# PROGRAMMING INFINTTY SYSTEMS WTHOUT MULTI-LINK FIRMWARE 

## IMPORTANT NOTICE

The Infinity systems provide extremely powerful and user-friendly access control. However, if they are programmed incorrectly, the systems may function improperly and are likely to cause you and others a great deal of inconvenience. Similarly, there are certain key things you and others in your building/complex must know about using the system. Thus, you should take the time to read these instructions completely before attempting to program or use your Infinity system. If you have any questions, you installing dealer will be happy to assist you.

> PLEASE NOTE: The locks on most Sentex System's cabinets are commonly keyed. This lock can be easily replaced. If you wish to have the lock on your system individually keyed, contact a locksmith.

## TABLE OF CONTENTS

This document is divided into ten (10) sections as follows:
SECTION NAME1-Overview Of System OperationPAGE1
2 - Hints On System Use And Maintenance ..... 4
3 - Basic Programming Rules ..... 6
4 - The Main Programming Menu ..... 8
5 - Initial System Set-Up (Areas 1 To 12, And 24) ..... 9
6 - Entering And Erasing Telephone Numbers, Entry Codes, And Card Codes (Areas 13 To 21) ..... 19
7 - Verifying And Printing Entries (Areas 22 And 23) ..... 25
8 - Directly Controlling System Relays ..... 26
9 - Other Special Functions ..... 27
10 - Alternative Methods Of Programming And Using The System ..... 29

IMPORTANT: The Sentex Systems warranty on this system is conditioned upon Sentex Systems being paid in full for this equipment. This warranty will not be honored until such payment has been received by Sentex Systems.

## 1-OVERVIEW OF SYSTEM OPERATION

The Infinity system is one of the most powerful and flexible access control systems in existence today. Yet, its user-friendly design also makes it one of the easiest to use. This section gives you an overview of how the system operates.

There are four basic Infinity systems, each of which can combine a wide variety of access control functions in one set of electronics. The "L", "S", "M", and "DI" series contain visitor entry capabilities as described below (although the "DI" series does not have an electronic directory) and can have varying degrees of card and/or code entry. The "B" series is a card and/or code entry only system.

The Infinity systems are capable of carrying out the following functions (several of these functions are optional, so ask your dealer which capabilities have been included in your system):

## 1. VISITOR ENTRY

The "L", "S", "M", and "DI" series Infinity systems can store, recall, and dial the telephone numbers of your building's occupants and respond to signals from their telephones to unlock a door or activate a gate operator (or any other device you wish). A visitor is instructed to find the occupant's name on the system directory and enter the accompanying code on the keypad. In the "L", "S", and "M" series, the directory is built into the system and will be displayed on one "page" of names at a time at the visitor's request. In the "DI" series, the directory is typed. When the code is entered, the system will dial the associated telephone number. If the occupant answers the call, they can take one of five actions by dialing a number on their telephone (the system recognizes signals from telephones using tone dialing only, except for the first action, which can be initiated by a rotary/pulse dial telephone):
A) a " 9 " will activate relay 1 to open a door or gate.
B) a " 5 " will activate relay 2 to open a door or to turn on whatever device is controlled by this relay.
C) a " 3 " will activate relay 3 and whatever device is controlled by it.
D) a "7" will activate relay 4 .
E) a " $\boldsymbol{*}$ " will hang-up the Infinity system without allowing entry.
F) a "\#" will extend the "call-time" (you can perform this action more than once in a conversation).

When relay 1 is activated, the display (if the system has one) will show "ACCESS GRANTED PLEASE ENTER NOW" and a short tone burst will be emitted. A record of each telephone entry "transaction" is then sent to the printer (if your system is equipped with one) and is also stored in a transaction memory that retains the most recent events (the exact number of transactions retained depends on the firmware and options in your system). This memory can be accessed at any time to find out who recently gained entry to the building.

## 2. AUTHORIZED PERSONNEL/OCCUPANT ENTRY

The Infinity system can be used to control the access of people who are authorized to be inside the building or complex. This can be accomplished using one of two entry systems:
A) Entry codes These 4- or 5- digit codes can be given to each occupant, service person, etc. or these codes can be limited to a few, or no, people. Each person enters their code on the keypad on the system's faceplate or at a remote keypad (optional). These codes must not be higher than 65535 . If it is valid, the entrance at which the code is used will be unlocked/opened. A series of invalid codes (you set the number) within a 3-minute period will disable this function for 3 minutes. The rest of the system's capabilities will continue to operate. This function is known as "strikes-and-out".
B) Cards These cards (which contain individual identification codes) are presented to a card reader head (up to 2 can be used per system) connected to the Infinity system. If the card is valid, entry is granted.

You can restrict the use of entry codes and cards by using one or more of the following features:
A) Time zones limit the days and/or times that a code or card is valid and the door/gate at which it can be used.
B) Anti-passback is a feature which greatly reduces the possibility of a card or code being used by more than one person. "True Anti-Passback" restricts the card or code by requiring that it be used to exit before it can be used to enter again (and vice versa). "Timed Anti-Passback" restricts the card or code by requiring a specific period of time to pass before you are able to use that card/code again on that reader/keypad.
C) Date-Limited Codes are special codes that will become invalid after a specific date that you program. These codes can only be used on Infinity systems that have full-control codes with names and they can ONLY be programmed with the use of SPS (versions 1.02 and higher). They may not be programmed from any other programming source.
Cards or codes that provide the ability to restrict access by time, day, or previous usage once the code has been validated in the system are called "full-control" codes. "Full control" codes are standard in the "B" series, but are optional in the "L", "S", "M", and "DI" series. You may also be able to associate a name with each full-control code or card. "Simple" entry codes (which provide no ability to restrict access by time, day, or previous usage once the code has been validated in the system) are standard in the "L", "S", "M", and "DI" series. Also, every time a code/card is used in the system, the transaction can be recorded on the system's printer (optional) and stored in a "transaction buffer" memory (see discussion in point 1 on page 2).

## 3. DOOR STATUS MONITORING

The Infinity system can monitor the status of any door it controls if the required sensors are installed (ask your dealer). If a controlled door is held open for more than 60 seconds after it is supposed to be relocked or if a controlled door is broken open, you can program the system to respond in either of the following ways:
A) Place a modem call to a preprogrammed number. If your system is equipped with a modem, it will place a call and, if the call is answered by another modem, will transmit a sequence including <INFINITY>, the system's programming code, and an alarm message. For example, if door 1 is forced open, the alarm message will be "DOOR 1 AJAR ALARM". The ALARM portion will be left off if the door is simply held open too long. If the forced call is not answered, a second call will be placed one minute later.
B) Close a relay to turn on a light or siren, or inform an alarm monitoring station of the problem. The system will also take these actions if someone enters too many consecutive incorrect entry codes within a 3 minute period. All "alarm" conditions are recorded to the printer, if your system is equipped with one, and also stored in the "transaction buffer" (discussed in point 1 page 2).

## 4. TIMED CONTROL OF DOORS AND RELAYS

The Infinity system can automatically unlock/open any door/gate three times per day and lock/close it later that day, at times you specify. It can also activate any other device which is being controlled by the system's relays. You may also establish up to 16 holidays on which these schedules will not operate unless you want them to. Thus, if the door are to be unlocked during normal business hours, you can have them remain locked on New Years Day if it falls on a weekday. All timed activity is reported to the printer (optional) and stored in the transaction memory.

## 5. FREE EXIT THROUGH MONITORED DOOR

If you wish to use it, the system can allow "free exit" through either controlled entry so that someone who entered the building properly does not cause a "forced" door condition when he/she leaves. Consult your installer to determine whether and how you should utilize this feature.
6. ACCESS FOR POST OFFICE AND FIRE DEPARTMENT

Conditions are included in the system to make sure that the post office and fire department can gain access to your facility without having to contact anyone to let them in. These will be hooked up by your installer and the relevant agency if needed.
7. DIRECT OPERATOR CONTROL OF RELAYS - SEE PAGE 27.
8. SPECIAL FEATURES - SEE PAGE 28.

A number of special features are available. Please refer to page 28 to see if any of the special features apply to your application.

## 2-HINTS ON SYSTEM USE AND MAINTENANCE

This section covers some important tips on how to use and maintain your Infinity system. After you understand it completely, you should review this information, as well as that contained in section 1, with everyone who will use or maintain this system. Your installing dealer should also have given you a single page of "User Instructions" that you can copy and give to each person. This training will make sure that user problems are minimized, which in turn will make your life easier. If your system includes card entry, it is particularly important to make sure that cardholders know how to present their cards to be read by the card reader. Even if this seems clear and uncomplicated to you, experience suggests that untrained users will have troubles initially with card entry.

## VISITOR ENTRY

1. When an occupant is allowing entry, neither party should hang-up until the occupant has pressed the appropriate key on his/her telephone.
2. The Infinity system has a feature that you (or anyone else you choose to tell about this feature) may use to initiate communication with the system. Dial the telephone number of the line to which the Infinity is connected and when it answers, press the "\# " key on your telephone. This will establish two-way communications using the Infinity's speaker and microphone, but will not allow you to grant entry. The call will time out just like a call placed from the Infinity.

## CODE/CARD ENTRY

1. If someone enters part of their entry code incorrectly, they can clear the incorrect entry by pressing the "* " key once. They must then start over at the beginning of the code.
2. When an incorrect entry code is made on the main keypad, the system will normally display a INVALID CODE - PLEASE WAIT message for 3 seconds and then say NOW TRY AGAIN. However, if this incorrect entry code causes the system to meet your "Strikes-and-out" limit, the first message will say INVALID ENTRY not INVALID CODE and the NOW TRY AGAIN message will not appear. Moreover, for the next 3 minutes the system will respond SYSTEM IN USE anytime someone tries to enter an entry code at the keypad. The other keypad will continue to operate correctly.
3. When using card entry, the Infinity will signal the user that entry has been granted by turning on a green light on the card reader (certain readers may already have a red light on or one may come on when the card is presented). Generally, there will be no indication to someone using an entry code (your installer can hook up indicator lights on your keypads, if you feel it is necessary).

## VIEWING TRANSACTION RECORDS

1. Whenever a transaction occurs, the Infinity sends a record of that event to a transaction buffer where it is stored. If your Infinity is equipped with a printer, each record will printed in a single line format as shown below: If your system is not equipped with a printer, the transactions can still be viewed on your display by performing programming step 23-4.
TIME DATE INPUT SOURCE CODE NAME ACTION REASON

| 09:12 AM | $07 / 08 / 96$ | KEYPAD 1 | 1164 | CODE 1164 | GRANTED |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 09:11AM | $07 / 08 / 96$ | PRGM-M1 |  |  |  |

2. INPUT SOURCE tells you the input source that generated the transaction and what programming transaction was generated. The chart below describes the input source and the programming transactions. Note that the transaction numbers of 0 through 2 indicate off-line changes using TAP, SPS, or MLP, while transaction numbers $4,5,8$, and 9 indicate on-line changes
```
SOURCE
K = KEYPAD
H = HANDHELD
M = MODEM
D = DIRECT CONNECT
P = PHONE, DTMF, REMOTE
PROGRAMMING TRANSACTION
0 = off-line MEMORY COPY
1 = off-line MEMORY FULL RELOAD
2 = off-line MEMORY PARTIAL RELOAD
4 = on-line MEMORY CHANGE
5 = on-line MEMORY CHANGE AND CLOCK CHANGE
8 = on-line MEMORY RESORT
9 = on-line MEMORY RESORT AND CLOCK CHANGE
```

NOTE: On-line programming that does not change the system memory (e.g., making a printout) will not be recorded. Changing the clock will be recorded as an on-line change.
3. CODE will either be a person's entry code, a person's card code, or the directory code of the person called.
4. ACTION tells you whether access was granted or denied, and if it was denied, why. It will also print the word Alarm if the door has been broken open or if someone causes the "Strikes-and out" feature to be invoked (see area 06 on page 13 for further discussion of this feature).

## SYSTEM MAINTENANCE ("L", "S", AND "M" SERIES ONLY)

1. The window that protects the display in your system may have been treated with a special coating that essentially eliminates glare and makes it much easier to read the display (this is an optionconsult your dealer to inquire if this has been purchased with your system). However, accumulated dirt or dust on the window or display can over time significantly reduce the readability of the display. Consequently, you should make sure that the window is kept clean, both on the outside and the inside. To clean the outside, use a soft, lint-free cloth and a mild solution of soap and water. DO NOT USE HARSH CLEANERS OR YOU WILL SCRATCH THE WINDOW.

To clean the inside, gently push a soft, dry, lint-free rag through the opening at one end of the display chamber until the end of the rag comes out of the opening at the opposite end of the display chamber. Then move the rag back and forth over the window and the display to remove any dust that may have accumulated. DO NOT REMOVE THE DISPLAY ASSEMBLY TO CLEAN THE WINDOW!
2. Your system's display may exhibit some unevenness in coloration or blotching in very hot weather and/or if it is in direct sunlight. This is a normal, temporary occurrence that will not harm the display or affect the usability of the system. The uneven coloration will disappear when the temperature falls and/or the display is no longer in the direct sunlight.

## 3-BASIC PROGRAMMING RULES

One aspect of the Infinity system's flexibility is that it can be programmed using any one of the 5 programming sources: (1) a handheld alpha-numeric data entry terminal connected to the unit, if it is an "L", "S", and "M" series system, (2) a standard video display or printing terminal hooked into the unit's RS 232 serial port, (3) the 12 button keypad on the faceplate of the unit, if it is an "L", "S", or "M" series system, or (4) a terminal/modem combination hooked via telephone into the optional built-in modem or a separate standalone modem hooked into the unit's RS 232 serial port, or (5) a standard tone dialing telephone (optional).

Programming is similar for all of these sources. Due to space limitations, the document will focus primarily on the most common methods, the handheld data entry terminal (referred to as "handheld" hereafter) and a standard terminal hooked into the system's RS 232 serial port (referred to as "terminal" hereafter). Differences between these two programming methods and the remaining three are covered in section 10.

This section covers some general rules about programming the Infinity system. If you master these few basic rules, you will have little trouble programming the system correctly:

- Before you can begin programming, your programming source must be activated. If you are using the handheld, you must open the Infinity cabinet and plug the cable into the pins on the bottom of the main circuit board that is labeled "HANDHELD PROGRAMMER".
- To enter programming, you must enter a "* " and then your six character programming access code. This code is set at 000000 by the factory but can be changed once you are in the programming mode. When you enter the programming mode, your system will display the "menu prompt" as shown below:

ENTER CODE FOR PROGRAMMING AREA YOU WISH TO ACCESS (ENTER 88 FOR MENU) __
You can see the menu of all of the areas that you can access by typing "88" plus the "ENTER" button. This menu is also shown on page 9.

- After you complete your entries in any area, you will be asked "DO YOU WISH TO CONTINUE IN THIS AREA? ( $1=$ YES $0=N O$ )". If you press the "1" key, the system will return to the prompt in which you specify the door(s) to which the programming is addressed. If you press the " 0 " key, the system will return to the menu prompt.
- After you specify which doors are being addressed, the prompts will appear on the screen telling you what entry you must make. Respond to the prompt and be sure to follow the format indicated. A flashing cursor indicates where your next key press will be displayed.
- When you have entered your response to a prompt, press the "ENTER" key. If you have entered the correct number and type of characters in the correct format, the system will display the next prompt. No entry is recorded in memory until all prompts in an area are completed.
- If you realize in the middle of an entry that you have made an error, press the "ESCAPE" key (on some keyboards, this key only says "ESC"). Your entry will remain on the screen in most cases, but you will be given a "clean" prompt, allowing you to begin your entry again. You also press the "ESCAPE" key if you are at the beginning of any prompt and want to leave that programming area completely. This will take you back to the menu prompt. If you wish to exit the programming mode completely, press the "ESCAPE" button when the menu prompt is on the screen.
- If you make a "format" error during programming, the system will display an error message and you will be given a clean prompt to allow you to re-enter the information correctly. Before re-entering the data, look at the incorrect entry and figure out why the system rejected it. Typically, a format error is caused by trying to enter an invalid character type (for example, a letter when only numbers are allowed) or a number that is too large or too small.
- The system will provide other messages if it is unable to complete the entry that you have attempted. These messages are easily understood and will direct you in terms of the next step you must take.
- All time entries are made using the AM/PM format, not the 24 hour format. You will first be prompted for the time and then the next prompt will ask you whether this time is to be AM or PM.
- In entries such as date and time, the system will show you the "punctuation" in the entry (for example, "______ will be shown when you are setting the current date). You must not enter this punctuation as you make your entry. Thus, January 7,1988 would be entered as 01071988 , but will be displayed as 01/07/1988. Similarly, 8:30 would be entered as 0830.
- Always enter the number of digits shown by the programming prompt (the only exceptions to this rule are entries of names, messages, or telephone numbers which may be terminated at any point). For example, you must always enter 2 digits for hours, minutes, month, and date. Year is always entered using 4 digits.
- If 60 seconds pass without a key being pressed, the system assumes that programming has been terminated and exits the programming mode. To re-enter the programming mode, follow the procedures described in the second point on the previous page.
- Due to space limitations in the Infinity system's memory, there are certain punctuation marks that cannot be used in the welcoming message that is shown on the display in the "L" series. The punctuation that you may use in this message are the following: pound (\#), star/asterisk (*), comma (,), period (.), dash (-), apostrophe ('), slash (/), and a blank space.


## 4 - THE MAIN PROGRAMMING MENU

Once you have entered the programming mode, you will need to enter a 2-digit code to tell the system which programming area you wish to access. If you do not remember all the codes, you may access the main menu by entering " 88 " + "ENTER" when the "menu-prompt" is shown (as described on page 7). For your reference, the menu of choices is shown below as it would appear on your terminal or on the display of an "L" series system.

| CODE | PROGRAMMING AREA | CODE |
| :---: | :--- | :---: |
| 00 | CHANGING PROGRAMMING ACCESS CODE | 13 |
| 01 | SETTING CLOCK | 14 |
| 02 | SETTING UP TIME ZONES | 15 |
| 03 | SETTING RELAY CONFIGURATION | 16 |
| 04 | SETTING DOOR OPEN TIME | 17 |
| 05 | ENABLING ALARM CALL |  |
|  | (NOT AVAILABLE IN CANADA) |  |
| 06 | SETTING STRIKES AND OUT | 18 |
| 07 | SETTING CALL LENGTH | 19 |
| 08 | SETTING CODE LENGTHS | 20 |
| 09 | SETTING ANTI-PASSBACK | 21 |
| 10 | SETTING AUTO UNLOCK SCHEDULES | 22 |
| 11 | SETTING HOLIDAY SCHEDULES | 23 |
| 12 | CHANGING SCREEN MESSAGES | 24 |
| YOUR CHOICE: |  |  |

PROGRAMMING AREA
ENTERING TELEPHONE NUMBER
ENTERING ENTRY CODE
ENTERING SINGLE CARD
ENTERING GROUPS OF CARDS
MAKING CARD CODES WORK AS
ENTRY CODES

ERASING TELEPHONE NUMBER ERASING SINGLE ENTRY CODE ERASING SINGLE CARD ERASING ALL ENTRIES VERIFYING ENTRIES PRINTOUT MEMORY CONTENTS ENTERING FACILITY CODE

Each of the programming areas are discussed in detail in the following pages, including an explanation of what you will be trying to accomplish in each area. A listing of the prompts that the system will display in leading you through the required entries is also shown along with examples of typical responses to the prompts and important notes that you should keep in mind as you respond to each prompt. Please note that you will not be allowed access to areas that your specific system is not equipped to handle.

Section 5 covers all the areas that deal with setting up the system guidelines, including areas 1 through 12 plus 24 . Section 6 covers areas 13 through 21 , the repetitive entries for adding and erasing telephone numbers, cards, and codes from the system. Section 7 discusses areas 22 and 23 which are used to check what is contained in the system's memory.

IMPORTANT NOTE: Section 8 and 9 discuss several "hidden" functions which are not shown on the main programming menu, but which you may want to utilize under special circumstances.

## 5 - INITIAL SYSTEM SET-UP

The areas discussed in this section control the system's "personality". Most areas have factory settings that will be appropriate in many situations (these are indicated where they exist).

Remember, if you make a mistake in an entry, press the "ESCAPE" or "ESC" button. To tell the system you have completed an entry, press the "ENTER" button. Also remember to watch the flashing cursor so that you make the correct response to each prompt.

## AREA 00 - CHANGING PROGRAMMING ACCESS CODE

PURPOSE: To change the code that must be used to enter the programming mode to some combination that will be secret and easy to remember. Factory setting $\mathbf{= 0 0 0 0 0 0}$

| SYSTEM PROMPT | EXAMPLE OF <br> TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| ENTER NEW PROGRAMMING ACCESS CODE $\qquad$ | 555555 + ENTER | THIS IS A 6 DIGIT CODE CONSISTING OF NUMBERS |

## AREA 01 - SETTING CLOCK

| PURPOSE: To set the system's internal and the automatic lock/unlock transactions to the printer (if clock must be reset, unless y | ck. An accurate clock schedules (see areas e is used) and/or tran have clock battery b | is critical for the proper use of time zones 02 and 10) as well as accurate reporting of saction buffer. If the system loses power, the ack-up option (ask your installer). |
| :---: | :---: | :---: |
| SYSTEM PROMPT | EXAMPLE OF <br> TYPICAL ENTRY | IMPORTANT NOTES |
| ENTER CURRENT TIME (HR:MN) | 0930 + ENTER | --SETS CLOCK TO 9:30. AM/PM IS SET IN THE NEXT STEP. <br> --HOUR MUST BE 2 DIGITS. DO NOT ENTER A COLON AFTER THE HOUR. |
| $0=A M 1=P M$ | $0+$ ENTER | SETS CLOCK TO AM. YOUR ENTRY WILL BE SHOWN AS AM OR PM. |
| TODAY'S DATE IS (MO/DA/YR)___ | 07041988 + ENTER | --SETS THE DATE TO JULY 4, 1988. <br> --ENTER MONTH AND DAY AS 2 DIGITS AND YEAR AS 4 DIGITS. DO NOT ENTER SLASHES BETWEEN MONTH, DAY, AND YEAR. |
| TODAY IS (1=SUN 7=SAT) | $2+$ ENTER | ```2=MONDAY, 3=TUESDAY, 4=WEDNESDAY, 5=THURSDAY, AND 6=FRIDAY.``` |
| DO YOU HAVE DAYLIGHT SAVINGS TIME? (1=YES, $0=N O)_{-}$ | 1 + ENTER | THE SYSTEM WILL ADJUST FOR DAYLIGHT SAVINGS TIME. IF IT DOES NOT EXIST IN YOUR AREA, ENTER 0. |

## AREA 02 - SETTING UP TIME ZONES

PURPOSE: Time zones allow you to restrict the access of cards or codes to certain times during certain days (e.g., the janitor's code is good only during the times he is supposed to be in your building). You can create up to 7 restricted time zones, each of which can contain up to 3 separate time periods. These zones can then be assigned to cards or codes as they are entered into the system (see areas 14, 15, and 16). Holidays may be included or excluded from a time zone. If excluded, any date you designate as a holiday in area 11 (such as January 1st) will not be included as part of the time zone if it falls on a day (such as Monday) that would otherwise be included.

To set up a time zone that extends past midnight and into the next day, create one segment that runs until midnight (for example, Monday through Friday from 8 PM until 12 midnight) and a second segment that starts at midnight on the following days (for example, 12 midnight until 4 AM on Tuesday through Saturday).

If you are setting a time zone to be valid on holidays, you must also program that time zone to be valid for a day of the week. For example, if you have programmed January 1st as a holiday and this holiday lands on a Friday, in order for a code to be considered valid, the time zone for that code must be valid on Holidays, as well as for Fridays. If the timezone is programmed to be valid only on holidays and not for Fridays, the code will be considered invalid and will not grant access.

| SYSTEM PROMPT | EXAMPLE OF <br> TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| ENTER TIME ZONE NUMBER(1-7) _ | $1+$ ENTER | RESTRICTED TIME ZONES ARE NUMBERED 1 TO 7. |
| ENTER TIME SEGMENT NUMBER (1-3) _ | $1+$ ENTER | --3 DIFFERENT TIME PERIODS MAY BE SET FOR EACH TIME ZONE. <br> --THE UNIT WILL DISPLAY THE CURRENT ENTRIES FOR ALL SEGMENTS IN THAT UNIT. <br> --IF NO ENTRIES HAVE BEEN MADE, NEXT PROMPT WILL BE SKIPPED. |
| ENTER 0 TO ERASE THIS SEGMENT OR 1 TO ENTER TIME AND VALID DAYS | $1+$ ENTER | IF 0 IS ENTERED, THE REST OF THE PROMPTS WILL NOT BE SHOWN. |
| TIME THAT ACCESS BEGINS IS (HR:MN) | 0600 + ENTER | --AM/PM IS SET IN THE NEXT STEP. <br> --DO NOT ENTER A COLON BETWEEN HOUR AND MINUTES. |
| 0=AM 1=PM | 0 + ENTER | SETS THE START TIME AS 6:00 AM |
| TIME THAT ACCESS ENDS IS (HR:MN) $\qquad$ | 0530 + ENTER | SEGMENTS MUST END AFTER TIME THAT ACCESS STARTS AND MAY NOT EXTEND PAST 12 MIDNIGHT ON THE SAME DAY OF THE WEEK. |
| $0=A M 1=P M$ | $1+$ ENTER | SETS THE ENDING TIME AS 5:30PM. |
| DAYS ON WHICH TIME ZONE IS VALID (1=SUN 8=HOL) _ | $3+5+$ ENTER | 2=MONDAY, $3=T U E S D A Y$, <br> 4=WEDNESDAY, 5=THURSDAY 6=FRIDAY, <br> $7=$ SATURDAY. |

## AREA 03 - SETTING RELAY CONFIGURATION

PURPOSE: To select the mode of operation for the system's third and fourth relays (the first and second relays are always used for control purposes). If set as CONTROL relays, each relay will activate on a timed basis (see area 10) or when a tenant dials a specified number (a "3" for relay 3 or a " 7 " for relay 4). As a SHUNT relay, relay 3 will be activated whenever relay 1 is activated to temporarily bypass an alarm sensor monitoring this entry. Relay 4 activates whenever relay 2 is activated. As an ALARM relay, relay 3 will activate if: (1) door 1 is forced open, (2) if door 1 is held open for more than 1 minute after relay 1 has been deactivated, or (3) the strikes-and-out feature has been violated at keypad 1 (see area 06 for further discussion of the strikes-and-out feature). Relay 4 acts in the same manner for door/relay/keypad 2 instead of 1 . As a CCTV relay, each relay will activate when a tenant dials the specified number (a "3" for relay 3 or a " 7 " for relay 4 ) and will stay activated until the tenant dials a " 9 " or " 5 " to activate a door, or the telephone call times out.
Factory setting = All control.

| SYSTEM PROMPT | EXAMPLE OF <br> TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| SET RELAY 3 FOR: | 0 + ENTER | --SEE EXPLANATION GIVEN IN |
| $0=C O N T R O L$ |  | "PURPOSE" SECTION ABOVE FOR |
| 1 =SHUNT |  | IMPLICATIONS OF EACH CHOICE. |
| 2=ALARM |  | --A PROMPT WILL BE REPEATED |
| 3=CCTV |  | FOR RELAY 4. |

## AREA 04 - SETTING DOOR OPEN TIME

PURPOSE: Sets the period of time that each relay will remain activated. Factory setting = $\mathbf{1 0}$ seconds

| SYSTEM PROMPT | EXAMPLE OF TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| ACTIVATION TIME FOR RELAY 1= _ SECONDS | 07 + ENTER | --ANSWER MUST CONTAIN 2 DIGITS. RELAYS CAN BE ACTIVATED FOR 01 TO 99 SECONDS. <br> --A PROMPT WILL BE REPEATED FOR RELAYS 2, 3, AND 4 ALSO. |

## AREA 05 - SETTING ALARM CALL (NOT AVAILABLE IN CANADA)

PURPOSE: To cause the unit to call a programmed number and indicate that an alarm condition exists if: 1) a monitored door is forced open, 2)if the door is held open for more than 1 minute after the relay has been deactivated, or 3) the strikes-and-out feature has been violated (see area 06).
Factory setting = Disabled.

| SYSTEM PROMPT |
| :--- |
| WANT AN ALARM CALL MADE |
| $(1=\mathrm{YES} 0=\mathrm{NO})$ - |
| ENTER NUMBER TO CALL |

EXAMPLE OF TYPICAL ENTRY

1 + ENTER

12138577358 + ENTER

## IMPORTANT NOTES

IF THE ANSWER IS NO, THE NEXT PROMPT WILL NOT APPEAR.

AN ALARM CALL WILL BE MADE TO 1-213-857-7358. DO NOT ENTER DASHES BETWEEN DIGITS.

## AREA 06 - SETTING STRIKES-AND-OUT

PURPOSE: Specifies the number of wrong codes that can be entered consecutively before a unit stops accepting codes for 3 minutes. Unit will close a specified relay and/or place an alarm call if these options have been activated in areas 03 and 05 . Factory setting $=3$ incorrect entries.


## AREA 07 - SETTING CALL LENGTH

PURPOSE: Sets the maximum length of any call made by the system. Time starts when dialing stops. Factory setting = $\mathbf{6 0}$ seconds.

SYSTEM PROMPT
MAXIMUM LENGTH IS (015-255) _ SECONDS

EXAMPLE OF TYPICAL ENTRY

072 + ENTER

IMPORTANT NOTES
--ENTER TIME AS THREE DIGITS. --SETTING TIME TO 70 SECONDS OR LESS WILL MINIMIZE YOUR PHONE BILL.

## AREA 08 - SETTING CODE LENGTHS

PURPOSE: Sets the number of digits in the directory codes (the number associated with a tenant's name and telephone number) and the entry codes (the code that can be used to gain entry without the use is a key). Factory setting $\mathbf{=} \mathbf{3}$ digits for directory codes and 4 digits for entry codes.

SYSTEM PROMPT
NUMBER OF DIGITS IN DIRECTORY CODE IS (1-4) $\qquad$

EXAMPLE OF TYPICAL ENTRY

NUMBER OF DIGITS IN ENTRY CODE 5 + ENTER IS (4-5) __

4 + ENTER

```
*
```

IF YOU CHANGE THE CODE LENGTH AFTER THE INITIAL SETTING, YOU MUST CHANGE ALL DIRECTORY CODES IN THE SYSTEM TO THE NEW LENGTH OR THE SYSTEM WILL NOT FUNCTION PROPERLY.

IF YOU ARE GOING TO HAVE CARD CODES WORK AS ENTRY CODES (SEE AREA 17), THIS MUST BE SET TO 5 SINCE CARD CODES ARE 5 DIGITS LONG.

## AREA 09 - SETTING ANTI-PASSBACK

PURPOSE: The anti-passback feature is designed to eliminate more than one person using the same card or code to gain entry to a restricted area. There are two types of anti-passback: true anti-passback and timed anti-passback. When true anti-passback is enabled, all users will need to use their card or code in card reader B or keypad B before access will be allowed again through card reader A or keypad A. When timed anti-passback is enabled, time restrictions are added to the door where the original activity had occurred. Factory setting = Disabled.

PLEASE NOTE: If you set the system for true anti-passback and you need to leave the controlled door or gate open for an extended period of time, the system will not know the location of the users. Therefore, when the problem has been fixed, you will need to disable and re-enable true anti-passback and the next transaction made by each user will be granted or "forgiven". This "forgiveness" will also apply if you re-enable true anti-passback to a system in which it was previously disabled.

| SYSTEM PROMPT | EXAMPLE OF TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| DO YOU WISH TO | $1+$ ENTER | --ENTER A "0" IF YOU DO NOT WISH |
| DISABLE ANTI-PASSBACK (0) |  | TO ENABLE ANTI-PASSBACK. |
| ENABLE "TRUE" ANTI-PASSBACK (1) |  | --ENTER A "1" IF YOU WISH TO |
| ENABLE "TIMED" ANTI-PASSBACK (2) |  | ENABLE TRUE ANTI-PASSBACK. <br> --ENTER A "2" IF YOU WISH TO ENABLE <br> TIMED ANTI-PASSBACK |
| THE TIMED ANTI-PASSBACK TIME IS (1-15) __ MINUTES. <br> (If timed anti-passback was selected) | 14 + ENTER | --ENTER THE NUMBER OF MINUTES YOU WISH TO HAVE AS THE TIME RESTRICTION. |

## AREA 10 - SETTING AUTO LOCK/UNLOCK SCHEDULES

PURPOSE: Allows the system to automatically unlock and relock a door, open and close an electric gate, or control almost any other function at times you specify. Each schedule can contain up to three time periods. For example, doors can automatically unlock at 8AM and relock at 5PM on weekdays, but unlock only from 8AM to 12 noon on Saturdays. You can exclude holidays from these schedules, if you wish, so that the door/gates will not be open even though a holiday falls on a day that would normally be a business day. For the Auto Lock/Unlock schedule to work with relays 3 and 4, these relays must be set as either control or CCTV relays (see area 03).

To set up a schedule that extends past midnight and into the next day, create one segment that runs until midnight (for example, Monday through Friday from 8PM until 12 midnight) and a second segment that starts at midnight on the following days (for example 12 midnight until 4AM on Tuesday through Saturday).

| SYSTEM PROMPT |  | TYPICAL ENTRY |
| :--- | :--- | :--- |
| SET AUTO LOCK/UNLOCK FOR |  | $3+$ ENTER |
| WHICH RELAY $(1-4) \_$ |  |  |
| ENTER TIME SEGMENT NUMBER <br> $(1-3) \_$ | $1+$ ENTER |  |

IMPORTANT NOTES
EACH RELAY MAY BE CONTROLLED INDEPENDENTLY IF THEY ARE SET AS "CONTROL" RELAYS IN AREA 03. --3 DIFFERENT TIME PERIODS MAY BE INCLUDED IN EACH SEGMENT. --IF NO ENTRIES HAVE BEEN MADE, THE NEXT PROMPT WILL BE SKIPPED.

| ENTER 0 TO ERASE THIS SEGMENT OR 1 TO ENTER VALID TIMES AND DAYS | $1 \text { + ENTER }$ | IF "0" IS ENTERED, IT WILL ERASE THE CURRENT SEGMENT AND WILL SKIP THE REST OF THE PROMPTS OR ENTER A "1" TO ENTER VALID TIME AND DAYS. |
| :---: | :---: | :---: |
| TIME TO OPEN DOORS IS (HR:MN) :- $\qquad$ | 0800 + ENTER | -SEGMENTS CAN BEGIN AT ANY TIME. --DO NOT ENTER A COLON BETWEEN THE HOURS AND MINUTES. |
| $0=A M 1=P M$ | 0 + ENTER | SETS BEGINNING TIME AS 8:00 AM. |
| TIME TO CLOSE DOORS IS (HR:MN) $\qquad$ | 0500 + ENTER | --SEGMENTS MUST END LATER <br> THAN THE TIME THAT THEY BEGIN AND ON THE SAME DAY. <br> --SEGMENTS CANNOT EXTEND PAST 12 MIDNIGHT. <br> --DO NOT ENTER A COLON BETWEEN <br> THE HOURS AND MINUTES. |
| 0=AM 1=PM | 1 + ENTER | SETS ENDING TIME AS 5:00PM. |
| DAYS ON WHICH TIME SEGMENT IS $\operatorname{VALID}(1=S U N$ 8=HOL) | $3+5+$ ENTER | $\begin{aligned} & \text { 2=MONDAY, } 3=\text { TUESDAY, } \\ & \text { 4=WEDNESDAY, } 5=\text { THURSDAY, } \\ & \text { 6=FRIDAY, } 7=\text { SATURDAY. } \end{aligned}$ |

## AREA 11-SETTING HOLIDAY SCHEDULES

PURPOSE: Establishes the dates that the unit will treat as holidays in assessing time zones and automatic lock/unlock schedules. When holidays are not specified as part of a time zone or lock/unlock schedule, a day which is specified will be excluded if it coincides with a holiday set up in this area. For example, if New Year's Day is set up as a holiday, then cards or codes that would ordinarily be allowed access will not be granted entry on January 1st.

| SYSTEM PROMPT | EXAMPLE OF <br> TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| ENTER HOLIDAY NUMBER (01-16) | 03 + ENTER | ENTRY MUST BE 2 DIGITS. |
| ENTER 0 TO REMOVE THIS HOLIDAY OR 1 TO ENTER A NEW HOLIDAY | 1 + ENTER | "0" ERASES AN EXISTING HOLIDAY <br> AND THE NEXT PROMPT IS SKIPPED. "1" <br> LETS YOU ENTER A NEW HOLIDAY OR MODIFY AN EXISTING ONE. |
| ENTER DATE (MO/DA) ___ | 0704 + ENTER | BOTH MONTH AND DATE MUST BE ENTERED AS 2 DIGITS. DO NOT ENTER THE SLASH BETWEEN THEM. |

## AREA 12-CHANGING SCREEN MESSAGES

PURPOSE: This area allows the three message pages and all of the single line messages to be changed to suit the user. This includes the possibility of converting the instructions into a foreign language. None of the programming instructions or messages are able to be changed. The AREA 12 menu provides four selections:

1. WELCOME MESSAGE
2. DIRECTIONS PAGE
3. AFTER DIALING PAGE
4. ALL OTHER MESSAGES

IMPORTANT NOTE: Only the welcoming message needs to be programmed. The other menu choices do not need to be changed. In fact, we strongly recommend that you leave the others unchanged, unless your particular application requires that they be changed.

## 1. WELCOMING MESSAGE

This message is shown on the screen when the unit is not being used by a visitor. It should greet the visitor, tell him/her where they are, and what to do next. You have 6 lines of 26 characters each to use for the message in the "L" series, 2 lines of 16 characters each in the "S" series, and 2 lines of 20 characters each in the " M " series. Note that there are no factory settings for this message. Therefore, this area must be programmed.

| SYSTEM PROMPT | EXAMPLE OF <br> TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| WHICH LINE OF THE MESSAGE (1-6) ARE YOU ENTERING? | 1 + ENTER | INDICATES THAT YOU WISH TO ENTER INFORMATION FOR LINE 1. |
| ENTER 26 CHARACTERS OR LESS FOR THIS LINE $\qquad$ | WELCOME TO <br> + ENTER | --TO ERASE A LINE, PRESS "ENTER" BUTTON WITH NO ENTRIES ON LINE. --YOUR ENTRY IS AUTOMATICALLY CENTERED ON THE SPECIFIED LINE. |

## 2. DIRECTIONS PAGE

This message provides instructions for system use. It includes 9 lines of 40 characters each in the "L" series, 3 displays of 2 lines with 16 characters in the " S " series, and 3 displays of 2 lines with 20 characters in the " M " series. Each line has a factory default instruction line that should not be changed. If you decide to change the instructions and then later decide to change them back to the factory settings, simply enter a " 0 ".

## INFINITY "L" EXAMPLE

| SYSTEM PROMPT | EXAMPLE OF <br> TYPICAL ENTRY | IMP |
| :---: | :---: | :---: |
| LINE 1: --DIRECTIONS-- | 1 + ENTER | --ENABLES |
| LINE 2: -FIND NAME ON DIRECTORY |  | --UNLESS |
| THAT FOLLOWS |  | REQUIRES |
| LINE 3: -THEN, ENTER CODE ON KEYPAD |  | MESSAGES |
| LINE 4: -PRESS \# KEY TO SEE NEXT PA |  | ADVISED T |
| LINE 5: OR PRESS * KEY TO SEE PRE | IIOUS PAGE | CHANGE A |
| LINE 6: -HOLD KEY DOWN FOR HIGH SP | EED | THIS SECT |
| LINE 7: -NOW, PRESS \# KEY TO SEE FIR | ST PAGE |  |
| LINE 8: -(TOP LEFT JUSTIFIED) PRESS * | KEY TO SEE PR | OUS PAGE |
| LINE 9: -(BOTTOM RIGHT JUSTIFIED) PR | ESS \# KEY TO S | NEXT PAGE |
| ENTER LINE NUMBER (1-9) TO CHANGE TO RETURN ALL LINES TO DEFAULT | ESC TO EXIT OR |  |

SYSTEM PROMPT
THESE MESSAGES ARE THE DIRECTORY INSTRUCTIONS


1 + ENTER
[TOP\}
[BOTTOM]
LINE 1: LINE 2: \# TO GO FORWARD * TO GO BACKWARD LINE 3: OR ENTER CODE ON KEYPAD TO DIAL

## IMPORTANT NOTES

--ENABLES EDITING OF LINE 1.
-- UNLESS YOUR APPLICATION REQUIRES YOU TO CHANGE THESE MESSAGES, IT IS STRONGLY ADVISED THAT YOU DO NOT CHANGE ANY OF THE MESSAGES IN THIS SECTION.

ENTER LINE NUMBER (1-3) TO CHANGE, ESC TO EXIT OR 0 TO RETURN ALL LINES TO DEFAULT $\qquad$

## 3. AFTER DIALING PAGE

This message provides the user with instructions about what to do while the system is dialing and after the conversation. It includes 5 lines of 40 characters each in the "L" series, 2 lines of 16 characters each in the "S" series, and 2 lines of 20 characters each in the "M" series. After programming your own instructions, you decide that you want to go back to the factory default for this area, simply enter a "0".

INFINITY "L" EXAMPLE


## 4. ALL OTHER MESSAGES

These messages are used to prompt and direct the user through various steps of the system. They include 12 lines of 40 characters each in the "L" series, 11 displays of 2 lines each with 16 characters plus 1 display of 1 line with 8 characters in the " S " series, and 11 displays of 2 lines with 20 characters plus 1 display of 1 line with 8 characters and 1 display of 1 line with 6 characters in the " $M$ " series. After programming your own messages, if you decide to return to the factory default messages, simply enter a "0".

SYSTEM PROMPT
THESE ARE ALL THE OTHER MESSAGES:
LINE 01: ACCESS GRANTED -
LINE 02: SYSTEM IS DIALING
LINE 03: LINE IS AVAILABLE
LINE 04: LINE IS IN USE
LINE 05: LINE IS BUSY
LINE 06: PLEASE ENTER NOW
LINE 07: PLEASE TRY AGAIN LATER
LINE 08: PRESS \# TO TRY AGAIN
LINE 10: SYSTEM IN USE
LINE 11: INVALID CODE
LINE 12: PLEASE WAIT
ENTER LINE NUMBER (01-12) TO CHANGE, ESC TO EXIT, OR 00 TO RETURN ALL LINES TO DEFAULT $\qquad$

INFINITY "S" EXAMPLE


SYSTEM PROMPT
THESE ARE ALL THE OTHER MESSAGES

EXAMPLE OF TYPICAL ENTRY

1 + ENTER
[TOP]
LINE 01: ACCESS GRANTED
LINE 02: SYSTEM IS
LINE 03: LINE NOW FREE
LINE 04:
LINE 05: LINE IS
LINE 06: THANKS FOR USING
LINE 07: PLEASE TRY
LINE 08: INVALID ENTRY
LINE 09: NOW
LINE 10: SYSTEM IN USE
LINE 11: INVALID
LINE 12: CODE:
LINE 13: NAME:
[BOTTOM]
PLEASE ENTER NOW
DIALING
PRESS \# TO DIAL
LINE IS IN USE
STILL BUSY
SENTEX SYSTEMS
AGAIN LATER
TRY AGAIN
CODE

ENTER LINE NUMBER (01-13) TO CHANGE, ESC TO EXIT, 00 TO RETURN ALL LINES TO DEFAULT $\qquad$

## AREA 24 - ENTERING FACILITY CODE

PURPOSE: To set the facility code of the cards the system is to accept. This code is set at the factory to match the cards shipped with your system. Thus, you should not need to make an entry in this area except in unusual circumstances.

| SYSTEM PROMPT | EXAMPLE OF TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| ENTER FACILITY CODE __ | 008 + ENTER | --MUST BE A 3 DIGIT ENTRY BETWEEN 000 AND 255. <br> --A FACILITY CODE OF 000 WILL SIGNAL THE SYSTEM TO IGNORE ALL FACILITY CODES. |

## 6 - ENTERING AND ERASING TELEPHONE NUMBERS, ENTRY CODES, AND CARD CODES

The programming areas in this section are subject to a number of variations depending on what capabilities have been installed in your system. Prompts that may not appear are noted in bold face type.

Remember, if you make an entry, press the "ESCAPE" or "ESC" button. To tell the system you have completed an entry, press the "ENTER" or "RETURN" button. Also, remember to watch the flashing cursor so that you make the correct response to each prompt.

PLEASE NOTE: To program Date-Limited Codes, please refer to the area titled "PROGRAMMING DATE-LIMITED CODES" in section 3 of your SPS User's Guide.

## AREA 13 - ENTERING TELEPHONE NUMBERS

PURPOSE:To enter directory codes (the code that will appear next to the name on the directory), telephone numbers, and names. If the system you are addressing is equipped with an electronic directory, the names will be inserted in the directory listing automatically. The amount of numbers and names your system will hold can be verified using area 22 selection 8 (see page 26). If your system is connected to a PBX telephone system in your building, see Section 9 (Other Special Functions) on page 28.

SYSTEM PROMPT
ENTER 3-DIGIT DIRECTORY CODE $\qquad$
EXAMPLE OF TYPICAL ENTRY 123 + ENTER

NUMBER. IF
FOR

ENTER TELEPHONE NUMBER $\qquad$ 8567849 + ENTER

IMPORTANT NOTES
--SYSTEM WILL ASK FOR A CODE CONTAINING THE NUMBER OF DIGITS YOU SPECIFIED IN AREA 08.
--YOU MAY NOT DUPLICATE CODES
UNLESS THE PEOPLE WHO SHARE THE
CODE ALSO SHARE A PHONE
YOU TRY TO USE THE SAME CODE
DIFFERENT PHONE NUMBERS, YOU WILL
GET AN ERROR MESSAGE AFTER YOU RESPOND TO THE NEXT PROMPT.
--TO REPLACE SOMEONE WHO HAS LEFT, YOU MUST FIRST ERASE THEM FROM THE SYSTEM (SEE AREA 18).
--SETS CODE 123 TO DIAL 856-7849.
--TELEPHONE NUMBERS CAN BE 1 TO
10 DIGITS LONG. DO NOT ENTER DASHES
BETWEEN NUMBERS.
--IF THE TELEPHONE NUMBER YOU ENTER
IS 10 DIGITS IN LENGTH, THE INFINITY
WILL AUTOMATICALLY DIAL A "1" BEFORE
THE TELEPHONE NUMBER. IF YOU DO NOT WISH TO HAVE A "1" DIALED BEFORE ALL 10-DIGIT TELEPHONE NUMBERS, DISABLE THE "PREFIX 1" FEATURE (SEE PAGE 28). IF YOU DO NOT WISH TO HAVE A "1" DIALED BEFORE A SINGLE 10-DIGIT TELEPHONE NUMBER, ENTER A " \&" AS THE LAST CHARACTER OF THE NAME FIELD (SEE BELOW FOR DETAILS).
$\qquad$

## AREA 14 - ENTERING ENTRY CODES

PURPOSE To set up 4- or 5- digit codes that can be used by occupants or service personnel to gain entry to your building complex without having to use a key or to contact someone inside. The number of entry codes that each system will hold can be checked using area 22, selection 8 (see page 26).

PLEASE NOTE: To program Date-Limited Codes, please refer to the area titled "PROGRAMMING DATE-LIMITED CODES" in section 3 of your SPS User's Guide.

| SYSTEM PROMPT | EXAMPLE OF <br> TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| ENTERING 5-DIGIT ENTRY CODE (LESS THAN 65536) $\qquad$ | 12345 + ENTER --CODE LENGTH ESTABLISHED IN <br> AREA 08 (FACTORY SETS AT 4, WHICH <br> WILL GIVE SLIGHTLY DIFFERENT PROMPT). |  |
|  |  | --YOU MAY NOT DUPLICATE CODES. <br> IF YOU TRY TO DO SO, THE SYSTEM WILL GIVE AN ERROR MESSAGE. |
| RENTER TIME ZONE ( $0=A N Y$ TIME, OR 1-7) $\qquad$ | 0 + ENTER | --0=CODE IS VALID AT ANY TIME. <br> --ZONES 1 TO 7 MUST BE SET UP IN AREA <br> 02 OR THEY WILL CAUSE ALL ENTRY <br> ATTEMPTS TO BE REJECTED. |

[^0]| [ENTER VALID DOOR (1, 2, OR BOTH=3) | $3+$ ENTER | IF YOU HAVE ACTIVATED ANTIPASSBACK (IN AREA 09), THEN YOU MUST CHOOSE 3. |
| :---: | :---: | :---: |
| Denter name | DOE, JOHN P | LIMIT IS 13 CHARACTERS. |
| ENTER ANOTHER ENTRY CODE? (1=YES 0=NO) _ | $1+$ ENTER | "1" RETURNS YOU TO THE 1ST PROMPT, "0" TAKES YOU TO MENU PROMPT. |

## AREA 15 - ENTERING A SINGLE CARD (OPTIONAL)

PURPOSE: To validate a single card to be used for entry. This is an optional function. If your system is not equipped with this function, you will not be able to enter this programming area. The number of cards that your system will hold can be checked using area 22, selection 8 (see page 26).

| SYSTEM PROMPT | EXAMPLE OF <br> TYPICAL PROMPT | IMPORTANT NOTES |
| :---: | :---: | :---: |
| ENTER CARD CODE | 00789 + ENTER | CARD CODES MUST ALWAYS BE ENTERED AS 5 DIGITS. |
| ENTER TIME ZONE (0 FOR ANY TIME OR 1-7) $\qquad$ <br> ENTER VALID DOOR (1, 2, OR BOTH=3) | $1+$ ENTER $1+$ ENTER | CARD WILL BE SUBJECT TO TIME ZONE "1" RESTRICTIONS. TIME ZONE "0" IS UNRESTRICTED. IF YOU HAVE ACTIVATED ANTIPASSBACK (IN AREA 09), THEN YOU MUST CHOOSE 3. |
| ®ENTER NAME | DOE, JOHN P | LIMIT IS 13 CHARACTERS. |
| ENTER ANOTHER CARD CODE? ( $1=\mathrm{YES} 0=\mathrm{NO}$ ) $\qquad$ | $1+$ ENTER | "1" RETURNS YOU TO THE 1ST PROMPT. "0" TAKES YOU TO THE MENU PROMPT. |

[^1]
## AREA 16 - ENTERING GROUPS OF CARDS

PURPOSE: To enter a group of cards that will be valid during the same time zone and at the same door. This allows large quantities of cards to be entered at the same time. However, names may not be associated with these cards in this process. If your system is not equipped with the card access option, you will not be able to enter this programming area.

| SYSTEM PROMPT | EXAMPLE OF <br> TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| ENTER FIRST CARD CODE | 04050 + ENTER | --CARD CODES MUST ALWAYS BE ENTERED AS 5-DIGITS. <br> --BE SURE THAT THE GROUP OF CARD CODES YOU ARE ENTERING DOES NOT INCLUDE NUMBERS ALREADY IN THE SYSTEM. |
| ENTER LAST CARD CODE | 05000 + ENTER | --ENDING CARD CODE MUST BE GREATER THAN THE FIRST CARD CODE. <br> --IF YOU ASK THE SYSTEM TO GROUP ENTER MORE CARDS THAN THE UNUSED CAPACITY OF THE SYSTEM, AN ERROR MESSAGE WILL BE DISPLAYED TELLING YOU HOW MANY CARDS YOU ARE TRYING TO ENTER AND HOW MUCH CAPACITY IS LEFT. YOU MUST THEN ERASE ENOUGH EXISTING CARDS (IF ANY) TO ALLOW THIS GROUP TO BE ENTERED, OR YOU MUST ENTER THE CARDS IN SMALLER GROUPS. |
| ENTER TIME ZONE (0 FOR ANYTIME, OR 1-7) $\qquad$ | 1 + ENTER | ALL CARDS WILL BE SUBJECT TO THE SAME TIME ZONE. |
| ENTER VALID DOOR (1, 2, OR BOTH=3) | $1+$ ENTER | --ALL CARDS WILL BE VALID ONLY AT THE DOOR(S) CHOSEN. --IF YOU ACTIVATED ANTIPASSBACK (IN AREA 09), THEN YOU MUST CHOOSE A 3. |

## AREA 17 - MAKING CARDS WORK AS ENTRY CODES

PURPOSE: Allows card codes to also be used as entry codes on the system's keypad (s). If this feature is activated, be sure that you set the number of digits in the entry codes to 5 (in area 08) or you will not be able to enter the 5 digits that make up a card code.

| SYSTEM PROMPT | EXAMPLE OF <br> TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| SHOULD CARD CODES ALSO WORK ENTRY CODES? (1=YES 0=NO) __ | 1 + ENTER | SETS UP CARD CODES TO AS FUNCTION AS ENTRY CODES. AS A RESULT, EACH CARD CODE WILL ALSO BE VALID AS AN ENTRY CODE. |

## AREA 18 - ERASING TELEPHONE NUMBERS

PURPOSE: Allows individual telephone numbers, directory codes, and names to be erased from the system's memory.

| SYSTEM PROMPT | EXAMPLE OF <br> TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| ENTER DIRECTORY CODE TO ERASE__ | 123 + ENTER | SYSTEM WILL RESPOND WITH THE INFORMATION IN MEMORY ASSOCIATED WITH THIS CODE. |
| TELEPHONE NUMBER: 8567849 NAME: DOE, JOHN P. |  |  |
| ERASE THIS ENTRY? ( $1=\mathrm{YES} 0=\mathrm{NO}$ ) | 1 + ENTER | --YOU MUST CONFIRM THAT YOU WISH TO ERASE THIS <br> INFORMATION. IF YOU SAY NO, <br> THE INFORMATION REMAINS IN THE MEMORY. <br> --IF ANOTHER PERSON SHARES THIS DIRECTORY CODE AND PHONE NUMBER, THE SYSTEM WILL SHOW THAT INFORMATION AFTER YOU HAVE ANSWERED THIS PROMPT. THIS PROCESS WILL BE REPEATED UNTIL ALL NAMES ASSIGNED TO THIS CODE ARE DISPLAYED. |

## AREA 19 - ERASING ENTRY CODES

PURPOSE: Allows individual entry codes to be erased from the system's memory. If the unit was not equipped with the entry code option, you will not be able to enter this programming area.

| SYSTEM PROMPT | EXAMPLE OF TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| ENTER ENTRY CODE TO ERASE | 12345 + ENTER | --THE NUMBER OF DIGITS IN THE ENTRY CODE IS SET IN AREA 08. <br> --IF THE SYSTEM IS EQUIPPED WITH THE OPTION THAT ASSOCIATES NAMES WITH CODES, THE SYSTEM WILL RESPOND WITH THE NAME ASSOCIATED WITH THIS CODE. |
| NAME: SMITH, FRED |  |  |
| ERASE THIS ENTRY? ( $1=Y \mathrm{Y}$ ( $0=$ NO) | $1+$ ENTER | YOU MUST CONFIRM THAT YOU WISH TO ERASE THIS CODE. IF YOU SAY NO, THIS CODE STAYS IN MEMORY. |

## AREA 20 - ERASING SINGLE CARD

PURPOSE: Allows an individual card to be erased from the system's memory. If the unit was not equipped with the card option, you will not be able to enter this programming area.

| SYSTEM PROMPT | EXAMPLE OF <br> TYPICAL ENTRY | IMPORTANT NOTES |
| :---: | :---: | :---: |
| ENTER CARD CODE TO ERASE | 00345 + ENTER | --ENTRY MUST BE 5 DIGITS LONG.- <br> --IF THE SYSTEM IS EQUIPPED WITH THE OPTION THAT ASSOCIATES NAMES WITH CARDS, THE SYSTEM WILL RESPOND WITH THE NAME ASSOCIATED WITH THIS CARD. |
| NAME: BROWN, JAMES |  |  |
| ERASE THIS ENTRY? (1=YES 0=NO) | 1 + ENTER | YOU MUST CONFIRM THAT YOU WISH TO ERASE THIS CARD. IF YOU SAY NO, THE CARD REMAINS IN THE MEMORY. |

## AREA 21 - ERASING ALL ENTRIES

PURPOSE: Allows you to completely erase an entire area of information (for example, all telephone number, and directory code entries or all cards) from the system's memory.

SYSTEM PROMPT
WHICH AREA SHOULD BE ERASED COMPLETELY? (0=PHONE NBRS, 1=CODES, 2=CARDS) $\qquad$

ALL ENTRY CODES WILL BE ERASED
ARE YOU SURE? $(1=Y E S \quad 0=N O) \_\quad 0+$ ENTER

EXAMPLE OF TYPICAL ENTRY

1 + ENTER

IMPORTANT NOTES
INDICATES THAT YOU WISH TO ERASE ALL ENTRY CODES. THE SYSTEM WILL ASK YOU TO CONFIRM YOUR DECISION TO ERASE AN ENTIRE AREA.
--YOU MUST CONFIRM THAT YOU WISH TO ERASE THIS ENTIRE AREA.
--ENTER A "0" IF YOU CHANGE YOUR MIND ABOUT ERASING AN ENTIRE AREA. THE information will be retained in the MEMORY.
--IF YOU ENTER A "1", IT WILL TAKE SEVERAL SECONDS TO COMPLETELY ERASE AN ENTIRE AREA. WHEN THE ERASURE IS COMPLETED, THE SYSTEM WILL RETURN TO THE MENU PROMPT.

## 7 - VERIFYING AND PRINTING ENTRIES

## AREA 22 - VERIFYING ENTRIES

PURPOSE: Allows you to verify information that you have entered into the system's memory as well as verifying the system capabilities and the status of available options.

| SYSTEM PROMPT |  | EXAMPLE OF <br> TYPICAL ENTRY |  |
| :--- | :--- | :--- | :--- |

## AREA 23 - PRINTING OUT MEMORY

PURPOSE: Allows you to print out or display the information stored in an area of the system's memory (for example, all cards or all codes) or the last 1200 transactions that have occurred (capacity for 6000 transactions in memory is available as an option).

EXAMPLE OF
TYPICAL ENTRY $\qquad$ IMPORTANT NOTES
TRANSACTIONS IN BUFFER INCLUDE THE LAST 1000-1200 ENTRIES, ENTRY ATTEMPTS, AND ALARM CONDITIONS. AN OPTION IS AVAILABLE THAT WILL STORE AND REPORT THE LAST 59006000 TRANSACTIONS.
--SENDING DATA TO THE PRINTER WILL CAUSE IT TO BE TRANSMITTED CONTINUOUSLY WITH PROPER FORMATTING AND PAGE HEADINGS. --SENDING DATA TO THE DISPLAY CAUSES IT TO BE SHOWN ON ONE PAGE AT A TIME. YOU WILL THEN BE ASKED IF YOU WISH TO PROCEED TO THE NEXT PAGE OR STOP.

## AREA 24 - ENTERING FACILITY CODE

SEE DISCUSSION ON PAGE 19.

## 8 - DIRECTLY CONTROLLING SYSTEM RELAYS

In addition to the programming areas discussed above, you may also directly control the system's four relays once you have entered the programming mode. This control is accomplished by entering a code when the menu prompt is given. These codes are not shown on the programming menu because they are not part of a normal programming process and are not generally used on a regular basis. They are included in the "program mode" only to ensure that system relays are not activated or deactivated except by authorized personnel.

IMPORTANT NOTE: It is strongly advised that you do not utilize this feature for more than two (2) times per day. If this feature is used more than two (2) times a day, it will disable the auto lock/unlock schedules for that day.

The codes for controlling the system's relays are as follows:
TIMED RELAY ACTIVATION (activation time is established in area 04)
RELAY 1 = 99 + ENTER
RELAY $2=95+$ ENTER
RELAY $3=93+$ ENTER
RELAY $4=97+$ ENTER
The system will not display a direct response to these entries - it will simply display a "fresh" programming prompt. However, the action you desired will be carried out immediately.

SUSTAINED RELAY ACTIVATION (stays activated until released by operator)
RELAY $1=98+$ ENTER
RELAY $2=94+$ ENTER
RELAY $3=92+$ ENTER
RELAY $4=96+$ ENTER
The unit will respond with "LATCH OPEN DOOR - ARE YOU SURE ( $1=\mathrm{YES} 0=\mathrm{NO}$ ) _. If you respond with a " 0 ", nothing will happen. If you respond with a "1", the appropriate relay will be activated until you "unlatch" it by initiating a timed activation of the same relay as described in the point above.

PLEASE NOTE: If relays 3 and 4 are set to operate as alarm relays, you will not be able to operate them on either a timed or sustained basis.

## 9- OTHER SPECIAL FUNCTIONS

The Infinity system has several other functions that you may need to use in special situations. These are accessed from the programming mode and are activated by entering a 2 -digit code when the menu prompt appears on the screen.

## ACTIVATING "PBX" DIALING

If an Infinity system with visitor entry and/or alarm call capability is connected to a PBX telephone system, you can direct the system to dial a digit you specify and then pause briefly (so the PBX can give the system an outside line) before dialing any 7-digit or longer telephone number that you program into the system. Any telephone number that is less than 7-digits is assumed to be an internal extension on the PBX and is dialed without the leading digit and pause.

To enable PBX dialing (or disable it if it has been enabled earlier), enter "82" and the "ENTER" button when the menu prompt is shown. The system will then ask you for which option number do you want. Enter a " 7 " and the "ENTER" button at this prompt. You will then be asked which number is to be dialed before any 7+digit telephone number. Respond by entering the number that your PBX requires to connect a telephone to an outside line (this number will be a " 9 " for most PBX's) and then the "ENTER" button.

## ENABLING/DISABLING THE PREFIX " 1 " FEATURE

When you are entering a directory code and the telephone number is exactly 10 digits in length, the Infinity system will automatically dial a leading " 1 " before the 10 digits. This feature is called the Prefix " 1 " feature. The factory default setting for this feature is "Enabled".

If you do not want the system to automatically dial a leading " 1 " on a 10-digit telephone number, you will need to disable the Prefix " 1 " feature. To disable this feature, enter " 82 " and the "ENTER" button when the menu prompt is shown. The system will then ask you for which option number do you want. Enter a " 2 " and the "ENTER" button at this prompt. If you wish to re-enable this feature at a later date, simply enter "82" and the "ENTER" button when the menu prompt is shown. The system will then ask you for which option number you want. Enter a "2" and the "ENTER" button at this prompt.

## ENABLING 26-BIT FORMAT

If you wish to use 26-bit format, you can enable this option through step 82.
To enable this feature, enter the number 82 and the "ENTER" button when the menu prompt is shown. The system will then ask you which option number you want. Enter a "1" and the "ENTER" button at the menu prompt. This option is now enabled. To disable this feature at a later date, simply enter the number 82 and the "ENTER" button when the menu prompt is shown. The system will then ask you which option number you want. Enter a "1" and the "ENTER" button at this prompt.
NOTE: When the 26 -bit format is enabled, the system will accept both 26 -bit and 30 -bit formats.

## SELECTING A TYPE OF LCD DISPLAY

If your system is a new installation, or if you have recently had repairs done to your system and the data on the LCD display does not appear in the correct manner (i.e., text wrapping from the end of last line to beginning of the first line, a single line splits into two separate lines, etc...), the system's display setting may be incorrect. To change the display setting in the software, enter the programming mode. At the programming prompt, enter " 50 " and the "ENTER" key. Next, press the "ESC" key to return to the display's welcoming message.

PLEASE NOTE: If the messages on your display are incorrectly shown, there is a chance that the programming prompts may also be incorrect. If you program your entries in the manner described above, the system will accept these entries without error and the problem should be corrected.

## RE-SORTING A DIRECTORY

If the directory in a system which has visitor entry capability should get scrambled for some reason, you may direct that system to "resort" it and put it back in the correct alphabetical order. At the menu prompt, enter the number "73" and the "ENTER" button. The system will then display a "PLEASE WAIT" message. When the next prompt appears on the screen, the resort is completed.

## DISABLING TRANSACTION REPORTING

There are four (4) types of transactions in which you have the ability to disable the system from reporting them. These transactions are as follows:

EXIT REQUESTS
INVALID CARDS
INVALID CODES
WRONG DOORS
If you do not wish to have a specific type of transaction reported to the system, you may disable the reporting of that transaction type through step 84. At the menu prompt, enter the number " 84 " and the "ENTER" button. Once you have entered this step, the cursor will be located next to the first transaction type at the top of the list (above). You have the ability to individually disable or enable the reporting of each of these transaction types. If you want to disable the reporting of a specific transaction, enter a " 0 " when the cursor is next to that transaction. If you want to enable the reporting of a specific transaction, enter a "1" when the cursor is next to that transaction.

## USING THE VOICE MAIL FEATURE

If there is a voice mail system connected to a tenant's telephone line, the Infinity system contains a feature which allows the visitor to dial an extension during a tenant call. To use the voice mail feature, once the visitor has placed a tenant call from the Infinity system and the voice mail system has answered the telephone line, the visitor can dial up to 6 digits on the front panel keypad. All of the keys on the front panel keypad are valid, except for the "*" key. If the "*" key is pressed, the tenant call will be disconnected.

## ENABLING/DISABLING THE NEW ANSWER

This feature is set to Yes by the factory and does not need to be changed unless a version of SPS older than version 6460 is in use. Older versions of SPS do not support the "New Answer" method and "Enable New Answer" should be set to "0" (zero) for No.
"Enable New Answer" must be set to Yes when multiple stand-alone Infinity units share a phone line. When multiple units share a phone line, each unit must have a unique access code and the "Rings Before Answer" setting must be the same.

To enable the new answer, enter " 25 " and the "ENTER" button when the menu prompt is shown. The system will then ask which option number you want. Enter a "2" and the "ENTER" button at this prompt. When the "Enable New Answer" prompt appears, press 1 for Yes or 0 for No.

## 10 - ALTERNATIVE METHODS OF PROGRAMMING AND USING METHODS

As noted in the "BASIC HINTS" section, your Infinity system can be programmed by several methods other than the use of a handheld data entry terminal or a stand-alone terminal (connected to the unit RS 232 port), the three methods that the preceding instructions cover. These alternatives methods include: the 12 button keypad located on the face of the unit (not available on the "B" or "DI" series), any terminal hooked into a Hayes-compatible modem, and any tone dial telephone (if the unit is equipped with the remote programming option). The sections below discuss the differences between these methods and the programming instructions contained in pages 10 through 26. Several of these alternatives are optional, so ask your installing dealer whether they have been included in your system.

## PROGRAMMING VIA THE 12-BUTTON KEYPAD

Programming from the 12-button keypad on the face of the Infinity system (not available on the " B " or "DI" series) involves only four differences from the procedures described in pages 10 through 26:

1. To enter programming, the programming access code must be preceded by pressing the "*" button three (3) times instead of once.
2. The "\# " button functions like the "ENTER" button on a terminal and the "* " button takes the place of the "ESCAPE" button. Thus, when you are done with an entry, you press the "\# " button. If you wish to exit from a programming step or erase a mistaken entry, you press the "* " button.
3. To make any entry that can include non-numeric characters (for example, a name), you must enter all characters (including numbers) by using the following 2-digit codes:

| $A=01$ | $\mathrm{~K}=11$ | $\mathrm{U}=21$ | $0=30$ | SPACE | $=40$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathrm{~B}=02$ | $\mathrm{~L}=12$ | $\mathrm{~V}=22$ | $1=31$ | POUND (\#) | $=41$ |
| $\mathrm{C}=03$ | $\mathrm{M}=13$ | $\mathrm{~W}=23$ | $2=32$ | AMPERSAND (\&) | $=42$ |
| $\mathrm{D}=04$ | $\mathrm{~N}=14$ | $\mathrm{X}=24$ | $3=33$ | ASTERISK (*) | $=43$ |
| $\mathrm{E}=05$ | $\mathrm{O}=15$ | $\mathrm{Y}=25$ | $4=34$ | APOSTROPHE (') | $=44$ |
| $\mathrm{~F}=06$ | $\mathrm{P}=16$ | $\mathrm{Z}=26$ | $5=35$ | DASH (-) | $=45$ |
| $\mathrm{G}=07$ | $\mathrm{Q}=17$ |  | $6=36$ | COMMA (,) | $=46$ |
| $\mathrm{H}=08$ | $\mathrm{R}=18$ |  | $7=37$ | NOT USED | $=47$ |
| $\mathrm{C}=09$ | $\mathrm{~S}=19$ |  | $8=38$ | PERIOD(.) | $=48$ |
| $\mathrm{~J}=10$ | $\mathrm{~T}=20$ |  | $9=39$ | SLASH (/) | $=49$ |

4. If the system is being programmed from a terminal at the time someone tries to enter programming from the keypad, the system will indicate on the display that the system is in use.

## PROGRAMMING/RELAY ACTIVATION VIA TONE DIALING TELEPHONE

Programming the Infinity system via tone dialing telephone (this is an option which must be ordered separately) is very similar to programming the system from the 12 -button keypad on the system's face. Thus, before proceeding with the rest of this section, read the introduction and points 2 and 3 in the section above. The points that follow discuss the differences between programming on the 12-button keypad and programming via telephone:

1. To reach the Infinity system, dial the telephone number to which the system is connected. If the system is busy, hang up and try again later. If it is not busy, it will answer and you will hear a synthesized voice say "HELLO". If your system has a modem also, you will hear a modem carrier tone after the "HELLO". You have 15 seconds to begin entering your 6-digit programming access code, including one leading "* ". Wait for the system to say "HELLO" before you enter your code. If you do not begin to enter your programming access code within the 15 second period, the system will hang-up without saying anything further. When you enter the correct programming access code, the system will say "READY MENU" signifying that you are at the menu prompt level.

If you enter an incorrect code, the system will also hang-up without saying anything (although it will repeat the numbers as you enter them). If someone is programming the system locally at the time you call, the system will let you enter your code, but will then say "ERROR" and then hang-up.

- IMPORTANT NOTE: If there is a non-numeric character in your programming access code, you will not be able to enter the programming mode via tone dial telephone.

2. The entire regular programming menu is available to you except areas 21, 22, 23, and 24. As you enter data, the synthesized voice will repeat your entries to you. The system will respond with "READY" and the area number after you pressed the 2-digits for the area that you desire and then the "\# " button. When you have completed a response to a prompt and pressed the "\# " button on your telephone, the system will signify that it is ready to proceed with the next prompt by saying "ENTERED". When you have completed all entries in an area and return to the menu prompt level, the system will say "READY MENU". If you hit the "* " button to escape from an entry, the system will say "CANCELED" and then "READY". If you have escaped to the menu prompt level, the system will say "READY MENU". If you make a mistake in an entry, the system will say "ERROR". It is then ready for you to re-enter the data for that prompt.

FOLLOW ALONG IN THESE INSTRUCTIONS TO ENSURE THAT YOU DO NOT LOSE YOUR PLACE AND MISPROGRAM THE SYSTEM. If you get lost, press the "* " button until you hear the system respond "READY MENU". You are then back at the menu prompt.
3. While you are programming over the telephone line, the system is unable to place any outgoing calls. If a visitor tries to place a call, the system's display will show "SYSTEM IN USE - PLEASE WAIT". When you are done programming, press the "* " button until the system says "GOODBYE". The Infinity system will hang-up automatically. If someone has tried to place a call in the previous 60 seconds, the system will beep at the visitor and put up a message saying "LINE IS NOW AVAILABLE - PRESS \# TO TRY CALL AGAIN".

## PROGRAMMING/RELAY ACTIVATION VIA A MODEM

The Infinity system can be programmed from a remote terminal connected to the system via a modem. This modem must be Hayes-compatible. The "remote" modem can connect to either the optional internal 300 baud modem or to a separate Hayes-compatible modem (which must be connected to the unit's RS 232 port).

To establish this modem-to-modem connection, consult the instructions you received with your modem on how to instruct your modem to place a call. If you are calling the internal modem, your modem should call the number to which the unit is connected. If you are using an "external" modem connected to the RS 232 port of the unit, call the number to which that modem has been connected. This may or may not be the same as the telephone number to which the Infinity is connected.

Once the two modems have established a proper connection, you must then begin to enter your programming access code within 15 seconds or the system will hang-up. The system will also hang-up if you enter an incorrect access code. Once you have entered your access code, programming the system via modem is exactly the same as described in pages 10 through 26 and all system prompts will be displayed on your terminal screen.


[^0]:    *These prompts will not appear if your system is not equipped with the "full-control codes" option.

[^1]:    * These prompts will not appear if your system is not equipped with the "full-control codes" option.
    ${ }^{* *}$ These prompts will not appear if your system is not equipped with the option that allows names to be associated with cards and/or codes.
    ** This prompt will not appear if your system is not equipped with the option that allows names to be associated
    with cards and/or codes.

