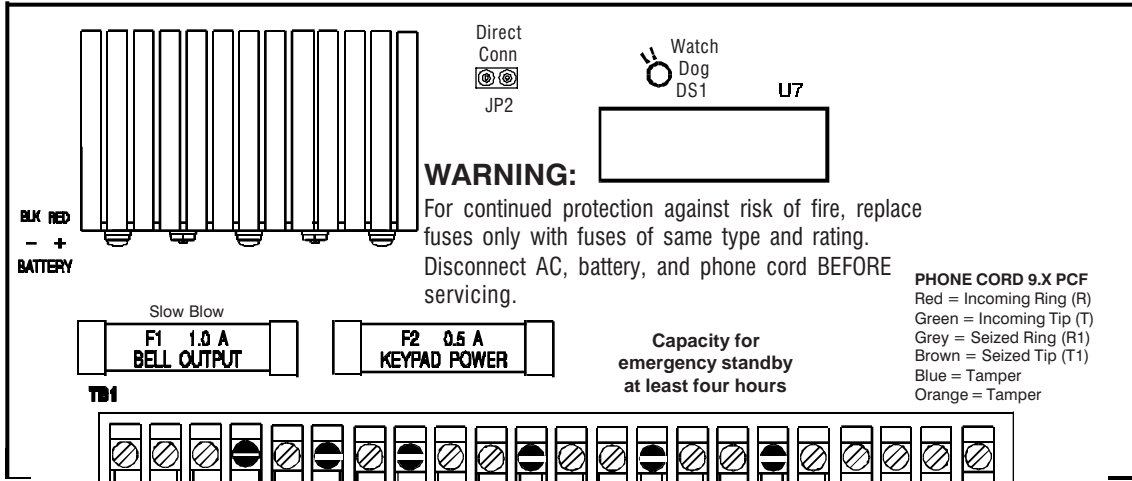# SYSTEM 236 Installation Manual

Direct Conn
JP2

Watch Dog DS1
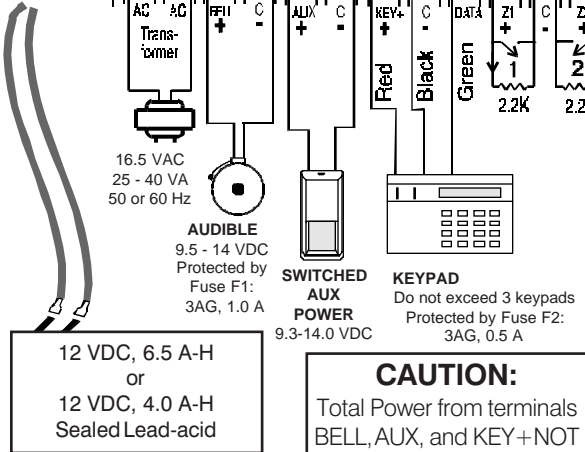
U7

BLK RED
− +
BATTERY

WARNING:
For continued protection against risk of fire, replace fuses only with fuses of same type and rating. Disconnect AC, battery, and phone cord BEFORE servicing.

PHONE CORD 9.X PCF
Red = Incoming Ring (R)
Green = Incoming Tip (T)
Grey = Seized Ring (R1)
Brown = Seized Tip (T1)
Blue = Tamper
Orange = Tamper

Slow Blow

F1   1.0 A
BELL OUTPUT

F2   0.5 A
KEYPAD POWER

Capacity for emergency standby at least four hours

TB1

AC AC
Trans-former

BELL + − AUX + C KEY+ C DATA Z1 + − C Z2 + − Z3 + − C Z4 + − Z5 + − C Z6 + − T R T1 R1

Red   Black   Green

1   2   3   4   5   6

2.2K 2.2K 2.2K 2.2K 2.2K 2.2K

16.5 VAC
25 - 40 VA
50 or 60 Hz

AUDIBLE
9.5 - 14 VDC
Protected by Fuse F1:
3AG, 1.0 A

SWITCHED AUX POWER
9.3-14.0 VDC

KEYPAD
Do not exceed 3 keypads
Protected by Fuse F2:
3AG, 0.5 A

12 VDC, 6.5 A-H
or
12 VDC, 4.0 A-H
Sealed Lead-acid

CAUTION:
Total Power from terminals BELL, AUX, and KEY+ NOT to exceed 800 mA, combined.
(Also see NOTE: below.)

GENERAL INFORMATION

- Connect ground wire from door hinge to earth ground using 16 AWG, green jacketed, solid-conductor wire
- All outputs are power limited
- If programmed for EOL or Supervised Loop, the 2.2K ohm EOL resistor (Model 9.X, 2.2K) must be at end of circuit
- Loop voltages: 0.00 - 1.50 VDC = short
  1.60 - 3.10 VDC = normal
  3.20 - 5.00 VDC = open
- ⬛ are electrically common
- When used as a fire warning system, use a 4-wire smoke detector (Sentrol #ES-449C) with a Power Supervisory EOL Relay Module (System Sensor A77-716 Series) at the end of the detector power loop. Consider the maximum detector alarm load when confirming that the total alarm load is less than 800 mA.

POWER SUPPLY INFORMATION

Use only 12 VDC, 6.5 A-H or 4.0 A-H sealed lead-acid battery
Replace battery every 4 - 6 years with C&K Model 1265 or Model 1240
6.5 A-H standby battery time with 1 keypad is 14 hours at 300 mA
4.0 A-H standby battery time with 1 keypad is 7 hours at 400 mA
Power demand for AUX POWER, keypads, and sounders not to exceed maximum ratings.
Install transformer on unswitched power receptacle
Maximum battery charge current = 350 mA

This equipment should be installed in accordance with the National Fire Protection Association's Standard 72 Chapter 2 (National Fire Protection Association, Batterymarch Park, Quincy, MA 02269). Printed information describing proper installation, operation, testing maintenance, evacuation planning and repair service is to be provided with the equipment.

All ratings on this page are in compliance with UL 985, UL 1023, and UL 1635.

NOTE:
Total power from terminals AUX and KEY+ **NOT** to exceed 400 mA, combined.

C&K®
SYSTEMS

Table of Contents

BEFORE YOU START

Scope of This Manual
This manual contains basic installation and programming information for the SYSTEM 236 control/communicator. For detailed information about remote programming, please refer to the Commander II/Monitor II Operating Manual (P/N 5-051-221-00).

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 236 hardware, software, and manuals without prior notice.

UL COMPLIANCE

The SYSTEM 236 is in compliance with Underwriters Laboratories, Inc. Standards UL 985, Household Warning System Units; UL 1023, Household Burglar Alarm System Units; and UL 1635, Digital Burglar Alarm Communicator System Units. **The following programming restrictions must be observed to meet UL standards:**

1. The audible must be programmed to sound at least four minutes before silencing.
2. No zone may be programmed for silent alarm.
3. Fire zones must be programmed for pulsing audible alarm.
4. Burglar zones must be programmed for a steady audible.
5. Burglar loops (non-24-hour loops) must be programmed for NO/NC.
6. No Entry Delay may be greater than 45 seconds.
7. No Exit Delay may be greater than 60 seconds.
8. The Dynamic Battery Test must be enabled.

UL Compliance (continued)

9. The Unit Status Report must be enabled.
10. The 24-hour Check-in must be enabled.
11. No Delay Before Dial may be programmed for the communicator.
12. The unit must not be programmed to dial a police station.
13. Use screws (supplied) to secure cover or a lock must be installed on the cabinet.
14. All devices must be UL listed.
15. Loop Response Time must be set to 500mS.

Zone Programming

FIRE LOOP	BURGLAR LOOP
· No Delay Before Dial	· No Delay Before Dial
· 24-hour arming	· Steady audible
· Pulsing audible	· NO/NC with EOL
· Supervised	· 500mS Loop Response Time
- latching for heat	
- resetting for smoke	
· Not shuntable	
· 500mS Loop Response Time	

Keypad Requirements
The keypad may not have the EMERGENCY symbol (⌗) on it. If your keypad has this symbol, remove the key and replace it with one of the blank keys provided.

INSTALLATION

Mounting
The SYSTEM 236 should be mounted in a location which allows convenient access to AC power, telephone connections, and earth ground.

· Remove the circuit board from the cabinet. This will prevent possible damage to the circuit board when removing the knock-outs.
  Remove the knock-outs.

· Mark the screw mounting holes on the wall.

·

· Mount the cabinet at the desired height and pass the cables through the knock-outs.
· Replace the circuit board, remembering to connect the ground lug to the lower left corner of the circuit board.
· Reconnect the spade lug to the lower door hinge. This provides the earth ground connection for the door.

Earth Ground
To ensure the effectiveness of the lightning and transient protection circuits, the control panel must be connected to "Earth Ground". Ideally, this should be a common ground to the power lines, telephone system, and security system. This type of ground, called a "Unified Earth Ground", provides the best protection. The ground connection, from a grounding rod, cold water pipe or other established ground point, is made to the green jacketed wire providing a ground to the panel housing.

WIRING THE PANEL

STANDBY BATTERY

The SYSTEM 236 is designed to operate using a 12 V, 6.5 A-H (Model 1265) or 12 V, 4.0 A-H (Model 1240) sealed lead-acid battery. Do not use non-rechargeable batteries or batteries other than sealed lead-acid. **It is recommended that you replace the standby battery every four to six years**.

Install the battery with the terminals oriented toward the hinge side of the case and the battery mounted as close to the hinge as possible. Connect the red lead to the positive terminal of the battery and the black lead to the negative battery terminal. The panel is electronically protected against reverse battery polarity.

WARNING:

☞ **Improper placement of the battery may result in ground trace shorting on the PCB.**

AC POWER

Terminal Label:
AC
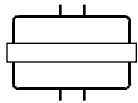
AC power is supplied from a 16.5 VAC, 25 - 40 VA transformer at 50 or 60 Hz. **A UL listed Class 2 transformer must be used**. Connect the secondary of the transformer to the terminals labelled AC on the SYSTEM 236. Use at least 18 AWG (1.02 mm) wire to reduce voltage drops. **The primary side of the transformer must be connected to an unswitched receptacle.** Secure the transformer to the wall.

AC Power Failure

If an AC power failure lasts more than 15 minutes, the keypads will display a system trouble. An AC failure report will be sent, if programmed. When AC is restored for five minutes, a restoral report will be sent.

Precautions

☞ **DO NOT share the secondary of the transformer with other devices. A foreign ground can damage the power supply, voiding the warranty.**

☞ **DO NOT use any transformer other than that specified in the AC POWER section above.**

Available Power

The maximum total power available at the BELL(+), AUX(+), and KEY (+) terminals is 800 mA. The switched auxiliary and keypads share the same power bus. The combined power for the AUX(+) and KEY(+) terminals is 400 mA. **Do not exceed 400 mA for all keypads and auxiliary devices**.

AUDIBLE OUTPUT

Terminal Label:
BELL & C

The BELL(+) Terminal (Audible output) provides up to 800 mA at 9.5 - 14.0 VDC.

Fuse F1

The BELL(+) Terminal is protected by a 3 AG, 1.0 A, slow-blow fuse (F1). If any fuse opens, remove AC and DC power, remove the short or overload condition, then replace the fuse before restoring power. **Do not substitute a higher rated fuse**.

Electromagnetic Interference

Vibrating horns can produce electromagnetic interference (EMI). While EMI will not damage the SYSTEM 236, it can cause transmission errors and mis-dialing. To minimize EMI, install a 0.01 mfd, 100 V capacitor across the terminals of the horn. **The capacitor must be located in the horn**.

SWITCHED AUXILIARY POWER
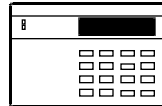
Terminal Label:
Aux & C
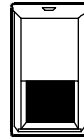
The AUX(+) Terminal provides a positive 9.3 - 14.0 VDC for auxiliary devices that require switched power for resetting. Typical devices include glassbreak and smoke detectors.

The Terminal labelled C provides the power common.

ARMING STATIONS

Terminal Label:
KEY, C, & DATA

KEY (+) Terminal (red) provides 9.8 - 14.0 VDC keypad power.
C (-) Terminal (black) is common.
DATA Terminal (green) is for keypad data.

Maximum wire length for connecting any keypad is 500' (152 m) of 22 AWG (0.643 mm) copper wire.
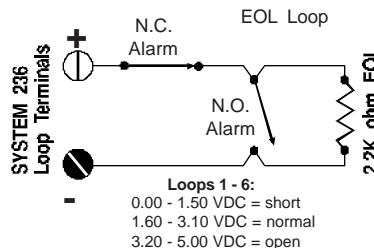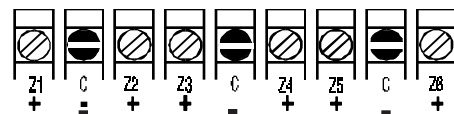
The SYSTEM 236 is capable of addressing up to seven Alpha II and four LED keypads. Each LED keypad uses 40 mA of current. Each Alpha II keypad uses 64 mA of current. See **Available Power** for current limitations. See pages 4 - 5 for additional information on keypad setup.

Fuse F2

KEY (+) Terminal is protected by a 3 AG, 0.5 A, fast-blow fuse.

LOOP INPUTS

Terminal Labels: Z 1 - Z 6 & C

Each loop is independently configured through programming. Loops can be wired with an open circuit switch, or closed circuit switch, or with a 2.2K ohm end-of-line (EOL) resistor. When programmed as

Loops 1 - 6:
0.00 - 1.50 VDC = short
1.60 - 3.10 VDC = normal
3.20 - 5.00 VDC = open

EOL, either an open or a short will be reported as an alarm if the system is in an armed state.
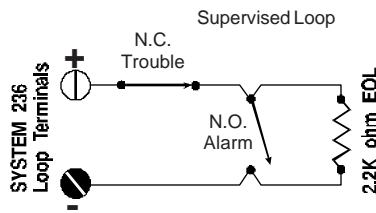
When operated as a Supervised Loop, an open will be reported as a Trouble, whether the system is armed or disarmed. A short on a Supervised Loop will be reported as an alarm if the system is armed, but will have no effect if the system is disarmed.

TAMPER SWITCH INSTALLATION

C&K has designed the SYSTEM 236 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 inside the cabinet at the lower right corner of the cabinet. For the 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 the 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.

Tamper Switches installed in the SYSTEM 236 cabinet
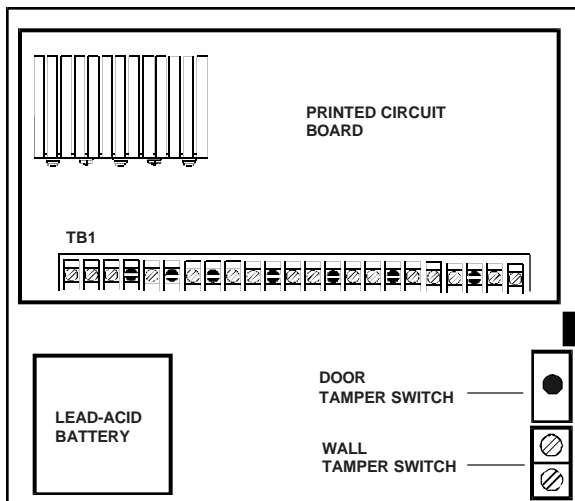

TELEPHONE INTERFACE
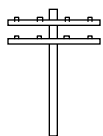
Use the 9.X PCF cord to connect the SYSTEM 236 to the phone line. The cord has a modular connector on one end to plug into the wall outlet and flying leads on the other end to connect to the panel. Wire the phone connector as follows:

9.X PCF

The 9.X PCF has eight flying leads on one end.

RED = ring (R)   BLUE and ORANGE = tamper
GREEN = tip (T)   YELLOW and BLACK = not used
GRAY = ring seized (R1)
BROWN = tip seized (T1)
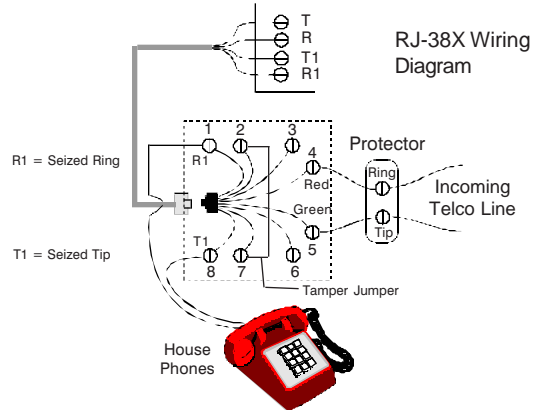
SYSTEM START-UP

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

Standby Battery Time with One LED Keypad

AUX POWER DRAIN*	STANDBY TIME	
	6.5 A-H Battery	4.0 A-H Battery
50 mA	32 hours	—
70 mA	—	24 hours
150 mA	24 hours	—
300 mA	14 hours	—
400 mA	12 hours	7 hours
*Total power for all keypads and auxiliary		

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

NOTE: Some Alpha keypads may use [SHIFT] and [ENTER] in place of the [*] and [#] keys, respectively.

Voltage Variations

Output voltages will vary between 9 and 14.4 VDC (worst case), depending on the load and battery condition.

KEYPAD SETUP

ALPHA II KEYPAD INFORMATION

The Alpha II keypad uses a top viewing display. This means the display reads most clearly when viewed from a top angle rather than straight on or from below. Mounting the keypad at the light switch level and adjusting the viewing angle gives the best results.

Adjusting the LCD Display

To adjust the viewing angle, remove the keypad from the back mounting plate. Towards the bottom center of the circuit board is a small hole. Insert a small screwdriver into the hole and adjust **R23**, while holding the keypad at its mounting height. Adjust the potentiometer as necessary for optimum viewing.

ADDRESSING KEYPADS

Each Alpha II 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. **Once all keypads have been addressed, reset the panel by pressing [Master Combination] [*] [6] [8] [#] or by removing and restoring both AC and DC power**.

Addressing Alpha II Keypads

The first time you power up the system, unaddressed Alpha II 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 each keypad has a different address number. The keypad will not accept values outside of this range. Should you accidentally use the same address for more than one keypad, the system will fail to properly respond to keypad input. Refer to page 24 for assistance in correcting this problem.

Addressing LED Keypads

The LED keypad also requires an address. The address on the LED keypad is set by two jumpers (W1 and W2) on the printed circuit board.
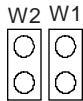
W2 W1
The chart below shows how to set Jumpers **W1** and **W2** to set the address of LED keypads. Any address from 8 to 11 can be used. The exact number is not important, as long as each LED keypad in the system has a different address number. In the event that two keypads are accidently given the same address, the system will fail to respond to keypad input. Refer to page 24 for assistance in correcting this problem.

W1	W2	KEYPAD ADDRESS
Installed	Installed	**8**
Removed	Installed	**9**
Installed	Removed	**10**
Removed	Removed	**11**

FACTORY SETTINGS

DEFAULT VALUES

The default programming of the SYSTEM 236 will allow you to use it as a local panel without any additional programming. The actual default programming values are shown on the Programming Worksheet (last 2 pages of this manual).

> **NOTE:** If you connect power before wiring the loops, install a 2.2K EOL resistor across each loop.

Combinations

Installer combination: 0 1 2 3 4 5
User #1 (Master) combination: 1 2 3 4
User #2 - 6: disabled
Default installer combination: yes

Combinations (cont.)

Combination required: no
Faulted Arming type: goof-proof
Opening/closing: no Users authorized to send O/C reports

Reporting

Account #1: 000000
Dialing type: pulse
RPS allowed: yes

Zones

Zone 1 = entry/exit delay, EOL circuit
Zone 2 = interior, EOL circuit
Zone 3 = doors or windows, EOL circuit
Zone 4 = doors or windows, EOL circuit
Zone 5 = doors or windows, EOL circuit
Zone 6 = fire or smoke - supervised EOL circuit
Panic soft zone: pulsed audible, non-reporting

Testing

Test report interval: 7 days, disabled

Timing

Entry time: 60 seconds, prewarn
Exit time: 30 seconds, prewarn
Bell time: 5 minutes

Unit Control:

Local system: yes
Dynamic battery test: off

PROGRAMMING OPTIONS

The following is an alphabetical listing of all SYSTEM 236 programming options, including Command Locations and Digit Positions. Digit Positions are inside parentheses ( ).

Option	Location
AC Fail Report Code	18 (3)
AC Line Frequency	08 (6)
AC Restore Report Code	18 (4)
Account Number	0B (1 - 6)
Audible Time	1B (3)
Autohome Enable	1B (6)
Bell Fuse Fail Report Code	18 (1)
Bell Fuse Restore Report Code	18 (2)
Cancel Report Code	15 (3)
Closing Report Code	16 (3)
Combination Command	08 (5)
Completed Programming Report Code	17 (4)
Daily Battery Test Enable	08 (4)
Default Installer Combination	08 (3)
Delay Before Dial Enable	25 (1 - 6)
Delay Before Dial Time	1B (4)
Dial Attempts	09 (2)
Dial Type	09 (6)
Disable Instant/Home Exit Delay	1B (5)
Disable Loop LEDs	08 (1)
Door Chime Enable	23 (1 - 6)
Entry Delay Time	1B (1)
Event Report Receiver Select	15 (1)
Exit Delay Time	1B (2)

Option	Location
Failed To Communicate Report Code	17 (3)
Faulted Arming Type	08 (2)
Installer Combination	00 (1 - 6)
Keypad RPS Enable	09 (4)
Local System Only	09 (1)
Loop Alarm Report Code	1C (1 - 6)
Loop Arming Type	1D - 22 (4)
Loop Audible Type	1D - 22 (5)
Loop Circuit Type	1D - 22 (6)
Loop Receiver Select	1D - 22 (2)
Loop Response Time	1D - 22 (1)
Loop Restore Reporting Code	15 (5)
Loop Restore Type	1D - 22 (3)
Loop Shunting Enable	24 (1 - 6)
Loop Shunt Report Code	15 (2)
Low Battery Report Code	18 (5)
Low Battery Restore Report Code	18 (6)
Master Code	01 (1 - 4)
Opening Report Code	16 (2)
Opening/Closing Report Receiver Select	16 (1)
Panic Audible Type	19 (4)
Panic Report Code	19 (1 - 2)
Panic Report Receiver Select	19 (3)
Phone Ring Type	09 (5)
Receiver #1 Message Format	0A (2)
Receiver #1 Phone Number	0C - 0E (1 - 6)
Receiver #1 Receive Format	0A (1)
Receiver #2 Message Format	0A (4)
Receiver #2 Phone Number	0F - 11 (1 - 6)
Receiver #2 Receive Format	0A (3)
RPS Enable	09 (3)
RPS Phone Number	12 - 14 (1 - 6)
Set Test Report Countdown Timer	A0 (1)
Test Report Code	1A (1 - 2)
Test Report Interval	1A (4)
Test Report Receiver Select	1A (3)
Trouble Report Code	15 (4)
Trouble Restore Code	15 (5)
Unit Status Report Code	17 (1)
User Arming Type	07 (1 - 6)
User Combinations	01 - 06 (1 - 4)
Watchdog Reset Report Code	17 (2)

PROGRAMMING THE PANEL

You can program the SYSTEM 236 from the LED or Alpha II keypad, or remotely using the Commander II software. This manual provides you with a brief discription of each programming option beginning on page 9. Remote 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 AC LED's will flash to indicate programming mode. The Alpha II keypad will display **CMD DATA** across the top of the LCD display to indicate programming mode.

NOTE: Some Alpha keypads may have a [↑] [SHIFT] key and an [↵] [ENTER] key in place of the [*] and [#] keys, respectively. This manual uses the [*] for the [SHIFT] key and the [#] for the [ENTER] key.

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 (program data), then press the [#] key to store the data. The LED keypad does not display programmed values. If you are not sure that the correct programming values have been entered, program the Command Location again.

System 236 LED Keypad Layout
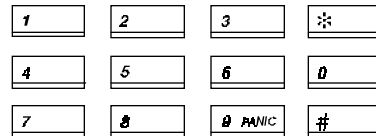
NOTE: To program Command Location A0 with an LED keypad, remember to enter the Command Location, followed by the program data, then press the [#] key.

Warning: If you enter a Command Location and then press the [#] key without entering any data, the keypad will beep 5 times, indicating an error. To correct this problem, simply re-enter the Command Location and Data, then press the [#] key.

### Programming with the Alpha II Keypad

Entering program data with an Alpha II keypad is a two-step process. First, key in the two-digit address (Command Location) to be programmed and press the [#] (or [ENTER]) key. The Alpha II keypad displays the Command Location and the data previously stored. Enter the new data you wish to store and press the [#] (or [ENTER]) key to write the data. You can also scroll through the Command Locations in numerical order by alternately pressing and releasing the [ENTER] key.

NOTE: Command Location A0 must be addressed directly. When programming this Command Location with an Alpha II keypad, the previously stored data is not displayed. To program this location, enter the Command Location followed by the [#] key. Then enter the data to be stored and again press the [#] key.

Programming Hexidecimal Numbers

The Alpha II Programming Template is double-sided. On one side is the Panel Programming Template. (See below.) Use this side when programming the control panel.

Panel Programming Keys
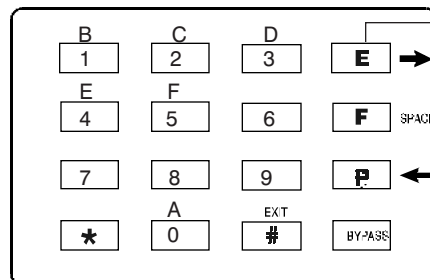
NOTE: The EMERGENCY key may be blank.

NOTE: Some keypads may have the ↑ and ↵ in place of the * and #.

Data is programmed into the panel using the hexidecimal number system, which consists of the digits 0 - 9 and the letters A - F. The digits 0 - 9 are entered directly from the keypad. The chart below shows how to enter the hexidecimal digits A through F.

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

NOTE: Some Keypads may use the ↑ key in place of the ✳ key.

The same procedure is used with both the LED and the Alpha II keypads.

End of Programming Segment
The last two Command Locations are CL 25 and CL A0. When you press the [#] (or [ENTER]) key at these locations, the program will advance to CL 26 or CL A1. These locations are not used in the SYSTEM 236. If you enter CL 26 or CL A1, either press [*][#] ([SHIFT] [ENTER] on some Alpha keypads) to exit programming, or press the Command Location followed by the [#] key for the desired programming location.

To Exit Panel 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.***

Programming the ALPHA II Keypad

You must have the Alpha II keypad wired to the SYSTEM 236. 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.

The Alpha II Keypad
You can program Alpha II keypads with labels for each of the 6 zones and special messages. **Zone labels** display during the walk-test and when the [#] (or [ENTER]) key is pressed during alarm memory or faults. The **Service Message** is displayed during AC failure, fuse failure, communication failure, low battery, or Watchdog reset. The **Dealer Message** displays whenever the system is disarmed.

The messages can be programmed directly from the Alpha II keypad or remotely using the Commander II/Monitor II software package. For detailed information about remote programming, refer to the Commander II/Monitor II Operating Manual (P/N 5-051-221-00).

To enter Keypad Programming, press [Installer Combination] [*] [0] [1] [#]. The Alpha II will display **SERVICE MESSAGE?**. If you do not wish to enter a Service Message, press the [BYPASS] key to scroll to the desired message. If you scroll past the desired message, press and release the [BYPASS] key until you scroll around to it again. You can also scroll in reverse by pressing the [*] key followed by the [BYPASS] key.

Remember: Some keypads may use [SHIFT] and [ENTER] instead of [*] and [#], respectively.

The Scrolling order of the Alpha II messages is:
- SERVICE MESSAGE
- DEALER MESSAGE
- SOFT ZONE IDENTIFIER (C)
- HARDWIRED LOOP IDENTIFIERS
- KEYPAD ADDRESS

For example, to change the Keypad Address:
Enter keypad programming, as described previously, then press [*] [BYPASS]. This will step backwards one step to Keypad Address. Enter the [New Address] followed by the [#] key.

NOTE: If you do not press any key for 5 minutes, the keypad will automatically exit the programming mode.

How To Program Letters and Numbers
Alpha II keypads can be customized to display different messages for the loops and special functions. On one side of the Programming Template, you'll find the Alpha Programming Template. Once you place the Alpha Template over the keys, you'll be able to easily program 6 hardwired loop identifiers, 1 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.

ALPHA II Programming Template
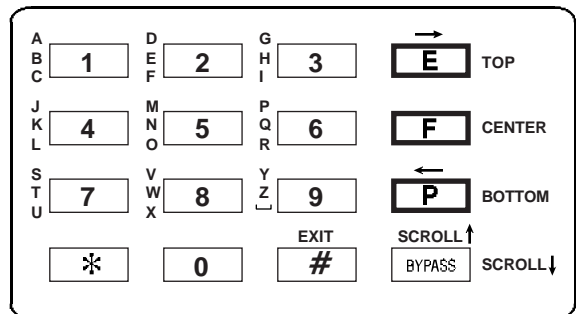
NOTE: Some Alpha keypads may have a ↑ [SHIFT] key and an ↵ [ENTER] key in place of the [*] and [#] keys, respectively. This manual uses the [*] for the [SHIFT] key and the [#] for the [ENTER] key.

Letters may easily be entered from the Alpha II 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] will program the letter C. The soft zone keys are also labelled Top, Center, and Bottom, respectively.

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

SPECIAL FUNCTION KEYS

The Alpha II keypad also has special function keys available during programming. The function of each key is outlined below:

STAR (Shift)

✱ The star (*) key is used as a SHIFT key, and allows you to shift the 1, 2, 3, 4, 5, and 0 keys to other values or functions. Press and release the ✱ key first. On some keypads, this key is labelled ↑ .

POUND (Enter)

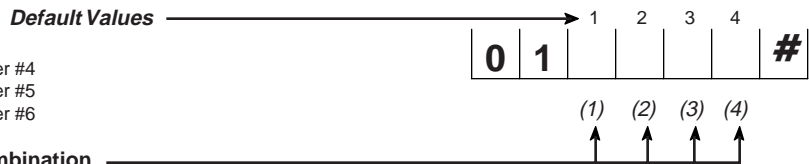**#** The pound (#) key is used like the ENTER key on a computer. It signals that you are finished entering data.

This key may be labelled ◀━ on some keypads.

MOVE CURSOR RIGHT (➡)

✱ + **E** During programming, a combination of the STAR (*) key and the EMERGENCY (E) key is used to move the cursor one space to the right. The data which is passed over is not changed. The EMERGENCY key may be labelled ⊡ on some keypads. If your keypad has this symbol, remove the key and replace it with one of the blank keys provided.

MOVE CURSOR LEFT (⬅)
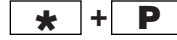
✱ + **P** A combination of the STAR (*) and the POLICE (P) key is used to move the cursor one space to the left. The data which is passed over is not changed. This key may be shown with the ⬭ symbol on some keypads.

ERASE

P + **9** A combination of the POLICE (P) key and the [9] key is used as the erase key. It erases the program value at the cursor position, then moves the cursor one position to the right.

SCROLL

BYPASS The BYPASS key is used to scroll through the messages and zone locations for keypad programming. To scroll backwards, press the STAR (*) key followed by the [BYPASS] key.

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

Command Location 00: Installer Combination

Default Values —————————————→ 0 1 2 3 4 5

| 0 | 0 | | | | | | | # |

(1) (2) (3) (4) (5) (6)
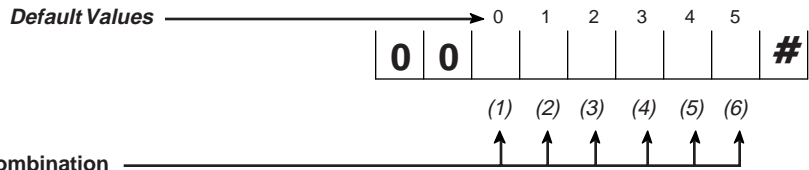
Digit Positions (1) - (6): Installer Combination ——————

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

Command Locations 01 - 06: User Arming Combination (PIN)

Default Values —————————————→ 1 2 3 4

| 0 | 1 | | | | | # |

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

(1) (2) (3) (4)

Digit Position (1) - (4): Arming Combination ——————

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

Master Combination can be used to change other combinations.

To delete a PIN, enter 0 0 0 0.

Command Location 07: User Opening/Closing Report Enable

Default Values —————————————→ 0 0 0 0 0 0

| 0 | 7 | | | | | | | # |

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

Digit Position (1): User #1 O/C Report Enable ——————
0 = No Opening and No Closing Reports
1 = Opening and Closing Reports

Digit Position (2): User #2 O/C Report Enable ——————
0 = No Opening and No Closing Reports
1 = Opening and Closing Reports

Digit Position (3): User #3 O/C Report Enable ——————
0 = No Opening and No Closing Reports
1 = Opening and Closing Reports

Digit Position (4): User #4 O/C Report Enable ——————
0 = No Opening and No Closing Reports
1 = Opening and Closing Reports

Digit Position (5): User #5 O/C Report Enable ——————
0 = No Opening and No Closing Reports
1 = Opening and Closing Reports

Digit Position (6): User #6 O/C Report Enable ——————
0 = No Opening and No Closing Reports
1 = Opening and Closing Reports

NOTE: Some Alpha keypads may have a [↑] [SHIFT] key and an [↵] [ENTER] key in place of the [*] and [#] keys, respectively. This manual uses the [*] for the [SHIFT] key and the [#] for the [ENTER] key.

Command Location 08: Panel Control Options

Default Values ——————————→ 0   0   1   0   0   1

| 0 | 8 | | | | | | | # |

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

Digit Position (1): Disable Loop LEDs ————

0 = No
1 = Yes: shuts zone LEDs off after 5 minutes

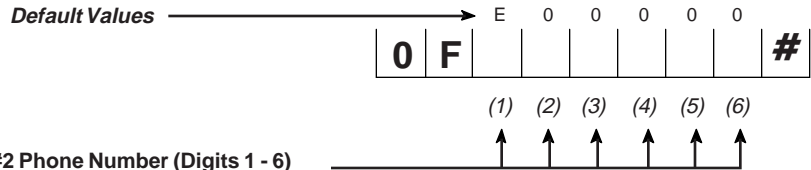**Digit Position (2): Faulted Arming Type** ————

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 reverts to factory value on power loss

Digit Position (4): Daily Battery Test Enable ————

0 = No
1 = Yes: tests battery under load 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): AC Line Frequency ————

0 = 50 Hz
1 = 60 Hz

*Pirate Guard is a trademark of C&K Systems, Inc.

Command Location 09: Telco Control Options

Default Values ——————————→ 1   1   1   1   0   1

| 0 | 9 | | | | | | | # |

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

Digit Position (1): Local System Only ————

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

Digit Position (2): Dialing Attempts ————

0 = 4 attempts
1 = 8 attempts
2 = 14 attempts

Digit Position (3): RPS Enable ————

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

Digit Position (4): Enable Keypad RPS ————

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

Digit Position (5): Phone Ring Type ————

0 = Single ring; uniformly timed rings with long pauses between rings
1 = Double ring; rings twice quickly followed by a long pause then rings twice again

Digit Position (6): Dial Type ————

0 = Touch Tone* DTMF
1 = Pulse Dialing   *Touch Tone is a trademark of AT&T

CL 0A and 0B

Command Location 0A: Communications Format

Default Values ──────────────────────────→ 1   1   1   1

| 0 | A | | | | | # |

                   (1) (2) (3) (4)
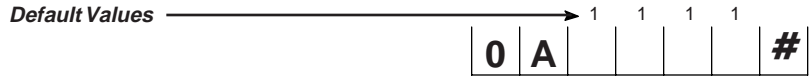
Digit Position (1): Receiver #1 Receiver Format ──────────

1 = Fast "A", 2300 Hz   4 = SumCheck, 2300 Hz
2 = Slow "B", 1400 Hz   5 = CFSK III
3 = SumCheck, 1400 Hz   6 = Ademco DTMF, 1400 Hz

Digit Position (2): Receiver #1 Message Format ──────────

1 = 3/1 Extended
2 = 4/2 (2-digit reporting code)
3 = CFSK III

Digit Position (3): Receiver #2 Receiver Format ──────────

1 = Fast "A", 2300 Hz   4 = SumCheck, 2300 Hz
2 = Slow "B", 1400 Hz   5 = CFSK III
3 = SumCheck, 1400 Hz   6 = Ademco DTMF, 1400 Hz

Digit Position (4): Receiver #2 Message Format ──────────

1 = 3/1 Extended
2 = 4/2 (2-digit reporting code)
3 = CFSK III

Valid combinations of Receiver Format and Message Format are listed below.

Message Format	Receiver Format
3/1 Extended	All formats, **except** CFSK III and DTMF, 1400 Hz
4/2 (2-digit reporting)	All formats, **except** CFSK III
CFSK III	CFSK III only

Command Location 0B: Account Number

Default Values ──────────────────────────→ 0   0   0   0   0   0

| 0 | B | | | | | | | # |

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

Digit Positions (1) - (6): Account Number

Valid entries are 0 - F.
The account number is right justified. The last digit must be in Position (6).
The SYSTEM 236 will read the account number using:
         Digit Positions (4) - (6) in 3-digit accounts
         Digit Positions (3) - (6) in 4-digit accounts
         Digit Positions (1) - (6) in 6-digit accounts
Fill all unused Digit Positions with 0's.

NOTE: Some Alpha keypads may have a ☐ [SHIFT] key
and an ☐ [ENTER] key in place of the [*] and [#]
keys, respectively. This manual uses the [*] for the
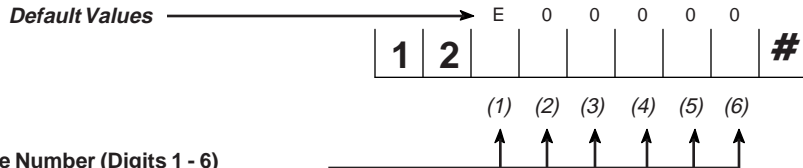[SHIFT] key and the [#] for the [ENTER] key.

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

Command Locations 0C - 0E: Receiver #1 Phone Number

Order in which the numbers will be dialed

Command Location 0C	Command Location 0D	Command Location 0E

(1)   (2)   (3)   (4)   (5)   (6)   *(1)   (2)   (3)   (4)   (5)   (6)*   *(1)   (2)   (3)   (4)   (5)   (6)*
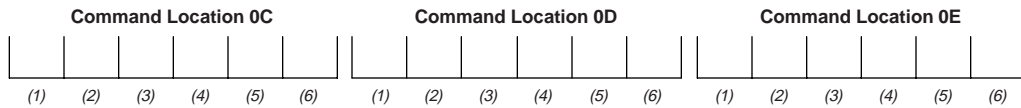
Command Location 0C: Receiver #1 Phone Number (digits 1 - 6)

Default Values ──────────────➤ E   0   0   0   0   0

0 C | | | | | | **#**

(1)   (2)   (3)   (4)   (5)   (6)
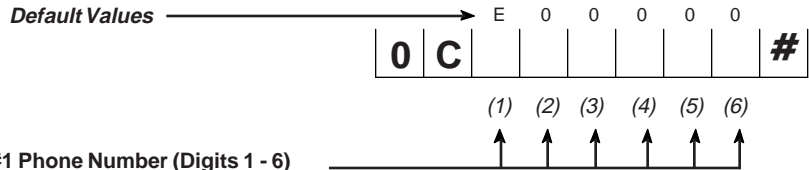
Digit Positions (1) - (6): Receiver #1 Phone Number (Digits 1 - 6)

0 - 9 = dialing digits
✳ 0 = dial tone detect (use if more than one dial tone must be detected)
✳ 2 = * (DTMF dialing only, not used in pulse dialing)
✳ 3 = # (DTMF dialing only, not used in 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". Zeroes after EON will
not be dialed.**

Command Location 0D: Receiver #1 Phone Number (digits 7 - 12)

Default Values ──────────────➤ 0   0   0   0   0   0

0 D | | | | | | **#**

(1)   (2)   (3)   (4)   (5)   (6)
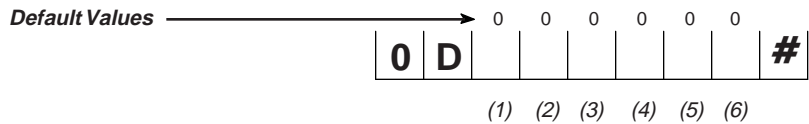
Command Location 0E: Receiver #1 Phone Number (digits 13 - 18)
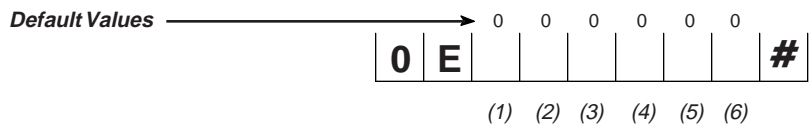
Default Values ──────────────➤ 0   0   0   0   0   0

0 E | | | | | | **#**

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

NOTE: Some Alpha keypads may have a ⬆ [SHIFT] key and an ⏎ [ENTER] key in place of the [*] and [#] keys, respectively. This manual uses the [*] for the [SHIFT] key and the [#] for the [ENTER] key.

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

Command Locations 0F - 11: Receiver #2 Phone Number

Order in which the numbers will be dialed

Command Location 0F						Command Location 10						Command Location 11					
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
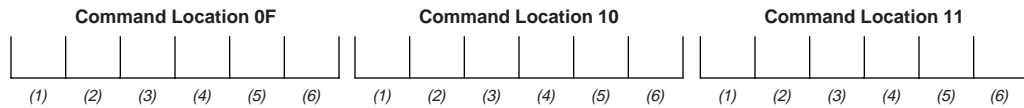
Command Location 0F: Receiver #2 Phone Number (digits 1 - 6)

Default Values ⟶ E 0 0 0 0 0

0 F [ ][ ][ ][ ][ ][ ] **#**

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

Digit Positions (1) - (6): Receiver #2 Phone Number (Digits 1 - 6)

  0 - 9 = dialing digits
✳ 0 = dial tone detect (use if more than one dial tone must be detected)
✳ 2 = * (DTMF dialing only, not used in pulse dialing)
✳ 3 = # (DTMF dialing only, not used in 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". Zeroes after EON will
not be dialed.

Command Location 10: Receiver #2 Phone Number (digits 7 - 12)

Default Values ⟶ 0 0 0 0 0 0

1 0 [ ][ ][ ][ ][ ][ ] **#**

(1) (2) (3) (4) (5) (6)
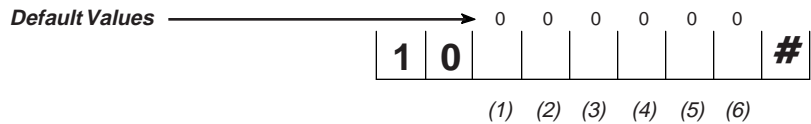
Command Location 11: Receiver #2 Phone Number (digits 13 - 18)
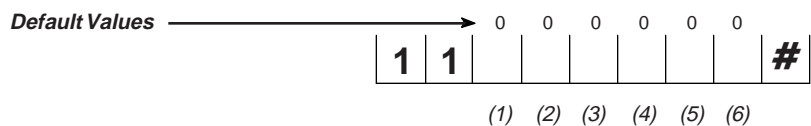
Default Values ⟶ 0 0 0 0 0 0

1 1 [ ][ ][ ][ ][ ][ ] **#**

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

NOTE: Some Alpha keypads may have a [↑] [SHIFT] key and an [↵] [ENTER] key in place of the [*] and [#] keys, respectively. This manual uses the [*] for the [SHIFT] key and the [#] for the [ENTER] key.

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

Command Locations 12 - 14: RPS Phone Number

Order in which the numbers will be dialed

Command Location 12						**Command Location 13**						**Command Location 14**					
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
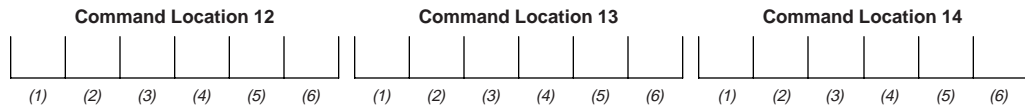
Command Location 12: RPS Phone Number (digits 1 - 6)

Default Values ⟶ E 0 0 0 0 0

1 2 ⬚ ⬚ ⬚ ⬚ ⬚ ⬚ **#**

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

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

0 - 9 = dialing digits
✱ 0 = dial tone detect (use if more than one dial tone must be detected)
✱ 2 = * (DTMF dialing only, not used in pulse dialing)
✱ 3 = # (DTMF dialing only, not used in 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". Zeroes after EON will not be dialed.

Command Location 13: RPS Phone Number (digits 7 - 12)

Default Values ⟶ 0 0 0 0 0 0

1 3 ⬚ ⬚ ⬚ ⬚ ⬚ ⬚ **#**

(1) (2) (3) (4) (5) (6)
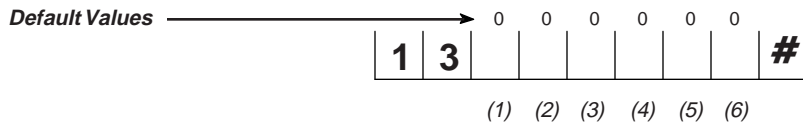
Command Location 14: RPS Phone Number (digits 13 - 18)

Default Values ⟶ 0 0 0 0 0 0

1 4 ⬚ ⬚ ⬚ ⬚ ⬚ ⬚ **#**

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

NOTE: Some Alpha keypads may have a [↑] [SHIFT] key and an [⏎] [ENTER] key in place of the [*] and [#] keys, respectively. This manual uses the [*] for the [SHIFT] key and the [#] for the [ENTER] key.

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

Command Location 15: Event Reports

Default Values ──────────────────────────────→ 1 9 D F E

| 1 | 5 | | | | | | **#** |

                               (1)   (2)   (3)   (4)   (5)
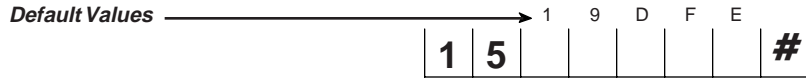
Digit Position (1):   Event Report Receiver Select ────────
                             Shunts, All Restores, Status, Trouble, and Cancel

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 (2):   Loop Shunt Report Code ────────

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

Digit Position (3):   Cancel Report Code ────────

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

Digit Position (4):   Trouble Report Code ────────

Valid entries are 1 - F.
This is a 1-digit reporting code used for all loops.
For 2-digit reporting formats, the loop number will be automatically added as an extension.
Programming a "0" in Position (4) disables trouble reporting for all loops.

Digit Position (5):   Loop Restore Reporting Code ────────

Restores are sent for alarm, shunt, and trouble.
Valid entries are 1 - F.
This is a 1-digit reporting code used for all loops.
For 2-digit reporting formats, the loop number will be automatically added as an extension.
Programming a "0" in Position (5) disables restore reporting for all loops.

Command Location 16: Opening/Closing Reports

Default Values ──────────────────────────────→ 1 B C

| 1 | 6 | | | | **#** |

                             (1)   (2)   (3)

Digit Position (1):   Opening/Closing 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 (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.

Command Location 17: Status Events Reporting Codes - #1

Default Values ⟶ 0 0 0 0

| 1 | 7 | | | | | # |

(1) (2) (3) (4)

Digit Position (1): Unit Status Report Code

This is a global command for CL 17 and CL 18.
If Position (1) is programmed with a "0", all Status Reports in CL 17 and CL 18 will be disabled.

If Position (1) is programmed with any value other than 0, all Status Reports in CL 17 and CL 18 which have been enabled (not programmed with 0) will send reports. Status Reporting Codes will be a 2-digit code. The first digit is the contents of CL 17 (1) and the second digit is the respective Report Code programmed into the panel.

Digit Position (2): Watchdog Reset Report Code

0 = No
1 - F = Yes: this report code sent after each Watchdog reset

Digit Position (3): Failed To Communicate Report Code

0 = No
1 - F = Yes: this report code sent after each failure to communicate

Digit Position (4): Completed Programming Report Code

0 = No
1 - F = Yes: this report code sent on completion of panel programming

Command Location 18: Status Events Reporting Codes - #2

Default Values ⟶ 0 0 0 0 0 0

| 1 | 8 | | | | | | | # |

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

Digit Position (1): Bell Fuse Fail Report Code

0 = No
1 - F = Yes: this report code sent at Bell Fuse failure

Digit Position (2): Bell Fuse Restore Report Code

0 = No
1 - F = Yes: this report code sent at Bell Fuse restoral

Digit Position (3): AC Fail Report Code

0 = No
1 - F = Yes: this report code sent at AC failure

Digit Position (4): AC Restore Report Code

0 = No
1 - F = Yes: this report code sent at AC restoral

Digit Position (5): Low Battery Report Code

0 = No
1 - F = Yes: this report code sent at low battery voltage

Digit Position (6): Low Battery Restore Report Code

0 = No
1 - F = Yes: this report code sent when battery voltage returns to normal

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: Panic Report

Default Values ────────────────────────► 0   0   1   1

| 1 | 9 | | | | | # |

                                         (1) (2) (3) (4)

Digit Positions (1) - (2): Panic Report Code ────────

Valid entries are 0 - F
Program a "00" to disable Panic Reports.

Digit Position (3): Panic 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 (4): Panic Audible Type ────────

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

Command Location 1A: Test Report

Default Values ────────────────────────► 0   0   1   5

| 1 | A | | | | | # |

                                         (1) (2) (3) (4)

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

Valid entries are 0 - F
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 ────────

0 = Manual (See NOTE)   4 = 24 hours   8 = 1 hour, if armed
1 = 1 hour   5 = 7 days   9 = 4 hours, if armed
2 = 4 hours   6 = 14 days   ✳ 0 = 12 hours, if armed
3 = 12 hours   7 = 30 days   ✳ 1 = 24 hours, if armed

> **NOTE:** When the Test Report Interval is programmed with a "0", automatic
> Test Reporting is disabled. To send a Manual Test Report to the
> Central Station, refer to the System Test procedures outlined in the
> Keypad End User Manual supplied with this System.

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

Command Location 1B: Panel Timing

Default Values ———————————→ 3 2 2 1 0 0

| 1 | B | | | | | | | # |

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

Digit Position (1): Entry Delay

1 = 10 seconds	3 = 60 seconds	5 = 120 seconds
2 = 30 seconds	4 = 90 seconds	6 = 150 seconds

Digit Position (2): Exit Delay

1 = 10 seconds	3 = 60 seconds	5 = 120 seconds
2 = 30 seconds	4 = 90 seconds	6 = 150 seconds

Digit Position (3): Audible Time

1 = 2 minutes	3 = 10 minutes	5 = 30 minutes
2 = 5 minutes	4 = 15 minutes	

Digit Position (4): Delay Before Dial Time

1 = 10 seconds	3 = 30 seconds	5 = 50 seconds
2 = 20 seconds	4 = 40 seconds	6 = 60 seconds

Digit Position (5): Disable Instant/Home Exit Delay

0 = No
1 = Yes: no exit delay when system is Instant, Home, or Instant/Home armed

Digit Position (6): Autohome Enable

0 = No
1 = Yes: interior zones automatically shunted when the system is armed and the exit door is not used

Command Location 1C: Loop Alarm Reporting Codes

Default Values ———————————→ 1 2 3 4 5 6

| 1 | C | | | | | | | # |

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

Digit Position (1): Loop 1 Alarm Report Code

Valid entries are 1 - F.
Zone number is automatically added as the second digit.
Program a "0" to disable Alarm Reports for this loop.

Digit Position (2): Loop 2 Alarm Report Code

See Digit Position (1) for programming information.

Digit Position (3): Loop 3 Alarm Report Code

See Digit Position (1) for programming information.

Digit Position (4): Loop 4 Alarm Report Code

See Digit Position (1) for programming information.

Digit Position (5): Loop 5 Alarm Report Code

See Digit Position (1) for programming information.

Digit Position (6): Loop 6 Alarm Report Code

See Digit Position (1) for programming information.

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

CL 1D - 23

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Command Locations 1D - 22: Loop Control

1D = Loop 1   20 = Loop 4
1E = Loop 2   21 = Loop 5
1F = Loop 3   22 = Loop 6

Default Values →   1   1   1   2   2   0

1 D | | | | | | **#**

Digit Position (1): Loop Response Time →   *(1) (2) (3) (4) (5) (6)*

0 = 10 milliseconds
1 = 500 milliseconds

Digit Position (2): Loop 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 (3): Loop Restore Type

0 = No restoral   2 = Return to normal, bell silences
1 = Return to normal   3 = Return to normal, system disarmed

Digit Position (4): Loop Arming Type

0 = Instant   3 = Long Delay
1 = Interior   4 = 24 hours (always armed)
2 = Delay

Digit Position (5): Loop Audible Type

1 = Pulsing   4 = Silent with no LED
2 = Steady   5 = Silent with LED
3 = Chirp

Digit Position (6): Loop Circuit Type

0 = EOL: alarm on open or short
1 = Supervised: trouble on open; alarm on short; follows bell time
2 = Supervised, bell latched: trouble on open; alarm on short; bell latched

NOTE: A Loop programmed as type 1 or 2 will report any open as a Trouble condition, regardless of panel armed status.

Command Location 23: Door Chime Enable

Default Values →   0   0   0   0   0   0

2 3 | | | | | | **#**

(1) (2) (3) (4) (5) (6)
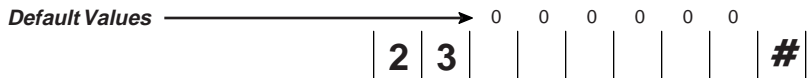
Digit Position (1): Loop 1 Door Chime Enable
0 = No
1 = Yes: keypads beep two seconds when loop is faulted

Digit Position (2): Loop 2 Door Chime Enable
Refer to Digit Position (1) for programming options.

Digit Position (3): Loop 3 Door Chime Enable
Refer to Digit Position (1) for programming options.

Digit Position (4): Loop 4 Door Chime Enable
Refer to Digit Position (1) for programming options.

Digit Position (5): Loop 5 Door Chime Enable
Refer to Digit Position (1) for programming options.

Digit Position (6): Loop 6 Door Chime Enable
Refer to Digit Position (1) for programming options.

Command Location 24: Shunting Enable

Default Values ⟶ 1 1 1 1 1 1

| 2 | 4 | | | | | | | # |

Digit Position (1): Loop 1 Shunting Enable ⟶ (1) (2) (3) (4) (5) (6)
0 = No: makes this zone a priority zone (not shuntable)
1 = Yes: authorized users can bypass or force arm

Digit Position (2): Loop 2 Shunting Enable
Refer to Digit Position (1) for programming options.

Digit Position (3): Loop 3 Shunting Enable
Refer to Digit Position (1) for programming options.

Digit Position (4): Loop 4 Shunting Enable
Refer to Digit Position (1) for programming options.

Digit Position (5): Loop 5 Shunting Enable
Refer to Digit Position (1) for programming options.

Digit Position (6): Loop 6 Shunting Enable
Refer to Digit Position (1) for programming options.

Command Location 25: Delay Before Dial Enable

Default Values ⟶ 0 0 0 0 0 0

| 2 | 5 | | | | | | | # |
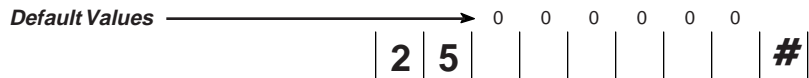
Digit Position (1): Loop 1 Delay Before Dial Enable ⟶ (1) (2) (3) (4) (5) (6)
0 = No
1 = Yes: this loop will delay dialing on alarm for time programmed in CL 1B (4)

Digit Position (2): Loop 2 Delay Before Dial Enable
Refer to Digit Position (1) for programming options.

Digit Position (3): Loop 3 Delay Before Dial Enable
Refer to Digit Position (1) for programming options.

Digit Position (4): Loop 4 Delay Before Dial Enable
Refer to Digit Position (1) for programming options.

Digit Position (5): Loop 5 Delay Before Dial Enable
Refer to Digit Position (1) for programming options.

Digit Position (6): Loop 6 Delay Before Dial Enable
Refer to Digit Position (1) for programming options.

Command Location A0: Test Report Countdown Timer

| A | 0 | | # |

Digit Position (1): Set Test Report Countdown Timer ⟶ (1)

This command sets the time when the first Test Report is transmitted to the central station. The SYSTEM 236 will
use this transmission time whenever it is powered up or the CPU is reset
(unless CL A0 is reprogrammed).

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 = 24 hours	✳ 4 = 22 hours
		✳ 5 = 24 hours

Example:
The time is 1500 hours (3:00 pm). You want the first Test Report to
transmit at 0100 hours (1:00 am). 3:00 pm + 10 hours = 1:00 am.
Program the value "8" in Position (1) of CL A0.

TESTING

Once the installation is complete, connect 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 insure that the system is operating properly.

TELEPHONE LINE PROBLEMS

In the event of telephone line problems, disconnect the SYSTEM 236 by removing the modular connector plug from the Telco interface jack. **Do not disconnect the connection inside the SYSTEM 236 cabinet**. Doing so will prevent the premise phones from operating. If the 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 correctly after the control panel has been disconnected from the phone line, notify the telephone company and request prompt repair. **The user may not under any circumstances, in or out of warranty, attempt any service or repairs on the SYSTEM 236**. The control panel must be returned to C&K SYSTEMS or an authorized service agency for repairs.

WATCHDOG INDICATOR

DS1

WATCH DOG

The SYSTEM 236 is protected by an advanced circuit that constantly monitors the microprocessor.

As long as the panel is powered and operating normally, the DS1 LED on the circuit board will flash. If the Watchdog circuit detects a failure, it will attempt to reset the panel and make the DS1 LED light steadily.

If the panel resumes normal operations after a Watchdog reset, clear the DS1 LED by resetting the panel or pressing [*] [1] [#], then test the system. No further action is required.

If the panel does not operate properly after a Watchdog reset, call the C&K Technical Support Hotline at 1-800-227-8065.

FCC NOTICE

WARNING: **This device is intended to be installed by a professional alarm installer.**

The user shall be cautioned that changes or modifications not expressly approved by C&K SYSTEMS could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the manufacturer's instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient the receiving antenna.
- Connect the equipment to a different outlet so that the control panel and receiver are on different branch circuits.
- Increase the separation between the equipment and the receiver.
- Consult the alarm dealer or an experienced radio/television technician for help.

In accordance with Part 68 of the FCC Rules, this device must not be used on party lines or coin operated phone lines.

If you experience trouble with the telephone lines, disconnect the panel from the line to determine the source of the trouble. If it is determined that the control panel is malfunctioning, discontinue its use until the malfunction has been corrected.

CANADIAN EMISSION REQUIREMENTS

This digital apparatus does not exceed the Class B limits for radio noise emmissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la Class B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Keypad Operation Command Summary

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

The following Keypad Commands apply to both the LED and Alpha II 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] [#]
Chime On/Off		[*] [5] [#]
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 interior zones are shunted simultaneously; Exterior zones armed; Combo may be required	[Combination] [*] [4] [#]
Instant Arm	Converts all delayed zones to instant; Combo may be required	[Combination] [*] [7] [#]
Instant Home Arm	Arms exterior zones, shunts interior zones, 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 labelled 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 26 and CL 08 (5).

The following Keypad Commands apply to the Alpha II 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 & Revision Number		[*] [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] [#]

Survey of Most Common Questions

The following is a summary of the questions most frequently asked of our Technical Support Department.

QUESTION: *How do I program the panel with the LED keypad?*
ANSWER: To program with the LED keypad, enter the Command Location to be programmed, the Data to be programmed and the press the [#] key. (See also page 6.)

For Example: To program User #2 with a PIN of 4-5-3-5, enter the following keystrokes:

CL	Data to Store	Write Data
[0][2]	[4] [5] [3] [5]	[#]

Question: *How do I access Alpha Keypad Programming to enter Zone Labels?*
Answer: To begin Alpha Keypad Programming (you cannot program the LED keypad), enter [Installer Combination] [*] [0] [1] [#]. Then scroll to the desired message location. (See also page 7.)

Question: *How do I interpret a Trouble on the LED keypad? How do I clear a Trouble on the LED keypad?*
Answer: A number of conditions may cause the Service LED to light. See the chart below for additional information.

Service LED	Power LED	Zone LED's	Cause
Flash Slow	On	Off	Watchdog
On	On	Flash Slow	Zone Trouble
On	Off	Off	AC Failure
On	Flash Slow	Off	Low Battery
Flash Fast	On	Off	System Trouble (Comm Fail)
On	On	Off	System Trouble (Bell Fuse Fail)

Question: *How do I enter hexidecimal numbers when using keypad programming?*
Answer: Hexidecimal values are entered through the use of the [*] key and one of the digits [0] - [5]. For additional help with entering hexidecimal numbers, refer to pages 6 - 7. The hexidecimal conversion chart is also found at various locations throughout the programming section of the manual.

Question: *What is an "Interface error 1" and how do I correct the error?*
Answer: This error is caused by a problem with the Data line (Green wire) between the panel and the keypad. Check the connection to ensure that the wire is not pinched or loose. Also try disconnecting all keypads from the panel (one at a time), resetting the panel after each keypad is removed. Remember, to reset the panel press: [Master Code] [*] [6] [8] [#].

Question: *How do I reset Alarm Memory?*
Answer: To Clear Alarm Memory, press [*] [1] [#].

Question: *How do I address an Alpha Keypad for the first time?*
Answer: If you have an Alpha keypad that has never been addressed, when power is initially applied, the display will read **KEYPAD ADDRESS?**. To enter the address, simply press a number between 0 and 7. Remove panel power for 3 seconds and then re-apply power to reset the system. For additional information about Keypad addressing, see page 5.

> **NOTE:** If operating at or near the limit of AUX Power and Keypad Power, you may need to remove power for up to 30 seconds in order for the system to reset properly.

Question: *Why do my loops fail to respond after changing the programming?*
Answer: In order for the panel to recognize the programming changes for the loops, either the loops have to be tripped and restored or the panel must be reset ([Master Combination] [*] [6] [8] [#]).

Question: *How do I interpret the Unit Status Reports? Can the codes be changed?*
Answer: Status Reporting is divided between CL 17 and CL 18. Each Reporting Code of the Unit Status Report is a two-digit code. The first digit is the data programmed into CL 17 Digit Position (1) and may be any value from 0 - F. The second digit is the data programmed into the respective Status Report Code. Please note that programming a 0 into CL 17 (1) will disable all Unit Status Reports in CL 17 and CL 18. Additional information about Unit Status Reporting Codes can be found on page 16 in the programming section.

Question: *How do I enter Receiver and RPS Phone Numbers? Why do I have to enter the E at the end of the number?*
Answer: The System 236 is designed to handle phone numbers up to 18 digits long, but the firmware can only handle 6 digits per Command Location. This means that 3 Command Locations are required to store a phone number. With variations in number length and special characters which may need to be included, the software needs some method of determining the end of the number. The E (entered by pressing [*][4]) tells the software that it has reached the end of the phone number and to ignore any additional digits.

        For Example: To program the panel for Receiver #1 with a phone number of 555-1212 and disable the call waiting feature using *70, enter the following sequence:

Command Location 0C						Command Location 0D						Command Location 0E					
C	7	0	5	5	5	1	2	1	2	E	0	0	0	0	0	0	0
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)

NOTE: Entering [*] [2] in CL 0C (1) will display the value "C" and entering [*] [4] in CL 0D (5) will display the value "E".

Question: *How can I correct the problem of two Alpha keypads with the same address?*
Answer: When two keypads have been given the same address, a conflict occurs on the data bus since two keypads are trying to communicate at the same time. The only way to correct the problem is to disconnect both keypads and then re-address one of them, making sure that the address is not used by any other keypad. To re-address the keypad, enter Alpha Keypad Programming ([Installer Combination] [*] [0] [1] [#]) and scroll backward one step ([*] [BYPASS]). Then enter the new address. Don't forget to reset the panel ([Master Code] [*] [6] [8]]#]) after changing the address, so the panel knows how to properly address the keypad. For additional information about keypad addressing, see page 5.

Question: *Why can't my panel communicate with the Central Station?*
Answer: There are several reasons for the panel not communicating. The first place to look is CL 09 (1). This is the Telco Control, if Digit Position (1) is programmed with a 1, all communication except RPS is disabled. If 09 (1) is programmed with a 0, check to ensure that all of the following parameters are properly set:

        Account Number 1 is programmed into CL 0B
        Receiver #1 Phone Number is correctly programmed into CL 0C - 0E
        Receiver Format and Message Format agree CL 0A
        Telco Control Options (CL 09) are correctly programmed
        The RJ-31X jack is correctly wired (pins 4 & 5 are not switched with 1 & 8)

Recommendations for Reducing False Alarms

The recommendations contained in this section are designed to assist you in reducing false alarms. The first column contains the Command Locations and Digit Positions in parentheses ( ). The second column is the recommended program option followed by a brief explanation.

Program Option	CL	Program Function	Comments
Arming/Combination Options	08 (5)	Combination Command	This feature is enabled to prevent unauthorized users from activating certain keypad functions. When activated, this command will require a valid User Combination to perform such functions as Bypassing a Zone, Group Bypassing, Keypad Activated RPS, Central Station and Bell Testing, and Instant Arming. For more help with commands requiring User Combinations, see page 22(Command Summary).
Loop Control alarms.	1D - 22 (1)	Loop Response Time	This option determines the response time of the loop itself. It acts as a buffer on the loop to minimize the possibility of fast acting sensors, such as swingers or window foil, producing false
Loop Control	1D - 22 (3)	Loop Restore Type	This option is used in conjunction with CL 15 Digit Position (5), Restore Reporting Code, and CL 15 (1), Event Report Receiver Select. The panel can be programmed to send a Restoral Report only when the loop is normal and the system is disarmed. With this arrangement, any loop which is triggered multiple times while armed will only send one alarm report until the system is disarmed. This prevents the system from tieing up the phone line with continuous alarm and restoral reports.
Loop Control doors	1D - 22 (4)	Loop Arming Type	There may be occassion where it is desirable to program all and interior points as delayed. Or you may need to program interior zones to be delayed only during the Entry/Exit Delay Time. This Command Location allows a variety of Arming Types to help minimize false alarms.
Event Reporting actually	15 (1 & 3)	Cancel Report Code/Cancel Report Receiver Select	This feature should always be enabled on reporting systems, especially if the system does not send Opening and Closing Reports. A Cancel Report is sent to the monitoring station in the event that an Authorized User clears the alarm while the bell is still active. The Cancel Report Code (Digit Position 3) is
			a two-digit code with the first digit being programmed by the installer and the second digit being the User ID # when the report is sent. Digit Position (1) determines which receiver gets the Cancel Report.
Loop Switches	25 (1 - 6)	Delay Before Dial	This option programs the loops to have a delay after they are triggered to allow the User time to shut down the system in the event of an accidental triggering of the zone. The amount of time is determined by the value programmed into CL 1B Digit Position (4). The time delay may be between 10 and 60 seconds, in 10 second intervals.

THE LIMITATIONS OF YOUR ALARM SYSTEM

While the SYSTEM 236 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 AC will not work if their AC 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 a different level of the residence from bedrooms, there 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 another 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 236 and all keypads should also be tested.

- Installing an alarm system may make you eligible for lower insurance rates. However, an alarm system is not a substitute for insurance. Homeowners, property owners, and renters should continue to insure their lives and property.

236 Programming Worksheet

Client: _____ **SYSTEM 236 Phone Number:** _____

Address: _____

Installer: _____ **Date:** _____

VOLTS
AC volts (AC terms): _____

AUX POWER VOLTS
(terms AUX+ and C): _____

BATTERY VOLTS
Under load - AC off: _____

   CURRENT
   Keypads _____

   AUX POWER

         + _____

TOTAL
(400 mA allowed): = _____

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 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** Name: _____

---

0 7   [0][0][0][0][0][0] # **User Arming Type**

0 8   [0][0][1][0][0][1] # **Panel Control Options**

0 9   [1][1][1][1][0][1] # **Telco Control Options**

0 A   [1][1][1][1] # **Communications Format**

| 0 | B | 0 | 0 | 0 | 0 | 0 | 0 | # | **Account Number** |

Phone #1 (1st 6 digits)

| 0 | C | E | 0 | 0 | 0 | 0 | 0 | # |

(Middle 6 digits)

| 0 | D | 0 | 0 | 0 | 0 | 0 | 0 | # |

(Last 6 digits)

| 0 | E | 0 | 0 | 0 | 0 | 0 | 0 | # |

Phone #2 (1st 6 digits)

| 0 | F | E | 0 | 0 | 0 | 0 | 0 | # |

(Middle 6 digits)

| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | # |

(Last 6 digits)

| 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | # |

RPS Phone (1st 6 digits)

| 1 | 2 | E | 0 | 0 | 0 | 0 | 0 | # |

(Middle 6 digits)

| 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | # |

(Last 6 digits)

| 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | # |

| 1 | 5 | 1 | 9 | D | F | E | # | **Event Reports** |

| 1 | 6 | 1 | B | C | # | **Opening/Closing Reports** |

| 1 | 7 | 0 | 0 | 0 | 0 | # | **Status Event Reporting Codes - #1** |

| 1 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | # | **Status Events Reporting Codes - #2** |

| 1 | 9 | 0 | 0 | 1 | 1 | # | **Panic/Duress** |

| 1 | A | 0 | 0 | 1 | 5 | # | **Test Report** |

| 1 | B | 3 | 2 | 2 | 1 | 0 | 0 | # | **Timing/Keypad Control** |

| 1 | C | 1 | 2 | 3 | 4 | 5 | 6 | # | **Loop Alarm Reporting Codes** |

| 1 | D | 1 | 1 | 1 | 2 | 2 | 0 | # | **Loop 1 Control** |

| 1 | E | 1 | 1 | 1 | 1 | 2 | 0 | # | **Loop 2 Control** |

| 1 | F | 1 | 1 | 1 | 0 | 2 | 0 | # | **Loop 3 Control** |

| 2 | 0 | 1 | 1 | 1 | 0 | 2 | 0 | # | **Loop 4 Control** |

| 2 | 1 | 1 | 1 | 1 | 0 | 2 | 0 | # | **Loop 5 Control** |

| 2 | 2 | 1 | 1 | 0 | 4 | 1 | 1 | # | **Loop 6 Control** |

| 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | # | **Door Chime Enable** |

| 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | # | **Shunt Enable** |

| 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | # | **Delay Before Dial** |