

CC488



Security Systems

EN

Quick Reference Guide  
Solution Ultima 880

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## 1.0 Overview

### 1.1 Introduction

Thank you for choosing the Solution Ultima 880 Control Panel (model CC488) for your installation. You will find this system extremely flexible, reliable, and easy to use. This *Quick Reference Guide* is supplied with the system to provide users with enough basic information to wire, configure, and program the system. Due to the systems many programmable features and options, we suggest that you obtain the *CC484/CC486/CC488 Installation Manual* that provides detailed information on system options, functions, and programming methods.

### 1.2 Programming

The programming options of the system are stored in a non-volatile EPROM. This memory holds all information during a total power loss and can be changed as many times as required.

The entire programming sequence consists of entering a location number and changing the data as required.

Use the following methods to program the system:

- Codepad
- Hand Held Programmer
- Alarm Link Software

### 1.3 Programming Using A Codepad

The system must be disarmed (with no active alarm) to program the system. If there is an active alarm or the system is armed, enter the code for User 1 (Default = 2580) followed by the [#] key. (User Code 1 is factory default as the Master Code.)

To enter Installer's Programming Mode, enter the installer code (Default = 1234) followed by the [#] key. Two beeps are heard and both the STAY and AWAY indicators flash simultaneously to indicate that you entered programming mode. The codepad indicators displays the current data programmed in LOCATION 000 (first location of the Primary Telephone Number).

To move to another programming location, enter the location number followed by the [#] key. The data in the new location is displayed using the codepad indicators. (For example, if you enter [3 4 #], the system jumps to LOCATION 034, the beginning of the Subscriber ID Number For Receiver 1.)

To move to the next location, press the [#] key. This steps you to the next location. The data in the next location is displayed using the codepad indicators. (For example, if you are currently positioned at LOCATION 034, pressing the [#] key takes you to LOCATION 035.)

To step back one location, press the [\*] key. (For example, if you are currently positioned at LOCATION 35, pressing the [\*] key returns to LOCATION 34.)

To change data in the current location, enter the new value (0 to 15) followed by the [\*] key. This stores the new data into the location. (For example, if you enter the value [1 4 \*], both the Zone 4 indicator and the MAINS indicator display to represent the new data value.)

To move to the next location, press the [#] key. The data in the next location displays.

To exit Installer's Programming Mode, enter [9 6 0 #]. Two beeps are heard and the STAY and AWAY indicators no longer display. The system returns to the disarmed state and is ready for use.

*Table 1* displays a quick guide to programming:

Task	Keystrokes
Enter Installer's Programming Mode	[1 2 3 4 #]
Exit Installer's Programming Mode	[9 6 0 #]
Step to next Location	[#]
Step back one Location	[*]
Program new data into Location	[Data][*] (Data = 0 to 15)
Jump to another Location	[Location No.][#]

**Table 2: Codepad Indicators**

Data Value	Zone 1 Indicator	Zone 2 Indicator	Zone 3 Indicator	Zone 4 Indicator	Zone 5 Indicator	Zone 6 Indicator	Zone 7 Indicator	Zone 8 Indicator	MAINS Indicator
0									
1	X								
2		X							
3			X						
4				X					
5					X				
6						X			
7							X		
8								X	
9	X							X	
10									X
11	X								X
12		X							X
13			X						X
14				X					X
15					X				X

**1.4 Programming Option Bits**

Use option bits to program any combination of the four different options in one location by adding the options together. Programming a zero disables all four options.

**Example**

If at LOCATION 177 you only want options 1, 2, and 4, add the numbers together and the total is the number to be programmed. The number to be programmed is 7 (1 + 2 + 4 = 7).

**Table 3: Programming Option Bits**

Option	Description
1	Dialler reporting functions allowed
2	Remote arming using telephone allowed
4	Answering machine bypass only when armed
8	Use bell 103 for FSK format (Disabled = CCITT V21)

**1.5 Installer’s Programming Commands**

Installer Programming Commands, displayed in *Table 4*, can only be used when you enter Installer’s Programming Mode. Enter the command followed by the [#] key.

**Table 4: Installer’s Programming Commands**

Command	Description
958	Enable/disable zone status (hand held programmer required).
959	Test programming key.
960	Exit Installer’s Programming Mode.
961	Default system back to factory settings.
962	Copy panel memory to programming key.
963	Copy programming key to panel memory.
964	Erase programming key.
965	Default system for domestic dialling format.
966	Enable/disable automatic stepping of locations when programming.
999	Display software version (hand held programmer required).

## 1.6 Arming/Disarming the System

**Table 5: Arming/Disarming the System**

	<b>AWAY Mode</b>	<b>STAY Mode 1</b>	<b>STAY Mode 2</b>
<b>Arming (On)</b>	<p>Press and hold the [#] key until two beeps are heard.</p> <p>Or</p> <p>Enter your code followed by the [#] key (for example, [2 5 8 0 #]).</p> <p>Or</p> <p>To arm all areas, enter your code followed by [0] and then the [#] key (for example, [2 5 8 0 0 #]).</p> <p>Use a code to arm all areas simultaneously that the code is assigned to in AWAY Mode without needing to arm each area individually.</p>	<p>Press and hold the [*] key until two beeps are heard.</p> <p>Or</p> <p>Enter your code followed by the [*] key (for example, [2 5 8 0 *]).</p>	<p>Press and hold the [0] key until two beeps are heard.</p>
<b>Disarming (Off)</b>	<p>Enter your code followed by the [#] key (for example, [2 5 8 0 #]).</p> <p>Or</p> <p>To disarm all areas, enter your code followed by [0] and then the [#] key (for example, [2 5 8 0 0 #]).</p> <p>Use a code to disarm all areas simultaneously that the code is assigned without needing to disarm each area individually.</p>	<p>Press and hold the [*] key until two beeps are heard (only if no alarm).</p> <p>Or</p> <p>Enter your code followed by the [#] key (for example, [2 5 8 0 #]).</p>	<p>Press the [0] key until two beeps are heard (only if no alarm).</p> <p>Or</p> <p>Enter your code followed by the [#] key (for example, [2 5 8 0 #]).</p>

## 1.7 Isolating Zones

### 1.7.1 Standard Isolating

1. Press the [\*] key twice.
2. Enter the zone number that you want isolated, followed by the [\*] key.  
Repeat step 2 if more than one zone is required to be isolated.
3. Press the [#] key to exit when finished.

### 1.7.2 Code to Isolate

1. Press the [\*] key once.
2. Enter your user code.
3. Enter the zone number that you want isolated, followed by the [\*] key.  
Repeat Step 2 if more than one zone is required to be isolated.
4. Press the [#] key to exit when finished.

## 1.8 Add/Delete RF Devices (Wireless Zones)

### 1.8.1 Add RF Device

1. Enter the four character **Installer Code**, followed by [0] and the [#] key (for example, [1 2 3 4 0 #]).
2. Enter the Device Number (1 to 16) you want to add, followed by the [#] key.
3. Enter the 9-digit RF device ID number, followed by the [#] key.

### 1.8.2 Delete RF Device

1. Enter the Installer Code followed by [0] and the [#] key (for example, [1 2 3 4 0 #]).
2. Enter the Device Number (1 to 16) you want to delete, followed by the [#] key.
3. Press the [\*] key to delete the RF device.

## 1.9 Set First Test Report

1. Enter the four character Installer Code, followed by [1] and the [#] key (for example, [1 2 3 4 1 #]).
2. Enter the Number Of Days (0 to 15) to wait until the first test report, followed by the [#] key.

## 1.10 Event Memory Recall

Enter the four character Installer Code or Master Code, followed by [8] and the [#] key (for example, [1 2 3 4 8 #]).

The last 40 events (non partitioned) or last ten events (partitioned) are displayed in reverse order (for example, most recent to least recent).

## 1.11 Walk Test Mode

1. Enter the four character Installer Code or Master Code, followed by [7] and the [#] key (for example, [1 2 3 4 7 #]).
2. Test each zone as required.
3. Press the [#] key to exit.

## 1.12 Satellite Siren Service Mode

Enter the four character Installer Code, followed by [5] and the [#] key (for example, [1 2 3 4 5 #]).

## 1.13 Telephone Monitor Mode (Toggle On/Off)

1. Enter the four character Installer Code, followed by [6] and the [#] key (for example, [1 2 3 4 6 #]).
2. Press and hold the [9] key until two beeps are heard to send a test report.

**Table 6: Telephone Monitor Mode**

Zone LED	Dialling Event
1	Telephone Line Seized
2	Dialling Telephone Number
3	Handshake Received
4	Data Being Sent
5	Kiss-Off Received
None	Released Telephone Line

## 1.14 Add/Delete User Code/RF Keyfob

### 1.14.1 Add A User Code

1. Enter the four character Master Code, followed by [1] and the [#] key (for example, [2 5 8 0 1 #]).
2. Enter the User Number (1 to 16) you want to add/change, followed by the [#] key.
3. Enter the new code, followed by the [#] key.

### 1.14.2 Add RF Keyfob

1. Enter the four character Master Code, followed by [1] and the [#] key (for example, [2 5 8 0 1 #]).
2. Enter the User Number (9 to 16) you want to add, followed by the [#] key.
3. Enter the 9-digit RF keyfob ID number, followed by the [#] key.

### 1.14.3 Delete a User Code/RF Keyfob

1. Enter the four character Master Code, followed by [1] and the [#] key (for example, [2 5 8 0 1 #]).
2. Enter the User Number (1 to 16) you want to delete, followed by the [#] key.
3. Press the [\*] key to delete the User Code.

## 1.15 Change Domestic Telephone Numbers

1. Enter the four character Installer Code or Master Code, followed by [2] and the [#] key (for example, [1 2 3 4 2 #]).
2. Enter the digits for the telephone number.
3. If there is more than one telephone number, press the [\*] key, followed by the [4] key (inserts break between phone numbers) and repeat Step 2, or press the [#] key to exit.

## 1.16 Turn Outputs On/Off

1. Enter the four character Master Code, followed by [5] and the [#] key (for example, [2 5 8 0 5 #]).
2. Enter the Output Number (1 to 3) you want to toggle on or off.
3. Press the [#] key to toggle on or the [\*] key to toggle off.
4. Press the [#] key to exit.

## 1.17 Setting Date and Time

1. Enter the four character Master Code, followed by [6] and the [#] key (for example, [2 5 8 0 6 #]).
2. Enter the day (DD), month (MM), and year (YY) followed by the hour (HH) and minute (MM).
3. Press the [#] key to exit.

## 1.18 Day Alarm – Toggle On/Off

Press and hold the [4] key until two beeps are heard. Day alarm toggles on or off.

## 1.19 STAY Mode 2 Zones – Program

1. Enter the four character Installer Code or Master Code, followed by [4] and the [#] key (for example, [1 2 3 4 4 #]).
2. Enter the Zone Number you want the system to automatically isolate, followed by the [\*] key.  
Repeat if more than one zone must be automatically isolated when armed in STAY Mode 2.
3. Press the [#] key to exit.

### 1.20 Fault Analysis

1. Press and hold the [5] key until two beeps are heard.
2. Zone Indicators display FAULT conditions (see *Table 7*).
3. Press [#] key to exit.

**Table 7: Fault Analysis Conditions**

Zone LED	Fault Condition	Description
1	System Fault	Press and hold button [1] to determine fault. 1 = Battery Fail 2 = Date/Time 3 = RF Rx Jamming RF Rx Tamper RF Rx Comm's Fail 4 = Horn Speaker Fail 5 = Telephone Line Fail 6 = E2 Fail 7 = Fuse Fail 8 = AC Fail
2	RF Low Battery	Press and hold button [2] to determine fault. Displays zones (1 to 8) that register RF Low Battery.
3	Zone Tamper	Press and hold button [3] to determine fault. Displays zones (1 to 8) that register Zone Tamper.
4	Sensor Watch	Press and hold button [4] to determine fault. Displays zones (1 to 8) that register Zone Sensor Watch
5	RF Sensor Watch	Press and hold button [5] to determine fault. Displays zones (1 to 8) that register Zone RF Sensor Watch
6	Communication Fail	Press and hold button [6] to determine fault. 1 = Receiver 1 Fail (Dialler) 2 = Receiver 2 Fail (Dialler)

#### 1.21 Modem Call (Alarm Link)

Press and hold the [6] key until two beeps are heard.

#### 1.22 Latching Outputs (Reset)

Press and hold the [7] key until two beeps are heard.

### 1.23 Codepad ID/Buzzer Tone

1. Press and hold the [8] key until the desired buzzer tone is reached.  
If the system is partitioned (CC488 only), the codepad displays a number identifying which area the codepad belongs to (see *Table 8*).
2. Press the [#] key to exit.

**Table 8: Codepad ID/Buzzer Tone**

Zone LED	Codepad Assignment
1	Area 1
2	Area 2
7	Master Partitioned Codepad

#### 1.24 Test Report

Press and hold the [9] key until two beeps are heard.

#### 1.25 Speaker Test

Press and hold the [1] key until two beeps are heard. The speaker sounds for two seconds.

#### 1.26 Bell Test

Press and hold the [2] key until two beeps are heard. The piezo sounds for two seconds.

#### 1.27 Strobe Test (Toggle On/Off)

Press and hold the [3] key until three beeps are heard to turn the strobe on.

Or

Press and hold the [3] key until two beeps are heard to turn the strobe off.

#### 1.28 Telco Arm Sequence (Call Forward On)

1. Enter your four character Installer Code or Master Code followed by [3] and the [#] key (for example, [1 2 3 4 3 #]).
2. Press [1] followed by the [#] key.
3. Enter the **Call Forward On** sequence.
4. Press the [#] key to exit.

#### 1.29 Telco Disarm Sequence (Call Forward Off)

1. Enter your four character Installer Code or Master Code followed by [3] and the [#] key (for example, [1 2 3 4 3 #]).
2. Press [2] followed by the [#] key.
3. Enter the **Call Forward Off** sequence.
4. Press the [#] key to exit.

## 2.0 Programming Parameters



Shaded rows indicate default values.

### 2.1 Phone Programming

#### 2.1.1 Phone Number 1 - Receiver 1

<b>Location</b>	000 to 015
<b>Default</b>	0
0 = 10 and telephone termination = 0 Anywhere else 0 = 0	

#### 2.1.2 Phone Number 2 - Receiver 1

<b>Location</b>	016 to 031
<b>Default</b>	0
0 = 10 and telephone termination = 0 Anywhere else 0 = 0	

#### 2.1.3 Handshake Tone For Receiver 1

<b>Location</b>	032
1	HI-LO handshake (contact ID)
2	1400 Hz (Ademco TX @ 1900 Hz)
3	2300 Hz (Sescoa TX @ 1800 Hz)
4	No handshake
5	Pager

#### 2.1.4 Transmission Format For Receiver 1

<b>Location</b>	033
1	Contact ID
2	4 + 2 Expressed
3	FSK 300 Baud
4	Domestic
5	Basic Pager
6	Reserved
7	Reserved
8	4 + 2 Pulsed

#### 2.1.5 Subscriber ID Number For Receiver 1

<b>Location</b>	034 to 039
<b>Default</b>	0
Right justified	

#### 2.1.6 Phone Number 1 - Receiver 2

<b>Location</b>	040 to 055
<b>Default</b>	0
0 = 10 and telephone termination = 0 Anywhere else 0 = 0	

#### 2.1.7 Phone Number 2 - Receiver 2

<b>Location</b>	056 to 071
<b>Default</b>	0
0 = 10 and telephone termination = 0 Anywhere else 0 = 0	

#### 2.1.8 Handshake Tone For Receiver 2

<b>Location</b>	072
1	HI-LO handshake (contact ID)
2	1400 Hz (Ademco TX @ 1900 Hz)
3	2300 Hz (Sescoa TX @ 1800 Hz)
4	No handshake
5	Pager

#### 2.1.9 Transmission Format For Receiver 2

<b>Location</b>	073
1	Contact ID
2	4 + 2 Expressed
3	FSK 300 Baud
4	Domestic
5	Basic Pager
6	Reserved
7	Reserved
8	4 + 2 Pulsed

#### 2.1.10 Subscriber ID Number For Receiver 2

<b>Location</b>	074 to 079
<b>Default</b>	0
Right justified	

#### 2.1.11 Dialling Format

<b>Location</b>	080
1	Australian DTMF
2	Australian Decadic
3	Alternate DTMF and Decadic (Aust)
4	International DTMF
5	Reversed Decadic
6	Alternate DTMF and Reversed Decadic

#### 2.1.12 Reserved

<b>Location</b>	081 to 112
-----------------	------------

#### 2.1.13 Telco Arming Sequence (Call Forward On)

<b>Location</b>	113 to 142
<b>Default</b>	0

#### 2.1.14 Telco Disarm Sequence (Call Forward Off)

<b>Location</b>	143 to 158
<b>Default</b>	0

#### 2.1.15 Call Back Telephone Number

<b>Location</b>	159 to 174
<b>Default</b>	0
0 = 10 and telephone termination = 0 Anywhere else 0 = 0	

#### 2.1.16 Ring Count

<b>Location</b>	175
<b>Default</b>	8
0	Panel does not answer
1 to 13	No. of rings until panel answers
14	Answering machine bypass 2
15	Answering machine bypass 1

**2.1.17 Telephone Line Fail Options**

<b>Location</b>	176
<b>Default</b>	0
1	Display FAULT Indicator when telephone line fails
2	Sound alarm when system is armed
4	Sound alarm when system is disarmed
Options 2 and 4 must be used in conjunction with Option 1 (for example, program 1, 3, 5, or 7)	

**2.1.18 Dialler Options 1**

<b>Location</b>	177
1	Dialler reporting functions allowed
2	Remote arming by telephone allowed
4	Answering machine bypass only when armed
8	Use Bell 103 for FSK format (Disabled = CCITT V21)

**2.1.19 Dialler Options 2**

<b>Location</b>	178
<b>Default</b>	0
1	Open/Close Reports only if previous alarm
2	Open/Close Reports for STAY Mode 1 and STAY Mode 2
4	Delay siren until transmission complete
8	Extend handshake wait time from 30 to 55 sec.

**2.1.20 Dialler Options 3**

<b>Location</b>	179
<b>Default</b>	0
1	Set DTMP dialling pulses to 1 digit/sec.
2	Lockout telephone line fail alarm (V1.03+)
4	Change Decadic dialling to 60/40
8	Reserved

**2.1.21 Dialler Options 3 (V1.04+)**

<b>Location</b>	179
1	Set DTMP dialling pulses to 1 digit/sec.
2	Lockout telephone line fail alarm (V1.03+)
4	Change Decadic dialling to 60/40
8	External modem module (CC811) required for FSK (V1.09+)

**2.1.22 Alarm Link Options**

<b>Location</b>	180
1	Upload/download allowed
2	Call back phone number required for upload/download
4	Exit upload/download connection on alarm
8	External modem module (CC811) required for alarm link

**2.2 Installer Code**

<b>Location</b>	181 to 184	
	<b>Location</b>	<b>Default</b>
	181	1
	182	2
	183	3
	184	4

**2.3 User Code Programming**

**2.3.1 User Codes**

<b>Location</b>	185 to 264	
	<b>Location</b>	<b>Default</b>
User #01	185	2
	186	5
	187	8
	188	0
User #02	189 (Authority Level)	10
	190 to 193	15
User #03	194	2
	195 to 198	15
User #04	199 (Authority Level)	2
	200 to 203	15
User #05	204 (Authority Level)	2
	205 to 208	15
User #06	209 (Authority Level)	2
	210 to 213	15
User #07	214 (Authority Level)	2
	215 to 218	15
User #08	219 (Authority Level)	2
	220	0
RF User #09	221 to 223	15
	224 (Authority Level)	3
RF User #10	225 to 228	15
	229 (Authority Level)	2
RF User #11	230 to 233	15
	234 (Authority Level)	2
RF User #12	235 to 238	15
	239 (Authority Level)	2
RF User #13	240 to 243	15
	244 (Authority Level)	2
RF User #14	245 to 248	15
	249 (Authority Level)	2
RF User #15	250 to 253	15
	254 (Authority Level)	2
RF User #16	255 to 258	15
	259 (Authority Level)	2
	260 to 263	15
	264 (Authority Level)	2

**2.3.2 Authority Levels**

<b>Authority Levels</b>	<b>Description</b>
0	Arm/Disarm
1	Arm Only
2	Arm/Disarm and Open/Close Reports
3	Arm Only and Close Reports
4	Arm/Disarm and Code Required to Isolate
6	Arm/Disarm and Open/Close Reports and Code Required to Isolate
8	Master Code and Arm/Disarm
10	Master Code and Arm/Disarm and Open/Close Reports
12	Master Code and Arm/Disarm and Code Required to Isolate
14	Master Code and Arm/Disarm and Code Required to Isolate and Open/Close Reports

## 2.4 Day Alarm Zones

<b>Location</b>	265
<b>Default</b>	0
1	Zone 1
2	Zone 2
4	Zone 3
8	Zone 4

## 2.5 EOL Resistor Value

<b>Location</b>	266
0	No EOL
1	1k
2	1k5
3	2k2
4	3k3
5	3k9
6	4k7
7	5k6
8	6k8
9	10k
10	12k
11	22k
12	Reserved
13	Reserved
14	Split EOL (3k3/6k8 with tamper 1k)
15	Split EOL (3k3/6k8)

## 2.6 Zone Programming

### 2.6.1 Zone Defaults

Location	267 to 322	Location	Default
<b>Zone #01 (Default = Delay-1)</b>			
	Zone Type	267	2
	Zone Pulse Count	268	0
	Zone Pulse Count Time	269	0
	Zone Options 1	270	1
	Zone Options 2	271	14
	Report Code	272	1
	Dialler Options	273	1
<b>Zone #02 (Default = Handover)</b>			
	Zone Type	274	1
	Zone Pulse Count	275	0
	Zone Pulse Count Time	276	0
	Zone Options 1	277	1
	Zone Options 2	278	14
	Report Code	279	1
	Dialler Options	280	1
<b>Zone #03 (Default = Handover)</b>			
	Zone Type	281	1
	Zone Pulse Count	282	0
	Zone Pulse Count Time	283	0
	Zone Options 1	284	1
	Zone Options 2	285	14
	Report Code	286	1
	Dialler Options	287	1

### 2.6.1 Zone Defaults (continued)

Location	267 to 322	Location	Default
<b>Zone #04 (Default = Handover)</b>			
	Zone Type	288	1
	Zone Pulse Count	289	0
	Zone Pulse Count Time	290	0
	Zone Options 1	291	1
	Zone Options 2	292	14
	Report Code	293	1
	Dialler Options	294	1
<b>Zone #05 (Default = Instant)</b>			
	Zone Type	295	0
	Zone Pulse Count	296	0
	Zone Pulse Count Time	297	0
	Zone Options 1	298	1
	Zone Options 2	299	14
	Report Code	300	1
	Dialler Options	301	1
<b>Zone #06 (Default = Instant)</b>			
	Zone Type	302	0
	Zone Pulse Count	303	0
	Zone Pulse Count Time	304	0
	Zone Options 1	305	1
	Zone Options 2	306	14
	Report Code	307	1
	Dialler Options	308	1
<b>Zone #07 (Default = Instant)</b>			
	Zone Type	309	0
	Zone Pulse Count	310	0
	Zone Pulse Count Time	311	0
	Zone Options 1	312	1
	Zone Options 2	313	14
	Report Code	314	1
	Dialler Options	315	1
<b>Zone #08 (Default = 24 hr. Tamper)</b>			
	Zone Type	316	9
	Zone Pulse Count	317	0
	Zone Pulse Count Time	318	0
	Zone Options 1	319	1
	Zone Options 2	320	12
	Report Code	321	1
	Dialler Options	322	1

**2.6.2 Zone Types**

Zone Type	Description
0	Instant
1	Handover
2	Delay-1
3	Delay-2
4	Reserved
5	Reserved
6	24 hr. Medical
7	24 hr. Panic
8	24 hr. Hold-up
9	24 hr. Tamper
10	Reserved
11	Keyswitch
12	24 hr. Burglary
13	24 hr. Fire
14	Chime
15	Not Used

**2.6.3 Zone Pulse Count**

Use the pulse count to program how many pulses (0 to 15) need to be registered within the pulse count time to activate an alarm.

**2.6.4 Zone Pulse Count Time**

Option	20 ms Loop Response Time	Option	150 ms Loop Response Time
0	0.5 sec.	8	20 sec.
1	1 sec.	9	30 sec.
2	2 sec.	10	40 sec.
3	3 sec.	11	50 sec.
4	4 sec.	12	60 sec.
5	5 sec.	13	90 sec.
6	10 sec.	14	120 sec.
7	15 sec.	15	200 sec.

**2.6.5 Zone Options 1**

Option	Description
1	Lockout siren/dialler
2	Delay Alarm report
4	Silent alarm
8	Sensor watch

**2.6.6 Zone Options 2**

Option	Group
1	Isolated in STAY Mode 1
2	Zone isolation allowed
4	Forces arming allowed
8	Zone Restore Report allowed

**2.6.7 Zone Dialler Options**

Option	Description
0	No zone reports allowed
1	Report to Receiver 1
2	Report to Receiver 2
4	Report to both Receiver 1 and Receiver 2
8	Report to Receiver 2 only if Receiver 1 fails

**2.6.8 Keyswitch Zone Options**

The keyswitch zone options replace Zone Options 1 only for the zones that were programmed to operate as a keyswitch zone.

Option	Description
0	Latching arm and disarm in AWAY Mode
1	Latching arm in AWAY Mode
2	Latching disarm from AWAY Mode or STAY Mode
4	Latching arm and disarm in STAY Mode
5	Latching arm in STAY Mode
6	Latching disarm from STAY Mode
8	Momentary arm and disarm in AWAY Mode
9	Momentary arm in AWAY Mode
10	Momentary disarm from AWAY Mode or STAY mode
12	Momentary arm and disarm in STAY Mode
13	Momentary arm in STAY Mode
14	Momentary disarm from STAY Mode

**2.7 Swinger Programming**

**2.7.1 Swinger Shutdown Count For Siren**

Location	323
<b>Default</b>	3
0	Unlimited
1 to 15	Number of times siren operates until lockout

**2.7.2 Swinger Shutdown Count For Dialler**

Location	324
<b>Default</b>	6
0	Unlimited
1 to 15	Number of times dialler operates until lockout

**2.8 Zone Status Programming**

**2.8.1 Zone Status – Zone Tamper Report**

Location	325 to 326	
	Location	Default
Zone Tamper Report	325	0
Zone Tamper Restore Report	326	0

**2.8.2 Zone Status – Walk Test Report**

Location	327 to 328	
	Location	Default
Walk Test Start Report	327	0
Walk Test End Report	328	0

**2.8.3 Zone Status – Bypass Report**

Location	329 to 330	
	Location	Default
Zone Bypass Report	329	9
Zone Bypass Restore Report	330	8

**2.8.4 Zone Status – Trouble Report**

Location	331 to 332	
	Location	Default
Zone Trouble Report	331	2
Zone Trouble Restore Report	332	3

**2.8.5 Zone Status – Sensor Watch Report**

Location 333 to 334		
	Location	Default
Sensor Watch Report	333	4
Sensor Watch Restore Rept	334	5

**2.8.6 Zone Status – Alarm Restore Code**

Location 335	
Default	14

**2.8.7 Zone Status Reporting Options**

Location 336	
0	No zone status reports allowed
1	Report to Receiver 1
2	Report to Receiver 2
4	Report to both Receiver 1 and Receiver 2
8	Report to Receiver 2 only if Receiver 1 fails

**2.9 RF Programming**

**2.9.1 RF Supervision Time**

Location 337	
Default	0
Increments of 6 hrs. (0 to 90 hrs.)	

**2.9.2 RF Low Battery Report**

Location 338 to 339		
	Location	Default
RF Low Battery Report	338	6
RF Low Battery Restore Report	339	8

**2.9.3 RF Receiver Trouble Report**

Location 340 to 341		
	Location	Default
RF Receiver Trouble Report (tens digit)	340	7
RF Receiver Trouble Report (units digit)	341	9

**2.9.4 RF Receiver Trouble Restore Report**

Location 342 to 343		
	Location	Default
RF Receiver Trouble Restore Report (tens digit)	342	7
RF Receiver Trouble Restore Report (units digit)	343	11

**2.9.5 RF Dialler Options**

Location 344	
0	No Zone Status Reports allowed
1	Report to Receiver 1
2	Report to Receiver 2
4	Report to both Receiver 1 and Receiver 2
8	Report to Receiver 2 only if Receiver 1 fails

**2.10 Report Programming**

**2.10.1 Open/Close Reports**

Location 345 to 346		
	Location	Default
Open Report	345	11
Close Report	346	12

**2.10.2 Open/Close Reporting Options**

Location 347	
0	No Open/Close Reports allowed
1	Report to Receiver 1
2	Report to Receiver 2
4	Report to both Receiver 1 and Receiver 2
8	Report to Receiver 2 only if Receiver 1 fails

**2.10.3 Codepad Duress Report**

Location 348	
Default	6

**2.10.4 Codepad Panic Report**

Location 349 to 350		
	Location	Default
Tens digit	349	7
Units digit	350	15

**2.10.5 Codepad Fire Report**

Location 351 to 352		
	Location	Default
Tens digit	351	7
Units digit	352	14

**2.10.6 Codepad Medical Report**

Location 353 to 354		
	Location	Default
Tens digit	353	7
Units digit	354	13

**2.10.7 Codepad Reporting Options**

Location 355	
0	No Codepad Alarm Reports allowed
1	Report to Receiver 1
2	Report to Receiver 2
4	Report to both Receiver 1 and Receiver 2
8	Report to Receiver 2 only if Receiver 1 fails

**2.11 System Status Programming**

**2.11.1 System Status – Fuse Fail Report**

Location 356 to 357		
	Location	Default
Tens digit	356	10
Units digit	357	3

**2.11.2 System Status – Fuse Fail Restore Report**

Location 358 to 359		
	Location	Default
Tens digit	358	10
Units digit	359	8

**2.11.3 System Status – AC Fail Report**

Location 360 to 361		
	Location	Default
Tens digit	360	10
Units digit	361	2

**2.11.4 System Status – AC Fail Restore Report**

Location 362 to 363		
	Location	Default
Tens digit	362	10
Units digit	363	7

**2.11.5 System Status – Low Battery Report**

Location 364 to 365		
	Location	Default
Tens digit	364	10
Units digit	365	1

**2.11.6 System Status – Low Battery Restore Report**

Location 366 to 367		
	Location	Default
Tens digit	366	10
Units digit	367	6

**2.11.7 System Status – Access Denied (Code Retry)**

Location 368 to 370		
	Location	Default
Code retry limit (0 = unlimited)	368	6
Tens digit	369	7
Units digit	370	12

**2.11.8 System Status Reporting Options**

Location 371	
0	No Codepad Alarm Reports allowed
1	Report to Receiver 1
2	Report to Receiver 2
4	Report to both Receiver 1 and Receiver 2
8	Report to Receiver 2 only if Receiver 1 fails

**2.12 Test Report Programming**

**2.12.1 Test Report Time (Automatic)**

Location 372 to 378		
	Location	Default
Hour of day (tens digit)	372	0
Hour of day (units digit)	373	0
Minute of day (tens digit)	374	0
Minute of day (units digit)	375	0
Test report (tens digit)	376	7
Test report (units digit)	377	1
Repeat interval in days	378	0

**2.12.2 Test Reporting Dialler Options**

Location 379	
0	No Codepad Alarm Reports allowed
1	Report to Receiver 1
2	Report to Receiver 2
4	Report to both Receiver 1 and Receiver 2
8	Report to Receiver 2 only if Receiver 1 fails

**2.13 Output Programming**

**2.13.1 Outputs**

Location 380 to 409			
		Location	Default
<b>Output 1 (Default = Horn Speaker)</b>			
	Event Code	380	1
	Event Code	381	14
	Polarity	382	0
	Time Base	383	0
	Time Base Multiplier	384	0
	Time Base Multiplier	385	0
<b>Output 2 (Default = Fire Alarm With Verification)</b>			
	Event Code	386	2
	Event Code	387	7
	Polarity	388	10
	Time Base	389	2
	Time Base Multiplier	390	1
	Time Base Multiplier	391	5
<b>Strobe Output (Default = Strobe – Reset After 8 hrs.)</b>			
	Event Code	392	2
	Event Code	393	0
	Polarity	394	6
	Time Base	395	4
	Time Base Multiplier	396	0
	Time Base Multiplier	397	8
<b>Relay Output (Default = Sirens Running)</b>			
	Event Code	398	1
	Event Code	399	15
	Polarity	400	1
	Time Base	401	0
	Time Base Multiplier	402	0
	Time Base Multiplier	403	0
<b>Codepad Buzzer (Default = Entry/Exit Warning and Day Alarm)</b>			
	Event Code	404	0
	Event Code	405	13
	Polarity	406	2
	Time Base	407	1
	Time Base Multiplier	408	0
	Time Base Multiplier	409	1

**2.13.2 Event Codes**

Event Code	Description
0 0	EDMSAT – satellite siren (output 1 only)
0 1	System armed
0 2	System disarmed
0 3	Armed in STAY mode
0 4	Armed in AWAY mode
0 5	Pre-arming alert
0 6	Exit warning (all zones sealed) and entry warning
0 7	Exit warning
0 8	Exit warning finished
0 9	Kiss-off after end of exit time
0 10	Reserved
0 11	Entry warning
0 12	Entry warning and day alarm resetting
0 13	Exit warning and entry warning and day alarm resetting
0 14	Day alarm resetting
0 15	Day alarm latching
1 0	Day alarm enabled
1 1	Telephone line fail
1 2	Kiss-off received
1 3	Fuse fail
1 4	AC fail
1 5	Low battery
1 6	Horn speaker fail
1 7	Sensor watch alarm
1 8	Codepad medical alarm
1 9	Codepad fire alarm
1 10	Codepad panic alarm
1 11	Codepad duress alarm
1 12	Access denied (code retries)
1 13	Reserved
1 14	Horn speaker (output 1 only)
1 15	Sirens running
2 0	Strobe
2 1	Silent alarm
2 2	Alarm in STAY Mode
2 3	Alarm in AWAY Mode
2 4	System fault
2 5	Fire alarm (resetting)
2 6	Fire alarm (latching)
2 7	Fire alarm (verification)
2 8	Remote control 1
2 9	Remote control 2
2 10	Remote control 3
2 11	Radio control output 1
2 12	Radio control output 2
2 13	Radio control output 1 - not in AWAY Mode
2 14	Radio control output 2 - not in AWAY Mode
2 15	Communications fail after 3 attempts

**2.13.2 Event Codes (continued)**

Event Code	Description
3 0	Communications fail
3 1	Dialler disabled
3 2	Dialler active (on-line)
3 3	Ring detect
3 4	Codepad panic (multi-break) V1.05+
3 5	Mimic zone 1
3 6	Mimic zone 2
3 7	Mimic zone 3
3 8	Mimic zone 4
3 9	Mimic zone 5
3 10	Mimic zone 6
3 11	Mimic zone 7
3 12	Mimic zone 8
3 13	Reserved
3 14	Reserved
3 15	Reserved
4 0	Reserved
4 1	Reserved
4 2	Reserved
4 3	Reserved
4 4	Reserved
4 5	Chime
4 6	Zone not sealed
4 7	Zone not sealed after exit time
4 8	Reserved
4 9	AC mains cycle (60 Hz or 50 Hz)
4 10	Area 1 – zone unsealed (Solution 880 only)
4 11	Area 2 – zone unsealed (Solution 880 only)
4 12	Reserved
4 13	Reserved
4 14	Reserved
4 15	Reserved
5 0	Reserved
5 1	Reserved
5 2	Area 1 in alarm (Solution 880 only)
5 3	Area 2 in alarm (Solution 880 only)
5 4	Reserved
5 5	Reserved
5 6	Area 1 armed (Solution 880 only)
5 7	Area 2 armed (Solution 880 only)
5 8	Reserved
5 9	Reserved
5 10	Area 1 disarmed (Solution 880 only)
5 11	Area 2 disarmed (Solution 880 only)
5 12	Reserved
5 13	Reserved
5 14	Any areas armed (Solution 880 only)
5 15	Any areas disarmed (Solution 880 only)
6 0	Area 1 codepad data terminal (Solution 880 only)
6 1	Area 2 codepad data terminal (Solution 880 only)

**2.13.3 Polarity (Modes)**

Option	Description
0	Disabled
1	Normally open, going low
2	Normally open, pulsing low
3	Normally open, one shot low
4	Normally open, one shot low (reset)
5	Normally open, one shot low (re-trigger)
6	Normally open, latching low
7	Reserved
8	Normally low, going open
9	Normally low, pulsing open
10	Normally low, one shot open
11	Normally low, one shot open (reset)
12	Normally low, one shot open (re-trigger)
13	Normally low, latching open

**2.13.4 Time Base**

Option	Description
1	200 ms
2	1 sec.
3	1 min.
4	1 hr.

**2.13.5 Time Base Multiplier**

Enter a value between 01 and 99.

**2.13.6 One Shot Mode**

When you program the output polarity as one shot, the time base is multiplied by the time base multiplier. (For example, if the time base = 2 and the multiplier = 05, the output operates for 10 sec.)

**2.13.7 Pulsing Mode**

When you program the output polarity as pulsing, the time base becomes the ON time and the multiplier becomes the OFF time. The OFF time is the time base x the multiplier. (For example, if you want the output to pulse 1 sec. ON and 5 sec. OFF, you would program time base as one and the multiplier as five.)

**2.14 Time Programming**

**2.14.1 Entry Time 1**

Location 410 to 411		
	Location	Default
Increments of 1 sec. (0 to 15 sec.)	410	4
Increments of 16 sec. (0 to 240 sec.)	411	1

**2.14.2 Entry Time 2**

Location 412 to 413		
	Location	Default
Increments of 1 sec. (0 to 15 sec.)	412	8
Increments of 16 sec. (0 to 240 sec.)	413	2

**2.14.3 Exit Time (AWAY/STAY Modes)**

Location 414 to 415		
	Location	Default
Increments of 1 sec. (0 to 15 sec.)	414	12
Increments of 16 sec. (0 to 240 sec.)	415	3

**2.14.4 Entry Guard Time For STAY Mode**

Location 416 to 417		
	Location	Default
Increments of 1 sec. (0 to 15 sec.)	416	0
Increments of 16 sec. (0 to 240 sec.)	417	0

**2.14.5 Delay Alarm Report Time**

Location 418 to 419		
	Location	Default
Increments of 1 sec. (0 to 15 sec.)	418	0
Increments of 16 sec. (0 to 240 sec.)	419	0

**2.14.6 Sensor Watch Time**

Location 420 to 421		
	Location	Default
Increments of days (tens digit)	420	0
Increments of days (units digit)	421	0

**2.14.7 Codepad Lockout Time**

Location 422	
Default	0
Increments of 10 sec. (0 sec. to 150 sec.)	

**2.14.8 Siren Run Time**

Location 423	
Default	5
Increments of 1 min. (0 min. to 15 min.)	

**2.14.9 Siren Sound Rate**

Location 424	
Default	7
0 = Slowest frequency	
15 = Fastest frequency	

**2.14.10 Auto Arming Pre-Alert Time**

Location 425	
Default	1
Increments of 5 min. (0 min. to 75 min.)	

**2.14.11 Auto Arming Time**

Location 426 to 429		
	Location	Default
Hour of the day (tens digit)	426	0
Hour of the day (units digit)	427	0
Minute of the day (tens digit)	428	0
Minute of the day (units digit)	429	0

**2.14.12 Auto Disarming Time**

Location 430 to 433		
	Location	Default
Hour of the day (tens digit)	430	0
Hour of the day (units digit)	431	0
Minute of the day (tens digit)	432	0
Minute of the day (units digit)	433	0

**2.14.13 Kiss-Off Wait Time**

Location 434	
Default	3
Increments of 500 ms (500 ms = 8 sec.)	

**2.14.14 Speaker Beep Volume**

<b>Location</b>	435
<b>Default</b>	13
0	No Beeps
15	Loudest Beeps

**2.15 Options Programming**

**2.15.1 System Options 1**

<b>Location</b>	436
1	Bosch Security Systems smart lockout allowed
2	Horn speaker monitor
4	Strobe indication for radio arm/disarm
8	Assign button 4 on transmitter to operate STAY Mode 1

**2.15.2 System Options 2**

<b>Location</b>	437
<b>Default</b>	0
1	Codepad panic to be silent
2	Codepad fire to be silent
4	Codepad medical to be silent
8	Access denied (code retries) to be silent

**2.15.3 System Options 3**

<b>Location</b>	438
1	AC fail after 1 hr. (Disabled = after 2 min.)
2	Ignore AC fail
4	Pulse count handover allowed
8	Handover delay to be sequential

**2.15.4 System Options 4**

<b>Location</b>	439
<b>Default</b>	0
1	Panel to power up disarmed (if power reset)
2	Arm/disarm tracking on power up
4	Internal crystal to keep time
8	Radio keyswitch interface, night arm station, or RE005 installed

**2.15.5 Consumer Options 1**

<b>Location</b>	440
<b>Default</b>	0
1	Test reports only when armed
2	Test report after siren reset
4	Auto arm in STAY Mode 1
8	STAY indicator to display day alarm status

**2.15.6 Consumer Options 2**

<b>Location</b>	441
1	Codepad displays extinguish after 60 sec.
2	Single button arming allowed (AWAY/STAY Modes 1 and 2)
4	Single button disarming allowed (STAY Modes 1 and 2)
8	Alarm memory reset on disarm

**2.15.7 Consumer Options 3**

<b>Location</b>	442
1	Codepad fault beeps allowed
2	Use digit 3 for codepad duress alarm (instead of digit 9)
4	Alarms activate sirens and strobe outputs in STAY Modes 1 and 2
8	Zone tamper alarms to be silent

**2.15.8 Radio Input Options**

<b>Location</b>	443
<b>Default</b>	0
1	RF Receiver (RF-3212/E) connected
2	Latching keyswitch input
3	Momentary keyswitch input
4	Reserved

**2.15.9 Partitioning Options 1**

<b>Location</b>	444
<b>Default</b>	0
1	First to Open/Last to Close reporting armed
2	Area 1 codepad connected to data terminal
4	Reset sirens from any area allowed
8	Master codepad to display AUX indicator when online

**2.15.10 Partitioning Options 2**

<b>Location</b>	445
<b>Default</b>	0
1	Lock area 1 to Receiver 1 and lock area 2 to Receiver 2
2	User codes allowed to arm/disarm both areas at same time (Code [0][#])
4	Reserved
8	Reserved

**2.16 Zone Allocations Programming**

**2.16.1 Zone Allocations for Area 1**

<b>Location</b>	446 to 453	
	<b>Location</b>	<b>Default</b>
Zone 1 LED – Area 1 Codepad	446	0
Zone 2 LED – Area 1 Codepad	447	0
Zone 3 LED – Area 1 Codepad	448	0
Zone 4 LED – Area 1 Codepad	449	0
Zone 5 LED – Area 1 Codepad	450	0
Zone 6 LED – Area 1 Codepad	451	0
Zone 7 LED – Area 1 Codepad	452	0
Zone 8 LED – Area 1 Codepad	453	0

**2.16.2 Zone Allocations for Area 2**

<b>Location</b>	454 to 461	
	<b>Location</b>	<b>Default</b>
Zone 1 LED – Area 2 Codepad	454	0
Zone 2 LED – Area 2 Codepad	455	0
Zone 3 LED – Area 2 Codepad	456	0
Zone 4 LED – Area 2 Codepad	457	0
Zone 5 LED – Area 2 Codepad	458	0
Zone 6 LED – Area 2 Codepad	459	0
Zone 7 LED – Area 2 Codepad	460	0
Zone 8 LED – Area 2 Codepad	461	0

## 2.17 User Code Area Assignment

Location 462 to 477		
	Location	Default
User Code 1	462	0
User Code 2	463	0
User Code 3	464	0
User Code 4	465	0
User Code 5	466	0
User Code 6	467	0
User Code 7	468	0
User Code 8	469	0
User Code 9	470	0
User Code 10	471	0
User Code 11	472	0
User Code 12	473	0
User Code 13	474	0
User Code 14	475	0
User Code 15	476	0
User Code 16	477	0
0	User code not assigned	
1	User code assigned to Area 1	
2	User code assigned to Area 2	
3	User code assigned to both Area 1 and Area 2	

## 2.18 Domestic Telephone Numbers

Location 478 to 525	
---------------------	--

## 2.19 Reserved

Location 526	
Default	0

## 2.20 RF Programming

### 2.20.1 RF Options

Location 527	
Default	0
1	Sound siren on RF Receiver fail
2	Sound siren on RF Receiver tamper/jamming
4	Unseal zone that fails supervision (if supervision enabled)
8	RF jamming monitoring allowed

### 2.20.2 RF Device Mapping for Devices 1 to 8

Location 528 to 535		
	Location	Default
Map RF Device 1 to Zone (1 to 8)	528	1
Map RF Device 2 to Zone (1 to 8)	529	2
Map RF Device 3 to Zone (1 to 8)	530	3
Map RF Device 4 to Zone (1 to 8)	531	4
Map RF Device 5 to Zone (1 to 8)	532	5
Map RF Device 6 to Zone (1 to 8)	533	6
Map RF Device 7 to Zone (1 to 8)	534	7
Map RF Device 8 to Zone (1 to 8)	535	8

### 2.20.3 RF Device Mapping for Devices 9 to 16

Location 536 to 543		
	Location	Default
Map RF Device 9 to Zone (1 to 8)	536	0
Map RF Device 10 to Zone (1 to 8)	537	0
Map RF Device 11 to Zone (1 to 8)	538	0
Map RF Device 12 to Zone (1 to 8)	539	0
Map RF Device 13 to Zone (1 to 8)	540	0
Map RF Device 14 to Zone (1 to 8)	541	0
Map RF Device 15 to Zone (1 to 8)	542	0
Map RF Device 16 to Zone (1 to 8)	543	0

### 2.20.4 Ring Burst Time (V1.07+)

Location 748 to 749		
	Location	Default
Increments of 5 ms. (0 to 75 ms)	748	4
Increments of 80 ms. (0 to 1200 ms)	749	6

### 2.20.5 RF Signal Strength for Devices 1 to 8

Location 801 to 808		
	Location	Default
Signal Strength for RF Device 1	801	0
Signal Strength for RF Device 2	802	0
Signal Strength for RF Device 3	803	0
Signal Strength for RF Device 4	804	0
Signal Strength for RF Device 5	805	0
Signal Strength for RF Device 6	806	0
Signal Strength for RF Device 7	807	0
Signal Strength for RF Device 8	808	0

### 2.20.6 RF Signal Strength for Devices 9 to 16

Location 809 to 816		
	Location	Default
Signal Strength for RF Device 9	809	0
Signal Strength for RF Device 10	810	0
Signal Strength for RF Device 11	811	0
Signal Strength for RF Device 12	812	0
Signal Strength for RF Device 13	813	0
Signal Strength for RF Device 14	814	0
Signal Strength for RF Device 15	815	0
Signal Strength for RF Device 16	816	0

## 2.21 System Option Programming

### 2.21.1 Default Options

Location 900	
0	Defaulting System Allowed
15	Defaulting System Disabled

### 2.21.2 System Time

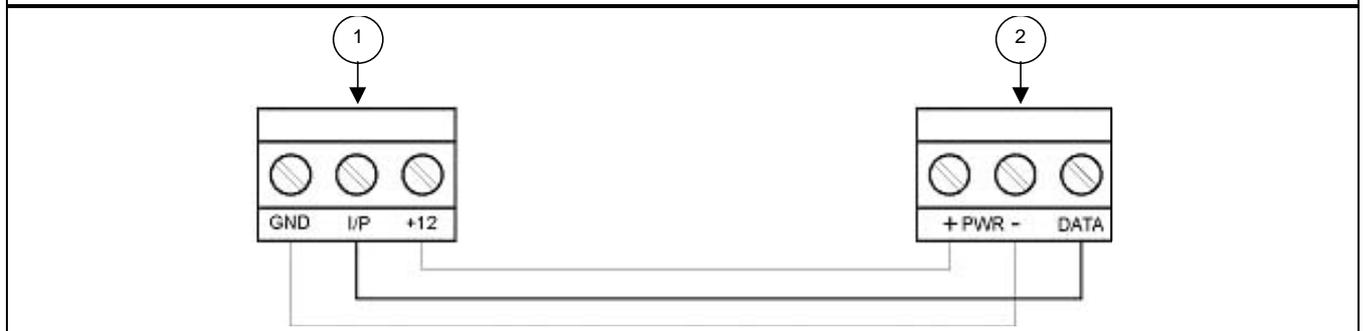
Location 901 to 904		
	Location	Default
Hour of the day (tens digit)	901	0
Hour of the day (units digit)	902	0
Minute of the day (tens digit)	903	0
Minute of the day (units digit)	904	0

### 2.21.3 System Date

Location	905 to 910	
	Location	Default
Day of the month (tens digit)	905	0
Day of the month (units digit)	906	1
Month of the year (tens digit)	907	0
Month of the year (units digit)	908	1
Current year (tens digit)	909	0
Current year (units digit)	910	1

## 3.0 Solution Ultima RF Receiver Interface

Figure 1: RF Receiver (RF 3212/E) Wiring Diagram



1 = Solution Ultima Control Panel

2 = RF Receiver (RF 3212/E)

### Wiring and Power Up:

1. Remove power from the control panel.
2. Connect the RF Receiver to the control panel as shown above using 0.8 mm (22 AWG) or larger wire. Wire length should not exceed 300 m (1000 feet).
3. Apply power to the control panel. The red LED at the centre of the module turns on.

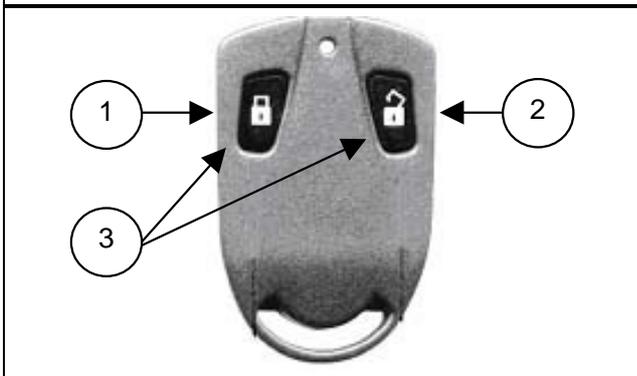
### Operation:

The following describes the status of the module based on the LED condition.

- LED On – Module is functioning normally.
- LED Off – Power failure has occurred or module is not wired correctly.
- LED Turns Off Momentarily – Module acknowledged receiving an RF signal from a remote RF device.

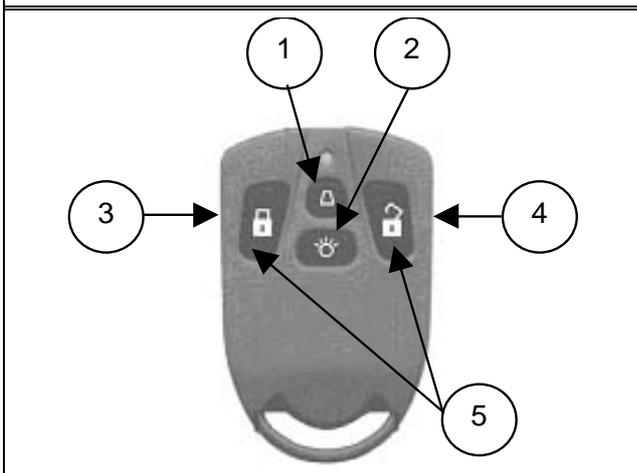
## 4.0 RF Keyfob Operations

Figure 2: RF3332/E – 2 Button RF Keyfob



- 1 = Button 1: Arm in AWAY Mode
- 2 = Button 2: Disarm from AWAY/STAY Mode
- 3 = Buttons 1 and 2: Press both buttons simultaneously to activate Panic alarm.

Figure 3: RF3332/E – 4 Button RF Keyfob

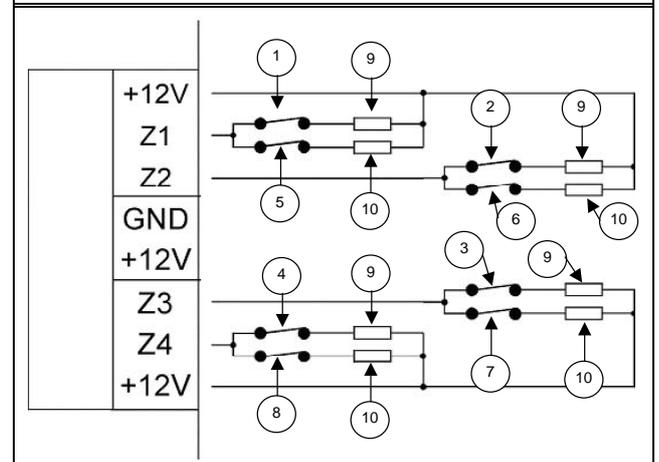


- 1 = Button 4: Arm in STAY Mode 1
- 2 = Button 3: Optional
- 3 = Button 1: Arm in AWAY Mode
- 4 = Button 2: Disarm from AWAY/STAY Mode
- 5 = Buttons 1 and 2: Press both buttons simultaneously to activate Panic alarm.

## 5.0 Connections for Split EOL Resistors

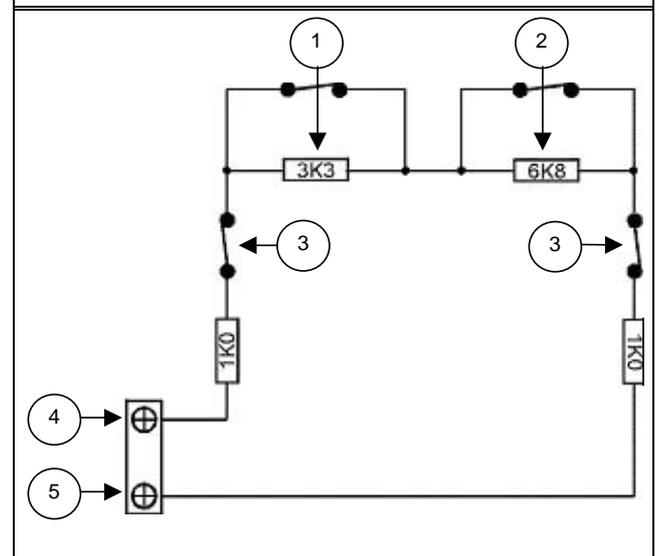
### 5.1 8 Burglary Zones

Figure 4: Split EOL Wiring Diagram (Location 266 = 15)



- 1 = Zone 1
- 2 = Zone 2
- 3 = Zone 3
- 4 = Zone 4
- 5 = Zone 5
- 6 = Zone 6
- 7 = Zone 7
- 8 = Zone 8
- 9 = 3k3
- 10 = 6k8

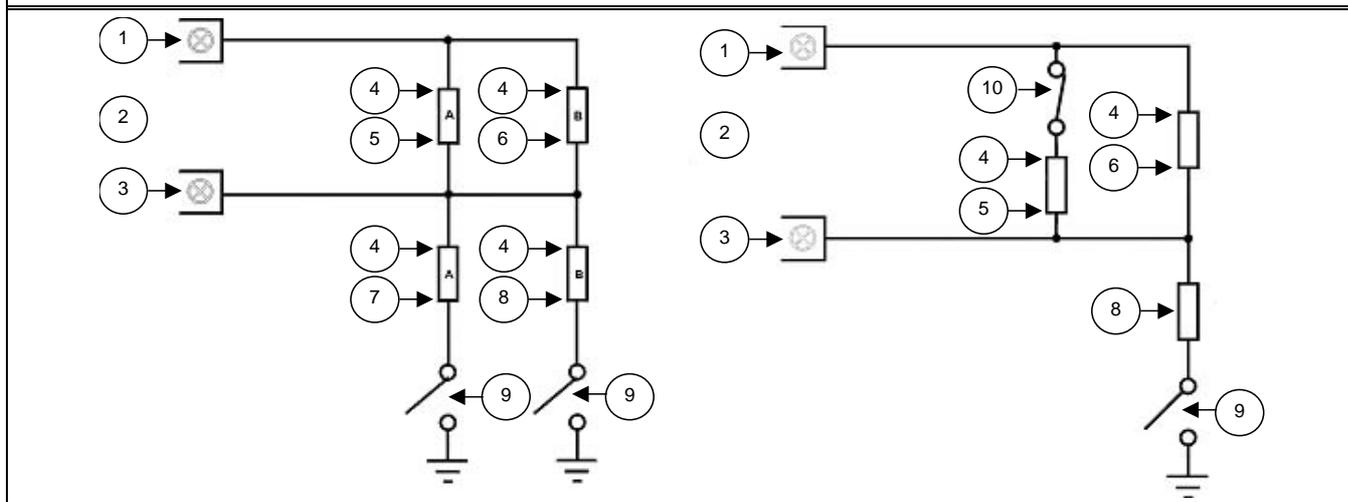
Figure 5: Split EOL Wiring Diagram with Tamper (Location 266 = 14)



- 1 = Zone 1
- 2 = Zone 5
- 3 = Tamper
- 4 = +12 V
- 5 = Zone 1

### 5.2 8 Zone Operation Using N/O Contacts

Figure 6: Split EOL Wiring Diagrams Using N/O Contacts



1 = +12 V

2 = Zone Input

3 = Zone

4 = EOL

5 = 3k3

6 = 6k8

7 = 1k5

8 = 4k7

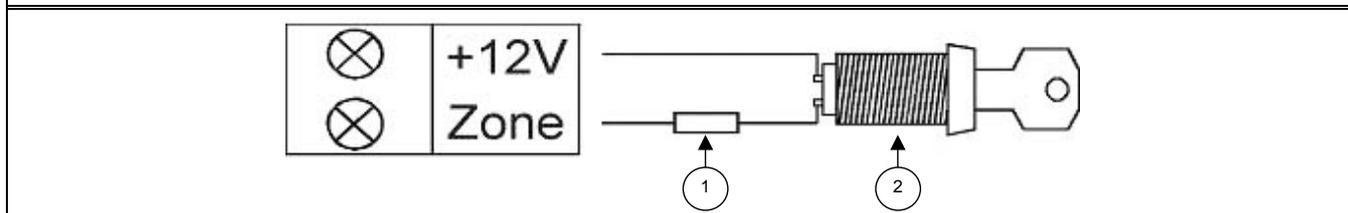
9 = N/O

10 = N/C

## 6.0 Wiring Diagrams

### 6.1 Keyswitch Zone

Figure 7: Wiring Diagram for Keyswitch Zone

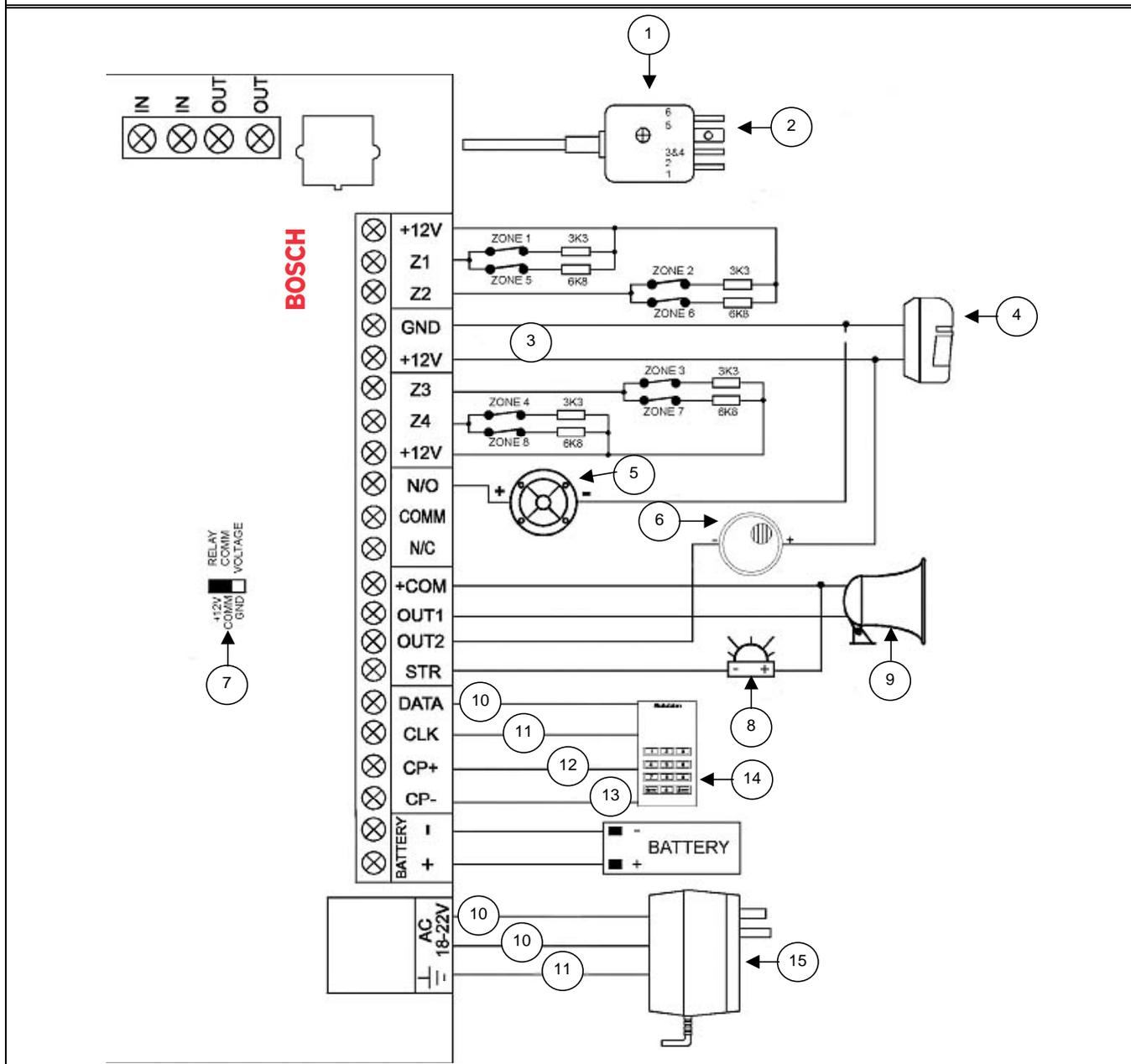


1 = EOL

2 = Keyswitch (Momentary/Toggle)

### 6.2 Solution Ultima Series

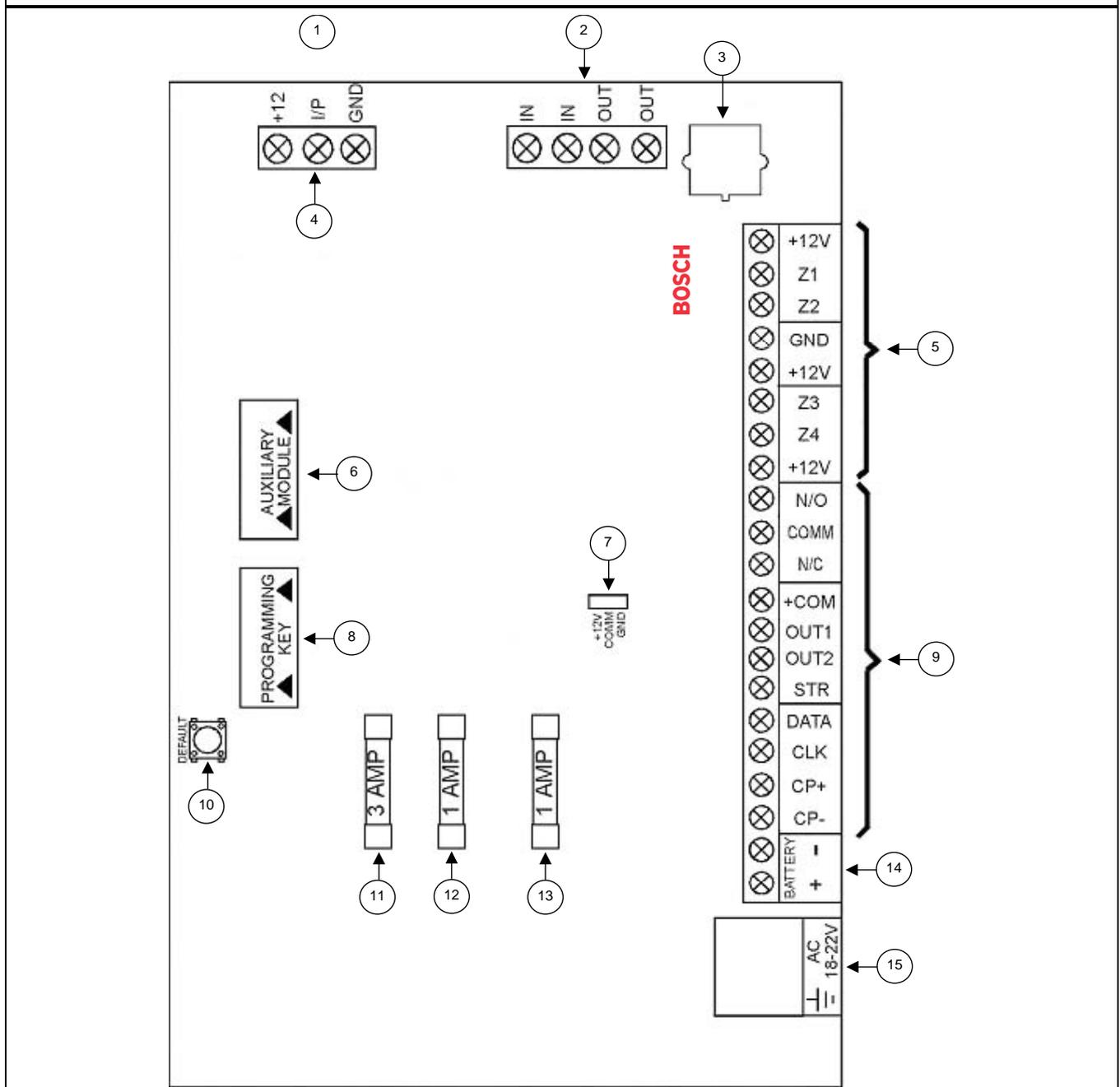
Figure 8: Solution Ultima Series Wiring Diagram



- |   |                                     |
|---|-------------------------------------|
| 1 = 605 Plug                                  | 7 = Link between +12 V and Comm     |
| 2 = 1 (Green) - Internal phone line           | 8 = Strobe                          |
| 5 (Yellow) - Internal phone line              | 9 = Horn speaker                    |
| 2 (Black) - Telecom line (street)             | 10 = Yellow                         |
| 6 (Red) - Telecom line (street)               | 11 = Green                          |
| 3 and 4 - Not used                            | 12 = Red                            |
| 3 = Power to external equipment: 12V @ 400 Ma | 13 = Black                          |
| 4 = PIR                                       | 14 = Codepad                        |
| 5 = Piezo siren                               | 15 = 18 VAC 1.3 A Plug Pack (TF008) |
| 6 = Smoke detector                            |                                     |

## 7.0 Component Overlay

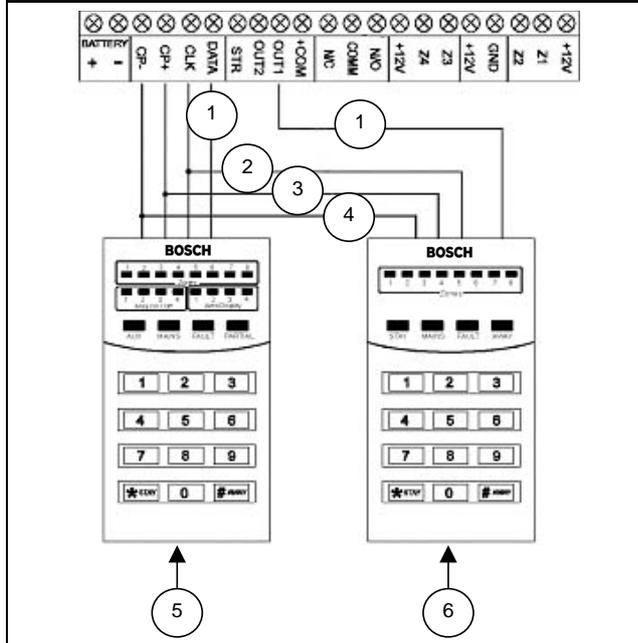
Figure 9: Solution Ultima Series Component Overlay



- |  |   |
|--|---|
| <p>1 = OUT – Internal phone line<br/>                 OUT – Internal phone line<br/>                 IN – Telecom line (street)<br/>                 IN – Telecom line (street)</p> <p>2 = Termination for phone line</p> <p>3 = Socket for telecom lead connection</p> <p>4 = Receiver interface connection</p> <p>5 = Zone termination strip</p> <p>6 = Phone amplifier or direct link cable</p> | <p>7 = Relay contact select</p> <p>8 = Programming key or hand help programmer plugs</p> <p>9 = Output termination strip</p> <p>10 = Default switch</p> <p>11 = 3 A battery fuse</p> <p>12 = 1 A accessory fuse</p> <p>13 = 1 A codepad fuse</p> <p>14 = Battery input</p> <p>15 = Plug pack input (Bosch Security Systems TF008)</p> |
|--|---|

## 8.0 Codepad Connections Partitioning

**Figure 10: Connections for CP-5 Master Partitioned (CP500P) Codepad and CP-5 Area Addressable (CP500A) Codepad**



- 1 = Data
- 2 = CLK
- 3 = +12 V
- 4 = GND
- 5 = Master Partitioned Codepad
- 6 = Addressable Area Codepad

If the CP-5 Area Addressable (CP500A) codepad is assigned to Area 1, DIP Switch 1 on the back of the remote codepad must be in the ON position. The following locations for Output 1 must be programmed.

[LOCATION 380 = 6, 381 = 0]

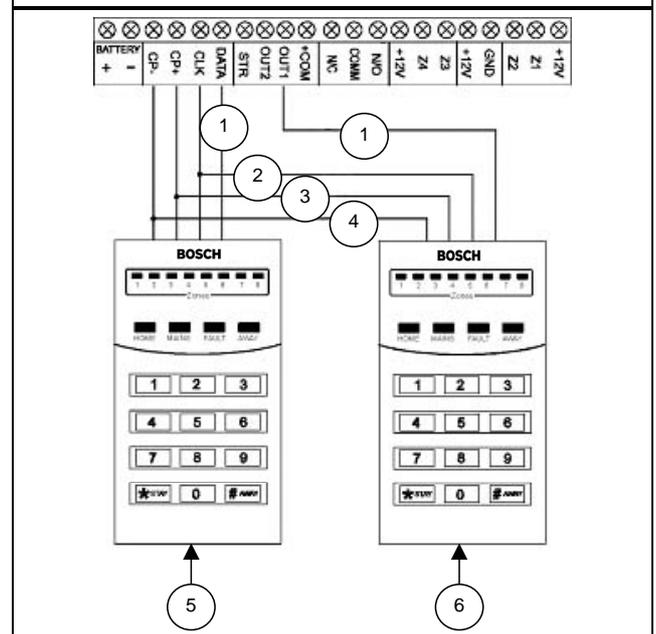
If the CP-5 Area Addressable (CP500A) codepad is assigned to Area 2, DIP Switch 2 on the back of the remote codepad must be in the ON position. The following locations for Output 1 must be programmed.

[LOCATION 380 = 6, 381 = 1]

**Note:**

*The Master Partitioned Keypad requires setting all DIP switches to the ON position to operate correctly.*

**Figure 11: Connections for Two CP-5 Eight Zone Area Addressable (CP500A) Codepads**



- 1 = Data
- 2 = CLK
- 3 = +12 V
- 4 = GND
- 5 = Area 1 Codepad
- 6 = Area 2 Codepad

The following DIP Switch settings and locations must be programmed for the two CP-5 Area Addressable (CP500A) codepads to function correctly.

**AREA 1 CODEPAD**

DIP Switch 1 on the back of the remote codepad must be in the ON position. The following location must be programmed.

[LOCATION 444, Option bit 2 must be enabled]

**AREA 2 CODEPAD - (Output 1)**

DIP Switch 2 on the back of the remote codepad must be in the ON position. The following locations for Output 1 must be programmed.

[LOCATION 380 = 6, 381 = 1]

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