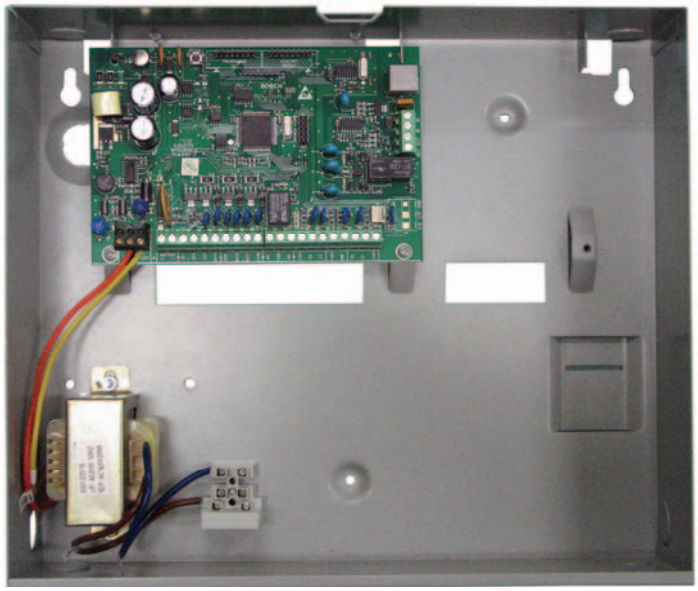
ICP-CC404



Installation Guide

ICP-CC404

EN Control Panel

Copyright Notice

Notice of Liability

This material is designed for use by tradespeople with expertise in the installation of this product. Persons without appropriate expertise should seek assistance before attempting installation.

While care has been taken in the preparation of this material, Bosch Security Systems, Inc. and its representatives will not be responsible to any person or entity for any loss or damage directly or indirectly caused by information in, or any omission from, this material.

Bosch Security Systems, Inc. reserves the right to make changes to features and specifications of its products at any time without prior notification.

Contents

1.0 Introduction 7
1.1 Features 7
1.2 Quick Start 7
1.2.1 Setting the Date and Time 8
1.2.2 Zone Defaults 8
1.2.3 Zone Types 8
2.0 Programming 9
2.1 Programming with the Remote Codepad 9
2.2 Programming with the Programming Key 10
2.3 Programming Option Bits 10
2.4 Installer's Programming Commands 10
2.4.1 Command 958 – Enable/Disable Zone Status Mode 11
2.4.2 Command 959 – Test the Programming Key 11
2.4.3 Command 960 – Exit from the Installer's Programming Mode 12
2.4.4 Command 961 – Reset the Control Panel to Factory Default Settings 12
2.4.5 Command 962 – Copy the Control Panel Memory to the Programming Key 12
2.4.6 Command 963 – Copy the Programming Key to the Control Panel 12
2.4.7 Command 964 – Erase the Programming Key 13
2.4.8 Command 965 – Set Up Domestic Dialing Format 13
2.4.9 Command 966 – Enable or Disable Auto Step Mode 13
2.4.10 Command 999 – Display the Panel Type or Software Version Number 14
2.5 Disable Factory Defaults 15
3.0 Codepad Indicators 16
3.1 ICP-CP508W Eight Zone LED Codepad 16
3.2 ICP-CP508LW Eight Zone LCD Codepad 17
4.0 System Operations 18
4.1 Arming the System in AWAY Mode 18
4.2 Disarming the System from AWAY Mode 18
4.3 Arming the System in STAY Mode 1 19
4.4 Disarming the System from STAY Mode 1 19
4.5 Arming the System in STAY Mode 2 20
4.6 Disarming the System from STAY Mode 2 20
4.7 Codepad Duress Alarm 21
4.8 Codepad Panic Alarm 21
4.9 Codepad Fire Alarm 21
4.10 Codepad Medical Alarm 21
4.11 Isolating Zones 21
4.11.1 Standard Isolating 21
4.11.2 Code to Isolate 22
4.12 Fault Analysis Mode 22
4.13 Fault Descriptions 22
5.0 Remote Radio Transmitter Operations 24
5.1 Indications from Remote Radio Transmitter Operations 24
5.2 Remote Radio User Code Priority Levels 24
5.3 Changing or Deleting Remote Radio User Codes 24
5.4 Two-Channel Remote Radio Hand-Held Transmitter Operations 25
5.4.1 Arming in AWAY Mode 25
5.4.2 Disarming from AWAY Mode 25
5.4.3 Arming in STAY Mode 1 25
5.4.4 Disarming from STAY Mode 1 26
5.4.5 Panic Alarm 26
5.5 Four-Channel Remote Radio Hand-Held Transmitter Operations 26
5.5.1 Arming in AWAY Mode 26
5.5.2 Disarming from AWAY Mode 26
5.5.3 Arming in STAY Mode 1 26
5.5.4 Disarming from STAY Mode 1 26
5.5.5 Panic Alarm 27
5.5.6 Remote Outputs 27
6.0 System Functions 27
6.1 Installer Code Functions 27
6.1.1 Set the Number of Days until the First Test Report 27
6.1.2 Changing Domestic Phone Numbers 28
6.1.3 Change Telco Arming or Disarming Sequence 28
6.1.4 Setting STAY Mode 2 Zones 30
6.1.5 Satellite Siren Service Mode 30
6.1.6 Turning Telephone Monitor Mode On and Off 31
6.1.7 Walk Test Mode 31
6.1.8 Event Memory Recall Mode 31
6.2 Master Code Functions 31
6.2.1 Changing and Deleting User Codes 32
6.2.2 Changing and Deleting Remote Radio User Codes 32
6.2.3 Changing Domestic Phone Numbers 33
6.2.4 Change Telco Arming or Disarming Sequence 34
6.2.5 Setting STAY Mode 2 Zones 35
6.2.6 Turning Outputs On/Off 36
6.2.7 Setting the Date and Time 36
6.2.8 Walk Test Mode 36
6.2.9 Event Memory Recall Mode 36
6.3 Hold-Down Functions 37
6.3.1 Arming the System in AWAY Mode 37
6.3.2 Arming the System in STAY Mode 1 37
6.3.3 Arming the System in STAY Mode 2 37
6.3.4 Horn Speaker Test 37

6.3.5 Bell Test....37
6.3.6 Strobe Test....37
6.3.7 Turning Day Alarm On and Off....38
6.3.8 Fault Analysis Mode....38
6.3.9 Initiate a Modem Call....38
6.3.10 Reset Latching Outputs....38
6.3.11 Codepad Buzzer Tone Change....38
6.3.12 Send Test Report....38
7.0 Remote Arming by Telephone....38
8.0 Alarm Link Software....39
8.1 Remote Connect....39
8.1.1 Remote Connect with Customer Control....39
8.1.2 Remote Connect without Callback Verification....39
8.1.3 Remote Connect with Callback Verification 39
8.1.4 Direct Connect....40
8.2 Alarm Link Options....40
9.0 Domestic Dialing....40
9.1 Domestic Dialing Function....40
9.2 Setting Up and Programming Domestic Reporting....41
10.0 Dialer Reporting Formats....42
10.1 Transmission Formats....42
10.1.1 Contact ID Format....42
10.1.2 Point ID Codes....43
10.1.3 4 + 2 Express Reporting Format....43
10.1.4 Basic Pager Reporting Format....44
10.2 Basic Pager Display Information....45
11.0 Dialer Information....46
11.1 Primary Telephone Number for Receiver 1 and Receiver 2....46
11.2 Secondary Telephone Number for Receiver 1 and Receiver 2....47
11.3 Handshake Tone for Receiver 1 and Receiver 2....47
11.4 Transmission Format for Receiver 1 and Receiver 2....47
11.5 Subscriber ID Number for Receiver 1 and Receiver 2....47
11.6 Dialing Format....48
11.7 Telco Arming Sequence....48
11.8 Telco Disarming Sequence....48
11.9 Call Back Telephone Number....49
11.10 Ring Count....49
11.11 Telephone Line Fault Options....49
12.0 Dialer Options....50
12.1 Dialer Options 1....50
12.2 Dialer Options 2....50
12.3 Dialer Options 3....51
13.0 Access Code....51
13.1 Installer Code....51
13.2 User Codes....51
13.3 User Code Priority....52
14.0 Zone Information....53
14.1 Day Alarm Information....53
14.1.1 Day Alarm Resetting....53
14.1.2 Day Alarm Latching....53
14.1.3 Day Alarm Operation....53
14.2 EOL Resistor Value....53
14.3 Zone Programming....54
14.3.1 Zone Types....55
14.3.2 Zone Pulse Count....56
14.3.3 Zone Pulse Count Time....56
14.3.4 Zone Options 1....57
14.3.5 Keyswitch Zone Options....57
14.3.6 Zone Options 2....58
14.3.7 Zone Report Code....59
14.3.8 Zone Dialer Options....59
14.4 Swinger Shutdown Count for Siren....59
14.5 Swinger Shutdown Count for Dialer....59
15.0 System Reporting Information....60
15.1 Zone Status – Bypass Reports....60
15.2 Zone Status – Trouble Reports....60
15.3 Zone Status – Sensor Watch Reports....60
15.4 Zone Status – Alarm Restore Code....60
15.5 Zone Status Reporting Options....61
15.6 Open/Close Reports....61
15.7 Open/Close Reporting Options....61
15.8 Codepad Duress Report....61
15.9 Codepad Panic Report....61
15.10 Codepad Fire Report....61
15.11 Codepad Medical Report....62
15.12 Codepad Reporting Options....62
15.13 System Status – AUX Power Supply Fail Report....62
15.14 System Status – AUX Power Supply Fail Restore Report....62
15.15 System Status – AC Fail Report....62
15.16 System Status – AC Fail Restore Report....62
15.17 System Status – Low Battery Report....62
15.18 System Status – Low Battery Restore Report63
15.19 System Status – Access Denied....63
15.20 System Status Reporting Options....63
15.21 Test Reporting Time....63
15.22 Test Reporting Dialer Options....64
16.0 Programmable Outputs....64
16.1 Redirecting Outputs to the Codepad Buzzer 64
16.2 Output Event Types....65
16.3 Output Polarity....68
16.4 Output Timing....70
16.5 Pulsing Polarities....70

16.6 One-Shot Polarities 70
17.0 System Event Timers....70
17.1 Programming Entry/Exit Timers....70
17.2 Entry Timer 1 70
17.3 Entry Timer 2 71
17.4 Exit Time 71
17.5 Entry Guard Timer for STAY Mode 71
17.6 Delay Alarm Reporting Time 71
17.7 Sensor Watch Time....71
17.8 Codepad Lockout Time....71
17.9 Siren Run Time 71
17.10 Siren Sound Rate....71
17.11 Auto Arming Pre-Alert Timer 72
17.12 Auto Arming Time....72
17.13 Auto Disarming Time 72
17.14 Kiss-Off Wait Time 72
17.15 System Time 72
17.16 System Date 72
18.0 System and Consumer Options 73
18.1 System Options 1 73
18.2 System Options 2 73
18.3 System Options 3 74
18.4 System Options 4 74
18.5 Consumer Options 1....75
18.6 Consumer Options 2....75
18.7 Consumer Options 3....75
18.8 Radio Input Options....76
19.0 Optional Equipment 76
19.1 RE012E/RE013E 2-Channel/ 4-Channel Hand-Held Transmitters 433 MHz 76
19.2 WE800E 433 MHz RF Receiver 76
19.3 RE005E Two-Channel Radio Interface 76
19.4 CC891 Programming Key....76
19.5 CC816 Alarm Link Software 76
19.6 CP5 Eight Zone LED Codepad (CP508W)...76
19.7 CP5 Eight Zone LCD Codepad (CP508LW) 77
19.8 CP105A Night Arm Station 77
19.9 PS101 Power Supply Module 77
19.10 TF008 Plug Pack (TF008) 77
20.0 Terminals and Descriptions....78
20.1 Terminal Descriptions 78
20.2 Glossary Of Terms....79
20.3 Diagrams 81
21.0 Specifications 84
21.1 Warranty Statement....84
21.2 Advice to Users 84
21.3 New Zealand Telepermit Notes....84
22.0 Programming Sheets 85
22.1 Country Codes....93

Figures

Figure 1: ICP-CP508W Eight Zone LED Codepad16
Figure 2: ICP-CP508LW Eight Zone LCD Codepad....17
Figure 3: ICP-CP508W LED Codepad Showing Audible Alarm Buttons 21
Figure 4: RE012/E: 2-Channel Keyfob Transmitter25
Figure 5: RE013/E: 4-Channel Keyfob Transmitter26
Figure 6: Basic Pager Display 45
Figure 7: Split EOL Resistors Using NC Contacts 54
Figure 8: Split EOL Resistors Using NO Contacts 54
Figure 9: Wiring Diagram for Keyswitch Zone 58
Figure 10: WE800E Wireless ON/OFF Interface....76
Figure 11: ICP-CC404 Wiring Diagram....81
Figure 12: ICP-CC404 Component Overlay 82
Figure 13: Telecom Connection Diagram for Australia....83
Figure 14: Telecom Connection Diagram for New Zealand 83
Figure 15: Telecom Connection Diagram for China83

Tables

Table 1: Zone Defaults....8
Table 2: Zone Types....8
Table 3: Codepad Indicators....9
Table 4: Programming Option Bits Example....10
Table 5: Installer's Programming Mode Commands....10
Table 6: Command 965 Defaults....14
Table 7: Control Panel Type....14
Table 8: Zone Indicators....16
Table 9: STAY Indicator....16
Table 10: AWAY Indicator....16
Table 11: MAINS Indicator....16
Table 12: FAULT Indicator....17
Table 13: Audible Indicators....17
Table 14: Fault Indicators....22
Table 15: Horn Speaker Indication Beeps for Remote Operations....24
Table 16: Strobe Indications for Remote Operations....24
Table 17: Codepad Indicators for Remote Radio User Numbers....25
Table 18: Remote Output Event Types....27
Table 19: Installer Code Functions....27
Table 20: Domestic Dialing Digits....28
Table 21: Codepad Indicators When Changing Phone Numbers....28
Table 22: Telco Arming or Disarming Dialing Digits....29
Table 23: Codepad Indicators When Changing the Telco Arming or Disarming Sequence....29
Table 24: Telephone Monitor Mode Indications....31
Table 25: Master Code Functions....32
Table 26: Remote Radio Numbers Displayed by the Codepad Indicators....32
Table 27: Codepad Indicators When Changing Domestic Telephone Numbers....33
Table 28: Domestic Dialing Digits....33
Table 29: Telco Arming or Disarming Dialing Digits....34
Table 30: Codepad Indicators When Changing Telco Arming or Disarming Sequence....34
Table 31: Domestic Dialing Digits....41
Table 32: Contact ID Format Breakdown....42
Table 33: Point ID Codes....43
Table 34: Example Reporting in 4 + 2 Express Format....43
Table 35: 4 + 2 Express Reporting Format....43
Table 36: 4+2 Express Transmission Code Descriptions....44
Table 37: Zone Status Display Descriptions....45
Table 38: Dialing Digits....46
Table 39: Telco Arm or Disarm Dialing Digits....48
Table 40: Default User Codes....51
Table 41: Priority Levels....52
Table 42: EOL Resistor Options....53
Table 43: Zone Programming Defaults....55
Table 44: Zone Pulse Count Times....56
Table 45: Zone Dialer Options....59
Table 46: Zone Status Reporting Options....61
Table 47: Open/Close Reporting Options....61
Table 48: Codepad Alarm Reporting Options....62
Table 49: System Status Reporting Options....63
Table 50: Test Reporting Time Parameters....64
Table 51: Test Reporting Options....64
Table 52: Output Parameters....64
Table 53: Output Programming Defaults....64
Table 54: Event Type Polarities....69
Table 55: Time Base Settings....70
Table 56: Pulsing Time Settings....70
Table 57: One-Shot Time Settings....70
Table 58: Auto Arming Time Parameters....72
Table 59: Auto Disarming Time Parameters....72
Table 60: System Time Parameters....72
Table 61: System Date Parameters....73
Table 62: Strobe Indications for Remote Operations....73
Table 63: Horn Speaker Indication Beeps for Remote Operations....73
Table 64: Terminal Descriptions....78
Table 65: Glossary....79
Table 66: Specifications....84

1.0 Introduction

Congratulations on selecting the ICP-CC404 Control Panel for your installation. Take the time to read through this guide and familiarize yourself with the outstanding operating and installation features of this system so you can get the most from your unit.

In all aspects of planning, engineering, styling, operation, convenience, and adaptability, we try to anticipate your every possible requirement. Programming simplicity and speed are major considerations; we believe that our objectives are more than satisfied.

This Installation Guide explains all aspects of programming the ICP-CC404 Control Panel from factory default to final commissioning. All system parameters and options are detailed, but suitability is left to the individual. You can tailor each control panel to meet your requirements quickly and easily. The programming simplicity makes your installation quick, accurate, and rewarding.

As control panels continue to improve over the years, they become very powerful. We have addressed the needs of some early first-time users who have advanced to true "power users," while maintaining the simplicity of the product and the Installation Guide.

1.1 Features

The ICP-CC404 Security System uses the latest in microprocessor technology to provide you with useful features, and superior reliability and performance.

The control panel provides these features:

- Eight programmable User Codes (1 to 8)
- Eight remote radio User Codes (9 to 16)
- Four programmable Burglary Zones
- Four programmable 24-Hour Zones
- Dual reporting
- On-board Line Fault Module
- Telco arming/disarming sequence
- Automatic arming and disarming
- Codepad Duress, Panic, Fire, and Medical Alarms
- STAY Mode and AWAY Mode operation
- Upload/download programmable
- Dynamic battery testing
- Entry and Exit Warning beeper
- Remote arming
- Answering machine bypass
- AC fail and system fault indicators
- Monitored Siren Output
- Strobe Output
- Relay Output
- Separate Fire Alarm sound
- EDMSAT – Satellite Siren-compatible
- Zone lockout
- Sensor watch
- Day Alarm
- Walk Test Mode
- Delayed reporting
- 40 events in non-volatile memory

1.2 Quick Start

The following steps allow you to use the ICP-CC404 Control Panel with factory default values. The default values allow the control panel to communicate in the Contact ID format. If you are not familiar with programming the range of control panels, read the information in *Section 2.0 Programming* on page 9 before starting the installation.

1. After all wiring is complete, connect the AC plug pack to the control panel.

   Both the MAINS and AWAY indicators light. The MAINS indicator lights to indicate that the AC MAINS supply is connected. The AWAY indicator lights to indicate that the system is armed in AWAY Mode.

   If any 24-Hour zones are unsealed when you power up the system, the Siren, Strobe, and Bell Outputs activate into alarm and the corresponding zone indicators flash.
2. Enter the default Master Code (2580) and press [AWAY] to disarm the system and to reset any alarm that occurred when you powered up the system.

   The AWAY indicator turns off to signify that the system is disarmed.

   If any zone indicator flashes, an alarm occurred in that zone.

   If a zone indicator lights constantly, the zone is unsealed.
3. Connect the backup battery.
4. Enter the default Master Code (2580) and press [AWAY].

   Two beeps sound and the STAY and AWAY indicators flash simultaneously to indicate you entered Installer's Programming Mode. You are automatically positioned at Location 000, the first digit of the Primary Telephone Number for Receiver 1.
5. Enter the default Installer Code (1234) and press Enter the Primary Telephone Number, the Secondary Telephone Number, and the Subscriber ID Number for Receiver 1.

   Refer to *Sections 11.1* on page 46, *11.2* on page 47, and *11.5* on page 47 for more information about programming these numbers.

When programming the telephone numbers for Receiver 1 and Receiver 2, you must program a 0 as a 10. Programming a 0 in the telephone number indicates the end of the dialing sequence. Unless otherwise stated, program a 0 as a 0 in all locations other than the telephone numbers for Receiver 1 and Receiver 2, and the Call Back Telephone Number.

6. If required, set the Test Report time. Program any other required changes. Otherwise, factory default settings are used. Refer to *Section 15.21 Test Reporting Time* on page 63 for more information.
7. Enter command [9 6 0] and press [AWAY] to exit from the Installer's Programming Mode.

   Two beeps sound and the STAY and AWAY indicators turn off. The system returns to the disarmed state and is ready for use. Refer to *Section 2.4 Installer's Programming Commands* on page 10 for more information.
8. Use the Master Code to set the date and time. Refer to *Section 1.2.1 Setting the Date and Time* for more information.

1.2.1 Setting the Date and Time

1. Enter your Master Code and press [6][AWAY]. Three beeps sound and the STAY and AWAY indicators flash.
2. Enter the day, month, year, hour, and minute in DD, MM, YY, HH, MM format (where DD is the day of the month, MM is the month of the year, YY is the year, HH is the hour of the day, and MM minute of the day) and press [AWAY].

   Use 24:00 hour format when programming the hour of the day.

   Two beeps sound and the STAY and AWAY indicators turn off. If a long beep sounds, there was an error when you entered the date and time.

Example

To set the date and time for the 1st January 2006 at 10:30 PM, enter:

[2 5 8 0 6][AWAY][0 1 0 1 0 6 2 2 3 0][AWAY]

1.2.2 Zone Defaults

The default zone settings for the control panel are listed in *Table 1*. You can program Zones 1 to 4 to any of the zone types. Refer to *Table 2* for the zone types you can select.

Table 1: Zone Defaults

Zone	Zone Type	Zone	Zone Type
1	Delay-1	5	24-Hour Burglary
2	Handover	6	24-Hour Burglary
3	Handover	7	24-Hour Fire
4	Instant	8	24-Hour Tamper

1.2.3 Zone Types

There are thirteen zone types to choose from when programming zones for the ICP-CC404 Control Panel. Refer to *Section 14.3 Zone Programming* on page 54 for more information.

Table 2: Zone Types

Type	Description	Type	Description
0	Instant	8	24-Hour Holdup
1	Handover	9	24-Hour Tamper
2	Delay-1	10	Reserved
3	Delay-2	11	Keyswitch
4	Reserved	12	24-Hour Burglary
5	Reserved	13	24-Hour Fire
6	24-Hour Medical	14	Chime only
7	24-Hour Panic	15	Zone not used

2.0 Programming

The control panel programming options are stored in a non-volatile EPROM. This memory holds all configuration and user-specific data even after a total power loss.

Because the data retention time is up to ten years without power, no reprogramming is required after powering down the control panel.

You can change data as many times as necessary without any additional specialized equipment. The memory is organized in locations, each of which holds the data for a specific function.

15 is the maximum value that you can program into any location.

In general, the entire programming sequence consists of selecting the required location, and then entering or changing the current data. Repeat this procedure until you program all the required data. The factory default settings are selected for reporting to the monitoring station in Contact ID format.

The Installer Code provides access only to the Installer's Programming Mode and does not allow you to arm and disarm the system. You cannot enter Installer's Programming Mode when the system is armed, or at any time during siren run time.

You can program the ICP-CC404 Control Panel using any of these three devices:

- Remote codepad
- CC816 Alarm Link Upload/Download Software

2.1 Programming with the Remote Codepad

To program the control panel using the remote codepad, the system must be disarmed with no alarm memory present.

To access Installer's Programming Mode:

Enter the four-digit Installer Code (the factory default is 1234) and press [AWAY].

Two beeps sound and both the AWAY and the STAY indicators flash simultaneously to indicate that you entered Installer's Programming Mode.

When you enter Installer's Programming Mode, you are automatically positioned at Location 000, the first digit of the Primary Telephone Number for Receiver 1. The codepad indicators display the current data stored in this location.

Table 3: Codepad Indicators

Data Value	Zone Indicators 1	2	3	4	5	6	7	8	MAINS
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

To move to a different programming location:

Enter the location number and press [AWAY].

For example, press [3 4][AWAY] to automatically step you to the beginning of the Subscriber ID Number for Receiver 1. The data stored in the new location appears.

To move to the next location:

Press [AWAY].

For example, if you are currently positioned at Location 034, press [AWAY] to step to Location 035.

To move to the previous location:

Press [STAY].

For example, if you are positioned at Location 035, press [STAY] to step back to Location 034.

To change data in the current location:

Enter the new value (0 to 15) and press [STAY].

The data is stored and you remain positioned at the same location. The codepad indicators show the new value (for example, if you enter [1 4] and press [STAY], the Zone 4 and MAINS indicators light).

To exit from the Installer's Programming Mode:

Enter command [9 6 0] and press [AWAY].

Two beeps sound and the STAY and AWAY indicators turn off. The system returns to the disarmed state and is now ready for use.

Refer to *Section 2.4 Installer's Programming Commands* on page 10 for more information about using Installer's Programming Mode.

2.2 Programming with the Programming Key

The CC891 Programming Key allows you to store or copy programming information from your control panel. After storing information in the programming key, you can easily program other ICP-CC404 Control Panels with the same programming data. You can also use the programming key to back up existing information.

If you connect the programming key to the control panel when it is disarmed, the key automatically initiates a data transfer to the control panel's memory.

If you have a new programming key, enter Installer's Programming Mode, program the system as required, and connect the programming key to the control panel.

To connect the programming key, locate the socket labelled PROGRAMMING KEY at the top of the printed circuit board (PCB) next to the Auxiliary Module socket. Observe the triangular markings on the PCB and align them with the markings on the programming key.

To copy data from the control panel data to the programming key:

1. Enter the Installer Code (the default is 1234) and press [#] to enter Installer's Programming Mode.
2. Enter [9 6 2 #].

   Refer to *Section 2.4.5 Command 962 – Copy the Control Panel Memory to the Programming Key* on page 12 for more information.
3. Enter [9 6 0 #] to exit from the Installer's Programming Mode.

   Two beeps sound and the system returns to the disarmed state. Before removing the programming key, wait 2 sec for the activity LED to return to its normal state. The programming key becomes your standard data pattern for future control panel programming.

If you enter Installer's Programming Mode, insert a programming key, and change the data in any location. The data for both the programming key and the control panel is changed at the same time.

If you do not enter Installer's Programming Mode first, connecting the CC891 Programming Key to the control panel when the programming key memory is blank corrupts the control panel's memory. If this occurs, you must return the control panel to Bosch Security Systems, Inc. to unlock the control panel's memory. A service fee is charged.

2.3 Programming Option Bits

When programming some locations, there are up to four options per location. You can select one, two, three, or all four options for each location, but you can program only one value for the location. Calculate this value by adding the option bit numbers together.

Example

To select Options 1 and 4 for Location 177, add the numbers together and program the sum. In this example, program a 5 in the location (1 + 4 = 5).

Table 4: Programming Option Bits Example

Option	Description
1	Allow dialer reporting functions
2	Enable remote arming by telephone
4	Enable answering machine bypass only when armed
8	Enabled = Use Bell 103 for FSK format Disabled = CCITT V21 format

2.4 Installer's Programming Commands

There are ten commands you can use in Installer's Programming Mode. To issue the command, enter the command number and press [#].

Table 5: Installer's Programming Mode Commands

Command	Function
959	Test the programming key Refer to *Section 2.4.2* on page 11.
960	Exit from Installer's Programming Mode Refer to *Section 2.4.3* on page 12.
961	Reset the control panel to factory defaults Refer to *Section 2.4.4* on page 12.
962	Copy the control panel memory to the programming key Refer to *Section 2.4.5* page 12.
963	Copy the programming key data to the control panel memory Refer to *Section 2.4.6* on page 12.
964	Erase the programming key Refer to *Section 2.4.7* on page 13.
965	Set up domestic dialing format Refer to *Section 2.4.8* on page 13.
966	Enable or disable Auto Step Mode Refer to *Section 2.4.9* on page 13.
999	Display the software version number or control panel type Refer to *Section 2.4.10* on page 14.

2.4.1 Command 958 – Enable/Disable Zone Status Mode

This function enables and disables Zone Status Display Mode when using the hand-held programmer. The hand-held programmer shows the zones on the seven-segment display from left to right. If there is a dash lit on the display of the hand-held programmer, the corresponding zone is unsealed. If the display is blank, the zone is sealed.

The third (or centre) display shows either 4 or 8. A 4 indicates that Zones 1 to 4 are shown. An 8 indicates that Zones 5 to 8 are shown.

Press [#] to toggle the display between Zones 1 to 4 and 5 to 8. This feature is very useful during installation because you can view the zone status at the control panel, saving you time and money.

To enable Zone Status Mode:

1. Enter the Installer Code (the default is 1234) and press [#] to enter Installer's Programming Mode.

   Two beeps sound and the programmer displays the data stored in Location 000.
2. Enter [9 5 8 #].

   Two beeps sound and 4 appears in the centre display to indicate Zones 1 to 4 are shown.

To disable Zone Status Mode:

Enter [9 5 8 #].

Two beeps sound and you return to Installer's Programming Mode.

Example

A hyphen (–) in the display indicates that the zone is unsealed.

A blank display indicates that the zone is sealed.

```
- - 4 - -
```

indicates that Zone 1 is sealed and Zones 2, 3, and 4 are unsealed.

```
-   8   -
```

indicates that Zones 5 and 8 are unsealed and Zones 6 and 7 are sealed.

2.4.2 Command 959 – Test the Programming Key

This command initiates a test of the programming key. You can use the CC891 Programming Key only with the ICP-CC404 Control Panel.

The programming key test is non-destructive and any data in the programming key remains after the test is completed. One long beep indicates that the programming key test failed. Two beeps indicate a successful test.

If you remove the programming key before the test is done, the programming key data becomes corrupt. Do not remove the programming key while the activity LED is lit or pulsing rapidly.

To test the programming key:

1. Enter the Installer Code (the default is 1234) and press [#] to enter Installer's Programming Mode.

   Two beeps sound and the STAY and AWAY indicators flash on the remote codepad to indicate that you entered Installer's Programming Mode. The remote codepad displays the data stored in Location 000.
2. Connect the programming key to the PROGRAMMING KEY pins (next to the Auxiliary Module socket) at the top of the control panel printed circuit board.
3. Enter [9 5 9 #].

   Two beeps sound after a successful test of the programming key. A long beep indicates that the programming key data is corrupt and must be erased to clear the corrupt data. Refer to *Section 2.4.7 Command 964 – Erase the Programming Key* on page 13 for more information.
4. Enter [9 6 0 #] to from the Installer's Programming Mode.

   Two beeps sound. The STAY and AWAY indicators turn off on the remote codepad and the system returns to the disarmed state.
5. Remove the programming key from the control panel.

   Failure to exit from the Installer's Programming Mode before removing the programming key can corrupt the data in the programming key.

2.4.3 Command 960 – Exit from the Installer's Programming Mode

This command exits from the Installer's Programming Mode. You can exit from the Installer's Programming Mode from any location.

To exit from the Installer's Programming Mode:

Enter [9 6 0 #].

Two beeps sound and the system returns to the disarmed state. When using the remote codepad, the STAY and AWAY indicators turn off.

2.4.4 Command 961 – Reset the Control Panel to Factory Default Settings

This command resets the control panel to factory default values. Default values are listed throughout this guide and in the programming sheets in *Section 22.0* on page 85. You can reset the control panel from any location.

To reset the control panel to factory defaults:

1. Enter the Installer Code (the default is 1234) and press [#] to enter Installer's Programming Mode.
   Two beeps sound and the STAY and AWAY indicators flash on the remote codepad to indicate you entered Installer's Programming Mode. The remote codepad shows the data stored in Location 000.
2. Enter [9 6 1 #].
   Two beeps sound and the system resets to the factory default values.

2.4.5 Command 962 – Copy the Control Panel Memory to the Programming Key

This command copies the control panel memory to the programming key. You can only use the CC891 Programming Key with the ICP-CC404 Control Panel.

To copy the control panel memory to the programming key:

1. Enter the Installer Code (the default is 1234) and press [#] to enter Installer's Programming Mode.
   Two beeps sound and the STAY and AWAY indicators flash on the remote codepad to indicate you entered Installer's Programming Mode. The remote codepad shows the data stored in Location 000.
2. Connect the programming key to the PROGRAMMING KEY pins (next to the Auxiliary Module socket) at the top of the control panel's printed circuit board.
3. Enter [9 6 2 #].
   Two beeps sound after the control panel memory is successfully copied to the programming key. A long beep indicates that the programming key is corrupt and must be erased to clear the corrupt data. Refer to *Section 2.4.7 Command 964 – Erase the Programming Key* on page 13 for more information.
4. Enter command [9 6 0 #] to exit from the Installer's Programming Mode.
   The STAY and AWAY indicators turn off on the remote codepad to indicate that the system is disarmed.
5. Remove the programming key from the control panel.
   Failure to exit from the Installer's Programming Mode before removing the programming key can corrupt the programming key.

2.4.6 Command 963 – Copy the Programming Key to the Control Panel

This command copies data from the programming key to the control panel. You can only use the CC891 Programming Key with the ICP-CC404 Control Panel.

To copy the programming key memory to the control panel:

1. Enter the Installer Code (the default is 1234) and press [#] to enter Installer's Programming Mode. Two beeps sound and the STAY and AWAY indicators flash on the remote codepad to indicate you entered Installer's Programming Mode. The remote codepad shows the data stored in Location 000.
2. Connect the programming key to the PROGRAMMING KEY pins (next to the Auxiliary Module socket) at the top of the control panel's printed circuit board.
3. Enter [9 6 3 #].
   Two beeps sound after the programming key's data is successfully copied to the control panel. A long beep indicates that the programming key is corrupt and must be erased to clear the corrupt data. Refer to *Section 2.4.7 Command 964 – Erase the Programming Key* on page 13 for more information.
4. Enter [9 6 0 #] to exit from the Installer's Programming Mode.
   The STAY and AWAY indicators turn off on the remote codepad to indicate that the system is disarmed.
5. Remove the programming key from the control panel.
   Failing to exit from the Installer's Programming Mode before removing the programming key can corrupt the programming key.

2.4.7 Command 964 – Erase the Programming Key

This command erases all data from the programming key. You can only use the CC891 Programming Key with the ICP-CC404 Control Panel.

To erase the programming key:

1. Enter the Installer Code (the default is 1234) and press [#] to enter Installer's Programming Mode. Two beeps sound and the STAY and AWAY indicators flash on the remote codepad to indicate you entered Installer's Programming Mode. The remote codepad shows the data stored in Location 000.
2. Connect the programming key to the PROGRAMMING KEY pins (next to the Auxiliary Module socket) at the top of the control panel's printed circuit board.
3. Enter [9 6 4 #].

   Two beeps sound after the data is deleted.
4. Enter [9 6 0 #] to exit from the Installer's Programming Mode.

   The STAY and AWAY indicators turn off on the remote codepad to indicate that the system is disarmed.
5. Remove the programming key from the control panel.

   Failing to exit from the Installer's Programming Mode before removing the programming key can corrupt the programming key.

2.4.8 Command 965 – Set Up Domestic Dialing Format

Command 965 simplifies the setup of the domestic dialing format to a one-step operation. Refer to *Section 9.0 Domestic Dialing* on page 40 for more information.

To set up domestic dialing format:

1. Enter the Installer Code (the default is 1234) and press [#] to enter Installer's Programming Mode. Two beeps sound and the STAY and AWAY indicators flash on the remote codepad to indicate you entered Installer's Programming Mode. The remote codepad shows the data stored in Location 000.
2. Enter [9 6 1 #].

   The command automatically sets Receiver 1 to domestic reporting and sets the locations shown in bold in *Table 6* on page 14 for Receiver 2 only. No other locations are changed when you issue Command 965.

All domestic telephone numbers are stored in Locations 466 to 513. For more information, refer to *Section 9.2 Setting Up and Programming Domestic Reporting* on page 41.

As shown in *Table 6* on page 14, the transmission format is automatically set for domestic dialing and the Subscriber ID Number set for one identification beep. All reports, except Zone Status reporting and System Status reporting, are allocated to Receiver 1 for domestic dialing.

Zone Status Reports, including Zone Bypass, Zone Trouble, Sensor Watch, and Alarm Restore codes, and System Status Reports, including AUX Power Supply Fail, AC Fail, Low Battery, and Access Denied Reports, are allocated to Receiver 2 and do not report unless Receiver 2 is also set up to report.

2.4.9 Command 966 – Enable or Disable Auto Step Mode

This command allows you to enable or disable Auto Step Mode when programming in Installer's Programming Mode. When programming with the remote codepad, there is no visual indication that Auto Step Mode is enabled.

If the Auto Step Mode is enabled, pressing [*] automatically moves you to the next programming location.

If Auto Step Mode is disabled, you must move to the next location by pressing [#]. The example below shows that Auto Step Mode is very useful when programming successive locations.

To enable Auto Step Mode:

1. Enter the Installer Code (default = 1234) and press [#] to enter Installer's Programming Mode.

   Two beeps sound and the STAY and AWAY indicators flash on the remote codepad to show you entered Installer's Programming Mode. The remote codepad displays the data stored in Location 000.
2. Enter [9 6 6 #].

   Two beeps sound.

To disable Auto Step Mode:

Enter [9 6 6 #].

Two beeps sound.

Table 6: Command 965 Defaults

Location	Description	Default Value	Setting
032	Handshake Tone for Receiver 1	**1**	(Handshake Tone)
033	Transmission Format	**4**	(Domestic)
034 to 039	Subscriber ID Number	0, 0, 0, 0, 0, **1**	(1 Beep)
332	Zone Status Reporting Options	**2**	(Receiver 2 only)
333 and 334	Open/Close Reports	**11, 12**	(Open/Close Reports)
335	Open/Close Reporting Options	**2**	(Receiver 2 only)
356 to 358	System Status – Access Denied	**6, 7, 12**	(Access Denied)
359	System Status Reporting Options	**2**	(Receiver 2 only)
360 to 366	Test Report Time	0, 0, 0, 0, **7, 1, 0**	(Test Reports)
367	Test Reporting Dialer Options	**1**	(Receiver 1 only)

Example (Auto Step Mode Enabled)

To enter the Primary Telephone Number 02 (pause) 9672 1055 when Auto Step Mode is enabled:

1. Press [0 #].

   You are positioned at Location 000 (the Primary Telephone Number for Receiver 1).
2. To program the number, press:
   [10 * 2 * 13 * 9 * 6 * 7 * 2 * 1 * 10 * 5 * 5 * 0*]

Example (Auto Step Mode Disabled)

To enter the Primary Telephone Number 02 (pause) 9672 1055 when Auto Step Mode is disabled:

1. Press [0 #].

   You are positioned at Location 000 (the Primary Telephone Number for Receiver 1).
2. To program the number, press:
   [10 * # 2 * # 13 * # 9 * # 6 * # 7 * # 2 * # 1 * # 10 * # 5 * # 5 * # 0 *]

2.4.10 Command 999 – Display the Panel Type or Software Version Number

When using the remote codepad, this command shows the version of the control panel. Because different control panels use the same printed circuit board (PCB), it is difficult to determine the control panel the PCB is set to.

To show the control panel type or software version number:

1. Enter the Installer Code (the default is 1234) and press [#] to enter Installer's Programming Mode. Two beeps sound and the remote codepad shows the data programmed in Location 000.

   If you are using the remote codepad, the STAY and AWAY indicators flash to indicate you entered Installer's Programming Mode.
2. Enter [9 9 9 #].

   Two beeps sound.

   If you are using the remote codepad, the codepad displays a zone indicator corresponding to the control panel type. Refer to *Table 7* for more information.

Table 7: Control Panel Type

Indicator	Control Panel Type
4	ICP-CC404
8	ICP-CC408 ICP-CC488

3. Press [#] to exit from this command and return to the Installer's Programming Mode.
4. Enter [9 6 0 #] to exit from the Installer's Programming Mode.

   Two sound and the system returns to the disarmed state.

   If you are using the remote codepad, the STAY and AWAY indicators turn off to indicate the system is disarmed.

2.5 Disable Factory Defaults

Program the Disable Factory Defaults feature in **Location 900**.

The default value is **0**.

This feature disables the DEFAULT button on the control panel printed circuit board (PCB) to prevent an operator from resetting the control panel to default values. This feature also prevents using a programming key when the system is disarmed.

Program 0 into this location to enable the DEFAULT button and to allow updates to location data using the programming key. Program 15 to disable the DEFAULT button and to require the Installer Code to program the control panel.

If the Installer Code is unknown, you must return the control panel to your Bosch Distributor for exchange. A nominal fee applies for this service.

Using this feature is not recommended.

If you need to disable the DEFAULT button, holding down the DEFAULT button on the PCB when programming this location prevents you from accidentally setting this option.

To prevent manual resetting of the control panel to default values:

1. Enter the Installer Code (the default is 1234) and press [#] to enter Installer's Programming Mode.

   Two beeps sound and the remote codepad shows the data programmed in Location 000.

   If you are using the remote codepad, the STAY and AWAY indicators flash to indicate you entered Installer's Programming Mode.
2. Enter [9 0 0 #] to move to Location 900.
3. Press and hold the DEFAULT button.

   The DEFAULT button is located at the top of the PCB next to the PROGRAMMING KEY socket.
4. Enter [1 5 *] to program 15 into Location 900.
5. Release the button.
6. Enter [9 6 0 #] to exit from the Installer's Programming Mode.

   Two beeps sound and the system returns to the disarmed state. If you are using a remote codepad, the STAY and AWAY indicators turn off to indicate the system is disarmed.

If Location 900 is not programmed as 15, use one of these procedures to successfully reset the control panel to the factory default settings.

To reset the control panel using the Installer Code:

1. Enter the Installer Code (the default is 1234) and press [#] to enter Installer's Programming Mode.

   Two beeps sound. The STAY and AWAY indicators flashes to indicate you entered Installer's Programming Mode.
2. Enter [9 6 5 #].

   Two beeps sound after the control panel is successfully reset.
3. Enter [9 6 0 #].

   Two beeps sound. The STAY and AWAY indicators stop flashing and the system returns to the disarmed state.

   The control panel is now successfully reset to the factory settings.

To reset the control panel using the default button:

1. Disconnect the AC MAINS supply and the backup battery from the control panel.

   Press and hold the DEFAULT button. The DEFAULT button is located at the top of the PCB next to the PROGRAMMING KEY socket.
2. Reconnect the AC MAINS supply to the control panel.
3. Wait 3 to 5 sec and release the button.
4. Enter [2 5 8 0 *] to disarm the system using the default Master Code.

   The control panel is successfully reset to the factory settings.

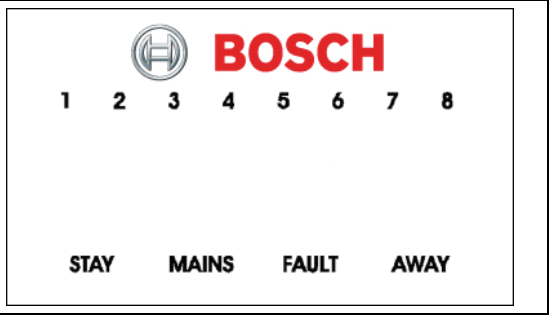
If the option to restore the default control panel settings is disabled using Location 900:

- The dialer seize relay (RL2) clicks four times. You must return the control panel to Bosch Security Systems, Inc. for exchange. If the Installer Code is unknown, a service fee is charged to unlock the control panel's memory
- When programmed to disable the default control panel setting, you cannot use the command [961#] to retrieve the programming data.
- The use of this feature is not recommended.

3.0 Codepad Indicators

3.1 ICP-CP508W Eight Zone LED Codepad

Figure 1: ICP-CP508W Eight Zone LED Codepad



The codepad is the communications interface between you and the alarm system. The codepad allows you to issue commands and offers visual and audible indications to guide you through general operation.

The codepad incorporates a number of indicators: eight zone indicators show the condition of each zone and four other indicators show general status. These indicators are described in *Table 8* through *Table 13* on page 17.

Zone Indicators

Table 8: Zone Indicators

Indicator	Definition
On	The zone is unsealed
Off	The zone is sealed
Flashing fast (0.25 sec on/0.25 sec off)	The zone is in alarm
Flashing slow (1 sec on/1 sec off)	The zone is manually isolated

STAY Indicator

The STAY indicator lights when the system is armed in STAY Mode 1 or STAY Mode 2. The STAY indicator flashes with the AWAY indicator when you are in Installer's Programming Mode or you are using a Master Code function.

For more information, refer to:

- *Section 4.3* on page 19 to arm the system in STAY Mode 1.
- *Section 14.3.4* on page 57 to set zones to automatically isolate in STAY Mode 1.
- *Section 4.5* on page 20 to arm the system in STAY Mode 2.
- *Section 6.1.4* on page 30 to use the Installer Code to set zones to automatically isolate in STAY Mode 2.
- *Section 6.2.5* on page 35 to use the Master Code to set zones to automatically isolate in STAY Mode 2.

Table 9: STAY Indicator

Indicator	Definition
On	The system is armed in STAY Mode 1 or STAY Mode 2
Off	The system is not armed in STAY Mode 1 or STAY Mode 2
Flashing	Zone Isolating Mode or setting STAY Mode 2 zones

AWAY Indicator

The AWAY indicator lights when the system is armed in AWAY Mode. The AWAY indicator flashes with the STAY indicator when you are in Installer's Programming Mode or you are using a Master Code function.

Refer to *Section 4.1 Arming the System in AWAY Mode* on page 18 for more information.

Table 10: AWAY Indicator

Indicator	Definition
On	The system is armed in AWAY Mode
Off	The system is not armed in AWAY Mode

MAINS Indicator

The MAINS indicator shows whether the system's AC MAINS supply is normal or failed.

When programming in Installer's Programming Mode or using a Master Code function, the MAINS indicator lights to indicate a location value from 10 to 15. The MAINS indicator represents the 10 digit, which is added to the value of the lit zone indicator (for example, if the value programmed in a location is 12, the MAINS and Zone 2 indicators light).

Table 11: MAINS Indicator

Indicator	Definition
On	The AC MAINS power is normal
Flashing	The AC MAINS supply failed

FAULT Indicator

The FAULT indicator lights when the system detects a system fault. Refer to *Section 4.12 Fault Analysis Mode* on page 22 for more information on system faults.

Each time a new system fault is detected (the FAULT indicator flashes), the codepad beeps once per minute.

Press [AWAY] to stop the beeping and to acknowledge the fault.

Table 12: FAULT Indicator

Indicator	Definition
On	A system fault must be corrected
Off	The system is normal (no faults)
Flashing	A system fault must be acknowledged

Audible Indicators

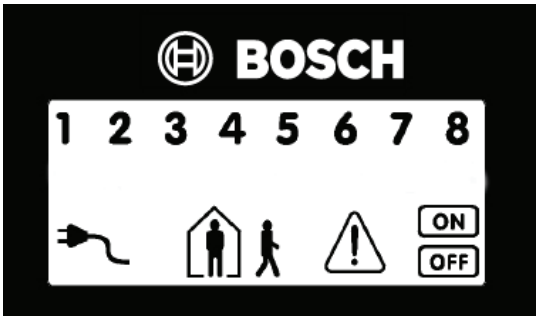
The codepad provides these audible indications:

Table 13: Audible Indicators

Audible Indicator	Definition
One short beep	A button was pressed on the codepad, or Exit Time ended when arming in STAY Mode 1 or STAY Mode 2
Two short beeps	The system accepted the code
Three short beeps	The system executed the requested function
One long beep	Exit Time ended when arming in AWAY Mode, or the requested operation was denied or aborted
One short beep every second	Walk Test Mode is currently active, or warning before automatic arming takes place
One short beep every 2 sec	Telephone Monitor Mode is active.
One short beep every minute	There is a system fault to acknowledge

3.2 ICP-CP508LW Eight Zone LCD Codepad

Figure 2: ICP-CP508LW Eight Zone LCD Codepad



The codepad is the communications interface between you and the alarm system. The codepad allows you to issue commands and offers visual and audible indications to guide you through general operation.

The codepad uses a number of indicators: eight zone indicators show the condition of each zone and seven other indicators show general status. These indicators are described in this section.

Zone Indicators

1 2 3 ... The zone indicators (1 to 8) show the status of the zones as listed in *Table 8* on page 16.

AWAY Indicator

The AWAY indicator lights when the system is armed in AWAY Mode. The ON indicator also lights when the system is armed in AWAY Mode (refer to *Table 10* on page 16).

The AWAY indicator flashes with the STAY indicator when you are in Installer's Programming Mode or you are using a Master Code function.

Refer to *Section 4.1 Arming the System in AWAY Mode* on page 18 for more information.

STAY Indicator

The STAY indicator lights when the system is armed in STAY Mode 1 or STAY Mode 2 (refer to *Table 9* on page 16).

The STAY indicator also flashes with the AWAY indicator when you are in Installer's Programming Mode or you are using a Master Code function.

The ON indicator also lights when the system is armed in STAY Mode 1 or STAY Mode 2.

For more information, refer to:

- Section 4.3 on page 19 to arm the system in STAY Mode 1.
- Section 14.3.4 on page 57 to set zones to automatically isolate in STAY Mode 1.
- Section 4.5 on page 20 to arm the system in STAY Mode 2.
- Section 6.1.4 on page 30 to use the Installer Code to set zones to automatically isolate in STAY Mode 2.
- Section 6.2.5 on page 35 to use the Master Code to set zones to automatically isolate in STAY Mode 2.

System Disarmed

This indicator lights with the OFF indicator when the system is disarmed.

MAINS Indicator

The MAINS indicator shows when the systems AC MAINS supply is normal or failed (refer to *Table 11* on page 16).

When programming in Installer's Programming Mode or using a Master Code function, the MAINS indicator lights to indicate a location value from 10 to 15. The MAINS indicator represents the 10 digit, which is added to the value of the lit zone indicator (for example, if the value programmed in a location is 12, the MAINS and Zone 2 indicators light).

Zone Isolating Mode


Flashing

This indicator (the person) flashes once every 3 sec when you attempt to isolate zones or program zones to automatically isolate for STAY Mode 2.

For more information, refer to:

- *Section 4.11* on page 21 to manually isolate zones.
- *Section 6.1.4* on page 30 to use the Installer Code to set zones to automatically isolated in STAY Mode 2.
- *Section 6.2.5* on page 35 to use the Master Code to set zones to automatically isolate in STAY Mode 2.

Fault Indicator

The fault indicator lights when the system detects a system fault (refer to *Table 12* on page 17). Refer to *Section 4.12 Fault Analysis Mode* on page 22 for more information on system faults.

Each time a new system fault is detected (the fault indicator flashes), the codepad beeps once per minute. Press [AWAY] to stop the beeping and acknowledge the fault.

Programming Mode


Flashing

These two indicators flash when you enter Installer's Programming Mode or use any Master Code function.

OFF Indicator/Zone Sealed

The OFF indicator lights when the system is disarmed and flashes when a zone becomes unsealed when disarmed. The indicator stops flashing when all zones are sealed.

ON Indicator/Zone in Alarm

The ON indicator lights when the system is armed and flashes when an alarm occurs. The indicator resets after a valid User Code is entered.

Audible Indicators

The codepad provides a number of audible indications. Refer to *Table 13* on page 17.

4.0 System Operations

This section explains the general operations of the system: arming and disarming the system in the three modes, isolating zones, initiating codepad alarms, and determining a fault.

4.1 Arming the System in AWAY Mode

Arming the system in AWAY Mode is normally performed when you leave the premises and want all zones ready to detect an intrusion.

There are two different methods to arm the system in AWAY Mode. You can always use the first method. You can use the other method only if Option 2 is enabled in Location 429 (refer to *Section 18.6 Consumer Options 2* on page 75).

If you must isolate a zone(s) before arming the system in AWAY Mode, refer to *Section 4.11 Isolating Zones* on page 21.

Single button arming in AWAY Mode reports as User Code number 16.

To arm the system in AWAY Mode (method one):

Enter your code and press [AWAY].

Two beeps sound, the AWAY indicator lights, and Exit Time starts.

To arm the system in AWAY Mode (method two):

Select Option 2 in Location 429 to enable single button arming in AWAY Mode (refer to *Section 18.6 Consumer Options 2* on page 75).

1. Press and hold [AWAY].
2. When two beeps sound, release the button.
   The AWAY indicator lights and Exit Time starts.

If a zone is not sealed at the end of Exit Time, the zone is automatically isolated and its indicator lights on the remote codepad. The zone becomes an active part of the system again after it is resealed. For example, if a window is open when Exit Time expires, the window is not an active part of the system until it is closed. Opening the window after Exit Time expires causes an alarm.

Forced Arming

Arming the system when a zone is not sealed is known as forced arming. Refer to *Section 14.3.6 Zone Options 2* on page 58 to enable forced arming for each zone.

If the AWAY indicator does not light and a long beep sounds when you attempt to arm the system in AWAY Mode, forced arming is not permitted. If this is the case, you seal all zones or manually isolate them before you can arm the system.

4.2 Disarming the System from AWAY Mode

When you enter the premises after the system is armed in AWAY Mode, you must disarm the system from AWAY Mode to disable detection devices that activate the siren, strobe, and bell outputs.

If there was an alarm before disarming the system from AWAY Mode, a zone indicator flashes to indicate a previous alarm in that zone.

To disarm the system from AWAY Mode:

Enter your code and press [AWAY].

Two beeps sound and the AWAY indicator is extinguished.

4.3 Arming the System in STAY Mode 1

Use STAY Mode 1 when you need to arm the perimeter and unused areas of the premises to detect a would-be intruder from entering the premises, while at the same time moving freely within an automatically isolated area.

Only the installer can program zones to automatically isolate in STAY Mode 1. Refer to *Section 14.3.6 Zone Options 2* on page 58 for more information on setting zones to automatically isolate in STAY Mode 1.

There are two methods to arm your system in STAY Mode 1. You can always use the first method. You can use the other method only if Option 2 is enabled in Location 429 (refer to *Section 18.6 Consumer Options 2* on page 75).

Entry Guard Timer for STAY Mode

When arming the system in STAY Mode 1, an optional entry timer called Entry Guard Timer for STAY Mode can delay the siren, strobe, and bell outputs if a zone that is not automatically isolated activates an alarm. Entry Guard Timer for STAY Mode is the delay time used for all zones, except 24-Hour zones, when the system is armed in STAY Mode 1 or STAY Mode 2.

If the Entry Guard Timer for STAY Mode is programmed and a zone that was not automatically isolated is activated, the codepad beeps twice per sec until the Entry Guard Timer for STAY Mode expires or the system is disarmed. If the alarm is not reset before Entry Guard Timer for STAY Mode expires, the system activates the strobe, bell, and siren outputs.

Single button arming in STAY Mode 1 reports as User Code number 16.

To arm the system from STAY Mode 1 (method one):

Enter your code and press [STAY].
Two beeps sound and the STAY indicator lights. Exit Time starts.

The indicators for any zones that are programmed to automatically isolate in STAY Mode 1 flash until Exit Time expires. At the end of Exit Time, the zone indicators turn off and the codepad sounds one short beep.

To arm the system from STAY Mode 2 (method two):

1. Press and hold [STAY].
2. When two beeps sound, release the button. The STAY indicator is lit and Exit Time starts.

The indicators for any zones programmed to automatically isolate in STAY Mode 1 flash until Exit Time expires. At the end of Exit Time, the zone indicators turn off and the codepad sounds one short beep.

If a zone is not sealed at the end of Exit Time, the zone is automatically isolated and is constantly lit on the remote codepad. The zone becomes an active part of the system again after it is resealed. For example, if a window is open when Exit Time expires, the window does not become an active part of the system until it is closed. Opening the window after Exit Time expires causes an alarm.

Forced Arming

Arming the system when a zone is not sealed is known as forced arming. Refer to *Section 14.3.6 Zone Options 2* to enable forced arming for each zone.

If the STAY indicator does not light and a long beep sounds when you attempt to arm the system in STAY Mode 1, forced arming is not permitted. If this is the case, you must seal all zones or manually isolate them before you can arm the system.

4.4 Disarming the System from STAY Mode 1

There are two methods to disarm the system from STAY Mode 1. You can always use the first method. You can use the other method only if Option 4 is selected in Location 429 (refer to *Section 18.6 Consumer Options 2* on page 75).

To disarm the system from STAY Mode 1 (method one):

Enter your code and press [STAY].

Two beeps sound and the STAY indicator is extinguished. The system is now disarmed.

You cannot use method two unless both Options 2 and 4 are enabled in Location 429.

To disarm the system from STAY Mode 1 (method two):

A flashing zone indicator represents a previous alarm in that zone. If this is the case, a valid User Code is required to disarm the system using method one. To enable method two, select Option 4 in Location 429 (refer to *Section 18.6 Consumer Options 2* on page 75).

Press and hold [STAY].

When two beeps sound, release the button. The STAY indicator is extinguished and the system is disarmed.

Single button disarming from STAY Mode 1 reports as User Code 16.

4.5 Arming the System in STAY Mode 2

Use STAY Mode 2 to arm the perimeter and unused areas of the premises to detect an intruder, while at the same time being able to move freely within an automatically isolated area.

You can program zones to automatically isolate in STAY Mode 2 using an Installer Code function (refer to *Section 6.1.4* on page 30) or a Master Code function (*Section 6.2.5* on page 35).

Entry Guard Timer for STAY Mode

When arming the system in STAY Mode 2, you can use an optional entry timer called Entry Guard Timer for STAY Mode to delay the siren, strobe, and bell outputs if a zone that is not automatically isolated activates an alarm. Entry Guard Timer for STAY Mode is the delay time used for all zones, except 24-Hour zones, when the system is armed in STAY Mode 1 or STAY Mode 2.

If the Entry Guard Timer for STAY Mode is programmed and a zone that was not automatically isolated is activated, the codepad beeps twice per sec until the Entry Guard Timer for STAY Mode expires or the system is disarmed. If the alarm is not reset before Entry Guard Timer for STAY Mode expires, the strobe, bell, and siren outputs are activated into alarm.

Single button disarming from STAY Mode 2 reports as User Code 16.

To arm the system in STAY Mode 2:

1. Press and hold [0].
2. When two beeps sound, release the button.
   The STAY indicator lights and the Exit Time starts.

The indicators for any zones programmed to automatically isolate in STAY Mode 2 flash until the Exit Time expires. At the end of Exit Time, the zone indicators turn off and the codepad sounds one short beep.

If a zone is not sealed at the end of Exit Time, the zone is automatically isolated and lights constantly on the remote codepad. The zone becomes an active part of the system again after it is resealed. For example, if a window is open when Exit Time expires, the window does not become an active part of the system until it is closed. Opening the window after Exit Time expires causes an alarm.

Forced Arming

Arming the system when a zone is not sealed is known as forced arming. Refer to *Section 14.3.6 Zone Options 2* on page 58 to enable forced arming for each zone.

If the STAY indicator does not light and a long beep sounds when attempting to arm the system, forced arming is not permitted. If this is the case, you must seal all zones or manually isolate them before you can arm the system.

4.6 Disarming the System from STAY Mode 2

There are two methods to disarm the system from STAY Mode 2. You can always use the first method. You can use the other method only if Option 4 is enabled in Location 429 (refer to *Section 18.6 Consumer Options 2* on page 75).

You cannot use method two unless both Options 2 and 4 are enabled in Location 429.

To disarm the system from STAY Mode 2 (method one):

Enter your code and press [STAY].

Two beeps sound and the STAY indicator turns off. The system is now disarmed.

To disarm the system from STAY Mode 2 (method two):

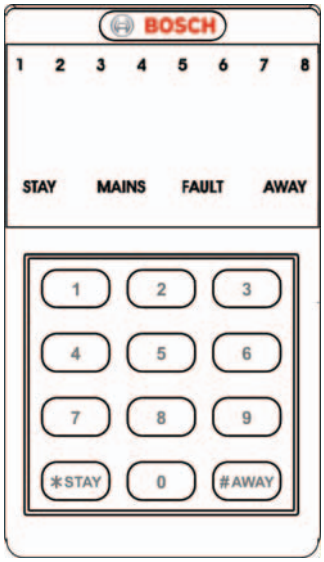
A flashing zone indicator represents a previous alarm in that zone. If this is the case, a valid User Code is required to disarm the system using method one. To enable method two, select Option 4 in Location 429 (refer to *Section 18.6 Consumer Options 2* on page 75).

1. Press and hold [0].
2. When two beeps sound, release the button.
   The STAY indicator turns off and the system is disarmed.

Single button disarming from STAY Mode 2 reports as User Code16.

4.7 Codepad Duress Alarm

Figure 3: ICP-CP508W LED Codepad Showing Audible Alarm Buttons



A codepad Duress Alarm is used as a silent holdup alarm when 9 is added to the end of a valid User Code used to disarm the system. If a User Code has a priority level that only allows arming, that User Code can transmit a Duress Alarm when the system is armed.

A Duress Alarm (Contact ID Event Code 121) is useful only if your system reports to a monitoring station or pocket pager because domestic reporting format cannot decipher the type of alarm that occurred. You can disable the codepad Duress Alarm Report by programming 0 in Location 336 (refer to *Section 15.8 Codepad Duress Report* on page 61). You can select Option 2 in Location 430 to use 3 instead of 9 to activate a Duress Alarm (refer to *Section 18.7 Consumer Options 3* on page 75).

4.8 Codepad Panic Alarm

An audible codepad Panic Alarm activates when a user presses either [1] and [3] or [STAY] and [AWAY] simultaneously.

Select Option 1 in Location 425 to program the codepad Panic Alarm as silent (refer to *Section 18.2 System Options 2* on page 73). To disable the codepad Panic Alarm Report, program Locations 337 and 338 to 0 (refer to *Section 15.9 Codepad Panic Report* on page 61). A codepad Panic Alarm transmits Contact ID Event Code 120 if the system reports to a base ation receiver.

4.9 Codepad Fire Alarm

An audible codepad Fire Alarm activates when a user presses [4] and [6] on the remote codepad simultaneously. A distinct fire sound is emitted through the horn speaker to indicate this type of alarm. The fire sound is different than the burglary sound.

Select Option 2 in Location 425 to program the codepad Fire Alarm as silent (refer to *Section 18.2 System Options 2* on page 73). To disable the codepad Fire Alarm Report, program Locations 339 and 340 to 0 (refer to *Section 15.10 Codepad Fire Report* on page 61). A codepad Fire Alarm transmits a Contact ID Event Code 110 to a base station receiver.

4.10 Codepad Medical Alarm

An audible codepad Medical Alarm activates when a user presses [7] and [9] simultaneously.

Select Option 4 in Location 425 to program codepad Medical Alarm as silent (refer to *Section 18.2 System Options 2* on page 73). To disable reporting of the codepad Medical Alarm Report, program Locations 341 and 342 to 0 (refer to *Section 15.11 Codepad Medical Report* on page 62). A codepad Medical Alarm transmits a Contact ID Event Code 100 to a base station receiver.

4.11 Isolating Zones

Isolating allows you to manually disable one or more zones before arming the system in AWAY Mode, STAY Mode 1, or STAY Mode 2. When a zone is isolated, access is allowed into that zone when the system is armed without activating an alarm.

For example, you might want to isolate a zone before arming the system because a zone passive infrared (PIR) detector is activating false alarms or because you need to leave a pet inside a particular zone while you are away.

You can isolate zones using one of two methods. One method requires a valid User Code and the other does not. The ability to isolate zones is determined by the priority level assigned to each User Code holder. Some User Code holders cannot isolate zones. Refer to *Section 13.3 User Code Priority* on page 52 for more information.

Zones manually isolated using this method transmit a Zone Bypass Report (Contact ID Event Code 570) for each isolated zone when the system is armed. A Zone Bypass Restore Report is transmitted when the system is disarmed.

4.11.1 Standard Isolating

Standard isolating allows any operator to isolate zones because no code is required.

1. Press [STAY] twice.
   Three beeps sound.

2. Enter the number of the zone to isolate and press [STAY].

   The indicator for the zone flashes.

   24-Hour zones are automatically isolated as soon as you press [STAY]. All other Burglary Zones are automatically isolated only after the system is armed.

3. Repeat *Step 2* for each zone you want to isolate.

> As each zone is selected to isolate, the corresponding zone indicator flashes. If you make a mistake, enter the incorrect zone number and press [STAY]. This zone is no longer selected to isolate and the zone indicator turns off.

4. Press [AWAY].

   Two beeps sound and the system returns to the disarmed state.

   The indicators for the selected zones continue to flash until the next time the system is disarmed.

Example

To manually isolate zones 1, 3, and 4, press:

[STAY][STAY][1][STAY][3][STAY][4][STAY][AWAY]

4.11.2 Code to Isolate

The code to isolate method permits only those User Code holders with a priority level that includes Code to Isolate. The standard isolating method is disabled for any User Code with this priority level.

1. Press [STAY].
2. Enter your code and press [STAY].

   Three beeps sound and the STAY indicator flashes.

   If you attempt to enter Isolating Mode with a User Code that is not set for Code to Isolate, the system ignores the attempt.

3. Enter the number of the zone to isolate and press [STAY].

   The indicator for the zone flashes.

   24-Hour zones are automatically isolated as soon you press [STAY]. All other burglary zones are automatically isolated only after the system is armed.

4. Repeat *Step 3* for each zone to isolate.

> As each zone is selected to isolate, the corresponding zone indicator flashes. If you make a mistake, enter the incorrect zone number and press [STAY]. This zone is no longer selected to isolate and the zone indicator turns off.

5. Press [AWAY].

   Two beeps sound and the system returns to the disarmed state.

   The indicators for the selected zones continue to flash until the next time the system is disarmed.

Example

To manually isolate zones 1, 3, and 4, press:

[STAY][User Code][STAY][1][STAY][3][STAY][4][STAY][AWAY]

4.12 Fault Analysis Mode

Whenever a system fault occurs, the FAULT or MAINS indicator flashes and the codepad beeps once per minute.

If the MAINS indicator flashes, the AC MAINS supply is disconnected from the control panel. Refer to *AC MAINS Failure* on page 24.

To enter Fault Analysis Mode to determine a system fault other than the AC MAINS supply:

1. Press and hold [5] until two beeps sound.

   The FAULT indicator remains lit and the STAY and AWAY indicators flash.

   The lit zone indicators indicate the type of fault that occurred. Refer to *Table 14*.

2. To exit from the Fault Analysis Mode, press [AWAY].

   The STAY and AWAY indicators turn off and the FAULT indicator remains lit.

Table 14: Fault Indicators

Indicator	Fault Description
1	Low battery
2	Date and time
3	Sensor watch
4	Horn speaker disconnected
5	Telephone line fault
6	EEPROM fail
7	AUX Power Supply fail
8	Communications failure

4.13 Fault Descriptions

1 – Low Battery

A low battery fault occurs when the battery supply voltage falls below 11.2 VDC or when a Dynamic Battery Test detects a low capacity battery. This fault clears after a successful Dynamic Battery Test. The system performs a Dynamic Battery Test every 4 hours after power is connected to the control panel and every time the system is armed.

When reporting to the base station receiver, the control panel sends a Battery Test Failure Report (Contact ID Event Code 309) to indicate the low battery fault.

2 – Date and Time

The date and time fault occurs every time power is removed from the control panel. This type of fault causes the FAULT indicator to flash only if the Auto Arming Time is programmed in Locations 414 to 417 (refer to *Section 17.12 Auto Arming Time* on page 72). If this timer is not programmed, a date and time fault is indicated only when you enter Fault Analysis Mode. This fault clears after you program the date and time. Refer to *Section 6.2.7 Setting the Date and Time* on page 36 for more information.

3 – Sensor Watch

A sensor watch fault occurs when one of the detection devices stops working or fails to detect movement during the programmed time period when the system is disarmed. The sensor watch fault clears after the registered zone is unsealed and resealed.

To determine the zone that registered the sensor watch fault:

1. In Fault Analysis Mode, press and hold [5]. The indicator for the faulted zone lights.
2. Release the button.

Program the Sensor Watch Time in Locations 408 and 409 (refer to *Section 17.7 Sensor Watch Time* on page 71). To select the zones to be monitored for sensor watch, refer to *Section 14.3.4 Zone Options 1* on page 57.

When reporting to the base station receiver, the control panel sends a Self Test Fail Report (Contact ID Event Code 307) to indicate the sensor watch fault.

4 – Horn Speaker Monitor

A horn speaker monitor fault occurs when the horn speaker is disconnected from the control panel. This fault clears when the horn speaker is reconnected. To enable monitoring of the horn speaker, select Option 2 in Location 424 (refer to *Section 18.1 System Options 1* on page 73).

5 – Telephone Line Fault

A telephone line fault occurs when the telephone line disconnects from the control panel for longer than 40 sec. This fault can only occur if Option 1 is selected in Location 176 (refer to *Section 11.11 Telephone Line Fault Options* on page 49). The fault clears when the telephone line reconnects for longer than 40 sec.

6 – EEPROM Fail

An EEPROM Fail is registered when the control panel detects an internal checksum error. You must remove power to the control panel and reset the control panel to default values to clear this fault.

7 – AUX Power Supply Fail

This fault occurs when either the 1 A, 12 V accessories AUX power supply or the 1 A codepad AUX power supply fails. Ten sec after the AUX power supply fails, the control panel automatically sends a System Trouble code (Contact ID Event Code 300) to the base station receiver. Ten sec after the PTC is reset, the control panel sends a Trouble Restore Report.

If both 1 A AUX power supplies fail, only one system Trouble Report is sent to the base station receiver. The Trouble Restore Report is sent only after both AUX power supplies are reset.

8 – Communication Failure

A communication failure fault is registered if calls to the primary and secondary telephone numbers for Receiver 1 or Receiver 2 are unsuccessful.

To determine which receiver failed to report:

1. In Fault Analysis Mode, press and hold [8].
   Two beeps sound.
2. Release the button.
   If Receiver 1 failed to report, the Zone 1 indicator lights. If Receiver 2 failed to report, the Zone 2 indicator lights.

If the primary and secondary telephone numbers for Receiver 1 or Receiver 2 are set up for base reporting, Receiver 1 and Receiver 2 can each try up to twelve calls, per event, to the base station receiver. If the primary and secondary telephone numbers are programmed for both Receiver 1 and Receiver 2, the two receivers together can try up to 24 calls if the event is programmed to report on both receivers.

The control panel tries to call the base station receiver up to six times using both the primary and secondary telephone numbers (three times if only the primary telephone number is programmed). If the control panel fails to communicate to the base station receiver, a communications fault occurs. The control panel waits 10 min before it tries to report to the base station receiver up to six more times. The communication fault resets after the next successful call.

If Receiver 1 or Receiver 2 is programmed for domestic reporting, the control panel does not show a fault if it fails to report after calling six times.

If Option 1 in Location 145 is enabled (refer to *Section 12.1 Dialer Options 1* on page 50) and no telephone numbers are programmed, no fault occurs.

AC MAINS Failure

An AC MAINS supply failure automatically flashes the MAINS indicator. If the AC MAINS supply is disconnected continuously longer than 2 min, the remote codepad beeps the codepad buzzer once per minute. If the control panel is programmed to report an AC MAINS fail to a base station receiver, it sends an AC Fail Report (Contact ID Event Code 301).

The MAINS indicator stops flashing when the AC MAINS supply is reconnected. When the AC MAINS supply is continuously connected for 2 min, the codepad stops the once per minute beep and the control panel sends an AC Fail Restore Report to the base station receiver.

If the Enable AC Fail in 1 Hour option (1) is selected in Location 426 (refer to *Section 18.3 System Options 3* on page 74), the MAINS indicator flashes when the AC MAINS supply is disconnected, but does not activate the dialer or the codepad buzzer unless the AC MAINS supply is disconnected continuously for 1 hour.

If the Ignore AC MAINS Fail option (2) is selected in Location 426 (refer to *Section 18.3 System Options 3* on page 74), the codepad does not indicate when the AC MAINS supply fails, but the control panel still sends an AC Fail Report, if enabled.

5.0 Remote Radio Transmitter Operations

You can operate the ICP-CC404 Control Panel remotely using hand-held remote radio transmitters. You can use either a two-channel or a four-channel hand-held transmitter to operate the system.

Both the two-channel and four-channel hand-held transmitters can remotely arm and disarm the system in AWAY Mode or STAY Mode 1, and can activate remote Panic Alarms. The four-channel hand-held transmitter can also operate the control panel's programmable outputs to activate a garage door or outside lights, for example.

Before a hand-held radio transmitter can operate the control panel, you must teach the transmitter's radio code to the control panel. Refer to *Section 5.3 Changing or Deleting Remote Radio User Codes* for more information.

5.1 Indications from Remote Radio Transmitter Operations

When using the two-channel or four-channel hand-held transmitter to operate the system, the horn speakers or the strobe can provide audible or visual indications, or both. These indications allow using the system from outside the premises with confidence. The installer can program audible and visual indication beeps by selecting Options 4 and 8 in Location 424 (refer to *Section 18.1 System Options 1* on page 73).

Table 15: Horn Speaker Indication Beeps for Remote Operations

No. of Beeps	System Status
One	System disarmed
Two	System armed in AWAY Mode
One two-tone beep	System armed in STAY Mode 1

Table 16: Strobe Indications for Remote Operations

Strobe Duration	System Status
3 sec	System disarmed
6 sec	System armed in AWAY Mode
6 sec	System armed in STAY Mode 1

5.2 Remote Radio User Code Priority Levels

You can only program the remote radio hand-held transmitters to operate as User Codes 9 to 16. You can assign priority levels to each hand-held transmitter, for example, allowing the transmitter to arm the system only, or to arm and disarm the system. Refer to *Section 13.3 User Code Priority* on page 52 for more information.

Before a hand-held radio transmitter can operate the control panel, you must teach the transmitter's radio code to the control panel. Refer to *Section 5.3 Changing or Deleting Remote Radio User Codes* for more information.

5.3 Changing or Deleting Remote Radio User Codes

You can use up to eight remote radio hand-held transmitters (User Codes 9 to 16) to operate the system. Before the control panel accepts a signal from a remote radio hand-held transmitter, the control panel must learn the transmitter's code.

You can substitute the Installer Code for the Master Code to change or delete remote radio User Codes.

To add or change a remote radio User Code:

1. Enter the Master Code and press [1][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash.
2. Enter the user number (9 to 16) you want to add or change and press [AWAY].
   Two beeps sound and the corresponding zone indicators light. Refer to *Table 17*.

Table 17: Codepad Indicators for Remote Radio User Numbers

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

3. Press any of the [TRANSMIT] buttons on the hand-held transmitter to allow the control panel to learn transmitter's ID code.
   Two beeps sound and the STAY and AWAY indicators turn off.
4. Repeat *Steps 1* through *3* to add or change another remote radio User Code.

This function ends automatically if you do not press a button within 60 sec or if you press [AWAY].

One long beep indicates that the code already exists or you selected an incorrect user number.

To delete a remote radio User Code:

1. Enter the Master Code and press [1][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash.
2. Enter the user number (9 to 16) you want to delete and press [AWAY].
   Two beeps sound and the corresponding zone indicators light. Refer to *Table 17*.
3. Press [STAY] to delete the User Code.
   Two beeps sound and the STAY and AWAY indicators turn off.
4. Repeat *Steps 1* through *3* to delete another remote radio User Code.

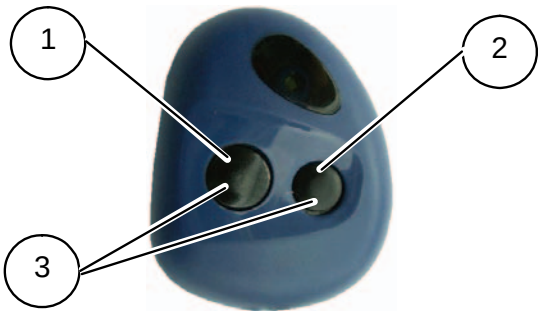
This function ends automatically if you do not press a button within 60 sec or if you press [AWAY].

One long beep indicates that you selected an incorrect user number.

5.4 Two-Channel Remote Radio Hand-Held Transmitter Operations

Because all operations using the two-button remote radio hand-held transmitter are fixed after the control panel learns the transmitter's code, no programming is required for the transmitter buttons.

Figure 4: RE012/E: 2-Channel Keyfob Transmitter



1 – Button 1: Arm or disarm in AWAY Mode
2 – Button 2: Arm or disarm STAY Mode
3 – Buttons 1 and 2: Press both buttons at the same time to activate Panic alarm.

5.4.1 Arming in AWAY Mode

Press and hold the black button for 2 sec.
Two beeps sound on the remote codepad and the AWAY indicator lights. Exit Time starts.

If horn speaker indication beeps are enabled, two beeps sound from the horn speaker. If strobe indications are enabled, the strobe flashes for 6 sec to indicate the system is armed.

5.4.2 Disarming from AWAY Mode

Press and hold either the black or green button for 2 sec.
Two beeps sound on the remote codepad and the AWAY indicator turns off.

If horn speaker indication beeps are enabled, one beep sounds from the horn speaker. If strobe indications are enabled, the strobe flashes for 3 sec to indicate the system is disarmed.

5.4.3 Arming in STAY Mode 1

Press and hold the green button for 2 sec.
Two beeps sound on the remote codepad and the STAY indicator lights. Exit Time starts.

If horn speaker indication beeps are enabled, one two-tone beep sounds from the horn speaker. If strobe indications are enabled, the strobe flashes for 6 sec to indicate the system is armed.

5.4.4 Disarming from STAY Mode 1

Press and hold either the black or green button for 2 sec.
Two beeps sound on the remote codepad and the STAY indicator is extinguished.

If horn speaker indication beeps are enabled, one beep sounds from the horn speaker. If strobe indications are enabled, the strobe flashes for 3 sec to indicate the system is disarmed.

5.4.5 Panic Alarm

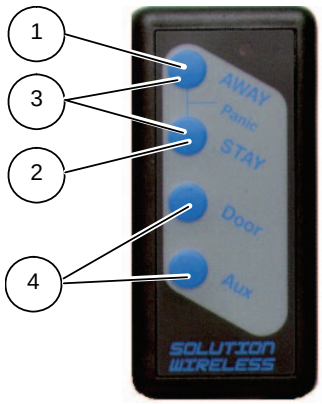
Press and hold both the black and green buttons together for 2 sec.
An audible Panic Alarm is initiated that activates the horn speaker, strobe, and internal sirens.

If Option 1 is selected in Location 425 (refer to *Section 18.2 System Options 2* on page 73), the remote radio Panic Alarm is also silent.

5.5 Four-Channel Remote Radio Hand-Held Transmitter Operations

Because all operations using the four-channel remote radio hand-held transmitter are fixed after the control panel learns the hand-held transmitter's code, no programming is required for the transmitter buttons. You can use the DOOR and AUX buttons on the transmitter to operate the control panel's programmable outputs (garage door or outside lights, for example).

Figure 5: RE013/E: 4-Channel Keyfob Transmitter



1 – Button 1: Arm or disarm in AWAY Mode
2 – Button 2: Arm or disarm in STAY Mode
3 – Buttons 1 and 2: Press both buttons at the same time to activate Panic alarm.
4 – Buttons 3 and 4: Your security company can program these buttons for optional operation, such as operating a garage door.

5.5.1 Arming in AWAY Mode

Press and hold [AWAY] for 2 sec.
Two beeps sound on the remote codepad and the AWAY indicator lights. Exit Time starts.

If horn speaker indication beeps are enabled, two beeps sound from the horn speaker. If strobe indications are enabled, the strobe flashes for 6 sec to indicate the system is armed.

5.5.2 Disarming from AWAY Mode

Press and hold either [AWAY] or [STAY] for 2 sec.
Two beeps sound on the remote codepad and the AWAY indicator is extinguished.

If horn speaker indication beeps are enabled, one beep sounds from the horn speaker. If strobe indications are enabled, the strobe flashes for 3 sec to indicate the system is disarmed.

5.5.3 Arming in STAY Mode 1

Press and hold STAY for 2 sec.
Two beeps sound on the remote codepad and the STAY indicator lights. Exit Time starts.

If horn speaker indication beeps are enabled, one two-tone beep sounds from the horn speaker. If strobe indications are enabled, the strobe flashes for 6 sec to indicate the system is armed.

5.5.4 Disarming from STAY Mode 1

Press and hold [AWAY] or [STAY] for 2 sec.
Two beeps sound on the remote codepad and the STAY indicator is extinguished.

If horn speaker indication beeps are enabled, one beep sounds from the horn speaker. If strobe indications are enabled, the strobe flashes for 3 sec to indicate the system is disarmed.

5.5.5 Panic Alarm

Press and hold both [AWAY] and [STAY] together for 2 sec.
An audible Panic Alarm is initiated that activates the horn speaker, strobe, and internal sirens.

If Option 1 is selected in Location 425 (refer to *Section 18.2 System Options 2* on page 73), the remote radio Panic Alarm is also silent.

5.5.6 Remote Outputs

The [DOOR] and [AUX] buttons on the four-channel hand-held transmitter can operate two remote outputs. Only the installer can program these outputs. You can use the Output Event Types listed in *Table 18*. Refer *Section 16.0 Programmable Outputs* for more information.

Table 18: Remote Output Event Types

Output Event Type	Description	Page
2,11	Radio Control Output 1	67
2,12	Radio Control Output 2	67
2,13	Radio Control Output 1 – not armed in AWAY Mode	68
2,14	Radio Control Output 2 – not armed in AWAY Mode	68

To turn Output 1 on:

Press and hold [DOOR] for 2 sec.
Output 1 turns on.

To turn Output 1 off:

Press and hold [DOOR] for 2 sec.
Output 1 turns off.

To turn Output 2 on:

Press and hold [AUX] for 2 sec.
Output 2 turns on.

To turn Output 2 off:

Press and hold [AUX] for 2 sec.
Output 2 turns off.

All reset times for the [DOOR] and [AUX] buttons are referenced to Polarities 1 and 8. Reset times vary depending on the polarity used.

6.0 System Functions

This section explains more advanced features, such as Installer Code, Master Code, and hold-down functions used for testing and regular maintenance of the system.

6.1 Installer Code Functions

Installer Code functions allow the installer to perform various system tests and tasks without knowing a Master Code.

To access the required Installer Code function, enter the Installer Code and corresponding function digit, and press [AWAY]. The Installer Code functions are listed in *Table 19*.

You can only access these functions when the system is disarmed.

Table 19: Installer Code Functions

Function	Description
0	Reserved
1	Set the number of days until the first Test Report (*Section 6.1.1*)
2	Change domestic telephone numbers (*Section 6.1.2*)
3	Change the Telco arming or disarming sequence (*Section 6.1.3* on page 28)
4	Setting STAY Mode 2 zones (*Section 6.1.4* on page 30)
5	Satellite Siren (EDMSAT) Service Mode (*Section 6.1.5* on page 30)
6	Turn Telephone Monitor Mode on and off (*Section 6.1.6* on page 31)
7	Walk Test Mode (*Section 6.1.7* on page 31)
8	Event Memory Recall Mode (*Section 6.1.8* on page 31)
9	Reserved

6.1.1 Set the Number of Days until the First Test Report

This function determines when the system sends the first Test Report (Contact ID Event Code 602). If you do not use this Installer Code Function, the first Test Report is sent to the base station receiver after the repeat interval programmed in Location 366 (refer to *Section 15.21 Test Reporting Time* on page 63). If you want the system to send the first Test Report sooner than the repeat interval, use this function to set when the first Test Report is sent.

To set the first Test Report:

1. Enter the Installer Code and press [1][AWAY]. Three beeps sound and the STAY and AWAY indicators flash.
2. Enter the number of days (1 to 15) until the first Test Report is sent and press [AWAY]. Two beeps sound and the STAY and AWAY indicators turn off. The system returns to the disarmed state.

> Each time you enter Installer's Programming Mode, the first Test Report time defaults to the repeat interval set in Location 366.
>
> The number of days counts down by one at 2400 hours as set in Locations 901 to 904 (refer to *Section 17.15 System Time* on page 72).

Example

If the repeat interval is set to 7 days, but you want the first Test Report to be sent in 2 days, enter:

[1 2 3 4 1][AWAY][2][AWAY]

6.1.2 Changing Domestic Phone Numbers

When the system is set up for domestic dialing, this function allows the installer to view and program the telephone numbers that the system calls if an alarm occurs. Refer to *Section 9.0 Domestic Dialing* on page 40 for more information.

To change domestic phone numbers:

1. Enter the Installer Code and press [2][AWAY]. Three beeps sound and the STAY and AWAY indicators flash.

   If there are telephone numbers programmed, they appear one digit at a time using the remote codepad indicators. Refer to *Table 21* on page 28 for the indicators and their meanings.

   If there are no telephone numbers programmed, an additional two beeps sound after entering this mode. These two beeps normally sound after you enter the last digit of the last phone number.
2. Enter the first phone number.

   Each digit appears as you enter it.
3. If you are programming another phone number, press [STAY][4] to separate the end of one phone number and the beginning of the next.

   If you are not programming other numbers, go to *Step 5*.
4. Repeat *Steps 2* and *3* to program another phone number.
5. Press [AWAY] to exit from this mode.

Table 20: Domestic Dialing Digits

Digit Required	Number to Program	Digit Required	Number to Program
0	0	8	8
1	1	9	9
2	2	10	refer to 0
3	3	*	* 1
4	4	#	* 2
5	5	4 sec pause	* 3
6	6	break	* 4
7	7	15	* 5

Example

If you want to program two separate telephone numbers (9672 1777 and 9672 1233), enter:

[1 2 3 4 2][AWAY][9 6 7 2 1 7 7 7][STAY]
[4 9 6 7 2 1 2 3 3][AWAY]

You can suspend domestic dialing at any time (for example, you are moving house and do not want the system to continue calling your work place or mobile phone).

To disable domestic dialing:

Enter the Installer Code and press [2][AWAY] [STAY][4][AWAY].

Table 21: Codepad Indicators When Changing Phone Numbers

	Zone Indicators								MAINS
Digit	1	2	3	4	5	6	7	8	Indicator
0									X
1	X								
2		X							
3			X						
4				X					
5					X				
6						X			
7							X		
8								X	
9	X							X	
11	X								X
12		X							X
Pause			X						X
Break				X					X
15					X				X

6.1.3 Change Telco Arming or Disarming Sequence

Program the call forward sequence to automatically operate when you arm the system in AWAY Mode. This feature is only available if the call forward option is available from your telecommunication provider.

When arming the system in AWAY Mode, the control panel automatically dials the telecommunication exchange to redirect all calls to your mobile phone, pocket pager, or answering service. When activated, your telephone still allows outgoing calls.

Contact your telecommunications provider for more information on call forward operations.

Table 22: Telco Arming or Disarming Dialing Digits

Digit Required	Number to Program	Digit Required	Number to Program
0	0	8	8
1	1	9	9
2	2	10	refer to 0
3	3	11	* 1
4	4	12	* 2
5	5	4 sec pause	* 3
6	6	break	* 4
7	7	15	* 5

Table 23: Codepad Indicators When Changing the Telco Arming or Disarming Sequence

	Zone Indicators								MAINS
Digit	1	2	3	4	5	6	7	8	Indicator
0									X
1	X								
2		X							
3			X						
4				X					
5					X				
6						X			
7							X		
8								X	
9	X							X	
11	X								X
12		X							X
Pause			X						X
Break				X					X
15					X				X

To program the Telco arming sequence – easy call forward (no answer on):

1. Enter the Installer Code and press [3][AWAY].

   Three beeps sound and the STAY and AWAY indicators flash.
2. Press [1][AWAY] to change the Telco arming sequence. Three beeps sound.

   If a call forwarding sequence is already programmed, the sequence appears one digit at a time using the remote codepad indicators. Refer to *Table 23* on page 29 for the indicators and their meanings.

   If there is no call forward sequence programmed, an additional two beeps sound after entering this mode. These two beeps normally sound after the last digit of the call forward sequence is displayed.
3. Press [STAY][1 6 1] and enter the phone number to which you want calls from the control panel diverted.
4. Press [STAY][2][AWAY].

   Two beeps sound and the system returns to the disarmed state.

Example

If you want to automatically divert all unanswered incoming calls to another telephone number (for example, 9672 1777) when the system is armed in AWAY Mode, enter:

[1 2 3 4 3][AWAY][1][AWAY][STAY]

[1 6 1 9 6 7 2 1 7 7 7][STAY][2][AWAY]

You can suspend the Telco arming sequence at any time.

To disable the Telco arming sequence:

Enter the Installer Code and press [3][AWAY][1][AWAY][STAY][4][AWAY].

To program the Telco disarming sequence – easy call forward (no answer off):

1. Enter the Installer Code and press [3][AWAY].

   Three beeps sound and the STAY and AWAY indicators flash.
2. Press [2][AWAY] to change the Telco disarming sequence.

   Three beeps sound.

   If a Telco disarming sequence is already programmed, the sequence appears one digit at a time using the remote codepad indicators. Refer to *Table 23* on page 29 for the indicators and their meanings.

   If there is no Telco disarming sequence programmed, an additional two beeps sound after entering this mode. These two beeps normally sound after the last digit of the sequence is shown.
3. Press [STAY][2 6 1][STAY][2][AWAY].

   Two beeps sound and the system returns to the disarmed state.

You can suspend the Telco disarming sequence at any time.

To disable the Telco disarming sequence:

Enter the Installer Code and press [3][AWAY][2] [AWAY][STAY][4][AWAY].

To program the Telco arming sequence – easy call forward (immediate on):

1. Enter the Installer Code and press [3][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash.
2. Press [1][AWAY] button to change the Telco arming sequence. Three beeps sound.
   If a call forwarding sequence is already programmed, the sequence appears one digit at a time using the remote codepad indicators. Refer to *Table 23* on page 29 for the indicators and their meanings.
   If there is no call forward sequence programmed, an additional two beeps sound after entering this mode. These two beeps normally sound after the last digit of the call forward sequence is shown.
3. Press [STAY][1 2 1] and enter the phone number to which you want calls from the control panel diverted.
4. Press [STAY][2][AWAY].
   Two beeps sound and the system returns to the disarmed state.

Example

If you want to automatically divert all incoming calls to another telephone number (for example, 9672 1777) when the system is armed in AWAY Mode, enter:

[1 2 3 4 3][AWAY][1][AWAY][STAY]

[1 2 1 9 6 7 2 1 7 7 7][STAY][2][AWAY]

You can suspend the Telco arming sequence at any time.

To disable the Telco arming sequence:

Enter the Installer Code and press [3][AWAY][1] [AWAY][STAY][4][AWAY].

To program the Telco disarming sequence – easy call forward (immediate off):

1. Enter the Installer Code and press [3][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash.
2. Press [2][AWAY] to change the Telco disarming sequence.
   Three beeps sound.
   If a Telco disarming sequence is already programmed, the sequence appears one digit at a time using the remote codepad indicators. Refer to *Table 23* for the indicators and their meanings.
   If there is no Telco disarming sequence programmed, an additional two beeps sound after entering this mode. These two beeps normally sound after the last digit of the sequence appears.
3. Press [STAY][2 2 1][STAY][2][AWAY].
   Two beeps sound and the system returns to the disarmed state.

You can suspend the Telco disarming sequence at any time.

To disable the Telco disarming sequence:

Enter the Installer Code and press [3][AWAY][2] [AWAY][STAY][4][AWAY].

6.1.4 Setting STAY Mode 2 Zones

This function allows the installer to select the zones that are automatically isolated when the system is armed in STAY Mode 2.

To arm the system in STAY Mode 2, press and hold [0] until two beeps sound.

Refer to *Section 6.3.3* on page 37 or *Section 4.5 Arming the System in STAY Mode 2* on page 17 for more information.

To set STAY Mode 2 zones:

1. Enter the Installer Code and press [4][AWAY].
   Three beeps sound and the STAY indicator flashes.
2. Enter the number of the zone you want to automatically isolate and press [STAY].
   The corresponding zone indicator flashes.
3. Repeat *Step 2* for each zone you want to select.

As you select each zone to isolate, the corresponding zone indicator flashes. If you make a mistake, enter the incorrect zone number and press [STAY]. This zone is no longer selected to isolate and the zone indicator turns off.

4. Press [AWAY].
   Two beeps sound and the system returns to the disarmed state.
   The indicators for the zones you selected and the STAY indicator turn off.

Example

If you want to select zones 2, 5, and 6, enter:

[1 2 3 4 4][AWAY][2][STAY][5][STAY][6][STAY] [AWAY]

You can disable all zones selected to automatically isolate for STAY Mode 2 at any time.

To disable STAY Mode 2 zones:

Enter the Installer Code and press [4][AWAY] [AWAY].

6.1.5 Satellite Siren Service Mode

If the SS914 Satellite Siren (EDMSAT) is connected to Output 1, this function allows you to perform service work on the system without activating the satellite siren. The satellite siren returns to its normal working state the next time the system is armed.

To enter Satellite Siren Service Mode:

Enter the Installer Code and press [5][AWAY].

Three beeps sound.

6.1.6 Turning Telephone Monitor Mode On and Off

Telephone Monitor Mode allows you to use the remote codepad for visual representation of data transmissions between the control panel and the base station receiver. The dialing sequence is also shown in this mode.

The codepad beeps once every 2 sec when Telephone Monitor Mode is active, whether the system is in Installer's Programming Mode or normal operating mode. The first five indicators show the progressive steps during a transmission to the base station receiver.

Table 24: Telephone Monitor Mode Indications

Zone LED	Dialing Event
1	Telephone line seized
2	Dialing phone number
3	Handshake received
4	Data being transmitted
5	Kiss-off received
None	Telephone line released

To turn Telephone Monitor Mode on:

Enter the Installer Code and press [6][AWAY].

Three beeps sound.

To turn Telephone Monitor Mode off:

Enter the Installer Code and press [6][AWAY].

Two beeps sound.

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

6.1.7 Walk Test Mode

Walk Test Mode allows you to test detection devices to ensure they are functioning correctly. Before activating Walk Test Mode, isolate any zones that are not required for testing. Refer to *Section 4.11 Isolating Zones* on page 21 for more information.

To enter Walk Test Mode:

1. Enter the Installer Code and press [7][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash. The codepad beeps once per sec when Walk Test Mode is active.
2. Unseal and seal the zones to be tested.
   The codepad sounds one long beep and the horn speaker sounds one short beep each time a zone is sealed or unsealed.
3. Press [AWAY] to exit from this function.
   Two beeps sound and the STAY and AWAY indicators turn off. The system returns to the disarmed state.

6.1.8 Event Memory Recall Mode

This function allows you to play back the last 40 system events that occurred. Event Memory Recall Mode reports all alarms and each arming or disarming of the system and helps with troubleshooting system faults. The events are shown using the codepad indicators.

To enter Event Memory Recall Mode:

Enter the Installer Code and press [8][AWAY]. Three beeps sound. The events are played back by the codepad indicators in reverse chronological order.

Example

If the events occurred in the following order:

1. System armed in AWAY Mode
2. Alarm in Zone 3
3. Alarm in Zone 4
4. System disarmed

The alarm memory plays back in this order:

1. All indicators off except MAINS (System disarmed)
2. Zone 4 and AWAY indicators light (Alarm in Zone 4)
3. Zone 3 and AWAY indicators light (Alarm in Zone 3)
4. AWAY indicator lights (System armed in AWAY Mode)

Each event is indicated by a beep and a lit indicator. Resetting a disarmed 24-Hour Alarm is indicated by a beep only.

After the last event, three beeps sound to indicate the end of playback. You can stop the replay at any time by pressing [AWAY].

If the system is armed in STAY Mode 1 or STAY Mode 2, the STAY indicator shows the event memory playback. There is no differentiation between STAY Mode 1 and STAY Mode 2.

If power is removed from the control panel, the memory of all events is saved.

6.2 Master Code Functions

Master Code Functions allow users with the appropriate priority level to perform certain supervisory level functions. You can use these functions only when the system is disarmed.

The default Master Code is 2580 and is User Code 1. You can program multiple Master Codes. Refer to *Section 13.3 User Code Priority* on page 52 for more information.

To access a Master Code function, enter the Master Code and press the corresponding function digit and the [AWAY] button. The Master Code functions are listed in *Table 25*.

Table 25: Master Code Functions

Function	Description
0	Reserved
1	Add, change, and delete User Codes/Remote Radio User Codes (*Sections 6.2.1* on page 32 and *6.2.2* on page 32)
2	Change domestic phone numbers (*Section 6.2.3* on page 33)
3	Change Telco Arm or Disarm Sequence (*Section 6.2.4* on page 34)
4	Set zones for STAY Mode 2 (*Section 6.2.5* on page 35)
5	Turn outputs on and off (*Section 6.2.6* on page 36)
6	Set the date and time (*Section 6.2.7* on page 36)
7	Walk Test Mode (*Section 6.2.8* on page 36)
8	Event Memory Recall Mode (*Section 6.2.9* on page 36)
9	Reserved

6.2.1 Changing and Deleting User Codes

This function allows a Master Code holder to change or delete a User Code.

1. Enter your Master Code and press [1][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash.
2. Enter the number of the code (1 to 8) you want to change and press [AWAY].
   Two beeps sound and the corresponding zone indicator lights.
3. Enter the new code and press [AWAY].
   Two beeps sound and the STAY and AWAY indicators turn off.
4. Repeat this procedure to change other User Codes.

This function ends automatically if you do not press a button within 60 sec or if you press [AWAY].

One long beep indicates that the code already exists or that you entered an incorrect user number.

Example

To program User Code number 2 as 4627, enter:

[2 5 8 0 1][AWAY][2][AWAY][4 6 2 7][AWAY]

To delete a User Code:

1. Enter your Master Code and press [1][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash.
2. Enter the number of the code (1 to 8) you want to delete and press [AWAY].
   Two beeps sound and the corresponding zone indicator lights.
3. Press [STAY] to delete the User Code.
   Two beeps sound and the STAY and AWAY indicators turn off.
4. Repeat this procedure to delete other User Codes.

This function ends automatically if you do not press a button within 60 sec or if you press [AWAY].

One long beep indicates that the code already exists or that you entered an incorrect user number.

Example

To delete user code number 3, enter:

[2 5 8 0 1][AWAY][3][AWAY][STAY]

6.2.2 Changing and Deleting Remote Radio User Codes

This function allows a Master Code holder to change or delete a remote radio User Code.

To add or change a remote radio User Code:

1. Enter your Master Code and press [1][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash.
2. Enter the number of the code (9 to 16) you want to change and press [AWAY].
   Two beeps sound and the corresponding codepad indicators light. Refer to *Table 26*.

Table 26: Remote Radio Numbers Displayed by the Codepad Indicators

User No	Zone Indicators 1	2	3	4	5	6	7	8	MAINS Indicator
9	X							X	
10									X
11	X								X
12		X							X
13			X						X
14				X					X
15					X				X
16						X			X

3. Press any of the [TRANSMIT] buttons on the hand-held transmitter.

   Two beeps sound and the STAY and AWAY indicators turn off.
4. Repeat this procedure to change other remote radio User Codes.

This function ends automatically if you do not press a button within 60 sec or if you press [AWAY].

One long beep indicates that the code already exists or that you entered an incorrect user number.

To delete a remote radio User Code:

1. Enter your Master Code and press [1][AWAY].

   Three beeps sound and the STAY and AWAY indicators flash.
2. Enter the number of the code (9 to 16) you want to delete and press [AWAY].

   Two beeps sound and the corresponding codepad indicators light. Refer to *Table 26*.
3. Press [STAY] to delete the User Code.

   Two beeps sound and the STAY and AWAY indicators turn off.
4. Repeat this procedure to delete other remote radio User Codes.

This function ends automatically if you do not press a button within 60 sec or if you press [AWAY].

One long beep indicates that the code already exists or that you entered an incorrect user number.

6.2.3 Changing Domestic Phone Numbers

When the system is set up for domestic dialing, this function allows the installer to view and program the telephone numbers that the system calls if an alarm occurs. Refer to *Section 9.0 Domestic Dialing* on page 40 for more information.

To change domestic phone numbers:

1. Enter your Master Code and press [2][AWAY].

   Three beeps sound and the STAY and AWAY indicators flash.

   If there are telephone numbers programmed, they appear one digit at a time using the remote codepad indicators. Refer to *Table 27* for the indicators and their meanings.

   If there are no telephone numbers programmed, an additional two beeps sound after entering this mode. These two beeps normally sound after you enter the last digit of the last phone number.

Table 27: Codepad Indicators When Changing Domestic Telephone Numbers

	Zone Indicators								MAINS
Digit	1	2	3	4	5	6	7	8	Indicator
0									X
1	X								
2		X							
3			X						
4				X					
5					X				
6						X			
7							X		
8								X	
9	X							X	
*	X								X
#		X							X
Pause			X						X
Break				X					X

2. Enter the first phone number.

   The indicator for each digit lights as you enter it.
3. If you are programming another phone number, press [STAY][4] to separate the end of one phone number and the beginning of the next.

   If you are not programming other numbers, go to *Step 5*.
4. Repeat *Steps 2* and *3* to program another phone number.
5. Press [AWAY] to exit from this mode.

Table 28: Domestic Dialing Digits

Digit Required	Number to Program	Digit Required	Number to Program
0	0	7	7
1	1	8	8
2	2	9	9
3	3	*	* 1
4	4	#	* 2
5	5	4 sec pause	* 3
6	6	break	* 4

Example

If you want to program two separate telephone numbers (9672 1777 and 9672 1233), enter:

[2 5 8 0 2][AWAY][9 6 7 2 1 7 7 7][STAY]

[4 9 6 7 2 1 2 3 3][[AWAY]

To disable domestic dialing:

Enter your Master Code and press [2][AWAY] [STAY][4][AWAY].

6.2.4 Change Telco Arming or Disarming Sequence

Program the call forward sequence to automatically operate when you arm the system in AWAY Mode. This feature is only available if the call forward option is available from your telecommunication provider.

When arming the system in AWAY Mode, the control panel dials the telecommunication exchange to redirect all calls to your mobile phone, pocket pager, or answering service. When activated, your telephone still allows outgoing calls.

Contact your telecommunications provider for more information on call forward operations.

Table 29: Telco Arming or Disarming Dialing Digits

Digit Required	Number to Program	Digit Required	Number to Program
0	0	8	8
1	1	9	9
2	2	10	0
3	3	11	* 1
4	4	12	* 2
5	5	4 sec pause	* 3
6	6	break	* 4
7	7	15	* 5

To program the Telco arming sequence – easy call forward (no answer on):

1. Enter your Master Code and press [3][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash.
2. Press [1][AWAY] to change the Telco arming sequence.
   Three beeps sound.
   If a call forwarding sequence is already programmed, the sequence appears one digit at a time using the remote codepad indicators. Refer to *Table 30* for the indicators and their meanings.
   If there is no call forward sequence programmed, an additional two beeps sound after entering this mode. These two beeps normally sound after the last digit of the call forward sequence is displayed.

Table 30: Codepad Indicators When Changing Telco Arming or Disarming Sequence

Digit	Zone Indicators 1	2	3	4	5	6	7	8	MAINS Indicator
0									X
1	X								
2		X							
3			X						
4				X					
5					X				
6						X			
7							X		
8								X	
9	X							X	
11	X								X
12		X							X
Pause			X						X
Break				X					X
15					X				X

3. Press [STAY][1 6 1] and enter the phone number to which you want calls from the control panel diverted.
4. Press [STAY][2][AWAY].
   Two beeps sound and the system returns to the disarmed state.

Example

If you want to automatically divert all unanswered incoming calls to another telephone number (for example, 9672 1777) when the system is armed in AWAY Mode, enter:

[2 5 8 0 3][AWAY][1][AWAY][STAY]

[1 6 1 9 6 7 2 1 7 7 7][STAY][2][AWAY]

You can suspend the Telco arming sequence at any time.

To disable the Telco arming sequence:

Enter your Master Code and press [3][AWAY][1] [AWAY][STAY][4][AWAY].

To program the Telco disarming sequence – easy call forward (no answer off):

1. Enter your Master Code and press [3][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash.
2. Press [2][AWAY] to change the Telco disarming sequence.
   Three beeps sound.
   If a Telco disarming sequence is already programmed, the sequence appears one digit at a time using the remote codepad indicators. Refer to *Table 30* for the indicators and their meanings.

If there is no Telco disarming sequence programmed, an additional two beeps sound after entering this mode. These two beeps normally sound after the last digit of the sequence is shown.

3. Press [STAY][2 6 1][STAY][2][AWAY].

   Two beeps sound and the system returns to the disarmed state.

You can suspend the Telco disarming sequence at any time.

To disable the Telco disarming sequence:

Enter your Master Code and press [3][AWAY][2] [AWAY][STAY][4][AWAY].

To program the Telco arming sequence – easy call forward (immediate on):

1. Enter your Master Code and press [3][AWAY].

   Three beeps sound and the STAY and AWAY indicators flash.

2. Press [1][AWAY] button to change the Telco arming sequence. Three beeps sound.

   If a call forwarding sequence is already programmed, the sequence appears one digit at a time using the remote codepad indicators. Refer to *Table 30* for the indicators and their meanings.

   If there is no call forward sequence programmed, an additional two beeps sound after entering this mode. These two beeps normally sound after the last digit of the call forward sequence is displayed.

3. Press [STAY][1 2 1] and enter the phone number to which you want calls from the control panel diverted.
4. Press [STAY][2][AWAY].

   Two beeps sound and the system returns to the disarmed state.

Example

If you want to automatically divert all incoming calls to another telephone number (for example, 9672 1777) when the system is armed in AWAY Mode, enter:

[2 5 8 0 3][AWAY][1][AWAY][STAY]

[1 2 1 9 6 7 2 1 7 7 7][STAY][2][AWAY]

You can suspend the Telco arming sequence at any time.

To disable the Telco arming sequence:

Enter your Master Code and press [3][AWAY][1] [AWAY][STAY][4][AWAY].

To program the Telco disarming sequence – easy call forward (immediate off):

1. Enter your Master Code and press [3][AWAY].

   Three beeps sound and the STAY and AWAY indicators flash.

2. Press [2][AWAY] to change the Telco disarming sequence.

   Three beeps sound.

   If a Telco disarming sequence is already programmed, the sequence appears one digit at a time using the remote codepad indicators. Refer to *Table 30* on page 34 for the indicators and their meanings.

   If there is no Telco disarming sequence programmed, an additional two beeps sound after entering this mode. These two beeps normally sound after the last digit of the sequence is shown.

3. Press [STAY][2 2 1][STAY][2][AWAY].

   Two beeps sound and the system returns to the disarmed state.

You can suspend the Telco disarming sequence at any time.

To disable the Telco disarming sequence:

Enter your Master Code and press [3][AWAY][2] [AWAY][STAY][4][AWAY].

6.2.5 Setting STAY Mode 2 Zones

This function allows the Master Code holder to select the zones that are automatically isolated when the system is armed in STAY Mode 2.

To arm the system in STAY Mode 2, press and hold [0] until two beeps sound. Refer to *Section 6.3.3* on page 37 or *Section 4.5 Arming the System in STAY Mode 2* on page 20 for more information.

To set STAY Mode 2 zones:

1. Enter your Master Code and press [4][AWAY].

   Three beeps sound and the STAY indicator flashes.

2. Enter the number of the zone you want to automatically isolate and press [STAY].

   The corresponding zone indicator flashes.

3. Repeat *Step 2* to select each zone.

As you select each zone to isolate, the corresponding zone indicator flashes. If you make a mistake, enter the incorrect zone number and press [STAY]. This zone is no longer selected to be isolated and the zone indicator is extinguished.

4. Press [AWAY].

   Two beeps sound and the system returns to the disarmed state.
   The indicators for the zones you selected and the STAY indicator turn off.

Example

If you want to select zones 2, 5, and 6, enter:

[2 5 8 0 4][AWAY][2][STAY][5][STAY][6][STAY] [AWAY]

You can disable all zones selected to automatically isolate for STAY Mode 2 at any time.

To disable STAY Mode 2 zones:

Enter your Master Code and press [4][AWAY] [AWAY].

6.2.6 Turning Outputs On/Off

If an output is programmed for remote operation, you can turn the remote output on or off using this Master Code function or remotely using the Alarm Link Software.

To use this Master Code function, you must program one or more of the outputs with these Output Event Types:

Output 1 = Output Event Type 2,8 (*page 67*)

Output 2 = Output Event Type 2,9 (*page 67*)

Output 3 = Output Event Type 2,10 (*page 67*)

To turn an output on from the remote codepad:

1. Enter your Master Code and press [5][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash.
2. Enter the number of the output (1 to 3) and press [AWAY].
   Three beeps sound and the output turns on.
3. Repeat *Step 2* to turn on another output.
4. Press [AWAY] to exit from this function.
   Two beeps sound and the STAY and AWAY indicators turn off.

Example

If Output 2 is programmed as 291000 in Locations 374 to 379, the Master Code holder can turn on this output by entering:

[2 5 8 0 5][AWAY][2][AWAY][AWAY]

To turn off an output from the remote codepad:

1. Enter your Master Code and press [5][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash.
2. Enter the number of the output (1 to 3) and press [STAY].
   Two beeps sound and the output turns off.
3. Repeat *Step 2* to turn off another output.
4. Press [AWAY] button to exit from this function.
   Two beeps sound and the STAY and AWAY indicators turn off.

Example

If Output 2 is programmed as 291000 in Locations 374 to 379, the Master Code holder can turn off this output by entering:

[2 5 8 0 5][AWAY][2][STAY][AWAY]

6.2.7 Setting the Date and Time

Use this function to change the date and time or if power was removed from the system.

If the date and time are not set, the date and time fault is shown only when the Auto Arming Time is programmed in Locations 414 to 417 (refer to *Section 17.12 Auto Arming Time* on page 72), or when you enter Fault Analysis Mode by holding down [5].

To set the new date and time:

1. Enter your Master Code and press [6][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash.
2. Enter the day, month, year, hour, and minute in DD, MM, YY, HH, MM format (where DD is the day of the month, MM is the month of the year, YY is the year, HH is the hour of the day, and MM minute of the day) and press [AWAY].
   Use 24:00 hour format when programming the hour of the day.
   Two beeps sound and the STAY and AWAY indicators turn off. If a long beep sounds, there was an error when you entered the date and time.

Example

To set the date and time for the 1st January 20064 at 10:30 PM, enter:

[2 5 8 0 6][AWAY][0 1 0 1 0 6 2 2 3 0][AWAY]

6.2.8 Walk Test Mode

Walk Test Mode allows you to test detection devices to ensure they are functioning correctly. Before activating Walk Test Mode, isolate any zones that are not required for testing. Refer to *Section 4.11 Isolating Zones* on page 21 for more information.

To enter Walk Test Mode:

1. Enter your Master Code and press [7][AWAY].
   Three beeps sound and the STAY and AWAY indicators flash. The codepad beeps once per sec when Walk Test Mode is active.
2. Unseal and seal the zones to be tested.
   The codepad sounds one long beep and the horn speaker sounds one short beep each time a zone is sealed or unsealed.
3. Press [AWAY] to exit from this function.
   Two beeps sound and the STAY and AWAY indicators turn off. The system returns to the disarmed state.

6.2.9 Event Memory Recall Mode

Event Memory Recall Mode allows you to play back the last forty system events. Event Memory Recall Mode shows all alarms and each arming or disarming of the system and helps with troubleshooting system faults. The events are shown using the codepad indicators.

To enter Event Memory Recall Mode:

Enter your Master Code and press [8][AWAY]. Three beeps sound. The events are played back by the codepad indicators in reverse chronological order.

Example

If the events occurred in the following order:

1. System armed in AWAY Mode
2. Alarm in Zone 3
3. Alarm in Zone 4
4. System disarmed

The alarm memory plays back in this order:

1. All indicators off except MAINS (System disarmed)
2. Zone 4 and AWAY indicators light (Alarm in Zone 4)
3. Zone 3 and AWAY indicators light (Alarm in Zone 3)
4. AWAY indicator lights (System armed in AWAY Mode)

Each event is indicated by a beep and a lit indicator. Resetting a disarmed 24-Hour Alarm is indicated by a beep only.

After the last event, three beeps sound to indicate the end of playback. You can stop the replay at any time by pressing [AWAY].

If the system is armed in STAY Mode 1 or STAY Mode 2, the STAY indicator shows the event memory playback. There is no differentiation between STAY Mode 1 and STAY Mode 2.

If the control panel is powered down, the memory of all events is lost.

6.3 Hold-Down Functions

Hold-down functions allow easy activation of specific operations. When you press and hold a button for 2 sec, two beeps sound and the corresponding function operates. The hold-down functions are listed below.

6.3.1 Arming the System in AWAY Mode

Pressing and holding [#] until two beeps sound arms the system in AWAY Mode. This function operates only if you select Option 2 in Location 429 (refer to *Section 18.6 Consumer Options 2* on page 75).

6.3.2 Arming the System in STAY Mode 1

Pressing and holding [*] until two beeps sound arms the system in STAY Mode 1. This function operates only if you select Option 2 in Location 429 (refer to *Section 18.6 Consumer Options 2* on page 75).

If there was no alarm during the armed cycle, pressing and holding [*] a second time disarms the system from STAY Mode 1. To enable single button disarming from STAY Mode 1 using this function, select Option 4 in Location 429.

If an alarm occurred or entry warning was activated, a valid User Code is required to disarm the system.

Refer to *Section 14.3.6 Zone Options 2* on page 58 for information on programming each zone to automatically isolate in STAY Mode 1.

6.3.3 Arming the System in STAY Mode 2

Pressing and holding [0] until two beeps sound arms the system in STAY Mode 2. This function operates only if you select Option 2 in Location 429 (refer to *Section 18.6 Consumer Options 2* on page 75).

If there was no alarm during the armed cycle, pressing and holding [0] a second time disarms the system from STAY Mode 2. To enable single button disarming from STAY Mode 2 using this function, select Option 4 in Location 429.

If an alarm occurred or entry warning was activated, a valid User Code is required to disarm the system.

For more information, refer to *Section 6.1.4 Setting STAY Mode 2 Zones* on page 30 (using the Installer Code function) or *Section 6.2.5 Setting STAY Mode 2 Zones* on page 35 (using the Master Code function).

6.3.4 Horn Speaker Test

Pressing and holding [1] until two beeps sound activates the horn speaker for a two-sec burst. No other sounding device operates during this mode.

6.3.5 Bell Test

Pressing and holding [2] until two beeps sound activates the internal screamers for a two-sec burst. No other sounding device operates during this mode.

If the SS914 Satellite Siren (EDMSAT) is connected to the control panel, this function tests both the horn speaker and the strobe connected to the satellite siren for a 2-sec burst.

6.3.6 Strobe Test

Pressing and holding [3] operates the strobe. No other device operates during this mode.

If the SS914 Satellite Siren (EDMSAT) is connected to the control panel, this function also tests the strobe on the satellite siren.

To turn the strobe test on:

Press and hold [3] until three beeps sound.

The strobe flashes.

To turn the strobe test off:

Press and hold [3] until two beeps sound.

The strobe stops flashing.

6.3.7 Turning Day Alarm On and Off

Pressing and holding [4] turns Day Alarm on or off. If you want the STAY indicator to indicate the status of Day Alarm operation (enabled or disabled), select Option 8 in Location 428 (refer to *Section 18.5 Consumer Options 1* on page 75). When this option is selected, the STAY indicator flashes once every 3 sec when Day Alarm is active.

To turn Day Alarm on:

Press and hold [4] until three beeps sound.

To turn Day Alarm off:

Press and hold [4] until two beeps sound.

6.3.8 Fault Analysis Mode

There are a number of system faults that can be detected by the control panel. When any of these faults are present, the FAULT indicator flashes and the codepad beeps once per minute. Refer to *Section 4.12 Fault Analysis Mode* on page 22 for more information on each fault type.

To determine the type of fault:

Press and hold [5] until two beeps sound.

The STAY, AWAY, and FAULT indicators flash. One or more zone indicators (1 to 8) light to indicate the type of fault that occurred. Refer to *Table 14* on page 22.

To Exit from Fault Analysis Mode:

Press [AWAY].

The STAY and AWAY indicators turn off and the system returns to the disarmed state.

6.3.9 Initiate a Modem Call

Pressing and holding [6] until two beeps sound forces the control panel to dial the callback telephone number programmed in Locations 159 to 174 (refer to *Section 11.9 Call Back Telephone Number* on page 49) in an attempt to connect to the installer's remote computer.

The remote computer must be running the CC816 Alarm Link Software and must be set to Waiting for an Incoming Call. If no callback telephone number is programmed, pressing and holding [6] has no effect.

6.3.10 Reset Latching Outputs

Pressing and holding [7] until two beeps sound resets any output that is programmed to remain on after it is activated.

The output must be programmed with a latching polarity. Refer to *Section 16.3 Output Polarity* on page 68 for more information.

6.3.11 Codepad Buzzer Tone Change

Pressing and holding [8] down continuously changes the tone of the buzzer in the remote codepad. There are fifty different tones from 1500 Hz to 5000 Hz. In an installation with multiple codepads, you can set a different tone for each codepad.

To change the buzzer tone:

1. Press and hold [8] continuously.
   The tone of the buzzer increases in pitch.
2. Release [8] button when you hear the desired tone.

> Every time power is removed from the system, you must reset each codepad to its individual tone using this function.

6.3.12 Send Test Report

Pressing and holding [9] until two beeps sound sends a Test Report (Contact ID Event Code 602) to test the dialing and reporting capabilities of the system without activating the sirens.

7.0 Remote Arming by Telephone

You can arm your system from any remote location by telephone. For security reasons, you cannot disarm the system using this method. A touch-tone telephone is required to use this feature.

To remotely arm your system by telephone:

1. Call the telephone number to which your control panel is connected.
   When the control panel answers the incoming call, a short jingle sounds.

> If you hear a number of unusual tones when the control panel answers the incoming call, the system is programmed for remote programming functions. Wait for a pause in the tones and follow *Step 2* to arm the system remotely.

2. Hold the phone controller to the mouthpiece of the telephone and press and hold the button on the side of the unit for 3 sec.
   You can also press and hold [*] on the touch-tone telephone for 3 sec to arm the system.
   Two beeps sound to indicate that the system is armed in AWAY Mode.
3. Hang up the telephone.
   The system remains armed.

If the control panel does not answer the call, the system might be armed already, remote functions are not enabled, or the Ring Count is set to 0. To enable remote arming by telephone, select Option 2 in Location 177 (refer to *Section 12.1 Dialer Options 1* on page 50). To set the number of rings before the control panel answers, refer to *Section 11.10 Ring Count* on page 49.

When both Remote Arming and Upload/Download are selected, the control panel answers the call expecting the remote computer. When this occurs, modem negotiating tones sound rather than the remote arming jingle.

8.0 Alarm Link Software

You can program or control the ICP-CC404 Control Panel remotely using an IBM or compatible personal computer and the CC816 Alarm Link Software. This software allows you to change your customer's control panel without leaving your office, improving customer service and saving you time and money. For locations where a control panel is installed hundreds of kilometres from your office, the Upload/Download feature is invaluable.

To use the Alarm Link Software with the ICP-CC404 Control Panel, set the control panel type in the Alarm Link database to *I404-V10*.

When adding a new customer in the Alarm Link Software, the Subscriber ID Number and the Installer Code must match the values programmed in the control panel for synchronisation when connecting to the control panel. If these two locations do not match those of the control panel, you cannot synchronize the computer and the control panel.

8.1 Remote Connect

The remote connect feature allows you to establish a connection through the telephone network from your IBM or compatible computer to the ICP-CC404 Control Panel. This software allows you to offer faster service to your clients.

8.1.1 Remote Connect with Customer Control

If you want to configure the control panel so a remote connection can only be established when the client initiates it through the remote codepad, program the following information:

- Program the Call Back Telephone Number in Locations 159 to 174 (refer to *Section 11.9* on page 49).
- Disable Option 1 in Location 180 (refer to *Section 8.2 Alarm Link Options* on page 40).

The control panel is now set so the client controls when a remote connection can be established.

To dial the remote computer:

Press and hold [6] until two beeps sound on the remote codepad.

8.1.2 Remote Connect without Callback Verification

Remote connect without callback verification is useful if you must perform Upload/Download functions from multiple locations.

There are two methods to disable callback verification. Remember that using this feature reduces the security of the control panel.

Method One

Method one allows you to call the control panel from any remote location without the control panel calling back to the computer to establish a link. When using this method, the customer cannot initiate a modem call by holding down [6].

To program method one:

1. Program Locations 159 to 174 for the Call Back Telephone Number to 0 (refer to *Section 11.9* on page 49).
2. Select Option 1 and disable Option 2 in Location 180 (refer to *Section 8.2 Alarm Link Options* on page 40).

The control panel allows connecting the first call without calling the remote computer.

Method Two

Method two allows you to program a callback telephone number so the customer can still initiate a modem call when necessary. When you call the control panel from a remote location using the computer, the control panel does not call back the remote computer to establish a link.

To program method two:

1. Program the Call Back Telephone Number in Locations 159 to 174 (refer to *Section 11.9* on page 49).
2. Select Option 1 and disable Option 2 in Location 180 (refer to *Section 8.2 Alarm Link Options* on page 40).

The control panel allows connecting the first call without calling the remote computer to make contact and allows the customer to initiate a modem call by holding down [6].

8.1.3 Remote Connect with Callback Verification

Remote connect with callback verification offers the highest degree of data security through a two-level security check.

In the first level, the Installer Code and the Subscriber ID Number must match those of the control panel. In the second level of security, the control panel calls the programmed callback telephone number to establish the valid connection.

To program the control panel for remote connection with callback verification:

1. Program the Call Back Telephone Number in Locations 159 to 174 (refer to *Section 11.9* on page 49).
2. Select Options 1 and 2 in Location 180 (refer to *Section 8.2 Alarm Link Options* on page 40).

8.1.4 Direct Connect

The direct connect feature gives the installer a simple method to program the ICP-CC404 Control Panel using a portable computer. Because telephone lines and modems are not required, programming the control panel is easily completed in minutes.

To use the direct connect feature, connect the CC808 Direct Link Cable between the correct serial port on your IBM or compatible computer and the auxiliary module socket on the control panel.

To use the direct connect feature, it is not necessary to select Option 1 in Location 180 to enable uploading and downloading using Alarm Link. The direct connect feature ignores this option.

8.2 Alarm Link Options

Program this parameter in **Location 180**.
The default value is **3**.

When programming this location, there are four options you can select. You can select any combination of the options by programming a single value. Calculate this value by adding the option bit numbers together. Refer to *Section 2.3 Programming Option Bits* on page 10 for more information.

The Alarm Link Options are:

1 – Enable Upload/Download Using Alarm Link

Select this option to use the CC816 Alarm Link Software to program the control panel remotely. The control panel does not respond to the Alarm Link Software if this option is not selected. Refer to *Section 8.0 Alarm Link Software* on page 39 for more information.

2 – Enable Alarm Link Call Back

If this option is selected and a callback telephone number is programmed, the remote programming computer must be connected to the telephone line programmed in the Call Back Telephone Number in Locations 159 to 174 (refer to *Section 11.9* on page 49).

If this option is not selected, the installer can connect to a customer's control panel from any remote location for upload or download operations without the control panel calling the remote computer, and the customer can initiate a modem call from the codepad by holding down [6]. Refer to *Section 8.0 Alarm Link Software* on page 39 for more information.

4 – Terminate Alarm Link Connection on Alarm

If an alarm occurs when the control panel is communicating with a remote computer using the CC816 Alarm Link Software, the Alarm Link session ends and the alarm message is sent to the base station receiver.

If an alarm occurs that does not need to be sent to the base station receiver, the session does not end. If this option is not selected and an alarm occurs, the Alarm Link software prompts the operator with a Terminate or Continue message.

9.0 Domestic Dialing

The locations of the primary and secondary telephone numbers for Receiver 1 or Receiver 2 are used only for base station and pager reporting. When either Receiver 1 or Receiver 2 is set up for domestic reporting, both the primary and secondary telephone numbers are ignored.

The domestic dialing telephone numbers are stored separately in Locations 466 to 513. These locations can store up to 48 digits. These 48 locations can store one or more telephone numbers. Depending on the length of each telephone number, these locations can store four or more different telephone numbers for domestic dialing.

If both Receiver 1 and Receiver 2 are set up for domestic reporting format, you still have 48 data locations. Both Receiver 1 and Receiver 2 use the same domestic telephone numbers. Programming separate domestic telephone numbers for Receiver 1 and Receiver 2 is not available for domestic dialing format.

Refer to *Section 9.2 Setting Up and Programming Domestic Reporting* for more information.

9.1 Domestic Dialing Function

When the control panel activates an alarm, it dials the first programmed telephone number. If it detects a busy or engaged tone, the control panel hangs up and dials the second telephone number (if one is programmed). The first call counts as one unsuccessful dialing attempt. If the second telephone number is also busy or an engaged tone is detected, the control panel hangs up and dials the third telephone number (if one is programmed) or attempts the first telephone number again.

If a busy tone is not detected, the control panel assumes that the telephone was answered and sends its transmission. The transmission sequence consists of an identification beep, followed by a siren tone and a long pause. The transmission sequence is repeated until the control panel receives an acknowledgment tone during the pause. The control panel automatically hangs up after 2 min. If more than one control panel sends reports to the same telephone number, the identification beep allows the customer to identify the control panel that called. The identification beep is programmed in Location 039 of the Subscriber ID Number for Receiver 1 or Location 079 of the Subscriber ID Number for Receiver 2.

When set up for Domestic Dialing Format, the control panel attempts up to six calls per alarm event. This count includes any unsuccessful calls. The counter is reset if the zone is reactivated and the control panel attempts six additional calls. The control panel stops dialing after six attempts or three successful calls. The control panel also stops dialing if a valid User Code is entered at the remote codepad.

If both Receiver 1 and Receiver 2 are programmed for domestic dialing, the maximum number of calls per alarm event is twelve.

To acknowledge domestic dialing:

If the received call is not acknowledged during any of the transmission pauses by pressing the [*] button on a touch-tone telephone or by using the CC911 Phone Controller, the control panel continues to send its transmission for 2 min. It then hangs up and dials the next telephone number. If the call is successfully acknowledged, the control panel hangs up and makes no more calls for that event.

9.2 Setting Up and Programming Domestic Reporting

Programming the control panel for domestic reporting is extremely simple when using the Installer's Programming Command 965. Refer to *Section 2.4.8 Command 965 – Set Up Domestic Dialing Format* on page 13 for more information.

To set up the control panel for domestic dialing:

1. Enter the Installer Code and press [AWAY] to enter Installer's Programming Mode.

   Two beeps sound and the STAY and AWAY indicators flash.
2. Enter [9 6 5] and press [AWAY].

   Two beeps sound. The control panel is now set up for Domestic Dialing Format.
3. Enter [9 6 0] and press [AWAY] to exit from the Installer's Programming Mode.

   Two beeps sound and the STAY and AWAY indicators turn off. The system returns to the disarmed state.
4. To program your telephone numbers, enter the Installer Code and press [2][AWAY].

   Three beeps sound and the STAY and AWAY indicators flash.

   If there are telephone numbers already programmed, they appear one digit at a time using the codepad indicators.

   If there are no programmed telephone numbers, an additional two beeps sound after entering this mode. These two beeps normally sound after the last digit of the last phone number lights.
5. Enter the digits for telephone number 1, one digit at a time (refer to *Table 31*).

   As you enter each digit, the corresponding codepad indicator lights.

Table 31: Domestic Dialing Digits

Digit Required	Number to Program	Digit Required	Number to Program
0	0	8	8
1	1	9	9
2	2	10	refer to 0
3	3	*	* 1
4	4	#	* 2
5	5	4 sec pause	* 3
6	6	break	* 4
7	7	15	* 5

6. After you enter all the digits of the first telephone number, press [STAY][4] to insert a break between the first telephone number and the second telephone number.
7. Repeat *Step 6* for each additional phone number.
8. After the last digit of the last telephone number, press [AWAY] to exit from this mode.

Example

To program two separate telephone numbers (9672 1777 and 9672 1233), enter the following sequence:

[1 2 3 4 2][AWAY][9 6 7 2 1 7 7 7][STAY]

[4 9 6 7 2 1 2 3 3][[AWAY]

You can cancel domestic dialing at any time (for example, you are moving house and do not want the system to continue calling your work place or mobile phone).

To disable domestic dialing:

Enter the Installer Code and press [2][AWAY][STAY][4][AWAY].

10.0 Dialer Reporting Formats

10.1 Transmission Formats

The ICP-CC404 Control Panel provides a number of transmission formats for its dialing and communication features. Program the transmission format for Receiver 1 in Location 033 and the transmission format for Receiver 2 in Location 073 (refer to *Section 11.4 Transmission Format for Receiver 1 and Receiver 2* on page 47). The control panel is set at the factory to report in the Contact ID Format.

10.1.1 Contact ID Format

Contact ID Format can identify hundreds of protection zones by their unique codes. This format provides a single-digit Event Qualifier and a three-digit Event Code that quickly identifies the reported condition.

In general, Contact ID Format is very simple because most of the Event Codes and Point ID Codes are predefined. The base station software usually can identify an alarmed zone by its Point ID Code and usually pays little attention to the Event Code.

Refer to *Table 33* on page 43 for more information about the ICP-CC404 Point ID Codes.

Table 32: Contact ID Format Breakdown

Subscriber ID Number	Qualifier	Event Code	Group Number	Point ID Number
SSSS	Q	XYZ	GG	CCC
Four-digit Subscriber ID Number	Event Qualifier, which provides specific event information: 1 – New event or opening 3 – New restore or closing	Event Code (comprised of three hex digits)	Group Number (comprised of two hex digits)	Point ID Number (comprised of three hex digits)

Table 33: Point ID Codes

Point ID	Event Description	Event Code	Explanation	Section
Zones 1 to 8	Burglary Zone	130	Burglary	*14.3.1*
	Medical Zone	100	24-Hour Medical	*14.3.1*
	Panic Zone	120	24-Hour Panic	*14.3.1*
	Hold-Up Zone	122	24-Hour Hold-Up	*14.3.1*
	Tamper Zone	137	24-Hour Tamper	*14.3.1*
	Burglary Zone	133	24-Hour Burglary	*14.3.1*
	Fire	110	24-Hour Fire	*14.3.1*
User Specific 1 to 16	Open/Close Report	401	Opening – User # Closing – User #	*15.7*
040	AC MAINS Fail	301	AC Power	*15.15*
031	Low Battery	309	Battery Test Failure	*15.17*
User Specific 1 to 16	Codepad Duress	121	Duress Alarm	*15.8*
041	Codepad Panic	120	Panic Alarm	*15.9*
046	Codepad Fire	110	Fire Alarm	*15.10*
045	Codepad Medical	100	Medical Alarm	*15.11*
042	Code Retry Limit Exceeded	421	Access Denied	*15.19*
044	Test Report	602	Test Report	*15.21*
047	Test Report	602	Test Report	*18.5*
Zone Specific 1 to 8	Sensor Watch	307	Sensor Self Test Failure	*15.3*
Zone Specific 1 to 8	Trouble	380	Sensor Trouble	*15.2*
Zone Specific 1 to 8	Bypass	570	Zone Bypass	*15.1*
00	AUX Power Supply Fail	300	System Trouble	*15.13*

10.1.2 Point ID Codes

Table 33 on page 43 shows the different Point ID Codes and Event Codes that are sent to the base station receiver when using Contact ID Reporting Format. All Event Codes are fixed. The control panel always sends the same code because there are no programming locations to change the codes.

10.1.3 4 + 2 Express Reporting Format

The 4 + 2 Express Format reports a Subscriber ID Number followed by an Expansion Code. The reporting Channel Number is sent directly after the Expansion Code.

Table 34: Example Reporting in 4 + 2 Express Format

Subscriber ID Number	Expansion Code	Channel Number
SSSS	A	C_H

Table 35: 4 + 2 Express Reporting Format

New Event	4 + 2 Report
Alarm	SSSS AC_H
Trouble	SSSS TC_H
Bypass	SSSS BC_H
AC Fail	SSSS EA_C
Low Battery	SSSS LL_B
Opening Report	SSSS OU
Closing Report	SSSS CU
Test Report	SSSS T_EO
Program Altered	SSSS P0
Duress	SSSS DD_0
Event	**4 + 2 Report**
Alarm Restore	SSSS R C_H
Trouble Restore	SSSS TR C_H
Bypass Restore	SSSS B_R C_H
AC Fail Restore	SSSS E_R A_{CR}
Low Battery	SSSS L L_B
Low Battery Restore	SSSS L_{BR}

Table 36: 4+2 Express Transmission Code Descriptions

Code	Description
SSSS	Subscriber ID Number
A	Alarm
C_H	Channel Number
0	Zero
T	Trouble
B	Bypass
E	AC Fail Code 1st digit
AC	AC Fail Code 2nd digit
L	Low Battery Code 1st digit
L_B	Low Battery Code 2nd digit
O	Open
C	Close
U	User Number
R	Alarm Restore Code
TR	Trouble Restore Code
B_R	Bypass Restore Code
E_R	AC Fail Restore Code 1st digit
AC_R	AC Fail Restore Code 2nd digit
L_R	Low Battery Restore Code 1st digit
L_{BR}	Low Battery Restore Code 2nd digit
D	Duress Code 1st digit
D_0	Duress Code 2nd digit
P	Panic Code 1st digit
P_{CH}	Panic Code 2nd digit
T_E	Test Code

10.1.4 Basic Pager Reporting Format

Although Basic Pager Format requires some interpretation of the numbers that appear on the display, it can differentiate between 1000 different control panels if a number of control panels report to the one pager.

To set up Receiver 1 for basic pager reporting:

1. Program the Basic Pager's access telephone number in Locations 000 to 015 (refer to *Section 11.1 Primary Telephone Number for Receiver 1 and Receiver 2* on page 46).
2. Program the Subscriber ID Number in Locations 034 to 039 (refer to *Section 11.5 Subscriber ID Number for Receiver 1 and Receiver 2* on page 47).
3. Select Pager Handshake (Option 5) in Location 032 (refer to *Section 11.3 Handshake Tone for Receiver 1 and Receiver 2* on page 47).
4. Program Basic Pager Format (Option 5) in Location 033 (refer to *Section 11.4 Transmission Format for Receiver 1 and Receiver 2* on page 47).

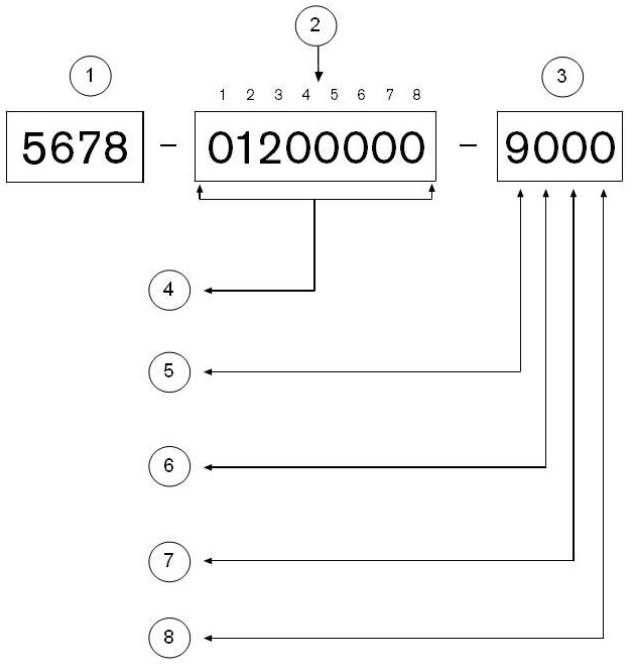
To set up Receiver 2 for basic pager reporting:

1. Program the Basic Pager's access telephone number in Locations 040 to 055 (refer to *Section 11.1 Primary Telephone Number for Receiver 1 and Receiver 2* on page 46).
2. Program the Subscriber ID Number in Locations 074 to 079 (refer to *Section 11.5 Subscriber ID Number for Receiver 1 and Receiver 2* on page 47).
3. Select Pager Handshake (Option 5) in Location 072 (refer to *Section 11.3 Handshake Tone for Receiver 1 and Receiver 2* on page 47).
4. Program Basic Pager Format (Option 5) in Location 073 (refer to *Section 11.4 Transmission Format for Receiver 1 and Receiver 2* on page 47).

The example in *Figure 6* shows:

- Transmission from Subscriber ID Number 5678
- Zone 2 in alarm
- Zone 3 manually isolated
- The system is armed
- The Panic Zone is normal
- The AC is connected
- There is no fault condition.

Figure 6: Basic Pager Display



1 – Subscriber ID number
2 – Zone status
3 – System status
4 – 0 – Zone Normal
1 – Alarm
2 – Manually Isolated
5 – 8 – Disarmed
9 – Armed
6 – 0 – Normal
1 – Panic/Duress
2 – Fire Alarm
3 – Medical Alarm
7 – 0 – AC Normal
1 – AC Failure
8 – 0 – System Normal
1 – System Fault

10.2 Basic Pager Display Information

Subscriber ID Number

This is the identification number of the control panel and is programmed in Locations 034 to 039 for Receiver 1 and Locations 074 to 079 for Receiver 2 (refer to *Section 11.5 Subscriber ID Number for Receiver 1 and Receiver 2* on page 47). The pocket pager displays only the last three digits of the Subscriber ID Number.

Zone Status

The zone status display shows you the status of each zone (1 to 8) of the control panel. *Table 37* describes each status number when displayed on a pocket pager.

Table 37: Zone Status Display Descriptions

Status	Zone Description
0	Zone normal The zone is sealed.
1	Alarm The zone is unsealed and in alarm.
2	Zone bypassed A system operator manually isolated the zone. Refer to *Section 4.11 Isolating Zones* on page 21 for information about manually isolate a zone(s) prior to arming the system Refer to *Section 15.1 Zone Status – Bypass Reports* on page 60 for more information.
3	Zone trouble A zone was left unsealed after the end of Exit Time. Refer to *Section 15.2 Zone Status – Trouble Reports* on page 60 for more information.

System Status

The system status information is shown by four digits, which are defined in *Figure 6* on page 45. The first digit indicates whether the system is armed or disarmed. The second digit indicates whether a codepad alarm was activated by the operator (refer to *Section 4.7 Codepad Duress Alarm* on page 21 through *Section 4.10 Codepad Medical Alarm* on page 21 for more information). The third digit indicates the status of the AC MAINS supply. The fourth digit indicates whether a system fault occurred at the control panel (refer *Section 4.12 Fault Analysis Mode* on page 22 for more information.

11.0 Dialer Information

This section outlines the programming information required for the ICP-CC404 Control Panel when communicating with a base station receiver. These parameters specify the telephone numbers to call, the transmission formats, handshake tones, and transmission speeds.

The control panel can report event information from two on-board dialers. The first dialer reports to Receiver 1 and the second dialer reports to Receiver 2. You can program each dialer with two separate telephone numbers, handshake tone, reporting format type, and Subscriber ID Number.

Example

You can set up Dialer 1 to report in Domestic Dialing Format to Receiver 1 and set up Dialer 2 to report to a base station receiver in Contact ID Format only if Dialer 1 is unsuccessful.

To program a telephone number:

You must program a 0 as 10. Each location in the primary, secondary, and callback telephone numbers stores one digit of the telephone number.

You must insert a 0 at the end of a telephone number to indicate to the dialer the end of the telephone number is reached. The dialing sequence ends when a 0 appears. Refer to *Table 38*.

Table 38: Dialing Digits

Digit Required	Number to Program	Digit Required	Number to Program
terminator	0	8	8
1	1	9	9
2	2	0	10
3	3	*	11
4	4	#	12
5	5	4 sec pause	13
6	6	break	14
7	7		

Example

To program the telephone number 9672 1055 as the Primary Telephone Number for Receiver 1, program the following sequence into Locations 000 to 015:

[9 6 7 2 1 10 5 5 0 0 0 0 0 0 0 0]

To enter a 4-sec pause in the dialing sequence, program a 13. A pause might be necessary when the dialer communicates through an old (slower) telephone exchange or when a PABX system is in place.

Example

To program the number 02 pause 9 672 1055, enter:

[10 2 13 9 6 7 2 1 10 5 5 0 0 0 0 0].

Table 38 shows how to program the numbers, keys, and functions for a telephone number.

11.1 Primary Telephone Number for Receiver 1 and Receiver 2

Program the Primary Telephone Number for Receiver 1 in **Locations 000 to 015**.

Program the Primary Telephone Number for Receiver 2 in **Locations 040 to 055**.

The default value for both telephone numbers is **0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0**.

When the control panel sends a report, Number this number to contact the monitoring station or pager, for example. If the call is successful, the information is sent and the dialer returns to Standby Mode.

If unsuccessful, the dialer attempts two more calls using the Primary Telephone Number for Receiver 1. If these calls are unsuccessful, the dialer calls the Secondary Telephone Number for Receiver 1 up to three times. If the dialing sequence is still unsuccessful, the control panel repeats this sequence by dialing the Primary and Secondary Telephone Numbers for Receiver 2 (if they are programmed).

If the first six attempts are unsuccessful and no telephone numbers for Receiver 2 are programmed, this procedure is repeated only once, for up to twelve call attempts per alarm, after ten min.

If the Primary and Secondary Telephone Numbers for Receiver 2 are also programmed, the control panel attempts up to 24 calls per alarm.

Contact your monitoring station or pager company for the correct telephone numbers before you program these locations.

When Receivers 1 or 2 is set up for domestic reporting, telephone numbers programmed into these locations are ignored. Refer to *Section 6.1.2 Changing Domestic Phone Numbers* on page 28 (using the Installer Code function) or *Section 6.2.3 Changing Domestic Phone Numbers* on page 33 (using the Master Code Function).

11.2 Secondary Telephone Number for Receiver 1 and Receiver 2

Program the Secondary Telephone Number for Receiver 1 in **Locations 016 to 031**.

Program the Primary Telephone Number for Receiver 2 in **Locations 056 to 071**.

The default value for both telephone numbers is

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.

Refer to *Section 11.1 Primary Telephone Number for Receiver 1 and Receiver 2* on page 46 for programming information.

When Receivers 1 or 2 are set up for domestic reporting, telephone numbers programmed into these locations are ignored. Refer to *Section 6.1.2 Changing Domestic Phone Numbers* on page 28 (using the Installer Code function) or *Section 6.2.3 Changing Domestic Phone Numbers* on page 33 (using the Master Code Function).

11.3 Handshake Tone for Receiver 1 and Receiver 2

Program the Handshake Tone for Receiver 1 in **Location 032**.

Program the Handshake Tone for Receiver 2 in **Location 072**.

The default value for both Handshake Tones is **1**.

These locations set the type of handshake tone required for the receivers before data transmissions to the monitoring station begin. The options are:

1 – HI LO Handshake

HI LO Handshake Tone is required to communicate in Contact ID Format or High Speed DTMF.

2 – 1400 Hz

1400 Hz Handshake Tone is required to communicate in Ademco Lo Speed Format or Domestic Dialing Format.

3 – 2300 Hz

Reserved.

4 – No Handshake

Setting these locations to No Handshake Tone is not recommended.

5 – Pager

Pager Handshake Tone is required to communicate in Basic Pager Format.

11.4 Transmission Format for Receiver 1 and Receiver 2

Program the Transmission Format for Receiver 1 in **Location 033**.

Program the Transmission Format for Receiver 2 in **Location 073**.

The default value for both Transmission Formats is **1**.

These locations select the data format used to send reports to the base station receiver. These locations also allow you to configure the control panel for domestic or basic pager formats. The options are:

1 – Contact ID

2 – 4 + 2 express

3 – FSK 300 baud Bell

4 – Domestic

5 – Basic Pager

7 – 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.

11.5 Subscriber ID Number for Receiver 1 and Receiver 2

Program the Subscriber ID Number for Receiver 1 in **Locations 034 to 039**.

Program the Subscriber ID Number for Receiver 2 in **Locations 074 to 079**.

The default value for both Subscriber ID Numbers is **0 0 0 0 0 0**.

The Subscriber ID Number is sent to identify the calling control panel.

For Basic Pager Format, Locations 034 to 036 (for Receiver 1) and Locations 074 to 076 (for Receiver 2) are ignored and the first digit of the Subscriber ID Number must start in Location 037 (Receiver 1) and Location 077 (Receiver 2).

When using Domestic Dialing Format, the number of identification beeps is determined by the value programmed in Location 039 (Receiver 1) and Location 079 (Receiver 2). This value allows the identification of up to 15 different control panels that call the same telephone number.

Example

To program the Subscriber ID Number as 4729, program:

0 0 4 7 2 9

11.6 Dialing Format

Program the Dialing Format in **Location 080**.

The default value for the Dialing Format is **1**.

The Dialing Format determines the method for dialing telephone numbers. The options are:

1 – Australian DTMF (5 digits/sec)

2 – Australian decadic

3 – Alternate DTMF and Australian decadic

4 – International DTMF (touch tone)

5 – Reversed decadic (10 minus 1)

6 – Alternate DTMF and reversed decadic

Options 3 and 6 alternate the dialing sequence between DTMF and decadic if the call to the base station receiver is unsuccessful. Use caution when selecting the dialing method.

Select the Australian method only if the control panel is connected to the Australian Telecommunications Network. Select the International DTMF dialing option only in countries that allow both the caller and the receiver to terminate a phone call. Using the incorrect format can disable the control panel's patented Telephone Anti-Jamming feature.

The alternating sequence is: DTMF – decadic – DTMF – decadic – DTMF – decadic.

11.7 Telco Arming Sequence

Program the Telco Arming Sequence in **Locations 113 to 142**.

The default value for the Telco Arming Sequence is **0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0**.

These locations allow you to activate call diversion automatically on your telephone when you arm the system in AWAY Mode. Refer to *Table 39*.

Table 39: Telco Arm or Disarm Dialing Digits

Digit Required	Number to Program	Digit Required	Number to Program
terminator	0	8	8
1	1	9	9
2	2	0	10
3	3	*	11
4	4	#	12
5	5	4 sec pause	13
6	6	break	14
7	7		

When the Telco Arming Sequence is activated after arming the system in AWAY Mode, the control panel redirects all calls to your mobile phone, pocket pager, or answering service.

Contact your telecommunications provider for more information on Call Forward operations.

To turn call forward (immediate) on, enter:

[* 2 1][forwarding telephone number][#]

Example

To immediately forward all incoming calls to the telephone number 96721055 after arming the system in AWAY Mode, program:

[11 2 1 9 6 7 2 1 10 5 5 12 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]

To turn call forward (no answer) on, enter:

[* 6 1][forwarding telephone number][#]

Example

To forward all incoming calls, when there is no answer, to the telephone number 96721055 after arming the system in AWAY Mode, program:

[11 6 1 9 6 7 2 1 10 5 5 12 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]

11.8 Telco Disarming Sequence

Program the Telco Disarming Sequence in **Locations 143 to 158**.

The default value for the Telco Disarming Sequence is **0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.**

This parameter allows you to deactivate call diversion automatically on your telephone when you disarm the system from AWAY Mode. Refer to *Table 39*.

To turn call forward (immediate) off, enter:

[# 2 1 #]

Example

To disable call forward (immediate) after disarming the system from AWAY Mode, program:

[12 2 1 12 0 0 0 0 0 0 0 0 0 0 0 0]

To turn call forward (no answer) off, enter:

[# 6 1 #]

Example

To disable call forward (no answer) after disarming the system from AWAY Mode, program:

12 6 1 12 0 0 0 0 0 0 0 0 0 0 0 0

11.9 Call Back Telephone Number

Program the Call Back Telephone Number in **Locations 159 to 174**.

The default value for the Call Back Telephone Number is **0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.**

This parameter stores the telephone number to call when Upload/Download is requested or the user holds down [6] to initiate a modem call from the control panel to establish a communications link with the remote computer. The computer must be running the CC816 Alarm Link Software and must be set to Waiting for an Incoming Call.

The Call Back Telephone Number is also required if Remote Connect with Callback Verification is required (refer to *Section 8.1.3* on page 39).

Refer to *Section 8.0 Alarm Link Software* on page 39 for more information.

11.10 Ring Count

Program the Ring Count in **Location 175**.

The default value for the Ring Count is **8.**

Programming this location to a value from 1 to 13 sets that number of rings before the control panel answers an incoming call. Set this count to an acceptable level, noting that one ring is "Ring, Ring – Ring, Ring" and that a Ring Count of 10 represents approximately 60 sec. This location has an effect only if Remote Arming, Remote Upload/Download using Alarm Link, or both are enabled.

Programming this location to 0 prevents the control panel from answering incoming calls regardless of any other programmed options.

Answering Machine Bypass

Answering Machine Bypass allows connecting with the control panel for Remote Arming or Upload/Download when an answering machine or facsimile machine is on the same telephone line. There are two different Answering Machine Bypass methods. Program a 14 to use the secondary method only when there is a large amount of traffic on the line (at a home office, for example). This method reduces the chance of the control panel incorrectly answering an incoming call.

Programming the Ring Count to 15 enables Answering Machine Bypass in the primary mode. When calling the control panel, allow the telephone to ring no more than four rings then hang up. If you call again within 45 sec, the control panel answers the call on the first ring and the connection is established. This prevents the answering machine or facsimile machine from answering the call. To enable Answering Machine Bypass only when the system is armed, select Option 2 in Location 177 (refer to *Section 12.1 Dialer Options 1* on page 50).

Program the Ring Count to 14 to enable Answering Machine Bypass in the secondary mode. In this case, call the control panel and allow the phone to ring no more than two rings and hang up. Wait at least 8 sec and call the control panel again. The control panel answers on the first ring. If you do not wait the 8 sec, the control panel does not answer the call. To enable Answering Machine Bypass only when the system is armed, select Option 2 in Location 177 (refer to *Section 12.1 Dialer Options 1* on page 50).

Set the Ring Count for the answering or facsimile machine to a value greater than two rings. Four to six rings is preferred.

Program a 0 into this location to disable the control panel from answering an incoming call.

11.11 Telephone Line Fault Options

Program the selected Telephone Line Fault Options in **Location 176**.

The default value is **0**.

This location has three options. You can select any combination of these options by programming a single value. Calculate this value by adding the option bit numbers together. Refer to *Section 2.3 Programming Option Bits* on page 10 for more information.

The control panel monitors the telephone line. If the telephone line is cut or disconnected for longer than 40 sec, the control panel lights the FAULT indicator on the codepad. The FAULT indicator is extinguished after the telephone line is restored for longer than 40 sec.

Option 2 and 4 do not operate unless you also enable Option 1.

The options are:

1 – Display FAULT Indicator When the Telephone Line Fails

When this options is selected, the FAULT indicator flashes and the codepad buzzer beeps once per minute if the control panel detects that the telephone line is disconnected. Refer to *Section 4.13 Fault Descriptions* on page 22 for more information.

2 – Sound Alarm When System Is Armed

To use Option 2, you must also select Option 1. If the control panel detects that the telephone line is disconnected when the system is armed, the horn speaker, bell, and strobe outputs are activated.

4 – Sound Alarm when System Is Disarmed

You must also select Option 1 to use this option. If the control panel detects that the telephone line is disconnected when the system is disarmed, the horn speaker, bell, and strobe outputs are activated.

If you program 7 in this location, the horn speaker, bell, strobe, and EDMSAT outputs are all activated when the system is armed or disarmed.

8 – Reserved

12.0 Dialer Options

When programming these locations, there are up to four options per location. You can select any combination of the options by programming a single value. Calculate this value by adding the option bit numbers together. Refer to *Section 2.3 Programming Option Bits* on page 10 for more information.

12.1 Dialer Options 1

Program the selected Dialer Options 1 in **Location 177**.

The default value is **9**.

The options are:

1 – Dialer Reporting Functions Allowed

If you select this option, the dialer operates for all functions.

If you do not select this option, the communication dialer does not operate.

Upload/Download using the CC816 Alarm Link Software and telephone remote arming remain operational regardless of this setting.

2 – Remote Arming by Telephone Allowed

If you select this option, you can remotely arm the system using a standard telephone with the CC911 Phone Controller or by pressing [*] on your touch-tone telephone. Refer to *Section 7.0 Remote Arming by Telephone* on page 38 for more information. Forced arming is automatically assumed when this feature is used. Refer to *Section 14.3.6 Zone Options 2* on page 58 for more information on forced arming.

Remote arming by telephone is not affected by whether remote functions are enabled or disabled. Refer to *Section 11.10 Ring Count* on page 49 for programming the number of rings before the control panel answers an incoming call.

4 – Answering Machine Bypass Only When Armed

Select this option to enable the Answering Machine Bypass feature when the system is armed. When the system is disarmed, the control panel does not answer any incoming calls. This option is useful in high telephone traffic installations where the control panel could answer an incoming call. Refer to *Section 11.10 Ring Count* on page 49 to program Answering Machine Bypass.

8 – Use Bell 103 for FSK Format (Disabled = CCITT V21)

If this option is selected, the control panel uses the BELL 103 transmission frequency at 300 baud. If this option is not selected, the control panel uses the CCITT V21 transmission frequency at 300 baud.

12.2 Dialer Options 2

Program the selected Dialer Options 2 in **Location 178**.

The default value is **0**.

The options are:

1 – Open/Close Reports Only if Previous Alarm

When selected, an Opening Report is sent to the base station receiver when the system is disarmed after an alarm occurred. When the system is armed, a Closing Report is sent. An Opening or Closing Report is not sent again until the system registers another alarm.

Open/Close Reports must be enabled in Locations 333 and 334 (refer to *Section 15.6 Open/Close Reports* on page 61) for this option to work.

If the system is disarmed when an alarm occurs, only a Closing Report is sent the next time the system is armed.

2 – Open/Close Reports for STAY Mode 1 and STAY Mode 2

Select this option if Open and Close Reports are required when the system is armed in STAY Mode 1 or STAY Mode 2.

Open/Close Reports must be enabled in Locations 333 and 334 (refer to *Section 15.6 Open/Close Reports* on page 61) for this option to work.

4 – Delay Siren until Transmission Complete

If this option is selected, the EDMSAT, horn speaker, bell, and strobe outputs are not activated until after the control panel sends the message and the base station receiver sends a kiss-off back to the control panel. If multiple messages are sent, the sirens are activated after the last kiss-off is sent.

If a Codepad Panic, Codepad Fire, or Codepad Medical Alarm is activated, the EDMSAT, horn speaker, bell, and strobe outputs operate immediately.

8 – Extend Time to Wait for Handshake from 30 to 60 Sec

By default, the control panel waits approximately 30 sec for receipt of a valid handshake tone after it dials the monitoring station. The handshake tone indicates to the control panel that it reached the monitoring station and can now send its messages. Selecting this option extends this wait time from 30 sec to 60 sec.

12.3 Dialer Options 3

Program the selected Dialer Options 3 in **Location 179**.

The default is 0. The options are:

1 – Set DTMF Dialing Pulses to 1 Digit/Sec

If this option is not selected, the Australian DTMF dialing format dials at 5 digits per sec (that is, 100 ms tone, 100 ms pause, 100 ms tone, 100 ms pause).

If this option is selected, the Australian DTMF dialing format dials at the rate of 1 digit per sec (that is, 500 ms tone, 500 ms pause).

2 – Reserved

4 – Change Decadic Dialing to 60/40

Some countries have different requirements for decadic dialing. Selecting this option changes the dialing characteristics from 65/35 (Australian Standard) to 60/40. Select this option only when the control panel is used in a country that requires decadic dialing as 60/40. This option has no effect when using DTMF tone dialing.

8 – Reserved

12.4 Alarm Link Options

For more information about this location, refer to *Section 8.2 Alarm Link Options* on page 40.

13.0 Access Code

This section describes the access codes that assign privileges and access functions for User Code holders of the system. There are two types of access codes, the Installer Code and User Codes. Each code allows access and operation of control panel functions.

13.1 Installer Code

Program the Installer Code in **Locations 181 to 184**.

The default Installer Code is **1 2 3 4**.

Use this code to access Installer's Programming Mode. The Installer Code can be up to four digits long. After power is applied to the control panel, the Installer Code can disarm the system if it is the first code used. The next time the Installer Code is used enables access to Installer's Programming Mode.

Installer Code functions allow the installer to execute functions when the system is disarmed without the customer's Master Code. Refer to *Section 6.1 Installer Code Functions* on page 27 for more information.

Refer to *Section 2.1 Programming with the Remote Codepad* on page 9 for more information on programming the system.

13.2 User Codes

The purpose of User Codes is to arm and disarm the system and to perform other specific functions. A Master Code holder can change or delete User Codes.

Program User Codes 1 to 8 in **Locations 185 to 224**.

Program Remote Radio User Codes 9 to 16 in **Locations 225 to 264**.

The default User Codes are listed in *Table 40*.

Table 40: Default User Codes

User Number	Locations	Code	Priority
User #01	185 to 189	2 5 8 0	10
User #02	190 to 194	15 15 15 15	2
User #03	195 to 199	15 15 15 15	2
User #04	200 to 204	15 15 15 15	2
User #05	205 to 209	15 15 15 15	2
User #06	210 to 214	15 15 15 15	2
User #07	215 to 219	15 15 15 15	2
User #08	220 to 224	0 15 15 15	3
RF User #09	225 to 229	15 15 15 15	2
RF User #10	230 to 234	15 15 15 15	2
RF User #11	235 to 239	15 15 15 15	2
RF User #12	240 to 244	15 15 15 15	2
RF User #13	245 to 249	15 15 15 15	2
RF User #14	250 to 254	15 15 15 15	2
RF User #15	255 to 259	15 15 15 15	2
RF User #16	260 to 264	15 15 15 15	2

User Codes are four digits long. The fifth position specifies the priority level for the code. Each User Code has its own priority level. More than one User Code can have the same priority level. The priority level controls the behaviour of the code, such as allowing it to arm only, to arm and disarm, or allow access to the Master Code functions (refer to *Section 13.3 User Code Priority* on page 52). The installer can assign access to Master Code functions to multiple User Codes.

Only the installer can change the priority level.

The ICP-CC404 Control Panel can have up to eight programmable User Codes (1 to 8) to operate the system. Refer to *Section 4.0 System Operations* on page 18 for information about the different methods to arm and disarm the system.

Although 16 User Codes are available, User Codes 9 through 16 can only be Remote Radio User Codes. User Codes 9 to 16 allow systems that require remote radio control by hand-held remote transmitters. Refer to *Section 5.0 Remote Radio Transmitter Operations* on page 24 for information on remote operations and adding and deleting Remote Radio User Codes.

User Code 16 is reported when any of these methods is used to arm or disarm the system:

- Arming and disarming using remote radio control equipment connected to the RE005E 2-Channel Radio Interface.
- Arming and disarming using the CC816 Alarm Link Software.
- Arming remotely by telephone.
- Single button arming in AWAY Mode, STAY Mode 1, or STAY Mode 2.
- Single button disarming from STAY Mode 1 or STAY Mode 2.
- Automatic arming in AWAY Mode or STAY Mode 1.
- Automatic disarming from AWAY Mode, STAY Mode 1, or STAY Mode 2

13.3 User Code Priority

The installer can assign one of ten different priority levels to a User Code. Each priority level allows or restricts a user from performing specific functions.

Table 41: Priority Levels

Level	Description
0	Arm or disarm
1	Arm only
2	Arm or disarm and Open or Close Reports
3	Arm only and Close Report
4	Arm or disarm and code to isolate
6	Arm or disarm, code to isolate, and Open or Close Reports
8	Arm or disarm and Master Code functions
10	Arm or disarm, Master Code functions, and Open or Close Reports
12	Arm or disarm, Master Code functions, and code to isolate
14	Arm or disarm, Master Code functions, code to isolate, and Open or Close Reports

Arm/Disarm

The user can arm and disarm the system. A Closing Report is sent only after a previous code that can send an Opening Report disarms the system.

Arm Only

The user can arm the system but cannot disarm the system. A Closing Report is sent only after a previous code that can send an Opening Report disarms the system.

Open/Close Reports

Open and Close reports are sent to the monitoring station when the user disarms and arms the system, but only if Open/Close Reports is enabled in Locations 333 and 334 (refer to *Section 15.6 Open/Close Reports* on page 61).

Code To Isolate

If one or more User Codes has this option included, the method of standard isolating is disabled and only a User Code with this option in its priority level can isolate zones before arming the system using the Code to Isolate method. Refer to *Section 4.11 Isolating Zones* on page 21 for more information.

When priority level 4, 6, 12, or 14 is assigned to any User Codes, the Standard Isolating method no longer operates. Only User Codes with a priority level of 4, 6, 12, or 14 can isolate zones using the Code to Isolate method.

Master Code Functions

The user has access to all Master Code functions. Refer to *Section 6.2 Master Code Functions* on page 31 for more information.

14.0 Zone Information

14.1 Day Alarm Information

Program the desired Day Alarm Zones in **Location 265**.
The default value is **0**.

The options are:

1 – Zone 1

2 – Zone 2

3 – Zone 3

4 – Zone 4

You can select any combination of the options by programming a single value. Calculate this value by adding the option bit numbers together. Refer to *Section 2.3 Programming Option Bits* on page 10 for more information.

Day Alarm allows some zones to be monitored when the system is disarmed. Visual or audible indications are available at any of the programmable outputs, including the codepad buzzer. This function accommodates latching and non-latching Day Alarm Output Event Types.

When the system is armed in AWAY Mode, STAY Mode 1, or STAY Mode 2, zones programmed as Day Alarm Zones activate the sirens and dialer just as non-Day Alarm Zones do. When Day Alarm is activated, it ignores any zone Pulse Count settings programmed for that zone (that is, the zone Pulse Count is only relevant when the system is armed).

Example

You can set up a Day Alarm at the front door of a shop with a pressure mat or electronic beam that is activated when a customer enters the shop. When a customer walks on the pressure mat or breaks the electronic beam, the codepad buzzer beeps.

14.1.1 Day Alarm Resetting

An output programmed for Day Alarm Resetting operates when a zone programmed for Day Alarm is activated. The output is reset after the zone is resealed. This occurs only when the system is disarmed. Refer to *Output Event Type 0,14 Day Alarm Resetting* on page 66 for more information.

14.1.2 Day Alarm Latching

An output programmed for Day Alarm Latching operates when a zone programmed for Day Alarm is activated. The zone indicator and the latching output is reset when [AWAY] is pressed. This occurs only when the system is disarmed. Refer to *Output Event Type 0,15 Day Alarm Latching* on page 66 for more information.

14.1.3 Day Alarm Operation

If a zone is programmed for Day Alarm, the zone can be isolated in the normal way so that it does not register as a Day Alarm Zone when the system is disarmed. You can only use Zones 1 to 4 as Day Alarm Zones.

You can program the STAY indicator to indicate whether Day Alarm is turned on or off by selecting Option 8 in Location 428 (refer to *Section 18.5 Consumer Options 1* on page 75). When Day Alarm is on, the STAY indicator flashes once every three sec.

Zones 5 to 8 can be monitored by programming an output to mimic a zone. Refer to *Section 16.2 Output Event Types* on page 65 for more information on the Output Event Types that you can program.

To turn Day Alarm on:

Press and hold [4] until three beeps sound.

To turn Day Alarm off:

Press and hold [4] until two beeps sound.

14.2 EOL Resistor Value

Program the EOL Resistor Value in **Location 266**.

The default value is **15**.

Table 42: EOL Resistor Options

Option	Resistor Value
0	No EOL
1	1 kΩ (brown, black, red)
2	1.5 kΩ (brown, green, red)
3	2.2 kΩ (red, red, red)
4	3.3 kΩ (orange, orange, black, brown) 1%
5	3.9 kΩ (orange, white, red)
6	4.7 kΩ (yellow, violet, red)
7	5.6 kΩ (green, blue, red)
8	6.8 kΩ (blue, grey, black, brown) 1%
9	10 kΩ (brown, black, orange)
10	12 kΩ (brown, red, orange)
11	22 kΩ (red, red, orange)
12	Reserved
13	Reserved
14	Reserved
15	Split EOL 1% resistors

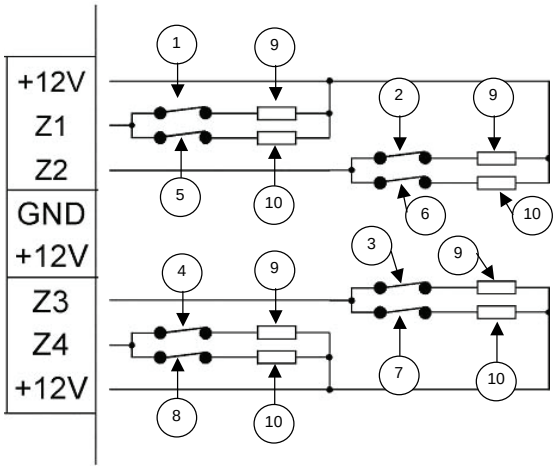
You can program the control panel for different EOL (end-of-line) resistor values (refer to *Table 42*). This is a global parameter that affects all zones simultaneously. This feature allows you to install the ICP-CC404 Control Panel at an existing site without changing the EOL resistors. This feature also increases the security of the system because eleven possible EOL resistor values can be used, which makes it extremely difficult to tamper with the system.

If you select split EOL resistors, the control panel looks for four Burglary Zones (1 to 4) with 3.3 kΩ EOL resistors and four 24-Hour Zones (5 to 8) consisting of 6.8 kΩ resistors connected in parallel. The Zone 1 terminal on the PCB is the terminal for Zones 1 and 5.

Use caution when using split EOL resistors to create four Burglary Zones and four 24-Hour Zones. This configuration is only suitable for normally-closed (NC) contacts. If normally-open (NO) contacts are used, as is the case with most smoke detectors, a short circuit on one zone activates both zones connected in parallel.

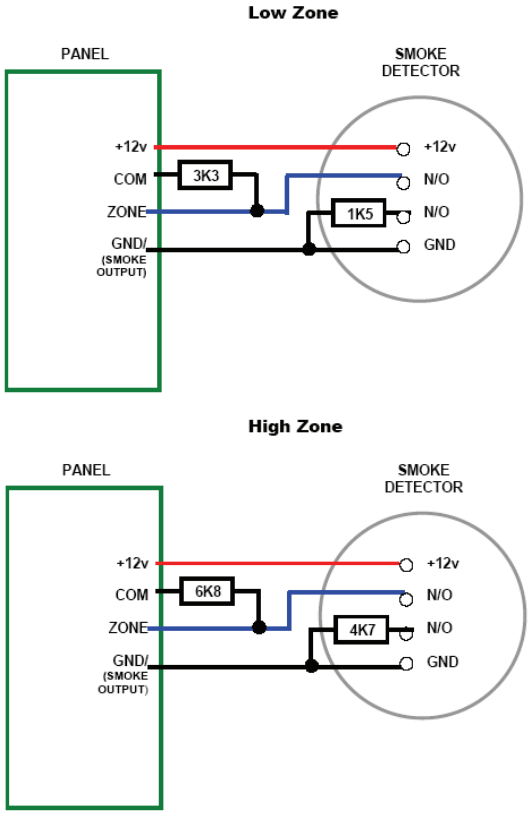
If you require NO contacts when using split EOL resistors, refer to *Figure 8* for information on how to connect NO contacts.

Figure 7: Split EOL Resistors Using NC Contacts



1 – Zone 1	*6 – Zone 6*
2 – Zone 2	*7 – Zone 7*
3 – Zone 3	*8 – Zone 8*
4 – Zone 4	*9 – 3.3 kΩ*
5 – Zone 5	*10 – 6.8 kΩ*

Figure 8: Split EOL Resistors Using NO Contacts



14.3 Zone Programming

The programming information for each zone is stored in seven locations divided into three groups. The first three locations determine how the zone operates, the next two locations set up a number of zone options, and the last two locations store the dialer reporting information for the zone.

Zone Operating Information

These locations store the Zone Type (for example, Delay-1, Instant, or 24-Hour), the Zone Pulse Count, and the Zone Pulse Count Time. The Zone Pulse Count specifies the number of times the zone must activate within the time specified in the Zone Pulse Count Time. Refer to *Sections 14.3.1 Zone Types*, *14.3.2 Zone Pulse Count* on page 56, and *14.3.3 Zone Pulse Count Time* on page 56 for more information.

Zone Options

These two locations allow you to select from a number of options. Refer to *Sections 14.3.4 Zone Options 1* on page 57 and *14.3.6 Zone Options 2* on page 58 for more information.

Zone Reporting Information

This information includes the locations for the Zone Report Code and the Zone Dialer Options.

The Zone Report Code determines whether the control panel sends Alarm Reports for the zone. Refer to Section *14.3.7 Zone Report Code* on page 59 for more information.

The Zone Dialer Options location enables you to specify how a zone sends a report to a base station receiver. Refer to *Section 14.3.8 Zone Dialer Options* on page 59 for more information.

Zone Defaults

The default zone parameters for the ICP-CC404 Control Panel are listed in *Table 43*. You can program Zones 1 to 4 as any Zone Type, but you can only program Zones 5 to 8 as a 24-Hour Zone Type.

Table 43: Zone Programming Defaults

Zone Number	Default Type	Locations	Zone Type	Pulse Count	Pulse Time	Zone Options 1	Zone Options 2	Report Code	Dialer Options
Zone 1	Delay 1	267 to 273	2	0	0	1	14	1	1
Zone 2	Handover	274 to 280	1	0	0	1	14	1	1
Zone 3	Handover	281 to 287	1	0	0	1	14	1	1
Zone 4	Instant	288 to 294	0	0	0	1	14	1	1
Zone 5	Fixed 24-hr burglary	295 to 301	12	0	0	1	12	1	1
Zone 6	Fixed 24-hr burglary	302 to 308	12	0	0	1	12	1	1
Zone 7	Fixed 24-hr fire	309 to 315	13	0	0	1	12	1	1
Zone 8	Fixed 24-hr tamper	316 to 322	9	0	0	1	12	1	1

14.3.1 Zone Types

0 – Instant Zone

An Instant Zone (Contact ID Event Code 130) immediately sounds the sirens and operates the dialer when it is unsealed after the Exit Timer expires.

If an Instant Zone is not restored when the system is disarmed, a Zone Restore Report is automatically sent to the receiving party.

1 – Handover Zone

A Handover Zone (Contact ID Event Code 130) acts as an Instant Zone if it is activated by itself. If a Handover Zone is activated after a Delay Zone, the remaining Delay Time is handed over from the Delay Zone to the Handover Zone.

Handover can be sequential or non-sequential. The default settings is sequential handover. You can disable sequential handover by disabling Option 8 in Location 426 (refer to *Section 18.3 System Options 3* on page 74).

If a Handover Zone is not restored when the system is disarmed, a Zone Restore Report is automatically sent to the receiving party.

2 – Delay-1 Zone

A Delay-1 Zone (Contact ID Event Code 130) has a delay time determined by the value in Locations 398 and 399 (refer to *Section 17.2 Entry Timer 1* on page 70). After Entry Time expires, the system activates an alarm.

If a Delay-1 Zone is not restored when the system is disarmed, a Zone Restore Report is sent to the receiving party.

3 – Delay-2 Zone

A Delay-2 Zone (Contact ID Event Code 130) has a delay time determined by the value in Locations 400 and 401 (refer to *Section 17.3 Entry Timer 2* on page 71). After Entry Time expires, the system activates an alarm.

If a Delay-2 Zone is not restored when the system is disarmed, a Zone Restore Report is sent to the receiving party.

4 – Reserved

5 – Reserved

6 – 24-Hour Medical Zone

A 24-Hour Medical Zone (Contact ID Event Code 100) is always ready to activate the dialer, horn speaker, bell, and strobe, regardless of whether the system is armed or disarmed. A Medical Report is sent to the base station receiver. A 24-Hour Medical Zone does not send a Restore Report until the zone is restored.

7 – 24-Hour Panic Zone

A 24-Hour Panic Zone (Contact ID Event Code 120) is always ready to activate the dialer, horn speaker, bell, and strobe, regardless of whether the system is armed or disarmed. A Panic Report is sent to the base station receiver. A 24-Hour Panic Zone does not send a Restore Report until the zone is restored.

8 – 24-Hour Holdup Zone

A 24-Hour Holdup Zone (Contact ID Event Code 122) is always ready to activate the dialer, horn speaker, bell, and strobe, regardless of whether the system is armed or disarmed. If you want the holdup alarm to be silent, select Option 4 in the first Zone Options location (refer to *Section 14.3.4 Zone Options 1* on page 57). A 24-Hour Holdup Zone does not send a Restore Report until the zone is restored.

9 – 24-Hour Tamper Zone

A 24-Hour Tamper Zone (Contact ID Event Code 137) is always ready to activate the dialer, horn speaker, bell, and strobe, regardless of whether the system is armed or disarmed. A 24-Hour Tamper zone does not send a Restore Report until the zone is restored.

11 – Keyswitch Zone

A Keyswitch Zone is used to connect a keyswitch to operate the system. Refer to *Section 14.3.5 Keyswitch Zone Options* on page 57 for information on programming this zone type. User Code 16 is reported when arming and disarming using this method of operation. Programming the priority level of User Code 16 also affects the operation of the Keyswitch Zone. Refer to *Section 13.3 User Code Priority* on page 52 for more information.

12 – 24-Hour Burglary Zone

A 24-Hour Burglary Zone (Contact ID Event Code 133) is always ready to activate the dialer, horn speaker, bell, and strobe, regardless of whether the system is armed or disarmed. A 24-Hour Burglary zone does not send a Restore Report until the zone is restored.

13 – 24-Hour Fire Zone

A 24-Hour Fire Zone (Contact ID Event Code 110) is always ready to activate the dialer, horn speaker, bell, and strobe, regardless of whether the system is armed or disarmed. A distinct fire sound is emitted through the horn speaker to indicate this type of alarm. This fire sound is completely different than the burglary sound. A 24-Hour Fire zone does not send a Restore Report until the zone is restored.

14 – Chime Zone

A Chime Zone is not a burglary zone. It can never sound the sirens or activate the dialer. Its purpose is to map the zone to a programmable output to indicate if the zone is sealed or unsealed. Refer to *Output Event Type 4,5 Global Chime* on page 68.

Chime zones require EOL resistors and they are registered at a remote codepad. These zones do not affect the operation of forced arming.

15 –Zone Not Used

If a zone is not used, program the zone type location as 15. An EOL resistor is not required if this zone type is used. This zone type never sounds the sirens or activates the dialer.

14.3.2 Zone Pulse Count

Zone pulse count is the number of times a zone must be activated before the zone registers an alarm. The number can vary from 0 to 15. The zone pulse count value is relative to the time frame (that is, the number of pulses that must be present during a particular time frame). Refer to *Section 14.3.3 Zone Pulse Count Time* on page 56 for time frame settings.

> A zone programmed with a pulse count activates an alarm when it is continuously unsealed for 10 sec. A 24-Hour Fire Zone programmed with a pulse count activates an alarm when it is continuously unsealed for 30 sec.

Zone Pulse Count Handover

Zone pulse count handover operates only with Zone Pulse Count Time options 8 to 15. Refer to *Section 14.3.3 Zone Pulse Count Time* on page 56 for more information.

Any zone that registers one trigger pulse automatically increments any other zone pulse count that already registered at least one trigger pulse during its respective time. To enable this feature, select Option 4 in Location 426 (refer to *Section 18.3 System Options 3* on page 74).

> 24-Hour Zones can receive all handover pulses from other zones. 24-Hour Zones cannot hand over pulses to other zones.

14.3.3 Zone Pulse Count Time

Zone pulse count time is the time frame or period over which the programmed number of pulses must register to activate an alarm.

Table 44: Zone Pulse Count Times

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

For zone pulse count time, Options 0 to 7 have a zone loop response time of 20 ms and Options 8 to 15 have a zone loop response time of 150 ms. Loop response time is the length of time a zone must be unsealed before it can register as a valid pulse.

Inertia sensors should use Options 0 to 7 and PIR detectors should use Options 8 to 15.

24-Hour Zones can receive any handover pulses from other zones. 24-Hour Zones cannot hand over pulses to other zones.

14.3.4 Zone Options 1

This location has four programming options. You can select any combination of the options by programming a single value. Calculate this value by adding the option bit numbers together. Refer to *Section 2.3 Programming Option Bits* on page 10 for more information.

1 – Lockout Siren and Lockout Dialer

Lockout refers to one activation per arming cycle (that is, a zone programmed for Lockout can activate the sirens or dialer only once).

The next time the system is armed, the zone can activate the sirens and dialer once more. Restore signals are sent when the system is disarmed.

The ICP-CC404 Control Panel performs lockout differently than other control panels because only the first zone to activate an alarm is locked out. All other zones that are activated during the same Siren Run Time reset when the sirens reset. This prevents an intruder from activating all zones and waiting for the sirens to stop before re-entering the premises.

Example

All zones are programmed for both lockout siren and dialer. Zone 1 is activated, followed by all other zones, which activates the sirens and causes the dialer to send a report to the base station receiver. Zone 1 is the only zone that stops sending reports to the base station receiver because the first activated zone is locked out. The remaining zones continue to send reports if they are activated again.

Use Location 323 to set the number of times the siren is allowed to activate before it is locked out (refer to *Section 14.4 Swinger Shutdown Count for Siren* on page 59). Use Location 324 to set the number of times the dialer is activated before lockout takes effect (refer to *Section 14.5 Swinger Shutdown Count for Dialer* on page 59).

2 – Delay Alarm Reporting

Select this option to allow sending alarm reports on selected zones to be delayed so a user can enter a code to cancel alarms that are not yet required to send a report. All sounding devices (horn speaker, strobe, and bell outputs) operate as soon as the alarm occurs, but the dialer does not operate until the delay time programmed in Locations 406 and 407 expires (refer to *Section 17.6 Delay Alarm Reporting Time* on page 71).

4 – Silent Alarm

Select this option to program a zone as silent. A silent zone does not activate the horn speaker, bell, strobe, or EDMSAT outputs. The dialer and all other programmable outputs function according to the parameters programmed for the zone.

8 – Sensor Watch

Sensor watch allows the control panel to recognize when detection devices might have stopped working. This feature monitors the operation of a zone over the time period programmed in Locations 408 and 409 (refer to *Section 17.7 Sensor Watch Time* on page 71).

This value specifies how many 24-hour periods a zone can remain continuously sealed before it registers as a Sensor Watch fault. The number of hours required to fulfill these 24-hour periods is calculated only when the system is disarmed. Every time the system is armed in the AWAY Mode, STAY Mode 1, or STAY Mode 2, the Sensor Watch Timer pauses its count. The Sensor Watch Timer continues its count the next time the system is disarmed.

Example

If the Sensor Watch Time is programmed for 2 days and the premises is armed for 12 hours and disarmed for 12 hours each day, it takes 4 days before a zone can register a Sensor Watch fault.

14.3.5 Keyswitch Zone Options

This section lists the options avialable to Keyswitch Zones. If you program a zone as a keyswitch input (Zone Type 11), program the selected Keyswitch Zone options in the location normally used for Zone Options 1. Keyswitch Zones report as User Code 16.

0 – Latching Arm and Disarm in AWAY Mode

The system is armed or disarmed from AWAY Mode when using the latching keyswitch input.

1 – Latching Arm in AWAY Mode

The system is armed in AWAY Mode when using the latching keyswitch input. Disarming the system is not permitted from the Keyswitch Zone.

2 – Latching Disarm from AWAY Mode, STAY Mode 1, or STAY Mode 2

The system is disarmed from AWAY Mode, STAY Mode 1, or STAY Mode 2 when using the latching keyswitch input. Arming the system is not permitted from the Keyswitch Zone.

4 – Latching Arm and Disarm in STAY Mode 1

The system is armed or disarmed in STAY Mode 1 when using the latching keyswitch input. Arming and disarming the system in AWAY Mode is not permitted from the Keyswitch Zone.

5 – Latching Arm in STAY Mode 1

The system is armed in STAY Mode 1 when using the latching keyswitch input. Arming the system in AWAY Mode or disarming the system is not permitted from the Keyswitch Zone.

6 – Latching Disarm from STAY Mode 1 or STAY Mode 2

The system is disarmed from STAY Mode 1 or STAY Mode 2 when using the latching keyswitch input. Arming the system in STAY Mode 1 or STAY Mode 2, or arming and disarming the system in AWAY Mode is permitted from the Keyswitch Zone.

8 – Momentary Arm and Disarm in AWAY Mode

The system is armed or disarmed from AWAY Mode when using the momentary keyswitch input.

9 – Momentary Arm in AWAY Mode

The system is armed in AWAY Mode when using the momentary keyswitch input. Disarming the system is not permitted from the Keyswitch Zone.

10 – Momentary Disarm from AWAY Mode, STAY Mode 1, or STAY Mode 2

The system is disarmed from either AWAY Mode, STAY Mode 1, or STAY Mode 2 when using the momentary keyswitch input. Arming the system is not permitted from the Keyswitch Zone.

12 – Momentary Arm and Disarm in STAY Mode 1

The system is armed or disarmed in STAY Mode 1 when using the momentary keyswitch input. Arming and disarming the system in AWAY Mode is not permitted from the Keyswitch Zone.

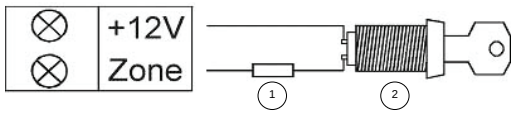
13 – Momentary Arm in STAY Mode 1

The system is armed in STAY Mode 1 when using the momentary keyswitch input. Arming the system in AWAY Mode or disarming the system is not permitted from the Keyswitch Zone.

14 – Momentary Disarm from STAY Mode 1 or STAY Mode 2

The system is disarmed from STAY Mode 1 or STAY Mode 2 when using the momentary keyswitch input. Arming the system in STAY Mode 1 or STAY Mode 2, or arming and disarming the system from AWAY Mode is not permitted from the Keyswitch Zone.

Figure 9: Wiring Diagram for Keyswitch Zone



1 – EOL

2 – Keyswitch (Momentary/Toggle)

14.3.6 Zone Options 2

This location has four programming options. You can select any combination of the options by programming a single value. Calculate this value by adding the option bit numbers together. Refer to *Section 2.3 Programming Option Bits* on page 10 for more information.

1 – Isolate in STAY Mode 1

If this option is selected, the zone can be automatically isolated when the system is armed in STAY Mode 1.

If this option is not selected and the system is armed in STAY Mode 1, the zone activates an alarm when activated as it normally would in AWAY Mode.

You can specify a global entry time for all zones, except for 24-Hour Zones, when the system is armed in STAY Mode 1. You program this time in Locations 404 and 405 (refer to *Section 17.5 Entry Guard Timer for STAY Mode* on page 71). The Entry Guard Timer overrides the delay time programmed for a Delay Zone. If you program the Entry Guard Timer as 0, each zone acts according to its programmed zone type.

Refer to *Section 4.3 Arming the System in STAY Mode 1* on page 19 for more information.

2 – Zone Isolation Allowed

If this option is selected, the operator can isolate the zone before arming the system. If this option is not selected, the zone cannot be manually isolated. When a zone is manually isolated, a Zone Bypass Report (Contact ID Event Code 570) is sent. Refer to *Section 4.11 Isolating Zones* on page 21 for more information.

When isolating 24-Hour Zones, the system automatically sends a Zone Bypass Report when the zone is selected to be isolated. All non-24-Hour zones send a Bypass Report only when the system is armed.

If you do not want the system to send Zone Bypass Reports, program Locations 325 and 326 to 0 (refer to *Section 15.1 Zone Status – Bypass Reports* on page 60).

4 – Forced Arming Allowed

If this option is selected, the system can be armed with the zone unsealed. If this option is not selected, the system does not allow the User Code holder to arm the system until the zone is sealed or manually isolated. Refer to *Section 4.11 Isolating Zones* on page 21 for more information.

8 – Zone Restore Report

If this option is selected, the zone sends Restore Reports when the zone is restored. If this option is not selected, the zone does not send Restore Reports when the zone is restored.

If a non-24-Hour zone is not restored when the system is disarmed, the system automatically sends a Zone Restore Report for that zone. All 24-Hour zones send a Zone Restore Report only when the zone is restored.

14.3.7 Zone Report Code

If you want the control panel to send Zone Alarm Reports, program this location as 1. If not, program this location as 0.

14.3.8 Zone Dialer Options

By default, a zone reports only to Receiver 1. *Table 45* lists the reporting options for the zone.

Table 45: Zone Dialer Options

Option	Description
0	No report required
1	Receiver 1
2	Receiver 2
4	Receiver 1 and Receiver 2
8	Receiver 2 only when Receiver 1 fails

14.4 Swinger Shutdown Count for Siren

Program the Swinger Shutdown Count for Siren in **Location 323**.

The default value is **3**.

This location determines the number of times the sirens can be activated before lockout options take effect. Programming a 0 sets the count to unlimited. This location has no effect unless you program at least one zone for lockout siren. Refer to *Section 14.3.4 Zone Options 1* on page 57 to program zones for lockout siren.

Only alarms activated from zone inputs can decrease the Swinger Shutdown Counter. Alarms such as Codepad Panic, Access Denied, and other system alarms do not affect the Swinger Shutdown Count.

When the sirens are operating, its counter is only decreased by the first zone that activated the alarm. Any other zones that are activated during Siren Run Time do not affect the counter.

When the Swinger Shutdown Count is reached, all zones that were activated are locked out according to their individual lockout settings.

Example

All eight zones are programmed for lockout siren with a Swinger Shutdown Count of 3. If Zone 1 activates an alarm, the Swinger Shutdown Count is decreased by one after the end of Siren Run Time to a swinger shutdown count of 2.

After the Siren Run Time is reset from the previous alarm, Zone 2 activates an alarm and activates the sirens. After the sirens reset, the swinger shutdown count is decreased again to 1.

If Zone 3 also activates an alarm after the sirens are reset from Zone 2, the Swinger Shutdown Count is decreased to 0, which locks out all three zones from sounding the sirens until the system resets.

At this point, the Swinger Shutdown Count for Sirens resets to 3 and the process of swinger shutdown for remaining zones begins again until all zones are locked out.

14.5 Swinger Shutdown Count for Dialer

Program the Swinger Shutdown Count for Dialer in **Location 324**.

The default value is **6**.

This location determines the number of times the dialer can be activated before lockout options take effect. This location has no effect unless you program at least one zone for lockout dialer. Refer to *Section 14.3.4 Zone Options 1* on page 57 to program zones for lockout dialer.

Only alarms activated from zone inputs can decrease the Swinger Shutdown Counter. Alarms such as Codepad Panic, Code Retries, and other system alarms do not affect the Swinger Shutdown Count.

When the dialer is online, its counter is only decreased by the first zone that activated the alarm. Any other zones that are activated while the dialer is online do not affect the counter.

When the Swinger Shutdown Count is reached, all zones that were activated are locked out according to their individual lockout settings.

If Lockout Dialer is enabled for any zone, the last restore signal is not sent until the system is disarmed.

Example

All eight zones are programmed for lockout dialer with a Swinger Shutdown Count of 6. If Zone 1 activates an alarm, the Swinger Shutdown Count decreased to 5 when the control panel calls.

If Zone 1 reactivates the dialer, the Swinger Shutdown Count is decreased to 4. If Zone 1 reactivates the dialer three more times, the Swinger Shutdown Count is 1.

If Zone 2 activates an alarm, the Swinger Shutdown Count decreases to 0, which locks out Zone 2 from activating the dialer until the system resets. At this point, the Swinger Shutdown Count for the Dialer resets to 6 and the process of swinger shutdown for the remaining zones, including Zone 1, begins again until all zones are locked out.

15.0 System Reporting Information

This section covers basic housekeeping features of the system.

15.1 Zone Status – Bypass Reports

Program the Zone Bypass Report value in **Location 325** (the default value is **9**) and the Zone Bypass Restore Report value in **Location 326** (default **8**).

A zone is bypassed when it is manually isolated. Refer to *Section 4.11 Isolating Zones* on page 21 for information on isolating zones. A Zone Bypass Report (Contact ID Event Code 570) is sent at the end of Exit Time for any zone that was manually isolated. A 24-Hour Zone sends a Zone Bypass Report when the zone is selected to be isolated.

A Zone Bypass Restore Report is sent when the system is disarmed. All bypassed zones are cleared when the system is disarmed.

The Bypass Code parameter is used as the expansion digit in 4+2 Formats. It has no effect on Contact ID Format because a Zone Bypass is always sent as Event Code 570.

If Zone Bypass Reports are not required, program Locations 325 and 326 as 0.

15.2 Zone Status – Trouble Reports

Program the Zone Trouble Report value in **Location 327** (the default value is **2**) and the Zone Trouble Restore Report value in **Location 326** (default **3**).

A zone is in trouble when it is unsealed at the end of Exit Time. A Sensor Trouble Report (Contact ID Event Code 380) is sent to indicate that one or more zones were automatically isolated by the system. 24-Hour Zones that are unsealed at the end of Exit Time do not send a Sensor Trouble Report because the restore for that zone is still outstanding.

A Sensor Trouble Restore Report is sent for Burglary Zones when the zone is resealed or the next time the system is disarmed (whichever happens first). A 24-Hour Zone sends a restore signal only when it is resealed.

The Trouble code parameter is used as the expansion digit in 4+2 Format. It has no effect on Contact ID Format because a Sensor Trouble Report is always sent as Event Code 380.

If Sensor Trouble Reports are not required, program Locations 327 and 328 as 0.

15.3 Zone Status – Sensor Watch Reports

Program the Sensor Watch Report value in **Location 329** (the default value is **4**) and the Sensor Watch Restore Report value in **Location 326** (default **8**).

A Self Test Failure Report (Contact ID Event Code 307) is sent to the base station receiver when a zone was not activated during the Sensor Watch Time programmed in Locations 408 and 409 (refer to *Section 17.7 Sensor Watch Time* on page 71). This report continues to be sent (according to the frequency of the Sensor Watch Time) until the fault is corrected.

To clear the fault and stop any additional reporting, you must unseal and reseal the zone that registered the fault. Use the Sensor Watch Time in Locations 408 and 409 to set the number of days a zone can remain sealed without registering a fault. Refer to *Section 14.3.4 Zone Options 1* on page 57 to select zones to be monitored by the Sensor Watch feature.

If Self Test Failure Reports are not required, program Locations 329 and 330 as 0.

15.4 Zone Status – Alarm Restore Code

Program the Alarm Restore Code value in **Location 331**.

The default value is **14**.

If Zone Alarm Restore Reports are required, program this location as 14. If not, program this location as 0.

Location 332 (*Section 15.5 Zone Status Reporting Options* on page 61) is ignored when programming the Alarm Restore code and is global for all zones. A zone Restore Report is sent only to the receiving party to which the zone is allocated (for example, Receiver 1 or Receiver 2).

15.5 Zone Status Reporting Options

Use **Location 332** to select whether Zone Status Reports are sent to Receiver 1 (the default), Receiver 2, or both, Receiver 2 only when Receiver 1 fails, or there is no reporting at all. *Table* 46 lists the reporting options.

Table 46: Zone Status Reporting Options

Option	Description
0	No report required
1	Receiver 1
2	Receiver 2
4	Receiver 1 and Receiver 2
8	Receiver 2 only when Receiver 1 fails

15.6 Open/Close Reports

Program the Open Report value in **Location 333** (the default value is **11**) and the Close Report value in **Location 334** (default **12**).

An Opening Report (Contact ID Event Code 401) is sent to the base station receiver when the system is disarmed from AWAY Mode. A Closing Report (Contact ID Event Code 401) is sent at the end of Exit Time when the system is armed in AWAY Mode.

If an expanded format is selected, this code is used as the Expansion Code and the user number that armed or disarmed the system follows in the same transmission.

To enable Open and Close Reports in STAY Mode, select Option 2 in Location 178 (refer to *Section 12.2 Dialer Options 2* on page 50). To enable Open and Close Reports only after a previous alarm, select Option 1 in Location 178.

If Open and Close Reports are not required, program Locations 333 and 334 as 0.

15.7 Open/Close Reporting Options

Use **Location 335** to select whether Zone Status Reports are sent to Receiver 1 (the default), Receiver 2, or both, Receiver 2 only when Receiver 1 fails, or there is no reporting at all. *Table 47* lists the reporting options.

Table 47: Open/Close Reporting Options

Option	Description
0	No Open/Close Reports required
1	Receiver 1
2	Receiver 2
4	Receiver 1 and Receiver 2
8	Receiver 2 only when Receiver 1 fails

15.8 Codepad Duress Report

Program the Codepad Duress Report value in **Location 336**.

The default value is **6**.

A Duress Report (Contact ID Event Code 121) is sent to the base station receiver when a user adds 9 to the end of any valid User Code used to disarm the system. This alarm is always silent. A Duress Alarm can be activated during Exit Time (in other words, if the system is armed and then disarmed with a 9 at the end of the User Code before Exit Time expires, a Duress Report is sent). Adding 9 to the end of a User Code when arming the system does not cause a Duress Alarm.

If you want a 3 to activate a Codepad Duress Alarm instead of 9, select Option 2 in Location 430 (refer to *Section 18.7 Consumer Options 3* on page 75).

Restore Reports are not sent for this event.

If Duress Reports are not required, program Location 336 as 0.

15.9 Codepad Panic Report

Program the Codepad Panic Report value in **Location 337** (tens digit) and **Location 338** (units digit).

The default values are **7** (tens) and **15** (units).

A Panic Alarm Report (Contact ID Event Code 120) is sent to the base station receiver when a user presses either [1] and [3] or [STAY] and [AWAY] at the same time. A Panic Alarm is audible, but you can program the alarm as silent by selecting Option 1 in Location 425 (refer to *Section 18.2 System Options 2* on page 73).

Restore Reports are not sent for this event.

If Panic Reports are not required, program Locations 337 and 338 as 0.

15.10 Codepad Fire Report

Program the Codepad Fire Report value in **Location 339** (tens digit) and **Location 340** (units digit).

The default values are **7** (tens) and **14** (units).

A Fire Alarm Report (Contact ID Event Code 110) is sent to the base station receiver when a user presses [4] and [6] at the same time. A Fire Alarm is audible, but you can program the alarm as silent by selecting Option 2 in Location 425 (refer to *Section 18.2 System Options 2* on page 73). A distinct fire sound is emitted through the horn speaker to indicate this type of alarm. The fire sound is different than the burglary sound.

Restore Reports are not sent for this event.

If Fire Reports are not required, program Locations 339 and 340 as 0.

15.11 Codepad Medical Report

Program the Codepad Medical Report value in **Location 341** (tens digit) and **Location 342** (units digit).
The default values are **7** (tens) and **13** (units).

A Medical Report (Contact ID Event Code 100) is sent to the base station receiver when a user presses [7] and [9] at the same time. A Medical Alarm is audible, but you can program the alarm as silent by selecting Option 4 in Location 425 (refer to *Section 18.2 System Options 2* on page 73).

Restore Reports are not sent for this event.

If Medical Reports are not required, program Locations 341 and 342 as 0.

15.12 Codepad Reporting Options

Use **Location 343** to select whether Codepad Alarm Reports are sent to Receiver 1 (the default), Receiver 2, or both, Receiver 2 only when Receiver 1 fails, or there is no reporting at all. *Table 47* lists the reporting options.

Table 48: Codepad Alarm Reporting Options

Option	Description
0	No Codepad Alarm Reports required
1	Receiver 1
2	Receiver 2
4	Receiver 1 and Receiver 2
8	Receiver 2 only when Receiver 1 fails

15.13 System Status – AUX Power Supply Fail Report

Program the AUX Power Supply Fail Report value in **Location 344** (tens digit) and **Location 345** (units digit).

The default values are **10** (tens) and **3** (units).

A System Trouble Report (Contact ID Event Code 300) is sent when either the codepad AUX power supply or the accessories AUX power supply fails. The system reports the event approximately 10 sec after the AUX power supply fails.

15.14 System Status – AUX Power Supply Fail Restore Report

Program the AUX Power Supply Fail Restore Report value in **Location 346** (tens digit) and **Location 347** (units digit).

The default values are **10** (tens) and **8** (units).

A System Trouble Restore Report (Contact ID Event Code 300) is sent when the failed codepad AUX power supply or the accessories AUX power supply is reset. The system reports the event approximately 10 sec after the AUX power supply is reset.

15.15 System Status – AC Fail Report

Program the AC Fail Report value in **Location 348** (tens digit) and **Location 349** (units digit).

The default values are **10** (tens) and **2** (units).

An AC Fail Report (Contact ID Event Code 301) is sent to the base station receiver when the AC mains supply is disconnected for 2 min. If you do not want an AC Fail Report to be sent until the AC mains supply is disconnected for 1 hour, select Option 1 in Location 426 (refer to *Section 18.3 System Options 3* on page 74). If you want to ignore AC Fail, select Option 2 in Location 426.

If AC Fail Reports are not required, program Locations 348 and 349 as 0.

15.16 System Status – AC Fail Restore Report

Program the AC Fail Restore Report value in **Location 350** (tens digit) and **Location 351** (units digit).

The default values are **10** (tens) and **7** (units).

An AC Fail Restore Report is sent when the AC mains supply is connected continuously for longer than 2 min.

If AC Fail Restore Reports are not required, program Locations 350 and 351 as 0.

15.17 System Status – Low Battery Report

Program the Low Battery Report value in **Location 352** (tens digit) and **Location 353** (units digit).

The default values are **10** (tens) and **1** (units).

A Battery Test Failure Report (Contact ID Event Code 309) is sent to the base station receiver when the system's battery voltage falls below 11.2 VDC or when a dynamic battery test detects that a low capacity battery.

The control panel continually monitors the battery voltage. Refer to *Section 4.13 Fault Descriptions* on page 22 for more information. A dynamic battery test is performed every time the system is armed and every four hours after the control panel is powered up.

If Low Battery Reports are not required, program Locations 352 and 353 as 0.

Outputs 1 to 4 do not operate when the control panel detects a low battery.

15.18 System Status – Low Battery Restore Report

Program the Low Battery Restore Report value in **Location 354** (tens digit) and **Location 355** (units digit).

The default values are **10** (tens) and **6** (units).

A Low Battery Restore Report is sent if the backup battery is restored the next time the system is armed, or when the next dynamic battery test reports the battery test is OK.

If Low Battery Restore Reports are not required, program Locations 354 and 355 as 0.

15.19 System Status – Access Denied

Program the Code Retry Limit in **Location 356**. The default value is **6**.

Program **0** to allow unlimited retries.

Program the Access Denied Report value in **Location 357** (tens digit) and **Location 358** (units digit).

The default values are **7** (tens) and **12** (units).

An Access Denied Report (Contact ID Event Code 421) is sent to the base station receiver when the number of incorrect code attempts equals the number programmed in Location 356. An Access Denied Alarm is audible, but you can program the alarm as silent by selecting Option 8 in Location 425 (refer to *Section 18.2 System Options 2* on page 73).

Restore reports for this event are not sent.

If Access Denied reports are not required, program Locations 357 and 358 as 0.

Code Retries

The Code Retries feature restricts the number of times an invalid User Code can be entered in an attempt to operate the system. Location 356 sets the number of incorrect code attempts that causes an alarm. When the number of incorrect code attempts equals the number programmed in this location, the system performs these actions:

- Activates the sirens, internal screamers, and strobes connected to the control panel. Select Option 8 in Location 425 (refer to *Section 18.2 System Options 2* on page 73) to change this alarm to silent.
- Shuts down all codepads connected to the control panel and locks them out for the time period programmed in Location 410 (refer to *Section 17.8 Codepad Lockout Time* on page 71).
- Sends an Access Denied Report (Contact ID Event Code 421) to the base station receiver.

Each time the system is armed or disarmed, the Code Retries counter is reset. You can program the counter to a value from 1 to 15. If you want the number of incorrect code attempts to be unlimited, program a 0 in Location 356. In this case, the Access Denied Report is never generated and the system does not perform the three actions listed above. This function works when the system is armed or disarmed.

15.20 System Status Reporting Options

Use **Location 359** to select whether System Status Reports are sent to Receiver 1 (the default), Receiver 2, or both, Receiver 2 only when Receiver 1 fails, or there is no reporting at all. *Table 47* lists the reporting options.

Table 49: System Status Reporting Options

Option	Description
0	No System Status Reports required
1	Receiver 1
2	Receiver 2
4	Receiver 1 and Receiver 2
8	Receiver 2 only when Receiver 1 fails

15.21 Test Reporting Time

Program the Test Reporting Time into **Locations 360** to **366** as described in *Table 50* on page 64.

Table 50: Test Reporting Time Parameters

Location	Parameter	Default
360	Hour of day (tens digit)	0
361	Hour of day (units digit)	0
362	Minute of day (tens digit)	0
363	Minute of day (units digit)	0
364	Test Report (tens digit)	7
365	Test Report (units digit)	1
366	Repeat interval in days	0

A Test Report (Contact ID Event Code 602) is a specific signal sent to the base station receiver and is normally used to test the dailing and reporting functions of the control panel.

When programming Test Report options, specify the hour and minute of the day the report is required, and how often to send the report. Test reports are sent on a daily basis from every day to every fifteen days. Refer to *Section 6.1.1 Set the Number of Days until the First Test Report* on page 27 to set the first test report.

If Test Reports are not required, program the repeat interval in Location 366 as 0.

Program the Test Report Time as 24:00 to send reports every 30 min.

Example

To send Test Reports once every seven days at 11:35 PM, program Locations 360 to 366 as:

2 3 3 5 7 1 7

15.22 Test Reporting Dialer Options

Use **Location 367** to select whether Test Reports are sent to Receiver 1 (the default), Receiver 2, or both, Receiver 2 only when Receiver 1 fails, or there is no reporting at all. *Table 51* lists the reporting options.

Table 51: Test Reporting Options

Option	Description
0	No Test Reports required
1	Receiver 1
2	Receiver 2
4	Receiver 1 and Receiver 2
8	Receiver 2 only when Receiver 1 fails

16.0 Programmable Outputs

The ICP-CC404 Control Panel has four fully-programmable outputs on the main printed circuit board and one programmable output that operates the codepad buzzer. The four outputs are set by default to operate as horn speaker, fire alarm verification, strobe, and internal screamer.

Outputs 1 to 4 do not operate when the control panel detects a low battery.

Programmable outputs require four parameters to operate correctly.

Table 52: Output Parameters

Parameter	Description
Event Type	The Event Type specifies when an output is activated. The Output Event Types are listed in *Section 16.2*. Enter the code for the Output Event Type into the two corresponding locations for the output.
Polarity	Polarity determines whether the output operates for the duration of the event, pulses for the duration, operates once only (one shot), or latches on. The polarity options are listed in *Table 54* on page 69.
Time Base/ Time Multiplier	The Time Base and Time Multiplier parameters determine how long and how often the output operates. Refer to *Section 16.4 Output Timing* on page 70.

Table 53: Output Programming Defaults

Output	Default Output Type	Locations	Event Code		Polarity	Time Base	Time Base Multiplier	
Output 1	Horn Speaker	368 to 373	1	14	0	0	0	0
Output 2	Fire Alarm with Verification	374 to 379	2	7	10	2	1	5
Strobe	Strobe – Reset in 8 hr	380 to 385	2	0	6	4	0	8
Relay	Sirens Running	386 to 391	1	15	1	0	0	0
Codepad Buzzer	Entry/Exit Warning and Day Alarm	392 to 397	0	13	2	1	0	1

16.1 Redirecting Outputs to the Codepad Buzzer

Multiple output event types can be directed to the codepad buzzer so the buzzer can indicate a number of events.

To redirect an output to the codepad buzzer, select an output and program it for the desired Output Event Type. If the output is functioning correctly, add 8 to the first (tens) digit of the Output Event Type.

Example

3,0 Communications Failure

This event operates after the dialer makes all possible attempts to reach the base station receiver. It resets when the control panel receives the first kiss-off. This Output Event Type is not applicable to domestic reporting.

To redirect this Output Event Type to operate a codepad buzzer, program the Output Event Type as:

11,0 Communications Failure

The codepad buzzer now operates instead of the output that was programmed. Output 3 is no longer functional and cannot be used for any other Output Event Type.

16.2 Output Event Types

There are approximately 60 Output Event Types. Two numbers designate each Output Event Type. Program these numbers into the appropriate locations for the output.

All reset times reference Polarities 1 and 8. Reset times vary depending on the selected polarity.

0,0 EDMSAT - Satellite Siren (Output 1 Only)

This output controls all functions of the SS914 Satellite Siren (EDMSAT). The Speaker Indication Beeps option does not function through the satellite siren for remote operations. No polarity is required for this Output Event Type.

0,1 System Armed

This output operates when the system is armed. The output resets when the system is disarmed.

0,2 System Disarmed

This output operates when the system is disarmed. The output resets when the system is armed.

0,3 Armed in STAY Mode

This output operates when the system is armed in STAY Mode 1 or STAY Mode 2. The output resets when the system is disarmed.

0,4 Armed in AWAY Mode

This output operates when the system is armed in AWAY Mode. The output resets when the system is disarmed.

0,5 Auto Arm Pre-Arming Alert Time

This output operates during the time period before the control panel is automatically armed in AWAY Mode or STAY Mode 1. The output resets when the control panel is automatically armed in AWAY Mode or STAY Mode 1. The Auto Arming Pre-Alert Time is programmed in Location 413 (refer to *Section 17.11* on page 72 for more information).

0,6 Exit Warning with All Zones Sealed or Entry Warning

This output operates during Exit Time when the control panel is armed and all zones are sealed. The output resets when Exit Time expires.

This output operates again during Entry Time and resets when Entry Time expires or the system is disarmed.

This output also operates if a zone is activated when the system is armed in STAY Mode 1 or STAY Mode 2 and the Entry Guard Timer for STAY Mode is programmed in Locations 404 and 405 (refer to *Section 17.5* on page 71).

0,7 Exit Warning

This output operates during Exit Time when the system is armed. The output resets when Exit Time expires.

0,8 Exit Warning Finished

This output operates after Exit Time expires when the system is armed. The output resets when the system is disarmed.

0,9 Kiss-Off after Exit Time

This output operates after the first successful transmission to the base station receiver when Exit Time expires. The output resets when the system is disarmed.

0,11 Entry Warning

This output operates when during Entry Timer 1, Entry Timer 2, or Entry Guard Timer for STAY Mode. The output resets when the Entry Time expires.

0,12 Entry Warning + Day Alarm Resetting

This output combines Entry Warning and Day Alarm Resetting so that either of these two events activates the output.

If the output is activated by Entry Timer 1, Entry Timer 2, or Entry Guard Timer for STAY Mode, the output resets when the Entry Time expires or the system is disarmed.

If a zone programmed for Day Alarm is activated when the system is disarmed, the output resets when the zone is resealed. You can turn Day Alarm on and off by pressing and holding [4]. Refer to *Section 14.1 Day Alarm Information* on page 53 for programming zones to operate for Day Alarm.

0,13 Exit Warning + Entry Warning + Day Alarm Resetting

This output operates when the system is armed, regardless of whether zones are sealed or unsealed, until Exit Time expires.

The output operates again during Entry Time and resets when Entry Time expires or the system is disarmed.

The output also operates during the Entry Guard Timer for STAY Mode time.

If a zone programmed for day alarm is activated when the system is disarmed, the output resets when the zone is resealed. You can turn Day Alarm on and off by pressing and holding [4]. Refer to *Section 14.1 Day Alarm Information* on page 53 for programming zones to operate for Day Alarm.

0,14 Day Alarm Resetting

This output operates when a zone programmed for Day Alarm is activated. The output resets when the Day Alarm zone is resealed. You can turn Day Alarm on and off by pressing and holding [4]. Refer to *Section 14.1 Day Alarm Information* on page 53 for programming zones to operate for Day Alarm.

0,15 Day Alarm Latching

This output operates when a zone programmed for Day Alarm is activated. The output resets by pressing [AWAY]. You can turn Day Alarm on and off by pressing and holding [4]. Refer to *Section 14.1 Day Alarm Information* on page 53 for programming zones to operate for Day Alarm.

1,0 Day Alarm Enabled

This output operates when Day Alarm is enabled. The output resets when Day Alarm is turned off. Refer to *Section 14.1 Day Alarm Information* on page 53 for programming zones to operate for Day Alarm.

You can turn Day Alarm on and off by pressing and holding [4]. Three beeps indicate that Day Alarm is turned on, two beeps indicate that Day Alarm is turned off. Refer to *Section 6.3.7 Turning Day Alarm On and Off* on page 38 for more information.

1,1 Telephone Line Fail

This output operates when the built-in telephone line fault module detects that the telephone line is disconnected longer than 40 sec. The output resets when the telephone line is restored continuously for longer than 40 sec. This output does not operate unless Option 1 in Location 176 is selected (refer to *Section 11.11 Telephone Line Fault Options* on page 49).

1,2 Kiss-Off Received

This output operates after the control panel successfully sends a message to the receiving party.

1,3 AUX Power Supply Fail

This output operates when either the 1 A codepad AUX power supply or the 1 A accessories AUX power supply fails. The output resets when the faulty AUX power supply is reset.

1,4 AC Fail

This output operates when the AC mains fails. The output resets when the AC mains is restored. This output operates regardless of whether Option 2 in Location 426 is selected (refer to *Section 18.3 System Options 3* on page 74).

1,5 Low Battery

This output operates when a Dynamic Battery Test detects the battery failed or the battery voltage is below 11.2 VDC. The Dynamic Battery Test is performed every 4 hours after power is applied to the system and every time the system is armed.

This output resets only after a Dynamic Battery Test detects that the backup battery voltage is normal.

1,6 Horn Speaker Monitor Fail

If the Enable Monitoring of Horn Speaker (Option 2) in Location 424 is selected (refer to *Section 18.1 System Options 1* on page 73), this output operates when the horn speaker is disconnected. The output resets when the horn speaker is reconnected.

1,7 Sensor Watch Alarm

This output operates when the Sensor Watch Count is reached. Refer to *Section 14.3.4 Zone Options 1* on page 57 for more information on programming zones for sensor watch. Refer to *Section 17.7 Sensor Watch Time* on page 71 for setting the number of days before a zone registers as a faulty sensor watch zone.

1,8 Codepad Medical Alarm

This output operates when a user activates a Codepad Medical Alarm by pressing [7] and [9] at the same time on the remote codepad. This output resets when a valid User Code is entered at the remote codepad.

1,9 Codepad Fire Alarm

This output operates when a user activates a Codepad Medical Alarm by pressing [4] and [6] at the same time on the remote codepad. This output resets when a valid User Code is entered at the remote codepad.

1,10 Codepad Panic Alarm

This output operates when a user activates a Codepad Panic Alarm (audible or silent) by pressing either [1] and [3] or [STAY] and [AWAY] at the same time on the remote codepad. This output resets when a valid User Code is entered at the remote codepad.

1,11 Codepad Duress Alarm

This output operates when a user activates a Duress Alarm by adding a 9 to the end of the User Code used to disarm the system. This output resets the next time the system is armed.

1,12 Codepad Tamper – Access Denied

This output operates when the wrong code is entered more times than allowed. The number of incorrect attempts allowed is programmed in Location 356 (refer to *Section 15.19 System Status – Access Denied* on page 63). This output resets when a valid User Code is entered.

1,14 Horn Speaker (Output 1 Only)

This output operates only on Output 1. Use this output for one or two 8 Ω horn speakers. Refer to *Section 17.9 Siren Run Time* on page 71 and *Section 17.10 Siren Sound Rate* on page 71 to program the speaker.

To enable monitoring of the horn speaker, select Option 2 in Location 424 (refer to *Section 18.1 System Options 1* on page 73).

1,15 Sirens Running

This output operates for the duration of the Siren Run Time programmed in Location 411 (refer to *Section 17.9 Siren Run Time* on page 71). When the sirens are activated, this output resets when the Siren Run Time expires. The relay output (Output 4) is set by default for this operation.

2,0 Strobe Operating

This output operates when an alarm occurs and resets when a valid User Code is entered. The strobe output (Output 3) is set by default for strobe operation and is programmed to reset automatically after 8 hours.

2,1 Silent Alarm

This output operates when any zone programmed to activate silently. The output resets when the Siren Run Time expires, an audible alarm is activated, or a valid User Code is entered.

2,2 Alarm When in STAY Mode

This output operates when an audible or silent alarm zone is activated when the system is armed in STAY Mode 1 or STAY Mode 2. The output resets when the system is disarmed.

2,3 Alarm When in AWAY Mode

This output operates when an audible or silent zone alarm is activated when the system is armed in AWAY Mode. The output resets when the system is disarmed.

2,4 Mimic System Fault

This output operates without any time delays when any system fault occurs, including an AC mains supply failure. The output resets when the system fault or the AC mains supply is restored.

2,5 Fire Alarm Resetting

This output operates when a 24-Hour Fire Zone is activated. The output resets when a valid User Code is entered or when Siren Run Time expires.

2,6 Fire Alarm Latching

This output operates when a 24-Hour Fire Zone is activated and resets when the system is armed or disarmed.

2,7 Fire Alarm Verification

This feature is used on some commercial fire control panels to reduce false alarms from smoke detectors. It is very similar to zone pulse count used in some motion detectors. A fire zone is allotted a pulse count of 3 pulses over a period of 3 min.

If the smoke detector activates, the voltage to the smoke detector is disconnected for 15 sec and then reapplied. No alarm is registered.

If the unit activates again within 3 min of the first activation, no alarm is registered and the voltage to the smoke detector is again disconnected for 15 sec and then reapplied.

If a third activation is detected within 3 min of the first activation, (three pulses in 3 min) a fire alarm is registered. Power to the smoke detector is maintained to facilitate unit identification through the detector memory.

Connect this output to the negative side of any fire or smoke detector. To configure an output for this feature, use these settings.

EVENT TYPE = 2,7
POLARITY = 10
TIMEBASE = 2
MULTIPLIER = 15

Program the zone to which the fire or smoke detector is connected as:

ZONE TYPE = 13
ZONE PULSE COUNT = 3
ZONE PULSE COUNT TIME = 15

2,8 Remote Control 1

2,9 Remote Control 2

2,10 Remote Control 3

These outputs can be remotely activated (turned on or off) by the following methods:

- Remote codepad (refer to *Section 6.2.6 Turning Outputs On/Off* on page 36 for more information).
- Remotely through the Alarm Link Software (refer to your *Alarm Link Instruction Manual* for more information).

2,11 Radio Control Output 1

This output operates when the [DOOR] button on the four-channel hand-held transmitter is activated.

2,12 Radio Control Output 2

This output operates when the [AUX] button on the four-channel hand-held transmitter is activated.

2,13 Radio Control Output 1 – Not in AWAY Mode

This output operates when the [DOOR] button on the four-channel hand-held transmitter is activated. The output does not operate when the system is armed in AWAY Mode.

2,14 Radio Control Output 2 – Not in AWAY Mode

This output operates when the [AUX] button on the four-channel hand-held transmitter is activated. The output does not operate when the system is armed in AWAY Mode.

2,15 Communications Failure after Three Unsuccessful Calls

This output operates after the communication dialer makes three unsuccessful calls to the base station receiver. The output resets when all messages are sent (that is, when the message buffer is empty or when all possible attempts are made).

3,0 Communications Failure

This output operates after the communication dialer makes all possible attempts to reach the base station receiver. The output resets when the first kiss-off is received. This output does not operate for domestic formats.

3,1 Dialer Disabled

This output operates when the Dialer reporting functions allowed Option 1 in Location 177 are not selected (refer to *Section 12.1 Dialer Options 1* on page 50). The output resets when Option 1 is selected.

3,2 Dialer Active

This output operates when the communication dialer is online. The output resets when the communication dialer releases the telephone line.

3,3 Ring Detect

This output operates when the control panel detects an incoming call. The output resets when the ringing stops or when the call is answered.

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

These output types mimic the zone inputs. The output operates when the zone is unsealed and resets when the zone is sealed. They operate regardless of the selected zone type (for example, a zone programmed as Not Used can still operate a mimic output). This feature operates when the system is armed or disarmed.

4,5 Global Chime

This output operates when any Chime zones are activated. The output resets when the zone is resealed. Refer to *Section 14.3.1 Zone Types* on page 55 for more information.

4,6 Zone Not Sealed

This output operates when a Burglary Zone is unsealed. Chime zones do not operate this output.

4,7 Zone Not Sealed after Exit Time

This output operates at the end of Exit Time if a Burglary Zone is unsealed. The output resets when all zones are sealed or the system is disarmed. Chime zones do not operate this output.

4,9 AC Mains 60 Hz or 50 Hz

This output is activated when the AC mains supply frequency is 60 Hz. The output resets if the AC mains supply returns to 50 Hz.

16.3 Output Polarity

There are fifteen different polarities. Each polarity is designated by a number that you program into the third location for the output.

Table 54: Event Type Polarities

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 (can restart timer)
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 (can restart timer)
12	Normally low, one-shot open (can reset)
13	Normally low, one-shot open (alarm)
14	Normally low, latching open

0 – Output Not Used

If an output is not required, program the polarity as 0.

1 – Normally Open, Going Low

This polarity is a normally-open circuit and switches to 0 V when the event occurs. The output switches back to an open circuit when the event is restored. Time parameters do not apply to this polarity.

2 – Normally Open, Pulsing Low

This polarity is a normally-open circuit and switches to pulsing 0 V when the event occurs. The output switches back to an open circuit when the event is restored. Time parameters vary the On time of the pulse.

3 – Normally Open, One-Shot Low

This one-shot polarity is a normally-open circuit and switches to 0 V when the event occurs. The output switches back to an open circuit when the time parameter setting expires. This one-shot time setting always runs its full duration and cannot be manually reset.

4 – Normally Open, One-Shot Low with Reactivate

This one-shot polarity is a normally-open circuit and switches to 0 V when the event occurs. Every time the event occurs, it restarts the one-shot timer. The output switches back to an open circuit when the one-shot time expires.

This polarity is ideally suited for lighting control. You can use a PIR to activate an output to turn on lights. Whenever there is movement, the PIR reactivates the output and lengthens the time the lights remain on.

5 – Normally Open, One-Shot Low with Reset

This one-shot polarity is a normally-open circuit and switches to 0 V when the event occurs. Because the output switches back to an open circuit when the one-shot time expires or when the event returns to normal, the operation of the output can be shortened regardless of the programmed time parameter.

6 – Normally Open, One-Shot Low with Alarm

This one-shot polarity is a normally-open circuit and switches to 0 V when the event occurs. The output switches back to an open circuit when the one-shot time expires, when the event returns to normal, or when the system is disarmed.

This polarity is ideally suited for the operation of strobe lights because you can program the lights to reset (up to 99 hours) and prevent them from burning out or bothering others due to prolonged operation.

7 – Normally Open, Latching Low

This polarity is a normally-open circuit and switches to 0 V when the event occurs. The output switches back to an open circuit when a user holds down [7] on the remote codepad until two beeps sound. Time parameters do not apply to this polarity.

8 – Normally Low, Going Open

This polarity is normally 0 V and switches to an open circuit when the event occurs. The output switches back to 0 V when the event ends. Time parameters do not apply to this polarity.

9 – Normally Low, Pulsing Open

This polarity is normally 0 V and switches to a pulsing open circuit when the event occurs. The output switches back to 0 V when the event ends. Time parameters vary the Off time of the pulse.

10 – Normally Low, One-Shot Open

This one-shot polarity is normally 0 V and switches to an open circuit when the event occurs. The output switches back to 0 V when the time parameter expires. This one-shot time setting always runs its full duration and cannot be manually reset.

11 – Normally Low, One-Shot Open with Reactivate

This one-shot polarity is normally 0 V and switches to an open circuit when the event occurs. Every time the event occurs, it restarts the one-shot timer. The output switches back to 0 V when the one-shot time expires.

12 – Normally Low, One-Shot Open with Reset

This one-shot polarity is normally 0 V and switches to an open circuit when the event occurs. Because the output switches back to 0 V when the one-shot time expires or when the event returns to normal, the one-shot timer can be shortened regardless of the time setting.

13 – Normally Low, One-Shot Open with Alarm

This one-shot polarity is normally 0 V and switches to an open circuit when the event occurs. Because the output switches back to 0 V when the one-shot time expires, when the event returns to normal, or when the system is disarmed, the one-shot timer can be shortened regardless of the time setting.

14 – Normally Low, Latching Open

This polarity is normally 0 V and switches to an open circuit when the event occurs. The output switches back to 0 V when the user holds down [7] on the remote codepad until two beeps sound. Time parameters do not apply to this polarity.

16.4 Output Timing

The timing of outputs is calculated by the time base and a multiplier. These two values play different roles depending on the selected polarity. When you program outputs to pulse, you can set both the On and Off times. You can program one-shot polarities to operate from 200 ms to 99 hours.

The maximum value you can program in the two multiplier locations is 9,9.

Table 55: Time Base Settings

Option	Description
1	200 ms
2	1 sec
3	1 minute
4	1 hour

You can only set the time base settings to one of the values listed in *Table 55*. The multiplier value is a two-digit decimal number from 00 to 99. For greater accuracy, use 60 sec for 1-minute intervals and 60 min for one-hour intervals.

16.5 Pulsing Polarities

When programming pulsing polarities, you must set both the On and Off times. The duration, or On time, for an output is determined by the time base selected from one of the options in *Table 55*. In other words, there are only four possible On times.

The Off time is calculated by multiplying the On time by a decimal number between 00 and 99. If you want an output to operate for 200 ms every 5 sec, program the time settings as:

On Time: 1
Off Time: 2 5

Table 56: Pulsing Time Settings

On Time	Off Time	Increments	Tolerance
200 ms	200 ms to 19.8 sec	200 ms	±200 ms
1 sec	1 to 99 sec	1 sec	±1 sec
1 min	1 to 99 min	1 min	±1 min
1 hour	1 to 99 hr	1 hr	± hr

16.6 One-Shot Polarities

The duration, or On time, of an output is the product of the time base and the multiplier.

If you want an output to operate for 5 sec, program the time settings as:

Time Base: 2
Multiplier: 0 5

The On time is calculated by multiplying the time base setting (1 sec) by the multiplier value (05) (for example, 1 x 05 = 5 sec).

Table 57: One-Shot Time Settings

On Time	Increments	Tolerance
200 ms to 19.8 sec	200 ms	±200 ms
1 to 99 sec	1 sec	±1 sec
1 to 99 min	1 min	±1 min
1 to 99 hr	1 hr	± hour

17.0 System Event Timers

This section covers the features that involve timing, such as Entry and Exit Times, Sensor Watch Time, Siren Run Time, and System Date and Time.

17.1 Programming Entry/Exit Timers

There are two programming locations for Entry Timer 1, Entry Timer 2, Exit Time For AWAY Mode, and Entry Guard Time For STAY Mode.

The first location of the timer allows you to set the timer in increments of 1 sec. The second location allows you to set the timer in increments of 16 sec. Add these two locations together for the total time.

Example

To set the Entry Time to 18 sec, program Location 410 as 2 (2 x 1 sec = 2 sec) and Location 411 as 1 (1 x 16 sec = 16 sec) for a total time of 18 sec (2 + 16 = 18).

17.2 Entry Timer 1

Program Entry Timer 1 into **Locations 398** (increments of 1 sec) and **399** (increments of 16 sec). The default value for Entry Timer 1 is 20 sec (**4 1**).

You can program Entry Timer 1 from 0 to 255 sec in increments of 1 sec. Entry Timer 1 is the delay time used by the Delay-1 Zones. Refer to *Section 14.3.1 Zone Types* on page 55 for more information.

17.3 Entry Timer 2

Program Entry Timer 1 into **Locations 400** (increments of 1 sec) and **401** (increments of 16 sec). The default value for Entry Timer 2 is 40 sec (**8 2**).

You can program Entry Timer 2 from 0 to 255 sec in increments of 1 sec. Entry Timer 2 is the delay time used by Delay-2 Zones. Refer to *Section 14.3.1 Zone Types* on page 55 for more information.

17.4 Exit Time

Program Exit Timer into **Locations 402** (increments of 1 sec) and **403** (increments of 16 sec).
The default value for the Exit Timer is 60 sec (**12 3**).

You can program the Exit Timer from 0 to 255 sec in increments of 1 sec. When arming the system in AWAY Mode, the remote codepad beeps during Exit Time until the final 10 sec, when the codepad sounds one continuous beep to indicate the end of Exit Time is near.

The remote codepad always sounds one short beep at the end of Exit Time when arming in STAY Mode 1 or STAY Mode 2.

17.5 Entry Guard Timer for STAY Mode

Program Entry Guard Timer for STAY Mode into **Locations 404** (increments of 1 sec) and **405** (increments of 16 sec).
The default value for Entry Guard Timer for STAY Mode is **0**.

Entry Guard Timer for STAY Mode is the delay time used for all zones except 24-Hour Burglary and 24-Hour Fire Zones when the system is armed in STAY Mode 1 or STAY Mode 2. All zones, including Delay Zones, use this timer for the entry delay (for example, the Entry Guard Timer overrides the delay time programmed for a Delay Zone). If the Entry Guard Timer is programmed as 0, each zone acts according to its programmed zone type.

17.6 Delay Alarm Reporting Time

Program the Delay Alarm Reporting Time into **Locations 406** (increments of 1 sec) and **407** (increments of 16 sec).
The default value for the Delay Alarm Reporting Time is **0**.

These locations program the time in sec that a delayed report waits dormant in the dial buffer before it is sent to the receiving party. If a User Code holder resets the alarm within this time frame, the control panel clears the dialer buffer and does not report the alarm to the receiving party. Refer to *Section 14.3.4 Zone Options 1* on page 57 to program zones for delay alarm reporting.

17.7 Sensor Watch Time

Program Sensor Watch Time into **Locations 408** (increments of days, tens digit) and **409** (increments of days, units digit).
The default value for the Sensor Watch Time is **0**.

The time set in these two locations determines the number of days (0 to 99) a zone can remain sealed before registering as a fault. This feature is active only when the system is disarmed. If a zone programmed for Sensor Watch is not unsealed and reset during this time, the FAULT indicator lights. Refer to *Section 4.13 Fault Descriptions* on page 22 for more information on Sensor Watch Faults. Refer to *Section 14.3.4 Zone Options 1* on page 57 for programming zones for Sensor Watch.

The Sensor Watch Time counter is active only when the control panel is disarmed. If the system is disarmed for 8 hours a day and the Sensor Watch Time is programmed for 1 day, a zone programmed for Sensor Watch registers a Sensor Watch Fault if it is not activated while disarmed within 3 days.

This feature is useful, for example, when someone places objects in the view of a motion detector, preventing the detector from picking up movement.

17.8 Codepad Lockout Time

Program the Codepad Lockout Time into **Location 410** (increments of 10 sec).
The default value for the Code Lockout Time is **0**.

All codepads are locked out for the programmed time if an invalid code is entered more times than allowed by the code retry attempts programmed in Location 356 (refer to *Section 15.19 System Status – Access Denied* on page 63). If the Codepad Lockout Time is programmed as 0, codepad lockout does not occur.

17.9 Siren Run Time

Program the Siren Run Time into Location 411 (increments of 1 minute).
The default value for the Siren Run Time is **5**.

The Siren Run Time determines how long the horn speaker operates during an alarm. You can program the Siren Run Time from 0 to 15 min.

17.10 Siren Sound Rate

Program the Siren Sound Rate into **Location 412**.
The default value for the Siren Sound Rate is **7**.

The Siren Sound Rate varies the frequency of the siren tone slowest (0) and to fastest (15). The Siren Sound Rate does not change the frequency of the fire alarm tone.

17.11 Auto Arming Pre-Alert Timer

Program the Auto Arming Pre-Alert Timer into **Location 413** (increments of 5 min).
The default value for the Auto Arming Pre-Alert Timer is **1** (5 min).

This location sets the time period during which the control panel warns you it is automatically armed in AWAY Mode. The codepad beeps once every second until the Pre-Alert Timer expires: the system then automatically arms itself in AWAY Mode. If you want the system to automatically arm in STAY Mode 1, select Option 4 in Location 428 (refer to *Section 18.5 Consumer Options 1* on page 75).

After the control panel automatically arms in AWAY Mode or STAY Mode 1, Exit Time starts. If a valid User Code is entered during the Pre-Alert Time, the Auto Arming Time programmed in Locations 414 to 417 (refer to *Section 17.12 Auto Arming Time*) is extended by 1 hour.

If you want a programmable output to operate during the Auto Arming Pre-Alert Time, use Output Event Type 0,5 Auto Arm Pre-Arming Alert Time (refer to page 65).

17.12 Auto Arming Time

Program the Auto Arming Time in **Locations 414** to **417** as described in *Table 58*.
The default value is midnight (**0 0 0 0**).

Table 58: Auto Arming Time Parameters

Location	Parameter	Default
414	Hour of day (tens digit)	0
415	Hour of day (units digit)	0
416	Minute of day (tens digit)	0
417	Minute of day (units digit)	0

These locations specify the time of the day that the system automatically arms itself in AWAY Mode. Set this time in 24-hour format (for example, program 10:30 PM as 2230). If you want the system to arm in STAY Mode 1, select Option 4 in Location 428 (refer to *Section 18.5 Consumer Options 1* on page 75).

If forced arming is disabled for any zone, the automatic arming feature operates regardless of whether any zones are unsealed. Refer to *Section 14.3.6 Zone Options 2* on page 58 for more information on programming zones for forced arming.

User Code 16 is reported when this feature is used.

17.13 Auto Disarming Time

Program the Auto Disarming Time in **Locations 418** to **421** as described in *Table 59*.
The default value is midnight (**0 0 0 0**).

Table 59: Auto Disarming Time Parameters

Location	Parameter	Default
418	Hour of day (tens digit)	0
419	Hour of day (units digit)	0
420	Minute of day (tens digit)	0
421	Minute of day (units digit)	0

These locations specify the time of day that the system automatically disarms itself. Set this time in 24-hour format (for example, program 10:30 PM as 2230).

User Code 16 is reported when this feature is used.

17.14 Kiss-Off Wait Time

Program the Kiss-Off Wait Time into **Location 422** (increments of 500 millisec).
The default value for the Kiss-Off Wait Time is **3** (1500 ms).

This location sets the time that the control panel waits for acknowledgment before resending a report. This timer applies only to the 4 + 2 Express Format.

17.15 System Time

Program the System Time in **Locations 901** to **904** as described in *Table 60*.
The default value is **0 0 0 0**.

Table 60: System Time Parameters

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

The ICP-CC404 Control Panel has a real-time 24-hour clock you must set during installation. Set this time in 24-hour HHMM format (for example, program 10:30 PM as 2230). You must reset the System Time every time power is removed from the system.

A Master Code holder can also set the System Date and Time (refer to *Section 6.2.7 Setting the Date and Time* on page 36).

17.16 System Date

Program the System Date in **Locations 905** to **910** as described in *Table 61*.
The default value is 01 January, 2001 (**0 1 0 1 0 1**).

Table 61: System Date Parameters

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

The ICP-CC404 Control Panel has a real-time 12-month calendar you must set during installation, and reset every time power is removed from the system.

A Master Code holder can also set the System Date and Time (refer to *Section 6.2.7 Setting the Date and Time* on page 36).

18.0 System and Consumer Options

The locations in this section have up to four options. You can select any combination of these options by programming a single value. Calculate this value by adding the option bit numbers together. Refer to *Section 2.3 Programming Option Bits* on page 10 for more information.

18.1 System Options 1

Program the selected System Options 1 in **Location 424**.
The default value is **1**.

The options are:

1 – Smart Lockout Allowed

This feature allows the control panel to remove any zones that are programmed for lockout dialer from the lockout list when the sirens are running. This feature allows a monitoring station to receive zone alarm reports from previously locked out zones during siren time. Refer to *Section 14.3.4 Zone Options 1* on page 57 for information on programming zones for lockout dialer and lockout siren.

Refer to *Section 14.5 Swinger Shutdown Count for Dialer* on page 59 to program the number of times the zone can send a report before being locked out.

2 – Horn Speaker Monitor

If this option is selected, the control panel detects when the horn speaker is disconnected from the speaker terminals. The FAULT indicator lights when the horn speaker is disconnected and turns off when the horn speaker is reconnected.

If an output must operate when the horn speaker is disconnected, use Output Event Type 1,6 Horn Speaker Monitor Fail (refer to this option on page 66 for more information).

4 – Strobe Indications for Radio Arm/Disarm

This option allows the strobe to indicate when the system is armed and disarmed when remotely operating the system using the WE800E Wireless On/Off Interface. Refer to *Table 62*.

Table 62: Strobe Indications for Remote Operations

Strobe Duration	System Status
3 sec	System disarmed
6 sec	System armed in AWAY Mode
6 sec	System armed in STAY Mode 1

8 – Horn Speaker Beeps for Radio Arm/Disarm

This option enables the horn speaker to sound when the system is armed or disarmed remotely using the WE800E Wireless On/Off Interface. Refer to *Table 63*.

Table 63: Horn Speaker Indication Beeps for Remote Operations

Beeps	System Status
1	System disarmed
2	System armed in AWAY Mode
1 two-tone beep	System armed in STAY Mode 1

18.2 System Options 2

Program the selected System Options 2 in **Location 425**.
The default value is **0**.

The options are:

1 – Silent Codepad Panic

If this option is selected, a Codepad Panic Alarm or Radio Remote Panic Alarm does not operate the horn speaker, the bell, or the strobe outputs. If this option is not selected, all three outputs operate after a Codepad Panic Alarm is activated when a user presses [1] and [3] or [STAY] and [AWAY] at the same time on the remote codepad. Selecting this option does not affect the operation of the communication dialer.

If you want to disable reporting of a Codepad Panic Alarm, program Locations 337 and 338 as 0 (refer to *Section 15.9 Codepad Panic Report* on page 61).

2 – Silent Codepad Fire

If this option is selected, a Codepad Fire Alarm does not operate the horn speaker, the bell, or the strobe outputs. If this option is not selected, all three outputs operate after a Codepad Fire Alarm is activated when a user presses [4] and [6] at the same time on the remote codepad. Selecting this option does not affect the operation of the communication dialer.

If you want to disable the reporting of a Codepad Fire Alarm, program Locations 339 and 340 as 0 (refer to *Section 15.10 Codepad Fire Report* on page 61).

4 – Silent Codepad Medical

If this option is selected, a Codepad Medical Alarm does not operate the horn speaker, the bell, or the strobe outputs. If this option is not selected, all three outputs operate after a Codepad Medical Alarm is activated when a user presses [7] and [9] at the same time on the remote codepad. Selecting this option does not affect the communication dialer operation.

To disable the reporting of a Codepad Medical Alarm, program Locations 341 and 342 as 0 (refer to *Section 15.11 Codepad Medical Report* on page 62).

8 – Silent Access Denied (Code Retries)

If this option is selected, a Codepad Tamper Alarm does not operate the horn speaker, bell, or the strobe outputs. If this option is not selected, all three outputs operate after a Codepad Tamper Alarm occurs.

Refer to *Section 15.19 System Status – Access Denied* on page 63 to set the number of invalid code retries that causes an alarm condition. Selecting this option does not affect the operation of the communication dialer. If you want to disable the reporting of Access Denied reports, program Locations 357 and 358 as 0.

18.3 System Options 3

Program the selected System Options 3 in **Location 426**.
The default value is **8**.

The options are:

1 – AC Fail after 1 Hour

If this option is selected, the MAINS indicator flashes when the AC mains supply is disconnected. An AC Loss signal (Contact ID Event Code 301) is sent to the base station receiver after the AC mains supply is disconnected continuously for longer than 60 min.

If this option is not selected, the MAINS indicator flashes and an AC Loss signal (Contact ID Event Code 301) is sent to the base station receiver after the AC mains power is disconnected continuously for 2 min.

The MAINS indicator stops flashing when the AC mains supply is restored for longer than 2 min.

An AC Loss Restore Report is sent to the base station receiver after the AC mains supply is restored continuously for more than 2 min regardless of if this option is selected.

2 – Ignore AC Fail

If this option is selected, the MAINS indicator does not flash and the codepad does not beep every minute when the AC mains is disconnected from the control panel. If you want a programmable output to operate when the AC mains fails, use Output Event Type 1,4 AC Fail (refer to page 66).

If this option is selected, an AC Loss report (Contact ID Event Code 301) still reports to the base station receiver unless Locations 348 and 349 are programmed as 0 (refer to *Section 15.15 System Status – AC Fail Report* on page 62).

4 – Zone Pulse Count Handover

If this option is selected, any zone pulse count readings are handed over and accumulate to any zone that is activated during the same arming cycle. Zone pulse count handover only operates with zone pulse count options 8 to 15. Refer to *Section 14.3.2 Zone Pulse Count* on page 56 and *Section 14.3.3 Zone Pulse Count Time* on page 56 for more information.

24-Hour Zones can receive any handover pulses from other zones. 24-Hour Zones cannot hand over pulses to other zones.

8 – Sequential Handover Delay

If this option is selected, handover delay is sequential (that is, in numerical order from lowest to highest). If the sequence is broken before the Entry Time expires, an alarm occurs. If this option is not selected, handover delay follows the entry path if a Delay Zone is activated first. Refer to *Section 14.3.1 Zone Types* on page 55 for more information about Handover Zones.

18.4 System Options 4

Program the selected System Options 4 in **Location 427**.
The default value is **0**.

The options are:

1 – Panel Powers Up Disarmed

If this option is selected, the control panel starts in the disarmed state when the battery and AC mains are reconnected after power is removed from the system.

If this option is not selected, the system always starts armed in AWAY Mode.

2 – Arm/Disarm Tracking on Power Up

If selected, the control panel keeps its current armed status in non-volatile memory. If the control panel is restarted due to a power failure, the control panel returns to being armed or disarmed as it was before the power failed.

Example

If the system is disarmed when power is removed from the system, the system returns to the disarmed state when power is reapplied to the system.

4 – Internal Crystal Keeps Time

If this option is selected, the control panel uses the internal crystal (XTAL) to track time. This option is useful in countries that do not have a constant mains frequency. If this option is not selected, the control panel uses the mains frequency as a time base to keep time.

8 – Night Arm Station, or RE005/E Installed

Select this option to use the RE005/E 2-Channel Radio Interface, or the CP105A Night Arm Station. This option enables any of these three accessories to operate the control panel. User Code 16 is used to send Open and Close Reports when you use any of these accessories.

18.5 Consumer Options 1

Program the selected Consumer Options 1 in **Location 428**.
The default value is **0**.

The options are:

1 – Test Reports Only When Armed

If this option is selected, Test Reports (Contact ID Event Code 602) are only sent when the system is armed. It is no longer necessary to send a Test Report with an Opening and Closing Report every day.

Most commercial premises are open during the working week, so a Test Report is not necessary because Open and Close Reports are sent at the programmed time. If you want to manually send a Test Report, press and hold [9] until two beeps sound.

Refer to *Section 15.21 Test Reporting Time* on page 63 to set the desired Test Report Time. To set the first Test Report, refer to *Section 6.1.1 Set the Number of Days until the First Test Report* on page 27.

2 – Test Report after Siren Reset

Select this option to force the control panel to send a Test Report after the siren resets. This can be used to indicate to the monitoring station that the control panel itself was not tampered with during the alarm period.

4 – Auto Arm in STAY Mode 1

Select this option if automatic arming in STAY Mode 1 is preferred to automatic arming in AWAY Mode.

Program the time the control panel automatically arms itself in Locations 414 to 417 (refer to *Section 17.12 Auto Arming Time* on page 72). Set the Auto Arming Pre-Alert Time in Location 413 (refer to *Section 17.11* on page 72).

8 – STAY Indicator Shows Day Alarm Status

If this option is selected, the STAY indicator flashes once every 3 sec when Day Alarm is enabled.

Specify Day Alarm zones in Location 265 (refer to *Section 14.1 Day Alarm Information* on page 53).

You can turn Day Alarm on and off by holding down [4] for 2 sec. Three beeps indicate Day Alarm is turned on and two beeps indicate Day Alarm is turned off. Refer to *Section 14.1.3 Day Alarm Operation* on page 53 for more information.

18.6 Consumer Options 2

Program the selected Consumer Options 2 in **Location 429**.
The default value is **2**.

The options are:

1 – Codepad Display Turn off after 60 Sec

If this option is selected, all indicators on the remote codepad display turn off if a button is not pressed for 60 sec. The indicators lights again when there is an alarm (except a silent alarm), when a button is pressed on the codepad, when the AC mains fail beeps, or if the Entry Timer is activated.

2 – Single Button Arming Allowed

If this option is selected, the hold-down functions for arming in AWAY Mode, STAY Mode 1 and STAY Mode 2 are functional. Refer to *Section 6.3 Hold-Down Functions* on page 37 for more information.

4 – Single Button Disarming Allowed

This option operates only when Option 2 in this location is also selected. This option allows hold-down functions for disarming from STAY Mode 1 and STAY Mode 2. Refer to *Section 6.3 Hold-Down Functions* on page 37 for more information.

8 – Alarm Memory Reset on Disarm

If this option is selected, the alarm events memory clears from the remote codepad when the system is disarmed. If this option is not selected, the system must be armed and disarmed again to clear alarm memory from the remote codepad.

18.7 Consumer Options 3

Program the selected Consumer Options 3 in **Location 430**.
The default value is **5**.

The options are:

1 – Codepad Fault Alarms Beep

If this option is selected, the FAULT indicator flashes and the codepad beeps once every minute until the user acknowledges a system fault. To acknowledge a new fault and stop the codepad from beeping once every minute, press [AWAY].

If this option is not selected, only the codepad FAULT indicator flashes when a new fault occurs and the codepad does not beep once every minute.

2 – Digit 3 for Codepad Duress Instead of 9

If this option is selected, a user can add 3 (instead of a 9) to the code used to disarm the system to activate a Duress Alarm.

4 – Alarms Activate Sirens and Strobe Outputs in STAY Modes 1 and 2

Select this option if audible alarms are required when the system is armed in STAY Mode 1 or 2.

18.8 Radio Input Options

Program the selected Radio Input Options in **Location 431**.
The default value is **0**.

The options are:

1 – Radio Receiver (WE800E)

Select this option to use the WE800E 433 MHz RF Receiver for remote operations using radio remote hand-held transmitters.

2 – Latching Keyswitch Input

Selecting this option allows you to connect a latching keyswitch to the P5 terminals D and GND to remotely arm and disarm the system in AWAY Mode.

3 – Momentary Keyswitch Input

Selecting this option allows you to connect a momentary keyswitch to the P5 terminals D and GND to remotely arm and disarm the system in AWAY Mode.

19.0 Optional Equipment

Bosch Security Systems, Inc. manufactures a number of accessories that can be used with the ICP-CC404 Control Panel. These optional pieces of equipment enhance certain features making the system extremely flexible.

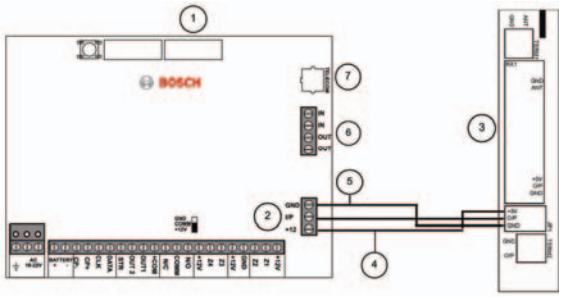
19.1 RE012E/RE013E 2-Channel/ 4-Channel Hand-Held Transmitters 433 MHz

These hand-held radio transmitters can be used with the RE005E 433 MHz RF Receiver to operate the system remotely. Both hand-held transmitters can remotely arm and disarm the system in AWAY Mode or STAY Mode 1 and can activate remote Panic Alarms. The four-channel hand-held transmitter can also operate outputs such as garage doors, swimming pool pumps, or outside lights.

19.2 WE800E 433 MHz RF Receiver

This interface allows the use of up to eight radio User Codes (9 to 16). This is useful if you want the system to be radio controlled and you would like to give your customer total control using a radio hand-held remote transmitter.

Figure 10: WE800E Wireless ON/OFF Interface



1 – Direct link cable
2 – Receiver interface connection
3 – Wireless ON/OFF Interface
4 – Red
5 – Black
6 – Termination for phone line
7 – Socket for telecom lead connection

19.3 RE005E Two-Channel Radio Interface

The two-channel radio interface allows customers to operate Control Panels remotely and to control two on-board relays. The interface can be used as a stand-alone receiver, independent of a Control Panel, used solely for remote control of external devices connected to the two on-board relays.

The interface's operating frequency is 433 MHz with the ability to store up to 120 radio remote codes. Connect the interface to a Control Panel using a three-wire connection in parallel with the codepad and select Option 8 in Location 427 (refer to *Section 18.4 System Options 4* on page 74).

19.4 CC891 Programming Key

The programming key copies and stores all information programmed in your control panel. The programming key can hold all your common configuration data such as monitoring station telephone numbers and zone reporting channels.

19.5 CC816 Alarm Link Software

This software can program the ICP-CC404 Control Panel by either the direct link or remote connect methods. This software can access all options and features and maintain history and service reports. Program options to use this feature in Location 180 (refer to *Section 8.2 Alarm Link Options* on page 40). Refer to *Section 8.0 Alarm Link Software* on page 39 for more information on using Alarm Link Software.

19.6 CP5 Eight Zone LED Codepad (CP508W)

This codepad operates with the range of control panels. It provides indications for up to eight zones.

19.7 CP5 Eight Zone LCD Codepad (CP508LW)

This codepad operates with the range of control panels. This codepad has a fixed icon display and provides indications for up to eight zones.

19.8 CP105A Night Arm Station

The night arm station has a panic button and allows the user to arm and disarm the system in STAY Mode 1 from a bedroom or sitting room. Enable the night arm station to operate with the system by selecting Option 8 in Location 427 (refer to *Section 18.4 System Options 4* on page 74).

19.9 PS101 Power Supply Module

The PS101 Power Supply Module provides 13.8 VDC at currents up to 1 A. Use the module with the TF008 18 VAC plug pack.

The module provides standard, fully short-circuit proof, power out, and battery charging terminals, and a DC LED indicator. If the application requires an uninterruptible power supply, a rechargeable sealed lead-acid battery can be installed. If there is a mains failure, the power supply switches to battery power without interrupting the supply to the load.

19.10 TF008 Plug Pack (TF008)

The TF008 plug pack is used with control panels. The plug pack includes built-in thermal fuses that blow during overload or fault conditions to eliminate a possible fire threat due to excessive heat buildup inside the casing.

The plug pack incorporates a three-wire flying lead that enables a mains earth connection between the equipment and the plug pack. This connection might be required for lightning protection on equipment connected to phone lines or for safety reasons such as earthing of metal enclosures.

20.0 Terminals and Descriptions

20.1 Terminal Descriptions

Table 64: Terminal Descriptions

Terminal	Description
EARTH	Connect this terminal to the green wire on the TF008 Plug Pack that is internally connected to mains earth. Because extensive lightning protection is built into the control panel, this terminal must be connected correctly to take advantage of this protection.
18 VAC	These two terminals are plug-on type, and are the termination point for the TF008 Plug Pack. To ensure correct operation, the voltage of the plug pack must be 18 VAC to 22 VAC at 1.3 A (minimum).
+BATTERY –BATTERY	The +BATTERY terminal connects to the red positive terminal of the battery and the –BATTERY terminal connects to the black negative terminal of the battery. The battery should be a 12 VDC sealed lead-acid rechargeable type with a capacity from 1.2 Ah to 6.5 Ah. The battery is protected by a 2.5 A PTC.
	The charging globe situated above the 2.5 A PTC lights until the battery is 100% charged.
GND +12V CLK DATA	This group of terminals provides the connection points for the system codepads. Connect all system codepads in parallel back to these terminals. The only factor restricting the number of codepads you can connect is the available power and its distribution. Because each codepad has a maximum power requirement of 60 mA with all indicators lit, consider this in calculating your available continuous power. The total continuous external load cannot exceed 1 A.
STR OUT 1 +COM	These terminals are the output terminals. You can configure the outputs to any combination of the functions available through the system programming options. You can use them for a variety of functions with considerable flexibility. All outputs have a common +12 VDC terminal and each output can sink up to 400 mA. By default, Output 1 operates a horn speaker.
	This group of terminals is protected by the solid-state Integrated Protection System (IPS). IPS tolerates abuse or incorrect wiring. Each open collector output does not use any current, but can provide up to 400 mA.
COMM N/O	These relay contacts are fully programmable similar to the strobe and Output 1. By default, they are alarm output (Sirens Running – Output Event Type 1,15).
	The NO contact is the connection point for the positive side of a DC siren, such as a piezo screamer. The negative side of the DC siren connects to the GND terminal. The PCB provides a link (JP2) to connect the COM terminal to either GND or +12 V. Connect this link to +12 V as shown in *Figure 11* on page 81. The relay is rated at 1 A at 30 VDC.
+12V Z4 Z3	Use these terminals for Zones 3 and 4. The common terminal is +12V. Connect all normally-closed contacts in series with the EOL resistor and connect all normally-open contacts in parallel with the EOL resistor. The function of the zones and their response times are configured using the system programming options. If split EOL is programmed, 24-Hour Zones or Keyswitch Zones connected in parallel to Zones 3 and 4 act as Zones 7 and 8.
+12V GND	Use these two terminals to provide power to detectors and other equipment. They are protected by the 1 A PTC.
Z2 Z1 +12V	Use these terminals for Zones 1 and 2. The common terminal is +12V. Connect all normally-closed contacts in series with the EOL resistor and connect all normally-open contacts in parallel with the EOL resistor. The function of the zones and their response times are configured using the system programming options. If split EOL is programmed, 24-Hour Zones or Keyswitch Zones connected in parallel to Zones 1 and 2 act as Zones 5 and 6.

20.2 Glossary Of Terms

Table 65: Glossary

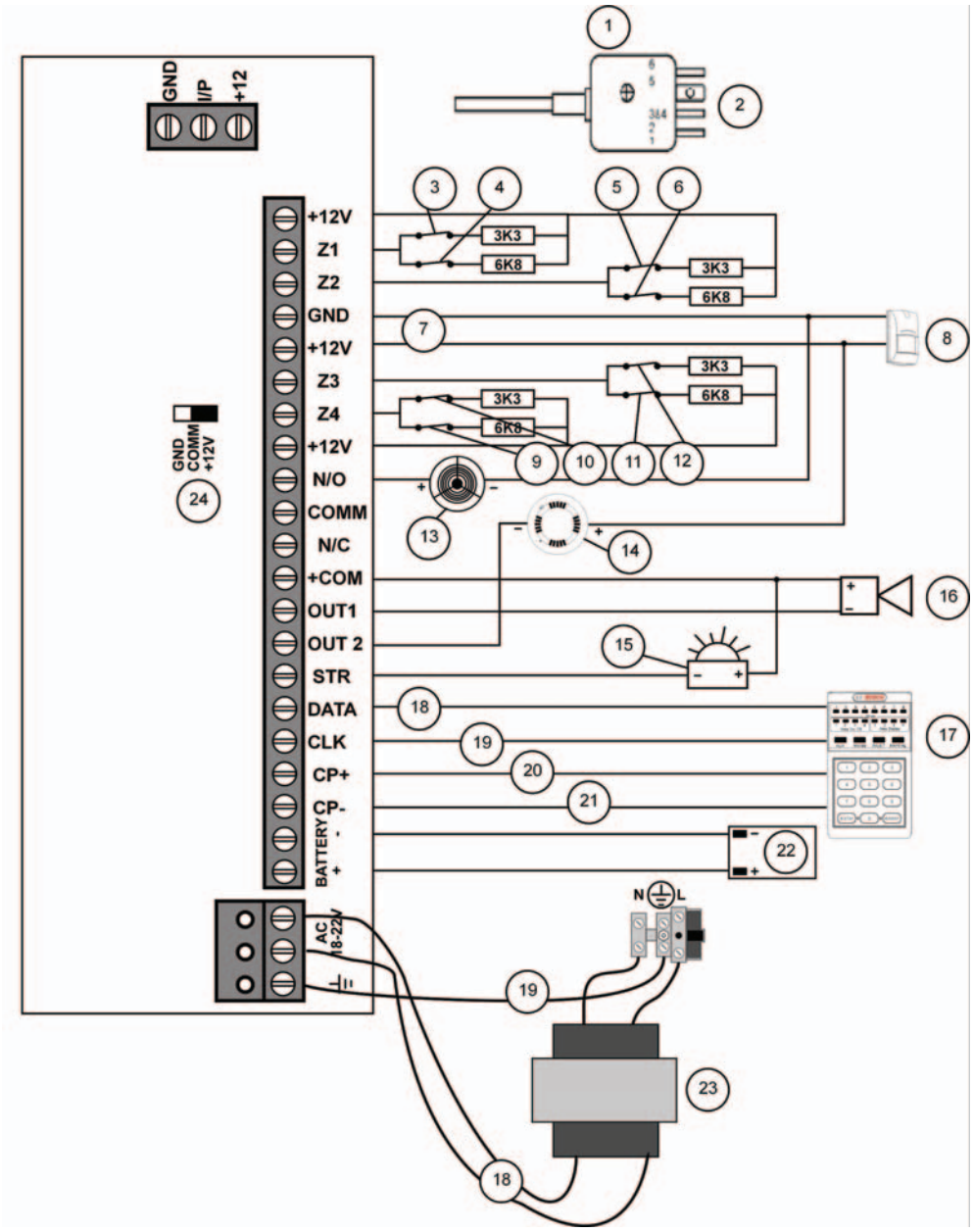
Term	Description
24-hour zone	A monitored input where tamper switches and emergency switches can be connected. If one of these switches is violated at any time (whether the system is armed or disarmed), an alarm is reported.
alarm condition	The status when an alarm system is armed and one of the detection devices is violated. A 24-Hour zone (for example, a smoke detector) can activate when the system is armed or disarmed.
answering machine bypass	A condition that enables connection with the control panel for remote arming or remote programming operations when there is an answering machine or facsimile machine on the same telephone line.
Armed (System ON)	A status in which the system is ready to accept alarms.
automatic arming	Programming that allows the system to arm automatically at the same time each day in AWAY Mode or STAY Mode 1.
automatic disarming	Programming that allows the system to disarm automatically at the same time each day in AWAY Mode or STAY Mode 1.
AWAY or #	A codepad button used to execute any given command.
AWAY Mode	The mode used to arm your system when you leave your premises.
codepad	A device that allows you to perform all functions such as arming, disarming, and programming of your alarm system.
day alarm	Programming that allows a combination of zones to be monitored while the system is disarmed.
detector	A unit installed as a satellite component in a security system designed to detect an intruder within a protected area. Some common forms of detection devices are passive infrared, smoke, photo electric beams, reed switches, and vibration sensors.
dialer	An electronic device that uses tones or pulses to dial an electronic receiver such as a monitoring station, mobile phone, or pocket pager. It uses the public switched telephone network to send alarm or supervisory signals.
disarmed	A system status that does not accept alarms, except for 24-hour zones.
dual reporting	Reporting that allows your control panel to transmit alarm signals in two different reporting formats (for example, the control panel can transmit to a monitoring station and to a mobile phone, or to two different monitoring stations).
dynamic battery testing	A method used to monitor and test the condition of your backup battery.
EDMSAT satellite siren	A self-contained siren unit complete with flashing blue strobe light and a backup battery that provides a higher level of security for an alarm system.
entry delay	A programmed delay of the system alarm responses that allows a person to enter a building through the entry door to turn the system off.
entry warning	The beeping from a codepad during an entry delay as a reminder to disarm the system.
exit delay	A programmed delay of the system alarm responses that allows a person to leave a building after turning the system on.
external equipment	Any device connected to a security system, such as a detector, codepad, or siren.
force arming	A method of overriding the safety feature that prevents arming with a faulted zone on a control panel.
hand-over delay	If a system is armed and Zone 1 is violated, the entry delay starts timing. If Zone 2 is violated, the entry delay time is handed over to the Zone 2 and so on, to Zones 3 and 4. This is known as sequential hand-over delay.
hand-held radio remote control	A device used to arm and disarm a security system or to cause a panic alarm.
lockout dialer	A dialer that activates only once per zone per arming cycle.
lockout siren	A siren that activates only once per zone per arming cycle.

Table 65: (continued)

Term	Description
master code	A numeric code used for arming and disarming the system, and for allowing access to all functions available through the codepad.
monitoring station	A secure location where a digital receiver monitors a number of alarm systems and deciphers their alarm transmission reports so the operator can advise the appropriate authorities to take immediate action.
panic	A condition or type of alarm in which the user requires either immediate police or medical assistance.
phone controller	A device used to arm a security system over the telephone line, and to acknowledge domestic alarm reports.
remote radio user code	A code used to arm and disarm a system from a remote location, using hand-held transmitters (in AWAY Mode or STAY Mode 1). Remote panic alarms are also allowed.
sealed	Refers to a zone's status. If a zone is sealed, the detection devices are not violated and the zone indicator is not lit (that is, a reed switch is closed or a detector is on standby waiting for an intrusion).
sensor watch	A feature that allows the control panel to recognize when detection devices might have stopped working. Sensor watch monitors the operation of a zone over a programmed time period.
silent alarm	An alarm that sounds only at a remote location, and gives no obvious local indication that an alarm was sent out.
STAY Mode 1	A condition that automatically isolates certain zones when the security system is armed in this mode. Only the installer can program these zones.
STAY Mode 2	A condition that automatically isolates certain zones when the security system is armed in this mode. The Master Code holder can program these zones.
telco arming sequence	A feature that automatically diverts a telephone number to another telephone when a security system is armed in AWAY Mode, the same as using call forwarding.
telco disarming sequence	An automatic suspension of diverting of the telephone when the system is disarmed.
unsealed	Refers to a zone's status. If a zone is unsealed, the detection devices are violated and the zone indicator is lit (that is, a reed switch is open or a detector noted an intrusion).
user code	A numeric code used to arm and disarm the system.
zone	A monitored input used to activate an alarm. A zone might be set up to activate an alarm only when the system is armed or to operate whether the system is armed or disarmed.

20.3 Diagrams

Figure 11: ICP-CC404 Wiring Diagram

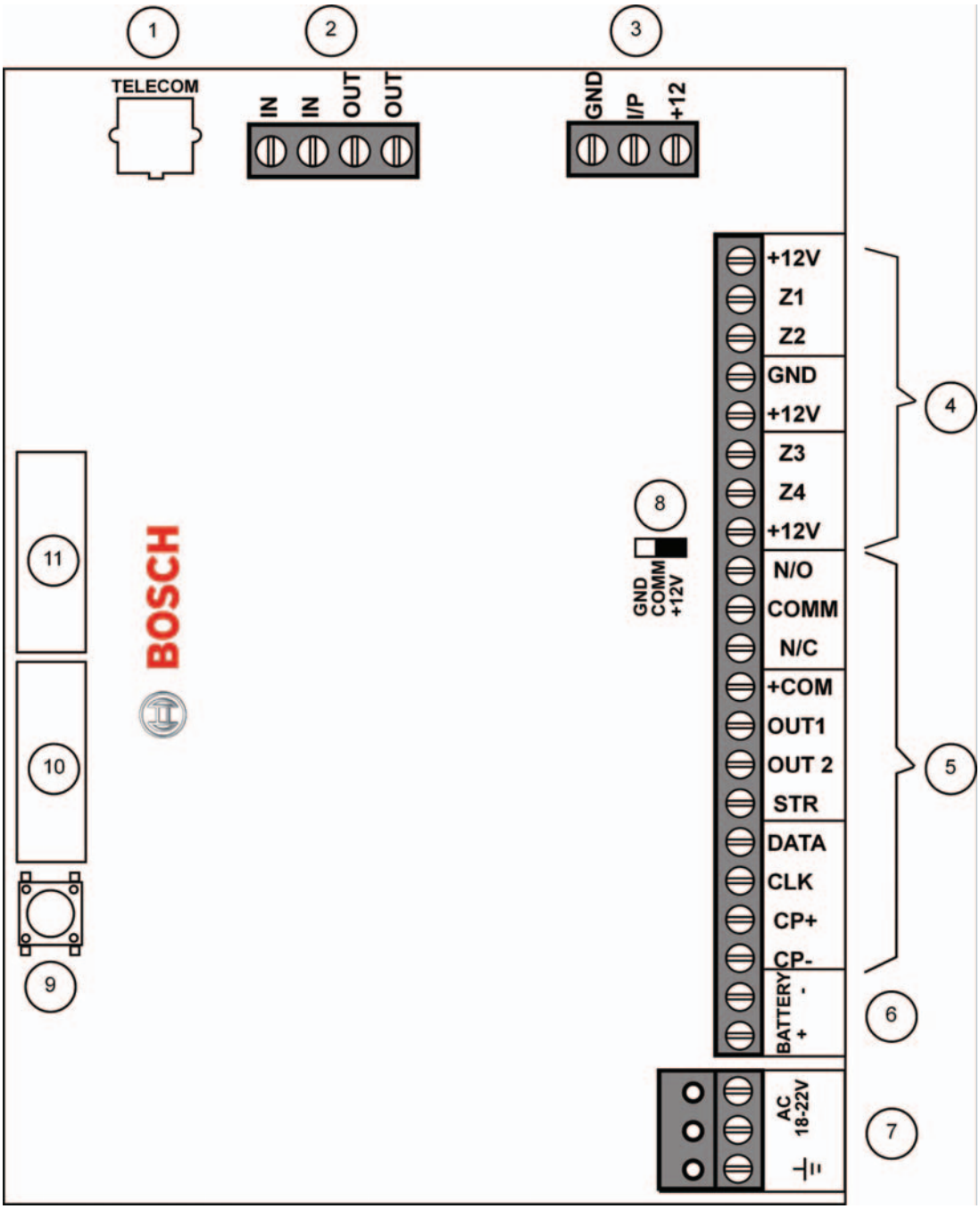


1 – 605 plug
2 – 6 (Red) Telecom line (street)
5 (Yellow) Internal phone line
3 and 4 Not used
2 (Black) Telecom line (street)
1 (Green) Internal phone line
3 – Zone 1
4 – Zone 5
5 – Zone 2
6 – Zone 6

7 – Power to external equipment: 12 V @ 400 mA
8 – PIR
9 – Zone 8
10 – Zone 4
11 – Zone 7
12 – Zone 3
13 – Piezo siren
14 – Smoke detector

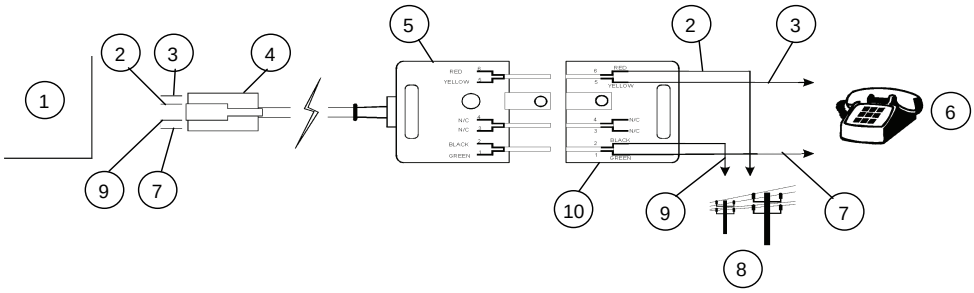
15 – Strobe
16 – Horn speaker
17 – Codepad
18 – Yellow
19 – Green
20 – Red
21 – Black
22 – Battery
23 – 18 VAC 1.3 A plug pack (TF008)
24 – Link between +12 V and Comm

Figure 12: ICP-CC404 Component Overlay



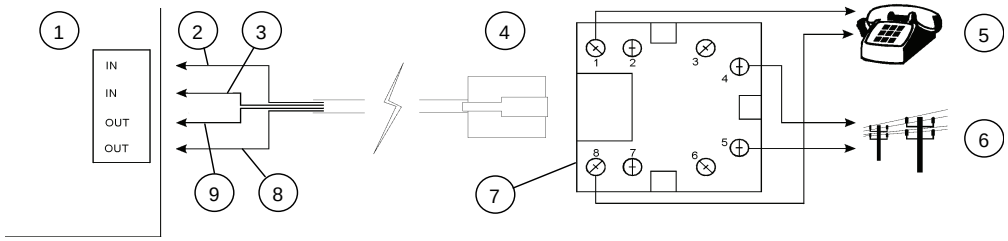
1 – Socket for telecom lead connect
2 – Termination for phone line
OUT – internal phone line
IN – telecom line (street)
3 – Receiver interface connection
4 – Zone termination strip
5 – Output termination strip
6 – Battery input
7 – Plug pack input (Bosch TF008)
8 – Relay contact select
9 – Default switch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

Figure 13: Telecom Connection Diagram for Australia



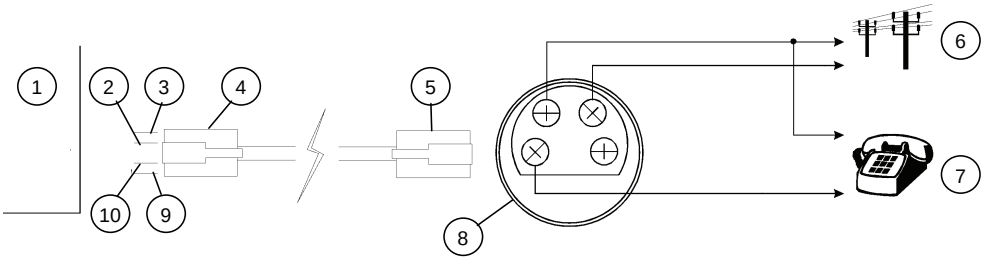
1 – Control panel
2 – Red wire
3 – Yellow wire
4 – 6P4C plug (top view)
5 – 605 plug
6 – Internal phones
7 – Green wire
8 – Telecom line
9 – Black wire
10 – 611 socket
1 (green): internal phone line
2 (black): telecom line (street)
3 and 4: not connected
5 (yellow): internal phone line
6 (red): telecom line (street)

Figure 14: Telecom Connection Diagram for New Zealand



1 – Control panel
2 – Black wire
3 – Red wire
4 – RJ45 plug (top view)
5 – Internal phones
6 – Telecom line
7 – (black): telecom line (street)
(green): internal phone line
(red): telecom line (street)
(yellow): internal phone line
8 – Green wire
9 – Yellow wire

Figure 15: Telecom Connection Diagram for China



1 – Control panel
2 – Red wire
3 – Black wire
4 – 4P4C plug (top view)
5 – RJ12 plug (top view)
6 – Telecom line
7 – Internal phones
8 – Rear view of telephone plate
(green): internal phone line
(black): telecom line (street)
(yellow): internal phone line
(red): telecom line (street)
9 – Yellow wire
10 – Green wire

21.0 Specifications

Table 66: Specifications

Temperature Range	0°C to +45°C (+32°F to +113°F)
Humidity	10% to 95%
Power Source	TF008 Plug Pack – 240 VAC/18 VAC @ 1.3 A
Standby Current	65 mA
Current Draw In Alarm	115 mA
Current Draw In Alarm with Codepad	105 mA
Backup Battery	6 Ah/12 VDC Rechargeable sealed lead acid battery
Dimensions (case, packed in carton)	30.6 cm x 26.2 cm x 8.4 cm (12.1 in. x 10.3 in. x 3.3 in.)
Weight	2.5 kg (5.5 lb)
Supplier Code	N771
New Zealand Telepermit	PTC 211/98/085

The Austel permit issued for this product is subject to the following conditions: The ICP-CC404 Control Panel can only be powered by a Bosch Security Systems, Inc. TF008 Plug Pack (Approval Number Q92128).

21.1 Warranty Statement

Bosch Security Systems, Inc. warrants this product to be free from defects in material and workmanship for a period of three years from the date of manufacture as indicated by the date stamp or the serial number on the product.

Defective units returned by the purchaser at their own expense during this period will be repaired or replaced at the option of the manufacturer. The repair or replacement is free of charge provided that the defects were not incurred during shipping or handling, or the damage was not due to causes beyond the control of Bosch Security Systems, Inc., such as lightning, excessive voltage, mechanical shock, or damage arising out of abuse, alteration, or improper application of the equipment.

21.2 Advice to Users

The Austel permit issued for this product is subject to this condition:

The ICP-CC404 Control Panel can only be powered by a TF008 Plug Pack (Approval Number Q92128).

21.3 New Zealand Telepermit Notes

- The grant of a telepermit for a device does not indicate telecom acceptance of responsibility for the correct operation of the device under all operating conditions.
- This equipment shall not be used in any manner that could constitute a nuisance to other telecom customers.
- Disconnect this equipment immediately if it becomes physically damaged and arrange for its disposal or repair.
- The transmit level from this device is set at a fixed level, so there might be circumstances where the performance is less than optimal. Before reporting such occurrences as faults, please check the line with a standard telepermitted telephone and do not report a fault if the telephone performance is satisfactory.
- This device is equipped with pulse dialing while the telecom standard is DTMF tone dialing. There is no guarantee that telecom lines will always continue to support pulse dialing. Use of dialing, when this equipment is connected to the same line as other equipment, can give rise to bell tinkle or noise and can also cause a false answer condition. If problems such as this occur, the user should not contact the Telecom Faults Service.
- This equipment is set up to carry out test calls at pre-determined times. These test calls interrupt other calls that might be set up on the line at the same time. Discuss the timing set for these test calls with the installer. The timing set for test calls from this equipment may be subject to drift. If this proves to be inconvenient and your calls are interrupted, discuss the problem of timing with the equipment installer. Do not report the matter as a fault to Telecom Faults Service.
- This equipment shall not be set up to make automatic calls to the Telecom 111 Emergency Service. This equipment should not be used under any circumstances that may constitute a nuisance to other Telecom customers.
- In the event of any problem with this device, disconnect the system battery, AC mains supply, and the telephone line. The user must arrange with the supplier of the device for the necessary repairs. If the matter is reported to telecom as a wiring fault and the fault is proven to be due to this product, a call-out charge is incurred.

22.0 Programming Sheets

Location Function	Options/Notes	Default/ Programming Entry
000 to 015 **Phone Number 1 - Receiver 1** Refer to page 46	0 = 10 and telephone termination = 0 anywhere else 0 = 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
016 to 031 **Phone Number 2 - Receiver 1** Refer to page 47	0 = 10 and telephone termination = 0 anywhere else 0 = 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
032 **Handshake Tone – Receiver 1** Refer to page 47	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	1
033 **Transmission Format – Receiver 1** Refer to page 47	1 Contact ID 2 4 + 2 express 3 FSK 300 baud 4 Domestic 5 Basic pager 7 Reserved	1
034 to 039 **Subscriber ID Number – Receiver 1** Refer to page 47	Right justified	0 0 0 0 0 0
040 to 055 **Phone Number 1 - Receiver 2** Refer to page 46	0 = 10 and telephone termination = 0 anywhere else 0 = 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
056 to 071 **Phone Number 2 - Receiver 2** Refer to page 47	0 = 10 and telephone termination = 0 anywhere else 0 = 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
072 **Handshake Tone – Receiver 2** Refer to page 47	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	1
073 **Transmission Format – Receiver 2** Refer to page 47	1 Contact ID 2 4 + 2 express 3 FSK 300 baud 4 Domestic 5 Basic pager 7 Reserved	1
074 to 079 **Subscriber ID Number – Receiver 2** Refer to page 47	Right justified	0 0 0 0 0 0
080 **Dialing Format** Refer to page 48	1 Australian DTMF 2 Australian decadic 3 Alternate DTMF and Australian decadic 4 International DTMF 5 Reversed decadic 6 Alternate DTMF and reversed decadic	1
081 to 112 **Reserved**		
113 to 142 **Telco Arming Sequence (Call Forward On)** Refer to page 48		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
143 to 158 **Telco Disarm Sequence (Call Forward Off)** Refer to page 48		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
159 to 174 **Call Back Telephone Number** Refer to page 49	0 = 10 and telephone termination = 0 anywhere else 0 = 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Location Function	Options/Notes	Default/ Programming Entry
175 **Ring Count** Refer to page 49	0 Control panel does not answer 1 to 13 Number of rings until control panel answers 14 Answering machine bypass 2 15 Answering machine bypass 1	8
176 **Telephone Line Fail Options** Refer to page 49	1 Display FAULT indicator when telephone line fails 2 Sound alarm when system arms 4 Sound alarm when system disarms Options 2 and 4 must be used with Option 1 (for example, program 1, 3, 5, or 7).	0
177 **Dialer Options 1** Refer to page 50	1 Dialer reporting functions allowed 2 Remote arming by telephone allowed 4 Answering machine bypass only when armed 8 Bell 103 used for FSK format (Disabled = CCITT V21)	9
178 **Dialer Options 2** Refer to page 50	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 sec to 60 sec	0
179 **Dialer Options 3** Refer to page 51	1 Set DTMF dialing pulses to 1 digit/sec 2 Reserved 4 Change decadic dialing to 60/40 8 Reserved	0
180 **Alarm Link Options** Refer to page 40	1 Upload/download allowed 2 Call back phone number required for upload/download 4 Exit from upload/download connection on alarm 8 External modem module (CC811) required	3
181 to 184 **Installer Code** Refer to page 51		1 2 3 4

Location Function	Options/Notes	Default/ Programming Entry
185 to 264 **User Codes** Refer to page 51	The fifth location in each user code is the authority level: 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	
User #01 (185 to 189)		2 5 8 0 10
RF User #09 (225 to 229)		15 15 15 15 2
User #02 (190 to 194)		15 15 15 15 2
RF User #10 (230 to 234)		15 15 15 15 2
User #03 (195 to 199)		15 15 15 15 2
RF User #11 (235 to 239)		15 15 15 15 2
User #04 (200 to 204)		15 15 15 15 2
RF User #12 (240 to 244)		15 15 15 15 2
User #05 (205 to 209)		15 15 15 15 2
RF User #13 (245 to 249)		15 15 15 15 2
User #06 (210 to 214)		15 15 15 15 2
RF User #14 (250 to 254)		15 15 15 15 2
User #07 (215 to 219)		15 15 15 15 2
RF User #15 (255 to 259)		15 15 15 15 2
User #08 (220 to 224)		0 15 15 15 3
RF User #16 (260 to 264)		15 15 15 15 2
265 **Day Alarm Zones** Refer to page 53	1 Zone 1 2 Zone 2 4 Zone 3 8 Zone 4	0
266 **EOL Resistor Value** Refer to page 53	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 Reserved 15 Split EOL (3K3/6K8) : Four burglary zones and four 24-hr zones	15

Location Function	Options/Notes	Default/ Programming Entry
267 to 322 **Zone Definitions** Refer to page 54		
Zone #01 (267 to 273)	2 0 0 1 14 1 1 (Delay 1)	
Zone #02 (274 to 280)	1 0 0 1 14 1 1 (Handover)	
Zone #03 (281 to 287)	1 0 0 1 14 1 1 (Handover)	
Zone #04 (288 to 294)	0 0 0 1 14 1 1 (Instant)	
Zone #05 (295 to 301)	12 0 0 1 12 1 1 (Fixed 24-hr burglary)	
Zone #06 (302 to 308)	12 0 0 1 12 1 1 (Fixed 24-hr burglary)	
Zone #07 (309 to 315)	13 0 0 1 12 1 1 (Fixed 24-hr fire)	
Zone #08 (316 to 322)	9 0 0 1 12 1 1 (Fixed Tamper)	

The first location (from the left) of the zone definition is the Zone Type. The options are:

0 Instant	4 Reserved	8 24-hour hold-up	12 24-hour burglary
1 Handover	5 Reserved	9 24-hour tamper	13 24-hour fire
2 Delay 1	6 24-hour medical	10 Reserved	14 Chime
3 Delay 2	7 24-hour panic	11 Keyswitch	15 Not used

The second location of the zone definition is the Zone Pulse Count. Use the pulse count to program the number of pulses (0 to 15) that must register within the pulse count time to activate an alarm.

The third location (from the left) of the zone definition is the Zone Pulse Count Time. The options are:

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

The fourth location of the zone definition is the Zone Options 1 parameter. The options are:

1 Lockout siren/dialer	4 Silent alarm
2 Delay Alarm Report	8 Sensor watch

The fifth location of the zone definition is the Zone Options 2 parameter. The options are:

1 Isolated in STAY Mode 1	4 Forced arming allowed
2 Zone isolation allowed	8 Zone Restore Report allowed

The sixth location of the zone definition is the Report Code. The options are:

0 Do not send Zone Alarm Reports
1 Send Zone Alarm Reports

The seventh location of the zone definition is the Zone Dialer Options parameter. The options are:

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

The keyswitch zone options replace Zone Options 1 for zones programmed to operate as keyswitch zones (Zone Type = 11). The options are:

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

Location Function	Options/Notes	Default/ Programming Entry
323 **Swinger Shutdown Count for Siren** Refer to page 59	1 to 15 Number of times siren operates until lockout	3
324 **Swinger Shutdown Count for Dialer** Refer to page 59	1 to 15 Number of times dialer operates until lockout	6
325 Zone Bypass Report **326 Zone Bypass Restore Report** Refer to page 60		9 8
327 Zone Trouble Report **328 Zone Trouble Restore Report** Refer to page 60		2 3
329 Sensor Watch Report **330 Sensor Watch Restore Report** Refer to page 60		4 5
331 **Zone Alarm Restore Code** Refer to page 60		14
332 **Zone Status Reporting Options** Refer to page 61	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	1
333 Open Report **334 Close Report** Refer to page 61		11 12
335 **Open/Close Reporting Options** Refer to page 61	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	1
336 **Codepad Duress Report** Refer to page 61		6
337 to 338 **Codepad Panic Report** **=890-**Refer to page 61	Location 337: tens digit Location 338: units digit	7 15
339 to 340 **Codepad Fire Report** Refer to page 61	Location 339: tens digit Location 340: units digit	7 14
341 to 342 **Codepad Medical Report** Refer to page 62	Location 341: tens digit Location 342: units digit	7 13
343 **Codepad Reporting Options** Refer to page 62	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	1
344 to 345 **System Status – AUX Power Supply Fail Report** Refer to page 62	Location 344: tens digit Location 345: units digit	10 3
346 to 347 **System Status – AUX Power Supply Fail Restore Report** Refer to page 62	Location 346: tens digit Location 347: units digit	10 8
348 to 349 **System Status – AC Fail Report** Refer to page 62	Location 348: tens digit Location 349: units digit	10 2

Location Function	Options/Notes	Default/ Programming Entry
350 to 351 **System Status – AC Fail Restore Report** Refer to page 62	Location 350: tens digit Location 351: units digit	10 7
352 to 353 **System Status – Low Battery Report** Refer to page 62	Location 352: tens digit Location 353: units digit	10 1
354 to 355 **System Status – Low Battery Restore Report** Refer to page 63	Location 354: tens digit Location 355: units digit	10 6
356 to 358 **System Status – Access Denied (Code Retry)** Refer to page 63	Location 356: Code retry limit (0 = unlimited) Location 357: tens digit Location 358: units digit	6 7 12
359 **System Status Reporting Options** Refer to page 63	0 No System 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	1
360 to 366 **Test Report Time (Automatic)** Refer to page 63	Location 360: Hour of day (tens digit) Location 361: Hour of day (units digit) Location 362: Minute of day (tens digit) Location 363: Minute of day (units digit) Location 364: Test Report (tens digit) Location 365: Test Report (units digit) Location 366: Repeat interval in days	0 0 0 0 7 1 0
367 **Test Reporting Dialer Options** Refer to page 64	0 No Test 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	1

368 to 397
Outputs
Refer to page 64

Output 1 (368 to 373)	1 14 0 0 0 0 (Horn speaker)	Relay Output (386 to 391)	1 15 1 0 0 0 (Sirens running)
Output 2 (374 to 379)	2 7 10 2 1 3 (Fire alarm with verification)	Codepad Buzzer (392 to 397)	0 13 2 1 0 1 (Entry/exit plus day alarm)
Strobe Output (380 to 385)	6 0 6 4 0 8 (Strobe – reset after 8 hr)		

The first two locations (from the left) of the output definition provide the Event Code. For a complete list of the Output Event Codes, refer to *Section 16.2 Output Event Types* on *page 65*.

The third location of the output definition is the output polarity. The options are:

0 Disabled
1 Normally open, going low
2 Normally open, pulsing low
3 Normally open, one shot low
4 Normally open, one shot low (can restart)
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 (can restart)
12 Normally low, one shot open (can reset)
13 Normally low, one shot open (alarm)
14 Normally low, latching open

The fourth location of the output definition is the time base. The options are:

1 200 ms
2 1 sec
3 1 min
4 1 hr

Location Function	Options/Notes	Default/ Programming Entry
368 to 397 **Outputs** **(continued)**	The fifth and sixth locations of the output definition provide the time base multiplier. Enter a value between 01 and 99. **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 5 sec. **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, which is multiplied by the multiplier. For example, if you want the output to pulse 1 sec ON and 5 sec OFF, you would program time base as 2 and the multiplier as 5.	
398 to 399 **Entry Time 1** Refer to page 70	Location 398: increments of 1 sec (0 to 15 sec) Location 399: increments of 16 sec (0 to 240 sec)	4 1
400 to 401 **Entry Time 2** Refer to page 71	Location 400: increments of 1 sec (0 to 15 sec) Location 401: increments of 16 sec (0 to 240 sec)	8 2
402 to 403 **Exit Time (AWAY/STAY Modes)** Refer to page 71	Location 402: increments of 1 sec (0 to 15 sec) Location 403: increments of 16 sec (0 to 240 sec)	12 3
404 to 405 **Entry Guard Time for STAY Mode** Refer to page 71	Location 404: increments of 1 sec (0 to 15 sec) Location 405: increments of 16 sec (0 to 240 sec)	0 0
406 to 407 **Delay Alarm Report Time** Refer to page 71	Location 406: increments of 1 sec (0 to 15 sec) Location 407: increments of 16 sec (0 to 240 sec)	0 0
408 to 409 **Sensor Watch Time** Refer to page 71	Location 408: increments of days (tens digit) Location 409: increments of days (units digit)	0 0
410 **Codepad Lockout Time** Refer to page 71	0 No lockout 1 to 15 Increments of 10 sec (10 sec to 150 sec)	0
411 **Siren Run Time** Refer to page 71	0 No siren time 1 to 15 Increments of 1 min (1 min to 15 min)	5
412 **Siren Sound Rate** Refer to page 71	0 to 15 (slowest to fastest frequency)	7
413 **Auto Arming Pre-Alert Time** Refer to page 71	0 No pre-alert time 1 to 15 Increments of 5 min (5 min to 75 min)	1
414 to 417 **Auto Arming Time** Refer to page 72	Location 414: Hour of day (tens digit) Location 415: Hour of day (units digit) Location 416: Minute of day (tens digit) Location 417: Minute of day (units digit)	0 0 0 0
418 to 421 **Auto Disarming Time** Refer to page 72	Location 418: Hour of day (tens digit) Location 419: Hour of day (units digit) Location 420: Minute of day (tens digit) Location 421: Minute of day (units digit)	0 0 0 0
422 **Kiss-Off Wait Time** Refer to page 72	0 to 15 Increments of 500 ms (500 ms to 8 sec)	3
423 **Reserved**		0
424 **System Options 1** Refer to page 73	1 Bosch smart lockout allowed 2 Horn speaker monitor 4 Strobe indication for radio arm/disarm 8 Horn speaker beeps for radio arm/disarm	1

Location Function		Options/Notes	Default/ Programming Entry
425 **System Options 2** Refer to page 73	1 2 4 8	Codepad panic to be silent Codepad fire to be silent Codepad medical to be silent Access denied (code retries) to be silent	0 [ ]
426 **System Options 3** Refer to page 74	1 2 4 8	AC fail after 1 hr (disabled = after 2 min) Ignore AC fail Pulse count handover allowed Handover delay to be sequential	8 [ ]
427 **System Options 4** Refer to page 74	1 2 4 8	Control panel to power up disarmed (if power reset) Arm/disarm tracking on power up Internal crystal to keep time Night arm station, or RE005E installed	0 [ ]
428 **Consumer Options 1** Refer to page 75	1 2 4 8	Test reports only when armed Test report after siren reset Auto arm in STAY Mode 1 STAY indicator to display day alarm status	0 [ ]
429 **Consumer Options 2** Refer to page 75	1 2 4 8	Codepad display extinguish after 60 sec Single button arming allowed (AWAY/STAY Modes 1 and 2) Single button disarming allowed (STAY Modes 1 and 2) Alarm memory reset on disarm	2 [ ]
430 **Consumer Options 3** Refer to page 75	1 2 4 8	Codepad fault beeps allowed Use digit 3 for codepad duress alarm (instead of digit 9) Alarms activate sirens and strobe outputs in STAY Modes 1 and 2 Reserved	5 [ ]
431 **Radio Input Options** Refer to page 76	1 2 3 4	Radio receiver (WE800E) Latching keyswitch input Momentary keyswitch input Reserved	0 [ ]
466 to 513 **Domestic Telephone Numbers** Refer to page 41			
748 to 749 **Reserved**			[ ] [ ]
750 to 781 **Country Codes** Refer to page 93		Location 750: Country Code (tens digit) Location 751: Country Code (units digit)	0 2 [ ] [ ]
900 **Default Options** Refer to page 15	0 15	Defaulting system allowed Defaulting system disabled	0 [ ]
901 to 904 **System Time** Refer to page 72		Location 901: Hour of day (tens digit) Location 902: Hour of day (units digit) Location 903: Minute of day (tens digit) Location 904: Minute of day (units digit)	0 0 0 0 [ ] [ ] [ ] [ ]
905 to 910 **System Date** Refer to page 72		Location 905: Day of the month (tens digit) Location 906: Day of the month (units digit) Location 907: Month of the year (tens digit) Location 908: Month of the year (units digit) Location 909: Current year (tens digit) Location 910: Current year (units digit)	0 1 0 1 0 1 [ ] [ ] [ ] [ ] [ ] [ ]

22.1 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		
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 Guinea	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		

Index

2-Channel Hand Held Transmitter Operations
- Arming In AWAY Mode ... 25
- Arming In STAY Mode 1 ... 25
- Disarming From AWAY Mode ... 25
- Disarming From STAY Mode 1 ... 26

4-Channel Hand Held Transmitter Operations
- Arming In AWAY Mode ... 26
- Arming In STAY Mode 1 ... 26
- Disarming From AWAY Mode ... 26
- Disarming From STAY Mode 1 ... 26
- Turning Remote Output 1 Off ... 27
- Turning Remote Output 1 On ... 27
- Turning Remote Output 2 Off ... 27
- Turning Remote Output 2 On ... 27

AC Mains
- Fail In 1 Hour ... 73
- Ignore Fail Indication ... 73

AC Mains Failure ... 24
Access Codes
- Installer Code ... 50
- User Codes ... 50

Access Denied To Be Silent ... 73
Adding User Codes ... 35
Alarm Link
- Direct Connect ... 40
- Enable Alarm Link Call Back ... 40
- Initiate Modem Call ... 38
- Remote Connect With Call Back Verification ... 39
- Remote Connect With Customer Control ... 39
- Remote Connect Without Call Back Verification ... 39
- Terminate Session If Report Pending ... 40

Alarm Link Software ... 76
Answering Machine Bypass ... 48
Arming
- In AWAY Mode ... 18
- In STAY Mode 1 ... 19, 37
- In STAY Mode 2 ... 20, 37

Auto Arm In STAY Mode 1 ... 74
Automatic Stepping Of Locations ... 13
AWAY Indicator ... 16, 17
AWAY Mode
- Arming ... 18
- Disarming ... 18

Bell Test ... 37
Bypass Reports ... 59
Call Back Telephone Number ... 48
Changing User Codes ... 35
Codepad Duress ... 21
Codepad Fire ... 21, 73
Codepad Fire To Be Silent ... 73
Codepad Indicators
- AWAY ... 16
- AWAY Indicator ... 17
- FAULT ... 16
- FAULT Indicator ... 18
- MAINS ... 16
- MAINS Indicator ... 17, 18
- Off Indicator ... 18
- On Indicator ... 18
- STAY ... 16
- STAY Indicator ... 17
- System Disarmed ... 17
- Zone Indicators ... 17
- Zone Isolating Mode ... 18

Codepad Medical ... 21, 73
Codepad Medical To Be Silent ... 73
Codepad Panic ... 21, 72
Codepad Panic To Be Silent ... 72
Command 958 - Enable/Disable Zone Status ... 11
Command 959 - Test Programming Key ... 11
Command 960 - Exit Installer's Programming Mode ... 12
Command 961 - Reset Control Panel Back To Factory Default ... 12
Command 965 - Set Up Domestic Dialing ... 13
Command 966 - Enable/Disable Automatic Stepping ... 13
Command 999 - Display Panel Type/Software Version ... 14
Communication Failure ... 23
Consumer Options 1
- Auto Arm In STAY Mode 1 ... 74
- Enable STAY Indicator To Display Day Alarm Status ... 74
- Send Test Reports Only If Armed ... 74

Control Panel To Power Up Disarmed ... 73
CP5 Eight Zone Codepad ... 76
Date and Time ... 36
Day Alarm
- Operation ... 52
- Status Indicator ... 74
- Turning On/Off ... 38

Defaulting The Control Panel ... 12
Dialer Information
- Answering Machine Bypass ... 48
- Call Back Telephone Number ... 48
- Dialing Format ... 47
- Primary Telephone Number For Receiver 1 ... 45
- Programming Telephone Numbers ... 45
- Subscriber ID Number For Receiver 1 ... 46
- Telco Arming Sequence ... 47
- Telephone Line Fault Options ... 48, 72

Disarming
- Automatic ... 71
- From AWAY Mode ... 18

Domestic Dialing
- Command 965 ... 13
- Disable ... 30, 35, 36
- Format ... 40
- Function ... 40

Duress Alarm ... 21
EDM Smart Watch ... 72
EDMSAT ... 64
Entry Guard Timer For STAY Mode ... 19, 20
Exit Installer's Programming Mode ... 12
Fault
- AC Mains Failure ... 24
- Communication Failure ... 23
- Low Battery ... 22
- Sensor Watch ... 23

Fault Analysis Mode ... 22
- Exit ... 38

FAULT Indicator ... 16, 18
Features
- Solution 404 ... 7

Fire Alarm ... 21
Forced Arming ... 18, 19, 20

Handover 54
Hold Down Function
  Arm In STAY Mode 1 37
  Arm In STAY Mode 2 37
  Bell Test 37
  Initiate Modem Call 38
  Reset Latching Outputs 38
  Send Test Report 38
  Strobe Test 37
  Turning Day Alarm On/Off 38
Installer Code 50
Installer Code Function
  Change Telco Arm/Disarm Sequence 28, 34
  Setting STAY Mode 2 Zones 30, 35
  Telephone Monitor Mode 30
Installer's Programming Commands
  958 - Enable/Disable Zone Status 11
  959 - Test Programming Key 11
  960 - Exit Installer's Programming Mode 12
  961 - Reset Control Panel Back To Factory Default . 12
  965 - Set Up Domestic Dialing 13
  966 - Automatic Stepping Of Locations 13
  999 - Display Panel Type/Software Version Number 14
Introduction 7
Invalid Code 73
Isolate In STAY Mode 1 57
Isolating Allowed 57
Isolating Zones 21
Latching Outputs
  Resetting 38
Lockout Dialer 56
Lockout Siren 56
Low Battery 22
MAINS Indicator 16, 17, 18
Master Code Function
  Changing & Deleting User Codes 32
  Setting Date and Time 36
  Turning Outputs ON/OFF 36
  Walk Test Mode 36
Medical Alarm 21
Modem Call 38
New Zealand Telepermit Notes 83
Night Arm Station 76
Off Indicator 18
On Indicator 18
Option Bits 10, 40, 49, 52, 56, 57
Optional Equipment
  2-Channel Radio Interface 75
  8 Zone LED Codepad 76
  Night Arm Station 76
  Programming Key 76
  PS100 Power Supply 76
  TF008 Plug Pack 76
Output Event Type
  AC Fail 65
  AC Mains 60 Hz or 50 Hz 67
  Alarm When In AWAY Mode 66
  Alarm When In STAY Mode 66
  Armed In AWAY Mode 64
  Armed In STAY Mode 64
  Auto Arm Pre-Alert Time 64
  AUX Power Supply Fail 65
  Codepad Duress Alarm 66
  Codepad Fire Alarm 65
  Codepad Medical Alarm 65
  Codepad Panic Alarm 65
  Codepad Tamper 66
  Communications Failure 67
  Communications Failure After 3 Unsuccessful Calls . 67
  Day Alarm Enabled 65
  Day Alarm Latching 65
  Day Alarm Resetting 65
  Dialer Active 67
  Dialer Disabled 67
  EDMSAT - Satellite Siren 64
  Entry Warning 64
  Entry Warning + Day Alarm Resetting 64
  Exit Warning 64
  Exit Warning Finished 64
  Exit Warning With All Zones Sealed Or Entry Warning 64
  Fire Alarm Latching 66
  Fire Alarm Resetting 66
  Fire Alarm Verification 66
  Global Chime 67
  Horn Speaker 66
  Horn Speaker Monitor Fail 65
  Kiss-Off After Exit Time 64
  Kiss-Off Received 65
  Low Battery 65
  Mimic System Fault 66
  Mimic Zone 1 67
  Mimic Zone 2 67
  Mimic Zone 3 67
  Mimic Zone 4 67
  Mimic Zone 6 67
  Mimic Zone 7 67
  Mimic Zone 8 67
  Radio Control Output 1 67
  Radio Control Output 1 - Not In AWAY Mode 67
  Radio Control Output 2 67
  Radio Control Output 2 - Not In AWAY Mode 67
  Remote Control 1 66
  Remote Control 2 66
  Remote Control 3 66
  Ring Detect 67
  Sensor Watch Alarm 65
  Silent Alarm 66
  Sirens Running 66
  Strobe Operating 66
  System Armed 64
  System Disarmed 64
  Telephone Line Fail 65
  Zone Not Sealed 67
  Zone Not Sealed After Exit Time 67
Outputs
  One Shot Polarities 69
  Pulsing Polarities 69
  Redirecting Output To Codepad Buzzer 64
  Turning On/Off 36
Panic Alarm 21
Power Up Disarmed 73
Primary Telephone Number For Receiver 1 45
Programming 9
  Automatic Stepping Of Locations 13
  Entry/Exit Tiemrs 69
  Option Bits 10, 40, 49, 52, 56, 57
  Via Programming Key 10
  Via Remote Codepad 9
Programming Key 10, 76

Test 11
PS100 Power Supply Module 76
Quick Start 7
Receiver 1
Primary Telephone Number 45
Subscriber ID Number 46
Remote Radio Transmitter Codes
Deleting Transmitter Codes 33
Remote Radio Transmitter Operations 24
Add or Changing Transmitter Codes 25
Arming In AWAY Mode 25, 26
Arming In STAY Mode 1 ..... 25, 26
Deleting Transmitter Codes 25
Disarming From STAY Mode 1 26
Disarming In AWAY Mode 25, 26
Operating Outputs 27
Remote Radio User Codes
Adding Or Changing 25, 32
Deleting 25, 33
Reporting Format
Domestic Dialing 40
Reset Control Panel Back To Factory Default 12
Sensor Watch 23, 56
Smart Watch 72
STAY Indicator 16, 17
STAY Indicator To Display Day Alarm Status 74
STAY Mode 1
Arming 19, 37
STAY Mode 2
Arming 20, 37
Setting Zones 30, 35
Strobe Test 37
System Disarmed 17
System Operations
Arming In AWAY Mode 18
Arming In STAY Mode 1 19
Arming In STAY Mode 2 20
Disarming From AWAY Mode 18
System Options 1
EDM Smart Lockout 72
System Options 2
Access Denied To Be Silent 73
Codepad Fire To Be Silent 73
Codepad Medical To Be Silent 73
Codepad Panic To Be Silent 72
System Options 3
AC Fail In 1 Hour 73
Ignore AC Mains Fail Indication 73
System Options 4
Enable Control Panel To Power Up Disarmed 73
Telco Arming Sequence 28, 34, 47
Telephone Monitor Mode 30
Test Reports 38
Only When Armed 74
TF008 Plug Pack 76
Trouble Reports 59
User Codes 50
Adding Or Changing 32
Deleting 32, 33
Walk Test Mode 36
Warranty Statement 83
Zone
EOL Resistor Value 52
Isolating Allowed 57
Options 1 53
Pulse Count 55
Pulse Count Handover 55
Restore Code 59
Restore Report 58
Status Mode 11
Trouble 59
Zone Bypass 59
Zone Indicators 17
Zone Options 1
Lockout Siren & Dialer 56
Sensor Watch 56
Zone Options 2
Isolate In STAY Mode 1 57
Zone Isolation Allowed 57
Zone Restore Report 58
Zone Reporting Information
Zone Restore Code 59
Zone Types
Chime Zone 55
Delay-1 Zone 54
Delay-2 Zone 54
Handover Zone 54
Instant Zone 54

Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, NY 14450-9199 USA
www.boschsecurity.com

F01U089401-02

BOSCH