ICP-CC488

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Contents

Figures

Tables

1.0   Overview

1.1   Introduction

Thank you for choosing the ICP-CC488 Control Panel 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 *ICP-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
- 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 from 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:

Table 1: Quick Guide to Programming	
Task	**Keystrokes**
Enter Installer's Programming Mode	[1 2 3 4 #]
Exit from 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	Dialer 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
959	Test programming key.
960	Exit from 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 dialing 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		
	AWAY Mode	**STAY Mode 1**	**STAY Mode 2**
Arming (On)	Press and hold the [#] key until two beeps are heard.	Press and hold the [*] key until two beeps are heard.	Press and hold the [0] key until two beeps are heard.
	Or	Or	
	Enter your code followed by the [#] key (for example, [2 5 8 0 #]).	Enter your code followed by the [*] key (for example, [2 5 8 0 *]).	
	Or		
	To arm all areas, enter your code followed by [0] and then the [#] key (for example, [2 5 8 0 0 #]).		
	Use a code to arm all areas simultaneously that the code is assigned to in AWAY Mode without needing to arm each area individually.		
Disarming (Off)	Enter your code followed by the [#] key (for example, [2 5 8 0 #]).	Press and hold the [*] key until two beeps are heard (only if no alarm).	Press the [0] key until two beeps are heard (only if no alarm).
	Or	Or	Or
	To disarm all areas, enter your code followed by [0] and then the [#] key (for example, [2 5 8 0 0 #]).	Enter your code followed by the [#] key (for example, [2 5 8 0 #]).	Enter your code followed by the [#] key (for example, [2 5 8 0 #]).
	Use a code to disarm all areas simultaneously that the code is assigned without needing to disarm each area individually.		

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 and press [*].
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	**Dialing Event**
1	Telephone Line Seized
2	Dialing Telephone Number
3	Handshake Received
4	Data Being Sent
5	Kiss-Off Received
None	Released Telephone Line

You must exit from Telephone Monitor Mode to resume normal operations.

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 (refer to *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 – EEPROM Fail 7 – AUX Power Supply 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 (Dialer) 2 – Receiver 2 Fail (Dialer)

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 (refer to *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 sec.

1.26   Bell Test

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

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

Location	000 to 015
Default	0
0 – 10 and telephone termination – 0	
Anywhere else 0 – 0	

2.1.2   Phone Number 2 - Receiver 1

Location	016 to 031
Default	0
0 – 10 and telephone termination – 0	
Anywhere else 0 – 0	

2.1.3   Handshake Tone For Receiver 1

Location	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

Location	033
1	Contact ID
2	4 + 2 express
3	FSK 300 Baud
4	Domestic
5	Basic Pager
6	Reserved
7	Reserved
8	Reserved

☑ The Basic Pager option supports only eight zones due to protocol limitations. If you use more than eight zones, this option is not recommended.

If you use the Zone 16, the 4 + 2 Express and FSK 300 Baud formats are not recommended because Zone 16 will be assigned as "0" and some receivers will not support this zone.

2.1.5   Subscriber ID Number For Receiver 1

Location	034 to 039
Default	0
Right justified	

2.1.6   Phone Number 1 - Receiver 2

Location	040 to 055
Default	0
0 – 10 and telephone termination – 0	
Anywhere else 0 – 0	

2.1.7   Phone Number 2 - Receiver 2

Location	056 to 071
Default	0
0 – 10 and telephone termination – 0	
Anywhere else 0 – 0	

2.1.8   Handshake Tone For Receiver 2

Location	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

Location	073
1	Contact ID
2	4 + 2 express
3	FSK 300 Baud
4	Domestic
5	Basic Pager
6	Reserved
7	Reserved
8	Reserved

☑ The Basic Pager option supports only eight zones due to protocol limitations. If you use more than eight zones, this option is not recommended.

If you use the Zone 16, the 4 + 2 Express and FSK 300 Baud formats are not recommended because Zone 16 will be assigned as "0" and some receivers will not support this zone.

2.1.10   Subscriber ID Number For Receiver 2

Location	074 to 079
Default	0
Right justified	

2.1.11   Dialing Format

Location	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

Location	081 to 112

2.1.13 Telco Arming Sequence (Call Forward On)

Location	113 to 142
Default	0

2.1.14 Telco Disarm Sequence (Call Forward Off)

Location	143 to 158
Default	0

2.1.15 Call Back Telephone Number

Location	159 to 174
Default	0
0 – 10 and telephone termination – 0 Anywhere else 0 – 0	

2.1.16 Ring Count

Location	175	
Default	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

Location	176	
Default	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 Dialer Options 1

Location	177	
1	Dialer 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 Dialer Options 2

Location	178	
Default	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 60 sec	

2.1.20 Dialer Options 3

Location	179	
Default	2	
1	Set DTMF dialing pulses to 1 digit/sec	
2	Lockout telephone line fail alarm	
4	Change Decadic dialing to 60/40	
8	Reserved	

2.1.21 Alarm Link Options

Location	180
1	Upload/download allowed
2	Call back phone number required for upload/download
4	Exit from upload/download connection on alarm
8	Reserved

2.2 Installer Code

Location	181 to 184

	Location	Default
	181	1
	182	2
	183	3
	184	4

2.3 User Code Programming

2.3.1 User Codes

Location	185 to 264	

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

2.3.2   Authority Levels

Authority Levels	Description
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

Location	265
Default	0
1	Zone 1
2	Zone 2
4	Zone 3
8	Zone 4

2.5   EOL Resistor Value

Location	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 378	
	Location	Default
Zone #01 (Default – Delay-1)		
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
Dialer Options	273	1
Zone #02 (Default – Handover)		
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
Dialer Options	280	1
Zone #03 (Default – Handover)		
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
Dialer Options	287	1
Zone #04 (Default – Handover)		
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
Dialer Options	294	1
Zone #05 (Default – Instant)		
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
Dialer Options	301	1
Zone #06 (Default – Instant)		
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
Dialer Options	308	1
Zone #07 (Default – Instant)		
Zone Type	309	0
Zone Pulse Count	310	0
Zone Pulse Count Time	311	0
Zone Options 1	312	1
Zone Options 2	313	12
Report Code	314	1
Dialer Options	315	1

Location	267 to 378 (Continued)		
Zone #08 (Default – 24 hr Tamper)			
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	
Dialer Options	322	1	
Zone #09 (Default – Instant)			
Zone Type	323	15	
Zone Pulse Count	324	0	
Zone Pulse Count Time	325	0	
Zone Options 1	326	1	
Zone Options 2	327	14	
Report Code	328	1	
Dialer Options	329	1	
Zone #10 (Default – Instant)			
Zone Type	330	15	
Zone Pulse Count	331	0	
Zone Pulse Count Time	332	0	
Zone Options 1	333	1	
Zone Options 2	334	14	
Report Code	335	1	
Dialer Options	336	1	
Zone #11 (Default – Instant)			
Zone Type	337	15	
Zone Pulse Count	338	0	
Zone Pulse Count Time	339	0	
Zone Options 1	340	1	
Zone Options 2	341	14	
Report Code	342	1	
Dialer Options	343	1	
Zone #12 (Default – Instant)			
Zone Type	344	15	
Zone Pulse Count	345	0	
Zone Pulse Count Time	346	0	
Zone Options 1	347	1	
Zone Options 2	348	14	
Report Code	349	1	
Dialer Options	350	1	
Zone #13 (Default – Instant)			
Zone Type	351	15	
Zone Pulse Count	352	0	
Zone Pulse Count Time	353	0	
Zone Options 1	354	1	
Zone Options 2	355	14	
Report Code	356	1	
Dialer Options	357	1	

Location	267 to 378 (Continued)		
Zone #14 (Default – Instant)			
Zone Type	358	15	
Zone Pulse Count	359	0	
Zone Pulse Count Time	360	0	
Zone Options 1	361	1	
Zone Options 2	362	14	
Report Code	363	1	
Dialer Options	364	1	
Zone #15 (Default – Instant)			
Zone Type	365	15	
Zone Pulse Count	366	0	
Zone Pulse Count Time	367	0	
Zone Options 1	368	1	
Zone Options 2	369	14	
Report Code	370	1	
Dialer Options	371	1	
Zone #16 (Default – Instant)			
Zone Type	372	15	
Zone Pulse Count	373	0	
Zone Pulse Count Time	374	0	
Zone Options 1	375	1	
Zone Options 2	376	14	
Report Code	377	1	
Dialer Options	378	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/dialer
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 Dialer 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	379
Default	3
1 to 15	Number of times siren operates until lockout

2.7.2   Swinger Shutdown Count For Dialer

Location	380
Default	6
1 to 15	Number of times dialer operates until lockout

2.8   Zone Status Programming

2.8.1   Zone Status – Zone Tamper Report

Location	381 to 382		
		Location	Default
Zone Tamper Report		381	0
Zone Tamper Restore Report		382	0

2.8.2   Zone Status – Walk Test Report

Location	383 to 384		
		Location	Default
Walk Test Start Report		383	0
Walk Test End Report		384	0

2.8.3   Zone Status – Bypass Report

Location	385 to 386		
		Location	Default
Zone Bypass Report		385	9
Zone Bypass Restore Report		386	8

2.8.4   Zone Status – Trouble Report

Location	387 to 388		
		Location	Default
Zone Trouble Report		387	2
Zone Trouble Restore Report		388	3

2.8.5   Zone Status – Sensor Watch Report

Location	389 to 390		
		Location	Default
Sensor Watch Report		389	4
Sensor Watch Restore Report		390	5

2.8.6   Zone Status – Alarm Restore Code

Location	391
Default	14

2.8.7   Zone Status Reporting Options

Location	392
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	393
Default	0
Increments of 6 hrs. (0 to 90 hrs.)	

2.9.2   RF Low Battery Report

Location	394 to 395		
		Location	Default
RF Low Battery Report		395	6
RF Low Battery Restore Report		395	8

2.9.3   RF Receiver Trouble Report

Location	396 to 397		
		Location	Default
RF Receiver Trouble Report (tens digit)		396	7
RF Receiver Trouble Report (units digit)		397	9

2.9.4   RF Receiver Trouble Restore Report

Location	398 to 399		
		Location	Default
RF Receiver Trouble Restore Report (tens digit)		398	7
RF Receiver Trouble Restore Report (units digit)		399	11

2.9.5   RF Dialer Options

Location	400
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	401 to 402		
		Location	Default
Open Report		401	11
Close Report		402	12

2.10.2   Open/Close Reporting Options

Location	403
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	404
Default	6

2.10.4   Codepad Panic Report

Location	405 to 406		
		Location	Default
Tens digit		405	7
Units digit		406	15

2.10.5   Codepad Fire Report

Location	407 to 408		
		Location	Default
Tens digit		407	7
Units digit		408	14

2.10.6   Codepad Medical Report

Location	409 to 410		
		Location	Default
Tens digit		409	7
Units digit		410	13

2.10.7   Codepad Reporting Options

Location	411
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 – AUX Power Supply Fail Report

Location	412 to 413		
		Location	Default
Tens digit		412	10
Units digit		413	3

2.11.2   System Status – AUX Power Supply Fail Restore Report

Location	414 to 415		
		Location	Default
Tens digit		414	10
Units digit		415	8

2.11.3   System Status – AC Fail Report

Location	416 to 417		
		Location	Default
Tens digit		416	10
Units digit		417	2

2.11.4   System Status – AC Fail Restore Report

Location	418 to 419		
		Location	Default
Tens digit		418	10
Units digit		419	7

2.11.5   System Status – Low Battery Report

Location	420 to 421		
		Location	Default
Tens digit		420	10
Units digit		421	1

2.11.6   System Status – Low Battery Restore Report

Location	422 to 423		
		Location	Default
Tens digit		422	10
Units digit		423	6

2.11.7   System Status – Access Denied (Code Retry)

Location	424 to 426		
		Location	Default
Code retry limit (0 – unlimited)		424	6
Tens digit		425	7
Units digit		426	12

2.11.8   System Status Reporting Options

Location	427
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	428 to 434		
		Location	Default
Hour of day (tens digit)		428	0
Hour of day (units digit)		429	0
Minute of day (tens digit)		430	0
Minute of day (units digit)		431	0
Test report (tens digit)		432	7
Test report (units digit)		433	1
Repeat interval in days		434	0

2.12.2   Test Reporting Dialer Options

Location	435
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	436 to 465		
		Location	Default
Output 1 (Default – Horn Speaker)			
Event Code		436	1
Event Code		437	14
Polarity		438	0
Time Base		439	0
Time Base Multiplier		440	0
Time Base Multiplier		441	0
Output 2 (Default – Fire Alarm With Verification)			
Event Code		442	2
Event Code		443	7
Polarity		444	10
Time Base		445	2
Time Base Multiplier		446	1
Time Base Multiplier		447	5
Strobe Output (Default – Strobe – Reset After 8 hrs.)			
Event Code		448	2
Event Code		449	0
Polarity		450	6
Time Base		451	4
Time Base Multiplier		452	0
Time Base Multiplier		453	8
Relay Output (Default – Sirens Running)			
Event Code		454	1
Event Code		455	15
Polarity		456	1
Time Base		457	0
Time Base Multiplier		458	0
Time Base Multiplier		459	0
Codepad Buzzer (Default – Entry/Exit Warning and Day Alarm)			
Event Code		460	0
Event Code		461	13
Polarity		462	2
Time Base		463	1
Time Base Multiplier		464	0
Time Base Multiplier		465	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	AUX Power Supply 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	Dialer disabled
3	2	Dialer active (on-line)
3	3	Ring detect
3	4	Codepad panic (multi-break)
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
4	11	Area 2 – zone unsealed
4	12	Reserved
4	13	Reserved
4	14	Reserved
4	15	Reserved
5	0	Reserved
5	1	Reserved
5	2	Area 1 in alarm
5	3	Area 2 in alarm
5	4	Reserved
5	5	Reserved
5	6	Area 1 armed
5	7	Area 2 armed
5	8	Reserved
5	9	Reserved
5	10	Area 1 disarmed
5	11	Area 2 disarmed
5	12	Reserved
5	13	Reserved
5	14	Any areas armed
5	15	Any areas disarmed
6	0	Area 1 codepad data terminal
6	1	Area 2 codepad data terminal

2.13.3   Polarity (Modes)

Option	Description
0	Output not used
1	Normally open, going low
2	Normally open, pulsing low
3	Normally open, one shot low
4	Normally open, one shot low (reactivate)
5	Normally open, one shot low (can reset)
6	Normally open, one shot low (alarm)
7	Normally open, latching low
8	Normally low, going open
9	Normally low, pulsing open
10	Normally low, one shot open
11	Normally low, one shot open (reactivate)
12	Normally low, one shot open (can reset)
13	Normally low, one-shot open (alarm)
14	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	466 to 467		
		Location	Default
Increments of 1 sec (0 to 15 sec)		466	4
Increments of 16 sec (0 to 240 sec)		467	1

2.14.2   Entry Time 2

Location	468 to 469		
		Location	Default
Increments of 1 sec (0 to 15 sec)		468	8
Increments of 16 sec (0 to 240 sec)		469	2

2.14.3   Exit Time (AWAY/STAY Modes)

Location	470 to 471		
		Location	Default
Increments of 1 sec (0 to 15 sec)		470	12
Increments of 16 sec (0 to 240 sec)		471	3

2.14.4   Entry Guard Time For STAY Mode

Location	472 to 473		
		Location	Default
Increments of 1 sec (0 to 15 sec)		472	0
Increments of 16 sec (0 to 240 sec)		473	0

2.14.5   Delay Alarm Report Time

Location	474 to 475		
		Location	Default
Increments of 1 sec (0 to 15 sec)		474	0
Increments of 16 sec (0 to 240 sec)		475	0

2.14.6   Sensor Watch Time

Location	476 to 477		
		Location	Default
Increments of days (tens digit)		476	0
Increments of days (units digit)		477	0

2.14.7   Codepad Lockout Time

Location	478
Default	0
Increments of 10 sec (0 sec to 150 sec)	

2.14.8   Siren Run Time

	479
Location	
Default	5
Increments of 1 min (0 min to 15 min)	

2.14.9   Siren Sound Rate

Location	480
Default	7
0 – Slowest frequency	
15 – Fastest frequency	

2.14.10   Auto Arming Pre-Alert Time

Location	481
Default	1
Increments of 5 min (0 min to 75 min)	

2.14.11   Auto Arming Time

Location	482 to 485		
		Location	Default
Hour of the day (tens digit)		482	0
Hour of the day (units digit)		483	0
Minute of the day (tens digit)		484	0
Minute of the day (units digit)		485	0

2.14.12   Auto Disarming Time

Location	486 to 489		
		Location	Default
Hour of the day (tens digit)		486	0
Hour of the day (units digit)		487	0
Minute of the day (tens digit)		488	0
Minute of the day (units digit)		489	0

2.14.13   Kiss-Off Wait Time

Location	490
Default	3
Increments of 500 ms (500 ms – 8 sec)	

2.14.14   Speaker Beep Volume

Location	491
Default	13
0	No Beeps
15	Loudest Beeps

2.15   Options Programming

2.15.1   System Options 1

Location	492
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

Location	493
Default	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

Location	494
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

Location	495
Default	0
1	Panel to power up disarmed (if power reset)
2	Arm/disarm tracking on power up
4	Internal crystal to keep time
8	Night arm station or RE005 installed

2.15.5   Consumer Options 1

Location	496
Default	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

Location	497
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

Location	498
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

Location	499
Default	0
1	DSRF Receiver
2	Latching keyswitch input
3	Momentary keyswitch input
4	Reserved

2.15.9   Partitioning Options 1

Location	500
Default	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

Location	501
Default	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 Enabled for Area 1 and Area 2

Location	502 to 517	
Default		0 0 0 0 0 0 0 0
Location 502	Area 1 – Zone 1 indicator	
Location 503	Area 1 – Zone 2 indicator	
Location 504	Area 1 – Zone 3 indicator	
Location 505	Area 1 – Zone 4 indicator	
Location 506	Area 1 – Zone 5 indicator	
Location 507	Area 1 – Zone 6 indicator	
Location 508	Area 1 – Zone 7 indicator	
Location 509	Area 1 – Zone 8 indicator	
Location 510	Area 2 – Zone 1 indicator	
Location 511	Area 2 – Zone 2 indicator	
Location 512	Area 2 – Zone 3 indicator	
Location 513	Area 2 – Zone 4 indicator	
Location 514	Area 2 – Zone 5 indicator	
Location 515	Area 2 – Zone 6 indicator	
Location 516	Area 2 – Zone 7 indicator	
Location 517	Area 2 – Zone 8 indicator	
0	Not mapped for this LED	
1	This LED used, a zone is mapped to it	

2.16.2   Zone Allocations for Area 1 and Area 2

Location	518 to 533	Refer to page 13
Default		0 0 0 0 0 0 0 0
Location 518	Area 1 – Zone 1 indicator	
Location 519	Area 1 – Zone 2 indicator	
Location 520	Area 1 – Zone 3 indicator	
Location 521	Area 1 – Zone 4 indicator	
Location 522	Area 1 – Zone 5 indicator	
Location 523	Area 1 – Zone 6 indicator	
Location 524	Area 1 – Zone 7 indicator	
Location 525	Area 1 – Zone 8 indicator	
Location 526	Area 2 – Zone 1 indicator	
Location 527	Area 2 – Zone 2 indicator	
Location 528	Area 2 – Zone 3 indicator	
Location 529	Area 2 – Zone 4 indicator	
Location 530	Area 2 – Zone 5 indicator	
Location 531	Area 2 – Zone 6 indicator	
Location 532	Area 2 – Zone 7 indicator	
Location 533	Area 2 – Zone 8 indicator	
0-15	Mapping zone 1-16 to this LED	

2.17   User Code Area Assignment

Location	534 to 549		
		Location	Default
User Code 1		534	0
User Code 2		535	0
User Code 3		536	0
User Code 4		537	0
User Code 5		538	0
User Code 6		539	0
User Code 7		540	0
User Code 8		541	0
User Code 9		542	0
User Code 10		543	0
User Code 11		544	0
User Code 12		545	0
User Code 13		546	0
User Code 14		547	0
User Code 15		548	0
User Code 16		549	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	550 to 597

2.19   Reserved

Location	598
Default	0

2.20   RF Programming

2.20.1   RF Options

Location	599
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 Option

Location	600 to 615	
	Location	**Default**
Map RF Device 1	600	1
Map RF Device 2	601	1
Map RF Device 3	602	1
Map RF Device 4	603	1
Map RF Device 5	604	1
Map RF Device 6	605	1
Map RF Device 7	606	1
Map RF Device 8	607	1
Map RF Device 9	608	1
Map RF Device 10	609	1
Map RF Device 11	610	1
Map RF Device 12	611	1
Map RF Device 13	612	1
Map RF Device 14	613	1
Map RF Device 15	614	1
Map RF Device 16	615	1
0	Mapping Disabled	
1	Mapping Enabled	

2.20.3   Default RF Device Mapping for Devices 1 to 8

Location	616 to 623	
	Location	**Default Value***
Map RF Device 1 to Zone (1 to 16)	616	00
Map RF Device 2 to Zone (1 to 16)	617	01
Map RF Device 3 to Zone (1 to 16)	618	02
Map RF Device 4 to Zone (1 to 16)	619	03
Map RF Device 5 to Zone (1 to 16)	620	04
Map RF Device 6 to Zone (1 to 16)	621	05
Map RF Device 7 to Zone (1 to 16)	622	06
Map RF Device 8 to Zone (1 to 16)	623	07
0-15	Mapping RF device to zone 1-16	

*   The programming for zone numbers 1 through 8 is in hexadecimal code (00 through 15). Refer to *Table 9* on page 22 for mapping information.

2.20.4   Default RF Device Mapping for Devices 9 to 16

Location	624 to 631	
	Location	**Default Value***
Map RF Device 9 to Zone (1 to 16)	624	08
Map RF Device 10 to Zone (1 to 16)	625	09
Map RF Device 11 to Zone (1 to 16)	626	10
Map RF Device 12 to Zone (1 to 16)	627	11
Map RF Device 13 to Zone (1 to 16)	628	12
Map RF Device 14 to Zone (1 to 16)	629	13
Map RF Device 15 to Zone (1 to 16)	630	14
Map RF Device 16 to Zone (1 to 16)	631	15
0-15	Mapping RF device to zone 1-16	

*   The programming for zone numbers 9 through 16 is in hexadecimal code (00 through 15). Refer to *Table 9* on page 22 for mapping information.

Table 9:	Hexadecimal Values for Zone Nos.
Zone Number	**Hexadecimal Value**
1	00
2	01
3	02
4	03
5	04
6	05
7	06
8	07
9	08
10	09
11	10
12	11
13	12
14	13
15	14
16	15

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

2.20.7   Reserved

Location	836 to 837		
		Location	**Default**
Reserved		836	
Reserved		837	

2.21   System Option Programming

2.21.1   Country Codes

Location	838 to 839	Refer to page 30	
		Location	**Default**
Country Code (tens digit)		838	0
Country Code (units digit)		839	2

2.21.2   Default Options

Location	900
0	Defaulting System Allowed
15	Defaulting System Disabled

2.21.3   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

2.21.4   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   RF Receiver Interface

Figure 1: RF Receiver (DSRF) Wiring Diagram	
1 – ICP-CC488 Control Panel	*2 – DSRF Receiver*
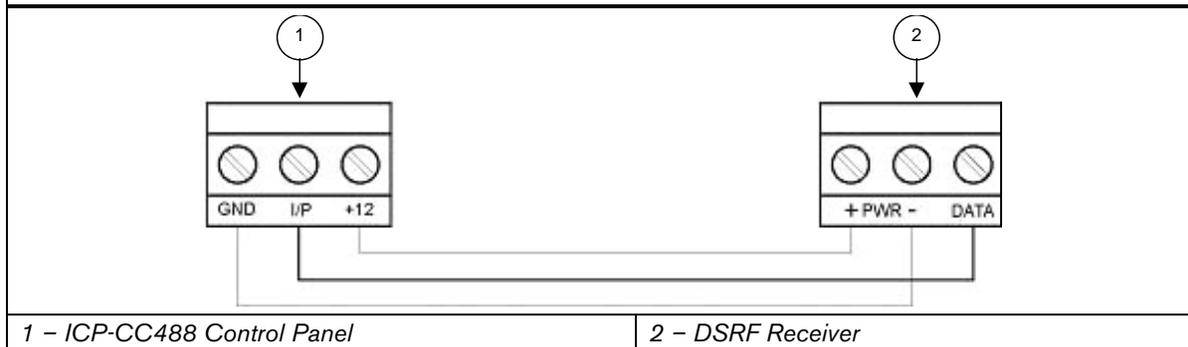
Wiring and Power Up:

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 ft).
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: 2-Button Keyfob
            Transmitter
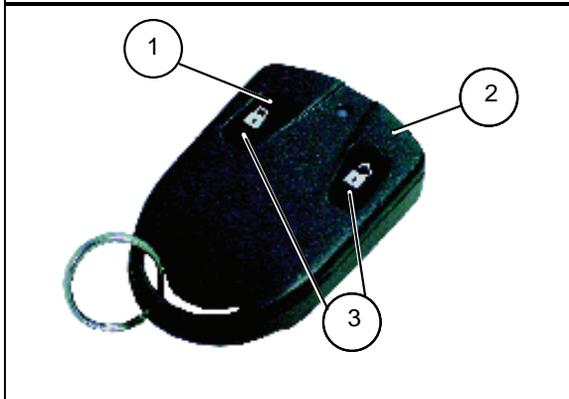
1 − Arm button
2 − Disarm button
*3 − Arm and Disarm buttons: Press both buttons
      at same time for 2 sec to send a Panic alarm.*

Figure 3:   RF3334: 4-Button Keyfob
            Transmitter
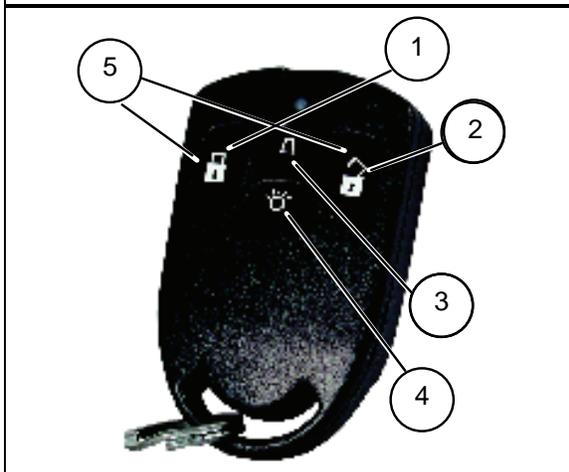
1 − Arm button
2 − Disarm button
3 − Option 1 button
4 − Option 2 button.
*5 − Arm and Disarm buttons: Press both buttons
      at same time for 2 sec to send a Panic alarm*

5.0   Connections for Split EOL Resistors

5.1   8 Burglary Zones

Figure 4:   Split EOL Wiring Diagram
            (Location 266 − 15)
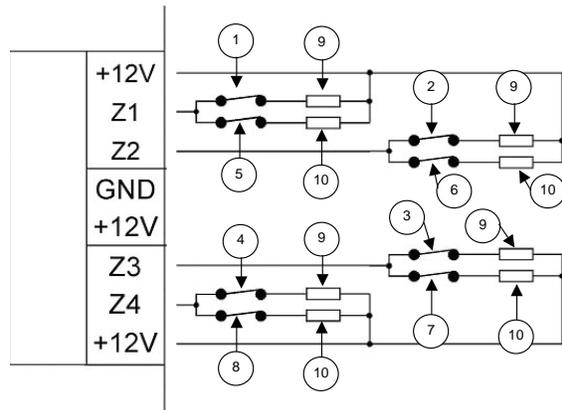
1 − Zone 1	*6 − Zone 6*
2 − Zone 2	*7 − Zone 7*
3 − Zone 3	*8 − Zone 8*
4 − Zone 4	*9 − 3k3*
5 − Zone 5	*10 − 6k8*

Figure 5:   Split EOL Wiring Diagram with
            Tamper (Location 266 − 14)
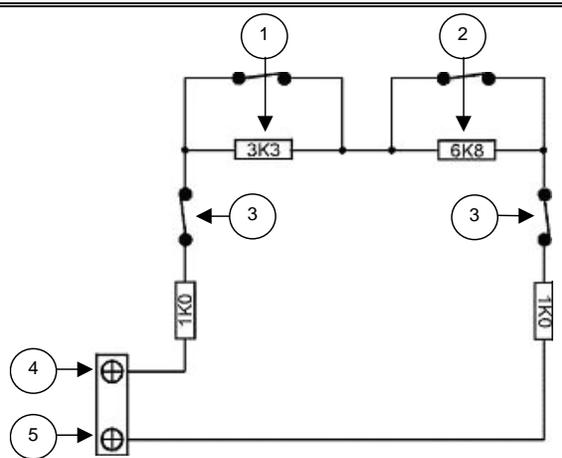
1 − Zone 1
2 − Zone 5
3 − Tamper
4 − +12 V
5 − Zone 1

5.2   8 Zone Operation Using N/O Contacts

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

1 − +12 V	*6 − 6k8*
2 − Zone Input	*7 − 1k5*
3 − Zone	*8 − 4k7*
4 − EOL	*9 − N/O*
5 − 3k3	*10 − N/C*
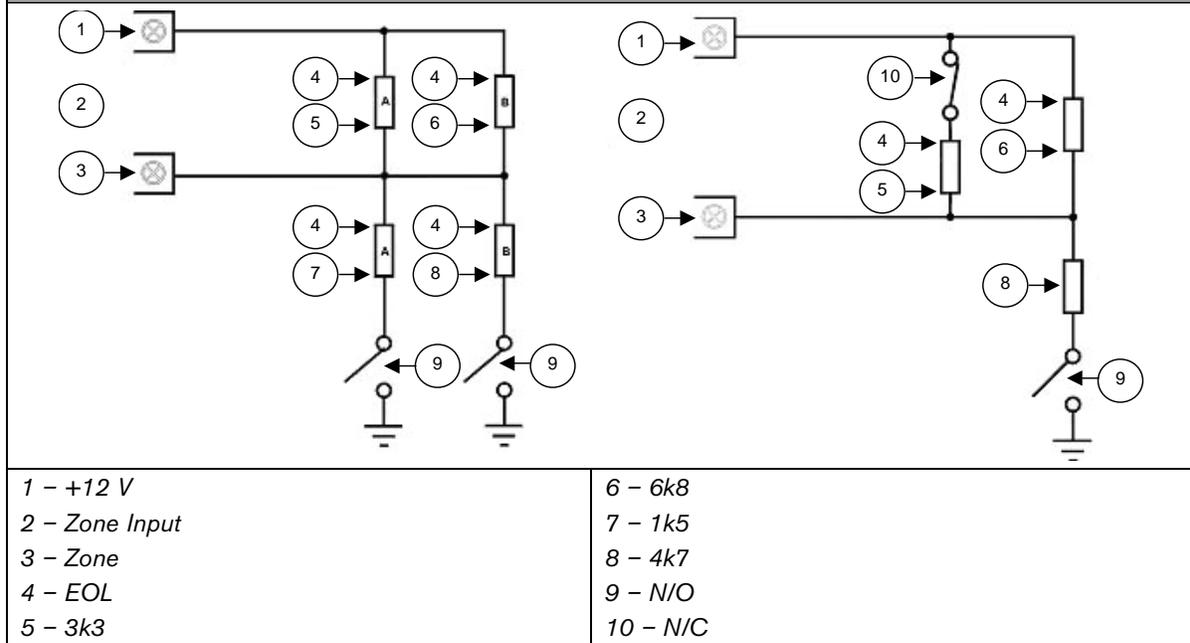
6.0   Wiring Diagrams

Figure 7:   Wiring Diagram for Keyswitch Zone

1 − EOL	*2 − Keyswitch (Momentary/Toggle)*
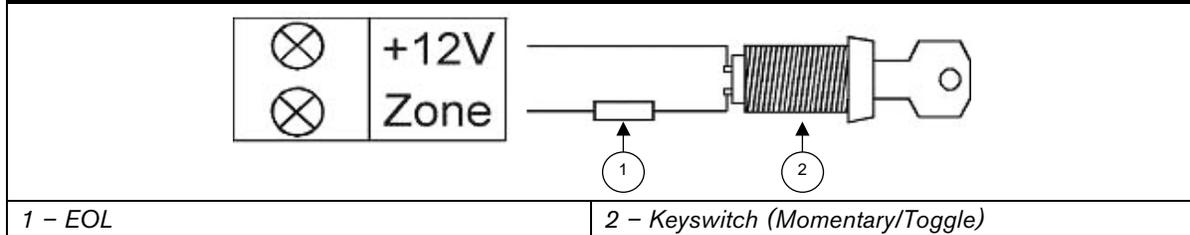
Figure 8:   ICP-CC488 Wiring Diagram
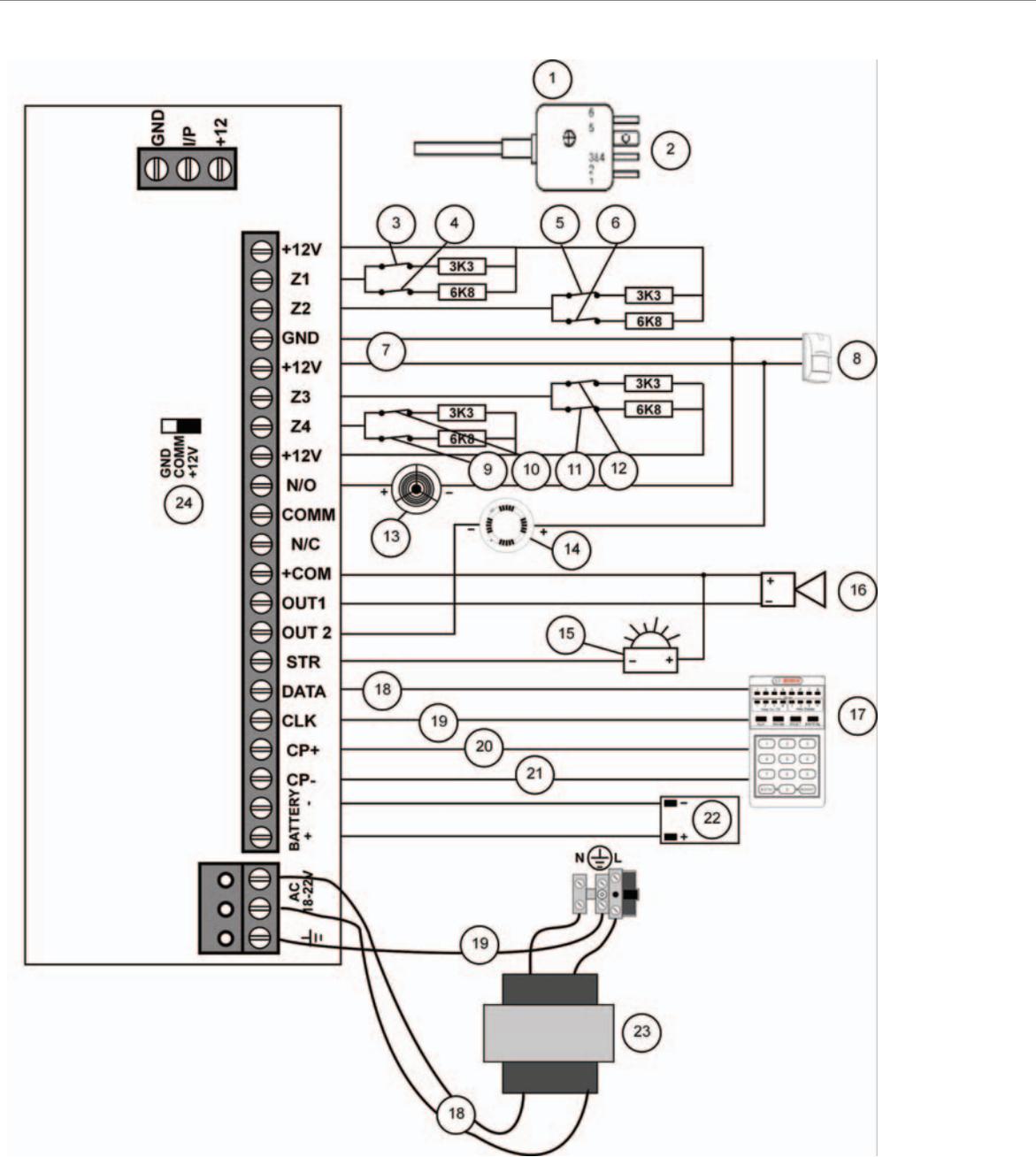
1 – 605 plug	7 – Power to external equipment:	15 – Strobe
2 – 6 (Red) Telecom line (street)	12 V @ 400 mA	16 – Horn speaker
5 (Yellow) Internal phone line	8 – PIR	17 – Codepad
3 and 4 Not used	9 – Zone 8	18 – Yellow
2 (Black) Telecom line (street)	10 – Zone 4	19 – Green
1 (Green) Internal phone line	11 – Zone 7	20 – Red
3 – Zone 1	12 – Zone 3	21 – Black
4 – Zone 5	13 – Piezo siren	22 – Battery
5 – Zone 2	14 – Smoke detector	23 – 18 VAC 1.3 A plug pack
6 – Zone 6		(TF008)
		24 – Link between +12 V and Comm

Figure 9: ICP-CC488 Component Overlay
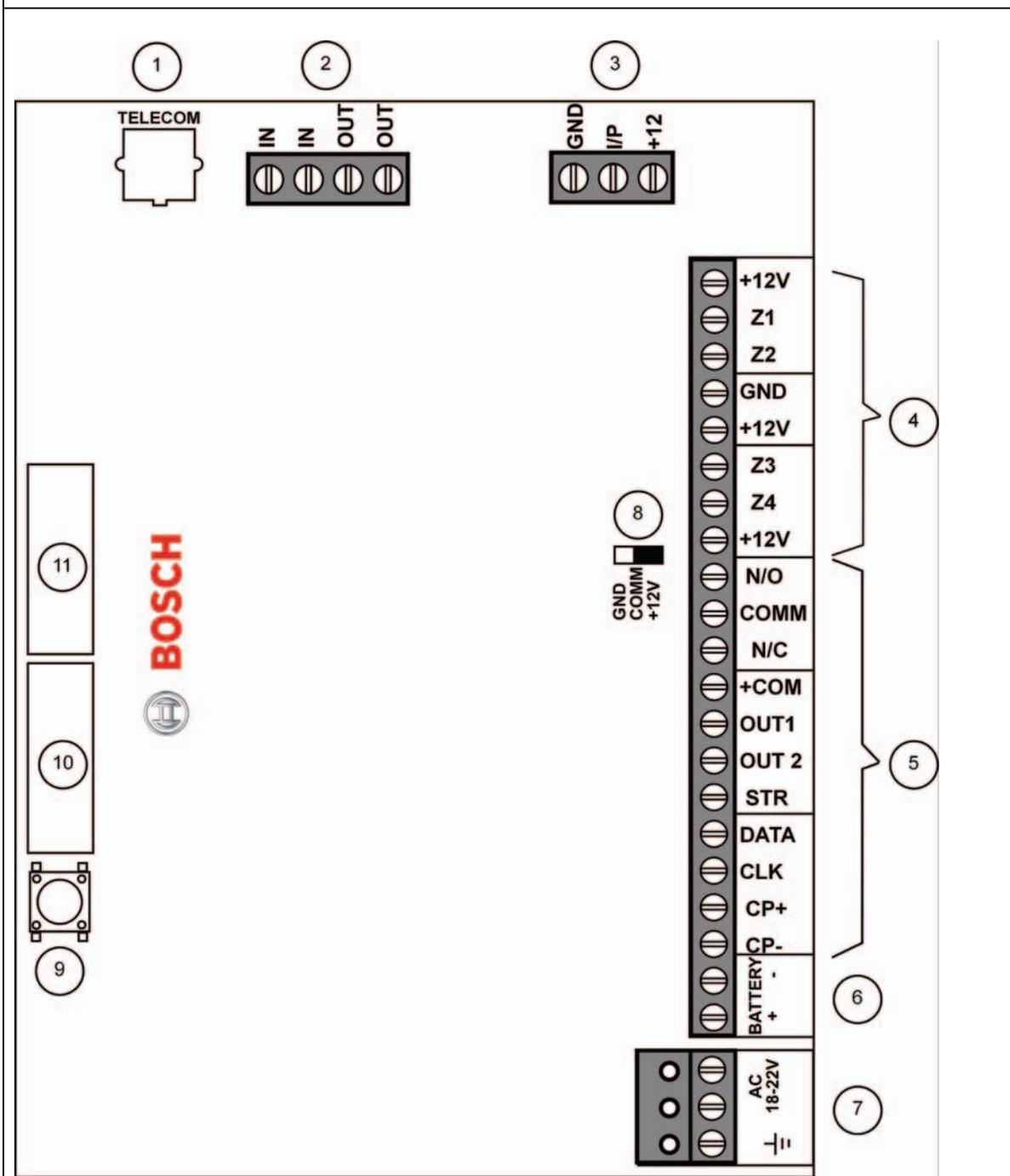
1 – Socket for telecom lead connect	6 –	Battery input
2 – Termination for phone line	7 –	Plug pack input (Bosch TF008)
OUT – internal phone line	8 –	Relay contact select
IN – Telecom line (street)	9 –	Default switch
3 – Receiver interface connection	10 –	Programming key
4 – Zone termination strip	11 –	Auxiliary Module: direct link cable
5 – Output termination strip		

7.0 Codepad Connections Partitioning

Figure 10: Connections for CP-5 Master Partitioned Codepad and CP-5 Area Addressable Codepad

1 − Data	*5 − Master Partitioned Codepad*
2 − CLK	
3 − +12 V	*6 − Addressable Area Codepad*
4 − GND	
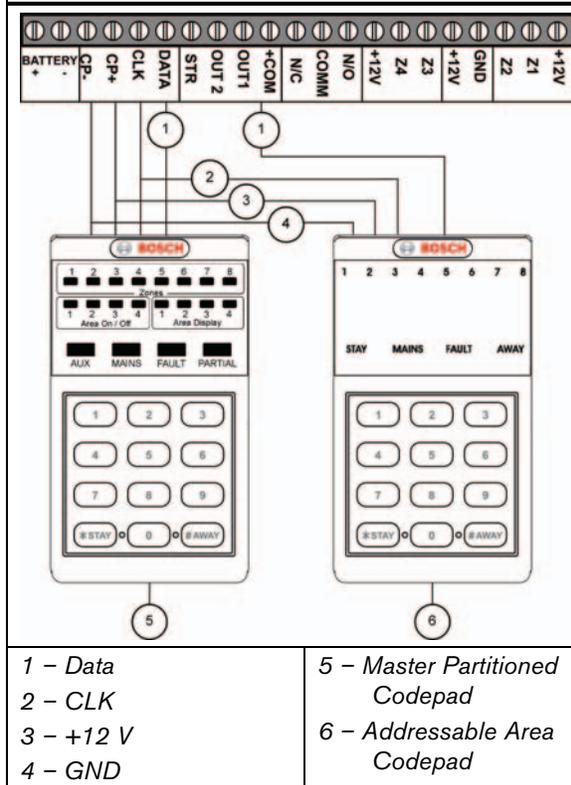
If the CP-5 Area Addressable (CP500A) codepad is assigned to Area 1, DIP Switch 1 on the back of the remote codepad must be in the ON position. The following locations for Output 1 must be programmed.

[Location 436 – 6, 437 – 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 436 – 6, 437 – 1]

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

Figure 11: Connections for Two CP-5 Area Addressable Codepads

|	
1 − Data	*4 − GND*
2 − CLK	*5 − Area 1 Codepad*
3 − +12 V	*6 − Area 2 Codepad*
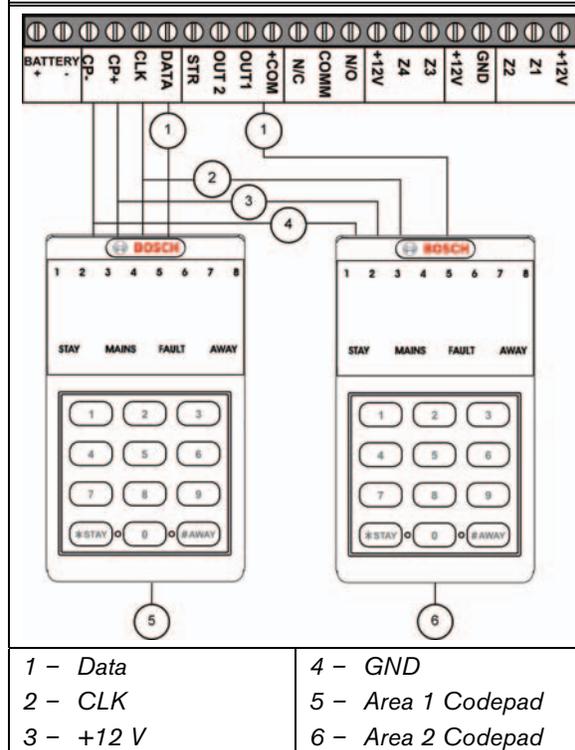
The following DIP Switch settings and locations must be programmed for the two CP-5 Area Addressable (CP500A) codepads to function correctly.

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 500, 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 436 – 6, 437 – 1]

8.0   Country Codes

The PSTN provides a programmable line interface to meet international telephone line requirements. This program meets various country PTT standards.

Country	Code	Country	Code	Country	Code	Country	Code	Country	Code
Argentina	0 1	Poland	4 1	Liechtenstein	6 3	Gabon	6 5	Papua New Guinea	6 5
Australia	0 2	Portugal	4 2			Gambia	6 5	Paraguay	6 5
Austria	0 3	Romania	4 3	Afghanistan	6 5	Ghana	6 5	Rwanda	6 5
Belgium	0 4	Russian Federation	4 4	Albania	6 5		6 5	St. Lucia	6 5
Brazil	0 5	Saudi Arabia	4 5	Andorra	6 5	Grenada	6 5	Samoa Eastern	6 5
Bulgaria	0 6	Serbia and Montenegro	4 6	Angola	6 5	Guatemala	6 5	San Marino	6 5
Canada	0 7	Singapore	4 7	Antigua and Barbuda	6 5	Guinea	6 5	Sao Tome and Principe	6 5
China	0 8	Slovakia	4 8	Azerbaijan	6 5	Guyana	6 5	Saint Vincent	6 5
Colombia	0 9	Slovenia	4 9	Bahamas	6 5	Haiti	6 5	Senegal	6 5
Croatia	1 0	South Africa	5 0	Bangladesh	6 5	Vatican	6 5	Seychelles	6 5
Cyprus	1 1	Spain	5 1	Barbados	6 5	Honduras	6 5	Sierra Leone	6 5
Czech Republic	1 2	Sweden	5 2	Belize	6 5	Iran	6 5	Solomon Is	6 5
Denmark	1 3	Switzerland	5 3	Benin	6 5	Iraq	6 5	Somali	6 5
Egypt	1 4	Taiwan, China	5 4	Bhutan	6 5	Ivory Coast	6 5	Sri Lanka	6 5
Estonia	1 5	Thailand	5 5	Bolivia	6 5	Jamaica	6 5	Sudan	6 5
Finland	1 6	Turkey	5 6		6 5	Kenya	6 5	Suriname	6 5
France	1 7	United Kingdom	5 7	Botswana	6 5	Kiribati	6 5	Swaziland	6 5
Germany	1 8	United States	5 8	Brunei	6 5	Kuwait	6 5	Tajikistan	6 5
Greece	1 9	Venezuela	5 9	Burkina-faso	6 5	Laos	6 5	Tanzania	6 5
Hong Kong, PRC	2 0	Vietnam	6 0	Burma	6 5	Lesotho	6 5	Togo	6 5
Hungary	2 1			Burundi	6 5	Liberia	6 5	Tuvalu	6 5
India	2 2	Armenia	6 2	Cambodia	6 5	Libya	6 5	Uganda	6 5
Indonesia	2 3	Belarus	6 2	Cameroon	6 5	Madagascar	6 5	United Arab Emirates	6 5
Ireland	2 4	Georgia	6 2	Cape Verde	6 5	Malawi	6 5	Uruguay	6 5
Italy	2 5	Jordan	6 2	Central African Republic	6 5	Maldives	6 5	Uzbekistan	6 5
Japan	2 6	Kazakhstan	6 2	Chad	6 5	Mali	6 5	Vanuatu	6 5
Korea, South	2 7	Kyrgyzstan	6 2	Chile	6 5	Marshall Islands	6 5	United Arab Emirates	6 5
Latvia	2 8	Moldova	6 2	Comoros	6 5	Mauritania	6 5		
Lithuania	2 9	Oman	6 2	Congo	6 5	Mauritius	6 5		
Luxembourg	3 0	Pakistan	6 2	Costa Rica	6 5	Micronesia	6 5		
Macedonia	3 1	Qatar	6 2	Cuba	6 5	Monaco	6 5		
Malaysia	3 2	Syria	6 2	Djibouti	6 5	Mongolia	6 5		
Malta	3 3	Ukraine	6 2	Dominica Rep.	6 5	Mozambique	6 5		
Mexico	3 4			East Timor	6 5	Namibia	6 5		
Netherlands	3 5	Algeria	6 3	Ecuador	6 5	Nauru	6 5		

Country	Code	Country	Code	Country	Code	Country	Code	Country	Code
New Zealand	3 6	Bahrain	6 3	El Salvador	6 5	Nepal	6 5		
Nigeria	3 7	French Polynesia	6 3	Equatorial Gui nea	6 5	Nicaragua	6 5		
Norway	3 8	Iceland	6 3	Eritrea	6 5	Niger	6 5		
Peru	3 9	Israel	6 3	Ethiopia	6 5	Palau	6 5		
Philippines	4 0	Lebanon	6 3	Fiji	6 5	Panama	6 5		

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