Doc.	600 4
	Rev F

CROWN JEWEL PROGRAMMING GUIDE



TABLE OF CONTENTS

SECTION 1 FEATURE OVERVIEW	1
SECTION 2 PROGRAMMING OVERVIEW	2
SECTION 3 TIME ZONES AND HOLIDAYS	4
SECTION 4 ENTRY CODES	5
SECTION 5 VISITOR CALLS	6
SECTION 6 DO NOT DISTURB	8
SECTION 7 CALL FORWARDING	9
SECTION 8 OUTPUT RELAY CONFIGURATION	11
SECTION 9 AUTO UNLOCK SCHEDULES	13
SECTION 10 SECURITY FEATURES	14
SECTION 11 OTHER SYSTEM SETTINGS	16
SECTION 12 MULTIPLE UNIT INSTALLATIONS	18
APPENDIX A THE PROGRAMMING MENU	19
APPENDIX B TROUBLESHOOTING	21

COPYRIGHT© 2002, ALL RIGHTS RESERVED

www.sentexsystems.com

This document is protected by copyright and may not be copied or adapted without the prior written consent of Sentex Systems. This documentation contains information proprietary to Sentex and such information may not be distributed without the prior written consent of Sentex. The software and firmware included in the Sentex product as they relate to this documentation are also protected by copyright and contain information proprietary to Sentex.

FOR TECHNICAL SUPPORT, PLEASE CONTACT YOUR LOCAL SENTEX SYSTEMS DEALER

SECTION 1 FEATURE OVERVIEW

The Crown Jewel is a single-line telephone entry system that connects directly to your telephone line. As a result, the system does not generate telephone charges. The Crown Jewel comes standard with a host of features and benefits including, but not limited too:

Visitor entry: When the visitor presses the "#" key on the unit's keypad, your telephone line will switch over to the unit and ring your telephone. You can then communicate with the visitor and allow entry at the main gate by pressing a "9". If the Crown Jewel unit is controlling a second gate, pressing a "5" allows entry.

Call Waiting: If your telephone is in use when the visitor presses the "#" key, you will hear 2 short tones to signal that a visitor is attempting to call. You can press a "2" and the outside call in progress will be put on hold and the telephone will be connected to the visitor.

Entry codes: You (and others you authorize) can have a unique 4-digit entry code. When this code is entered on the keypad, it will cause the specified gate to open. The Crown Jewel holds up to 75 different entry codes.

Auxiliary Keypad: An auxiliary keypad can be connected to the Crown Jewel unit as an additional access device for entry codes, such as at a pedestrian gate.

Free Exit Through a Monitored Gate: The unit can provide free exit through controlled entry to allow exit without causing a forced open alarm condition.

Direct Resident Control of Gates: The controlled gates or accessories can be activated directly from your tone dial telephone.

Time Zones: You can restrict the use of entry codes by limiting the days and times that a code is valid.

Do Not Disturb: The Crown Jewel has the ability to block visitor calls during specific times. It can be programmed manually or set up as schedules in which the feature will activate and deactivate automatically.

Call Forwarding: The Crown Jewel can be programmed to "forward" a visitor call to another location (instead of ringing the house) when you are away from home. This feature also allows you to grant access to a visitor from a remote location.

Visitor Calling Directly to Guest Houses, etc.: The Crown Jewel has the ability to let a visitor place a call to a location other than the main residence. For example, if the owner of the residence has a renter living in the guest house and the owner does not want to be bothered with visitor calls, s/he can program the Crown Jewel to dial the phone number in the guest house. Each Crown Jewel has the capacity for up to 3 guest houses.

Transactions: The Crown Jewel retains a record of the last 250 actions and programming entries, including the time and date of the activity and the person involved. The Windows based software program CJWin is required to retrieve the transactions.

Automatic Unlocking/Locking of Gate Relays: The Crown Jewel can automatically open or close to twice per day. It can also activate any other device that is being controlled by the unit's relays, such as driveway lights.

Holidays: The system allows up to 10 holidays on which these schedules will not operate unless required. For example, if the gate is to be unlocked during normal business hours, you can have it remain closed on New Years Day, if it falls on a weekday.

SECTION 2 PROGRAMMING OVERVIEW

A. PROGRAMMING BASICS

Each programming command begins with a 2-digit number, called a step number, which is followed by the required digits of data, and is entered by the "#" key. If the step and data information is valid, the unit will respond with 2 short beeps. If you do not hear 2 short beeps, the unit did not understand the input. The Crown Jewel can be programmed from various sources for complete flexibility. They include;

- The 12 digit keypad of the Crown Jewel unit
- The residence touch-tone dial telephone
- A remote touch-tone telephone (calling into the residence phone line)

B. HOW TO ENTER PROGRAMMING MODE

Begin by signaling the Crown Jewel unit that you want to enter programming mode.

From The Keypad

- 1. Press the asterisk key three times (***).
- 2. Enter the six-digit password. The default is six zeroes (000000)
- 3. The unit is now ready to accept programming instructions.

From the Residence Telephone

- 1. When you hear the dial tone, press the asterisk key three times (***).
- 2. Enter the six-digit password (default is 000000). The unit will emit a high-pitched tone.
- 3. Press the pound key (#). The tone will stop.
- 4. The unit is now ready to accept programming instructions.

From a Remote Telephone

1. Dial the residence telephone number.

NOTE: If the Crown Jewel unit and an answering machine (or answering service) utilize the same telephone line, let the line ring at least (2) two times, hang-up, and call back within one (1) minute. The Crown Jewel unit will answer on the second call. If the unit does not answer, you may need to change the ring count (see "Rings Before Answer" on page 16 for more information).

- 2. When the Crown Jewel picks up the call, you will hear 2 beeps. Press the asterisk key two times (**). The unit will beep twice again.
- 3. Press the asterisk key once (*).
- 4. Enter the six-digit password (default is 000000). The unit will emit a high-pitched tone.
- 5. Press the pound key (#) to stop the tone.
- 6. The unit is now ready to accept programming instructions.

C. EXIT PROGRAMMING MODE

Format: 00 + #

Keypad: Unit will respond with three short beeps.

Telephone: Unit will disconnect.

D. STEPS REQUIRED TO PROGRAM THE CROWN JEWEL

Each programming command consists of the following:

1. 2-digit step number

- 2. Required digits of data
- 3. # (pound) key to save the data

Example: 01 + 123456 + #

Two-digit step number: 01 (set the unit password)
Six-digit data: 123456 (the new password)

Save data: #

If an error was made during an entry, press the asterisk (*) key to cancel the command. Begin again.

E. SYSTEM RESPONSES

The Crown Jewel emits various audio tones to respond to input and to indicate certain conditions.

Programming Responses

2 short beeps: programming step was valid3 short beeps: programming mode was exited

1 long beep: input was not valid

2 long beeps: duplicate entry code was entered

• 3 long beeps: memory is full

4 long beeps: unit has reset or is powering up

busy signal: line is busy or Do Not Disturb feature is in effect

Direct Command Responses

5 short beeps: gate is closing by command10 short beeps: gate is opening by command

Other Responses

1 short beep: key was pressed on the main keypad

• 10 beeps: talk time for a visitor call is lapsing and the unit will beep once per second for the last 10

seconds unless the talk time is extended.

ring back: the unit is ringing the house

hi-low tones: an alarm condition has been activated

silence: the keypad has struck out, or the unit is being programmed from another source, or an

alarm condition exists

SECTION 3 TIME ZONES AND HOLIDAYS

A. SET THE SYSTEM DATE AND TIME

The Crown Jewel contains an internal clock calendar that automatically keeps time and adjusts for leap year, however does not adjust for daylight savings time. The calendar also is used for scheduling functions, history transactions, and entry codes.

Format: 27 + yy + mm + dd + day + hour + minutes + #

yy = year; mm = month; dd = current date

5 = Thursday 7 = Saturday Davs: 1 = Sunday 3 = Tuesday

> 2 = Monday 4 = Wednesday 6 = Friday

Hour and minutes are entered in twenty-four hour format); For example, the time of 7:20 PM is entered "1920"; the hour for 7:20 PM is entered "19"; the minutes are entered "20".

Example: 27 + 02 + 09 + 28 + 4 + 15 + 30 + #

(sets the unit's clock for 3:30 PM on Wednesday, September 28, 2002).

B. CREATE TIME ZONES

Times Zones allow you to set up time periods and days during which access is restricted for entry codes or the system performs functions automatically. For example, the gardener's entry code will only grant access on Mondays between the hours of 9:00 AM and 3:00 PM. You can program up to seven zones with two segments within each.

Format: 25 + time zone no. + segment no. + start time + end time + days + #

Time zone numbers range from 1 to 7 with two segments for each time zone (numbered 1 or 2).

3 = Tuesday Days: 1 = Sunday 5 = Thursday 7 = Saturday

> 2 = Monday 4 = Wednesday 6 = Friday 8 = Holidays

Example: 25 + 2 + 1 + 0800 + 1700 + 234568 + #

(sets time zone 2, segment 1 to start at 8:00 AM and end at 5:00 PM Monday through Friday and

holidays).

Note To set up a time zone that extends past midnight and into the next day, create one segment that runs

until midnight (for example:, 8:00 PM to 11:59 AM) and a second segment that starts at midnight on

the following days (for example:, 12:00 AM to 4:00 AM.

C. DEFINE HOLIDAYS

Holidays are special calendar dates that can be used to modify the system functionality such as do not disturb schedules, gate unlock schedules, and entry codes with time zones. For example, if New Year's Day is set up as a holiday, then entry codes that would ordinarily be allowed access will not be granted entry on January 1st.

Format: 28 + holiday no. + mm + date + #

The holiday number is one digit (0 through 9).

The month and date are each entered as two digits.

Example: 28 + 1 + 0101 + #

(sets January 1st as holiday number 1).

SECTION 4 ENTRY CODES

Entry Codes are used to open the gate or door through the keypad without phoning the residence. The Crown Jewel unit has capacity for 75 entry codes. To restrict access, you can also program entry codes to activate specific relays; and/or grant access only during specified Time Zones (see Section 2). Entry codes are four digits long between 0000 and 9999 inclusive.

A. CREATE AN ENTRY CODE FOR 24 HOUR ACCESS

Format: 03 + entry code + #

B. DELETE AN ENTRY CODE

Format: 04 + entry code to erase + #

C. DELETE ALL ENTRY CODES

Format: 05 + 101010 + #

D. SPECIAL ENTRY CODE PROGRAMMING

Create an entry code for specific relay activation or for limiting access by time.

Format: 03 + entry code + relay code + time zone + #

> Relay Codes: 0 = Cycle default relay 5 = Release main gate

> > 1 = Cycle main gate 6 = Release auxiliary relay

2 = Cycle auxiliary relay 7 = Release both relays 3 = Latch main gate open 8 = Cycle both relays

4 = Latch auxiliary relay 9 = Latch both

Time Zones are one digit long

Examples: Entry code with relay code and time zone: 03 + 1234 + 1 + 2 + #

Sets entry code 1234 to cycle relay 1 and be valid during the times set up for time zone 2.

Entry code with relay code only: 03 + 3579 + 2 + #

Sets entry code 3579 to cycle the auxiliary relay and be valid 24 hours a day, 7 days a week. If a time zone code is not entered as in the example above, the entry code will be assigned the default

time zone of "0" (access all day, every day).

Simple entry code: 03 + 2468 + #

Sets entry code 2468 to activate the main relay and be valid 24 hours a day, 7 days a week.

Note: If you select "0" as the relay code, the relay corresponding with the keypad where the entry code

was entered will activate. For example, if you enter a valid entry code on the Crown Jewel unit's main keypad, relay 1 will activate. If you enter a valid entry code on the auxiliary keypad, relay 2

will activate.

SECTION 5 VISITOR CALLS

When the visitor presses the "#" key at the unit's keypad, and your phone is not in use, the Crown Jewel will ring your phone (using a distinctive double ring). When you answer the phone, you can then communicate with the visitor and allow/deny entry by pressing one of the following digits on your telephone keypad:

<u>DIGIT</u>	ACTION THAT WILL BE TAKEN BY THE SYSTEM
9	Open the main gate
5	Activate the auxiliary relay
1	Extend the amount of time you may talk with a visitor
*	Deny entry to the visitor and disconnects the visitor call

If the phone is in use when the visitor presses the "#" key, the resident will hear 2 short tones to signal that a visitor is attempting to call. Pressing a "2" and the outside call will be put on hold and the call will be switched to the visitor. If you allow entry (as described above), you will automatically be switched back to the outside call in progress. You can also deny entry, hang the visitor up, and switch back to the call in progress by pressing a "*".

A. CHANGE THE VISITOR CALL RESPONSE KEYS

You can change the response keys pressed on your telephone keypad. To restore the response keys to the default settings enter 34#.

Default: 9521*

"9" for Main Gate activation"5" for Auxiliary Relay activation"2" for Call Waiting Toggle Digit"1" for Extend Talk Time Digit

** " for Hang-up Key

Format: 34 + main gate activation + auxiliary relay activation + call wait toggle + extend talk time + hang-up + #

Example: 34 + 1 + 2 + 6 + 7 + 8 + #

(Changes main gate activation digit to "1", auxiliary activation digit to "2", call waiting toggle digit to "6",

extend talk time digit to "7", and hang-up key to "8").

B. SET THE VISITOR CALL RING SOUND

Default: 2 (double ring)

Format: 06 + ring type + #

Ring types: 1 = single ring, 2 = double ring

C. SET THE MAXIMUM VISITOR CALL RING COUNT

Program the number of rings (1-24) the unit will allow before it aborts the call placed to the residence.

Default: 12

Format: 07 + no. of rings + #

D. SET VISITOR TALK TIME

Set the maximum length of time (15-250 seconds) for a call initiated by a visitor.

Default: 90 seconds

Format: 08 + no. of seconds + #

Example: 08 + 120 + #

(sets the talk time to 2 minutes).

NOTES

- 1. When the Crown Jewel is calling the residence during a normal visitor call, the talk time starts when the call is answered.
- 2. When the Crown Jewel is calling a Call Forwarding number, the talk time starts immediately after the number is dialed.
- 3. When there are 10 seconds of talk time left, the unit will beep 1 once each second to notify you. If you wish to extend the talk time, press "1" (one key).

E. ENABLE/DISABLE PULSE DIAL ACTIVATION

You can enable a resident to open the main gate by dialing "9" on a pulse (rotary) telephone in the residence. Pulse dialing cannot be used for any other visitor response, for programming, or for direct commands

Default: 0 (disabled)

Format: 09 + pulse dial mode + #

0 = disable pulse dial 1 = enable pulse dial

F. ENABLE/DISABLE CALL WAITING

Default: 1 (enabled)

Format: 10 + call waiting mode + #

0 = disable call waiting 1 = enable call waiting

Example: 10 + 0 + #

NOTE: This feature applies only to calls made to the main residence phone, not to other tenants via

Dialing Codes.

G. VISITOR CALLS TO OTHER TENANTS (DIALING CODES)

The Crown Jewel has the ability to let a visitor place a call to a location other than the main residence. This feature is utilized when the visitor presses 1#, 2#, or 3# on the unit's keypad, rather than just the # key.

Format: 19 + dialing code no. + telephone no. + #

• Dialing code number is one digit long (1, 2 or 3)

Telephone number may be up to 11 digits long

Example: 19 + 2 + 5551212 + #

(sets dialing code 2 to dial 555-1212 when 2# is pressed on the unit's keypad).

NOTE: Each unit has the capacity to program up to three (3) single-digit dialing codes.

SECTION 6 DO NOT DISTURB

A. SET UP A DO NOT DISTURB SCHEDULE

Format: 11 + days + start time + end time + holiday option + #

Days: 1 = Sunday 3 = Tuesday 5 = Thursday 7 = Saturday

2 = Monday 4 = Wednesday 6 = Friday 8 = Holidays

Time is defined in 24 hour format.

Holiday Options: 0 = No schedule on holidays

1 = Use same schedule on holidays

2 = Use schedule number 8 when this day falls on a programmed holiday

Example: 11 + 23 + 2315 + 0830 + 1 + #

(Do Not Disturb is Mondays and Tuesdays from 11:15 PM until 8:30 AM the following morning and

holidays).

NOTE: This feature applies only to calls made to the main residence phone, not to other tenants via Dialing

Codes.

B. ENABLE/DISABLE THE DO NOT DISTURB SCHEDULE

Default: 0 (disabled)

Format: 12 + Do Not Disturb mode (1 digit) + #

0 = Disable Do Not Disturb1 = Enable Do Not Disturb

Example: 12 + 1 + #

(Crown Jewel enables Do Not Disturb Schedule functionality)

C. DELETE A DO NOT DISTURB SCHEDULE

Format: 11 + day(s) + 99 + #

D. MANUAL ACTIVATION OF DO NOT DISTURB

This step temporarily overrides any Do Not Disturb Schedule that may be programmed.

Format: 89 + end time + # (Time is defined in 24 hour format)

Example: 89 + 0715 + #

(visitor calls will be blocked until 7:15 AM)

E. MANUAL CANCELLATION OF DO NOT DISTURB

Format: 89 + 99 + #

Page 8 of 21 Doc 6001141 Rev F

SECTION 7 CALL FORWARDING

Call Forwarding redirects visitor calls to an outside telephone number instead of ringing the residence. The forwarding number is a regular phone number of up to 11 digits in length. During a Call Forwarding call, the visitor will hear normal telephone line sounds but will not hear the number being dialed. You may also attach one of the following features to a forwarding number:

- an extension of an automated switchboard, or
- an extension (up to 6 digits) that the visitor can dial from the unit's keypad.

Call Forwarding applies only to calls made to the main residence phone, not to other tenants via Dialing Codes.

A. ENABLE OR DISABLE CALL FORWARDING

Default: 0 (disabled)

Format: 13 + Call Forwarding mode + #

Call Forwarding Modes: 0 = Disable Call Forwarding

1 = Enable Call Forwarding

2 = Enable Scheduled Call Forwarding

Example: 13 + 1 + #

(enables the Call Forwarding feature)

B. SET THE CALL FORWARDING NUMBER

Set the telephone number to which the Crown Jewel will forward visitor calls. To program an extension, see Section D.

Format: 14 + telephone no. + #

• The telephone number can be up to 11 digits long.

Example: 14 + 5551212 + #

(sets the Call Forwarding number to 555-1212)

C. SET THE CALL FORWARDING EXTENSION NUMBER

Format: 16 + extension number + #

The extension number may be up to 6 digits long.

Example: 16 + 1234 + #

(sets the extension number as 1234)

NOTE To dial an extension number, the Call Forwarding and the Forward Call Extension Delay features must

be enabled.

D. SET THE CALL FORWARDING EXTENSION DELAY

Program a pause between the Call Forwarding telephone number and the Call Forwarding extension. The number of seconds may be up to two digits long, from 1 to 99 seconds

Default: 0 (extension dialing disabled)

Format: 15 + no. of seconds + #

To disable feature, enter 15 + 0 + #

Example: 15 + 22 + #

E. CALL FORWARDING SCHEDULE

Format: 18 + day(s) + start time + end time + holiday option + #

Days: 1 = Sunday 3 = Tuesday 5 = Thursday 7 = Saturday 2 = Monday 4 = Wednesday 6 = Friday 8 = Holidays

Time is defined in 24 hour format.

Holiday Options: 0 = No schedule on holidays

1 = Use same schedule on holidays

2 = Use schedule number 8 when this day falls on a programmed holiday

Example: 18 + 2 + 0900 + 1800 + 0 + #

(sets the Call Forwarding schedule for Mondays between from 9:00 AM to 6:00 PM)

SECTION 8 OUTPUT RELAY CONFIGURATION

A. SET RELAY ACTIVATION TIMES

Set the amount of time the gate/relay will remain activated. Valid time range is 1-250 seconds.

Default: 10 seconds

Format: 23 + no. of seconds + # Main Relay

24 + no. of seconds + # Auxiliary Relay

Example: 23 + 35 + #

(sets relay 1 to remain activated for 35 seconds)

NOTE: If this relay activates a gate operator with a momentary contact closure, set the relay activation

time for a short period (for example, 2 seconds). A longer activation time might cause the gate to

repeatedly open and close until the activation period has expired.

B. TIMED RELAY ACTIVATION

Allows you to activate the relays for the amount of time that was programmed in the relay activation time. Use these steps to momentarily open the door/gate for a visitor without having the visitor first initiate a call.

Format: 91 # Main Relay

92 # Auxiliary Relay

C. LATCH A RELAY

Use this step if to keep the door/gate open for an undetermined period of time. It will temporarily override any existing unlock schedules. The gate will remain open until and through the unlock schedule for that day. When the unlock schedule ends, the gate will close.

Format: 93 # Main Relay

94 # Auxiliary Relay

D. RELEASE A RELAY

Activate the relay until released by another program step, a direct command, or an entry code with an unlatch relay code.

Format: 95 # Main Relay

96 # Auxiliary Relay 97 # Both Relays

E. LATCH RELAY UNTIL SPECIFIED TIME

Activate the relay until the time of day that you specify in this step. Time is 4 digits long, in a 24 hour format. This step will override any existing unlock schedules. Use this step to temporarily extend an unlock period beyond the scheduled closing time.

Format: 98 + end time + # Main Relay

99 + end time + # Auxiliary Relay

Example: 98 + 1730 + #

(latches main gate open until 5:30 PM).

F. SET AUXILIARY RELAY AND STATUS 2 INPUT CONFIGURATION

The auxiliary relay can be used to control a second gate, bypass (shunt) an alarm sensor, trigger an alarm device such as a siren, or activate an accessory such as CCTV. The status 2 input can be used as an exit request for the second gate or a sensor to detect the closed position of the main gate.

Default: 0 (Relay 2 is Control, Status 2 is Exit Request).

Format: 26 + configuration no. + #

Example: 26 + 3 + #

(sets relay 2 for alarm and Status 2 for Position Sense 1)

Configuration Number	Relay 2	Status 2	Video On
0	Control	Exit Request 2	
1	Shunt	Position Sense 1	
2	Alarm	Position Sense 1	
3	CCTV	Position Sense 1	Manual
4	CCTV	Position Sense 1	Immediate
5	Control	Position Sense 1	

NOTES If the second relay is set to configuration number:

- **0** During a visitor call, the relay will activate when you press a "5", or the relay will activate when the Exit Request Device has been activated.
- 1 Second relay will activate whenever the main relay activates to bypass an alarm sensor.
- 2 Second relay will activate upon an alarm condition.
- 3 Closed circuit TV will activate when you press a "5" on your telephone, but the visitor call will not terminate until you either grant access "9" or press "★" to terminate the call.
- 4 Closed circuit TV will activate when any key is pressed on the main keypad.
- **5** During a visitor call, the relay will only activate when you press "5".

SECTION 9 AUTO UNLOCK SCHEDULES

The Crown Jewel can automatically open and close any gate or device connected to the output relays. Each day of the week can have up to 2 time segments. On programmed holidays, the schedule can automatically be ignored or changed to the alternate Holiday schedule.

A. SET AUTO UNLOCK SCHEDULES

Program the Crown Jewel to automatically unlock and relock the gates.

Format: Main Relay: 41 + day(s) + segment + open time + end time + holiday option + #

Auxiliary Relay: 42 + day(s) + segment + open time + end time + holiday option + #

Days: 1 = Sunday 3 = Tuesday 5 = Thursday 7 = Saturday

2 = Monday 4 = Wednesday 6 = Friday 8 = Holidays

Segment is one digit long, either 1 or 2.

Time is defined in 24 hour format.

Holiday Options: 0 = No schedule on holidays

1 = Use same schedule on holidays

2 = Use schedule number 8 when this day falls on a programmed holiday

Example: 41 + 2 + 1 + 0800 + 1700 + 1 + #

(sets segment 1 for the main gate to open at 8 AM and close at 5 PM on Mondays and Holidays)

B. ERASE AUTO UNLOCK SCHEDULES

Format: Main Relay: 41 + day(s) + segment + 99 + #

Auxiliary Relay: 42 + day(s) + segment + 99 + #

Days: 1 = Sunday 3 = Tuesday 5 = Thursday 7 = Saturday

2 = Monday 4 = Wednesday 6 = Friday 8 = Holidays

Segment is one digit long, either 1 or 2.

Example: 41 + 2 + 1 + 99 + #

(Erase the Monday Segment 1 Unlock Schedule for the Main Gate)

C. ENABLE/DISABLE UNLOCK SCHEDULES

Default: 0 (Ignore Unlock Schedules) **Format:** 40 + Unlock Schedule mode + #

0 = Ignore Unlock Schedules1 = Enable Unlock Schedules

SECTION 10 SECURITY FEATURES

A. CHANGE THE UNIT PASSWORD

Default: 000000 (password must be 6 digits)

Format: 01 + password + #

B. VERIFY THE UNIT PASSWORD

Format: 02 + password + #

• If the unit responds with two beeps, the number that you entered matches the password you programmed in step 01.

NOTE: If the unit responds with an error tone, **do not exit programming**. The number that you entered does not match the password. Repeat steps 01 and 02 for proper password setting.

C. MAXIMUM NUMBER OF KEYPAD ERRORS

Set the maximum number of invalid entry codes that can be entered before the unit stops accepting codes from the keypad for 3 minutes.

Default: 5

Format: 20 + number of keypad errors for keypad 1 + number of keypad errors for keypad 2 + #

- The number of keypad errors for keypads 1 and 2 is one digit long, from 0 to 9 (0 = No limit).
- If you do not have a second keypad, press # after the number of keypad error for keypad 1.

Examples 20 + 3 + #

(sets keypad 1 to stop accepting codes after 3 unsuccessful attempts)

D. ENABLING DIRECT COMMANDS

Set the Crown Jewel to accept commands directly from the residence telephones.

Default: 1 (Enabled)

Format: 35 + direct command + #

Direct Commands: 0 = Disable Direct Commands

1 = Enables Direct Commands from residence phone only2 = Enables Direct Commands from a remote phone only

3 = Enables Direct Commands from residence or remote phone

E. ENABLE/DISABLE ALARM CALL

Set the Crown Jewel to make an alarm call when an alarm condition occurs.

Default: 0 (Disabled)

Format: 21 + alarm call mode + #

Alarm Modes: 0 = Disables alarm call

1 = Unit will generate an alarm call upon a door breach

2 = Unit will generate an alarm call upon a keypad "strike out"

3 = Unit will generate an alarm call upon a door breach or a keypad "strike out"

Example: 21 + 3 + #

(sets the unit to generate an alarm call upon a door breach or a keypad "strike out")

F. SET ALARM CALL NUMBER

Program the telephone number to call in case of an alarm condition. When you pick up the phone, you will hear continuous hi-low tones, indicating an alarm condition. The factory setting for the Alarm Call feature is disabled.

Format: 22 + alarm call telephone number + #

The alarm call telephone number may be up to 11 digits long.

• 22 + 00 + # enables this feature to ring resident phone.

Example: 22 + 5551212 + #

(sets the alarm call number to 555-1212)

G. USING THE IN-HOUSE PAGING FEATURE

You can send the Crown Jewel a Direct Command that will cause all the telephones connected to the unit's phone line to give a distinctive ring. For example:, you can use this command to page someone else in the residence. The Crown Jewel can cause a single, double, triple or quadruple ring.

Format: ##0 + ring digit + # then hang up the phone (from resident phone only)

Ring Digit: 1 = single ring

2 = double ring 3 = triple ring

4 = quadruple ring

H. SPEAK THROUGH THE CROWN JEWEL

Initiate communications from a telephone through the Crown Jewel at any time to greet visitors, ward off vandals, etc.

Format: 90 + # while in programming or ## + 90 + # from resident phone.

- 1. This call will terminate automatically in 60 seconds unless you hang up the line sooner.
- 2. Extend the talk time by pressing "1" on your telephone.

SECTION 11 OTHER SYSTEM SETTINGS

A. RINGS BEFORE ANSWER

Program the number of rings before the Crown Jewel answers the telephone call. This feature is used for programming from a remote telephone. If you have an answering machine (or answering service) attached to the same telephone line as the unit, set the Crown Jewel count for two (2) or more rings higher than the answering machine/service count.

Default: 5

Format: 29 + no. of rings + #

Number of rings can be up to 2 digits long from 1 to 15.

B. SET ALTERNATE PREFIXES

When you press either "##" or "*** " on the resident phone, the Crown Jewel assumes that you want its attention for a Direct Command or programming, and it disconnects from the telephone line to wait for commands. Some telephone companies offer special features that require pressing a preceding "#" or "* ". If you subscribe to such services and the Crown Jewel interferes with them, you can program the unit to accept different prefixes.

Default: 00 (Dial "##" for Direct Commands and "***" to enter programming mode).

Format: 36 + alternate prefix mode + #

Alternate prefix modes (2 digits long)

00 = Direct Commands is "##"; the prefix for programming is "*** ".

01 = Direct Commands is a combination of the two keys (i.e., "#* " or "*#"); the prefix for programming is a combination of three keys (i.e., "#*#" or "*#*").

02 = Direct Commands prefix is "** "; the prefix for programming is "** ".

03 = Direct Commands prefix is "##"; the prefix for programming is "###".

04 = Resident will not be able to program from the house or use the Direct Commands.

1n = Direct Commands prefix is "n#"; the prefix for programming is "nn*" where n is a number from 1 to 9.

Example: 36 + 01 + #

(sets the Alternate Prefix to "#"s and "*"s)

C. ENABLE/DISABLE THE NO-TELCO MODE

The Telco mode is invoked when the unit is using a telephone line. Enable No-Telco mode when the unit is <u>not</u> using a telephone line. After enabling or disabling the No-Telco mode, you MUST perform Step 32 – "Resetting the Unit". If No-Telco is enabled with a telephone line connected to the unit, the Crown Jewel ignores the telephone line. All Telco features like call forwarding and call waiting are disabled.

Default: 0 (disabled)

Format: 33 + No-Telco mode (1 digit) + #

No-Telco Modes: 0 = Enables **Telco** mode

1 = Enables No-Telco mode

D. OVERRIDE TELEPHONE COMPANY ANSWERING SERVICE

You can override the answering service by dialing the line attached to your unit, letting the phone ring once or twice only, then hanging up. After a few seconds, dial the same number again. The Crown Jewel will answer the second call immediately. Valid time range is 1-99 seconds.

Default: 20 seconds

Format: 43 + delay time in seconds + #

E. ERASE ALL TRANSACTIONS

Performing this command will erase all the transactions that are currently stored at the unit. Once erased, the transactions cannot be retrieved.

Format: 88 + 101010 + #

SECTION 12 MULTIPLE UNIT INSTALLATIONS

Up to seven (7) Crown Jewels can be installed on a single telephone line. Each unit must have a unique number from 1 to 7. Visitor calls can only be taken one at a time. For example:, if you take a visitor call from the main gate (unit 1), and another visitor tries to call from the rear gate (unit 2), you will not be notified until you hang up the original call. However, if you are making a regular phone call, the call waiting feature will operate normally.

A. PROGRAMMING MULTIPLE UNITS

When you program instructions from the residence telephone or a remote telephone, you must include the unit ID code.

From the Residence Telephone

- 1. At the dial tone, press the asterisk key three times (***).
- 2. Enter the unit ID code (1-7).
- 3. Enter the six-digit password (default is 000000). Unit will emit a high-pitched tone.
- 4. Press the pound key (#). The tone will stop and is now ready for programming.

From a Remote Telephone

- 1. Dial the residence telephone number.
- 2. When the Crown Jewel picks up the call, the unit will beep twice. Press the asterisk key two times (**). The unit will beep twice again.
- 3. Press the asterisk key once (*).
- 4. Enter the unit ID code (1-7).
- 5. Enter the six-digit password (default is 000000). The unit will emit a high-pitched tone.
- 6. Press the pound key (#). The tone will stop and is now ready for programming.

B. SET THE UNIT NUMBER

Adding or removing Crown Jewels will require the unit ID's to be re-entered. The unit ID is set from the Crown Jewel keypad only.

Format: 38 + number of this unit + total number of units + #

Number of the units is one digit (1-7) for individual ID's and one digit for total number of units (2-7)

Example: 38 + 2 + 4 + #

(sets this unit as unit 2 in a series of 4 units).

C. VERIFY THE UNIT NUMBER

Format: 37 + #

The unit will respond with the number of beeps corresponding to its unit number.

APPENDIX A THE PROGRAMMING MENU

Each programming command consists of the following:

• 2-digit step number

· Required digits of data

• # (pound) key to save the data

Example: 01 + 123456 + #

Two-digit step number: 01 (set the unit password)
Six-digit data: 123456 (the new password)

Save data: #

If an error occurs during an entry, press the "*" (asterisk) key to cancel the command. Begin again.

STEP	SEE PAGE	PURPOSE	DIGITS	ACCEPTABLE INPUT
00	2	Exit Programming Mode		
01	14	Change the Unit Password	6	
02	14	Verify the Unit Password	6	
03	5	Create an Entry Code	4, 5, or 6	4-digit entry code + relay code + time zone
04	5	Erase an Entry Code	4	4-digit entry code
05	5	Erase all Entry Codes	6	all codes erasing sequence (101010)
06	6	Set the Visitor Call Double Ring	1	1=single ring, 2=double ring
07	6	Set the Maximum Visitor Call Ring Count	up to 2	1 –24 rings
80	7	Set talk time	up to 3	15 – 250 seconds
09	7	Enable/disable Pulse Dial 9	1	0=disable, 1=enable
10	7	Enable/disable Call Waiting	1	0=disable, 1=enable
11	8	Set the Do Not Disturb Schedule	3 or 10	day of the week + starting time + ending time + holiday option, 99=erases
12	8	Enable/disable Do Not Disturb Schedule	1	0=disable, 1=enable
13	9	Enable/disable Call Forwarding	1	0=disable, 1=enable, 2=schedule
14	9	Set the Call Forwarding Number	up to 11	0 through 9, 00=disables the number
15	10	Set the Call Forwarding Extension Delay	up to 2	0 – 30 seconds
16	9	Set the Call Forwarding Extension Number	up to 6	00 = disables the number
17	9	Set the Maximum Number of Digits in the Call Forwarding Extension Number	1	0 –6
18	10	Set the Call Forwarding Schedule	3 or 10	Day + start time + end time + holiday option, 99=erases
19	7	Setting the Dialing Codes	up to 12	Code number + telephone no., 00=erases a code
20	14	Set the Maximum Number of Keypad Errors	2	Keypad 1 errors + keypad 2 errors
21	15	Enable/disable Alarm Call	1	0=disable, 1=gate breach only, 2=keypad strikeout, 3=both
22	15	Set the Alarm Call Number	up to 11	00=call resident only
23	11	Set Main Gate time	up to 3	1 – 250 seconds
24	11	Set Auxiliary Relay Time	up to 3	1 – 250 seconds
25	4	Enter a Time Zone Segment	4 or 11-18	time zone no. + segment no. + start time + end time + days, 99=erases time zone

STEP	SEE PAGE	PURPOSE	DIGITS	ACCEPTABLE INPUT
26	12	Set Auxiliary Relay and Status Configuration	1	0=Control (with exit request) 1=Shunt 2=Alarm 3=CCTV (manual) 4=CCTV (instant) 5=Control (with position sense)
27	4	Set the Date and Time	11	year + month + day + day of the week + hour + minute
28	4	Defining Holidays	5	holiday number + month + day
29	16	Setting the Rings Before Answer	up to 2	1 – 15 rings
30	-	Adjust the Sidetone Balance		Generate 45 second tone
31	21	Restore Factory Defaults		
32	21	Reset the Unit		
33	16	Enable/disable the No-Telco Mode	1	0=disable, 1=enable
34	6	Change the Visitor Call Response Keys	4 or 5	1-9
35	14	Enable Direct Commands	1	0=disable, 1=local, 2=remote, 3=both
36	16	Set Alternative Prefixes	2	00=normal, 01=mixed, 02=stars, 03=pounds, 04=none, 1n=num (n# or nn*) where n=1-9.
37	18	Beep Unit Number		
38	18	Setting the Unit Number	2	This unit number + total number of units
40	13	Enable/disable Unlock Schedules	1	0=disable, 1=enable
41	13	Set the Main Gate Unlock Schedule	up to 11	day of the week + segment number + starting time + ending time + holiday option, 99=erases
42	13	Set the Auxiliary Relay Unlock Schedule	up to 11	day of the week + segment number + starting time + ending time + holiday option, 99=erases
43	17	Override Telephone Company Answering Service	2	43 + delay time in seconds + #
88	17	Erase All Transactions	2	88 + 101010 + #
89	8	Activate the Do Not Disturb Until Feature	4	End time
90	15	Speak through the Crown Jewel		
91	11	Cycle the Main Gate		
92	11	Cycle the Auxiliary Relay		
93	11	Latch the Main Gate		
94	11	Latch the Auxiliary Relay		
95	11	Release the Main Gate		
96	11	Release the Auxiliary Relay		
97	11	Release Both Relays		
98	11	Latch the Main Gate "Until time"	4	End time
99	11	Latch the Auxiliary Relay "Until time"	4	End time

APPENDIX B TROUBLESHOOTING

A. RESET THE UNIT

You can reset the unit without disconnecting the power.

Format: 32 + #

NOTE Once you press the "#" key, the unit will beep once, reset, exit out of the programming mode, and

beep 4 times following the reset.

B. RESTORE FACTORY SETTINGS

When you initiate this step, the doors/relays that were latched (timed or untimed) before this step, will become unlatched. Entry codes and schedules will not be reset.

Format: 31 + #

STEP	PURPOSE	FACTORY SETTING
01	Changing the Programming Access Code	000000
06	Setting the Visitor Double Ring	Enabled
07	Setting the Maximum Visitor Ring Count	12
08	Setting Talk Time	90 seconds
09	Enabling/Disabling Pulse Dial 9	Disabled
10	Enabling/Disabling Call Waiting	Disabled
12	Enabling/Disabling Do Not Disturb Schedule	Disabled
13	Enabling/Disabling Call Forwarding	Disabled
20	Maximum Number of Keypad Errors	5 for Keypad 1
		5 for Keypad 2
21	Enabling/Disabling Alarm Call	Disabled
23	Setting the Main Gate Activation Time	10 seconds
24	Setting Auxiliary Relay Activation Time	10 seconds
26	Setting Auxiliary Relay and Status Configuration	Control relay, exit request 2
29	Rings Before Answer	5
34	Programming Visitor Response Keys	9521*
36	Programming the Alternate Prefixes Normal	
40	Enabling/Disabling Unlock Schedules Disabled	

C. RESET SYSTEM MEMORY

When you initiate this step, all programming will be reset to factory defaults and <u>all</u> data will be lost. Data will need to be reentered accordingly.

Format: 31 + 101010 + #