

SYS3316RF Installation Instructions

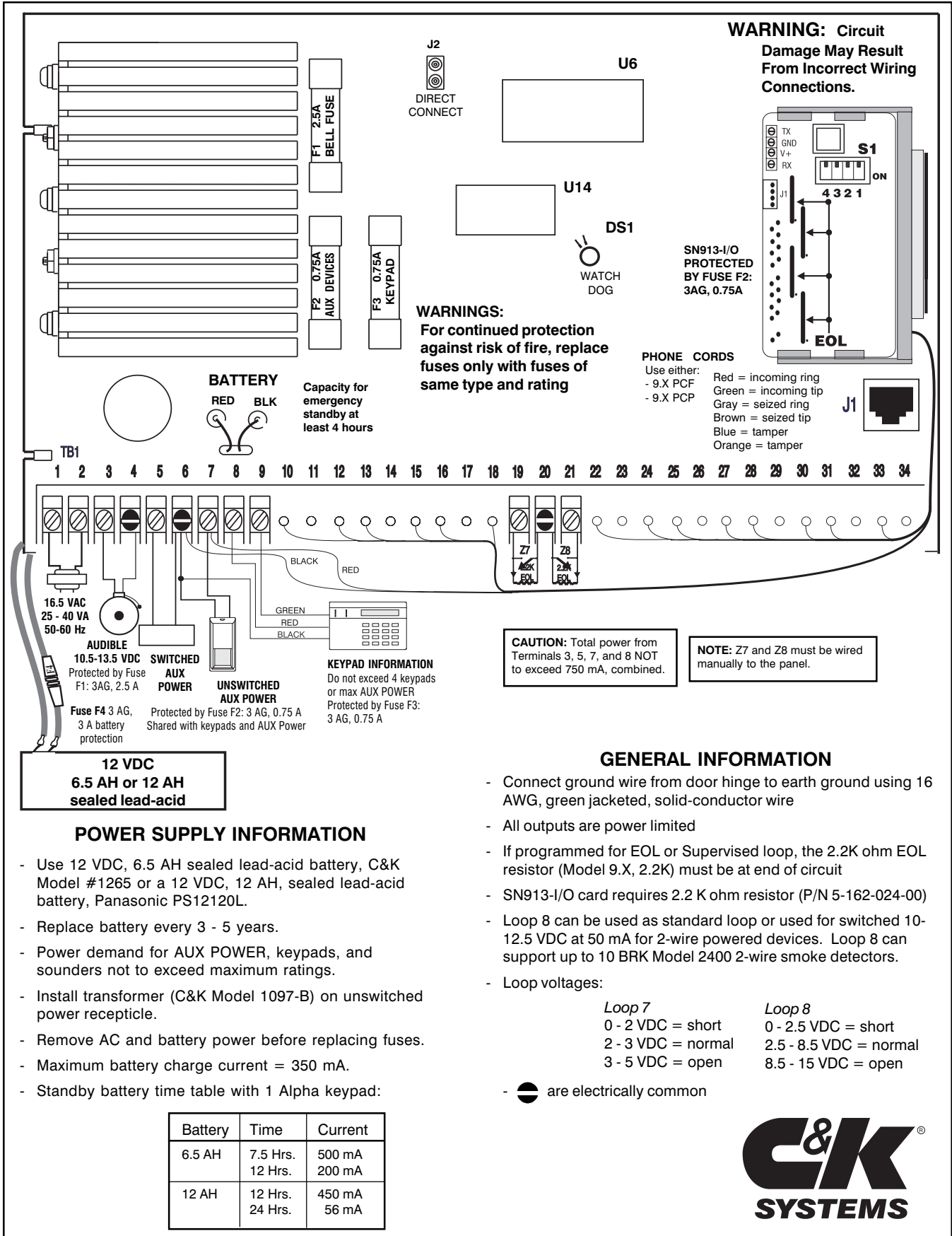


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BEFORE YOU START

Introduction

The SYS3316RF is a fully-programmable 16-zone control panel. It can be programmed from the Alpha or LED keypad or remotely via the COMMANDER II/MONITOR II software package.

Scope of This Manual

This manual contains basic installation and programming information for the SYS3316RF. For additional information about remote programming, please refer to the Commander II/Monitor II Operating 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 SYS3316RF hardware, software, and manuals without prior notice.

Residential Installation Guidelines

The following options are recommended for a standard SYS3316RF installation in a residential environment:

1. Program the audible to sound for at least four minutes before silencing.
2. No zones should be programmed for silent alarm.
3. Fire zones should be programmed for Temporal Code 3 audible alarm.
4. Burglar zones should be programmed for a steady audible.
5. Burglar loops should be programmed for EOL.
6. Entry Delay should not be greater than 45 seconds.
7. Exit Delay should not be greater than 60 seconds.
8. The Dynamic Battery Test should be enabled.
9. The Unit Status Report should be enabled.
10. The 24-hour Check-in (Test Report) should be enabled.
11. The communicator should not be programmed for Delay Before Dial.

Installation Guidelines (continued)

12. The system must not be programmed to dial a police station.
13. Use screws (supplied) to secure cover or install a lock on the cabinet.
14. Loop Response Time should be set to 500mS.

Zone Programming

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

INSTALLATION

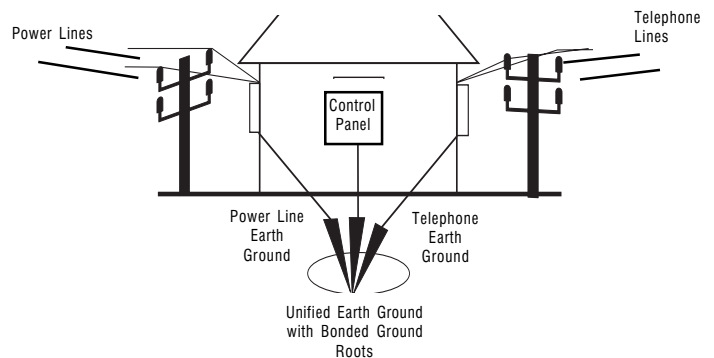
Mounting

The SYS3316RF should be mounted in a location which allows convenient access to AC power, telephone connections, and earth ground.

- Remove the SN913-I/O from its card cage and the control panel circuit board from the cabinet. This will prevent possible damage to the circuit boards 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 boards, remembering to connect the ground lug to the lower left corner of the control panel 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

Standby Battery

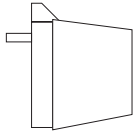
The SYS3316RF is designed to operate with a 12-volt, 6.5 AH, sealed lead-acid battery (C&K Model 1265). Do not use non-rechargeable batteries or batteries other than sealed lead-acid. **It is recommended that you replace the standby battery every three to five years.**

Connect the red lead to the positive terminal of the battery and the black lead to the negative battery terminal. The battery is reverse-polarity protected by a 3 amp, 3 AG, fast-blow fuse (F4).

For 24-hour standby, a 12 VDC, 12 A-H, sealed lead-acid battery must be connected in place of the 6.5 AH battery. Use the Panasonic model 12120L battery; use of the C&K Model 12V12A Battery Adapter (sold separately) is also required.

AC POWER

Terminals 1 and 2



AC power is supplied by a 16.5 VAC, 25 - 40 VA transformer at 50 or 60 Hz. A UL listed Class 2 transformer (such as the C&K Model 1097-B) must be used. Connect the transformer secondary to terminals 1 and 2. Use at least 18 AWG (1.02 mm) wire to reduce voltage drops. **The transformer primary must be**

connected to an unswitched receptacle. Do not connect primary to Ground-Fault-Interrupt (GFI) circuits. Secure the transformer to the wall.

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.

AC Power Failure

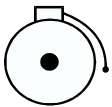
If an AC power failure lasts more than 15 minutes, the keypads will display a system trouble. An AC failure report will be sent, if programmed. When AC is restored for five minutes, a restoral report will be sent.

Available Power

The maximum total power available from the **Audible, AUX (Switched and Unswitched), and Keypad** Terminals (terminals 3, 5, 7, and 8) is 750 mA. The Switched Aux, Unswitched Aux, Receiver/Interface Board and Keypads Terminals share the same power bus. Combined power for these outputs should not exceed 500 mA.

AUDIBLE OUTPUT

Terminals 3 and 4



Terminal 3 provides up to 0.75 Amps at 10.5 - 13.5 VDC. The type of voltage (steady, pulsed, or chirp) and the time is programmable.

Fuse F1

Terminal 3 is protected by a 2.5 Amp, 3 AG fast-blow fuse (F1).

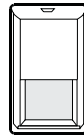
NOTE: If any fuse opens, remove AC and DC power, remove the short or overload condition, then replace the fuse before restoring power. Do not substitute a higher rated fuse.

Electromagnetic Interference

Vibrating horns and bells can produce electromagnetic interference (EMI). While EMI will not damage the SYS3316RF, it can cause transmission errors and mis-dialing. To minimize EMI, install a 0.01 mfd, 100 volt capacitor across the terminals of the horn or bell. The capacitor must be located at the source of the EMI (horn or bell).

AUXILIARY POWER

Terminals 5, 6, and 7



Terminals 5 and 7 provide positive 10 - 12.5 VDC power. Terminal 5 is used for devices that require switched power for resetting. Typical devices are glass-breaks and smoke detectors. Terminal 6 provides the common for Switched AUX, Unswitched AUX, and Keypad power. The SN913-I/O Interface Board is connected to terminals 6 and 7 at the factory.

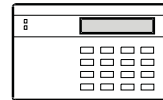
Fuse F2

Terminals 5 and 7 (AUX POWER) are protected by a 0.75 amp, 3 AG, fast-blow fuse (F2).

ARMING STATIONS

Terminals 6, 8, and 9

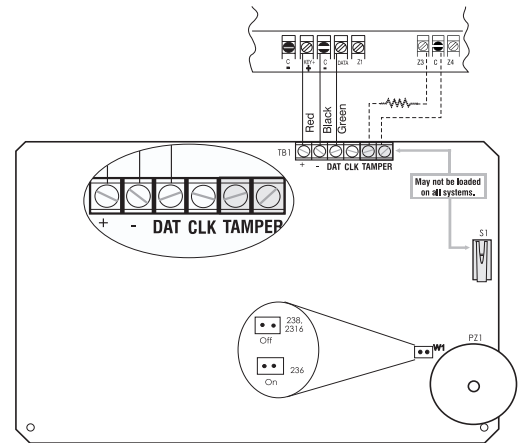
Terminal 6 (black) is common.



Terminal 8 (red) provides 11 - 14 VDC keypad power.

Terminal 9 (green) is data from the keypad to the panel.

Maximum wire length for connecting any keypad is 500' (152 m) of 22 AWG (0.643 mm) copper wire.



Connect the keypad to the control panel as shown in the diagram above. The Alpha Plus keypad also has a jumper, located near the piezo, that must be removed when used with the SYS3316RF control panel.

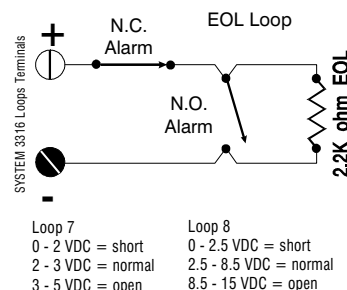
The SYS3316RF is capable of addressing up to 16 keypads (8 Alpha and 8 LED). Each LED keypad uses 35 mA of current. Each LCD (Alpha) keypad uses 64 mA of current. See **Available Power** for current limitations. See page 4 for additional information on keypad setup.

Fuse F3

Terminal 8 (keypad power) is protected by a 0.75 amp, 3 AG, fast-blow fuse (F3).

LOOP INPUTS

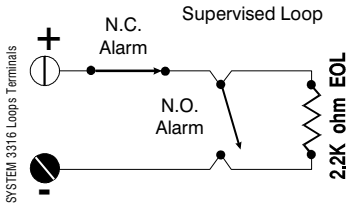
Terminals 19, 20, and 21



Two loops may be independently configured through programming. Loops can be wired with an open circuit switch, closed circuit switch, or with a 2.2K-ohm end-of-line (EOL) resistor.

When programmed as an EOL circuit, either an open or a short will be reported as an alarm if the system is in an armed state.

LOOP INPUTS (continued)



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 is reported as an alarm if the system is armed, but will have no effect if the system is disarmed.

Pre-wired Loops

Loops 1 - 6 and 9 - 16 are pre-wired to the SN913-I/O Interface Board and are configured as supervised loops for use with the WIRELESS transmitters. EOL resistors for these loops are installed on the SN913-I/O Interface Board.

Loop 8

The terminals for zone 8 (20 and 21) are a standard loop that can also power 2-wire devices. The loop supplies 10 - 12.5 VDC at 50 mA. Use Loop 8 to power 2-wire glass-breaks and smoke detectors. The 50 mA on Loop 8 is part of the 500 mA AUX Power.

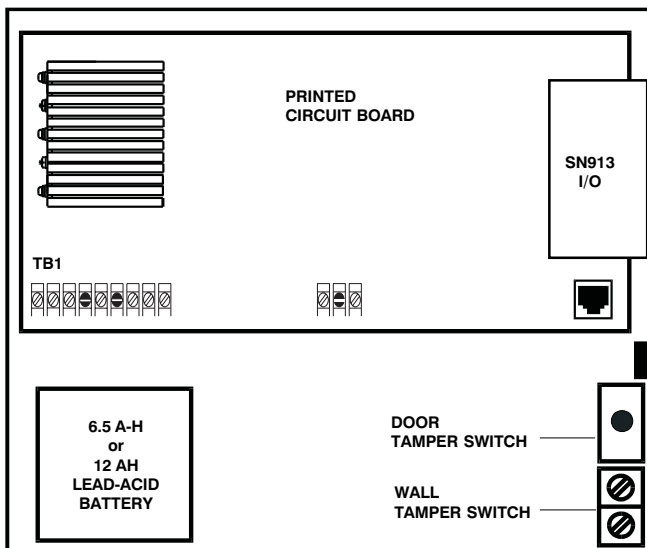
TAMPER SWITCH INSTALLATION

C&K has designed the SYS3316RF 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:

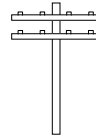
- 1 Position the tamper switch inside the cabinet at the lower right corner of the cabinet. For the wall tamper, the plunger should go through the small hole in the back of the cabinet. For the door tamper, the plunger should face out from the cabinet. **Refer to the drawing below.**
- 2 Connect the 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.

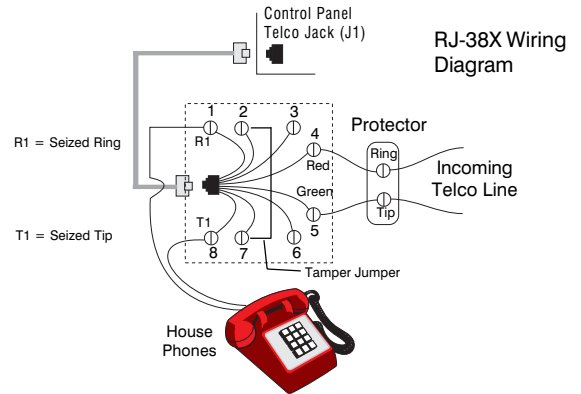
Tamper Switches installed in the SYS3316RF cabinet



TELEPHONE INTERFACE



Connect the SYS3316RF to the phone line using the 9.X PCF or 9.X PCF cord (not included). Each of the cords has an 8-pin telco plug on one end. Plug this end of the cord into J1 at the lower right corner of the PCB. Connect the other end as outlined below:



9.X PCF

The 9.XPCF has eight flying leads on the other end. Wire them to the phone line terminals as follows:

- | | |
|--------------------|-----------------------------|
| RED = ring | BROWN = tip seized |
| GREEN = tip | BLUE and ORANGE = tamper |
| GRAY = ring seized | YELLOW and BLACK = not used |

SYSTEM START-UP

Five 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.

If you replace the 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.

Voltage Variations

Output voltages at terminals 5, 7, and 8 may vary from 9.0 to 14.4 VDC (worst case), depending on the load, battery condition, and AC line voltage.

KEYPAD SETUP

ALPHA KEYPAD INFORMATION

The Alpha 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 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 for optimum viewing, while holding the keypad at its mounting height.

ADDRESSING KEYPADS

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. **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 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 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 23 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 the three hook switches on the LED keypad's PCB.

Hook switches **SW1**, **SW2**, and **SW3** are used to set the address of LED keypads. Refer to the chart below:

HOOK SWITCHES



Any address from 8 to 15 can be used. The exact number is not important, as long as each LED keypad in the system has a different address number. Should you accidentally use the same address for more than one keypad, the system will fail to respond to keypad input. Refer to page 23 (Alpha keypads with same addresses) for assistance in correcting this problem.

SW1	SW2	SW3	KEYPAD ADDRESS
Closed	Closed	Closed	8
Closed	Closed	Open	9
Closed	Open	Closed	10
Closed	Open	Open	11
Open	Closed	Closed	12
Open	Closed	Open	13
Open	Open	Closed	14
Open	Open	Open	15

LED Keypad Backlighting

Hook switch **J1** controls the LED keypad's backlighting. When J1 is closed (default setting), the backlighting will be enabled. Open J1 to disable the backlighting.

LED Keypad Piezo

Hook switch **J2** controls the LED keypad's piezo audible. When J2 is closed (default setting), the piezo is enabled. Open J2 to disable the piezo.

FACTORY SETTINGS

DEFAULT PROGRAM SETUP

The default programming of the SYS3316RF will allow you to operate it as a local panel without any additional programming. The actual default programming values are shown on the Programming Worksheet (last 4 pages of this manual).

Note: If you connect power before wiring the loops, install a 2.2K-ohm EOL resistor across each loop.

Combinations

Installer combination: 0 1 2 3 4 5
 User #1 (Master) combination: 1 2 3 4
 Users #2 - 32: disabled
 Default installer combination: yes
 Guest combination: no
 Combination required: no
 Faulted Arming type: goof-proof
 Opening/Closing: no Users authorized to send reports
 Duress: disabled

Reporting

Account #1 and #2: disabled
 Dialing type: pulse
 RPS allowed: yes

Zones

Zone 1 = Entry/Exit delay - SUPERVISED EOL circuit
 Zone 2 = doors or windows - SUPERVISED EOL circuit
 Zone 3 = doors or windows - SUPERVISED EOL circuit
 Zone 4 = doors or windows - SUPERVISED EOL circuit
 Zone 5 = doors or windows - SUPERVISED EOL circuit
 Zone 6 = doors or windows - SUPERVISED EOL circuit
 Zone 7 = doors or windows - EOL circuit
 Zone 8 = fire or smoke - supervised EOL circuit
 Zone 9 = interior - SUPERVISED EOL circuit
 Zone 10 = interior - SUPERVISED EOL circuit
 Zone 11 = interior - SUPERVISED EOL circuit
 Zone 12 = interior - SUPERVISED EOL circuit
 Zone 13 = interior - SUPERVISED EOL circuit
 Zone 14 = interior - SUPERVISED EOL circuit
 Zone 15 = interior - SUPERVISED EOL circuit
 Zone 16 = interior - SUPERVISED EOL circuit
 Emergency soft zone: chirp audible, non-reporting
 Fire soft zone: pulsed audible, non-reporting
 Police soft zone: steady audible, non-reporting

Testing

Test report interval: 7 days and disabled

Timing

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

Unit Control

Local system: yes
 Dynamic battery test: off

PROGRAMMING OPTIONS

The following is an alphabetical listing of all SYS3316RF programming options, including Command Locations and Digit Positions. Digit Positions are inside parentheses (). **NOTE:** All Command Locations are in Hexadecimal.

Option	Location
Account #1	0C (1 - 6)
Account #2	10 (1 - 6)
AC Power Line Frequency	2F (5)
Alarm Receiver Select by Loop	1F - 26 & 49 - 50 (1)
Alarm Reporting Code by Loop	17 - 1E & 40 - 47 (1 - 2)
Audible Time	2D (5)
Bell Reverse Operation	2E (3)
Cancel Report Code	2A (5)
Cancel Report Receiver Select	2A (6)
Closing Report Code	2C (3)
Closing Report Receiver Select	2C (4)
Combination Command	09 (2)
Daily Battery Test Enable	2F (2)
Default Installer Combination	09 (3)
Delay Before Dial by Loop	30 - 3F (4)
Delay Before Dial Time	0B (1)
Dial Attempts	0B (6)
Dial Type	0B (2)
Disable Loop LEDs	2E (5)
Door Chime Enable by Loop	30 - 3F (1)
Duress Report Code	2D (1)
Duress Report Receiver	2D (2)
Emergency Bell Type	27 (4)
Emergency Receiver Select	27 (3)

Option	Location
Emergency Report Code	27 (1 - 2)
Entry Delay Time	2D (3)
Entry Pre-alarm Enable	2E (1)
Exit Delay Time	2D (4)
Exit Pre-alarm Enable	2E (2)
Faulted Arming Type	09 (4)
Fire Bell Type	28 (4)
Fire Receiver Select	28 (3)
Fire Report Code	28 (1 - 2)
Four Minute Power Up Delay Enable	2F (3)
Group Shunt Enable	30 - 3F (3)
Guest Combination	08 (2 - 6)
Guest Combination Time	09 (1)
Installer Combination	00 (1 - 6)
Keypad RPS Enable	0B (3)
Local System Only	2F (1)
Loop Arming Type	1F - 26 & 49 - 50 (4)
Loop Bell Type	1F - 26 & 49 - 50 (5)
Loop Circuit Type	1F - 26 & 49 - 50 (6)
Loop Response Time	1F - 26 & 49 - 50 (2)
Loop Restore Type	1F - 26 & 49 - 50 (3)
Master Code (User #1)	01 (2 - 6)
Opening Report Code	2C (1)
Opening Report Receiver	2C (2)
Phone Ring Type	0B (5)
Police Bell Type	29 (4)
Police Receiver Select	29 (3)
Police Report Code	29 (1 - 2)
Receiver #1 Message Format	0A (2)
Receiver #1 Phone Number	0D - 0F (1 - 6)
Receiver #1 Receiver Format	0A (1)
Receiver #2 Message Format	0A (4)
Receiver #2 Phone Number	11 - 13 (1 - 6)
Receiver #2 Receiver Format	0A (3)
Restore Receiver Select	2A (2)
Restore Reporting Code by Loop	17 - 1E & 40 - 47 (3 - 4)
Ring Back Enable	2E (4)
RPS Enable	0B (4)
RPS Phone Number	14 - 16 (1 - 6)
Set Test Report Countdown Timer	A0 (1)
Set Real-Time Clock	B3 & B4 (1 - 6)
Shunt Enable	30 - 3F (2)
Shunt Receiver Select	2A (1)
Shunt Reporting Code by Loop	17 - 1E & 40 - 47 (5 - 6)
Soft Zone Operation Enable	2F (4)
Test Report Code	2B (1 - 2)
Test Report Interval	2B (4)
Test Report Receiver Select	2B (3)
Trouble Report Code	48 (1)
Trouble Report Receiver Select	48 (2)
Trouble Restore Code	48 (3)
Trouble Restore Receiver Select	48 (4)
Unit Status Code	2A (3)
Unit Status Receiver	2A (4)
User Arming Type	01 - 08 & 51 - 68 (1)
User Combinations	01 - 08 & 51 - 68 (2 - 6)

PROGRAMMING THE PANEL

You can program the SYS3316RF from the LED or LCD keypad, as well as remotely using the COMMANDER II software. Information on remote programming is available in the COMMANDER II/MONITOR II Operating Manual. This installation manual includes a brief description of each programming option beginning on page 8.

Starting Panel Programming

Key in the [Installer Combination] [*] [0] [#]. The default Installer Combination is **0 1 2 3 4 5**. When using the SYSTEM 2316 LED keypad, the PROGRAM LED will light steady to indicate programming mode. On the 2316 Plus LED keypad the READY, ARM, and SERVICE 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.

Programming with the LED Keypad

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

NOTE: To program Command Locations A0, B3, and B4 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 program 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 Hexadecimal Numbers

The Alpha keypad may be used to program the control panel. The cursor is moved to the right using the Emergency (E) key and to the left using the Police (P) key.

Data is programmed into the panel using the hexadecimal 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 hexadecimal digits A through F.

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

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

Programming with the Alpha Keypad

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

NOTE: Command Location A0 must be addressed directly. When programming this Command Location with an Alpha 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.

The last two Command Locations are CL 37 and CL A0. Pressing the [#] key at these locations will advance you to CL 38 or CL A1, respectively. Locations CL 38 and CL A1 are not used in the SYS3316RF. If you accidentally enter either of these locations, press [*] [#] to exit programming, or enter the Command Location number, followed by the [#] key, for the location you wish to program.

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 KEYPAD

Ensure the Alpha keypad is wired to the SYS3316RF and power is applied to the control panel. **You can only access the programming mode when the control panel is disarmed.**

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

The Alpha Keypad

You can program the Alpha keypads for special messages, each of the 16 zone labels, and the keypad address. **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 AC failure, fuse failure, communication failure, or low battery. The **Dealer Message** displays when the system is disarmed. The keypad address is initially displayed only during system start up (see page 4, Keypad Addressing).

These messages can be programmed directly from the Alpha keypad or remotely using the Commander II/Monitor II software package. For more detailed information about remote programming, refer to the Commander II/Monitor II Operating Manual.

Keypad Message Programming

The Alpha keypad programming template is used to allow the installer to program messages and zone descriptions into the Alpha keypads. The template shown on the next page should be used when programming the keypad.

To activate the keypad programming mode, enter the [Installer's Code] [*] [0] [1] [#]. Information may be entered into the keypad in the form of letters (upper and lower case), numbers (0 - 9), and 22 special symbols. All characters are displayed in the order listed above, i.e. upper and lower case letters, numbers, and special symbols. The [Space] character precedes the letter A.

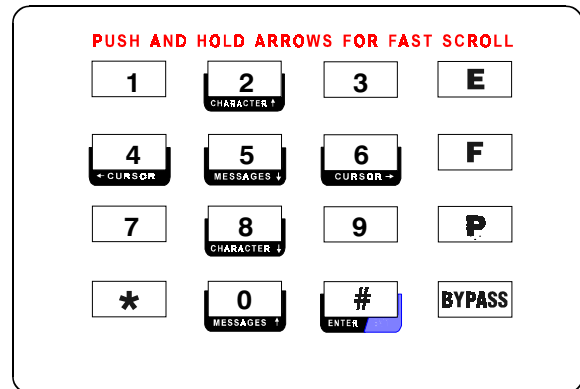
To enter a Message or Label, use the [2] key to scroll through the characters until you reach the desired character. If you scroll past the desired character, the [8] key may be used to scroll backwards. When the desired character is displayed, press the [6] key to move the cursor to the next character position. The [4] key moves the cursor to the left. When all characters have been entered, press the [#] key to write the message and move to the next message position. Use the [0] key to move backward through the messages.

The message order is:

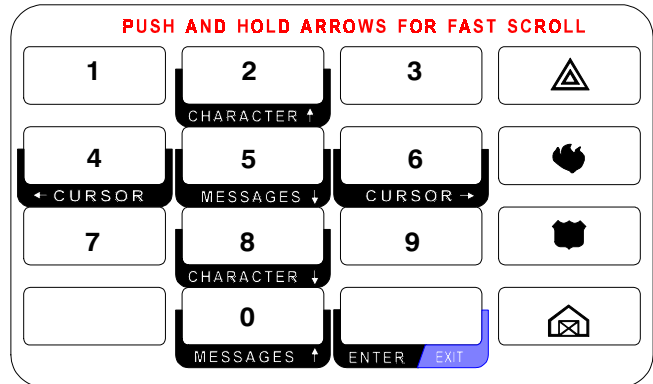
- SERVICE MESSAGE
- DEALER MESSAGE
- SOFT ZONE IDENTIFIERS (A, B, and C)
- HARDWIRED LOOP IDENTIFIERS
- KEYPAD ADDRESS

Both the Alpha (shown at the top of the next column) and the Alpha Plus (shown below in the next column) use the same procedure to program messages.

ALPHA II Programming Template



ALPHA PLUS Programming Template

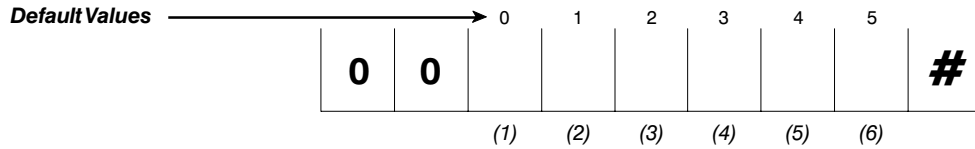


NOTE: If you do not press any key for 5 minutes, the keypad will automatically exit the programming mode.

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.**

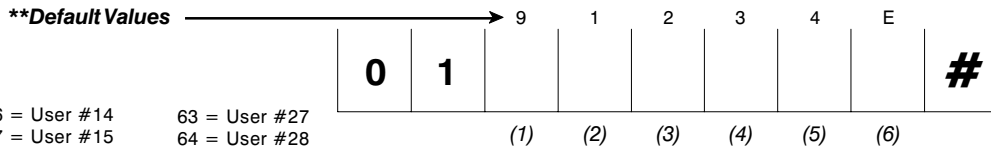
Command Location 00: Installer Combination



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

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

Command Location 01 - 08 and 51 - 68: User Arming Type and Combination



- 01 = User #1 (Master) 56 = User #14 63 = User #27
- 02 = User #2 57 = User #15 64 = User #28
- 03 = User #3 58 = User #16 65 = User #29
- 04 = User #4 59 = User #17 66 = User #30
- 05 = User #5 5A = User #18 67 = User #31
- 06 = User #6 5B = User #19 68 = User #32
- 07 = User #7 5C = User #20
- 08 = User #8 (Guest) 5D = User #21
- 51 = User #9 5E = User #22
- 52 = User #10 5F = User #23
- 53 = User #11 60 = User #24
- 54 = User #12 61 = User #25
- 55 = User #13 62 = User #26

****Default Values are different for each user. Refer to the SYS3316RF Programming Worksheet at the end of this manual for other user default values.**

Digit Position (1): Arming Type

- 1 = Arm Only, No Closing (C) Report, No Shunting
- 2 = Disarm Only, No Opening (O) Report, No Shunting
- 3 = Arm and Disarm, No O/C Reports, No Shunting
- 4 = Arm Only, with Closing Report, No Shunting
- 5 = Disarm Only, with Opening Report, No Shunting
- 6 = Arm and Disarm, with O/C Reports, No Shunting
- 7 = Arm Only, No Closing Report, Shunting Allowed
- 8 = Disarm Only, No Opening Report, Shunting Allowed
- 9 = Arm and Disarm, No O/C Reports, Shunting Allowed
- *0 = Arm Only, with Closing Report, Shunting Allowed
- *1 = Disarm Only, with Opening Report, Shunting Allowed
- *2 = Arm and Disarm, with O/C Reports, Shunting Allowed

NOTE: Opening and Closing Reports must be enabled. See CL 2C Digit Positions 1 and 3 for additional information.

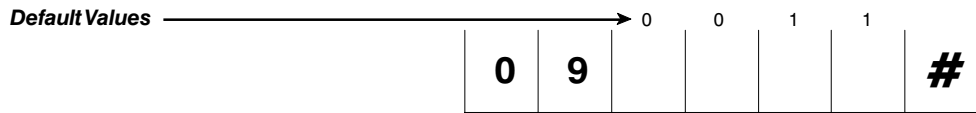
NOTE: Some programming locations allow variable-length data and require an End-of-Number (EON) character. Program *4 ("E") after the last digit. Fill remaining unused Positions with "0". The EON character is not required if the last digit is in Position 6.

Digit Positions (2) - (6): Arming Combination (PIN)

Combination may have from 2 - 5 digits. Valid entries are 0 - 9.

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

Command Location 09: Arming/Combination Options



Digit Position (1): Guest Combination Time

- | | | |
|-------------------------|------------|---------------|
| 0 = Guest Time Disabled | 5 = 5 days | * 0 = 10 days |
| 1 = 1 day | 6 = 6 days | * 1 = 11 days |
| 2 = 2 days | 7 = 7 days | * 2 = 12 days |
| 3 = 3 days | 8 = 8 days | * 3 = 13 days |
| 4 = 4 days | 9 = 9 days | * 4 = 14 days |
| | | * 5 = 15 days |

Digit Position (2): Combination Command

- 0 = No
 1 = Yes; requires combination for Bypass, Group Bypass, Instant Arm, keypad activated RPS, and Test (central station and bell)

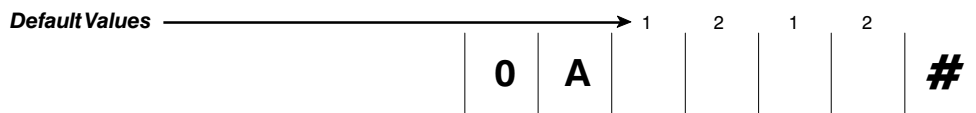
Digit Position (3): Default Installer Combination

- 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): Faulted Arming Type

- 1 = Goof-Proof: zones must be normal or shunted to arm
 2 = Force Arm: faulted zones will be shunted at end of Exit Delay
 3 = Chirp Alert: faulted zones will chirp bell upon transition from Exit Delay to Entrance Delay

Command Location 0A: Communications Formats



Digit Position (1): Receiver #1 Receiver Format

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

Digit Position (2): Receiver #1 Message Format

- | | |
|----------------------------------|---------------------|
| 2 = 3/1 Extended | 5 = CFSK III |
| 3 = 4/2 (2-digit reporting code) | 6 = SumCheck (DTMF) |

Digit Position (3): Receiver #2 Receiver Format

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

Digit Position (4): Receiver #2 Message Format

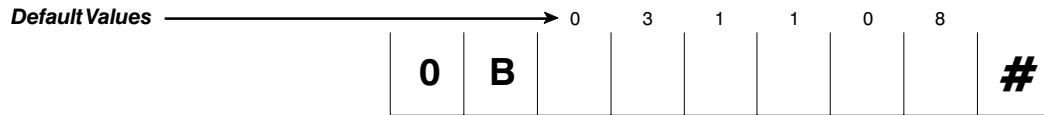
- | | |
|----------------------------------|---------------------|
| 2 = 3/1 Extended | 5 = CFSK III |
| 3 = 4/2 (2-digit reporting code) | 6 = SumCheck (DTMF) |

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

Message Format	Receiver Format(s)
3/1 Extended	All formats, except CFSK III and DTMF, 1400 Hz
4/2 (2-digit reporting)	Fast "A", 2300 Hz and Slow "B", 1400 Hz only
CFSK III	CFSK III only
SumCheck (DTMF)	DTMF, 1400 Hz only

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

Command Location 0B: Communications Control



Digit Position (1): Delay Before Dial Time

- 0 = 0 secs 4 = 40 secs 8 = 80 secs *2 = 120 secs
- 1 = 10 secs 5 = 50 secs 9 = 90 secs *3 = 130 secs
- 2 = 20 secs 6 = 60 secs *0 = 100 secs *4 = 140 secs
- 3 = 30 secs 7 = 70 secs *1 = 110 secs *5 = 150 secs

Digit Position (2): Dial Type

- 1 = DTMF - Touch Tone (10/sec)
- 2 = DTMF (5/sec)
- 3 = Pulse (10/sec)

Digit Position (3): Enable Keypad Activated RPS

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

Digit Position (4): RPS Enable

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

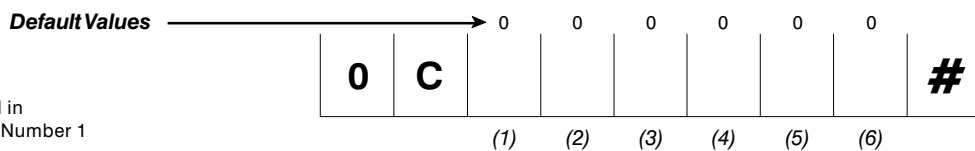
Digit Position (5): Phone Ring Type

- 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): Dialing Attempts

- 1 = 1 try 5 = 5 tries 9 = 9 tries *3 = 13 tries
- 2 = 2 tries 6 = 6 tries *0 = 10 tries *4 = 14 tries
- 3 = 3 tries 7 = 7 tries *1 = 11 tries *5 = 15 tries
- 4 = 4 tries 8 = 8 tries *2 = 12 tries

Command Location 0C: Account Number 1



Account Number 1 is used in conjunction with Receiver Number 1

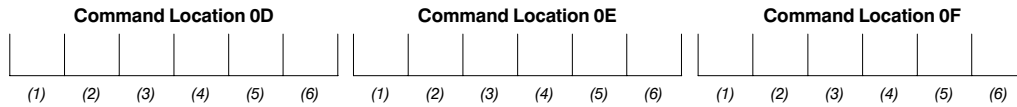
Digit Positions (1) - (6): Account Number

Valid entries are 0 - F.
 The Account Number is right justified. The last digit must be in Position (6).
 The SYS3316RF will read the account number using:
 Digit Positions (4) - (6) with 3-digit accounts
 Digit Positions (3) - (6) with 4-digit accounts
 Digit Positions (1) - (6) with 6-digit accounts
 Fill all unused Digit Positions with 0's.

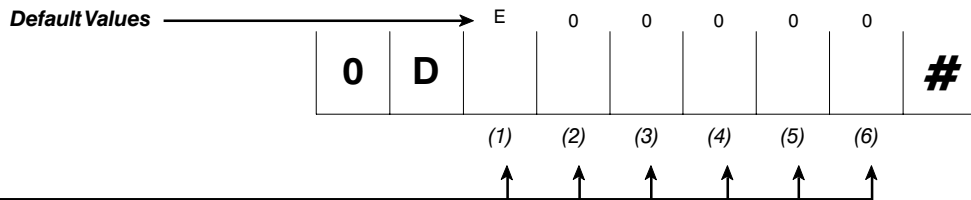
PROGRAMMING CONVERSIONS	
Hexadecimal Value	Key Strokes
A	* 0
B	* 1
C	* 2
D	* 3
E	* 4
F	* 5

Command Locations 0D - 0F: Receiver #1 Phone Number

Order in which the numbers will be dialed



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

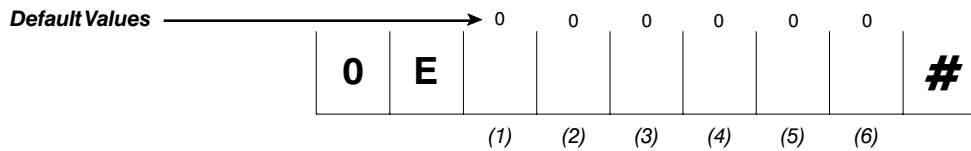


Digit Positions (1) - (6):

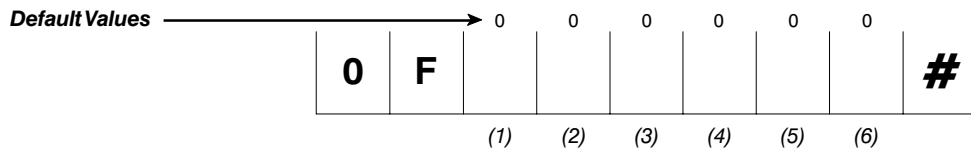
- 0 - 9 = dialing digits
- * 0 = dial tone detect
- * 2 = * (DTMF dialing only, not used in pulse dialing)
- * 3 = # (DTMF dialing only, not used in pulse dialing)
- * 4 = end of number
- * 5 = 5 second delay

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

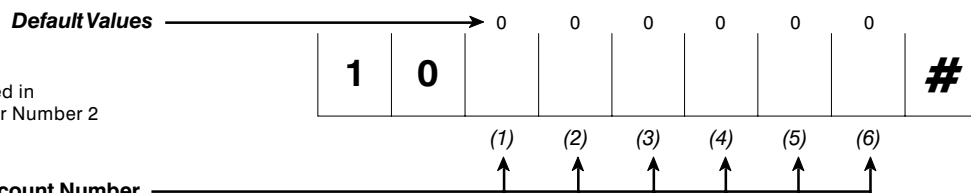
Command Location 0E: Receiver #1 Phone Number (digits 7 - 12)



Command Location 0F: Receiver #1 Phone Number (digits 13 - 18)



Command Location 10: Account Number 2



Account Number 2 is used in conjunction with Receiver Number 2

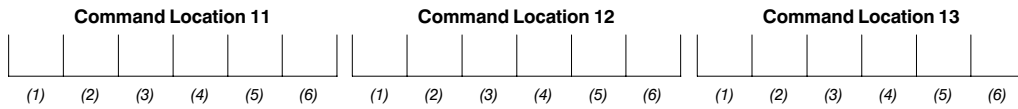
Digit Positions (1) - (6): Account Number

Valid entries are 0 - F.
The Account Number is right justified. The last digit must be in Position (6).
The SYS3316RF will read the account number using:
Digit Positions (4) - (6) with 3-digit accounts
Digit Positions (3) - (6) with 4-digit accounts
Digit Positions (1) - (6) with 6-digit accounts
Fill all unused Digit Positions with 0's.

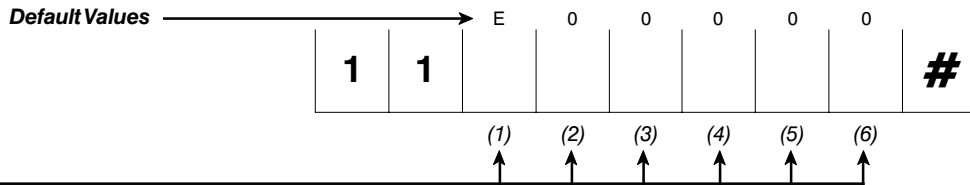
PROGRAMMING CONVERSIONS	
Hexadecimal Value	Key Strokes
A	* 0
B	* 1
C	* 2
D	* 3
E	* 4
F	* 5

Command Locations 11 - 13: Receiver #2 Phone Number

Order in which the numbers will be dialed



Command Location 11: Receiver #2 Phone Number (digits 1 - 6)

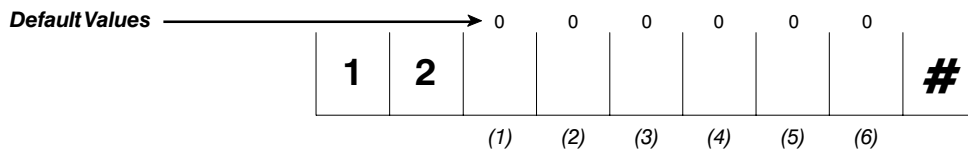


Digit Positions (1) - (6):

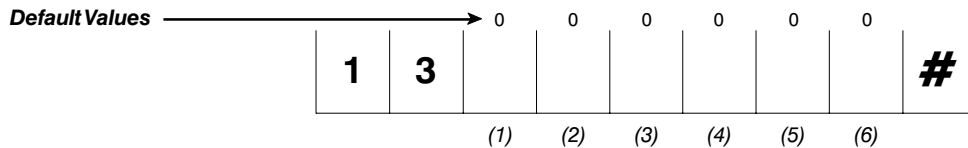
- 0 - 9 = dialing digits
- *0 = dial tone detect
- *2 = * (DTMF dialing only, not used in pulse dialing)
- *3 = # (DTMF dialing only, not used in pulse dialing)
- *4 = end of number
- *5 = 5 second delay

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

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



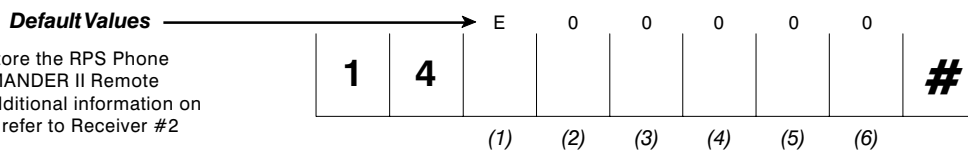
Command Location 13: Receiver #2 Phone Number (digits 13 - 18)



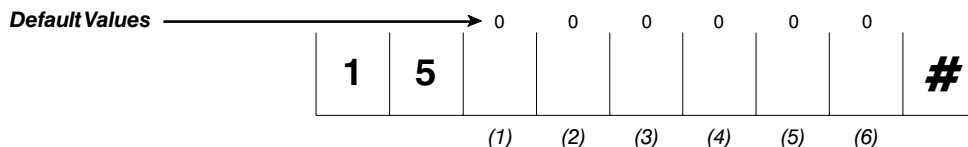
Command Locations 14 - 16: RPS Phone Number

Command Location 14: RPS Phone Number (digits 1 - 6)

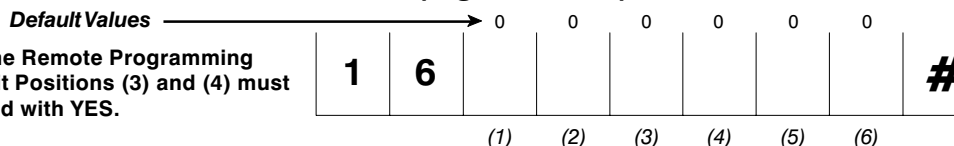
Command Locations 14 - 16 store the RPS Phone Number used by the the COMMANDER II Remote Programming Software. For additional information on programming these Locations, refer to Receiver #2 above.



Command Location 15: RPS Phone Number (digits 7 - 12)



Command Location 16: RPS Phone Number (digits 13 - 18)



NOTE: In order to utilize the Remote Programming feature, CL 0B, Digit Positions (3) and (4) must also be programmed with YES.

Command Locations 17 - 1E & 40 - 47: Loop Reporting Codes

****Default Values** → 0 1 E 1 0 0

17 = Loop 1	1C = Loop 6	43 = Loop 12	1	7						#
18 = Loop 2	1D = Loop 7	44 = Loop 13	(1)	(2)	(3)	(4)	(5)	(6)		
19 = Loop 3	1E = Loop 8	45 = Loop 14								
1A = Loop 4	40 = Loop 9	46 = Loop 15								
1B = Loop 5	41 = Loop 10	47 = Loop 16								
	42 = Loop 11									

****Default Values are different for each loop. Refer to the SYS3316RF Programming Worksheet at the end of this manual.**

Digit Positions (1) & (2): Alarm Reporting Code
Program 00 to disable Event Reporting for a loop.

Digit Positions (3) & (4): Restore Reporting Code
Program 00 to disable Event Reporting for a loop.

Digit Positions (5) & (6): Shunt Reporting Code
Program 00 to disable Event Reporting for a loop.

Command Locations 1F - 26, & 49 - 50: Loop Control

****Default Values** → 1 1 1 3 2 5

1F = Loop 1	24 = Loop 6	4B = Loop 11	1	F						#
20 = Loop 2	25 = Loop 7	4C = Loop 12	(1)	(2)	(3)	(4)	(5)	(6)		
21 = Loop 3	26 = Loop 8	4D = Loop 13								
22 = Loop 4	49 = Loop 9	4E = Loop 14								
23 = Loop 5	4A = Loop 10	4F = Loop 15								
		50 = Loop 16								

****Default Values are different for each loop. Refer to the SYS3316RF Programming Worksheet at the end of this manual.**

Digit Position (1): Alarm 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): Loop Response Time
0 = 5 milliseconds 2 = 500 milliseconds
1 = 250 milliseconds 3 = 750 milliseconds

Digit Position (3): Loop Restore Type
0 = No Restoral Report sent 2 = Restoral sent when loop normal and bell silences
1 = Restoral sent when loop normal 3 = Restoral sent when loop normal and system disarmed

Digit Position (4): Loop Arming Type
1 = Interior: delayed during E/E delays 4 = Long Delay: delay two times as long 7 = Day/Instant with bell
2 = Instant 5 = Day/Instant: buzzer on day fault 8 = Day/Delay with bell
3 = Delay 6 = Day/Delay: buzzer on day fault 9 = 24 Hours: always armed

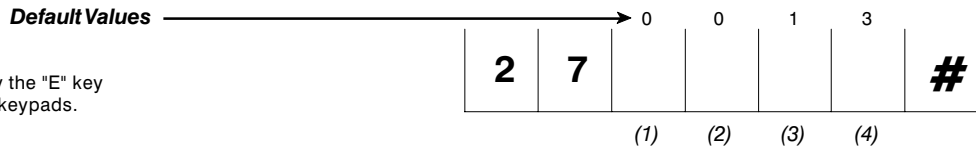
Digit Position (5): Loop Bell Type
1 = Temporal Code 3 3 = Steady 5 = Silent with no LED
2 = Pulsing 4 = Chirp 6 = Silent with LED

Digit Position (6): Loop Circuit Type
1 = Normally Open Circuit 4 = Supervised, bell latched
2 = Normally Closed Circuit 5 = Supervised, bell not latched
3 = End Of Line (EOL)

NOTE: A Loop programmed as type 4 or 5 will report any open as a Trouble condition, regardless of panel armed status.

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

Command Location 27: Soft Zone A (Emergency)



This Zone is identified by the "E" key on the Alpha II and LED keypads.

Digit Positions (1) and (2): Emergency Report Code

Program 00 to disable alarm reporting for Emergency zone.

Digit Position (3): Emergency Zone Receiver Select

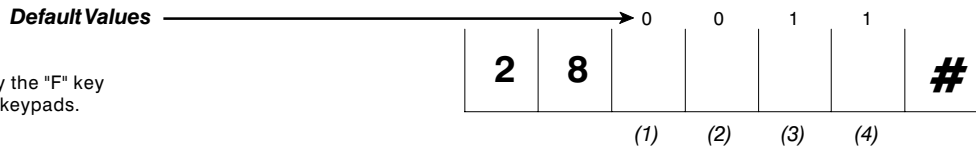
- 0 = Receiver 1 with Receiver 2 as back-up
- 1 = Receiver 1 only
- 2 = Receiver 2 only
- 3 = Receiver 1 and Receiver 2 (Dual Reporting)

Digit Position (4): Loop Bell Type

- 1 = Temporal Code 3
- 2 = Pulsing
- 3 = Steady
- 4 = Chirp
- 5 = Silent

NOTE: Command Location 2F Digit Position (4) must be programmed to YES to enable Soft Zones.

Command Location 28: Soft Zone B (Fire)



This Zone is identified by the "F" key on the Alpha II and LED keypads.

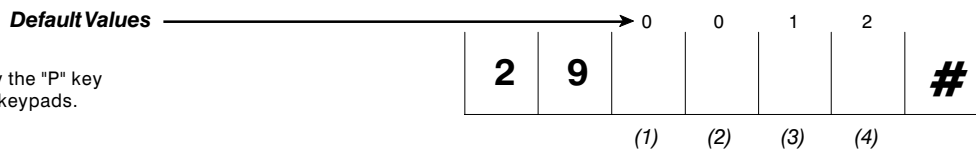
Digit Positions (1) and (2): Fire Report Code

Digit Position (3): Fire Receiver Select

Digit Position (4): Loop Bell Type

Refer to CL 27 for information about programming this zone.

Command Location 29: Soft Zone C (Police)



This Zone is identified by the "P" key on the Alpha II and LED keypads.

Digit Positions (1) and (2): Police Report Code

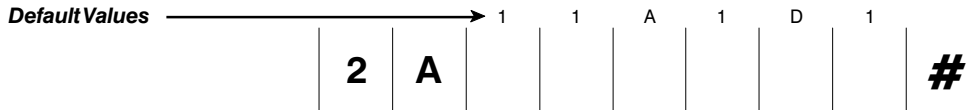
Digit Position (3): Police Zone Receiver Select

Digit Position (4): Loop Bell Type

Refer to CL 27 for information about programming this zone.

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

Command Location 2A: Event Reporting



Digit Position (1): Shunt Receiver Select

See also CL 17 - 1E & 40 - 47 Digit Positions (5) and (6).

- | | |
|-------------------------------------------|------------------------------------------------|
| 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): Restore Receiver Select

See also CL 17 - 1E & 40 - 47 Digit Positions (3) and (4).

- | | |
|-------------------------------------------|------------------------------------------------|
| 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): Unit Status Report Code

Valid entries are 0 - F.
The panel will add a fixed extension digit when reporting. Fixed codes are listed below.
Program a 0 at this position to disable Unit Status Reporting.

Digit Position (4): Unit Status 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 (5): Cancel Report Code

Valid entries are 0 - F.
The panel will add the User ID # as the second digit when reporting.
Program a 0 at this position to disable Cancel Reports.

Digit Position (6): 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) |

UNIT STATUS FIXED EXTENSION CODES	
1 = Low battery	7 = AC restore
2 = AC fail	8 = Bell fuse restore
3 = Bell fuse fail	B = Watchdog reset
5 = Failed to communicate	C = Completed programming
6 = Battery restore	

Command Location 2B: Test Report



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

Valid entries are 0 - F.
Program 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 Positions (4): Test Report Interval

- | | | |
|--------------|--------------|------------------------|
| 1 = 1 hour | 5 = 24 hours | *0 = 1 hour if armed |
| 2 = 2 hours | 6 = 7 days | *1 = 2 hours if armed |
| 3 = 4 hours | 7 = 14 days | *2 = 4 hours if armed |
| 4 = 12 hours | 8 = 21 days | *3 = 12 hours if armed |
| | 9 = 30 days | *4 = 24 hours if armed |

NOTE: CL A0 **must** be programmed to correctly set time of test.

Command Location 2C: Opening and Closing Report Codes



Digit Position (1): Opening Report Code

Valid entries are 0 - F.
The User ID # is transmitted after the opening code.
Program 0 to disable Opening Reports.

Digit Position (2): Opening 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)

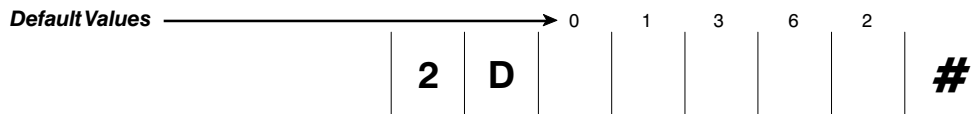
Digit Position (3): Closing Report Code

Valid entries are 0 - F.
The User ID # is transmitted after the opening code.
Program 0 to disable Closing Reports.

Digit Position (4): Closing 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)

Command Location 2D: Duress Report and Delays



Digit Position (1): Duress Report Code

Valid entries are 0 - F.
The User ID # will be reported as the second digit when reporting.
Program 0 to disable Duress Reports.

Digit Position (2): 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 (3): Entry Delay Time

1 = 10 secs 6 = 60 secs * 1 = 110 secs
2 = 20 secs 7 = 70 secs * 2 = 120 secs
3 = 30 secs 8 = 80 secs * 3 = 130 secs
4 = 40 secs 9 = 90 secs * 4 = 140 secs
5 = 50 secs * 0 = 100 secs * 5 = 150 secs

NOTE: To program delay times greater than 150 secs, see CL 1F - 26 & 49 - 50 Digit Position (4)

Digit Position (4): Exit Delay Time

1 = 10 secs 6 = 60 secs * 1 = 110 secs
2 = 20 secs 7 = 70 secs * 2 = 120 secs
3 = 30 secs 8 = 80 secs * 3 = 130 secs
4 = 40 secs 9 = 90 secs * 4 = 140 secs
5 = 50 secs * 0 = 100 secs * 5 = 150 secs

NOTE: To program delay times greater than 150 secs, see CL 1F - 26 & 49 - 50 Digit Position (4)

Digit Position (5): Audible Time

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

PROGRAMMING CONVERSIONS

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

Command Location 2E: Audible/Visual Switches



Digit Position (1): Entry Pre-alarm Enable

0 = No
1 = Yes: sounds keypad buzzers during entry delay

Digit Position (2): Exit Pre-alarm Enable

0 = No
1 = Yes: sounds keypad buzzers during exit delay

Digit Position (3): Bell Reverse Operation

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

Digit Position (4): Ring Back

0 = No
1 = Yes: Automatic Bell test after arming for local or non-supervised accounts; follows closing report for supervised accounts; sounds bells for 2 seconds.

Digit Position (5): Disable Loop LEDs

0 = No
1 = Yes: turn off zone LEDs after 5 minutes (panel must be disarmed)

Command Location 2F: Unit Control



Digit Position (1): Local System Only

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

Digit Position (2): Enable Daily Dynamic Battery Test

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

Digit Position (3): Enable Four Minute Power-Up Delay

0 = No
1 = Yes: all alarms suppressed for 4 minutes on power-up

Digit Position (4): Enable Soft Zone Operation

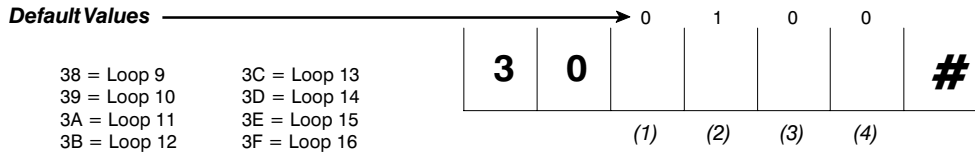
0 = No
1 = Yes: allow use of Emergency (E), Fire (F), and Police (P) keys (See also CL 27 - 29)

Digit Position (5): AC Power Line Frequency

0 = 50 Hz
1 = 60 Hz

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

Command Locations 30 - 3F: Loop Switches



- | | | | |
|-------------|-------------|--------------|--------------|
| 30 = Loop 1 | 34 = Loop 5 | 38 = Loop 9 | 3C = Loop 13 |
| 31 = Loop 2 | 35 = Loop 6 | 39 = Loop 10 | 3D = Loop 14 |
| 32 = Loop 3 | 36 = Loop 7 | 3A = Loop 11 | 3E = Loop 15 |
| 33 = Loop 4 | 37 = Loop 8 | 3B = Loop 12 | 3F = Loop 16 |

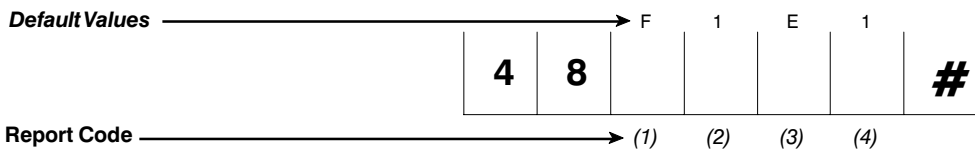
Digit Position (1): Enable Door Chime
 0 = No
 1 = Yes: keypads beep 2 seconds when faulted (disarmed condition)

Digit Position (2): Allow Shunting of This Loop
 0 = No: makes it a priority zone (not shuntable)
 1 = Yes: authorized users can bypass or force arm
 Refer to CL 01 - 08 & 51 - 58 Digit Position (1) for Arming Types (Authorization Levels)

Digit Position (3): Allow Group Shunting for This Loop
 0 = No
 1 = Yes: this loop will shunt with Group Shunt

Digit Position (4): Delay Before Dial
 0 = No
 1 = Yes: this loop will delay dialing on alarm for time programmed in 0B (1)

Command Location 48: Trouble Reports



Digit Position (1): Trouble Report Code
 This is a one-digit reporting code.
 Program 0 to disable Trouble Report.

Digit Position (2): Trouble Report 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 (3): Trouble Restoral Report Code
 This is a one-digit reporting code.
 Program 0 to disable Trouble Restoral Report.

Digit Position (4): Trouble Restoral Report 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)

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

Command Location A0: Test Report Countdown Timer

This command will set the time when the first Test Report is transmitted to the central station. The panel will use this transmission time each time it's powered up or the CPU is reset (unless Command Location A0 is reprogrammed).



Previously stored data is not displayed during programming.

Digit Position (1): Set Test Report Countdown Timer

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

NOTE: Refer to CL 2B for setting the time interval between Reports.

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 Memory Location A0.

Command Location B3: Set Real-Time Clock (Year, Month, Day)

This command will set the day, month, and year in the panel, and will not take effect until Command B4 is programmed.



Previously stored data is not displayed during programming.

Digit Position (1): Year - 10's

Digit Position (2): Year - 1's

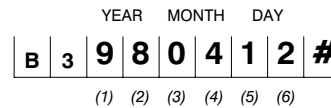
Digit Position (3): Month - 10's

Digit Position (4): Month - 1's

Digit Position (5): Day - 10's

Digit Position (6): Day - 1's

Example: If the date were April 12, 1998, B3 would be programmed



Command Location B4: Set Real-Time Clock (Hour, Minute, Second)

This command will set the hour, minute, and second in the panel. The time is set in BCD (military time).



Previously stored data is not displayed during programming.

Digit Position (1): Hour - 10's

Digit Position (2): Hour - 1's

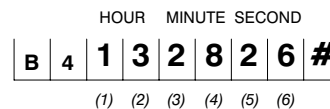
Digit Position (3): Minutes - 10's

Digit Position (4): Minutes - 1's

Digit Position (5): Seconds - 10's

Digit Position (6): Seconds - 1's

Example: If the time were 26 seconds past 1:28 pm, B4 would be programmed

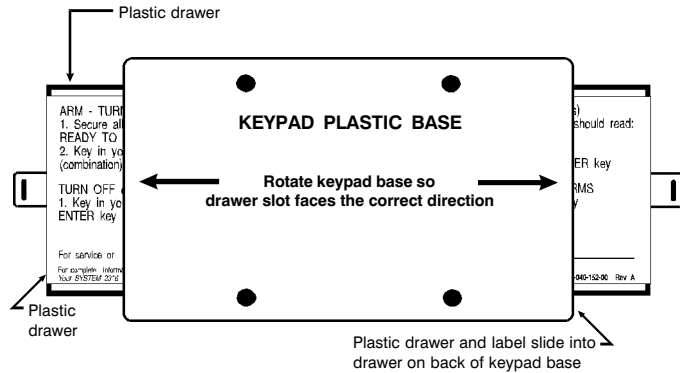


KEYPAD LABEL DRAWER

Each keypad comes with a Label Drawer and quick reference operating label. Follow the diagram below to set up the Label Drawer for each keypad.

Example of drawer pulled from the left

Example of drawer pulled from the right



1. Fill in the zone descriptions inside the label.
2. Mark "Y" or "N" to indicate if zones can be bypassed or not.
3. Determine if the drawer will slide from the right or left.
4. Peel the cover off the drawer glue.
5. Align the edge of the label with the edge of the drawer. Center the label top to bottom.
6. Press the label onto the glue. Avoid trapping air bubbles under the label.
7. Slide the drawer/label into the slot on the back of the keypad base.

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 at all times.**

TELEPHONE LINE PROBLEMS

In the event of telephone line problems, disconnect the SYSTEM 3316 by removing the modular connector plug from the Telco interface jack. **Do not disconnect the connection inside the SYS3316RF 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 or repairs on the SYS3316RF.** The control panel must be returned to C&K SYSTEMS or an authorized service agency for repairs.

Watchdog Indicator



The SYS3316RF is protected by an advanced circuit, called a Watchdog circuit, that constantly monitors the microprocessor.

As long as the panel has power and is operating normally, the Watchdog LED (DS1) on the circuit board will flash. If the Watchdog circuit detects a failure, it will attempt to reset the panel.

If the panel does not operate properly, and the Watchdog LED no longer flashes, call the **C&K Technical Support Hotline at 1-800-227-8065** in the U. S. or your local C&K representative.

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 complies with FCC Rules, Part 68.

On the outside of this equipment is a label that contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. If requested, provide this information to your telephone company.

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your number is called. In most, but not all areas, the sum of the REN's devices should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should call your local telephone company to determine the maximum REN for your calling area.

Should you experience trouble with the telephone lines, disconnect the equipment from the line to determine the source of the trouble. If it is determined that the equipment is malfunctioning, discontinue its use until the malfunction has been corrected. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telephone company cause to request the user to disconnect the equipment. Repairs to this equipment should be made by an authorized agent of C&K Systems, Inc. Contact your local alarm installation company for service.

Should this equipment cause harm to the telephone network, the telephone company may temporarily discontinue your service. If possible, they will provide you with advance notice. Otherwise they will notify you as soon as possible. The telephone company will also advise you of changes in its facilities, equipment, operations or procedures which could affect the operation of your equipment, allowing you the opportunity to maintain uninterrupted service. You will also be advised of your right to file a complaint with the FCC.

This equipment must not be used on party lines or coin operated phone lines.

FCC Part 15 Notice

This equipment has been tested and found to comply with the limits for Class B digital devices, 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 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:

- Reorient the radio/television antenna;
- Connect the AC transformer to a different outlet so that the equipment and radio/television are on different branch circuits;
- Relocate the equipment with respect to the radio/television;
- Consult the dealer or an experienced radio/television technician for help.

FCC Registration Number: C2DCHN-18741-AL-E
Ringer Equivalence: 0.3B

CANADIAN EMISSION REQUIREMENTS

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toute les exigences du Règlement sur le matériel brouilleur 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 - 16; Combo may be required	[Combination] [Bypass] [n] [#]
Chime On/Off	Combo may be required	[Combination] [*] [5] [#]
Change Combo using Master Combo	Must be done from User #1	[Master Combo] [*] [0] [#] [User Number] [#] [New Combo] [#] [New Combo] [#]
Clear Alarm Memory		[*] [1] [#]
Exit Programming		[*] [#]
Fire Alarm	Keypad activated	[F] (Hold for 3 seconds)
Group Bypass and Arm	Arms the system and all zones programmed for group bypass, CL 30 - 3F, Digit Position (3), are shunted simultaneously; Combo may be required (This is also called Home Arming)	[Combination] [*] [4] [#]
Group Bypass and Instant Arm	Same as Group Bypass (above) except system is Instant Armed (Exit Delay operates normally, upon expiration of Exit Delay, all delayed zones are converted to Instant - No Entry Delay). Combo may be required (Also called Instant/Home Arming)	[Combination] [*] [4] [7] [#] or [Combination] [*] [7] [4] [#]
Instant Arm	Arms system and converts delayed zones to Instant (Exit Delay active, No Entry Delay), Combo may be required	[Combination] [*] [7] [#]
Keypad Activated RPS	If enabled, CL 0B(3); Combo may be required	[Combination] [*] [0] [2] [#]
Medical Alarm	Keypad activated	[E] (Hold for 3 seconds)
Police/Panic Alarm	Keypad activated	[P] (Hold for 3 seconds)
Reset Aux Power	If resettable devices are connected to Terminals 5 and 6	[*] [6] [2] [#]
Reset Panel		[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		[*] [6] [0] [#]

NOTE: For additional information about Combination Command requirements, see page 24 and CL 09 (2).

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		[*] [6] [7] [#]
Kill/Revive Panel		[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 then press the [#] key. (See also pages 6 - 7.)

For Example: To program User #2 with the ability to Arm only, No Reports and No Shunting; and a PIN of 6543, enter the following keystrokes:

CL	Arm Type	PIN (w/EON)	Write Data
[0][2]	[1]	[6][5][4][3][*][4]	[#]

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 pages 7 - 8.)

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 Trouble LED to light. See the chart below for additional information.

Trouble 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
On	On	Off	System Trouble (Bell Fuse or Comm Fail.)

Question: *How do I enter hexadecimal numbers when using keypad programming?*

Answer: Hexadecimal values are entered through the use of the [*] key and one of the digits [0] - [5]. For additional help with entering hexadecimal numbers, refer to page 7. The hexadecimal 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] [#]. Depending upon how the system is programmed, you may be required to enter your User Combination and then 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: *How do I interpret the Unit Status Reports? Can the codes be changed?*

Answer: The Reporting Codes for the Unit Status Report is a two-digit code. The first digit is programmed into CL 2A Digit Position (3) and may be any value from 0 - F. The second digit is fixed by the firmware and cannot be changed. Please note that programming a 0 into 2A (3) will disable the report and no Unit Status information will be sent. Additional information about Unit Status Reporting Codes can be found on page 17 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 SYS3316RF 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 0D						Command Location 0E						Command Location 0F					
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 0D (1) will display the value "C" and entering [*] [4] in CL 0E (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 one of the keypads and then re-address the remaining one, ensuring that the new address is not in use 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 2F (1). This is the Unit Control, if Digit Position (1) is programmed with a 1, all communication except RPS is disabled. If 2F (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 0C
- Receiver #1 Phone Number is correctly programmed into CL 0D - 0F
- Receiver Format and Message Format agree CL 0A
- Communication Control (CL 0B) is correctly programmed
- The RJ-31X jack is correctly wired (pins 4 & 5 are not switched with 1 & 8)

Question: *How do I disarm my panel if I accidentally locked myself out by programming my user code as Arm Only?*

Answer: The only way to correct this problem is to access the panel through Remote Programming (RPS) or Direct Connect (also RPS) and disarm the panel. Then use the remote programming to re-program the panel. For additional information about RPS, see the Commander II/Monitor II Operating Manual.

Question: *Why doesn't my keypad respond? The Power LED is lit, but nothing happens.*

Answer: The panel may be in the KILL mode. On the LED keypad, only the Power LED will be lit. On the Alpha II keypad, the Power LED will be lit and the Service Message, if programmed, will be displayed. To restore the panel, press [Installer Combination] [*] [6] [9] [#].

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] [#]).

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.

<u>Program Option</u>	<u>CL</u>	<u>Program Function</u>	<u>Comments</u>
Arming/Combination Options	09 (2)	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 additional assistance with commands requiring User Combinations, see page 21 (Command Summary).
Arming/Combination Options	09 (4)	Chirp Alert	This option minimizes the possibility of leaving the system unarmed (faulted) when exiting. The system is armed in the normal manner and the user exits through the delayed exit door. If the door does not close properly, returning the loop to the normal state, the system will transition from the Exit Delay to the Entrance Delay at the completion of the Exit Delay time and chirp the Bell, alerting the user to the error in arming the system.
Loop Control	1F - 26 & 49 - 50 (2)	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 alarms.
Loop Control	1F - 26 & 49 - 50 (3)	Loop Restore Type	This option is used in conjunction with CL 17 - 1E & 40 - 47 Digit Positions (3 & 4), Restore Reporting Code, and CL 2A (2), Restore 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 tying up the phone line with continuous alarm and restoral reports.
Loop Control	1F - 26 & 49 - 50 (4)	Loop Arming Type	There may be occasion where it is desirable to program all doors 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 2A (5 & 6)		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 5) is actually 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 (6) determines which receiver gets the Cancel Report.

<u>Program Option</u>	<u>CL</u>	<u>Program Function</u>	<u>Comments</u>
Audible/Visual Switches	2E (1 & 2)	Entry/Exit Pre-Alarm	If Digit Position (1) is programmed for Entry Pre-Alarm, the keypad will sound continuously for all but the last 10 seconds of the amount of time programmed for the Entry Delay Time (CL 2D (3)). The keypad will beep for the last 10 seconds of the Entry Delay. If Digit Position (2) is programmed for Exit Pre-Alarm, the keypad will beep for the time programmed into CL 2D (4), Exit Delay Time. The speed at which the keypad beeps will increase during the last 10 seconds of the Delay time. Alpha II keypads will display a bar graph in addition to the audible tone.
Unit Control	2F (3)	Enable 4-minute Power-Up Delay	Suppresses all trouble and alarm reports for a period of four minutes after power is initially applied to the panel. This allows the sensors, such as PIR's time to stabilize when initializing or prevents powered devices, such as smoke detectors, from sending alarms when first starting panel with a dead battery or no battery connected.
Loop Switches	30 - 3F (3)	Allow Group Shunting	This allows multiple loops to be shunted simultaneously with a single keypad command. This is typically done on all interior loops in a system. The command also Arms or Instant Arms the system. (See page 21 for Group Bypassing and Instant Arm.)
Loop Switches	30 - 3F (4)	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 0B Digit Position (1). The time delay may be between 10 and 150 seconds, in 10 second intervals.

THE LIMITATIONS OF YOUR ALARM SYSTEM

While the SYS3316RF 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 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 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 electrical 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 SYS3316RF panel and keypads should also be tested.**
- 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.

5-051-396-00 Rev B

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<http://www.cksys.com>



SYS3316RF Programming Worksheet

Client: _____ SYS3316RF Phone Number: _____

Address: _____

Installer: _____ Date: _____ Control Location: _____

VOLTS

AC volts (term 1 and 2): _____

AUX POWER VOLTS

(term 5 and 6): _____

BATTERY VOLTS

Under load - AC off: _____

CURRENT

Keypads (term 6 and 8): _____

AUX POWER

(term 5 and 6): + _____

TOTAL

(500 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 1 | 9 | 1 | 2 | 3 | 4 | E | #

User #1 - Master
Name: _____

0 2 | 9 | E | 0 | 0 | 0 | 0 | #

User #2
Name: _____

0 3 | 9 | E | 0 | 0 | 0 | 0 | #

User #3
Name: _____

0 4 | 9 | E | 0 | 0 | 0 | 0 | #

User #4
Name: _____

0 5 | 9 | E | 0 | 0 | 0 | 0 | #

User #5
Name: _____

0 6 | 9 | E | 0 | 0 | 0 | 0 | #

User #6
Name: _____

0 7 | 9 | E | 0 | 0 | 0 | 0 | #

User #7
Name: _____

0 8 | 9 | E | 0 | 0 | 0 | 0 | #

User #8 -Guest
Name: _____

5 1 | 9 | E | 0 | 0 | 0 | 0 | #

User #9
Name: _____

5 2 | 9 | E | 0 | 0 | 0 | 0 | #

User #10
Name: _____

5 3 | 9 | E | 0 | 0 | 0 | 0 | #

User #11
Name: _____

5 4 | 9 | E | 0 | 0 | 0 | 0 | #

User #12
Name: _____

5 5 | 9 | E | 0 | 0 | 0 | 0 | #

User #13
Name: _____

5 6 | 9 | E | 0 | 0 | 0 | 0 | #

User #14
Name: _____

5 7 | 9 | E | 0 | 0 | 0 | 0 | #

User #15
Name: _____

5 8 | 9 | E | 0 | 0 | 0 | 0 | #

User #16
Name: _____

5 9 ⁹ E 0 0 0 0 #

User #17
Name: _____

5 A ⁹ E 0 0 0 0 #

User #18
Name: _____

5 B ⁹ E 0 0 0 0 #

User #19
Name: _____

5 C ⁹ E 0 0 0 0 #

User #20
Name: _____

5 D ⁹ E 0 0 0 0 #

User #21
Name: _____

5 E ⁹ E 0 0 0 0 #

User #22
Name: _____

5 F ⁹ E 0 0 0 0 #

User #23
Name: _____

6 0 ⁹ E 0 0 0 0 #

User #24
Name: _____

6 1 ⁹ E 0 0 0 0 #

User #25
Name: _____

6 2 ⁹ E 0 0 0 0 #

User #26
Name: _____

6 3 ⁹ E 0 0 0 0 #

User #27
Name: _____

6 4 ⁹ E 0 0 0 0 #

User #28
Name: _____

6 5 ⁹ E 0 0 0 0 #

User #29
Name: _____

6 6 ⁹ E 0 0 0 0 #

User #30
Name: _____

6 7 ⁹ E 0 0 0 0 #

User #31
Name: _____

6 8 ⁹ E 0 0 0 0 #

User #32
Name: _____

0 9 ^{0 0 1 1} #

Arm/Combination
Option

0 A ^{1 2 1 2} #

Communications
Formats

0 B ^{0 3 1 1 0 8} #

Communications
Control

0 C ^{0 0 0 0 0 0} #

Account #1

Phone #1 (1st 6 digits)

(Middle 6 digits)

(Last 6 digits)

0 D ^{E 0 0 0 0 0} #

0 E ^{0 0 0 0 0 0} #

0 F ^{0 0 0 0 0 0} #

1 0 ^{0 0 0 0 0 0} #

Account #2

Phone #2 (1st 6 digits)

(Middle 6 digits)

(Last 6 digits)

1 1 ^{E 0 0 0 0 0} #

1 2 ^{0 0 0 0 0 0} #

1 3 ^{0 0 0 0 0 0} #

RPS Phone (1st 6 digits)
1 4 ^{E 0 0 0 0 0} #

(Middle 6 digits)

(Last 6 digits)

1 5 ^{0 0 0 0 0 0} #

1 6 ^{0 0 0 0 0 0} #

1 | 7 | 0 | 1 | E | 1 | 0 | 0 | #

Loop 1 Codes

1 | 8 | 0 | 2 | E | 2 | 0 | 0 | #

Loop 2 Codes

1 | 9 | 0 | 3 | E | 3 | 0 | 0 | #

Loop 3 Codes

1 | A | 0 | 4 | E | 4 | 0 | 0 | #

Loop 4 Codes

1 | B | 0 | 5 | E | 5 | 0 | 0 | #

Loop 5 Codes

1 | C | 0 | 6 | E | 6 | 0 | 0 | #

Loop 6 Codes

1 | D | 0 | 7 | E | 7 | 0 | 0 | #

Loop 7 Codes

1 | E | 0 | 8 | E | 8 | 0 | 0 | #

Loop 8 Codes

4 | 0 | 0 | 9 | E | 9 | 0 | 0 | #

Loop 9 Codes

4 | 1 | 1 | 0 | E | A | 0 | 0 | #

Loop 10 Codes

4 | 2 | 1 | 1 | E | B | 0 | 0 | #

Loop 11 Codes

4 | 3 | 1 | 2 | E | C | 0 | 0 | #

Loop 12 Codes

4 | 4 | 1 | 3 | E | D | 0 | 0 | #

Loop 13 Codes

4 | 5 | 1 | 4 | E | E | 0 | 0 | #

Loop 14 Codes

4 | 6 | 1 | 5 | E | F | 0 | 0 | #

Loop 15 Codes

4 | 7 | 1 | 6 | E | 0 | 0 | 0 | #

Loop 16 Codes

Description

Volts

Ohms

1 | F | 1 | 1 | 1 | 3 | 2 | 5 | #

Loop 1 Control

2 | 0 | 1 | 1 | 1 | 2 | 2 | 5 | #

Loop 2 Control

2 | 1 | 1 | 1 | 1 | 2 | 2 | 5 | #

Loop 3 Control

2 | 2 | 1 | 1 | 1 | 2 | 2 | 5 | #

Loop 4 Control

2 | 3 | 1 | 1 | 1 | 2 | 2 | 5 | #

Loop 5 Control

2 | 4 | 1 | 1 | 1 | 2 | 2 | 5 | #

Loop 6 Control

2 | 5 | 1 | 2 | 1 | 2 | 2 | 3 | #

Loop 7 Control

2 | 6 | 1 | 2 | 1 | 9 | 1 | 5 | #

Loop 8 Control

4 | 9 | 1 | 1 | 1 | 1 | 2 | 5 | #

Loop 9 Control

4 | A | 1 | 1 | 1 | 1 | 2 | 5 | #

Loop 10 Control

4 | B | 1 | 1 | 1 | 1 | 2 | 5 | #

Loop 11 Control

		Description	Volts	Ohms
4	C	1 1 1 1 2 5 # Loop 12 Control		
4	D	1 1 1 1 2 5 # Loop 13 Control		
4	E	1 1 1 1 2 5 # Loop 14 Control		
4	F	1 1 1 1 2 5 # Loop 15 Control		
5	0	1 1 1 1 2 5 # Loop 16 Control		

2	7	0 0 1 3 # Emergency Zone	2	8	0 0 1 1 # Fire Zone	2	9	0 0 1 2 # Police Zone
---	---	--------------------------	---	---	---------------------	---	---	-----------------------

2	A	1 1 A 1 D 1 # Event Reports	2	B	0 0 1 6 # Test Report
2	C	B 1 C 1 # Opening/Closing Reports	2	D	0 1 3 6 2 # Duress/Delays
2	E	1 1 0 0 0 # Audible/Visual Switches	2	F	1 0 0 1 1 # Unit Control
4	8	F 1 E 1 # Trouble Reports			

3	0	0 1 0 0 # Loop 1 Switches	3	1	0 1 0 0 # Loop 2 Switches
3	2	0 1 0 0 # Loop 3 Switches	3	3	0 1 0 0 # Loop 4 Switches
3	4	0 1 0 0 # Loop 5 Switches	3	5	0 1 0 0 # Loop 6 Switches
3	6	0 1 0 0 # Loop 7 Switches	3	7	0 1 0 0 # Loop 8 Switches
3	8	0 1 0 0 # Loop 9 Switches	3	9	0 1 0 0 # Loop 10 Switches
3	A	0 1 0 0 # Loop 11 Switches	3	B	0 1 0 0 # Loop 12 Switches
3	C	0 1 0 0 # Loop 13 Switches	3	D	0 1 0 0 # Loop 14 Switches
3	E	0 1 0 0 # Loop 15 Switches	3	F	0 1 0 0 # Loop 16 Switches