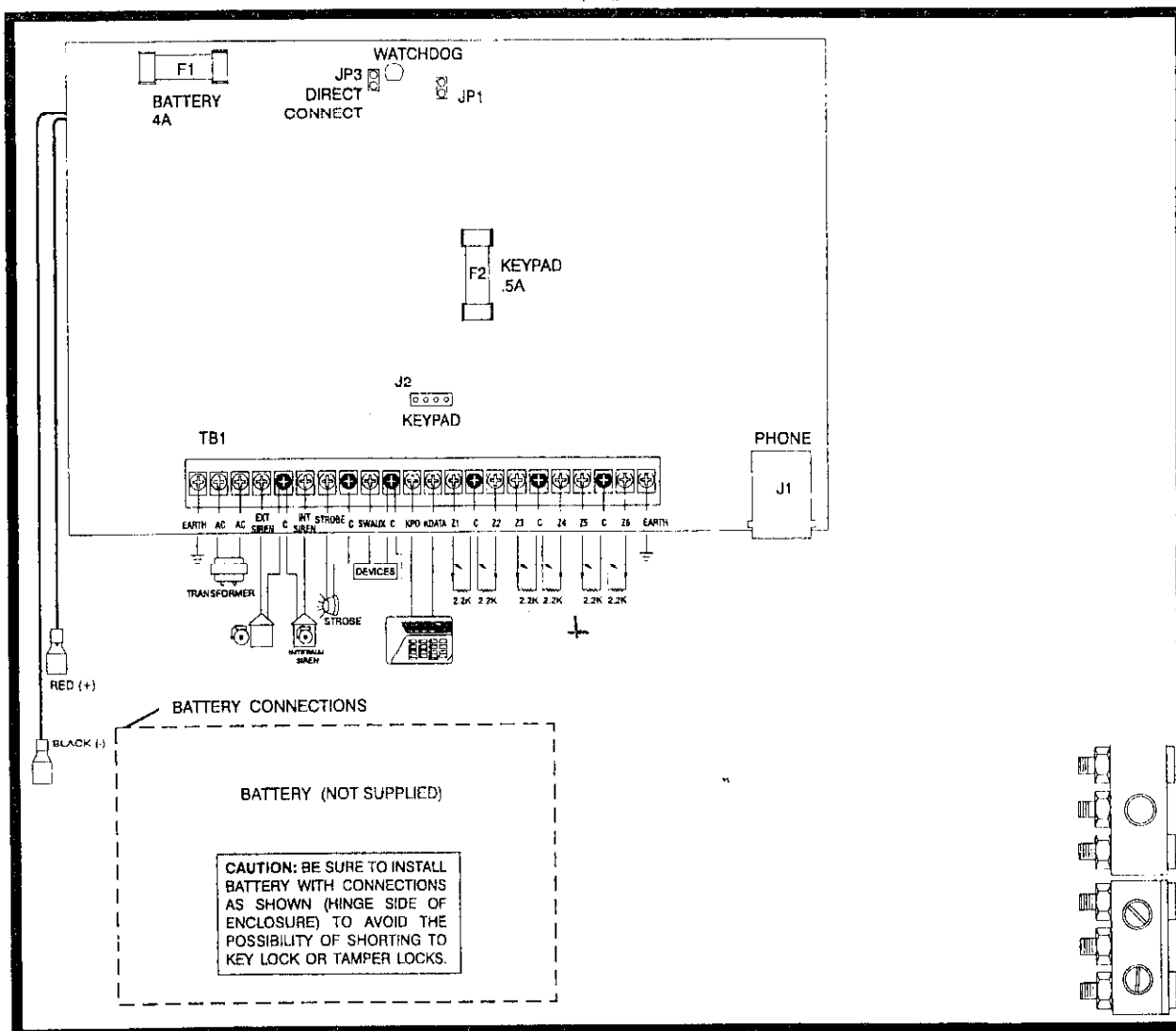


System 236i3AU Installation Manual



General Information

1. Nominal Loop Voltages:
 0.00 - 2.00 VDC = short
 2.00 - 3.25 VDC = normal
 3.25 - 5.00 VDC = open
 Nominal resistance @ 2.00 V = 1.47 K ohms
 Nominal resistance @ 3.25 V = 3.74 K ohms
2. **⊕** are electrically common.
3. External siren output = 0.75 A
4. Internal siren output = 0.75 A
5. Strobe output = 0.75 A
6. All outputs except keypad are electrically current limited.
7. Keypad/aux power output = 0.4 A (total)
8. External siren, internal siren and strobe should not exceed 1 A (combined)
9. Output currents are independent of battery state

Power Supply Information

1. Only use 12 VDC, 6.5 AH sealed lead-acid battery.
2. Battery is protected by a 4 A 5 mm x 20 mm fuse.
3. Replace the battery every 4 to 6 years.
4. Install transformer on unswitched power receptacle.
5. Transformer rating is 220 VAC, 50 Hz input, 16.5 VAC, 25 VA to 40 VA output.

Keypad Information

1. Do not exceed 4 keypads or maximum auxiliary power.
2. Protected by fuse F2, 0.5 A, 5 mm x 20 mm.
3. Subtract keypad power from AUX power total of 0.4 A.

C&K
SYSTEMS

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BEFORE YOU START

Scope of the manual

This manual contains basic installation and programming information for the System 236i3AU. For detailed information about using or programming the system, refer to the Alpha or LED Keypad manuals, or the Commander II/Monitor II Remote Programming manual.

Accuracy

This manual has been carefully checked for accuracy. However, C & K Systems assumes no liability for inaccuracies or actions resulting from the use of this manual. In addition, C & K reserves the right to modify the System 236i3AU hardware, software, and manual without prior notice.

CONNECTIONS

Standby Battery

The System 236i3AU is designed to operate with a 12 V, 6.5 Ah sealed lead-acid battery (C & K Model 1265). Do not use non-rechargeable batteries or batteries other than sealed lead-acid. Replace the standby battery every four to six years.

Connect the red lead to the battery positive terminal and the black lead to the battery negative terminal.

Fifteen minutes after power up, the panel will dynamically test the standby battery by interrupting mains power for two minutes and monitoring the battery under load.

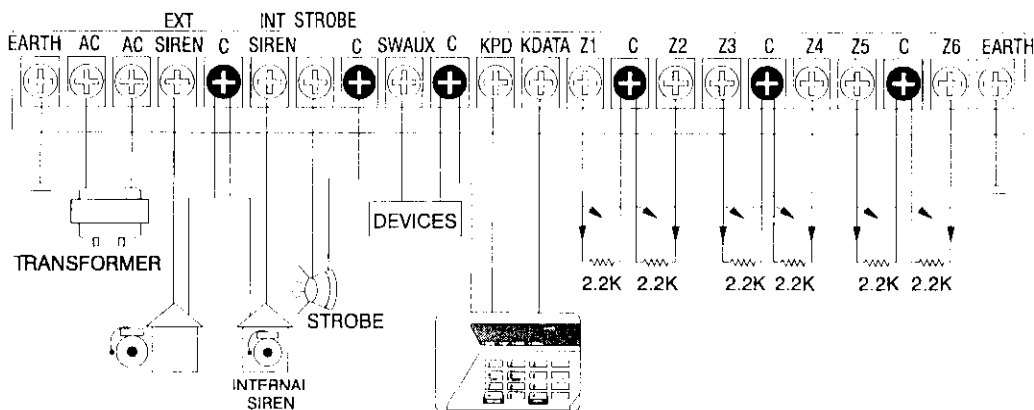
If you replace the standby battery after a SYSTEM TROUBLE-LOW BATTERY message, you must test the battery under load conditions. Press [*] [6] [4] [#] to start the dynamic battery test.

If replacement battery is discharged when installed, allow 24 hours to fully charge. After initial charge, deep discharge is prevented by a load shed circuit that disconnects the battery from load when voltage is below 10 VDC.

Standby Battery Time With One LED Keypad

AUX Power Drain*	Standby Time
50 mA	22 hours
250 mA	13 hours
500 mA	8 hours

* Total power for all keypads and auxiliary



Mains Power

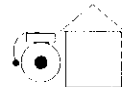
Mains power is supplied from a 16.5 VAC, 40 VA (25 VA min.) transformer at 50 or 60 Hz.

Connect the secondary of the transformer to the terminals labelled AC on the 236i3AU. Use at least 1.02 mm wire to reduce voltage drops. The primary side of the transformer must be connected to an un-switched receptacle. Secure the transformer to the wall.

Mains Power Failure

If a mains power failure lasts more than 60 minutes, the keypads will display a SYSTEM TROUBLE message. A mains failure report will be sent (if programmed). When mains power is restored for five minutes, a restoral report will be sent (if programmed).

- **DO NOT** share a secondary of the transformer with other devices. A foreign ground can damage the power supply, voiding warranty.
- **DO NOT** use transformers with a secondary rated less than 16.5 VAC at 25 VA.



External Siren

The EXT SIREN (+) terminal provides up to 0.75 amps, electronically protected at 8.0 - 13.2 VDC. **WARNING:** Total current from external siren, internal siren and strobe must not exceed 1.0 AMP. The panel has a voltage monitor circuit that will issue a bell fuse warning if the panel is overloaded, or when the panel is operating on battery and the battery is reaching depletion. At installation, test the panel under maximum load to verify the panel can supply the load attached.

Some sirens or strobes may have a listed current rating that would appear not to overload the panel, but causes the output to pulse or shutdown. In this case a 470 uf, 25 V capacitor in parallel with the device may correct the problem. (Make sure to connect the capacitor (+) to the output and (-) to common.



Internal Siren

The SIREN (+) terminal provides up to 0.75 amps at 8.2 - 13.2 VDC. **WARNING:** The total current draw on the external siren, internal siren and strobe terminals must not exceed 1.0 AMP. The internal siren is electronically protected (see external siren).



Strobe

The STRB (+) terminal provides up to .75 A. The strobe will latch on if an alarm condition occurs. Reset the terminal by entering a valid user combination. Strobe can be programmed as an indicator of arming and disarming (CL19). Strobe is electronically protected (see external siren).

Switched Auxiliary Power

The AUX (+) terminal provides up to .4 ADC positive 10-14.4 VDC power for devices that require switched power for resetting. Typical devices include glassbreak and smoke detectors. The terminal labelled C provides the power common and is also used for keypad common. Switched AUX is also electronically protected.

The maximum power available at the AUX (+) and KEY (+) terminals is 400 mA. Do not exceed 400 mA for all keypads and auxiliary devices.

The enclosure door on the System 236i3AU must be grounded. Connect the grounding strap from terminal 1 on the printed circuit board (PCB) to the door. A ground wire should also be run from either terminal 1 or 22 to a suitable earth ground.



Arming Stations

Up to two Alpha or four LED keypads can be wired to the System 236i3AU. KEY (+) terminal provides 10.4-14.4 VDC keypad power. C (-) terminal (black) is common, and also used for AUX. DATA terminal (green) is for data from the keypad to the panel.

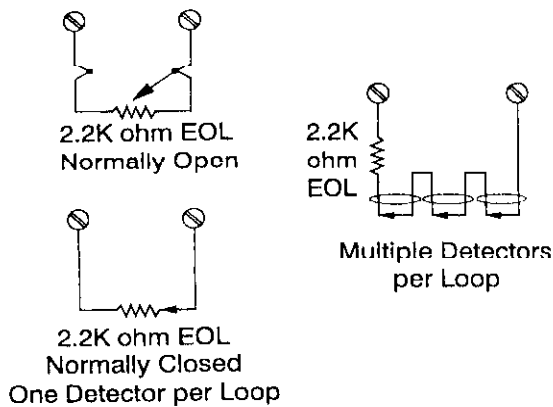
Maximum wire length for any keypad is 152 m of 0.643 mm copper wire.

Under idle conditions, each Alpha keypad uses 60 mA of power, and each LED keypad uses 35 mA, these are worst case calculations. Total power used by all keypads and auxiliary devices must not exceed 400 mA.

Fuse F2: The KEY (+) terminal is protected by a 0.5 amp, 5 mm x 20 mm fast-blow fuse (F2). If any fuse opens, remove mains and DC power, remove the short or overload condition, then replace the fuse before restoring power. Do not substitute a higher rated fuse.

LOOP INPUTS

Each loop is independently configured through programming. Loops are wired to use a 2.2K ohm end of line (EOL) resistor. Loop response time is programmable from 20 ms to 500 ms in command location CL20.



Keyswitch Arming/Disarming

The System 236i3AU is capable of using any, or multiple, zones for arming and disarming. Keyswitch zones must be programmed for that function (CL 1E) and dedicated for that use.

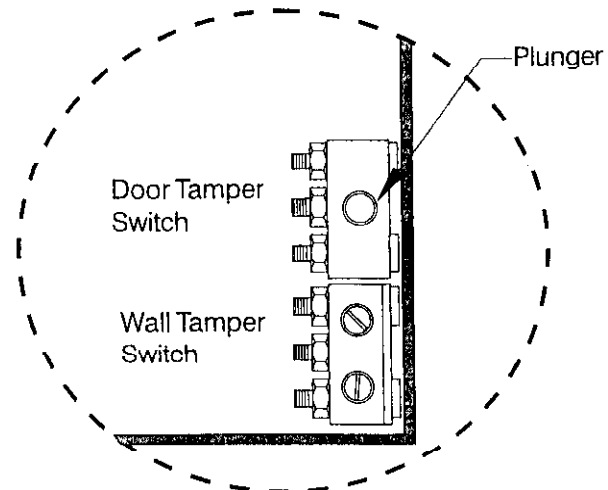
The zone is set up as a standard EOL zone and can be programmed for either a momentary or steady state switch. Wired as an EOL zone the switch can be either normally open or normally closed, see loop inputs. In either case the normal state is disarm and changing state will arm the panel. When using keyswitch arming the zone response time should be set to 500 ms, CL 20)

TAMPER SWITCH INSTALLATION

C & K has designed the System 236i3AU cabinet to use the Ademco Model 19 tamper switch. The cabinet is constructed in order to accommodate two switches. One tamper for the cover and a second switch for a wall tamper. To install the tamper switches:

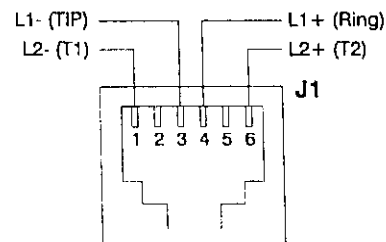
1. Position the tamper switch in the lower right corner of the cabinet. For wall tamper, the plunger should go through the small hole in the back of the cabinet. For the door tamper, the plunger should face out from the cabinet. Refer to drawing below.
2. Connect the tamper switches in series and wire the tamper terminals to a dedicated zone of the control panel.
3. Program the dedicated zone as desired: NC, EOL, 24-hour, etc.

Once the tamper switches are installed, opening the cabinet door or removing the cabinet from the wall will result in a tamper signal at the panel.



TELEPHONE INTERFACE

The 236i3AU uses a 6 pin Telco socket at the PCB. Wiring of the socket is as shown.



KEYPAD SETUP

Each Alpha and LED keypad installed in the system must have an address. Addresses must not be repeated. When replacing a keypad, make sure the replacement has the same address as the previous keypad. After all keypads have been addressed, reset the panel by removing and restoring both mains and DC power.

Addressing Alpha Plus Keypads

The first time you power up the system, unaddressed Alpha keypads will display KEYPAD ADDRESS?. Press any number from 0 through 7 at each keypad. The exact number you press is not important, as long as no other keypad has the same number.

Addressing LED Keypad

There are two jumpers on the LED keypad's PCB. Jumper W1 and W2 are used to set the address of the LED keypad. Refer to the chart below.

Any address from 8 to 11 can be used. The exact number is not important, as long as no other keypad in the system has the same number.

W1	W2	Keypad Address
Installed	Installed	8
Removed	Installed	9
Installed	Removed	10
Removed	Removed	11

PROGRAMMING THE PANEL

You can program the System 236i3AU from the LED or Alpha Plus keypad, or remotely using C & K's Commander II software. This installation manual contains a brief description of all System 236i3AU programming options. Detailed programming information can be found in the Commander II/Monitor II operating manual.

To Start Keypad Programming

Key in the [Installer Combination] [*] [0] [#]. The default installer combination is 0 1 2 3 4 5. On the LED keypad, the ARM, SERVICE, and POWER LED's will flash to indicate programming mode. The Alpha Plus keypad will display CMD DATA across the top of the LCD display to indicate programming mode.

Programming With The LED Keypad

Programming with the LED keypad is a one-step process. Key in the two digit address [Command Location] followed by the desired programming values, then press the [#] key. The LED keypad does not display programming values. If you are not sure that the correct programming values have been entered, program the Command Location again.

Programming With The Alpha Plus Keypad

Entering program data with an Alpha Plus keypad is a two step process. First, key in the two digit address [Command Location] you wish to program, followed by the [#] key. The keypad displays the programmed values previously stored in that location. Second, enter the new data to be stored in that location and press the [#] key to store the data. You can also scroll through the Command Locations in numerical order by alternately pressing and releasing the [#] key.

The last three Command Locations are CL 25, CL AO, and CL AD. When you press the [#] key at these locations, the program will advance to CL 26, SL A1, or CL AE. These locations are not used in the System 236i3AU; if you enter CL 26, CL A1, or CL AE, either press [*] [#] to exit programming, or press the Command Location number and [#] for the programming location you want.

To Exit Programming

When you have finished programming, press [*] [#]. The panel will also exit the programming mode if you do not press any key within a five minute period.

Direct Connect

When using a computer to locally program the panel, the direct connect jumper JP3 must be removed. After programming replace jumper. Additional information about programming the panel using the Direct Connect feature is available in the Commander II/Monitor II operating manual.

Note: Commander II/Monitor II operating manual indicates that JP3 should be shorted, DISREGARD for the 236i3AU.

ALPHA KEYPAD PROGRAMMING

After wiring the Alpha keypads to the System 236i3AU, apply power to the panel. You can only program when the panel is disarmed.

Note: Programming the Keypad is not the same as Keypad Programming.

You can program the Alpha keypads for the 6 zone labels and special messages. Zone labels display during the walk-test and when the [#] key is pressed during alarm memory or faults. The programmable Service Message is displayed during mains failure, fuse failure, communications failure, low battery, or Watchdog reset. The Dealer Message displays when the System 236i3AU is disarmed.

These messages can be remotely programmed or programmed from each Alpha keypad. Remote programming instructions are found in the Commander II/Monitor II operating manual.

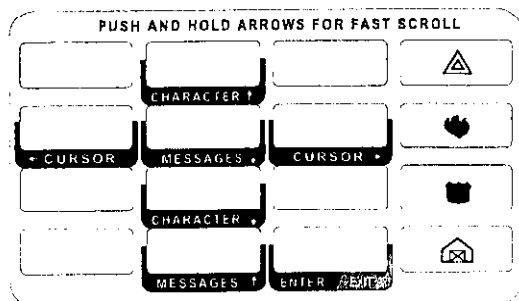
Local Alpha keypad programming is initiated by entering [Installer Combination] [*] [0] [1] [#]. The keypad will display SERVICE MESSAGE?. Press the [BYPASS] key to scroll through all the messages. If you scroll past the desired message, press and release the [BYPASS] key until you scroll to it again. You can also scroll in reverse by pressing the [*] key followed by the [BYPASS] key.

The scrolling order of the Alpha Plus messages is:

- SERVICE MESSAGE
- DEALER MESSAGE
- SOFT ZONE IDENTIFIER
- HARDWIRED LOOP IDENTIFIERS
- KEYPAD ADDRESS

Press [*] [#] to exit Programmin Mode.

NOTE: If you do not press a key for five minutes, the keypad will automatically exit the Programming Mode.



How to Program Letters and Numbers

The Alpha keypad can be customized to display different messages for the loops and special functions. Place the Alpha Template over the keypad keys. You can easily program 6 hardwired loop identifiers, soft zone identifier, a Dealer Message, Service Message, and the keypad address. Up to 16 characters can be programmed on the bottom line of the display.

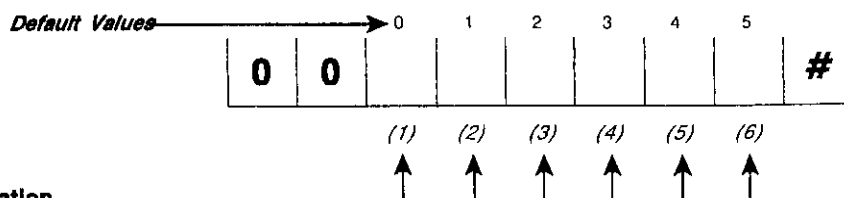
Letters can easily be entered from the Alpha Plus keypad by using a combination of the soft zone keys and the number keys. A color coded template is used to make entering letters easier. Referring to the figure above, the top letter of each group is red. The [E] key also has a red border. Pressing the [E] key followed by the [1] key will program the letter "A" into the keypad. Pressing the [F] key (color coded black) and the [1] will program the letter "B" and pressing the [P] key (color coded green) and the [1] key will program the letter "C". The soft zone keys are also labelled Top, Center, and Bottom, respectively.

WATCHDOG INDICATOR

The System 236i3AU microprocessor is constantly monitored by an advanced circuit. As long as the panel is powered and operating normally, the DS1 LED on the PCB will flash. If the Watchdog circuit detects a failure, it will reset the panel and make the DS1 LED light steadily.

Notes:

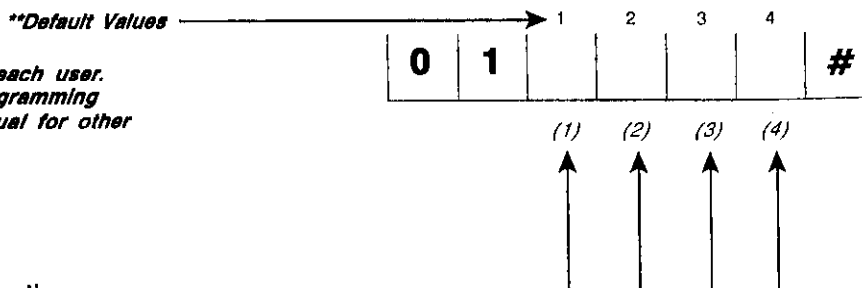
Command Location 00: Installer Combination



Digit Positions (1) - (6): Installer Combination

Combination must have 6 digits. Valid entries are 0 - 9.

Command Location 01 - 06: Personal Identification Number (PIN)



**** Default Values are different for each user.
Refer to the SYSTEM 236i3AU Programming
Worksheet at the end of this manual for other
user default values.**

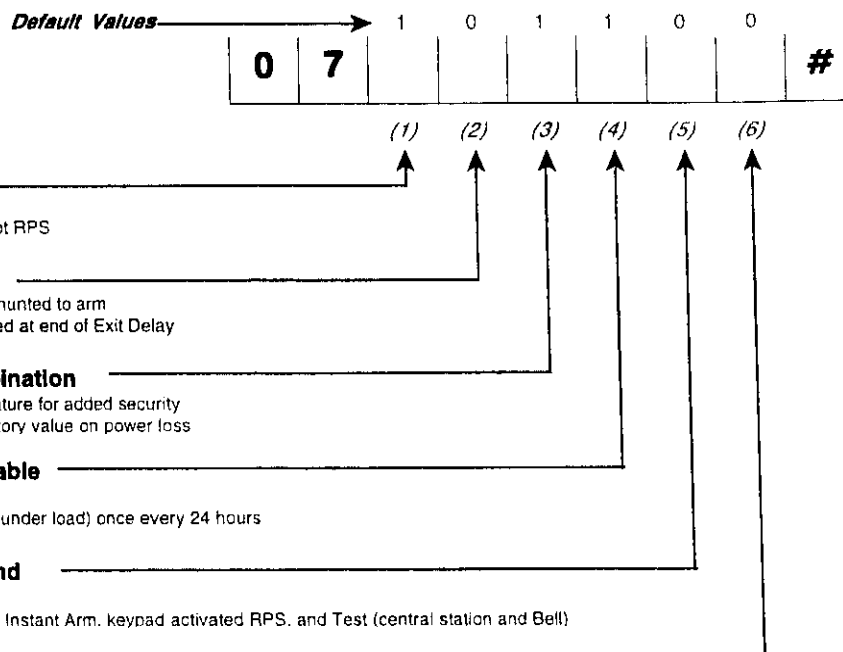
01 = User #1 (Master) 04 = User #4
02 = User #2 05 = User #5
03 = User #3 06 = User #6 (Duress)

Digit Positions (1) - (4): Arming Combination

Combination must have 4 digits. Valid entries are 0 - 9.

Master Combination can be used to change other combinations.

Command Location 07: Panel Control Options



Digit Position (1): Local System Only

0 = No
1 = Yes: disables all communications except RPS

Digit Position (2): Faulted Arming Type

0 = Goof-Proof: zones must be normal or shunted to arm
1 = Force Arm: faulted zones will be shunted at end of Exit Delay

Digit Position (3): Default Installer Combination

0 = No: this enables the Pirate-Guard™ feature for added security
1 = Yes: combination changes back to factory value on power loss

Digit Position (4): Daily Battery Test Enable

0 = No
1 = Yes: performs a 2-minute battery test (under load) once every 24 hours

Digit Position (5): Combination Command

0 = No
1 = Yes: requires combination for Bypass, Instant Arm, keypad activated RPS, and Test (central station and Bell)

Digit Position (6): Bell Reverse

0 = No
1 = Yes: supplies bell voltage in non-alarm state; bell requires external power supply

Command Location 08: Telco Control Options

Default Values → 3 1 2 2 0 1

0	8							#
		(1)	(2)	(3)	(4)	(5)	(6)	

Digit Position (1): Dial Retry Count →

1 = 1 attempt
2 = 2 attempts
3 = 3 attempts

Number of times the panel will try to send a report before signalling a "Failure to Communicate".

Digit Position (2): Dial Type →

0 = Touchtone DTMF (5/sec)
1 = Pulse (10/sec)

Digit Position (3): Receiver Format 1 →

1 = CFSK III	5 = Fast "A", 3/1 Extended	9 = Slow "B", 3/1 Extended
2 = Ademco DTMF 4/9 Extended	6 = Fast "A", 4/2	A = Slow "B", 4/2
3 = Ademco DTMF 4+2 Express	7 = Sumcheck 2300 Hz, 3/1 Extended	B = Sumcheck 1400 Hz, 3/1 Extended
4 = Personal Dialing	8 = Sumcheck 2300 Hz, 4/2 Extended	C = Sumcheck 1400 Hz, 4/2 Extended

Digit Position (4): Receiver Format 2 →

1 = CFSK III	5 = Fast "A", 3/1 Extended	9 = Slow "B", 3/1 Extended
2 = Ademco DTMF 4/9 Extended	6 = Fast "A", 4/2	A = Slow "B", 4/2
3 = Ademco DTMF 4+2 Express	7 = Sumcheck 2300 Hz, 3/1 Extended	B = Sumcheck 1400 Hz, 3/1 Extended
	8 = Sumcheck 2300 Hz, 4/2 Extended	C = Sumcheck 1400 Hz, 4/2 Extended

Digit Position (5): RPS Enable →

0 = No
1 = Yes: allows remote programming to start from off-premise location

Digit Position (6): Enable Keypad RPS →

0 = No
1 = Yes: allows remote programming to start from on-site keypad command

Command Location 09: Account Number 1

Default Values → 0 0 0 0 0 0

0	9							#
		(1)	(2)	(3)	(4)	(5)	(6)	

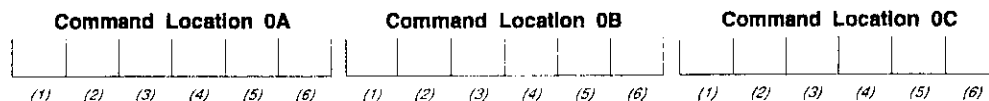
Digit Positions (1) - (6): Account #1 →

Valid entries are 0 - F. Entries 0 and A both transmit 10 pulses. The account number is right justified. The last digit must be in Position (6).
For 3-digit account numbers, use Positions (4) - (6).
For 4-digit account numbers, use Positions (3) - (6).
For 6-digit account numbers, use Positions (1) - (6).
Fill left-hand used Positions with any values. They will not be used by the system.

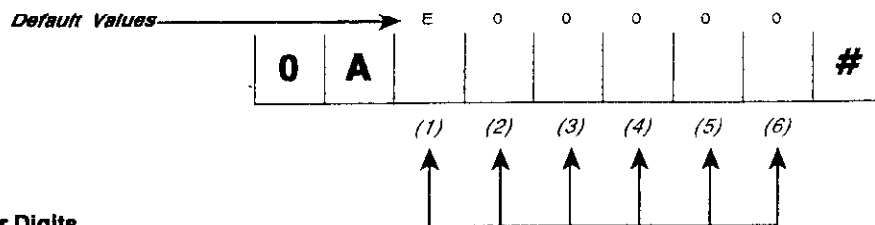
CL 0A - 0C

Receiver #1 Phone Number

Order in which the numbers will be dialed



Command Location 0A: Receiver #1 Phone Number (Digits 1 - 6)

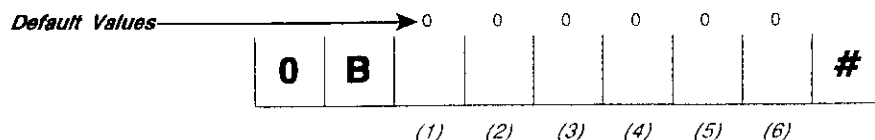


Digit Positions (1) - (6): Phone Number Digits

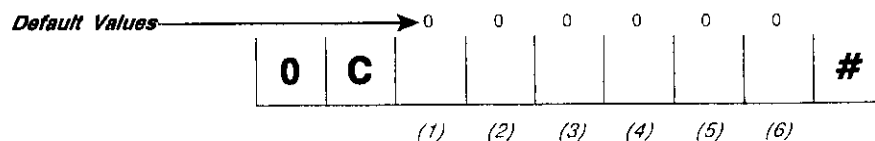
- 0 - 9 = dialing digits
- * 0 = dial tone detect
- * 2 = * (DTMF dialing only, not used for pulse dialing)
- * 3 = # (DTMF dialing only, not used for pulse dialing)
- * 4 = end of number
- * 5 = 5 second delay

Digit (1) is dialed first.
You must place a * 4 (EON) after the last digit to be dialed. Fill in remaining positions with 0. The zeroes will not be dialed.

Command Location 0B: Receiver #1 Phone Number (Digits 7 - 12)



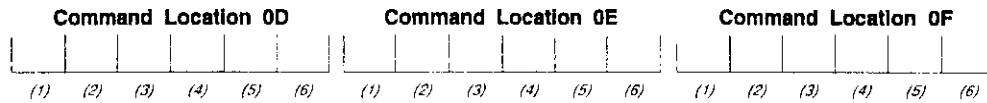
Command Location 0C: Receiver #1 Phone Number (Digits 13 - 18)



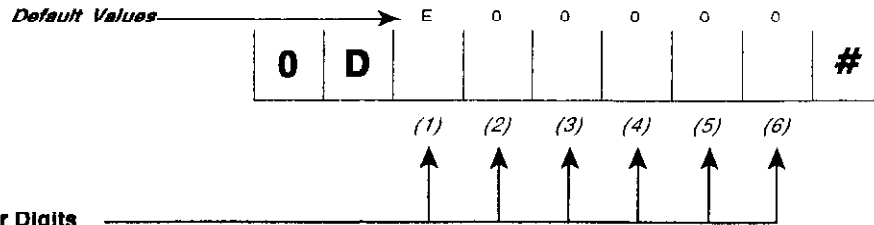
PROGRAMMING CONVERSIONS	
Hexadecimal Value	Key Strokes
A	* 0
B	* 1
C	* 2
D	* 3
E	* 4
F	* 5

Receiver #2 Phone Number

Order in which the numbers will be dialed



Command Location 0D: Receiver #2 Phone Number (Digits 1 - 6)

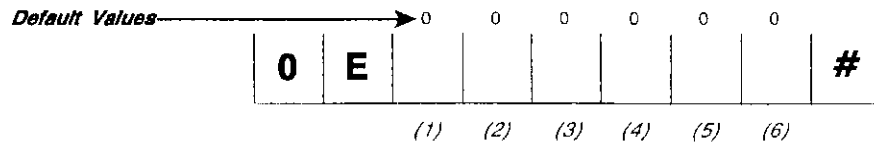


Digit Positions (1) - (6): Phone Number Digits

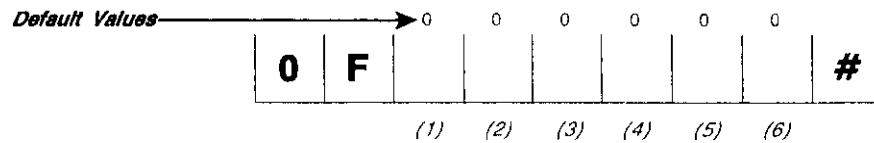
0 - 9 = dialing digits
 *0 = dial tone detect
 *2 = * (DTMF dialing only, not used for pulse dialing)
 *3 = # (DTMF dialing only, not used for pulse dialing)
 *4 = end of number
 *5 = 5 second delay

Digit (1) is dialed first.
You must place a * 4 (EON) after the last digit to be dialed. Fill in remaining positions with 0.
The zeroes will not be dialed.

Command Location 0E: Receiver #2 Phone Number (Digits 7 - 12)



Command Location 0F: Receiver #2 Phone Number (Digits 13 - 18)

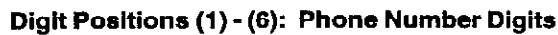


PROGRAMMING CONVERSIONS	
Hexadecimal Value	Key Strokes
A	* 0
B	* 1
C	* 2
D	* 3
E	* 4
F	* 5

[REDACTED]

Order in which the numbers will be dialed

Command Location 10						Command Location 11						Command Location 12					
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)



- Digit (1) is dialed first.**
You must place a 4 (EON) after the last digit
to be dialed. Fill in remaining positions with 0.
The zeroes will not be dialed.



Command Locations 13: Event Reports

Default Values

1	3				#
---	---	--	--	--	---

(1)

(2)

(3)

Digit Positions (1): Event Report Receiver Select

Shunts, All Restores, Status

- 0 = Receiver #1 with Receiver #2 as back-up
- 1 = Receiver #1 only
- 2 = Receiver #2 only
- 3 = Receiver #1 and Receiver #2 (DUAL Reporting)

Digit Positions (2): Loop Shunt Report Code

Valid entries are 1 - F.
This is a 1-digit reporting code.
For 2-digit reporting formats, the Zone Number will be automatically added as an extension.
Programming a "0" in Position (2) disables shunt reporting for all loops.

Digit Positions (3): Loop Restore Reporting Code

Valid entries are 1 - F.
This is a 1-digit reporting code.
For 2-digit reporting formats, the Zone Number will be automatically added as an extension.
Programming a "0" in Position (3) disables restore reporting for all loops.

Command Locations 14: Opening/Closing Reports

Default Values

1	4				#
---	---	--	--	--	---

(1)

(2)

(3)

Digit Position (1): Opening/Closing Receiver Select

- 0 = Receiver #1 with Receiver #2 as back-up
- 1 = Receiver #1 only
- 2 = Receiver #2 only
- 3 = Receiver #1 and Receiver #2 (DUAL Reporting)

Digit Position (2): Opening Report Code

Valid entries are 1 - F.
This is a 1-digit reporting code.
For 2-digit reporting formats, the User ID Number will be automatically added as an extension.
Programming a "0" in Position (2) disables opening reports.

Digit Position (3): Closing Report Code

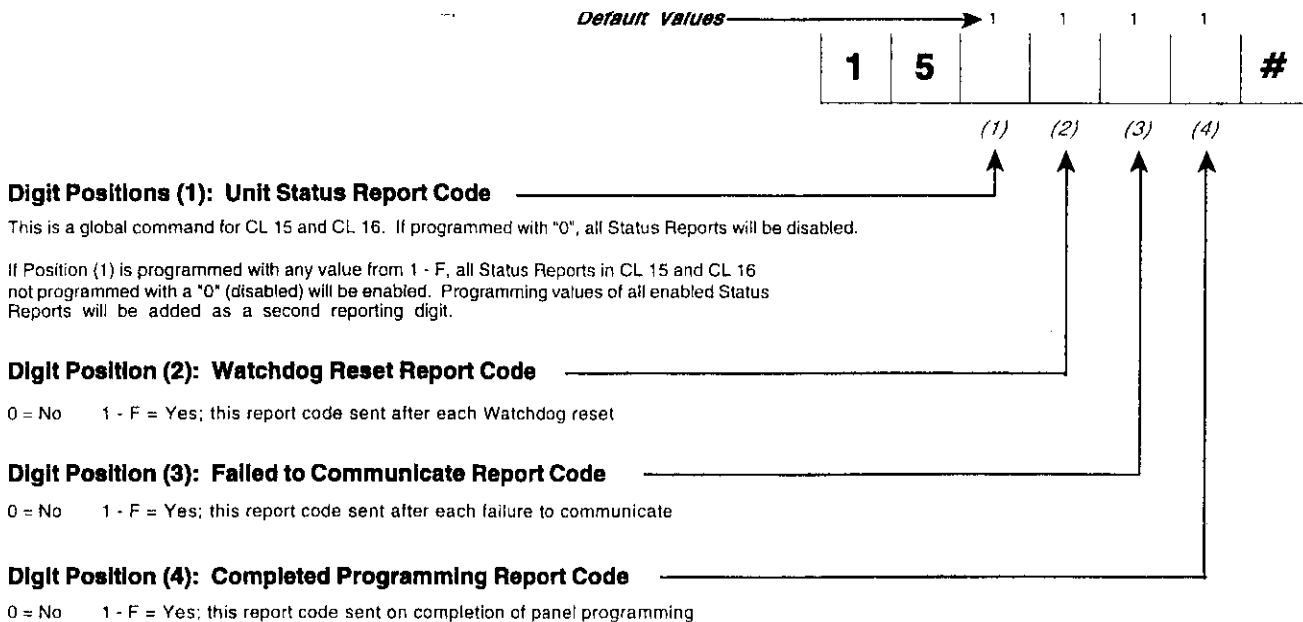
Valid entries are 1 - F.
This is a 1-digit reporting code.
For 2-digit reporting formats, the User ID Number will be automatically added as an extension.
Programming a "0" in Position (3) disables closing reports.

PROGRAMMING CONVERSIONS

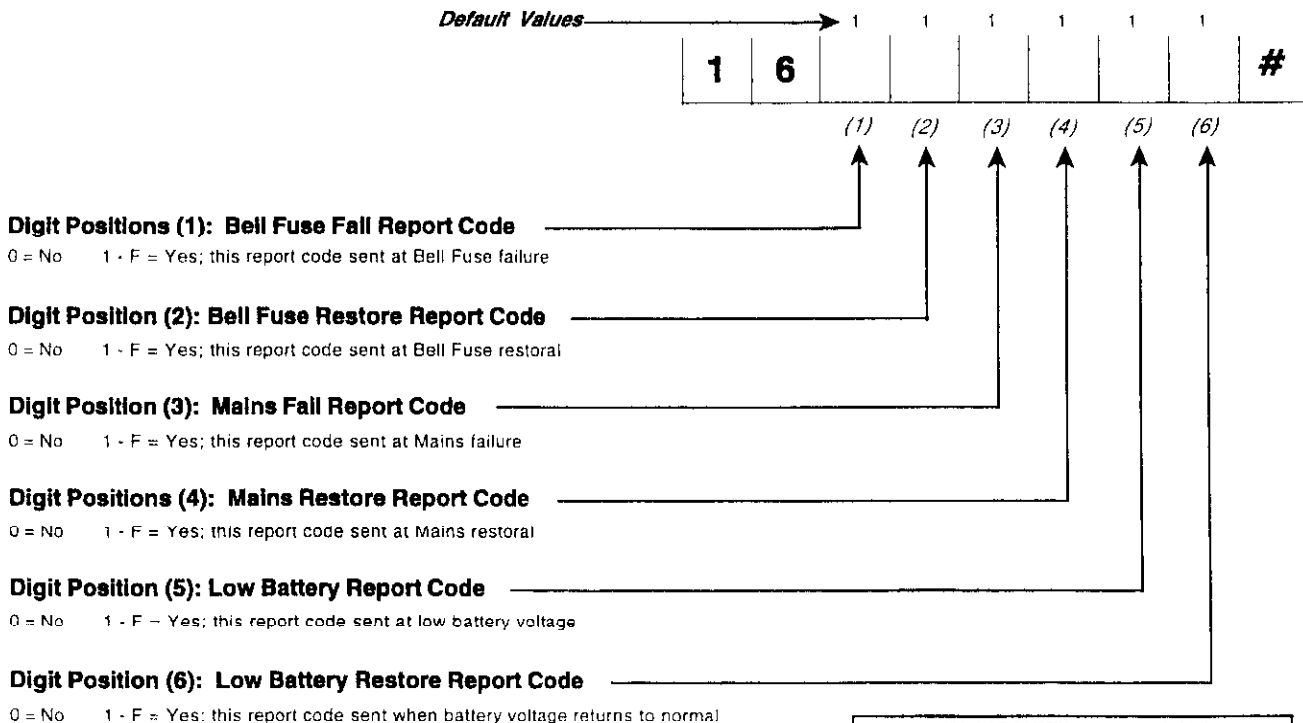
Hexadecimal Value	Key Strokes
A	* 0
B	* 1
C	* 2
D	* 3
E	* 4
F	* 5

CL 15 and 16

Command Location 15: Status Events Reporting Codes - #1

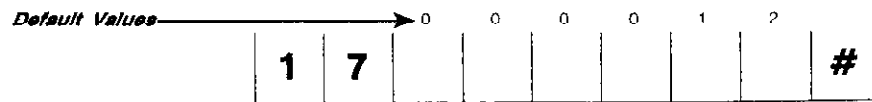


Command Location 16: Status Events Reporting Codes - #2



PROGRAMMING CONVERSIONS	
Hexadecimal Value	Key Strokes
A	* 0
B	* 1
C	* 2
D	* 3
E	* 4
F	* 5

Command Location 17: Panic/Duress



(1) (2) (3) (4) (5) (6)

Digit Position (1) - (2): Panic Report Code

This is a 2-digit reporting format. Reporting code 00 disables reporting for this option.

Digit Position (3) - (4): Duress Report Code

This is a 2-digit reporting format. Reporting code 00 disables reporting for this option.

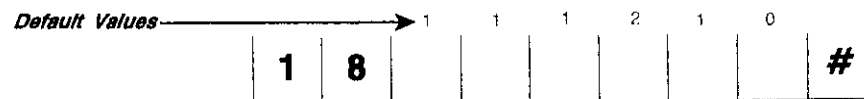
Digit Position (5): Panic/Duress Receiver Select

0 = Receiver #1 with Receiver #2 as back-up 2 = Receiver #2 only
 1 = Receiver #1 only 3 = Receiver #1 and Receiver #2 (DUAL Reporting)

Digit Position (6): Panic Bell Type

1 = Pulsing
 3 = Chirp
 2 = Steady
 4 = Silent

Command Location 18: Test Report



(1) (2) (3) (4) (5) (6)

Digit Positions (1) - (2): Test Report Code

Valid entries are 0 - F.
 Position (1) is sent for most receivers. Digit (2) is added for 4/2 and CFSK III formats.
 Program a "00" to disable Test Reports.

Digit Position (3): Test Report Receiver Select

0 = Receiver #1 with Receiver #2 as back-up 2 = Receiver #2 only
 1 = Receiver #1 only 3 = Receiver #1 and Receiver #2 (DUAL Reporting)

Digit Position (4): Test Report Interval

1 = 24 hours 2 = 7 days 3 = 30 days

Digit Position (5): Cancel Report Receiver Select

0 = Receiver #1 with Receiver #2 as back-up 2 = Receiver #2 only
 1 = Receiver #1 only 3 = Receiver #1 and Receiver #2 (DUAL Reporting)

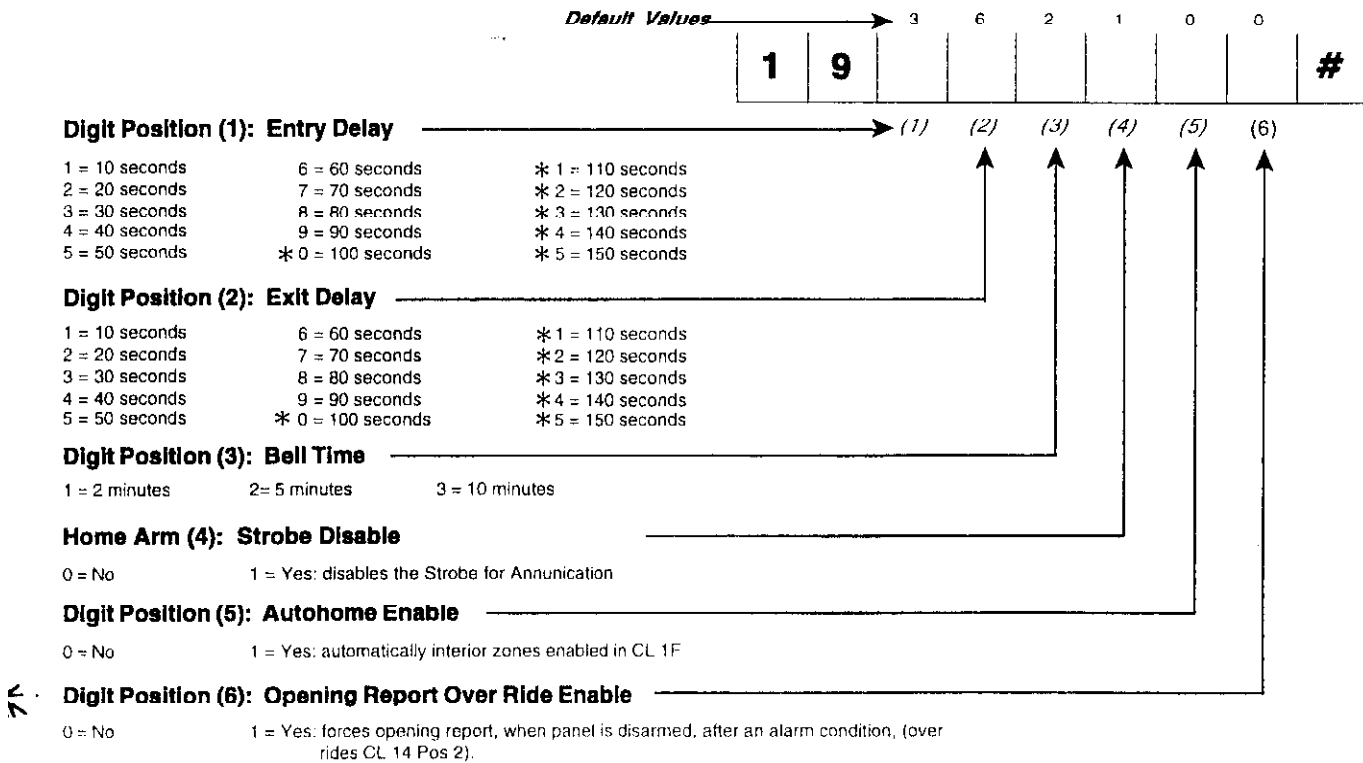
Digit Positions (6): Cancel Report Code

Valid entries are 0 - F.
 Program a "0" to disable Cancel Reports.

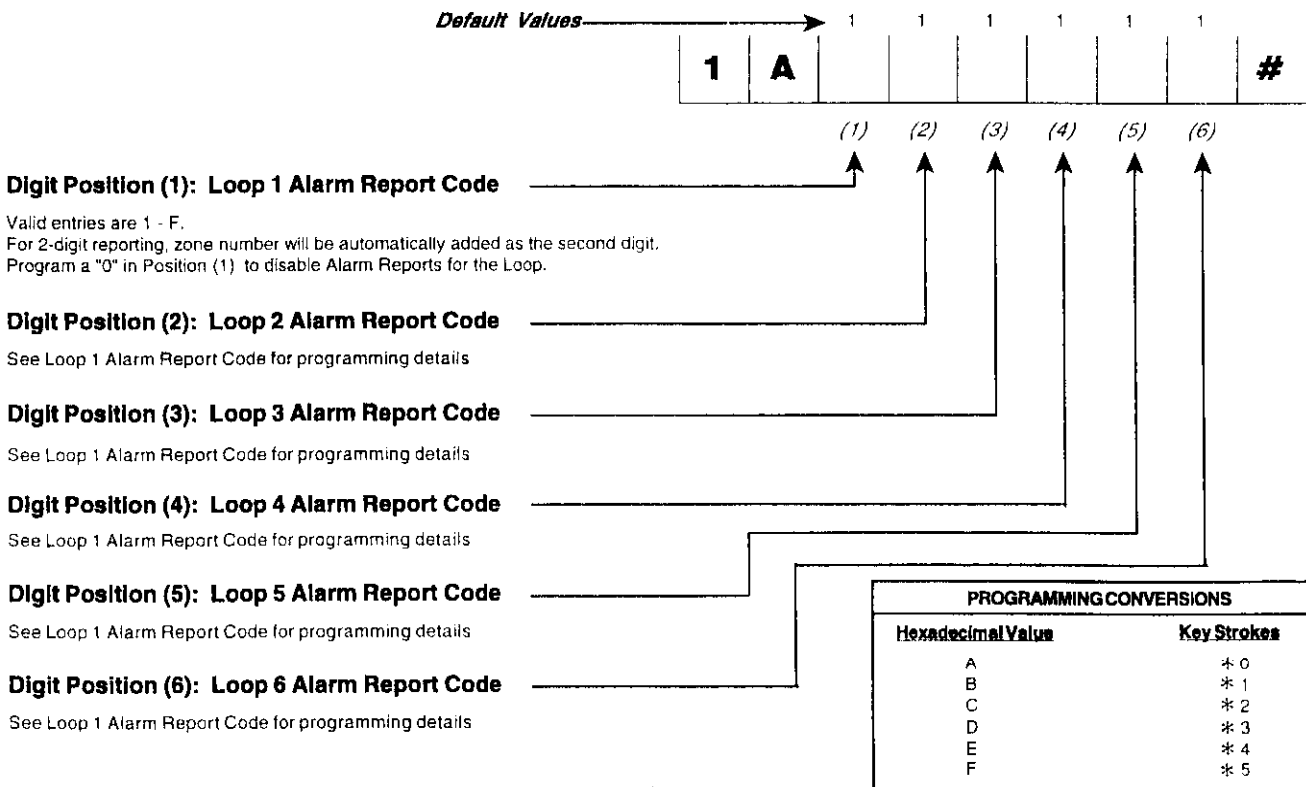
PROGRAMMING CONVERSIONS	
Hexadecimal Value	Key Strokes
A	* 0
B	* 1
C	* 2
D	* 3
E	* 4
F	* 5

CL 19 and 1A

Command Location 19: Timing, Keypad and Home Arm Control



Command Location 1A: Loop Alarm Reporting Codes



Command Location 1B: Loop Receiver Select



(1) (2) (3) (4) (5) (6)

Digit Position (1): Loop 1

0 = Receiver #1 with Receiver #2 as back-up
 1 = Receiver #1 only
 2 = Receiver #2 only
 3 = Receiver #1 and Receiver #2 (Dual Reporting)

Digit Position (2): Loop 2

See Loop Receiver Select, Loop 1 for programming details.

Digit Position (3): Loop 3

See Loop Receiver Select, Loop 1 for programming details

Digit Position (4): Loop 4

See Loop Receiver Select, Loop 1 for programming details

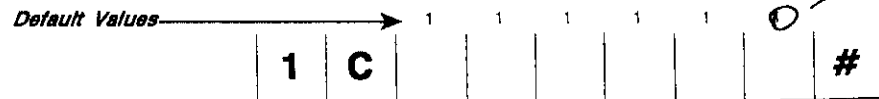
Digit Position (5): Loop 5

See Loop Receiver Select, Loop 1 for programming details

Digit Position (6): Loop 6

See Loop Receiver Select, Loop 1 for programming details

Command Location 1C: Loop Restore Type



(1) (2) (3) (4) (5) (6)

Digit Position (1): Loop 1

0 = Return to Normal.
 1 = System is disarmed.

Digit Position (2): Loop 2

See Loop Restore Type, Loop 1 for programming details

Digit Position (3): Loop 3

See Loop Restore Type, Loop 1 for programming details

Digit Position (4): Loop 4

See Loop Restore Type, Loop 1 for programming details

Digit Position (5): Loop 5

See Loop Restore Type, Loop 1 for programming details

Digit Position (6): Loop 6

See Loop Restore Type, Loop 1 for programming details

change

CL 1D and 1E

Command Location 1D: Loop Configuration

Default Values →

1	D							#
---	---	--	--	--	--	--	--	---

(1) (2) (3) (4) (5) (6)

Digit Position (1): Loop 1

0 = Loop Disabled

1 = Instant

2 = Interior

3 = Delay

4 = Long Delay

5 = 24 Hours

6 = Keyswitch Arming

7 = Keyswitch Arming pulsed
(spring loaded keys)

Digit Position (2): Loop 2

See Loop Configuration, Loop 1 for programming details

Digit Position (3): Loop 3

See Loop Configuration, Loop 1 for programming details

Digit Position (4): Loop 4

See Loop Configuration, Loop 1 for programming details

Digit Position (5): Loop 5

See Loop Configuration, Loop 1 for programming details

Digit Position (6): Loop 6

See Loop Configuration, Loop 1 for programming details

Command Location 1E: Loop Bell Type

Default Values →

1	E							#
---	---	--	--	--	--	--	--	---

(1) (2) (3) (4) (5) (6)

Digit Position (1): Loop 1

1 = Pulsing

2 = Steady

3 = Chirp

4 = Silent with no LED

5 = Silent with LED

Digit Position (2): Loop 2

See Loop Bell Type, Loop 1 for programming details

Digit Position (3): Loop 3

See Loop Bell Type, Loop 1 for programming details

Digit Position (4): Loop 4

See Loop Bell Type, Loop 1 for programming details

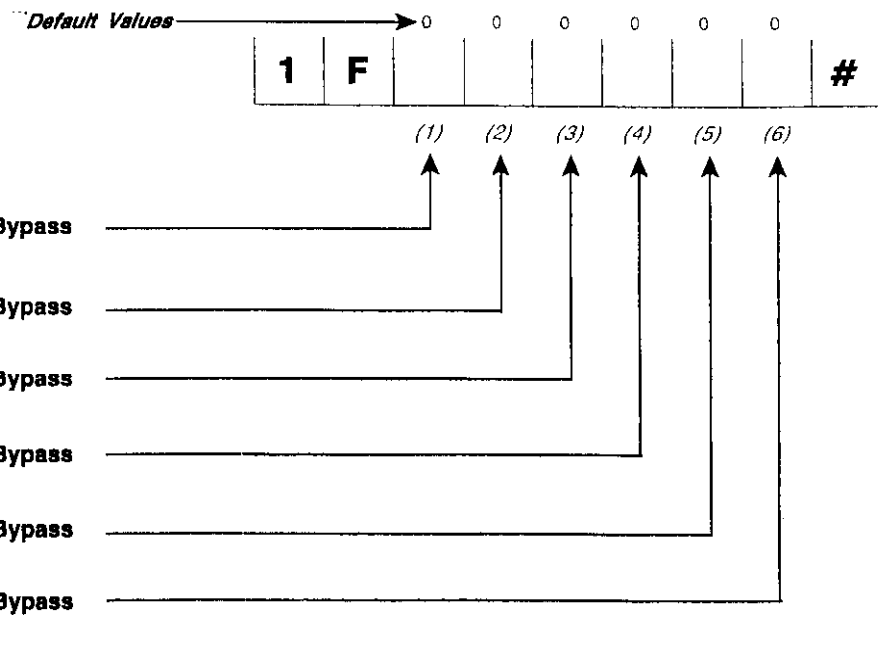
Digit Position (5): Loop 5

See Loop Bell Type, Loop 1 for programming details

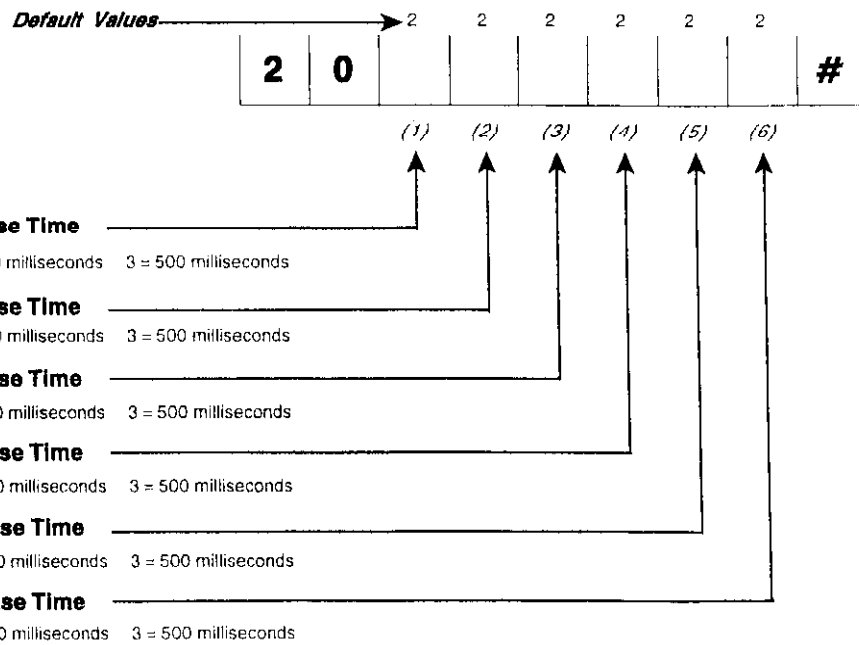
Digit Position (6): Loop 6

See Loop Bell Type, Loop 1 for programming details

Command Location 1F: Home Arm Bypass



Command Location 20: Zone Response Time



CL A0 and AD

Command Location A0: Test Report Countdown Timer

A	0		#
---	---	--	---

(1)

Digit Position (1): Set Test Report Countdown Timer

- | | | |
|--------------|--------------|----------------|
| 0 = 1/4 hour | 5 = 4 hours | * 0 = 14 hours |
| 1 = 1/2 hour | 6 = 6 hours | * 1 = 16 hours |
| 2 = 1 hour | 7 = 8 hours | * 2 = 18 hours |
| 3 = 2 hours | 8 = 10 hours | * 3 = 20 hours |
| 4 = 3 hours | 9 = 12 hours | * 4 = 22 hours |
| | | * 5 = 24 hours |

Command Location AD: Battery Test Countdown Timer

This command sets the time for the Daily Battery Test. It is recommended that the Daily Battery Test occur during the morning, so that any problems can be serviced that day.






A	D		#
---	---	--	---

(1)

Digit Position (1): Set Battery Test Countdown Timer

- | | |
|-------------|--------------|
| 0 = 2 hours | 2 = 14 hours |
| 1 = 8 hours | 3 = 20 hours |

PROGRAMMING CONVERSIONS	
Hexadecimal Value	Key Strokes
A	*0
B	*1
C	*2
D	*3
E	*4
F	*5

ARM or DISARM-[PIN] [#]	 = EMERGENCY
PERIMETER ARM-[*] [4] [#]	 = FIRE
PERIMETER INSTANT-[*] [47] [#]	 = POLICE
BYPASS ZONE-  [ZONE NO.] [#]	 = BYPASS
CHIME ON/OFF-[*] [5] [#]	

ZONE	DESCRIPTION
1	
2	
3	
4	
5	
6	
7	
8	

KEYPAD ZONE ID LABEL

Each keypad comes with a zone ID label and quick reference operating label. Fill in the zone descriptions and affix the label to the inside of the keypad door.

TESTING

Once the installation is complete, connect both AC and DC power. Complete programming, if required. Test all panel operations.

TO THE INSTALLER

Regular maintenance and inspection (at least monthly) by the installer and frequent testing by the user are vital to the continuous and satisfying operation of any alarm system. The installer should assume the responsibility for developing and offering a regular maintenance program to the user, as well as acquainting the user with the proper operation and limitations of the alarm system and its component parts. Recommendations must include a specific program of regular testing (at least weekly) to ensure that the system is operating properly.

TELEPHONE LINE PROBLEMS

In the event of telephone line problems, disconnect the System 236i3AU by removing the modular connector plug from the Telco interface jack. Do not disconnect the connection inside the System 236i3AU cabinet, doing so will prevent the premise phones from operating. If your phone works correctly after the control panel has been disconnected from the phone line, the control panel has a problem and should be returned for repair.

If the phone does not work after you have disconnected the control panel from the phone line, notify the telephone company and request prompt repair. The user may not under any circumstance (in or out of warranty) attempt any service repairs on the System 236i3AU. The control panel must be returned to C & K Systems or an authorized service agency for repairs.

LIMITATIONS OF YOUR ALARM SYSTEM

While the System 236i3AU is an advanced design security system, it does not offer guaranteed protection against burglary, fire, or other losses. Any alarm system, whether commercial or residential, is subject to compromise or failure to warn for a variety of reasons. These include:

- Intruders may gain access through unprotected openings or have the technical sophistication to bypass an alarm sensor or disconnect an alarm warning device.
- Intrusion detectors, smoke detectors, and many sensing devices will not operate without power. Devices powered by mains will not work if the mains power supply is off for any reason and their back up batteries are missing, dead, or improperly installed.
- Alarm warning devices such as sirens, bells, and horns may not alert people or wake up sleepers if they are located on the other side of closed or partly closed doors. If warning devices are on different levels of the residence from the bedrooms, they are less likely to waken or alert people inside the bedrooms.
- Telephone lines needed to transmit alarm signals from a premise to a central monitoring station may be out of service or temporarily out of service. Telephone lines are subject to compromise by sophisticated methods of attack.
- Smoke detectors used in conjunction with the alarm system may not sense fires that start where smoke cannot reach the detectors, such as chimneys, walls, or roofs, or on the other side of closed doors. Smoke detectors also may not sense a fire on a different level of the residence or building. A second floor detector, for example, may not sense a first floor or basement fire. Finally, smoke detectors have sensing limitations. No smoke detector can sense every kind of fire every time. In general, detectors may not always warn you about fires caused by carelessness and safety hazards, like smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electronic circuits, children playing with matches, arson, etc.
- The most common cause of an alarm system not functioning properly when an intrusion or fire occurs is **INADEQUATE MAINTENANCE**. Your alarm system should be tested weekly to make sure all sensors are operating properly. The System 236i3AU panel and keypads should also be tested weekly.
- Installing an alarm system may make you eligible for lower insurance rates, but an alarm system is not a substitute for insurance. Homeowners, property owners, and renters should continue to insure their lives and property.

GLOSSARY

Answering Machine Intercept:

When panel is programmed for this feature, it will answer phone on first ring of second call. Second call must occur within 30 seconds after second ring of first call. First call cannot ring more than two times. Commander II and Monitor II software are designed to automatically make correct phone call sequence. This unique call sequence allows the System 236i3AU to bypass most answering machines.

Bell Type:

Determines type of audible sound when loop goes into alarm. Five options are available, pulsing, steady, chirp, silent with no LED and silent with LED.

Call Back Process:

This feature requires 236i3AU to be programmed for RPS Enable, also use of Commander II or Monitor II RPS software. Computer will call panel, allow two rings, then hang up. Within 30 seconds, the computer will call panel again, and the panel will answer call. The panel will then hang up and dial programmed RPS phone number. When RPS computer answers, panel will ask for installer code. If installer code is correct, the panel will allow remote programming to begin. With keypad RPS enabled, user can force the 236i3AU to call the programmed RPS phone number.

Combination Command:

Determines if user combination is required for such functions as shunting, keypad RPS, and instant arming.

Delay Loops:

Allow entry and exit for programmed delay time.

Dial Attempts:

Number of attempts dialer will make to report alarms or events. System 236i3AU can be programmed for 1-3 dialing attempts, CL OB (6). If the panel is unable to report after last dialing attempt, it will go into failed to communicate mode.

Duress Combination:

Duress combination is user #6 (CL 06), or if duress combination is enabled, CL 17 (3) and (4).

Dynamic Battery Test:

Automatically tests the battery five minutes after power up. The System 236i3AU tests the battery under load for two minutes. If the battery voltage is below 11.25 volts, low battery condition will be annunciated and, if programmed, reported. Dynamic battery test will occur every 24 hours.

Faulted Arming Type:

Determines what state loops must be in before the panel will arm. The panel can be programmed for goof-proof arming or force arming.

Force Arming:

Allows the system to be armed even if loops are faulted. The loops still faulted at the end of exit delay are automatically bypassed.

Goof-Proof Arming:

Prevents the system from being armed until all non-24 hour loops are normal (not faulted).

Installer Combination:

Six digit combination needed for keypad or RPS programming. Always starts with 0. The combination is factory set at [0] [1] [2] [3] [4] [5]. The panel can be programmed not to revert to default combination on power loss, CL 07 (3). If default combination is changed and new combination is lost, programming mode will not be accessible. Installer combination cannot be used to arm or disarm the system.

Interior Loops:

Allow normal exit delay, but require delay loop to be faulted first before allowing entry delay.

Instant Loops:

Activate immediately if faulted when the system is armed.

Local System Only:

When enabled, this option allows the System 236i3AU to act as local alarm system that will not report alarm events. However, if RPS is enabled and the system is connected to a phone line, keypad RPS and regular RPS functions can still be performed.

Long Delay Loops:

Have double the programmed entry delay time.

Loop Restore Process:

Determines when restore reports are sent, and how many times loop can activate during armed period.

Personal Dialing:

This feature is equivalent to having a personal beeper. If programmed, System 236i3AU will call designated receiver and give a series of tones for one minute. The process will be repeated for programmed number of dialing attempts.

Reporting Options:

The System 236i3AU can be programmed to report to receiver #1 **or** receiver #2 (split reporting), receiver #1 **with** receiver #2 as back up (back up reporting), or receiver #1 **and** receiver #2 (dual reporting).

RPS Phone Number:

Phone line number connected to modem and personal computer running Commander II or Monitor II software. Both software packages allow System 236i3AU to be remotely programmed over phone line. In addition, Monitor II transforms PC into alarm receiver.

Soft Zone:

Zone generated by software instead of hardwired switches. System 236i3AU has one soft zone, police. User activates soft zone by depressing [POLICE] key for two or three seconds.

Twenty Four Hour Loops:

Twenty four hour loops always active, and respond to faults whether armed or disarmed.

User Combination:

The System 236i3AU can support up to six users. User one is referred to a master combination because it can be used to change any other combination except installer combination. If opening, closing or duress reporting is enabled, the System 236i3AU will transmit user ID number each time the combination is used to arm or disarm the system.

236i3AU Programming Worksheet

Client: _____ SYSTEM 236i3AU Phone Number: _____

Address: _____

Installer: _____ Date: _____

VOLTS

AC volts (term 1 and 2): _____

AUX POWER VOLTS

(term 9 and 10): _____

BATTERY VOLTS

Under load - AC off: _____

CURRENT

Keypads _____

AUX POWER

+ _____

TOTAL

(400 mA Max.): _____ = _____

CONTROL LOCATION:

BREAKER # AND LOCATION:

KEYPADS

Address Location

0 _____

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

0 0 0 1 2 3 4 5 # Installer Combination

0 1 1 2 3 4 # User #1 - Master Name: _____

0 2 0 0 0 0 # User #2 Name: _____

0 3 0 0 0 0 # User #3 Name: _____

0 4 0 0 0 0 # User #4 Name: _____

0 5 0 0 0 0 # User #5 Name: _____

0 6 0 0 0 0 # User #6 - Duress Name: _____

0 7 1 0 1 1 0 0 # Panel Control Options

0 8 3 1 2 2 0 1 # Telco Control Options

0 9 0 0 0 0 0 0 # Account #1

Phone #1 (1st 6 digits) (Middle 6 digits) (Last 6 digits)
0 A E 0 0 0 0 0 0 # 0 B 0 0 0 0 0 0 # 0 C 0 0 0 0 0 0 #

Phone #2 (1st 6 digits) (Middle 6 digits) (Last 6 digits)
0 D E 0 0 0 0 0 0 # 0 E 0 0 0 0 0 0 # 0 F 0 0 0 0 0 0 #

RPS Phone (1st 6 digits) (Middle 6 digits) (Last 6 digits)
1 0 E 0 0 0 0 0 0 # 1 1 0 0 0 0 0 0 # 1 2 0 0 0 0 0 0 #

1 3 1 0 1 # Event Reports

1 4 1 0 0 # Opening/Closing Reports

1 5 1 1 1 1 # Status Event Reporting Codes - #1

1 6 1 1 1 1 1 1 # Status Events Reporting Codes - #2

1 7 0 0 0 0 1 2 # Panic/Duress

1 8 1 1 1 2 1 0 # Test Report

1 9 3 3 2 1 0 0 # Timing and Keypad Control

1 A 1 1 1 1 1 1 # Loop Alarm Reporting Codes

1 B 1 1 1 1 1 1 # Loop Receiver Select

1 C 1 1 1 1 1 1 # Loop Restore Type

1 D 3 2 2 1 1 5 # Loop Configuration

1 E 2 2 2 2 2 1 # Loop Bell Type

1 F 0 0 0 0 0 0 # Door Chime Enable

2 0 2 2 2 2 2 2 # Zone Response Time

Keypad Operation Command Summary

The majority of the keypad commands apply equally to the LED and Alpha Plus keypads. Some keypad commands, however, apply to the LCD keypad only.

The following Keypad Commands apply to both the LED and Alpha Plus keypads:

Function	Comments	Keystroke Sequence
Arm/Disarm	Delays active	[Combination] [#]
Bypass Zone (n)	[n] is zone #1-6; Combo may be required	[Combination] [2] [n] [#]
Change Combo	Must be done from master combination (user #1)	[Master Combo] [*] [0] [#] [User no.] [New combo] [#] [New combo] [#]
Clear Alarm Memory		[*] [1] [#]
Entry/Exit Pre-Alarm	Toggle pre-alarm tones on and off	[*] [5] [2] [#]
Error Tones	Toggle error tones on and off	[*] [5] [4] [#]
Exit Programming		[*] [#]
Home Arm	All enabled zones in location 1F are shunted simultaneously; exterior zones armed; Combo may be required	[Combination] [*] [4] [#]
One Touch Home Arm (LED Keypad only)	All enable zones in location 1F are shunted simultaneously; exterior zones armed; Combo may be required	[*] [#] Simultaneously
Instant Arm	Converts all delayed zones to instant; Combo may be required	[Combination] [*] [7] [#]
Instant Home Arm	Arms exterior zones, shunts enable zones in location 1F. Entry delays converted to instant; Combo may be required	[Combination] [*] [4] [7] [#] or [Combination] [*] [7] [4] [#]
Keypad Activated RPS	If enabled, CL 09(4); Combo may be required	[Combination] [*] [0] [2] [#]
Keypad Tone Disable	Toggle Entry/Exit pre-alarm and confirmation/error tones on and off	[*] [5] [1] [#]
Panic Alarm	Keypad activated	[9] (Hold for 3 seconds)
Reset Aux Power	If resettable devices are connected to terminals labeled AUX (+) and C	[*] [6] [2] [#]
Reset Panel	Panel must be disarmed	[Master Combination] [*] [6] [8] [#]
Test - Battery	Use after correcting low battery problem	[*] [6] [4] [#]
Test - Bells	Combo may be required	[Combination] [*] [6] [3] [#]
Test - Central Station	Combo may be required	[Combination] [*] [6] [1] [#]
Test - Local Walk Test	Combo may be required	[Combination] [*] [6] [0] [#]

NOTE: For additional information about Combination Command requirements, see page ? and CL 08 (5).

The following Keypad Commands apply to the Alpha Plus keypad only:

Function	Comments	Keystroke Sequence
Arm Tones Toggle On/Off		[*] [5] [4] [#]
Audible Feedback Toggle		[*] [5] [1] [#]
Backlight Toggle On/Off		[*] [8] [#]
Display Keypad Model and Revision		[*] [9] [#]
Chime Toggle		[*] [5] [3] [#]
Pre-warn Toggle On/Off		[*] [5] [2] [#]

The following Keypad Commands are Installer Only Commands:

Function	Comments	Keystroke Sequence
Alpha Keypad Programming	Start programming the keypad	[Installer Combination] [*] [0] [1] [#]
Alpha Keypad Test	Keypad must be disconnected from panel	[*] [6] [7] [#]
Kill/Revive Panel	Panel must be disarmed	[Installer Combination] [*] [6] [9] [#]
Panel Programming	Start programming the panel	[Installer Combination] [*] [0] [#]

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