms on 4108 and 4116 zone expansion modules. If you use all 4108s, the maximum number of expansion modules you will use is 14. (14 x 8 zones = 112 zones + 16 zones on the main panel = 128 zones) For this reason, 15 and 16 are for future use.

PC4216 16 O/P (3)

There are 9 module tamper alarm reporting codes, one for each 4216 module can be enrolled onto the system.

PC4204 4 O/P (4)

There are 16 module tamper alarm reporting codes, one for each 4204 module can be enrolled onto the system.

MOD TAMP RESTORE (05)

Reporting Codes for the restoral of a modules tamper.

LCD4500 KEYPADS (0)

There are 16 keypad tamper restoral reporting codes, one for each keypad can be enrolled onto the system.

PC4400 RS-232 (1)

There is an RS-232 tamper restoral reporting code.

PC41XX ZONE EXP (2)

There are 16 reporting codes for tamper restorals on 4108 and 4116 zone expansion modules. If you use all 4108s, the maximum number of expansion modules you will use is 14 (14 x 8 zones = 112 zones + 16 zones on the main panel = 128 zones). For this reason, reporting codes 15 and 16 are for future use.

PC4216 16 O/P (3)

There are 9 tamper restoral reporting codes, one for each 4216 module can be enrolled onto the system.

PC4204 4 O/P (4)

There are 16 module tamper restoral reporting codes, one for each 4204 module can be enrolled onto the system.

[F][A][P] KEYS (06)

[F] [A] [P] Keys Reporting Codes for [F]ire, [A]uxiliary, [P]anic key alarms, [F]ire, [A]uxiliary, [P]anic key restoral and Duress Reporting Codes.

CLOSINGS (07)

Reporting Codes for Closings by Access Codes. There are 128 reporting codes, one for each access code.

MISC CLOSINGS (08)

Miscellaneous Reporting Codes for Closings. These 5 reporting codes are for Quick Arm, Partial Closing, Auto Arm Closing, Auto Arm Abort and Keypad Lockout.

- **Quick Arm** - See [✱][0] user function in the system manual.
- **Partial Closing** - If a partition auto-arms, and some zones were open, the system will force arm itself, bypass the open zones and send the partial closing reporting code to the monitoring station along with the alarm reporting codes of the zones that are open. Also, if zones were manually bypassed, the partial closing reporting code will be transmitted.
- **Auto Arm Abort** - If the auto-arming is aborted with or without an access code, this reporting code will be sent.
- **Auto Arm Closing** - When the system Auto-arms, the panel will send the auto-arm reporting code to the monitoring station. See Auto-arm [✱][6] functions in the System Manual.
- **Keypad Lockout** - If too many incorrect access codes (see "TOTAL BAD CODES" under Keypad Lockout Options for programming the number of incorrect code entries) are entered, the keypad will lock up, preventing anyone from attempting to enter any more access codes. When keypad lockout occurs, the keypad lockout reporting code is sent to the monitoring station.

OPENINGS (09)

Reporting Codes for openings by Access Codes. There are 128 reporting codes, one for each access code.

MISC OPENINGS (10)

Miscellaneous Reporting Code for Openings. The one for miscellaneous openings is the Opening After Alarms Reporting Code. An opening after alarm reporting code is sent to the monitoring station when the system is disarmed, and there was an alarm while the system was armed.

SYSTEM MAINT (11)

System Maintenance Reporting Codes. There are 19 reporting codes dealing with the operation and maintenance of the system. The reporting codes are:

- **Battery Trouble and Battery Restoral** - If the battery voltage on the PC4020 main panel is weak, disconnected or if the battery fuse fails, a battery trouble occurs, and the battery trouble reporting code is sent. When the battery voltage and fuse are restored, the battery restoral code is sent. See Battery Trouble under Trouble Display [✱][2] in the System Manual.
- **AC Line Trouble and AC Line Restoral** - If the incoming AC voltage to the AC terminals fails, an AC trouble occurs and the AC trouble reporting code is sent to the monitoring station after the AC Fail Tx Delay has elapsed (see "AC FAIL TX DELAY"). When the incoming AC is restored, the AC restoral reporting code is sent to the monitoring station. See AC Trouble under Trouble Display [✱][2] in the System Manual.
- **Main Bell Trouble and Main Bell Restoral** - If a bell trouble occurs, either from the bell fuse failure or the open bell terminals, the Main Bell Trouble reporting code will be sent to the monitoring station. When the trouble condition is restored, the Main Bell Restoral reporting code will be transmitted.
- **Main Aux Trouble and Main Aux Restoral** - If an auxiliary voltage supply trouble occurs, the Main Aux Trouble reporting code is transmitted, and when the auxiliary voltage supply is restored, the Main Aux Restoral code is transmitted.
- **COMBUS Trouble and COMBUS Restoral** - When the main panel losses communication with a module, the COMBUS Trouble reporting code will be transmitted, and when communications resume the COMBUS Restoral reporting code will be sent.
- **TLM Failure** - If the Links unit is being used, a TLM reporting code will be sent through the Links when a TLM trouble occurs. Do NOT program this code if the Links is not used.
- **TLM Restoral** - If there is a telephone line monitoring trouble, the PC4020 will not be able to communicate with the monitoring station until the telephone line is restored, then the TLM Restoral reporting code will be sent.
- **FTC Restoral** - If a failure to communicate trouble occurs, where the PC4020 could not get through to the monitoring station, the next time the panel attempts to communicate and is successful, it will also transmit the FTC restoral reporting code.
- **Periodic Test** - This is the reporting code that is sent to the monitoring station to test communications.
- **Buf Near Full** - This reporting code is sent only if a printer is not being used, or the printer is off line for 450 events.
- **User System Test** - When the user does a [✱][6] bell/comm test, the User System Test reporting code is sent to the monitoring station to test communications. See "BELL/COMM TEST" in the System Manual.
- **Links Test** - If this code is programmed and Links Test Transmission is enabled (see Links Toggles), this reporting code will be sent via the Links unit. This code will never be sent through the regular telephone line.
- **DLS Lead In and DLS Lead Out** - If the DLS Lead In reporting code is to be used, the DLS callback feature must be enabled. (See DLS callback under DLS Toggles). When a computer calls the PC4020 panel, after connection is made, both the panel and the computer will hang up the telephone line. The panel will then transmit the DLS Lead In reporting code to the monitoring station. The panel will then call the computer and begin downloading. When the computer is finished downloading to the panel, they will both hang up the phone line, and the PC4020 will transmit the DLS Lead Out reporting code to the monitoring station.
  Note: DLS Lead In/Out reporting code is only sent for User Call Up and DLS Call Back.
- **Ins Lead In and Ins Lead Out** - The Installer's Lead In reporting code is sent to the monitoring station when an installer enters the [✱][8] installer's programming mode. The Lead Out code is sent when the installer leaves [✱][8] installer's programming.

4204 MOD MAINT (12)	The PC4204 module maintenance reporting code section has reporting codes for sixteen modules, with 6 codes for each module, in a total of 96 reporting codes. The 6 codes for each module are Battery Trouble, AC Line Trouble, Aux Supply Trouble, Battery Restoral, AC Line Restoral and Aux Supply Restoral. These reporting codes are similar to the system maintenance reporting codes for the PC4020 main panel.
4400 MOD MAINT (13)	The PC4400 module maintenance reporting code section has 2 reporting codes, RS-232 Trouble and RS-232 Restoral. If there is a problem that the RS-232 cannot transmit, the RS-232 Trouble reporting code is sent to the monitoring station. When the problem is cleared, and the RS-232 has successfully transmitted, the RS-232 restoral is sent to the monitoring station.
2ND MASTER CLOSE (14)	The Second System Grand Master Code used by the installer has a reporting code to report when it has been used to arm a partition.
2ND MASTER OPEN (15)	The Second System Grand Master Code used by the installer has a reporting code to report when it has been used to disarm a partition.

Links Module

LINKS MODULE (4)	These section options are relevant to the Links operation.

Note: Dial Tone Search must be included in the land phone number. See 'Main Item' for programming details.

1ST NUMBER (0)	Phone Number 1. If the Links module is enabled on the PC4020 this number will be used to back up the land line first number should the telephone line fail.
2ND NUMBER (1)	Phone Number 2. If the Links module is enabled on the PC4020 this number will be used to back up the land line second number should the telephone line fail.
3RD NUMBER (2)	Phone Number 3. If the Links module is enabled on the PC4020 this number will be used to back up the land line third number should the telephone line fail.
DLS NUMBER (3)	This number is used if downloading is to be done or backed up with the Links 1000 unit. Enter the telephone number for computer if User Call Up, Periodic DLS or DLS Callback is enabled. See "PGM TEL NUMBER" for entering a telephone number and options when programming the phone number.

Programming Telephone Numbers

Enter the telephone number the way you would on a telephone. the total number of digits including the dial tone search and pauses must not exceed 31. Press the [*] key to enter the telephone entry options menu. A "D" for dial tone search is already programmed as the first digit.

Note: There must be a dial tone search programmed into the land line phone number for the links unit to operate.

[0] Save	[1] Dial tone	[2] Pause 2 Seconds	[3] Pause 4 Seconds
[4] DTMF [*]	[5] DTMF [#]	[6] Previous Menu	

[0] Save can be selected for the telephone number to be stored into the panel's memory, or simply press [#] when finished entering the number.

[1] Dial tone will add a 2 second search to the telephone number, which will be represented by a letter "D" on the display. When the panel does a dial tone search, it looks for dial tone before dialing the programmed phone number.

[2] Pause 2 Seconds will add a 2 second pause to the dialing sequence, which will be represented by the letter "E" on the display.

[3] Pause 4 Seconds will add a 4 second display to the dialing sequence, which will be represented by the letter 'A' on the display.

[4] DTMF [*] will input an asterisk, represented by a 'B' on the display. The dialer will output the same frequencies as a touch tone phone would if the [*] key were pressed. (Frequency required to disable call waiting.)

[5] DTMF [#] will add a '#' represented by a 'C' on the display. The dialer will output the same frequencies as a touch tone phone would if the [#] key were pressed.

LINKS TOGGLES (4)

This section contains all options related to the use of the Links module.

LINKS MODULE N

YES= Links module enabled. This selection must be enabled in order for the Links unit to operate.
NO = Links module disabled.

Note: Once the Links module is selected the Main PGM OUT automatically changes to Links Operation and cannot be reprogrammed until the Links module is deactivated.

LINKS TEST TX N

YES= A test transmission is sent by the panel for the Links unit. (See 'Tx Cycle Days' and 'Tx Cycle Time'.)
NO = No test transmission is sent by the panel for the Links unit.

Note: The Links Test Transmission Code can be programmed under system maintenance of the reporting code section.

ZONE 1 SUP N

YES= Zone 1 Links Supervisory enabled. This zone is used to indicate the trouble conditions of the Links unit. The troubles are: Loss of Cellular Communications, AC, DC and Tamper.
Notes: Cellular trouble reporting codes are programmed as Zone Trouble and Restoral. For clear identification of the Cellular Trouble, program a zone label that will identify the zone as Links zone.
If Partial Closings identify alarms are used the Alarm Reporting Code must be programmed for the feature to function properly.
End of Line resistors must be used for the Links Supervisory zone (see System Toggle Options). Do NOT use the Double EOL resistor on the Links Supervisory zone.
NO = Zone 1 Links Supervisory disabled

Note: When this option is enabled the PC4020 will automatically reprogram the zone type and options to be Links Supervisory for zone 1. The zone type cannot be changed until this option is disabled.

ZONE 2 ANSWER N

YES= Zone 2 Links Answer enabled. This zone is used when downloading is to be performed through the Links unit.
Note: End of Line resistors must not be used on the Links Answer zones.
NO = Zone 2 Links Answer disabled.

Note: When this option is enabled the PC4020 will automatically reprogram the zone type and options to be Links Answer for zone 2. The zone type cannot be changed until this option is disabled.

TX CYCLE DAYS (5)

Enter the number of days between test code communications. Valid entries are from 001 to 255. The default setting is 030.

Note: The 'Set Cycle Days' must be set to 001 on UL Listed systems.

TX CYCLE TIME (6)

Enter the time of day the test code will be communicated. Times are entered using military format HH:MM. The default setting is 0000.

SWITCHED AUXILIARY OUTPUT

SW AUX OUTPUT (05)

The switched auxiliary output terminal on the main panel is a 12 volt power supply activated and deactivated by any one of 28 options. When the switched auxiliary is activated, it outputs 12 volts (if measured, will read 13.8 volts). The switched auxiliary output, for some options can also be programmed to activate for only selected partitions.

For example:
If the SW AUX output has been programmed for Sensor Reset and enabled on partition 1 and partition 2.

Pressing [✱][4] on any keypad assigned to partition 1 or partition 2 will deactivate the output for the amount time programmed in "PGM PULSE TIME".
Pressing [✱][4] on a keypad assigned to partitions 3 to 8 will not activate the output.

Note: Refer to the PGM Outputs List for available options.

MAIN BELL OUTPUT

MAIN BELL OUTPUT (06)

The bell output on the main control board can be programmed to activate for any one of the 28 PGM output options on any number of partitions. The BELL terminal is normally 13.8 VDC and will switch to ground potential when activated. The BELL terminal will be at ground potential and switch to 13.8 VDC if any "INV" option is selected. If the bell output is not being used, a 1000 ohm resistor (brown, black, red, gold) must be connected across the terminals as the output is supervised.

Note: Refer to the PGM Outputs List for the available options.

PGM OUTPUTS

PGM OUTPUTS (07)

Main PGM Output

MAIN PGM OUT (0)

The PGM output can be programmed to activate for any one of the 28 options listed in the PGM outputs list. Normally the output will be open collector (not active) and will switch to ground potential (active). The output will switch from ground potential (active) to open collector (not active) if any "INV" options is selected.

Notes: ***Refer to the PGM Outputs List for the available options.***
If the Links Module is enabled the Main PGM Output cannot be programmed.
The message 'LINKS Module is Active' will appear if the section is entered.

PC4204 Options

4204 OPTIONS (1)

Each relay of any 4204 relay module can be programmed to activate for any one of the 28 options listed in the PGM outputs list. Normally each relay will be de-energized and energized when active. The relay will normally be energized and then de-energized if any "INV" option is selected. Output 1 will always be active if left at default of (19) COMBUS power. It will always be active unless there is no incoming COMBUS power.

PC4216 Options

4216 OPTIONS (2)

A maximum of nine 4216 output modules can be connected to the system.
First select the PC4216 to be programmed, then select the option it is going to be programmed for. The PC4216 can be an alarm annunciator, a zone follower or one of nine custom PGM arrays.

CUSTOM GROUP (01) → (09)

The custom group allows each of the 16 outputs to be individually programmed with one of the 28 options listed in the PGM outputs list. Each output is programmed in the "4216 CUSTOM" section.

ALARMS 1-16 (10)

The 8 selections of "ALARMS XX-XX" are for programming the PC4216 to annunciate alarms. The 16 outputs will activate for each of the corresponding selected zones. The output will remain active, even when the partition is disarmed, for continuously showing the zones which have gone into alarm. The outputs will deactivate the next time the partition is armed.
For example, a PC4216 is programmed for Alarms 49-64. If zone 53 goes into alarm, the output will activate and remain active even when the bells are silenced and the partition is disarmed. The outputs will reset when the partition is armed again.
More than one PC4216 can be programmed to annunciate the same zones.

FOLLOW 1-16 (18)

The 8 selections of "FOLLOW XX-XX" are for programming the PC4216 to annunciate open zones.
The 16 outputs will activate for each of the corresponding selected zones. The output will activate when the zone is open, and deactivate when the zone is restored.
More than one PC4216 can be used to annunciate the same group of 16 zones. For example, PC4216 #1 is programmed as Follow 33-48 and #5 is programmed as Follow 33-48. If zone 34 is opened, output 2 on both 4216s will activate.
See "Follows + Alarms" for making outputs act as a zone follower and alarm annunciator.

PC4216 Custom

4216 CUSTOM (3)

CUSTOM GROUP (01) → (09)

This section is for programming each of the 9 custom groups for different options. Each group can be programmed with 16 outputs from the 28 listed options. The PC4216 modules can then be assigned to one of these groups.

PGM Pulse Times

PGM PULSE TIMES (4)

This section will allow you to select the amount of time the PGM output will remain active after being triggered.

UTILITY/SENSOR (0)

The main bell, switched auxiliary or any of the PGM outputs programmed for "Utility Output", "Sensor Reset" and "Duress", can be active for 000 to 255 seconds. The default setting is 005.

KISSOFF PULSE (1)

Any output programmed for "Kissoff Output" can be active for 000 to 255 seconds. The default setting is 003.

GROUND START (2)

Any output programmed for "Ground Start" can be active for 000 to 255 seconds. The default setting is 002.

Note: The panel will wait till the end of the Ground Start before dialing.

CHIME PULSE (3)

Any output programmed for "Chime Pulse" can be active for 000 to 255 seconds. The default setting is 002.

PGM OUTPUTS LIST

	or zone alarm occurs on any of the selected partitions.
FIRE AND BURG (00)	The output will activate when any fire
	ire or zone alarm occurs on any of the selected partitions.
INV FIRE/BURG (01)	The output will deactivate when any f
	ne alarm occurs on any of the selected partitions.
BURG ONLY (02)	The output will activate when any zor
	zone alarm occurs on any of the selected partitions.
INV BURG ONLY (03)	The output will deactivate when any z
	alarm occurs on any of the selected partitions.
FIRE ONLY (04)	The output will activate when any fire
	fire alarm occurs on any of the selected partitions.
INV FIRE ONLY (05)	The output will deactivate when any
	s entered on any keypad on any of the selected partitions. ***"Utility/Sensor" PGM pulse time.***
UTILITY OUTPUT (06)	The output will activate when [*][7] i ***Note: This output will follow the***
	4] is entered on any keypad on any of the selected ***"Utility/Sensor" PGM pulse time.***
SENSOR RESET (07)	The output will deactivate when [*][4 partitions. ***Note: This output will follow the***
	the selected partitions are armed.
PARTITION STATUS (08)	The output will activate when any of
	arm occurs on any of the selected partitions. The output will caused the alarm is disarmed.
LATCHED STROBE (09)	The output will activate when any ala stay activated until the partition that
	ble condition is present on any of the selected partitions. of time, TLM) all trouble outputs will activate.
TROUBLE OUTPUT (10)	The output will activate when a troub If a system trouble occurs (i.e. loss c
	nd entry delay on any of the selected partitions.
COURTESY PULSE (11)	The output will activate during exit a
	hime is activated on any of the selected partitions, and ner expires. (See "CHIME PULSE" under "PGM PULSE
CHIME FOLLOWER (12)	The output will activate when door c deactivate when the chime pulse tim TIMES".) Door chime activates when a zone i Door Chime to activate, the user mu [*][6] User Functions in the System individual zones (see "CHIME FUNC
	s opened and activates again when a zone is closed. For ust enable the door chime (see "DOOR CHIME" under Manual) and the installer will enable door chime for the CTION" under "ZONE OPTIONS").
	phone line trouble is present.
TLM ONLY (13)	The output will activate when a telep

TLM AND ALARM (14)
The output will activate when a Telephone Line Trouble is present and an alarm occurs on any of the selected partitions.

FAILURE TO COMM (15)
The output will activate when a Failure to Communicate Trouble is present. The output will stay activated until the trouble is cleared by the user or a successful communication is sent to the central station.

COMMS ACTIVE (16)
The output will activate while the panel is attempting to communicate with the central station.

GROUND START (17)
The output will activate for a programmable number of seconds before the panel attempts to communicate with the central station. See 'PGM Pulse Times'.
Note: This output will follow the "Ground Pulse" PGM pulse time.

KISSOFF OUTPUT (18)
The output will activate for a programmable number of seconds after a successful communication to the central station. See 'PGM Pulse Times'.
Note: This output will follow the "Kissoff Pulse" PGM pulse time.

COMBUS POWER (19)
This output will remain active at all times unless a system reset is ordered by the main panel.

READY STATUS (20)
The output will activate when all the zones in the partition are closed, and the partition is disarmed. If a zone opens or the partition is armed, the output will deactivate.

ZONE ALARM (21)
This output will annunciate when a selected zone has gone into alarm.
Any one of the 128 zones can be selected. If the zone is armed and goes into alarm, the output will activate and remain active, even when the partition the zone belongs to has been disarmed. The output will remain active until the partition is armed again.

ZONE FOLLOW (22)
This output will follow a selected zone. Any one of the possible 128 zones can be selected. If the zone is opened, the output will activate. When the zone is closed the output will deactivate. See 'Follows + Alarms' for enabling the output to be a zone follower and zone alarm annunciator.

DURESS OUTPUT (23)
This output will be turned on when a duress type code is used to perform any function. It will follow the utility output timer.
Note: This output will follow the Utility/Sensor Reset PGM pulse time.

BUZZER FOLLOW (24)
This output will activate when a programmed partition(s) keypad buzzer activates for Entry Delays, Auto Arm Pre-alert, 24 Hour Buzzer and Door Strike.

REMOTE OPERATION (25)
This option can be remotely activated with DLS-1 (version 5.3 or later), and remain active until deactivated by the DLS-1 package.

EXIT FOLLOW (26)
This option will follow the exit delay timer of the partition(s) it is assigned to.

ENTRY FOLLOW (27)
This option will follow the entry delay timer of the partition(s) it is assigned to.

RS-232 OPTIONS

RS-232 OPTIONS (08)	This section will allow you to select the baud rate and handshake requirements for a PC4400 module if an on-site printer is being used.
BAUD RATE (0)	The Baud Rate is the communications speed of the PC4400 module. The PC4400 can communicate at 300, 600, 1200, or 2400 baud. If the printer is experiencing problems with missing characters, try lowering the baud rate.
HANDSHAKE (1)	This section is used to program the type of handshake signal used with the printer.
HANDSHAKE OFF N	This selection is for printers that do not use handshakes. YES= No handshake (XON/XOFF). NO = A handshake signal is sent from the printer (DTR Protocol).

SYSTEM LABEL

SYSTEM LABEL (09)

This selection will allow the system label to be programmed for events that do not pertain to a partition such as AC Trouble, which is logged to the event buffer. See Label Programming in "Event Messages " for programming instructions.

Note: The maximum length of the system label is 14 characters.

ADD/EDIT PARTITIONS

ADD/EDIT PAR (0)

Add/Edit Partition. Default settings has only the first partition enabled. To enable more partitions, select the Add/Edit partition section, then select the partition. The partition is now enabled.

WHICH PARTITION (1) → (8)

The PC4020 can be divided into 8 partitions. This section selects which of the 8 partitions the installer is programming.

CUSTOMER ID CODE (0)

Each partition has its own 4 digit customer account number that will be transmitted to the monitoring station when a reporting code is sent. The monitoring station can then identify the customer. Where a zero digit is required, use Hex A to transmit ten pulses. The receiver at the monitoring station interprets ten pulses as a zero. If a three digit code is required, enter [0] as the last digit. [0] represents a null digit, no pulses will be transmitted.

Partition Toggles

PAR TOGGLES (1)

Enabling or disabling options for individual partitions.

[F] ENABLED Y

YES= The [F]ire key is enabled.
NO = The [F]ire key is disabled.
(See "KEYPAD TOG OPT".)

[A] ENABLED Y

YES= The [A]uxiliary key is enabled.
NO = The [A]uxiliary key is disabled.
(See "KEYPAD TOG OPT".)

[P] ENABLED Y

YES= The [P]anic key is enabled.
NO = The [P]anic key is disabled.
(See "KEYPAD TOG OPT".)

DISPLAY CLOCK Y

YES= The time and date will be displayed on every keypad of the partition instead of the "ENTER CODE TO ARM SYSTEM" message after 10 seconds of no key presses.
NO = No clock display.

DISP EXIT TIME Y

YES= The exit delay time remaining will be displayed in the lower corner on all keypads on the partition during the exit delay.
NO = No exit time display.

BYPAS REQ CODE Y

Bypass require code?
YES= Bypassing zones requires a valid access code ([✱][1][code]), either a System Master code or an access code assigned to that partition.
NO = No access code required to bypass zones. ([✱][1])

AUTOARM ENAB Y

YES= Auto Arm control enabled.
NO = Auto Arm control disabled. If disabled, the user will not be able to enter the Auto Arm control menu in the [✱][6] user functions.

ABORT REQ CODE N

YES= An access code must be entered during the auto-arm pre-alert to abort the auto arm.
NO = Pressing any key during the pre-alert will abort the auto arm.
Note: If the Auto Arm Abort Code is programmed it will be sent for one of these conditions.

AUTOARM SQUAWK N

YES= The bell output will activate for one second every ten seconds during the auto-arm pre-alert.
NO = The bell output will not activate during auto-arm pre-alert.
Note: Auto Arm Squawk must be enabled on UL Listed systems.

BELL SQUAWK ON N

YES= The bell output will activate once briefly when the partition is armed, twice when disarmed. Only the bell terminals on the PC4020 main board, when programmed for "Fire and Burg", "Inv Fire/Burg", "Burg Only" or "Inv Burg Only", will squawk.
NO = Bell Squawk disabled.
Note: Bell Squawk must be enabled on UL Listed systems.

KYPD LOCKOUT? N	YES= Keypad Lockout enabled. NO = Keypad Lockout disabled. (See "TOTAL BAD CODES", "LOCKOUT DURATION" and "LOCKOUT REP CODE".)
UTIL REQ CODE N	YES= Utility output requires a valid access code - [*][7][access code]. NO = No access code required - [*][7]. (See "UTILITY OUTPUT".)
SEN RES REQ CD N	YES= Sensor Reset Requires Code - [*][4][access code]. NO = Sensor Reset does not require a code - [*][4]. (See "SENSOR RESET".)
USER FN ANY CD N	YES= User functions require [*][6][any code]. NO = User functions require [*][6][Master Code]. This means a Grand Master, System Master or a Supervisory Code assigned to that partition.
AUD.EXIT URGEN N	YES= 1 beep every second on keypad. During the last 10 seconds, keypad will beep 3 times per second. NO = Keypad is silent during exit delay.
SQUAWK EX.DEL N	YES= Bell squawks once every second on exit delay. During the last 10 seconds, bell will squawk twice every second. NO = Silent bell on exit delay.
AUD.EXIT FAULT N	YES= Zone delay will sound the siren for entry delay if zone is still violated at the end of exit delay. NO = Siren will not be on for entry delay if zone is still violated at the end of exit delay.
URG.ENTRY DEL N	YES= During the last 10 seconds of entry delay, keypad beeps 3 times per second. NO = Keypad entry is steady.
SQUAWK EN.DEL N	YES= Bell squawks once every second on entry delay. During the last 10 seconds, bell will squawk twice every second. NO = Bell is silent during entry delay.

Partition Times

PARTITION TIMES (2)	The following programming sections are for programming various times separately for each partition.
ENTRY DELAY (0)	The keypads will give a tone to signal an entry delay when a Standard Delay zone or a Delay Home Away zone is activated. This gives the user time to disarm the system when they enter through a door. The entry delay time is programmable from 000 to 255 seconds (see Standard Delay zones and Delay Home Away Zone Types). The default setting is 030. ***Note: The allowable entry delay for UL Listed systems is 60 seconds.***
EXIT DELAY (1)	When a system is armed, the zones will not become active until the exit delay has expired, this gives the user time to exit the building without tripping alarms. The exit delay time is programmable from 000 to 255 seconds. This time can be displayed on the keypad (see "Disp Exit Time"). The default setting is 120. ***Note: The allowable exit delay for UL Listed systems is 60 seconds.***
AUX ENTRY DELAY (2)	This entry time is for auxiliary delay zones, for doorways that may need a longer entry delay than standard delay zones. This time is programmable from 000 to 255 seconds (See Auxiliary Delay Zone Types). The default setting is 045.
AUX EXIT DELAY (3)	This exit time is for auxiliary delay zones, for doorways that may need a longer exit delay than standard delay zones. This time is programmable from 000 to 255 seconds (See Auxiliary Delay Zone Types.). The default setting is 120. ***Note: The auxiliary entry/exit delays should not be shorter than the standard entry/exit delay times.***

Zone Assignment

ZONE ASSIGNMENT (3)

This section is for assigning type and options for each individual zone.

ADD NEW ZONE (0)

By default, the first 16 zones on the main panel are assigned to partition 1. If zone expanders have been enrolled, the zones must be added to a partition for the PC4020 to be able to monitor them.

Upon entering this section, the zones which have not been assigned to the selected partition will be displayed. Use [<][>] keys to scroll through the zones, and the [*] key to select which zone to add to the selected partition.

Global Zones: If zone(s) are added to more than one partition (global zones), the zone(s) will follow the following rules:

- A global zone is not armed until all partitions which the zone belongs to are armed.
- A global delay zone will follow the longest delay of all partitions which it is assigned to. For example, if Partition 1 has an entry delay of 30 seconds and Partition 2 has an entry delay of 45 seconds, the global delay zone will not be in alarm until Partition 2 finishes with its entry delay.
- If one or more partitions that a global interior home-away zone(s) belongs to is [*] [9] armed (At-home Armed), and the other partitions which the zone(s) belongs to is not, the zone will not be active until the interior zones are activated ([*] [1]).
- If a global zone is manually bypassed and any partition that the zone belongs to is disarmed, the bypass will be removed from the zone.

EDIT ZONE (1)

This section is for editing zones which have already been assigned to a partition. Upon entering this section, the zones which have been assigned to the selected partition will be displayed. Use the [<] [>] keys to toggle through the zones, and the [*] key to select the zone to edit.

DELETE ZONE (2)

Deleting zones from the partition. When selecting which zone to delete, the keypad will only display zones which are assigned to the partition.

ZONE LABEL (0)

Each zone can have its own unique label to help identify it on the LCD keypad. Upon first entering this section, the LCD will display the current zone label. See 'Label Programming' in Event Messages.

Note: The maximum length of the zone label is 14 characters.

Zone Type

ZONE TYPE (1)

Select the zone type for the selected zone. Upon entering this section, the current programmed zone type is displayed.
For example, zone 001 will display 'Standard Delay' the first time it is programmed. The default setting is for Standard Delay. All other zones (002 through 128) are instant zones by default.

Note: Every time a new zone type is selected, the zone options for the selected zone will be set to a default setting. The default setting will be different depending on the zone type selected.

Zone Options **Zone Type Default Settings**

	Standard Delay	Auxiliary Delay	Instant	Interior	Int Home Away	Delay Home Away	24 hr Bell	24 hr Bell/Buzz	24 hr Buzzer	Standard Fire	Delayed Fire	Auto Ver Fire	Momentary Arm	Maintained Arm	Latching 24 hr	Forced Answer	Links Supervisory	Links Answer
Bell Audible	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N
Bell Pulsed	N	N	N	N	N	N	N	N	N	Y	Y	Y	N	N	N	N	N	N
Bypass Enabled	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	Y	Y	Y
Chime Function	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Force Arm	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	Y	Y
Swgr Shut Down	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N
Tx Delay ?	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

For example, if zone 009 is programmed for zone type "24 HR BUZZER", the zone options "BELL AUDIBLE" and "BYPASS ENABLED" will be enabled, and all other options will be disabled for zone 009.

STANDARD DELAY (00)

Standard delay zones have an entry and exit delay. The exit delay starts as soon as the panel is armed. The loop may be opened and closed during the delay time without causing an alarm. After the exit delay time has expired, opening the loop will start the entry delay timer. During the entry delay time, the keypad will sound steadily to advise the user that the system should be disarmed. If the panel is disarmed before the entry time expires, no alarm will be generated.

AUXILIARY DELAY (01)

The auxiliary delay zone operates the same way as the standard delay zone. However different entry/exit times may be programmed. This is useful when a system has two delay zones, each requiring a different entry/exit time.

INSTANT (02)

The zone opened will activate instantly after the partition is armed and the exit delay has expired.

INTERIOR (03)

The zone will follow the entry time of a delay zone. If no delay zone has been tripped the zone will activate instantly.

INT HOME AWAY (04)

The zone will operate the same as the interior option with one exception: the zone will automatically bypass if no delay zone on the partition is tripped during exit delay.

DELAY HOME AWAY (05)

The zone will operate the same as the Interior Home/Away option with one exception: the zone has entry delay.

24 HR BELL (06)

A 24 Hour Bell zone is active at all times, and will create an alarm whether the partition is armed or disarmed. This zone will not go into alarm if the zone is bypassed.

24 HR BELL/BUZZ (07)

This zone operates like the 24 hour bell option except the bell output terminals are activated when the partition is armed, and the keypad buzzer will be activated when the partition is disarmed.

24 HR BUZZER (08)

Operates the same as the 24 hour bell, except this zone will only activate the keypad buzzer.

STANDARD FIRE (09)

A fire zone is a 24 Hour zone that is specially used for fire detection circuits. On alarm, the bell output will pulse the bells to indicate that the fire loop has been activated. The communicator will immediately transmit the alarm to the monitoring station if a reporting code is programmed. If the fire zone is open circuit, the keypads will beep every 10 seconds and a fire zone trouble will be displayed on the LCD. If programmed the communicator will transmit the trouble to the monitoring station. The keypad beeping may be silenced by pressing any key.
Note: Do NOT program fire zones as silent and do NOT use the Double EOL resistors with this zone type.

DELAYED FIRE (10)

This fire zone works the same way as a 24 Hour fire zone, except the alarm memory and transmission by the communicator is delayed by 30 seconds. If the alarm is acknowledged by pressing any key before the 30 second delay expires, the bells will silence and the transmission will be aborted.
If after the alarm has been acknowledged, and the smoke detector has not been restored to normal, after 90 seconds the bell output will be activated again, in which the user then has another 30 second delay before the bell output latches and communicator are activated. A code would then be required to silence the bell output.
Note: Do NOT program fire zones as silent and do NOT use the Double EOL resistors with this zone type.

AUTO VER FIRE (11)

Automatically Verifying Fire Zone.
This zone works the same way as the Standard Fire Zone with the exception that it will reset the smoke detectors and wait for it to go into alarm again before sounding the bells and transmitting the alarm to the monitoring station. If the smoke detectors do not go into alarm again, it assumes there is a false alarm and no fire alarm will be initiated.

For activating an automatically verifying fire zone, the smoke detectors must be powered by the SW AUX power supply on the main panel, or controlled by a relay on a PC4204 module. Otherwise the PC4020 has no control over the power to the sensors.

When an automatically verifying fire zone is shorted, the PC4020 performs a "SENSOR RESET", which removes the power from the smoke detectors for 20 seconds. All SW AUX, BELL or PGM outputs programmed for "SENSOR RESET" will be activated. The outputs will be deactivated for 20 seconds, regardless of the time programmed in the "PGM PULSE TIMES" section. After the 20 second reset pulse time, power will be restored to the sensors and all fire zone troubles will be bypassed for 10 seconds to allow the detectors to settle.

If the smoke detectors initiate another alarm within 60 seconds after the power is restored, a fire alarm will immediately sound and the monitoring station will be notified.

If the smoke detector is not reset during the sensor reset, the zone will not be restored. Because the zone is not restored, a fire alarm will be initiated immediately.

See PGM OUTPUTS for programming an output as "SENSOR RESET", "Smoke Detector Power Supply" on the PC4204 Wiring Diagram for using the PC4204 to power up the smoke detectors, and PC4020 Wiring Diagram in the System Manual for using the SW AUX on the main panel to power up the smoke detectors.
Note: Do NOT program fire zones as silent and do NOT use the Double EOL resistors with this zone type.

MOMENTARY ARM (12)

A momentary closure of this zone will alternately arm and disarm the partition. This zone can be used as a key switch to arm and disarm the system. The zone is monitored for End of Line resistors if the "ZONES EOL" option is enabled in the system options.
Notes: This feature must not be used on UL Listed systems.
This zone type must not be used as a global zone.

MAINTAINED ARM (13)

When the zone is closed the partition will disarm. When the zone is opened the partition will be armed. The zone is monitored for End of Line resistors if the "ZONES EOL" option is enabled in the system options.
Note: This feature must not be used on UL Listed systems.

LATCHING 24 HR (14)

The zone will operate the same as the 24 hour bell option with one exception: the installer's mode ([✱][8]) must be entered before the system can be armed. This will ensure the problem has been examined by the installer.

FORCED ANSWER (15)

When this zone is tripped, the panel will instantly pick up the phone lines looking for a downloading computer. Do not use this zone type to monitor for alarms.

LINKS SUP (16)

"Links Supervisory" is used with the Links cellular communications unit to monitor for Links troubles. When the Links PGM output activates, a Links trouble will be logged on the event buffer and the zone trouble transmitted. This zone type may be programmed through the Links Toggle Option section.

Note: If Partial Closings identify alarms are used the Alarm Reporting Code must be programmed for the feature to function properly. Do NOT use the Double EOL resistors with this zone type.

LINKS ANSWER (17)

It provides the Links with a forced answer for downloading purposes. This zone type may be programmed through the Links Toggle Option section.

Note: Do NOT use the Double EOL resistors with this zone type.

Zone Options

ZONE OPTIONS (2)

Enabling or disabling options by zone.

BELL AUDIBLE Y

YES= An alarm causes the bell output to activate.
NO = Silent alarm.

BELL PULSED N

YES= The bell output will pulse when the zone is in alarm.
NO = The bell output will be steady when the zone is in alarm.

BYPASS ENABLED Y

YES= The zone may be manually bypassed.
NO = The zone cannot be bypassed.

CHIME FUNCTION Y

YES= Every keypad on the partition will chime both when the zone is violated and when the zone is then secured. The partition must be disarmed for the chime option to function.
NO = The zone will not chime the keypads.

FORCE ARM N

YES= The partition may be armed with the zone violated. The zone will be temporarily bypassed, and when the zone is secured it will be added back into the system.
NO = The partition cannot be armed if this zone is open.

SWGR SHUT DOWN Y

YES= After a zone causes a programmed number of alarms, the zone will shut down so that no further transmissions are sent to the monitoring station. The bell can follow Swinger Shut Down if programmed. (See "Shut Down 24 Hrs ", "Swinger Limit" and "Bell Shut Down.)
NO = Swinger Shut Down disabled.

Note: Swinger Shut Down must be disabled on UL Listed systems.

TX DELAY ? N

YES= The reporting of zone alarm will be delayed for the programmed time. If the system is disarmed within this time, no alarm signal will be communicated. (See "Zone TX Delay".)
NO = When an alarm occurs, the reporting code is transmitted immediately.

Note: TX Delay must be disabled on UL Listed systems.

Partition Label

PAR NAME LABEL (4)

Programming a partition name label. This label is programmed in the same manner as LCD messages or custom zone ID (see "Event Messages").

Note: The maximum length of the partition name label is 14 characters.

DELETE/COPY PARTITION

DELETE PARTITION (1)

Disables a partition.
If a partition is deleted, it does not erase any programming assigned to it, so if the installer decides to re-enable the partition, the programming is still there.

COPY PARTITION (2)

Copies a partition.
Copies the programming from one partition to another one. This includes the Customer ID Code, Partition Toggles, Partition Times and the Partition Name Label. The zone assignment is not copied.

MODULE HARDWARE

Enroll Module

ENROLL MODULE (0)

Each time a module is added, it must be enrolled on the system.
When adding modules to the system ensure that the power is off when connecting the COMBUS wiring.

LCD4500 KEYPADS (0)

'Press Any Key On Desired Unit' will be displayed on the keypad being used for programming. After the module has been added it will display its module number. Then press any key and the display will prompt with "Select (01)" on the top line of the LCD display. The second line of the display will prompt with 9 options. Options 01 through 08 are partition assignments, and options 09 is global keypad.

Note: To change the partition which a keypad assigned to, the keypad must be deleted and then re-enrolled with the new partition mask selected.

PC4400 RS-232 (1)

'Create Tamper On Desired Unit' will be displayed on the keypad being used for programming after the module has been chosen to be added. Open the tamper zone to enroll the module.

PC41XX ZONE EXP (2)

'Create Tamper On Desired Unit' will be displayed on the keypad being used for programming after the module has been chosen to be added. Open the tamper zone to enroll the module. Press any key to display which zones are added when the module is enrolled.

PC4216 16 O/P (3)

'Create Tamper On Desired Unit' will be displayed on the keypad being used for programming after the module has been chosen to be added. Open the tamper zone to enroll the module.

PC4204 4 O/P (4)

'Create Tamper On Desired Unit' will be displayed on the keypad being used for programming after the module has been chosen to be added. Open the tamper zone to enroll the module.

Note: The keypad being used to program with will indicate the module number after the module has been tampered. Make sure this number is recorded on the module programming work sheets.

Delete Module

DELETE MODULE (1)

To remove a module from the system, it must be first deleted.

Confirm Module

CONFIRM MODULE (2)

This is used to identify a module on the system in case the module number has been lost and further programming on that module is desired. Once the tamper is created the keypad display will indicate the module number.

EVENT BUFFER

EVENT BUFFER (3)	The installer can review the events stored in the event buffer by sending the contents of it to a printer.
PRN ENTIRE BUFF (0)	Printing out the event buffer through the PC4400 module. All events stored in the event buffer will be printed out. The event buffer can store up to 600 events.

Note: If the printer is left on line hooked up to the PC4400 (RS-232) module, it will always print out events as they occur.

DIAGNOSTICS

DIAGNOSTICS (4)

The Diagnostics function helps the installer to track down any problems that may be occurring with the modules. If this section is entered during the first minute after powering up the system, the selections Diagnostics, Binary Program, Memorize Vbat and Factory Default will be available to the installer. After the first minute, Diagnostics will automatically be selected.

DIAGNOSTICS (0)

The Diagnostics function helps the installer to track down any problems that may be occurring with the modules.
If there is no problem the keypad will display 'PC4020 System No Faults Found'.
If there is a problem, the keypad will display 'Error ... Module' along with 'E- T- LV-' and a number following one of them. The number represents a module (See Appendix C). The 'E' stands for a communications error, if the number follows the 'E', the main panel has lost communications with the module represented by the number. The 'T' stands for tamper, which means the tamper zone on the module has been activated. The 'LV' stands for low voltage, for when the module is not receiving enough voltage from the COMBUS. For example, if the display shows 'E- T-25 LV- ', this means the tamper on the PC4400 RS-232 module has been activated. The [<][>] keys are used to scroll through the display if there is more than one module with a trouble.

Note: The following items are available during the first minute after power up.

BINARY PROGRAM (1)

Normally used upon instruction from factory technical personal for specialized programming not covered by the standard programming instructions.

MEMORIZE VBAT (2)

Programs the battery offset voltage. Normally this is already set at the factory and need not be done again. To set the VBAT = 13.85 volts, remove the battery from the battery terminals. The battery terminals should now be output 13.85 volts. If it is not 13.85, turn the 'pot' above the heatsink until the voltage is the correct value. (If the voltage is 0 volts, check the battery fuse).

FACTORY DEFAULT (3)

The programming keypad will display the message 'Power System Down and Restart'. Remove all power to the main panel. This will erase all programming and reset the system to factory default settings. All modules will have to be re-enrolled.

INDEX
LCD Messages

This index of messages is useful for those familiar with the operation of the system and need a quick reference. First enter [✱][8][Installer's code], then the Quick Message Numbers for the option/function of interest.

Example:

AUX ENTRY DELAY, enter:
[✱][8][4020] ► (1) ► (0) ► (1)→(8) ► (2) ► (2)

► indicates sequence of entries, e.g. a number then(►) the next.

→ indicates a range of entries from which one is chosen, e.g. (1) to(→) (8).

T = Toggle

Symbols	Quick Message Numbers	Page
# OF RINGS	(0) ► (03) ► (6)	11
[A] AUD BUZZ	(0) ► (02) ► (1) ► T	8
[A] ENABLED	(1) ► (0) ► (1)→(8) ► (1) ► T	36
[A] SIL BELL	(0) ► (02) ► (1) ► T	8
[A] STDY BELL	(0) ► (02) ► (1) ► T	8
[F] BELL	(0) ► (02) ► (1) ► T	8
[F] BUZZER	(0) ► (02) ► (1) ► T	8
[F] ENABLED	(1) ► (0) ► (1)→(8) ► (1) ► T	36
[F] PULSE BELL	(0) ► (02) ► (1) ► T	8
[F][A][P] KEYS	(0) ► (04) ► (3) ► (06)	24
[P] ENABLED	(1) ► (0) ► (1)→(8) ► (1) ► T	36
[P] SIL BELL	(0) ► (02) ► (1) ► T	8
[P] SILENT BUZ	(0) ► (02) ► (1) ► T	8
[P] STDY BELL	(0) ► (02) ► (1) ► T	8
1200BAUD	(0) ► (08) ► (0) ► (2)	34
1ST NUMBER *(Communicator)*	(0) ► (04) ► (0) ► (0)	12
(Links)	(0) ► (04) ► (4) ► (0)	26
2 CALL TIMER	(0) ► (03) ► (5)	11
24 HR BELL *(Add)*	(1) ► (0) ► (1)→(8) ► (3) ► (0) ► WHICH ZONE ► (1) ► (06)	39
(Edit)	(1) ► (0) ► (1)→(8) ► (3) ► (1) ► WHICH ZONE ► (1) ► (06)	39
24HRBELL/BUZZ *(Add)*	(1) ► (0) ► (1)→(8) ► (3) ► (0) ► WHICH ZONE ► (1) ► (07)	39
(Edit)	(1) ► (0) ► (1)→(8) ► (3) ► (1) ► WHICH ZONE ► (1) ► (07)	39
24HRBUZZER *(Add)*	(1) ► (0) ► (1)→(8) ► (3) ► (0) ► WHICH ZONE ► (1) ► (08)	39
(Edit)	(1) ► (0) ► (1)→(8) ► (3) ► (1) ► WHICH ZONE ► (1) ► (08)	39
2400BAUD	(0) ► (08) ► (0) ► (3)	34
2ND MASTER CLOSE	(0) ► (04) ► (3) ► (14)	26
2ND MASTER OPEN	(0) ► (04) ► (3) ► (15)	26
2ND NUMBER *(Communicator)*	(0) ► (04) ► (0) ► (1)	12
(Links)	(0) ► (04) ► (4) ► (1)	26
300BAUD	(0) ► (08) ► (0) ► (0)	34
3RD NUMBER *(Communicator)*	(0) ► (04) ► (0) ► (2)	12
(Links)	(0) ► (04) ► (4) ► (2)	26
4204 MOD MAINT	(0) ► (04) ► (3) ► (12)	26
4204 OPTIONS	(0) ► (07) ► (1)	30
4216 CUSTOM	(0) ► (07) ► (3)	31
4216 OPTIONS	(0) ► (07) ► (2)	30
4400 MOD MAINT	(0) ► (04) ► (3) ► (13)	26
6 DIGIT CODE	(0) ► (02) ► (0) ► T	7
60 Hz LINE	(0) ► (02) ► (0) ► T	6
600BAUD	(0) ► (08) ► (0) ► (1)	34

A

ABORT REQ CODE	(1) ► (0) ► (1)→(8) ► (1) ► T	36
AC FAIL TX DELAY	(0) ► (04) ► (2) ► (2)	22
AC INHIBIT ARM	(0) ► (02) ► (0) ► T	6
AC TBL DISP	(0) ► (02) ► (0) ► T	6
ACCESS CODE	(0) ► (03) ► (4)	11
ADD NEW ZONE	(1) ► (0) ► (1)→(8) ► (3) ► (0)	38
ADD/EDIT PAR	(1) ► (0)	36
ALARM WHEN ARMED	(0) ► (01) ► (1) ► (1)	5
ALARM/RESTORE *(Phone #1)*	(0) ► (04) ► (0) ► (0) ► (2) ► T	19
(Phone #2)	(0) ► (04) ► (0) ► (1) ► (2) ► T	19
(Phone #3)	(0) ► (04) ► (0) ► (2) ► (2) ► T	19
ALARMS 1-16	(0) ► (07) ► (2) ► (1)→(9) ► (10)	30
ALARMS 17-32	(0) ► (07) ► (2) ► (1)→(9) ► (11)	30
ALARMS 33-48	(0) ► (07) ► (2) ► (1)→(9) ► (12)	30
ALARMS 49-64	(0) ► (07) ► (2) ► (1)→(9) ► (13)	30
ALARMS 65-80	(0) ► (07) ► (2) ► (1)→(9) ► (14)	30
ALARMS 81-96	(0) ► (07) ► (2) ► (1)→(9) ► (15)	30
ALARMS 97-112	(0) ► (07) ► (2) ► (1)→(9) ► (16)	30
ALARMS 113-128	(0) ► (07) ► (2) ► (1)→(9) ► (17)	30
ALARMS DISP	(0) ► (02) ► (0) ► T	6
ALL OTHERS *(Phone #1)*	(0) ► (04) ► (0) ► (0) ► (2) ► T	19
(Phone #2)	(0) ► (04) ► (0) ► (1) ► (2) ► T	19
(Phone #3)	(0) ► (04) ► (0) ► (2) ► (2) ► T	19
AUD.EXIT FAULT	(1) ► (0) ► (1)→(8) ► (1) ► T	37
AUD.EXIT URGEN	(1) ► (0) ► (1)→(8) ► (1) ► T	37
AUTO VER FIRE *(Add)*	(1) ► (0) ► (1)→(8) ► (3) ► (0) ► WHICH ZONE ► (1) ► (11)	40

(Edit)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) ▶ (11)	40
AUTOARM ENAB	(1) ▶ (0) ▶ (1)→(8) ▶ (1) ▶ T	37
AUTOARM SQUAWK	(1) ▶ (0) ▶ (1)→(8) ▶ (1) ▶ T	37
AUX ENTRY DELAY	(1) ▶ (0) ▶ (1)→(8) ▶ (2) ▶ (2)	37
AUX EXIT DELAY	(1) ▶ (0) ▶ (1)→(8) ▶ (2) ▶ (3)	37
AUXILIARY DELAY		
(Add)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (01)	39
(Edit)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) ▶ (01)	39

B

BAUD RATE	(0) ▶ (02) ▶ (0)	34
BELL AUDIBLE		
(Add)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (2) ▶ T	41
(Edit)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (2) ▶ T	41
BELL CUTOFF	(0) ▶ (02) ▶ (3) ▶ (2)	9
BELL PULSED		
(Add)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (2) ▶ T	41
(Edit)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (2) ▶ T	41
BELL SHUT DOWN	(0) ▶ (02) ▶ (0) ▶ T	6
BELL SQUAWK ON	(1) ▶ (0) ▶ (1)→(8) ▶ (1) ▶ T	36
BINARY PROGRAM	(4) ▶ (1)	45
BURG ONLY		
(SW Aux)	(0) ▶ (05) ▶ (02)	32
(Main Bell)	(0) ▶ (06) ▶ (02)	32
(Main PGM)	(0) ▶ (07) ▶ (0) ▶ (02)	32
(4204)	(0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (02)	32
(4216 custom)	(0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (02)	32
BUZZER FOLLOW		
(SW Aux)	(0) ▶ (05) ▶ (24)	33
(Main Bell)	(0) ▶ (06) ▶ (24)	33
(Main PGM)	(0) ▶ (07) ▶ (0) ▶ (24)	33
(4204)	(0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (24)	33
(4216 custom)	(0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (24)	33
BYPAS REQ CODE	(1) ▶ (0) ▶ (1)→(8) ▶ (1) ▶ T	36
BYPASS DISP	(0) ▶ (02) ▶ (0) ▶ T	6
BYPASS ENABLED		
(Add)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (2) ▶ T	41
(Edit)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (2) ▶ T	41

C

Change sys Mas	(0)▶ (02)▶ (0)▶ T	6
CHIME FOLLOWER		
(SW Aux)	(0) ▶ (05) ▶ (12)	32
(Main Bell)	(0) ▶ (06) ▶ (12)	32
(Main PGM)	(0) ▶ (07) ▶ (0) ▶ (12)	32
(4204)	(0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (12)	32
(4216 custom)	(0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (12)	32
CHIME FUNCTION		
(Add)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (2) ▶ T	40
(Edit)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (2) ▶ T	40
CHIME PULSE	(0) ▶ (07) ▶ (4) ▶ (3)	31
CLOSINGS	(0) ▶ (04) ▶ (3) ▶ (07)	26
COMBUS POWER		
(SW Aux)	(0) ▶ (05) ▶ (19)	33
(Main Bell)	(0) ▶ (06) ▶ (19)	33
(Main PGM)	(0) ▶ (07) ▶ (0) ▶ (19)	33
(4204)	(0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (19)	33
(4216 custom)	(0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (19)	33
COMMS ACTIVE		
(SW Aux)	(0) ▶ (05) ▶ (16)	33
(Main Bell)	(0) ▶ (06) ▶(16)	33
(Main PGM)	(0) ▶ (07) ▶ (0) ▶ (16)	33
(4204)	(0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (16)	33
(4216 custom)	(0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (16)	33
COMMS ENABLED	(0) ▶ (04) ▶ (1) ▶ T	22
COMMS FORMAT		
(Phone #1)	(0) ▶ (04) ▶ (0) ▶ (0) ▶ (1)	15
(Phone #2)	(0) ▶ (04) ▶ (0) ▶ (1) ▶ (1)	15
(Phone #3)	(0) ▶ (04) ▶ (0) ▶ (2) ▶ (1)	15
COMMS MISC	(0) ▶ (04) ▶ (2)	24
COMMS TOGGLES	(0) ▶ (04) ▶(1)	22
COMMUNICATOR	(0) ▶ (04)	14
CONFIRM MODULE	(2) ▶ (2)	43
COPY PARTITION	(1) ▶ (2)	42
COURTESY PULSE		
(SW Aux)	(0) ▶ (05) ▶ (11)	32
(MAIN Bell)	(0) ▶ (06) ▶ (11)	32
(Main PGM)	(0) ▶ (07) ▶ (0) ▶ (11)	32
(4204)	(0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (11)	32
(4216 custom)	(0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (11)	32
CREATE TAMPER ON DESIRED UNIT		
(Enroll)		
(4400)	(2) ▶ (0) ▶ (1)	43
(41XX)	(2) ▶ (0) ▶ (2)	43
(4216 custom)	(2) ▶ (0) ▶ (3)	43
(4204)	(2) ▶ (0) ▶ (4)	43
(Confirm)		
(4400)	(2) ▶ (2) ▶ (1)	43
(41XX)	(2) ▶ (2) ▶ (2)	43
(4216 custom)	(2) ▶ (2) ▶ (3)	43
(4204)	(2) ▶ (2) ▶ (4)	43
CUSTOM GROUP		
(4216 options)	((0) ▶ (07) ▶ (2) ▶ (1)→(9)	30
(4216 custom)	((0) ▶ (07) ▶ (3) ▶ (1)→(9)	31
CUSTOMER ID CODE	(1) ▶ (0) ▶ (1)→(8) ▶ (0)	36

D

DC INHIBIT ARM	(0) ▶ (02) ▶ (0) ▶ T	6
DEFAULT DIAL	(0) ▶ (04) ▶ (1) ▶ T	22
DELAY HOME AWAY		
(Add)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (05)	39
(Edit)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) ▶ (05)	39
DELAYED FIRE		
(Add)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (10)	40
(Edit)	(1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) ▶ (10)	40
DELETE MODULE	(2) ▶ (1)	43

DELETE PARTITION (1) ▶ (1) 42

DELETE ZONE (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (2) 38

DIAGNOSTICS
(Main Menu) (4) 45
(Option) (4) ▶ (0) 45

DIALER DIRECTION
(Phone #1) (0) ▶ (04) ▶ (0) ▶ (0) ▶ (2) 19
(Phone #2) (0) ▶ (04) ▶ (0) ▶ (1) ▶ (2) 19
(Phone #3) (0) ▶ (04) ▶ (0) ▶ (2) ▶ (2) 19

DISABLE LOCKOUT (0) ▶ (00) ▶ (3) ▶ (2) 4

DISP EXIT TIME (1) ▶ (0) ▶ (1)→(8) ▶ (1) ▶ T 36

DISPLAY CLOCK (1) ▶ (0) ▶ (1)→(8) ▶ (1) ▶ T 36

DLS CALLBACK (0) ▶ (03) ▶ (0) ▶ T 10

DLS NUMBER (0) ▶ (04) ▶ (4) ▶ (3) 26

DLS SECTION (0) ▶ (03) 10

DLS TOGGLES (0) ▶ (03) ▶ (0) 10

DOUBLE CALL (0) ▶ (03) ▶ (0) ▶ T 10

DOUBLE EOL (0) ▶ (02) ▶ (4) 9

DTMF ATTEMPTS (0) ▶ (04) ▶ (2) ▶ (0) 22

DTMF DIALING (0) ▶ (04) ▶ (1) ▶ T 20

DURESS OUPUT
(SW Aux) (0) ▶ (05) ▶ (23) 33
(Main Bell) (0) ▶ (06) ▶ (23) 33
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (23) 33
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (23) 33
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (23) 33

E

EDIT ZONE (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) 38

ENABLE LOCKOUT (0) ▶ (00) ▶ (3) ▶ (0) 4

ENROLL MODULE (2) ▶ (0) 43

ENTRY DELAY (1) ▶ (0) ▶ (1)→(8) ▶ (2) ▶ (0) 37

ENTRY FOLLOW
(SW Aux) (0) ▶ (05) ▶ (27) 33
(Main Bell) (0) ▶ (06) ▶ (27) 33
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (27) 33
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (27) 33
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (27) 33

EUROPE DIAL (0) ▶ (04) ▶ (1) ▶ T 21

EVENT BUFFER (3) 44

EVENT MESSAGES (0) ▶ (01) ▶ (1) 5

EXIT DELAY (1) ▶ (0) ▶ (1)→(8) ▶ (2) ▶ (1) 37

EXIT FOLLOW
(SW Aux) (0) ▶ (05) ▶ (26) 33
(Main Bell) (0) ▶ (06) ▶ (26) 33
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (26) 33
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (26) 33
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (26) 33

F

FACTORY DEFAULT (4) ▶ (3) 45

FAIL TO ARM (0) ▶ (01) ▶ (1) ▶ (0) 5

FAILURE TO COMM
(SW Aux) (0) ▶ (05) ▶ (15) 33
(Main Bell) (0) ▶ (06) ▶ (15) 33
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (15) 33
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (15) 33
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (15) 33

FIRE AND BURG
(SW Aux) (0) ▶ (05) ▶ (00) 32
(Main Bell) (0) ▶ (06) ▶ (00) 32
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (00) 32
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (00) 32
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (00) 32

FIRE ONLY
(SW Aux) (0) ▶ (05) ▶ (04) 32
(Main Bell) (0) ▶ (06) ▶ (04) 32
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (04) 32
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (04) 32
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (04) 32

FOLLOW 1-16 (0) ▶ (07) ▶ (2) ▶ (1)→(9) ▶ (18) 30

FOLLOW 17-32 (0) ▶ (07) ▶ (2) ▶ (1)→(9) ▶ (19) 30

FOLLOW 33-48 (0) ▶ (07) ▶ (2) ▶ (1)→(9) ▶ (20) 30

FOLLOW 49-64 (0) ▶ (07) ▶ (2) ▶ (1)→(9) ▶ (21) 30

FOLLOW 65-80 (0) ▶ (07) ▶ (2) ▶ (1)→(9) ▶ (22) 30

FOLLOW 81-96 (0) ▶ (07) ▶ (2) ▶ (1)→(9) ▶ (23) 30

FOLLOW 97-112 (0) ▶ (07) ▶ (2) ▶ (1)→(9) ▶ (24) 30

FOLLOW 113-128 (0) ▶ (07) ▶ (2) ▶ (1)→(9) ▶ (25) 30

FOLLOWS + ALARMS (0) ▶ (02) ▶ (0) ▶ T 7

FORCE ARM
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (2) ▶ T 41

(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (2) ▶ T 41

FORCED ANSWER
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (15) 41

(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) ▶ (15) 41

FORMATS
(Phone #1) (0) ▶ (04) ▶ (0) ▶ (0) ▶ (1) ▶ (00)→(18) 15
(Phone #2) (0) ▶ (04) ▶ (0) ▶ (1) ▶ (1) ▶ (00)→(18) 15
(Phone #3) (0) ▶ (04) ▶ (0) ▶ (2) ▶ (1) ▶ (00)→(18) 15

FROM WHICH PARTITION ?
(1) ▶ (2) ▶ (1)→(8) 42

FTC AUD BELL (0) ▶ (04) ▶ (1) ▶ T 23

G

GLOB [A] ENAB (0) ▶ (02) ▶ (0) ▶ T 8

GLOB [F] ENAB (0) ▶ (02) ▶ (0) ▶ T 7

GLOB [P] ENAB (0) ▶ (02) ▶ (0) ▶ T 8

GLOB DISP CLK (0) ▶ (02) ▶ (0) ▶ T 8

GLOB KYPD LOCK (0) ▶ (02) ▶ (0) ▶ T 8

GLOBAL KEYPAD (2) ▶ (0) ▶ (0) ▶ PRESS ANY KEY ON DESIRED UNIT ▶ (09) 7

GROUNDSTART
(SW Aux) (0) ▶ (05) ▶ (17) 33
(Main Bell) (0) ▶ (06) ▶ (17) 33
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (17) 33
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (17) 33
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (17) 33
(PGM Pulse Time) (0) ▶ (07) ▶ (4) ▶ (2) 31

H

HANDSHAKE (0) ▶ (08) ▶ (1) 34

HANDSHAKE OFF (0) ▶ (08) ▶ (1) ▶ T 34

HOURLY PRINT (0) ▶ (02) ▶ (0) ▶ T 7

I

INS LOCKOUT OPTS (0) ▶ (00) ▶ (3) 4

INSTALLER OPTS (0) ▶ (00) 4

INSTANT
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (02) 39
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) ▶ (02) 39

INT HOME AWAY
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (04) 39
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) ▶ (04) 39

INTERIOR
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (03) 39
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) ▶ (03) 39

INV BURG ONLY
(SW Aux) (0) ▶ (05) ▶ (03) 32
(Main Bell) (0) ▶ (06) ▶ (03) 32
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (03) 32
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (03) 32
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (03) 32

INV FIRE ONLY
(SW Aux) (0) ▶ (05) ▶ (05) 32
(Main Bell) (0) ▶ (06) ▶ (05) 32
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (05) 32
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (05) 32
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (05) 32

INV FIRE/BURG
(SW Aux) (0) ▶ (05) ▶ (01) 32
(Main Bell) (0) ▶ (06) ▶ (01) 32
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (01) 32
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (01) 32
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (01) 32

K

KEYPAD #1 GLOBE (0) ▶ (02) ▶ (0) ▶ T 8

KEYPAD TAMPERS (0) ▶ (02) ▶ (0) ▶ T 7

KEYPAD TOG OPT (0) ▶ (02) ▶ (1) 8

KISSOFF OUTPUT
(SW Aux) (0) ▶ (05) ▶ (18) 33
(Main Bell) (0) ▶ (06) ▶ (18) 33
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (18) 33
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (18) 33
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (18) 33

KISSOFF PULSE (0) ▶ (07) ▶ (4) ▶ (1) 31

KYPD #1 GLOBAL (0) ▶ (02) ▶ (0) ▶ T 7

KYPD LOCKOUT OPT (0) ▶ (02) ▶ (2) 9

KYPD LOCKOUT ? (1) ▶ (0) ▶ (1)→(8) ▶ (1) ▶ T 37

L

LATCHED STROBE
(SW Aux) (0) ▶ (05) ▶ (09) 32
(Main Bell) (0) ▶ (06) ▶ (09) 32
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (09) 32
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (09) 32
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (09) 32

LATCHING 24 HR
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (14) 40
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) ▶ (14) 40

LCD4500 KEYPADS
(Alarm) (0) ▶ (04) ▶ (3) ▶ (04) ▶ (0) 23
(Restore) (0) ▶ (04) ▶ (3) ▶ (05) ▶ (0) 24
(Enroll) (2) ▶ (0) ▶ (0) 43
(Delete) (2) ▶ (1) ▶ (0) 43
(Confirm) (2) ▶ (2) ▶ (0) 43

LINKS ANSWER (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (17) 41

LINKS SUP (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (16) 41

LINKS MODULE (0) ▶ (04) ▶ (14) ▶ (4) ▶ T 27

LINKS TOGGLES (0) ▶ (04) ▶ (14) ▶ (4) 27

LOCKOUT DURATION (0) ▶ (03) ▶ (2) ▶ (1) 9

M

MAIN BELL OUTPUT (0) ▶ (06) 29

MAIN ITEMS (0) ▶ (04) ▶ (0) 14

MAIN PGM OUT (0) ▶ (07) ▶ (0) 30

MAINTAINED ARM
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (13) 40
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) ▶ (13) 40

MEMORIZE VBAT (4) ▶ (2) 45

MILITARY TIME (0) ▶ (02) ▶ (3) ▶ T 7

MISC CLOSINGS (0) ▶ (04) ▶ (3) ▶ (08) 24

MISC OPENINGS (0) ▶ (04) ▶ (3) ▶ (10) 24

MOD TAMP ALARM (0) ▶ (04) ▶ (3) ▶ (04) 23

MOD TAMP RESTORE (0) ▶ (04) ▶ (3) ▶ (05) 24

MODULE HARDWARE (2) 3

MODULE NUMBER
(LCD4500) (2) ▶ (1) ▶ (0) ▶ (01)→(16) 43
(41XX) (2) ▶ (1) ▶ (2) ▶ (01)→(16) 43
(4216) (2) ▶ (1) ▶ (3) ▶ (1)→(9) 43
(4204) (2) ▶ (1) ▶ (4) ▶ (01)→(16) 43

MOMENTARY ARM
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (12) 40
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) ▶ (12) 40

N

NO EOL (0) ▶ (02) ▶ (4) 9

O

OPEN/CLOSE
(Phone #1) (0) ▶ (04) ▶ (0) ▶ (0) ▶ (2) ▶ T 19
(Phone #2) (0) ▶ (04) ▶ (0) ▶ (1) ▶ (2) ▶ T 19
(Phone #3) (0) ▶ (04) ▶ (0) ▶ (2) ▶ (2) ▶ T 19

OPENINGS (0) ▶ (04) ▶ (3) ▶ (09) 24

P

PANEL ID CODE (0) ▶ (03) ▶ (3) 11

PAR NAME LABEL (1) ▶ (0) ▶ (1)→(8) ▶ (4) 41

PAR TOGGLES (1) ▶ (0) ▶ (1)→(8) ▶ (1) 36

PARTITION AREA (1) 3

PARTITION STATUS
(SW Aux) (0) ▶ (05) ▶ (08) 32
(Main Bell) (0) ▶ (06) ▶ (08) 32
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (08) 32
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (08) 32
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (08) 32

PARTITION TIMES (1) ▶ (0) ▶ (1)→(8) ▶ (2) 37

PARTITION...X Y/N
(SW Aux) (0) ▶ (05) ▶ (00)-(08) 28
(SW Aux) (0) ▶ (05) ▶ (09)-(12), (14) 28
(Main Bell) (0) ▶ (06) ▶ (00)-(08) 29
(Main Bell) (0) ▶ (06) ▶ (09)-(12), (14) 29
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (00)-(08) 30
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (09)-(12), (14) 30
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (00)-(08) 30
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (09)-(12),(14) 30
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (00)-(08) 30
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (09)-(12), (14) 30

PC ID (0) ▶ (04) ▶ (1) ▶ T 20

PC ID RESTORES (0) ▶ (04) ▶ (1) ▶ T 21

PC ON AUTO ARM (0) ▶ (04) ▶ (1) ▶ T 20

PC41XX ZONE EXP
(Alarm) (0) ▶ (04) ▶ (3) ▶ (04) ▶ (2) 23
(Restore) (0) ▶ (04) ▶ (3) ▶ (05) ▶ (2) 24
(Enroll) (2) ▶ (0) ▶ (2) 43
(Delete) (2) ▶ (1) ▶ (2) 43
(Confirm) (2) ▶ (2) ▶ (2) 43

PC4204 4 O/P
(Alarm) (0) ▶ (04) ▶ (3) ▶ (04) ▶ (4) 24
(Restore) (0) ▶ (04) ▶ (3) ▶ (05) ▶ (4) 24
(Enroll) (2) ▶ (0) ▶ (4) 43
(Delete) (2) ▶ (1) ▶ (4) 43
(Confirm) (2) ▶ (2) ▶ (4) 43

PC4216 16 O/P
(Alarm) (0) ▶ (04) ▶ (3) ▶ (04) ▶ (3) 23
(Restore) (0) ▶ (04) ▶ (3) ▶ (05) ▶ (3) 24
(Enroll) (2) ▶ (0) ▶ (3) 43
(Delete) (2) ▶ (1) ▶ (3) 43
(Confirm) (2) ▶ (2) ▶ (3) 43

PC4400 RS-232
(Alarm) (0) ▶ (04) ▶ (3) ▶ (04) ▶ (1) 23
(Restore) (0) ▶ (04) ▶ (3) ▶ (05) ▶ (1) 24
(Enroll) (2) ▶ (0) ▶ (1) 43
(Delete) (2) ▶ (1) ▶ (1) 43
(Confirm) (2) ▶ (2) ▶ (1) 43

PERIODIC CALLUP (0) ▶ (03) ▶ (1) 11

PERIODIC DLS (0) ▶ (03) ▶ (0) ▶ T 10

PERIODIC TX ? (0) ▶ (04) ▶ (1) ▶ T 21

PGM 2ND MAS CODE (0) ▶ (00) ▶ (2) 4

PGM GRAND MASTER (0) ▶ (00) ▶ (1) 4

PGM INST CODE (0) ▶ (00) ▶ (0) 4

PGM OUTPUTS (0) ▶ (07) 30

PGM PULSE TIMES (0) ▶ (07) ▶ (4) 31

PGM TEL NUMBER
(Phone #1) (0) ▶ (04) ▶ (0) ▶ (0) ▶ (0) 12
(Phone #2) (0) ▶ (04) ▶ (0) ▶ (1) ▶ (0) 12
(Phone #3) (0) ▶ (04) ▶ (0) ▶ (2) ▶ (0) 12

PGM WALK TEST CD (0) ▶ (00) ▶ (3) 4

PH 1-2 BACKUP (0) ▶ (04) ▶ (1) ▶ T 22

PH 1-3 BACKUP (0) ▶ (04) ▶ (1) ▶ T 22

PH 2-3 BACKUP (0) ▶ (04) ▶ (1) ▶ T 22

PHONE NUMBER (0) ▶ (03) ▶ (2) 11

POWER SYSTEM DOWN AND RESTART (4) ▶ (3) ▶ T 45

POWER UP SHUNT (0) ▶ (02) ▶ (0) ▶ T 6

PRESS ANY KEY ON DESIRED UNIT
(Enroll) (2) ▶ (0) ▶ (0) 43
(Confirm) (2) ▶ (2) ▶ (0) 43

PRN ENTIRE BUFF (3) ▶ (0) 44

R

READY STATUS
(SW Aux) (0) ▶ (05) ▶ (20) 33
(Main Bell) (0) ▶ (06) ▶ (20) 33
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (20) 33
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (20) 33
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (20) 33

REMOTE OPERATION
(SW Aux) (0) ▶ (05) ▶ (25) 33
(Main Bell) (0) ▶ (06) ▶ (25) 33
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (25) 33
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (25) 33
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (25) 33

REPORTING CODES (0) ▶ (04) ▶ (3) 23

REST ON DISARM (0) ▶ (04) ▶ (1) ▶ T 20

RESTORE ON BTO (0) ▶ (04) ▶ (1) ▶ T 20

RING DETECT (0) ▶ (03) ▶ (0) ▶ T 10

RINGBACK (0) ▶ (04) ▶ (1) ▶ T 21

RINGBACK SQUAWK (0) ▶ (04) ▶ (1) ▶ T 21

RS-232 OPTIONS (0) ▶ (08) 34

S

SELECT PARTITION (2) ▶ (0) ▶ (0) ▶ PRESS ANY KEY ON DESIRED UNIT ▶ (01)→(08) 43

SEN RES REQ CD (1) ▶ (0) ▶ (1)→(8) ▶ (1) ▶ T 37

SENSOR RESET
(SW Aux) (0) ▶ (05) ▶ (07) 32
(Main Bell) (0) ▶ (06) ▶ (07) 32
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (07) 32
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (07) 32
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (07) 32

SET 24HR TIME
(Download) (0) ▶ (03) ▶ (1) ▶ (1) 11
(Test TX) (0) ▶ (04) ▶ (2) ▶ (4) ▶ (1) 23

SET CYCLE DAYS
(Download) (0) ▶ (03) ▶ (1) ▶ (0) 11
(Test TX) (0) ▶ (04) ▶ (2) ▶ (4) ▶ (0) 23

SHUT DOWN 24HRS (0) ▶ (04) ▶ (1) ▶ T 20

SINGLE EOL (0) ▶ (02) ▶ (4) 9

SQUAWK EN.DEL (1) ▶ (0) ▶ (1)→(8) ▶ (1) ▶ T 37

SQUAWK EX.DEL (1) ▶ (0) ▶ (1)→(8) ▶ (1) ▶ T 37

STANDARD DELAY
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (00) 39
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) ▶ (00) 39

STANDARD FIRE
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) ▶ (09) 40
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) ▶ (09) 40

SW AUX OUTPUT (0) ▶ (05) 28

SWGR SHUT DOWN
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (2) ▶ (T) 41
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (2) ▶ (T) 41

SWINGER LIMIT (0) ▶ (04) ▶ (2) ▶ (1) 22

SYS TOGGLE OPT (0) ▶ (02) ▶ (0) 6

SYSTEM AREA (0) 3

SYSTEM ID CODE (0) ▶ (04) ▶ (0) ▶ (3) 19

SYSTEM LABEL (0) ▶ (09) 35

SYSTEM MAINT (0) ▶ (04) ▶ (3) ▶ (11) 25

SYSTEM OPTIONS (0) ▶ (02) 6

SYSTEM TIMES (0) ▶ (02) ▶ (3) 9

T

TAMPERS INHIBIT (0) ▶ (02) ▶ (0) ▶ T 7

TEST CODE TX (0) ▶ (04) ▶ (2) ▶ (4) 23

TLM AND ALARM
(SW Aux) (0) ▶ (05) ▶ (14) 33
(Main Bell) (0) ▶ (06) ▶ (14) 33
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (14) 33
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (14) 33
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (14) 33

TLM + ALARM AUD (0) ▶ (04) ▶ (1) ▶ T 21

TLM AUD BELL (0) ▶ (04) ▶ (1) ▶ T 21

TLM ENABLED (0) ▶ (04) ▶ (1) ▶ T 21

TLM ONLY
(SW Aux) (0) ▶ (05) ▶ (13) 32
(Main Bell) (0) ▶ (06) ▶ (13) 32
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (13) 32
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (13) 32
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (13) 32

TO WHICH PARTITION ?
(1) ▶ (2) ▶ (1)→(8) ▶ (1)→(8) 42

TOTAL BAD CODES (0) ▶ (02) ▶ (2) ▶ (0) 9

TROUBLE OUTPUT
(SW Aux) (0) ▶ (05) ▶ (10) 32
(Main Bell) (0) ▶ (06) ▶ (10) 32
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (10) 32
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (10) 32
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (10) 32

TX CYCLE DAYS (0) ▶ (04) ▶ (4) ▶ (5) 9

TX CYCLE TIME (0) ▶ (04) ▶ (4) ▶ (6) 9

TX DELAY ?
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (2) ▶ (T) 41
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (2) ▶ (T) 41

U

URG.ENTRY DEL (1) ▶ (0) ▶ (1)→(8) ▶ (1) ▶ (T) 37

USER CALL UP (0) ▶ (03) ▶ (0) ▶ T 10

USER ENABS DLS (0) ▶ (03) ▶ (0) ▶ T 10

USER FN ANY CD (1) ▶ (0) ▶ (1)→(8) ▶ (1) ▶ T 37

UTIL REQ CODE (1) ▶ (0) ▶ (1)→(8) ▶ (1) ▶ T 37

UTILITY OUTPUT
(SW Aux) (0) ▶ (05) ▶ (06) 32
(Main Bell) (0) ▶ (06) ▶ (06) 32
(Main PGM) (0) ▶ (07) ▶ (0) ▶ (06) 32
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (06) 32
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(16) ▶ (06) 32

UTILITY/SENSOR (0) ▶ (07) ▶ (4) ▶ (0) 31

W

WHICH 4204
(Communicator) (0) ▶ (04) ▶ (3) ▶ (12) ▶ (01)→(16) 26
(PGM out) (0) ▶ (07) ▶ (1) ▶ (01)→(16) 30

WHICH4216 (0) ▶ (07) ▶ (2) ▶ (1)→(9) 30

WHICH OUTPUT
(4204) (0) ▶ (07) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) 30
(4216 custom) (0) ▶ (07) ▶ (3) ▶ (01)→(09) ▶ (01)→(16) 30

WHICH PARTITION
(Add) (1) ▶ (0) ▶ (1)→(8) 36
(Delete) (1) ▶ (1) ▶ (1)→(8) 36

WHICH ZONE ?
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) 37
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) 37
(Delete) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (2) ▶ (001)→(128) 41

X

XTAL TIMEBASE (0) ▶ (02) ▶ (0) ▶ T 6

Z

ZONE 1 SUP (0) ▶ (04) ▶ (4) ▶ (4) ▶ T 27

ZONE 2 ANSWER (0) ▶ (04) ▶ (4) ▶ (4) ▶ T 27

ZONE ALARM
(Rep Code) (0) ▶ (05) ▶ (3) ▶ (00) 23
(SW Aux) (0) ▶ (06) ▶ (21) 33
(Main Bell) (0) ▶ (07) ▶ (21) 33
(Main PGM) (0) ▶ (08) ▶ (0) ▶ (21) 33
(4204) (0) ▶ (08) ▶ (1) ▶ (01)→(16) ▶ (1)→(4) ▶ (21) 33
(4216 custom) (0) ▶ (08) ▶ (3) ▶ (01)→(16) ▶ (21) 33

ZONE ASSIGNMENT (1) ▶ (0) ▶ (1)→(8) ▶ (3) 38

ZONE FAULT (0) ▶ (01) ▶ (2) 5

ZONE FOLLOW (1) ▶ (0) ▶ (1)→(8) ▶ (22) 33

ZONE LABEL
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (0) 38
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (0) 38

ZONE OPTIONS
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (2) 41
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (2) 41

ZONE RESPONSE (0) ▶ (02) ▶ (3) ▶ (1) 9

ZONE RESTORE (0) ▶ (04) ▶ (3) ▶ (01) 23

ZONE SUPERVISION (0) ▶ (02) ▶ (4) 9

ZONE TAMPER (0) ▶ (01) ▶ (3) 5

ZONE TROB.REST (0) ▶ (04) ▶ (3) ▶ (03) 23

ZONE TROUBLE (0) ▶ (04) ▶ (3) ▶ (02) 23

ZONE TX DELAY (0) ▶ (04) ▶ (2) ▶ (3) 22

ZONE TYPE
(Add) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (0) ▶ WHICH ZONE ▶ (1) 38
(Edit) (1) ▶ (0) ▶ (1)→(8) ▶ (3) ▶ (1) ▶ WHICH ZONE ▶ (1) 38

INDEX
Keypad Functions

24 HR BELL/BUZZ 39

24 HR BUZZER 39

2ND GRAND MASTER CODE 26

6 DIGIT CODES 7

AC POWER
- AC FAILURE REPORTING CODE 25
- AC RESTORE REPORTING CODE 25
- AC FAILURE TX DELAY 22
- AC TROUBLE DISPLAY 6
- AC TROUBLE INHIBIT ARMING 6
- 60 HZ LINE 6

ACCESS CODE 13*/11
- USER ACCESS CODES 18*, 19*
- SYSTEM CODES 4, 11

ACCOUNT CODES
- PARTITION CODES 36
- SYSTEM ID CODE 19

ADD/EDIT PARTITION 36

ALARM MEMORY [*][3] 18*

AT HOME ARMING [*][9] 21*

ARMING 15*

AUDIBLE EXIT FAULT 37

AUDIBLE EXIT WITH URGENCY 37

AUTO ARMING 20*
- SET TIME 20*
- AUTOARM ENABLE 36
- AUTOARM ABORT REQUIRES CODE 36

AUTOARM ABORT REPORTING 24

AUTOARM CLOSINGS 24

AUTO BYPASSING/HOME-AWAY ARMING 16*

AUTO VERIFY FIRE 40

AUXILIARY ENTRY DELAY 37

AUXILIARY EXIT DELAY 37

AUXILIARY DELAY 39

BAUD RATE 34

BELL AUDIBLE 41

BELL CUTOFF 9

BELL PULSED 41

BELL SHUT DOWN 7

BELL SQUAWK 36
- ARMED/DISARMED 36
- AUTOARM 36

BELL SQUAWK ENTRY DELAY 37

BELL SQUAWK EXIT DELAY 37

BINARY PROGRAMMING 45

BURG ONLY 32

BUZZER FOLLOW MODE 33

BYPASS
- [*][1] COMMAND 7
- USER CODE REQUIRED 36

CALL DIRECTION 19
- PHONE NUMBER 1 19
- PHONE NUMBER 2 19
- PHONE NUMBER 3 19

CALLBACK ENABLE 10

CHANGE SYSTEM MASTER 6

CHIME 21*
- ENABLE 21*
- DURATION 31

CHIME FOLLOWER 32

CHIME FUNCTION 41

CLOCK
- SET 24 HOUR TIME 7
- SET DATE 7

CLOSINGS
- CLOSING BY USER 24
- MISC CLOSINGS REPORTING CODES 24
- QUICK ARM REPORTING CODE 24
- PARTIAL CLOSING REPORTING CODE 24
- AUTOARM REPORTING CODE 24

CODE ASSIGNMENT 18*, 19*

COMBUS POWER AND OPERATION 4*

COMBUS POWER 33

COMMUNICATOR 12
- PHONE NUMBER 1 12
- PHONE NUMBER 2 12
- PHONE NUMBER 3 12
- COMMUNICATIONS FORMAT 12
- CALL DIRECTION OPTIONS 19

COMMUNICATIONS ACTIVE 33

COMMUNICATIONS ENABLE 20

COMMUNICATOR MISCELLANEOUS 22
- DTMF ATTEMPTS 22
- SWINGER LIMIT 22
- AC FAIL TX DELAY 22
- ZONE TX DELAY 22

COMMUNICATOR TOGGLES 20
- COMMUNICATIONS ENABLE 20
- DTMF DIALING 20
- RESTORE ON BELL TIME OUT 20
- REST ON DISARM 20
- SHUT DOWN 24 HOURS 20
- REST ON DISARM 20
- PARTIAL CLOSING IDENTIFIED 24
- PARTIAL CLOSING ON AUTOARM 24
- PARTIAL CLOSING IDENTIFY RESTORALS 21
- TLM ENABLED 21
- TLM AUDIBLE 21
- FTC AUDIBLE BELL 21
- TLM AND ALARM AUDIBLE 21
- RINGBACK 21
- RINGBACK SQUAWK 21
- PERIODIC TRANSMISSION 21
- EUROPEAN DIAL 21
- DEFAULT DIAL 22
- PHONE 1-2 BACKUP 22
- PHONE 1-3 BACKUP 22
- PHONE 2-3 BACKUP 22

COMPUTER TELEPHONE NUMBER 11

CONFIRM MODULE 43
- LCD4500 KEYPAD 43
- PC4400 MODULE 43
- PC41XX MODULE 43
- PC4216 MODULE 43
- PC4204 MODULE 43

COPY PARTITION 42

COURTESY PULSE 32

CREATING A SYSTEM LAYOUT 3*

CUSTOM PROGRAM ARRAYS 31

DATE 15*

DC INHIBIT ARM 7

DEFAULT DIAL 22

DELAY HOME AWAY 39

DELAYED FIRE 40

DELETE MODULE 43
- LCD4500 KEYPAD 43
- PC4400 MODULE 43
- PC41XX MODULE 43
- PC4216 MODULE 43
- PC4204 MODULE 43

DELETE PARTITION 42

DELETE ZONE 38

DIAGNOSTICS 45
- DIAGNOSTICS 45
- BINARY PROGRAM 45
- MEMORIZE VBAT 45
- FACTORY DEFAULT 45

DISARMING 16*

DISABLE LOCKOUT 4

DISPLAY CLOCK 36

DISPLAY EXIT TIME 36

DLS CALL UP 10

DLS CALL BACK 10

DOUBLE CALL ENABLE 10

DOUBLE CALL TIMER 11

DOUBLE EOL 6

DOWNLOADING 25*
- DOWNLOADING OVER PHONE LINES 25*
- DOWNLOADING WITH AN ON-SITE 25*
- COMPUTER 25*

DOWNLOADING TOGGLES OPTIONS 10
- RING DETECT 10
- USER CALL UP 10
- DOUBLE CALL 10
- DLS CALL BACK 10
- PERIODIC DLS 10
- USER ENABLES DLS 10

DTMF ATTEMPTS 22

DTMF DIALING 20

**** Page references from Book 1 - System Manual.***

DURESS CODE 19*/20*

DURESS OUTPUT 33

DURESS REPORTING CODE 16

EDIT ZONE 38

EMERGENCY KEYS 24

ENABLE LOCKOUT 4

ENROLL MODULE 43
- LCD4500 KEYPAD 43
- PC4400 MODULE 43
- PC41XX MODULE 43
- PC4216 MODULE 43
- PC4204 MODULE 43

ENTRY DELAY 37
- STANDARD DELAY 39
- AUXILIARY DELAY 39

EUROPEAN DIAL 21

EVENT BUFFER 44
- PRINT ENTIRE EVENT BUFFER 44
- VIEW EVENT BUFFER 44

EVENT MESSAGES 5
- FAIL TO ARM 5
- ALARM WHEN ARMED 5

EXIT DELAY 37
- STANDARD DELAY 39
- AUXILIARY DELAY 39

EXIT FOLLOW 33

FACTORY DEFAULT 45

FAIL TO ARM 5

FAILURE TO COMMUNICATE 33

FIRE AND BURG 32

FIRE ONLY 32

FOLLOWS AND ALARMS 7

FORCE ARM ZONE(S) 41

FORCED ANSWER 41

FORMAT 12
- PHONE NUMBER 1 12
- PHONE NUMBER 2 12
- PHONE NUMBER 3 12
- OPTIONS 12

GLOB [A] ENAB 8

GLOB [F] ENAB 7

GLOB [P] ENAB 8

GLOB DISP CLK 8

GLOB KEYPAD LOCK 8

GLOBAL KEYPAD 43

GRAND MASTER CODE 4

GROUND START 31, 33

HANDSHAKE 34

HARDWARE RESET OF MEMORY TO FACTORY DEFAULT 6*

HOURLY PRINT 7

INHIBIT ARMING 6
- AC INHIBIT ARMING 7
- DC INHIBIT ARMING 7

INSTALLATION AND WIRING 3*
- SUGGESTED WIRING PROCEDURE 3*
- CREATING A SYSTEM LAYOUT 3*

INSTALLER'S CODE 4

INSTALLER'S OPTIONS 4
- PROGRAM INSTALLER'S CODE 4
- PROGRAM GRAND MASTER CODE 4
- PROGRAM 2ND MASTER CODE 4
- PROGRAM WALK TEST CODE 4
- INSTALLER'S LOCKOUT OPTIONS 4

INSTALLER'S PROGRAMMING - [*][8][INSTALLER'S CODE] 4

INSTANT 39

INTERIOR 39

INTERIOR HOME AWAY 39

INVERT BURG ONLY 32

INVERT FIRE ONLY 32

INVERT FIRE/BURG 32

KEYPAD #1 GLOBE 8

KEYPAD FUNCTIONS 13*
- ZONE BYPASS - [*][1] 16*
- TROUBLE DISPLAY - [*][2] 17*
- ALARM MEMORY DISPLAY - [*][3] 18*
- SENSOR RESET - [*][4] 18*
- USER CODE PROGRAMMING - [*][5] 18*
- USER FUNCTIONS - [*][6] 20*
- UTILITY OUTPUT - [*][7] 21*
- INSTALLER'S PROGRAMMING - [*][8] 21*
- AT HOME ARMING -[*][9] 21*
- QUICK ARM - [*][0] 22*
- QUICK EXIT - [*][0] 22*

KEYPAD LOCKOUT OPTIONS 9
- NUMBER OF BAD CODES 9
- LOCKOUT DURATION 9
- LOCKOUT REPORTING CODES 34

KEYPAD TAMPERS 7

KEYPAD TOGGLE OPTIONS 8
- [F] BELL AUDIBLE 8
- [F] PULSED BELL 8
- [F] BUZZER AUDIBLE 8
- [A] BELL AUDIBLE 8
- [A] PULSED BELL 8
- [A] AUDIBLE BUZZER 8
- [P] BELL AUDIBLE 8
- [P] PULSED BELL 8
- [P] BUZZER AUDIBLE 8

KEYPAD ZONES 22*

KISSOFF
- KISSOFF OUTPUT 33
- KISSOFF DURATION 31

LABELS
- USER CODE NAMES 19*
- PARTITION LABELS 41
- SYSTEM LABEL 35
- ZONE LABELS 38

LATCHED STROBE 32

LATCHING 24 HOUR 40

LCD4500 MODULES
- ENROLL 43
- DELETE 43
- CONFIRM 43
- TAMPER ALARM REPORTING CODES 23
- TAMPER RESTORAL REPORTING CODES 24
- [F][A][P] ALARM REPORTING CODES 23
- [F][A][P] RESTORAL REPORTING CODES 24

LCD MESSAGES 5
- FAIL TO ARM 5
- ALARM WHEN ARMED 5

LEAD IN REPORTING CODE 25

LEAD OUT REPORTING CODE 25

LINKS ANSWER 41

LINKS MODULE 26, 27

LINKS SUPERVISORY 41

LINKS TEST TRANSMISSION 27

LINKS TOGGLES 27
- LINKS MODULE 27
- LINKS TEST TRANSMISSION 27
- ZONE 1 SUPERVISORY 27
- ZONE 2 ANSWER 27

LINKS MODULE 26
- 1ST NUMBER 26
- 2ND NUMBER 26
- 3RD NUMBER 26
- DLS NUMBER 26
- LINKS TOGGLES 27
- TEST TRANSMISSION CYCLE DAYS 27
- TEST TRANSMISSION TIME 27

LOCKOUT DURATION 9

LOCKOUT REPORTING CODE

MAIN BELL OUTPUT 29

MAIN PGM OUTPUT 30

MAINTAINED ARM 40

MEMORIZE VBAT 45

MILITARY TIME 7

MISC CLOSING REPORTING CODE 24
- QUICK ARM 24
- PARTIAL CLOSING 24
- AUTO ARM ABORT 24
- AUTO ARM CLOSING 24
- KEYPAD LOCKOUT 24

MISC OPENING REPORTING CODE 24
- OPENING AFTER ALARM REPORTING CODE 24

MODULE SPECIFICATIONS 8*

**** Page references from Book 1 - System Manual.***

MODOULE TAMPER ALARM 23

MODULE TAMPER RESTORAL 24

MOMENTARY ARM 40

MOUNTING THE PANEL 4*

NUMBER OF RINGS 11

OPENING/CLOSING REPORTING CODES 19
- ACCESS CODES 19
- MISCELLANEOUS CLOSINGS 24
- MISCELLANEOUS OPENINGS 24

OPENINGS 24
- OPENINGS BY USER
- MISCELLANEOUS OPENINGS 24
- OPENING AFTER ALARM REPORTING 24
- CODE 24

PARTIAL CLOSING 24
- REPORTING CODE 24
- IDENTIFIED 18
- AUTO ARM 24

PARTITION 36
- ADD/EDIT 36
- DELETE 42
- COPY 42
- LABEL 42

PARTITION AREA 3

PARTITION LABEL 41

PARTITION STATUS 32

PARTITION TOGGLES 36
- [F] KEY ENABLE 36
- [A] KEY ENABLE 36
- [P] KEY ENABLE 36
- DISPLAY CLOCK 36
- DISPLAY EXIT TIME 36
- BYPASS REQUIRES CODE 36
- AUTO ARM ENABLED 36
- ABORT REQUIRES CODE 36
- AUTOARM SQUAWK 36
- BELL SQUAWK ENABLED 36
- KEYPAD LOCKOUT 37
- UTILITY REQUIRES CODE - [*][7] 37
- SENSOR RESET REQUIRES CODE - [*][4] 37
- USER FUNCTION ANY CODE - [*][6] 37
- BELL SQUAWK ON EXIT DELAY 37
- BELL SQUAWK ON ENTRY DELAY 37
- AUDIBLE EXIT FAULT 37
- AUDIBLE EXIT WITH URGENCY 37
- URGENCY ON ENTRY DELAY 37

PC4020 CONTROL PANEL WIRING DIAGRAMS 9*

PC4020 MAIN BOARD SPECIFICATIONS 7*

PC41XX MODULES
- ENROLL 43
- DELETE 43
- CONFIRM 43
- TAMPER ALARM REPORTING CODES 23
- TAMPER RESTORAL REPORTING CODES 24

PC4204 MODULES
- ENROLL 43
- DELETE 43
- CONFIRM 43
- TAMPER ALARM REPORTING CODES 23
- TAMPER RESTORAL REPORTING CODES 24

PC4116 MODULES
- ENROLL 43
- DELETE 43
- CONFIRM 43
- TAMPER ALARM REPORTING CODES 23
- TAMPER RESTORAL REPORTING CODES 24

PC4216 PROGRAMMABLE OUTPUTS 30

PC4400 MODULE
- ENROLL 43
- DELETE 43
- CONFIRM 43
- TAMPER ALARM REPORTING CODES 23
- TAMPER RESTORAL REPORTING CODES 24

PC ID 20

PC ON AUTO ARMING 20

PERIODIC CALL UP 11

PERIODIC DLS 10

PERIODIC DOWNLOAD ENABLE 10

PERIODIC TRANSMISSION 21

PGM OUTPUT LIST 32

PGM OUTPUTS 30
- MAIN PGM OUTPUT 30
- MAIN BELL OUTPUT 29
- SWITCHED AUX OUTPUT 28
- PC4204 OUTPUTS 30
- PC4216 OUTPUTS 30

PHONE 1-2 BACKUP 22

PHONE 1-3 BACKUP 22

PHONE 2-3 BACKUP 22

PHONE NUMBERS 11
- 1ST PHONE NUMBER 12
- 2ND PHONE NUMBER 12
- 3RD PHONE NUMBER 12
- DOWNLOADING PHONE NUMBER 26
- 1ST PHONE NUMBER (LINKS BACKUP) 26
- 2ND PHONE NUMBER (LINKS BACKUP) 26
- 3RD PHONE NUMBER (LINKS BACKUP) 26
- DOWNLOADING PHONE NUMBER (LINKS BACKUP) 26

PRINT ENTIRE EVENT BUFFER 44

PRINTER SETUP 24*

PRIORITY ALARMS/RESTORALS 24
- [F] KEY 24
- [A] KEY 24
- [P] KEY 24
- DURESS 24

PRINT EVENT BUFFER 44

PROGRAMMING ADDITIONAL ACCESS CODES 15

PROGRAMMING THE SYSTEM 5*

PROGRAM USER CODES [*][5] 18*

PROGRAM USER FUNCTIONS [*][6] 20*

QUICK ARM - [*][0] 22*
- ENABLE 22*
- REPORTING CODES 24

QUICK EXIT - [*][0] 22*

READY STATUS 33

REMOTE OPERATION 33

REPORTING CODES
- ZONE ALARMS 23
- ZONE RESTORALS 23
- ZONE TROUBLES 23
- OPENINGS 24
- MICS OPENINGS 24
- CLOSINGS 24
- [F][A][P] KEYS 24
- MODULE TAMPER ALARMS 23
- MODULE TAMPER RESTORALS 24
- SYSTEM MAINTENANCE 25
- PC4204 MAINTENANCE 26
- PC4400 MAINTENANCE 26
- SYSTEM TEST CODE 25
- KEYPAD LOCKOUT 24
- DOWNLOADING LEAD IN 25
- DOWNLOADING LEAD OUT 25

RESTORAL ON DISARM 20

RESTORAL REPORTING CODES
- ZONE 23
- TAMPER 24
- TROUBLE 25

RESTORAL ON BELL TIMEOUT 20

RING DETECT 10
- RING DETECT 10
- USER ENABLE RING DETECT 10

RINGBACK 21

RINGBACK SQUAWK 21

RS-232 OPTIONS 34
- BAUD RATE 34
- HANDSHAKE 34

SENSOR RESET - [*][4] 18*

SET NUMBER OF DAYS
- TEST CODE TRANSMISSION 23
- PERIODIC DOWNLOADING 11

SET 24 HOUR TIME 11, 23

SET DATE 7

STANDARD DELAY 39

STANDARD FIRE 40

SUGGESTED WIRING PROCEDURE 3*

SWITCHED AUX OUTPUT 28

SWINGER LIMIT 22

SWINGER SHUTDOWN 41
- ENABLE 41
- SWINGER LIMIT 22

**** Page references from Book 1 - System Manual.***

BELL SHUTDOWN 7

SYSTEM AREA 3

SYSTEM CODES 4
INSTALLER'S CODE 4
GRAND MASTER CODE 4
2ND MASTER CODE 4
WALK TEST CODE 4

SYSTEM ID CODE 19

SYSTEM KEYPAD FUNCTIONS 13*

SYSTEM LABEL 35

SYSTEM MAINTENANCE REPORTING CODES 25

SYSTEM MASTER CODE 4

SYSTEM OVERVIEW 2*

SYSTEM RESET

SYSTEM TIMES 9
ZONE RESPONSE TIME 9
BELL CUTOFF TIME 9

SYSTEM TOGGLE OPTIONS 7
ZONES EOL (END OF LINE) 7
CHANGE SYSTEM MASTER 7
POWER UP SHUNT 6
AC TROUBLE DISPLAY 6
60 HZ SIGNAL 6
AC FAILURE INHIBITS ARMING 6
LOW BATTERY INHIBITS ARMING 6
ALARMS DISPLAYED WHILE ARMED 6
BYPASS DISPLAYED WHILE ARMED 7
BELL SHUT DOWN 7
FOLLOWS AND ALARMS 7
6 DIGIT CODES 7
HOURLY PRINT 7
MILITARY TIME 7
KEYPAD TAMPERS 7
GLOB [A] ENAB 7
GLOB [F] ENAB 7
GLOB [P] ENAB 7
GLOB DISP CLK 8
GLOB KEYPAD LOCK 8
KEYPAD #1 GLOBE 8

SYSTEM TROUBLE COMBUS TROUBLE 18*

TAMPER REPORTING CODES 23, 24
LCD4500
PC4400
PC4116
PC4216
PC4204

TERMINAL CONNECTIONS 11*

TEST CODE TRANSMISSION 23
REPORTING CODE 23
SET 24 HOUR TIME 23
SET NUMBER OF DAYS 23

TEST TRANSMISSION TIME 23

TIMES 37
PARTITION ENTRY TIME 37
PARTITION EXIT TIME 37
PARTITION AUX ENTRY TIME 37
PARTITION AUX EXIT TIME 37

TLM AND ALARM 33

TLM AUDIBLE 21

TLM ENABLED 21

TLM ONLY 32

TOROID 10*

TOTAL BAD CODES 9

TRANSMISSION DELAY 41
TIME 41
ENABLE 41

TROUBLE
DISPLAY 17*
PGM OUTPUT 32
ZONE TROUBLE 23

TROUBLE DISPLAY 17*
BATTERY 17*
AC 17*
AUXILIARY SUPPLY 17*
TELEPHONE LINE TROUBLE 17*
FAILURE TO COMMUNICATE 17*
MAIL BELL TROUBLE 17*
FIRE TROUBLE 17*
LOSS OF TIME 17*
MODULE COMMUNICATION FAULT 17*
COMBUS LOW POWER 17*
INTERNAL FAULT 17*

TROUBLE OUTPUT 32

TX DELAY 41

UL LISTED COMMERCIAL AND RESIDENTIAL INSTALLATIONS 23*

URGENCY ON ENTRY DELAY 37

USER CALL UP 10

USER CODES
SYSTEM GRAND MASTER CODE 4/18*
2ND GRAND MASTER CODE 4/18*
SYSTEM MASTER CODE 18*
SUPERVISORY CODE 19*
ARM 19*
DISARM 19*
BYPASS 19*
DOOR STRIKE 19*
LOG 19*
DURESS 19*
ONE TIME USE (OTU) 19*

USER ENABLES DLS 10

USER FUNCTIONS - [*][6] 20*
QUICK ARM 20*
QUICK EXIT 20*
AUTO ARM CONTROL 20*
KEYPAD SETUP 21*
BELL/COMMUNICATIONS TEST 21*
DOOR CHIME 21*
SPECIAL MESSAGES 21*
USER CALL UP 21*

USER PROGRAMMING COMMANDS 18*

UTILITY OUTPUT - [*][7] 21*

VIEW EVENT BUFFER 15*

WALK TEST 4
WALK TEST CODE 4
LOCAL WALK TEST 21*
LOCAL AND COMMUNICATION TEST 21*
DISABLE WALK TEST 21*

ZONE 1 SUPERVISORY 27

ZONE 2 ANSWER 27

ZONE ALARMS 23, 33

ZONE ASSIGNMENT 38

ZONE BYPASSING 16*

ZONE DEFINITIONS
STANDARD DELAY 39
AUXILIARY DELAY 39
INSTANT 39
INTERIOR 39
INTERIOR HOME AWAY 39
DELAY HOME AWAY 39
24 HOUR BELL 39
24 HOUR BELL/BUZZER 39
24 HOUR BUZZER 39
STANDARD FIRE 40
DELAYED FIRE 40
AUTO VERIFY FIRE 40
MOMENTARY ARMING 40
MAINTAINED ARMING 40
LATCHING 24 HOUR 40
FORCED ANSWER 41
LINKS SUPERVISORY 41
LINKS ANSWER 41

ZONE END OF LINE (EOL) OPTION 6

ZONE FAULT 5

ZONE LABEL 38

ZONE LOOP RESPONSE 9

ZONE OPTIONS 41

ZONE RESTORAL REPORTING CODE 23

ZONE RESTORALS 23

ZONE TAMPER 5

ZONE TOGGLE OPTIONS 41
BELL AUDIBLE 41
BELL PULSED 41
BYPASS ENABLED 41
CHIME FUNCTION 41
FORCE ARM 41
SWINGER SHUT DOWN 41
TRANSMISSION DELAY 41

ZONE TRANSMISSION DELAY 22
TIME 22
ENABLE 41

ZONE TROUBLE REPORTING CODE 23

ZONE TROUBLES 23

ZONE TYPE 38

ZONE TYPE DEFAULT SETTINGS 38

**** Page references from Book 1 - System Manual.***

APPENDIX A

List of Available ASCII Characters

APPENDIX B

List of Diagnostics

E = Communication error
T = Tamper open
LV = Low voltage to module

Indicated # Number	For Future Use
1	
2	
3	
4	
5	
6	
7	
8	

Indicated Number	LCD4500 Module Number
9	1
10	2
11	3
12	4
13	5
14	6
15	7
16	8
17	9
18	10
19	11
20	12
21	13
22	14
23	15
24	16

Indicated Number	PC4400 RS-232 Module Number
25	1

Indicated Number	PC41XX Zone Module Number
26	1
27	2
28	3
29	4
30	5
31	6
32	7
33	8
34	9
35	10
36	11
37	12
38	13
39	14
40	For future use 15
41	For future use 16

Indicated Number	PC4216 O/P Module Number
42	1
43	2
44	3
45	4
46	5
47	6
48	7
49	8
50	9

Indicated Number	PC4204 O/P Module Number
51	1
52	2
53	3
54	4
55	5
56	6
57	7
58	8
59	9
60	10
61	11
62	12
63	13
64	14
65	15
66	16