

































































# CAT Series v 4.1X

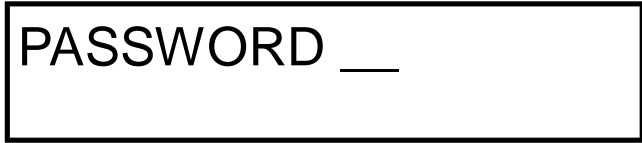
# 4 SETUP AND PROGRAMMING

## SETUP AND PROGRAMMING USING THE KEYPAD

After the CAT first powers on, the message "PRESS # TO VIEW DIRECTORY" will appear in the LCD display. The contrast control on the LCD board may have to be adjusted for best contrast, depending on lighting conditions. This adjustment is on the inside door near the top of the door, above the keypad. See the diagram below.



To begin programming press the "\*" and the "0" keys simultaneously



« This shows on the display window



After you see this in the window, you have six seconds to start to press the six digit pass code. The factory default pass code is 777777. Each time you press a key, a "\*" will appear in the window to keep the pass code confidential. After entering the sixth key, press the "\*" key. This should bring you to the main menu. If you don't press a key in any 6 second period, the CAT automatically reverts to operational mode. If during programming, you don't press any key for 60 seconds, the CAT automatically reverts to operational mode.

The choices for the main menu are:

1. CODES / NAMES
2. ENT. CONTROL
3. SYSTEM PARAMETERS
4. COMMUNICATIONS SETUP
5. CLOCK SETUP
6. ACCESS CONTROL
7. BUFFER INFO
8. CLEAR DATA
9. DISPLAY DATA

### NOTE:

Newer CATs with lighted key-pads do not have letters on keys. Refer to table on Pg. 30

**4 SETUP AND PROGRAMMING**

**SETUP AND PROGRAMMING USING THE KEYPAD..**

**MANAGER PASSCODE**

The first 3 digits of the 6 digit pass code are for programming main menu choice 1 (CODES/ NAMES) only. This is useful for on site maintenance of names and codes. This prevents the system parameters and configuration from being inadvertently modified after installation.

On the following is an overview of the menu selections possible on a CAT.

**PROGRAMMING CHOICES**

**MAIN MENU**

**1 = CODES / NAMES**

- 1 = ADD / FIND NAME
- 2 = FIND NAME
- 5 = CODES USED
- 6 = SHOW ALL CODES
- 7 = SHOW ALL NAMES
- 8 = ENA ACC GRP = 1
- 9 = ENA SPEC RLY = 1

- FOLLOW MENU
- 1 -6 ALPHA NUMERIC
- DISPLAYS # USED
- CRT ONLY
- CRT ONLY
- ENABLES ACCESS GROUPS
- ENABLES SPECIAL RELAYS

**2 = ENT. CONTROL**

- SEL ENT 1 - 16
- ENT XX
- 1 = UNLOCK TIME
- 2 = UNLOCK TONE
- 3 = AUTO GROUP
- 4 = LATCH TONE
- 5 = AJAR TIME
- 6 = SPEC RLY ENA = 1
- 7 = OPEN IN PROG

- | SELECT ENTRANCE     | Factory Defaults |
|---------------------|------------------|
| 1 -99 SECONDS       | 10               |
| 0 -9 T-TONE RECV'D  | 6                |
| 0 -7                | 0                |
| 0 - 9 T-TONE RECV'D | 0                |
| 0 - 99 SECONDS      | 20               |
| 0-1, (1 = ENABLE)   | 0                |
| 0-1, (1 = ENABLE)   | 0                |

**3 = SYS. PARAMETERS**

- |                 |                          |    |
|-----------------|--------------------------|----|
| 1 = TALK TIME   | 1 -99 MINUTES            | 01 |
| 2 = ALARM TIME  | 1 -99 SECONDS            | 10 |
| 3 = CODE LENGTH | 1 -6 DIR LENGTH          | 3  |
| 4 = PIN LENGTH  | 0 -6 PIN LENGTH          | 4  |
| 5 = BACK BEEP   | 0-1, (1 = ENABLE)        | 0  |
| 6 = TONE DIAL   | 0-1, (1 = T-TONE DIAL)   | 1  |
| 7 = UNIT ID     | 0 -9 RING COUNT          | 3  |
| 8 = STRIKE OUT  | 0-9, (0 = NO STRIKE-OUT) | 3  |
| 9 = TITLE PAGE  |                          |    |

**PROGRAMMING CHOICES continued**

**4 = COMM. SETUP**

- 1 = TERMINAL TYPE
- 2 = RS-232 BAUD
- 3 = PROGRAM. PSWD
- 4 = PIN ON ENT = 1
- 5 = SITE CODE
- 6 = DIRECTORY ON =1
- 7 = KEYPAD ON = 0
- 8 = SPKR TONE = 0

|                         | FACTORY DEFAULT |
|-------------------------|-----------------|
| 0 - 1, (1 = VT100A)     | 1               |
| 0 - 6, (0=300, 6=19200) | 5               |
| 1 - 6 DIGITS            | 777777          |
| 1 DIGIT                 | 1               |
| 0 - 255                 | 000             |
| 0 - 1, (1 = ON)         | 1               |
| 0 - 1, (1 = ON)         | 0               |
| 0 - 9                   | 0               |

**9 = UPDATE LCD (CATVISION ONLY)**

**5 = CLOCK SETUP**

- 1 = SET CLOCK
- 2 = SET TIME ZONES
- 3 = SET HOLIDAYS

**6 = ACCESS CONTROL**

- 1 = SET GROUPS
- 2 = SET LEVELS
- 3 = NUM RDR MOD

SETS NUM OF EXT READER MODULES

**7 = BUFFER INFORMATION**

- 1 = VIEW LOG
- 2 = SEND LOG
- 3 = LOG SIZE
- 4 = CLEAR BUFFER

**8 = CLEAR DATA**

- 1 = SET PARAMETERS
- 2 = CLEAR TIME ZONES
- 3 = CLEAR HOLIDAYS
- 4 = CLEAR AC-LEVELS
- 5 = CLEAR AC-GROUPS
- 6 = CLEAR ENTRANCES
- 7 = CLEAN CODES

**9 = DISPLAY DATA**

- 1 = SHOW INFO
- 2 = SHOW TIME ZONES
- 3 = SHOW HOLIDAYS
- 4 = SHOW AC-LEVELS
- 5 = SHOW AC-GROUPS
- 6 = SHOW ENTRANCES
- 7 = SHOW ENT BY GROUP
- 8 = SHOW LATCH STATE
- 9 = SHOW MODULE STATE

## 4 SETUP AND PROGRAMMING

### CODES / NAMES

**CODES/NAMES  
SELECT 1 - 7**

Pressing "1" (after entering the password) will show the choice at left.

A CODE refers to a record in the CAT's memory. A record consists of:

| CODE# | NAME       | PHONE    | PIN  | CARD | ACCESS | GROUP |
|-------|------------|----------|------|------|--------|-------|
| 123   | JONES, TIM | 555-1212 | 1234 | 2760 |        | 1     |

- A. Code numbers can be from 1 to 6 digits.
- B. Names and phone numbers must be entered to display name on directory
- C. Phone numbers can be entered without name, but will not display on directory.
- D. PIN (Personal Identification Number) codes are associated with code numbers.
- E. Optional card numbers (If in use) are associated with code numbers.
- F. Access Groups are associated with code numbers.

### ADD / FIND NAME

**CODE =**

Press "1" on the Codes/Names menu. You will be prompted for the code as shown at left:

If you make a mistake while keying in the code number, press the "0" and the "#" simultaneously to move back one space. From a terminal or computer, press the back arrow key. Enter the code number. It will be between one and six digits depending on the system parameters. After keying in the desired code number, press the "\*".

### DELETING A CODE

To delete a code number, key in the code number then press "#" followed by "\*". This also will erase all data associated with that code number, such as the name, phone number, PIN, and card number.

### DELETING A CODE FIELD

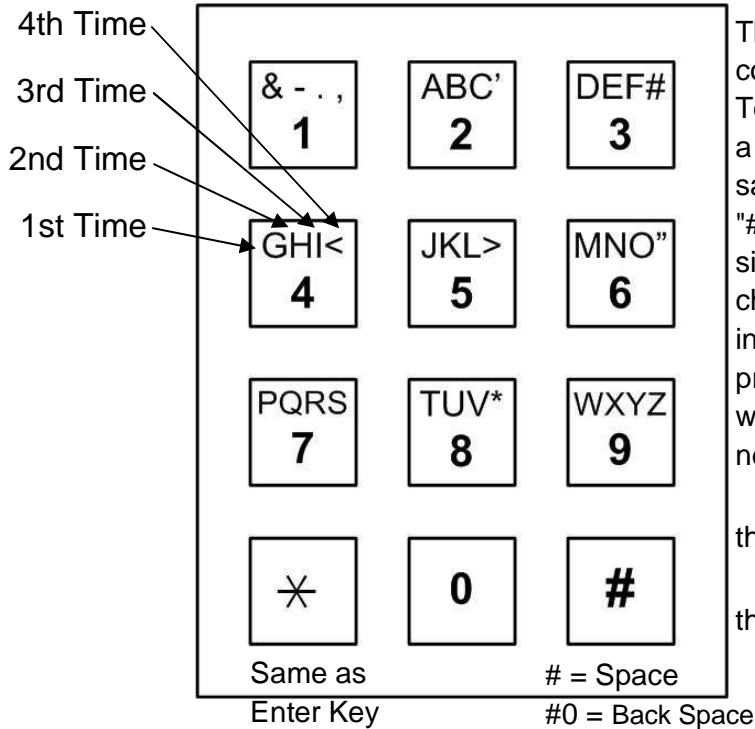
To delete a part of a code number, such as a phone number, PIN # or card #, go to that field by pressing the "\*" key. When you reach the desired field, key in "0", then "\*" from the keypad. This will delete the data in that field, but not any of the other fields associated with the code number.

**IF YOU PLACE A "0", IN THE FIRST POSITION OF A NAME FIELD, THEN "#", IT WILL DELETE ALL DATA ASSOCIATED WITH THAT CODE NUMBER.**

**NAME =**

For all CAT models, you will be prompted to enter a name. Names are 1 to 14 characters, including punctuation. It is not necessary to enter a name in a CATCard but you may wish to in order to keep track of card assignments. The keys on the keypad are alphanumeric. Since there are only 12 keys, each key generates it's number, more than one letter, and punctuation.

CAT Series v 4.1X



The first time you press a key, the first character corresponding to that key will appear in the display. To get to the second character, press the same key a second time. To get the third character, press the same key a third time. To skip a space, press the "#" key. To backspace, press the "0" and the "#" simultaneously. A backspace over an existing character will delete that character. If you inadvertently key past the desired character, keep pressing the key until the desired character is in the window. Then press the "#" key to advance to the next space. **FOR NUMBERS:**

To select numbers, press the "0" key and then the desired number key.

After completely entering the name, press the "\*" key to enter the name into memory.

**Refer to this table as a reference for CATs with lighted keypads.**

**NOTE: PRESS THE # KEY TO MOVE PAST THE LAST LETTER BEFORE PRESSING \*, OR LAST LETTER IS NOT PROGRAMMED.**

You will be prompted for the phone number. Enter the numbers normally. In this mode, letters are not possible. If you mis-key a digit of the phone number, press the "0" and the "#" simultaneously to backspace and correct the digit. After completely entering the phone number, press the "\*" key to enter the phone number into memory. To create a 3 second pause, press the "#" key. For phone systems that dial an 8 or a 9 to get an outside line, key in the number then the "#", then the phone number, then "\*".

**PHONE # =**

**HIDE NAME FEATURE:** Place a pause as the first item in the phone number (ex. #5551212). The name will not display in the directory, but anyone who dials the code number will still be able to reach the resident. It is not necessary to enter phone numbers in a CATCard but it is allowed for convenience.

You will be prompted to enter a PIN. A PIN is a Personal Identification Number. This will allow anyone who knows this number to enter the facility the CAT controls by entering a "\*" and this PIN code. Each name may have a PIN code. The PIN code length is from one to six digits, depending on what you selected from the system parameters menu. All PIN codes must be the same length as what was selected from the system parameters menu. When you enter the PIN code, press the "\*" key to place the PIN code into memory. If you disable the PIN (PIN length = 0), this choice will not display.

**PIN =**

Another selection in this sub-menu is the card reader numbers. The CAT system allows six card numbers per code entry. These are five digit numbers used with the card reader interface. If Facility Site code = 000, this selection may not display. The card numbers for the six cards that will be given to the name or group must be known. Enter these numbers into memory. If you make mistakes while keying in the number, press the "0" and the "#" key pressed simultaneously. This will backspace over the mis-keyed digit. After entering each Card code number, press the "\*" key to place the Card code number into memory.

**CARD X =**

## 4.2.1.2 FIND NAME

1-6 CHAR. <CR>

To select the find name function, press "2" from the Codes/Names menu. You will be prompted for 1 - 6 characters. Select characters in the same manner that you programmed names into memory (See the diagram on Pg. 31). When you have entered all desired characters, press "#", then "\*".

CODE = XXX  
<CR>MORE

This message will display whatever code number matches the letters selected. If there is more than one name with similar letters, pressing the "\*" key will display additional code numbers that meet the selection criteria.

NO MATCH  
<CR> TO CONT

If there is no match, you will be prompted to press either the "\*" from the keypad, or Enter key from the terminal. A <CR> or "\*" will return to sub-menu 1.

## SHOW ALL CODES

Select this sub-menu from the Codes/Names menu by pressing "8". This selection will list code numbers and all data associated with code numbers, sorted by CODE NUMBER in ascending order. It sends this data out the optional serial port (OPTKPRT) to a printer or terminal.

## SHOW ALL NAMES

Select this sub-menu from the Codes/Names menu by pressing "9". This selection will list code numbers and all data associated with code numbers, sorted by NAMES in ascending order. It sends this data out the optional serial port (OPTKPRT) to a printer or terminal.

## ENABLE ACCESS GROUPS

ENA ACC GRP = 0

Access Groups allow more control of a CAT by adding time zone control and increased card reader control.

To enable Access Groups from the factory default of 0, press "8" from the Codes / Names menu to get this sub-menu. Press "1" to enable Access Groups, and press "\*". This will return you to the Codes / Names menu.

## ENTRY CONTROL

SEL ENT \_

The Entry Control menu comes with factory defaults that should be sufficient for most installations. These default values are shown on Pg. 28 and 29. Some functions work with options that may not be present on your CAT unit. To get the menu at right, press "2" and then select the entrance to modify. The CAT unit can support up to 16 entrances with options installed.

ENT XX  
SEL FUNCT 1 - 4

## ENTRANCE XX UNLOCK TIME

ENT XX  
UNLOCK TIME = 10

Press "1" from the Entry Control menu to set the time in seconds from 1 to 99 seconds. This is the length of time the door control relay for door 1 will be energized. The factory default is 10 seconds. A good rule of thumb for entry time is 3 seconds plus 2 seconds for every step from the CAT to the entrance being controlled. To change time, key in the time desired and press the "\*" key. You will be returned to the Entry Control menu.

**CAT Series v 4.1X****ENTRANCE XX UNLOCK TONE**

The Entrance XX tone refers to the Touch-Tone™ number from a telephone that must be pressed to energize the door control relay. This relay will be energized for whatever length of time was selected (door open time). Rotary or pulse type telephones must dial any number "6" or greater to energize the door control relay. This will energize only the primary door control relay. To change the number from the default setting of 6 to another number, press "2" from the Entrance 1 Control menu. Select the new number (from 1 -9) and press the "\*" key. You will be returned to the Entry Control menu.

**ENT XX UNLOCK  
TONE = 6**

**NOTE: SELECTING A "0" DISABLES ENTRANCE 1 UNLOCK TONE FEATURE.**

**ENTRANCE XX AUTO GROUP**

The Entrance XX Auto Group refers to the group of Access levels and time zones that allow the entrance to automatically open on given days for the hours that match the time zone programmed.

To change the number from the default setting of 0 to another number, press "3" from the ENT 1 Control menu. Select the new number (from 0 - 9) and press the "\*" key. You will be returned to the Entry Control menu. **SELECTING A "0" DISABLES THE AUTO GROUP FUNCTION.** Selecting a number from 1 - 9 allows that number to automatically open the door on the days and times set for that group.

**ENT XX  
AUTO GROUP = 0**

**NOTE: AUTOMATIC UNLOCK/RE-LOCK (AUTO GROUP)  
OVERRIDES ANY OTHER LATCH CONTROL.**

**ENTRANCE XX LATCH TONE**

The Entrance X latch tone refers to the touch tone numbers that allow the entrance to automatically latch open when called in remote control mode. To change the number from the default setting of 0 to another number, press "4" from the ENT 1 Control menu. Select the new number (from 0 - 9) and press the "Enter" key. You will be returned to the Entry Control menu. **SELECTING A "0" DISABLES THE LATCH TONE FUNCTION.** Selecting a number from 1 - 9 allows that number to automatically latch open the door for that entrance.

**ENT XX  
LATCH TONE = 0**

**NOTE: IF ENT XX TONE AND ENT XX LATCH ARE THE  
SAME NUMBER, THE ENT 1 RELAY WILL NOT LATCH  
OR TIME OUT. IT WILL ENERGIZE BRIEFLY, AND  
THEN DE-ENERGIZE.**

**ENTRANCE XX AJAR TIME**

Press "5" from the Entry Control menu to set the ajar time. The ajar time is the length of time an entrance may be left ajar before energizing the optional alarm relay. This time is programmable from 1-99 seconds. Default is 0 (Off)

**ENT XX  
AJAR TIME = 20**

**ENTRANCE XX SPECIAL RELAY ENABLE**

Press "1" from the Entry Control menu to enable the auxiliary relays with this entrance. If installed with this CAT system, you may want the the relays to activate with certain entrances only. Default is 0 (Off)

**ENT XX  
SPEC RLY ENA = 0**

**ENTRANCE XX OPEN IN PROGRAMMING MODE**

Press "1" from the Entry Control menu to enable this Entrance to open during programming. During programming, the keypad and card readers are inactive, preventing entry. Setting this entry to One causes this entrance to automatically open during

**ENT XX  
OPEN IN PROG = 0**

### SYSTEM PARAMETERS

#### **SYS PARAM.**

The System Parameters menu comes with factory defaults that should be sufficient for most installations. These default values are shown on Pg. 28 and 29. Some functions work with options that may not be present on your CAT. For example, selection 2 Alarm Time is not valid unless the optional alarm control relay (OPTK3R) has been purchased. To get the menu at left, press "3" from the main menu.

### TALK TIME

#### **TALK TIME = 01**

Talk Time is the time in minutes from 1 - 99 minutes that the CAT remains connected after dial out. In areas of the country where rate usage is a concern, the factory default is 1 minute. For other applications, the talk time can be adjusted upward by pressing "1" from the System Parameters menu to get this sub-menu. Key in the desired number (must be 2 digits) and press "\*". This will return you to the System Parameters menu.

### ALARM TIME

#### **ALARM TIME = 10**

Alarm time is the time in seconds that the optional alarm relay control (OPTK3R) is energized. To change the alarm time from the factory default of 10 seconds, press "2" from the System Parameters menu to get this sub-menu. Key in the desired number (must be 2 digits) and press "\*". This will return you to the System Parameters menu.

### CODE LENGTH

#### **CODE LENGTH = 3**

Code length is the number of digits from 1 to 6 entered on the keypad to dial a phone from the CAT. To change the code length from the factory default of 3 digits, press "3" from the System Parameters menu to get this sub-menu. Key in the desired number from 1 - 6 and press "\*". This will return you to the System Parameters menu.

### PIN LENGTH

#### **PIN LENGTH = 4**

PIN length is the number of digits from 0 to 6, entered from the keypad to enter a PIN code from the CAT. To change the PIN length from the factory default of 4 digits, press "4" from the System Parameters menu to get this sub-menu. Key in the desired number from 0 - 6.

SELECTING PIN LENGTH = "0" DISABLES THE PIN FUNCTION. Press "\*" to return to the System Parameters menu.

### BACK BEEP

#### **BACK BEEP = 0**

Back Beep is a background tone that will "beep" every 10 seconds when enabled. This allows a called party to determine if someone called from a CAT. To enable the back beep from the factory default of 0, press "5" from the System Parameters menu to get this sub-menu. Press "1" to enable Back Beep, and press "\*". This will return you to the System Parameters menu.

**CAT Series v 4.1X**

**TONE DIAL** Tone dial selects whether the CAT dials out with Touch-Tones™, or uses pulses, like rotary dial phones. In areas of the country where Touch-Tone™ is not available, tone dial may be disabled. To disable the Tone Dial from the factory default of 1, press "6" from the System Parameters menu to get this sub-menu. Press "0" to disable Tone Dial, and press "\*". This will return you to the System Parameters menu.

**TONE DIAL = 1**

**Unit ID or Ring Count**

Unit ID or Ring Count is the number of rings the CAT listens to before it answers. This is useful for the software (Selcom 7) to identify that it is connected to the correct unit and operating the door control relay without being called, or for Remote Programming. If ring count is 0, the CAT will not answer at all. To change the ring count from the factory default of 3 rings, press "7" from the System Parameters menu to get this sub-menu. Key in the desired number from 0 - 9 and press "\*". This will return you to the System Parameters menu.

**UNIT ID = 3**

**STRIKE OUT**

Strike Out refers to the number of incorrect PIN code entries that can be made before the CAT "locks up". Once the CAT "locks up", it ignores any key entries for 60 seconds. This is to discourage attempts to guess PIN codes. Select Strike Out from the Door Control menu by pressing "9". To change from the factory default setting of 3, press any key from 0 - 9 and then press "\*".

**STRIKE OUT = 3**

**NOTE: IF 0 IS SELECTED, THE CAT WILL PERMIT UNLIMITED ATTEMPTS TO GUESS PIN CODES.**

If you enter an invalid PIN code, an error message like the one at right, will display. Wait until the title screen (if selected) appears, or until the error message goes away before re-keying the PIN code. If the number of strike outs is exceeded, an error tone will sound. A message like the one at left, will be shown on the front display of the CAT. If you enter a valid PIN code, the door control relay will energize and the open message shown at right, will display on the CAT for approximately 2 econds and then revert back to the title page.

**INVALID PIN  
TRY AGAIN**

**BUSY PLEASE WAIT**

**OPEN**

**TITLE PAGE**

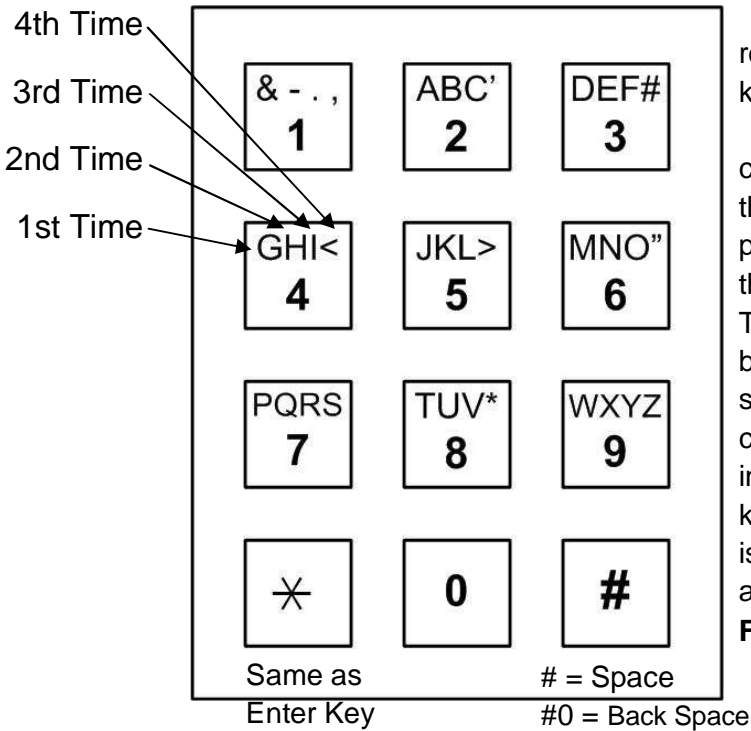
The Title Page has two lines of up to sixteen characters per line, including punctuation. The Title Page can be programmed from the keypad in the same manner as names were programmed.

**LINE 1**

See the table on the next page for character assignments. The CAT comes with a title page that says "PRESS # TO VIEW DIRECTORY", until the title page is reprogrammed. To program the Title Page from the factory default of "PRESS # TO VIEW DIRECTORY", press "9" from the System Parameters menu to get this sub-menu. Key in the desired character and press "#" to advance to the next character space. Press "#" to advance to a blank space. Press "#" and "0" simultaneously to backspace one character. When the first line is complete, press "\*" to advance to the second line.

**LINE 2**

Continue the second line as required. If you require any modifications of line 2, then line 1 must be re-entered first. After completion, press "\*". This will return you to the System Parameters menu.



The keypad programming table is repeated here as an aid to selecting the proper key strokes to set the title page.

The first time you press a key, the first character corresponding to that key will appear in the display. To get to the second character, press the same key a second time. To get the third character, press the same key a third time. To skip a space, press the "#" key. To backspace, press the "0" and the "#" simultaneously. A backspace over an existing character will delete that character. If you inadvertently key past the desired character, keep pressing the key until the desired character is in the window. Then press the "#" key to advance to the next space.

**FOR NUMBERS:**

To select numbers, press the "0" key and then the desired number key. After completely entering the name, press the "\*" key to enter the name into memory.

**NOTE: PRESS THE # KEY TO MOVE PAST THE LAST LETTER BEFORE PRESSING \*, OR LAST LETTER IS NOT PROGRAMMED.**

**COMMUNICATIONS SETUP**

**COMM. SETUP**

The Communications Setup menu comes with factory defaults that should be sufficient for most installations. These default values are shown on Pg. 28 and 29 . Some functions are used with options that may not be present on your CAT. For example, selection 2 RS-232 Baud is not valid unless you purchase the optional serial printer interface (OPTKPRT). To get the right menu, press "4" from the main menu.

**TERMINAL TYPE**

**TERM. TYPE = 1**

The CAT is designed to respond to terminals that follow VT -100B terminal control codes. It also can respond to "dumb terminal" codes. To disable the Terminal Type from the factory default of 1, press "1" from the Communications Setup menu to get this sub-menu. Press "0" to disable VT-100B emulation, and press "\*". This will return you to the Communications Setup menu.

**CAT Series v 4.1X**

**RS-232 BAUD**

The RS-232 Baud refers to the rate of speed for serial communications, such as a printer or terminal would need. This function requires the optional printer interface (OPTKPRT). The different rates are:

- 0 = 300 BAUD
- 1 = 600 BAUD
- 2 = 1200 BAUD
- 3 = 2400 BAUD
- 4 = 4800 BAUD
- 5 = 9600 BAUD
- 6 = 19200 BAUD

Protocol for serial devices is fixed at 8 bits, No parity, 1 stop bit. (8,N,1)

**RS-232 BAUD = 5**

To change the RS-232 Baud from the factory default of 5, press "2" from the Communications Setup menu to get this sub-menu. Next, select the number corresponding to the desired baud, and press "\*". This will return you to the Communications Setup menu.

**PROGRAM PASSWORD**

The CAT leaves the factory with a default password of 777777. The Password may be alphanumeric (1 - 6 characters) if programmed from an optional terminal. From the front keypad, only numbers (1 - 6 digits) are supported. This provides an additional level of security if you connect a terminal to a CAT. It is possible to create passwords that can not be accessed from the front keypad. To change the Program Password from the factory default of 777777, press "3" from the Communications Setup menu to get this sub-menu. Key in the desired 6 digits for the new password, and press "\*". You will be returned to the Communications Setup menu.

**PASSWORD = 777777**

**NOTE: 1<sup>st</sup> 2 DIGITS OF PROGRAM PASSWORD ARE THE CONTROL PASSWORD, FOR REMOTE CONTROL OF CAT UNIT (SUCH AS ENTRANCE LATCH). 1<sup>st</sup> 3 DIGITS OF PROGRAM PASSWORD ARE THE MANAGERS PASSWORD THAT ALLOWS ONLY CODE, NAME, PHONE, PIN, CARD, AND GROUP CHANGES.**

**PIN ON ENTRANCE**

This function determines which door control relay is activated when a PIN code (or a Rotary "6" from a called unit) is received by the CAT. To change the number from the default setting of 1 to another number, select "4" from the main menu. Select "4" from this sub-menu. Select the new number (from 1 - 4) and press "\*". You will be returned to the COMM. SETUP menu.

**PIN ON ENT = 1**

**SITE CODE**

The Site Code (sometimes called a Facility Code) is used with the Card Readers. Site Code is used to identify the group of cards being used with a particular CAT. This keeps cards on one facility from being used in another facility. The range of Site Codes is from 000 - 255.

To change the Site Code from the factory default of 000, press "5" from the Communications Setup menu to get to this sub-menu. Key in the desired 3 digits corresponding to the Site Code of the cards you have purchased, and press "\*".

**SITE CODE = 000**

**NOTE: IF SITE CODE = "000" THE CARD READER FUNCTION IS DISABLED, AND CARD # WILL NOT APPEAR IN CODE/NAMES PROGRAMMING MENU . IF SITE CODE IS SET TO 255, THE SITE CODE ON THE CARD WILL BE IGNORED, AND SECURITY OF CARDS WILL BE REDUCED.**

DIRECTORY ON / OFF

**DIRECTORY ON=1**

This selection allows all directory names to be suppressed from the display. The codes keyed in will still display. All names will still print to the optional printer (OPTKPRT). To disable Directory from the factory default of 1, press "6" from the Communications Setup menu to get this sub-menu. Press "0" to disable Directory, and press "\*".

KEYPAD ON / OFF

**KEYPAD ON = 0**

This selection allows the keypad to remain active after dial out. This is useful for ATM machines, voice mail, and other functions requiring a Touch-Tone™ signal after communications are established. To enable keypad from the factory default of 0,

press "7" from the Communications Setup menu to get this sub-menu. Press "1" to enable the keypad, and press "\*". Only the number keys are active, \* and # will not work. applications, the talk time can be adjusted upward by pressing "1" from the System Parameters menu to get this sub-menu. Key in the desired number (must be 2 digits) and press "\*". This will return you to the System Parameters menu.

SPEAKER TONE

**SPKR TONE = 0**

This selection allows the speaker to be activated for remote control from a telephone in order to listen in. When enabled, the CAT has an open audio channel to permit conversation from someone calling in to the CAT (the microphone is also enabled at

the same time). To enable speaker from the factory default of 0 (disabled), press "8" from the Communications Setup menu to get this sub-menu. Select a digit from 1 to 9 to enable speaker, and press "\*". This will return you to the Communications Setup menu.

UPDATE LCD (CATVISION ONLY)

**UPDATING \_**

This selection allows information in the CAT memory to be transferred to the display memory. Press 9 to enable update and then press "\*". This will return you to the Communications Setup Menu.

CLOCK SETUP

**CLOCK SETUP  
SELECT 1 - 3**

There are three menu choices that are:

1. Set time and date.
2. Set time zone(s).
3. Set Holidays.

SETTING TIME / DATE

**NOTE: ONCE TIME/DATE PROGRAMMING HAS BEGUN, ALL SELECTIONS MUST BE COMPLETED FOR CHANGES TO TAKE EFFECT.**

**00:00 00/00/00  
MIN.:**

Select "1" to set the time & date. You will be prompted to enter the current time in minutes as a one or two digit number. If you make a mistake, press "0" and "#" simultaneously to backspace one character. After the minutes are entered, press the "\*" key.

**00:00 00/00/00  
HOUR:**

Enter a 1 or 2 digit number to set the hour. If a mistake is made, press "0" and "#" simultaneously to backspace one character. After the hour is entered, press the "\*" key.

**00:00 00/00/00  
DAY, 1..7:**

This is NOT the day of the month. This is a number which corresponds to the day of the week. Enter a number corresponding to the day of the week. Sunday is "1", Saturday is "7" and so forth. If you make a mistake, press "0" and "#" simultaneously to backspace one character. After the day of the week is entered, press the "\*" key.

**CAT Series v 4.1X  
SETTING TIME / DATE continued**

Enter a 1 or 2 digit number to set the day of the month. If a mistake is made, press "0" and "#" simultaneously to backspace one character. After the day is entered, press the "\*" key.

**00:00 00/00/00  
DATE:**

Enter a 1 or 2 digit number to set the month. If you make a mistake, press "0" and "#" simultaneously to backspace one character. After the month is entered, press the "\*" key.

**00:00 00/00/00  
MONTH:**

Enter a 2 digit number to set the year. If you make a mistake, press "0" and "#" simultaneously to backspace one character. After the year is entered, press the "\*" key. You will be returned to the Clock Setup menu.

**00:00 00/00/00  
YEAR:**

**SETTING TIME ZONES**

A time zone is a period of time that limits when the CAT is valid. Use this to control access to a facility, when a given condition is valid, based on:

- 1) The time of day.
- 2) The day of the week.
- 3) Whether or not the day of the week is a Holiday.

A time zone is valid only within a 24 hour period that begins at midnight. A time zone has a start time and an ending time. This can be as short as two minutes, or as long as 24 hours. This time period is valid in combinations from 1 to 7 days and Holidays. There are 16 times zones numbered 0 - 15 available for use on a CAT. Not all time zones can be reached from this menu. To access all of them you must use Selcom 7 or newer. Holidays may be set up at any time. A time zone can have valid Holidays, or invalid Holidays. A time zone can be set that is only valid on Holidays, for applications that require different hours of access on Holidays.

From the main menu, select "5" for clock setup, then "2" for time zone.

You will be prompted to select a time zone between 0 and 9. If you make a mistake, press "0" and "#" simultaneously to backspace one character. Once programming of a time zone is begun, all choices must be keyed in or you will be returned to the beginning of the time zone menu.

**TIMEZONE <0-9>**

After the time zone is selected, press the "\*" key. You will be prompted to key in the hour. This is a 1 or 2 digit number. The hour is expressed in 24 hour format (e.g., 2:25 P.M. is keyed in as 14:25), from 00:00 to 23:59. If you make a mistake, press "0" and "#" simultaneously to backspace one character. After the hour is entered, press the "\*" Key.

**START HOUR 00**

You will be prompted to key in the minute. This is a 1 or 2 digit number between 00 and 59. If you make a mistake, press "0" and "#" simultaneously to backspace one character. After the minute is entered, press the "\*" key.

**START MIN 00**

Next, enter the ending hour. This is a 1 or 2 digit number. If you make a mistake, press "0" and "#" simultaneously to backspace one character. After the hour is entered, press the "\*" key."0" and "#" simultaneously to backspace one character. After the hour is entered, press the "\*" Key.

**END HOUR 23**

SETTING TIME / DATE continued

**END MIN 59**

Enter the ending minute. This is a 1 or 2 digit number between 00 and 59. If you make a mistake, press "0" and "#" simultaneously to backspace one character. After the minute is entered, press the "\*" key.

**DAYS 12345678**

Enter the desired day(s). Do this by keying in the number corresponding to the day of the week (1 = Sunday, 7 = Saturday and 8 = Holidays). As an example Monday through Friday would be keyed in as 2, 3, 4, 5 and 6. Days may be entered in any order. If you make a mistake, press "0" and "#" simultaneously to backspace one character. After all days are chosen, press the "\*" key.

The table below may be used to help keep track of which Time Zones are required for this installation. Writing them down in the table provided will help reduce programming entry errors.

|      | Start | Time | Stop  | Time |    | Day | of | the | Week |    |    |     |
|------|-------|------|-------|------|----|-----|----|-----|------|----|----|-----|
| Time | Hours | Min. | Hours | Min. | SU | MO  | TU | WE  | TR   | FR | SA | HOL |
| 0    |       |      |       |      |    |     |    |     |      |    |    |     |
| 1    |       |      |       |      |    |     |    |     |      |    |    |     |
| 2    |       |      |       |      |    |     |    |     |      |    |    |     |
| 3    |       |      |       |      |    |     |    |     |      |    |    |     |
| 4    |       |      |       |      |    |     |    |     |      |    |    |     |
| 5    |       |      |       |      |    |     |    |     |      |    |    |     |
| 6    |       |      |       |      |    |     |    |     |      |    |    |     |
| 7    |       |      |       |      |    |     |    |     |      |    |    |     |
| 8    |       |      |       |      |    |     |    |     |      |    |    |     |
| 9    |       |      |       |      |    |     |    |     |      |    |    |     |
| 10   |       |      |       |      |    |     |    |     |      |    |    |     |
| 11   |       |      |       |      |    |     |    |     |      |    |    |     |
| 12   |       |      |       |      |    |     |    |     |      |    |    |     |
| 13   |       |      |       |      |    |     |    |     |      |    |    |     |
| 14   |       |      |       |      |    |     |    |     |      |    |    |     |
| 15   |       |      |       |      |    |     |    |     |      |    |    |     |

**SETTING HOLIDAYS** Holidays can be used to keep time zones valid (or not) on Holidays, or by setting a different time zone to be valid for a different period of time on a Holiday. There are 16 Holidays numbered 0 - 15 available for use on a CAT. Not all holidays can be reached from this menu. Use Selcom 7 or newer to set all the holidays.

Select "3" to set the Holiday. Holidays may be entered in any order.

You will be prompted to select a Holiday between 0 and 9. If you make a mistake, press "0" and "#" simultaneously to backspace one character.

**HOLIDAY <0-9>**

After the Holiday is selected, you will be prompted to key in the month. This is a 1 or 2 digit number. If you make a mistake, press "0" and "#" simultaneously to backspace one character. Press the "\*" key after the month is entered.

**MONTH:**

After the month is selected, you will be prompted to key in the date. This is a 1 or 2 digit number between 1 and 31. If you make a mistake, press "0" and "#" simultaneously to backspace one character. After the date is entered, press the "\*" key.

**DATE:**

The table below may be used to help keep track of which Holidays are required for this installation. Writing them down in the table provided will help reduce programming entry errors. Remember, Holidays may be entered in any order.

| Holiday | Month | Day | Holiday |
|---------|-------|-----|---------|
| 0       |       |     |         |
| 1       |       |     |         |
| 2       |       |     |         |
| 3       |       |     |         |
| 4       |       |     |         |
| 5       |       |     |         |
| 6       |       |     |         |
| 7       |       |     |         |
| 8       |       |     |         |
| 9       |       |     |         |
| 10      |       |     |         |
| 11      |       |     |         |
| 12      |       |     |         |
| 13      |       |     |         |
| 14      |       |     |         |
| 15      |       |     |         |

## 4 SETUP AND PROGRAMMING

### ACCESS CONTROL

Access Control from a CAT is based on four general sets of conditions:

- 1) When a resident (who has been called from a CAT) keys in a valid door tone.
- 2) When a valid PIN code is presented at a door that is valid:
  - a) based on the time of day.
  - b) based on the day of week.
  - c) based on whether the day of the week is a Holiday or not.
- 3) When a valid card number is presented at a door card reader which is valid:
  - a) based on the card reader next to the entrance chosen for access.
  - b) based on the time of day.
  - c) based on the day of week.
  - d) based on whether the day of the week is a Holiday or not.
- 4) When an entrance group is valid, using automatic un-lock and re-lock.

The CAT has many combinations of access control based on these criteria. This versatility can be confusing to an installer, unless the access has been carefully defined BEFORE programming begins. The order in which to plan for an installation should be as follows:

1. Define access area. One entrance, or up to 16?
2. Define time zones.
  - What times is access allowed?
  - For Whom is access allowed? Everybody, or different groups of people?
  - What days is access to be allowed?
  - Are the time zones the same for different days, or different for different days?
  - Are Holidays used, and do Holidays require different time zones?
3. Define Access levels.
  - What time zone is valid for a given access level?
  - Which door is valid for an access level?
  - Is more than one door valid for a time zone?
4. Define Access Groups.
  - What combinations of access levels are in a group?
  - Is the access group to be used for PIN codes and Cards?
  - Is the access group to be used for automatic un-lock and re-lock?

The menu choices in this manual follow the order in which they appear on a CAT. These choices are in reverse order from how a site installation is typically planned. This is to force the installer to decide site requirements before beginning to program the CAT. The CAT was designed this way to help an unwary installer from "programming himself into a corner." There are tables associated with each section. They are there to help with site planning. It is strongly recommended they be completely filled out BEFORE attempting any programming.

### ACCESS GROUPS

Access Groups are used to allow groups of individuals card or PIN access by assigning a level or combination of levels to their group. Access Group Zero is predefined as an unlimited group. Group Zero allows access 24 hours a day, ALL days of the year. Access Groups are assigned to the individuals in the Directory. If you do not assign a Group to an individual during the directory entry, Zero (0) is assigned by default.

Since Access Levels have different Time Zone and entrance combinations, this creates many combinations for control of an entrance based on PIN, Card, or time of day.

Once Access Groups are enabled, an Access Group number for a given code number MUST be specified.

The other application for Access Groups is for automatic Unlocking and Relocking Entrances 1 - 4. An Access Group also may be one that has no valid Access Levels when it is needed to prevent entrance access.

From the main menu select "6" for Access



**SELECTING AN ACCESS GROUP**

Select "6" from the main menu. Press the "\*" key from the front door key pad, or the Enter key from a terminal. Select "1" from this sub-menu. You will be prompted to select a group from 1 - 9 as shown at right. Press the "\*" key from the front door key pad, or the Enter key from a terminal. Not all Groups can be reached from this menu. Use Selcom 7 or newer to set all the Groups.



**SELECTING AN ACCESS LEVEL**

After selecting a group, you will be prompted for levels. These are any combinations from 0 - 9 in any order. To change access levels for a given group, key in the new levels desired and press the "\*" key from the front door key pad, or the Enter key from a terminal. To delete access levels entirely use Clear Access Levels. Not all Levels can be reached from this menu. Use Selcom 7 or newer to set all the Levels



**ACCESS LEVELS**

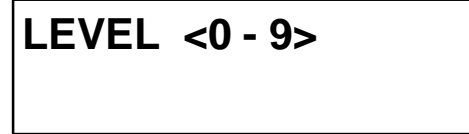
Access Levels are used to attach Time Zones to specific Entrances.

Only one Time Zone is allowed per Access Level. Any combination of entrances may be selected, but at least one entrance must be selected, or the affected Access Level will not function. From one to sixteen entrances may be assigned to an Access Level. Different combinations of control may be created. Do this by assigning one entrance a Time Zone and an Access level, and another entrance the same Time Zone but a different Access Level. Now these Access Levels can be grouped in different combinations for the Access Groups.

**PROGRAMMING AN ACCESS LEVEL**

Select "6" from the main menu. Press the "\*" key from the front door key pad, or the Enter key from a terminal.

Select "2" from this sub-menu. You will be prompted to select a level from 0 - 9 as shown at right. Press the "\*" key from the front door key pad, or the Enter key from a terminal. Not all Levels can be reached from this menu. Use Selcom 7 or newer to set all the Levels.



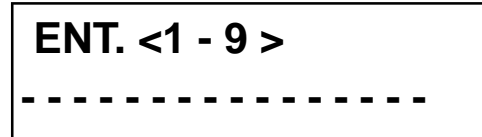
**SELECTING A TIME ZONE**

You will be prompted to select a time zone from 0 - 9 as shown at right. Select the desired zone number and press the "\*" key from the front door key pad, or the Enter key from a terminal. Not all time zones can be reached from this menu. Use Selcom 7 or newer to set all the time zones.



**SELECTING A ENTRANCE**

You will be prompted to select a door 1 - 9 as shown at right. Select the desired door combination and press the "\*" key from the front door key pad, or the Enter key from a terminal. Your system may not have all of the entrances. Not all entrances can be reached from this menu. Use Selcom 7 or newer to set all the entrances.



**4 SETUP AND PROGRAMMING**

**SYSTEM PARAMETERS**

**ACCESS LEVELS continued**

Use the table below to help keep track of which Access Levels are required for this installation. Writing them down in the table provided will help reduce programming entry errors.

|        |      | ENTRANCE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------|------|----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| ACCESS | TIME |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0      |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1      |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2      |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3      |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4      |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5      |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6      |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7      |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8      |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9      |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10     |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11     |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12     |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13     |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14     |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15     |      |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**AUTOMATIC UNLOCK AND RELOCK BY TIME ZONE**

The example on the next page shows how a business might keep two entrances open during peak employee traffic, and secure those two entrances at all other times. Time Zone 1 is valid for one half hour in the morning, Monday through Friday. Time Zone 2 is valid for one half hour in the afternoon, Monday through Friday. Time Zone 0 is valid all the time, except Holidays.

Each Time Zone is assigned to a different Access Level. Both entrances are selected in the Access Levels. The morning and the afternoon Access Levels are grouped together in Access Group 1.

By setting Entrance Group 1 to Access Group 1, the entrance will automatically unlock during peak traffic, and relock at all other times. Employees whose PIN codes or cards are set to Access Level 0, can open the entrance at all other times. If employees try to use their PIN code or Card while the entrances are unlocked, the display on the CAT will show "OPEN".

**EXAMPLE OF AN AUTOMATIC UNLOCK APPLICATION**

**Time Zone Setting**

| Time | Start Time |      | Stop Time |      | Day of the Wee |   |   |   |   |
|------|------------|------|-----------|------|----------------|---|---|---|---|
|      | Hour       | Min. | Hour      | Min. |                |   |   |   |   |
| 0    |            |      |           |      |                |   |   |   |   |
| 1    | 07         | 45   | 08        | 15   | X              | X | X | X | X |
| 2    | 16         | 45   | 17        | 15   | X              | X | X | X | X |

**Access Level Setting**

**AL1 (USES TIME ZONE 1 MORNING HOURS M - F)**

**AL2 (USES TIME ZONE 2 AFTERNOON HOURS M - F)**

**AG1 (USES ACCESS LEVELS 1 AND 2 )**

**THEN USE AG1 TO AUTO UNLOCK ENTR. 1 AND ENTR. 2**

| ENTRANCE    |   |   |   |
|-------------|---|---|---|
| ACCESS TIME |   |   |   |
| 0           |   |   |   |
| 1           | 1 | X | X |
| 2           | 2 | X | X |

| Access Levels |               |               |
|---------------|---------------|---------------|
| ACCESS        |               |               |
| 0             | Always Active | Always Active |
| 1             | X             | X             |
| 2             |               |               |

These are shorter versions of the other tables in this manual. Start by defining which entrance is to be unlocked, for how long, on which days. This is the time zone data. Next, define which combinations of doors are controlled by a time zone. This is an access level. Last, group access levels into an access group. The Entrance Group is that access group number.

**TRANSACTION BUFFER INFORMATION**

The transaction buffer stores any event that would normally create a logging printer message. For examples of report messages, see Pg. 18 or 66. The size of the transaction buffer depends on the capacity of the CAT. Usually, the smaller the capacity the larger the transaction buffer space. After a transaction buffer becomes full, it begins to overwrite the oldest event in the transaction buffer storage space.

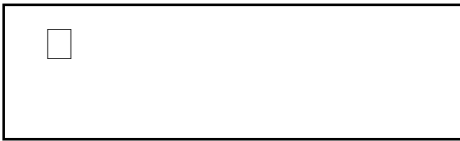
Press "7" from the main menu to get the selection shown at right. Press "\*" to return to the Main menu

**BUFFER INFO.**

4 SETUP AND PROGRAMMING

**TRANSACTION BUFFER INFORMATION continued**

**VIEW LOG**



This allows the log to be viewed from a terminal connected to the optional serial port. The log also may be viewed from a personal computer communicating through the optional modem. Pressing "1" from the front panel keypad will only show a cursor box in the LCD display as shown at left. The CAT will sound a long error beep and return to the Buffer Information menu.

**SEND LOG**

**PRINTING BUSY  
PLEASE WAIT**

Pressing "2" will send all logging data to either the optional serial port or to the optional modem, if you are using a terminal through the modem.. A message like the one at left will display.

**BUFFER INFO**

After all data stored in the buffer has been sent, the message shown at left will display. Press "\*" to return to the Buffer Information menu. Press "\*" again, to return to the Main menu.

**TRANSACTION BUFFER FREE**

**BUFF FREE = 70%**

Pressing "3" from the front panel keypad will only show the approximate amount of space remaining in the buffer A message similar to left will appear

**SEND LOG**

**ERASE LOG**

Press "4" to get to the menu at left. Pressing a "1" then "\*" clears all transactions stored in the buffer for the CAT. If you press a "1" by mistake, press "#" and "0" simultaneously to backspace over the "1". Press "0" then "\*" to return to the main menu. If you press any key other than "1", the CAT will sound a long error beep. Press "\*" to return to the Buffer Information menu. Press "\*" again, to return to the Main menu.

**CLEAR DATA**

**CLEAR DATA**

**SET PARAMETERS**

Pressing "1" returns all Entrance Control, System Parameters and Communication Setup settings to the SES factory defaults. These defaults are shown on Pg. 28 and 29. Press "1" to reset the parameters

**CLEAR TIME ZONES**

Pressing "2" causes this selection to clear any previously programmed time zone and resets all times to 00:00. Press "1" to Clear, "0" to Abort. Press "\*" to return to the Main menu.

**CLEAR HOLIDAYS**

Pressing "3" causes this selection to clear all Holidays from memory. This is useful for Holidays that are observed on different days from year to year, such as Thanksgiving or Labor Day. Press "1" to Clear, "0" to Abort. Press "\*" to return to the Main menu.

**CLEAR ACCESS LEVELS**

Pressing "4" causes this selection to clear all access levels of any previously programmed data. Press "1" to Clear, "0" to Abort. Press "\*" to return to the Main menu.

**CLEAR ACCESS GROUPS**

Pressing "5" causes this selection to clear all access groups of any previously programmed data. Press "1" to Clear, "0" to Abort. Press "\*" to return to the Main menu.

**CLEAR ENTRANCES**

Pressing "6" causes this selection to clear all entrance data. Press "1" to Clear, "0" to Abort. Press "\*" to return to the Main menu.

**CLEAN DIRECTORY CODES**

Pressing "7" causes this selection to clean the corrupted directory codes. Press "1" to Clear, "0" to Abort. Press "\*" to return to the Main menu.

**DISPLAY DATA**

Pressing the menu election "9" is used with an optional printer (OPTPRT), or a CRT or terminal for sub-menu choices 1 through 5. Data is sent to the optional serial port. It is used to print various parameters, such as Time Zones, Holidays, Access Levels, Access Groups and general Information. Sub-menu choices 6 through 9 send data to the LCD display on the front panel of the CAT. To select this function, press "9" from the Main Menu. You will see the display,

**DISPLAY DATA  
SELECT 1 - 1**

Pressing selection "1" will cause the display at right, to be shown briefly.

**PRINTING BUSY  
PLEASE WAIT**

Next, this message will be shown. Press "\*" to return to the sub-menu and print out other information

**SHOW INFO**

Pressing "1" will send the system configuration information (like the example below) for this CAT to a CRT or printer.

VER 4.19XX 2R  
CODE CAP = 0110  
PHONE CAP = 0100  
UNIT ID = 3  
CODE LENGTH = 3  
PIN LENGTH = 4  
SITE CODE = 010  
CR BIT TYPE = 0  
NUM RDR MOD = 2  
DISP TYPE = 2  
ENA ACC GRP = 0  
PRESS # TO VIEW  
DIRECTORY  
PASSWORD = 777777

**SHOW TIME ZONES**

Pressing "2" will send Time Zones to a CRT or printer.

| ZONE | STIME | ETIME | SMTWTFSH                 |
|------|-------|-------|--------------------------|
| 00   | 00:00 | 00:00 | -----                    |
| 01   | 00:00 | 00:00 | -----                    |
| 02   | 00:00 | 00:00 | ----- (TZ 3 –13 Typical) |
| 14   | 00:00 | 00:00 | -----                    |
| 15   | 00:00 | 00:00 | -----                    |

**4 SETUP AND PROGRAMMING**

**SHOW HOLIDAYS**

Pressing "3" will send holidays to a CRT or printer.

| HOL | MONTH | DATE |
|-----|-------|------|
| 00  | 00    | 00   |
| 01  | 00    | 00   |
| 02  | 00    | 00   |
| 03  | 00    | 00   |
| 04  | 00    | 00   |
| 05  | 00    | 00   |
| 06  | 00    | 00   |
| 07  | 00    | 00   |
| 08  | 00    | 00   |
| 09  | 00    | 00   |
| 10  | 00    | 00   |
| 11  | 00    | 00   |
| 12  | 00    | 00   |
| 13  | 00    | 00   |
| 14  | 00    | 00   |
| 15  | 00    | 00   |

**SHOW ACCESS LEVELS**

Pressing "4" will send all Access Levels to a CRT or printer.

| LEVEL | ENTRANCE        | TZ | STIME | ETIME | SMTWTFSH  |
|-------|-----------------|----|-------|-------|-----------|
| 00    | 123456789012345 | 00 | 00:00 | 23:59 | 1234567-  |
| 01    | 12—67—1-345     | 01 | 07:45 | 08:30 | -23456--- |
| 02    | 1-3—————        | 02 | 16:30 | 17:15 | -23456--- |
| 03    | -23—————        | 00 | 00:00 | 23:59 | 1234567-  |
| 04    | —————           | 00 | 00:00 | 23:59 | 1234567-  |
| 05    | —————           | 00 | 00:00 | 23:59 | 1234567-  |
| 06    | —————           | 00 | 00:00 | 23:59 | 1234567-  |
| 07    | —————           | 00 | 00:00 | 23:59 | 1234567-  |
| 08    | 123—————        | 00 | 00:00 | 23:59 | 1234567-  |
| 09    | 12—————         | 01 | 07:45 | 08:30 | -23456--- |
| 10    | 1-3—————        | 02 | 16:30 | 17:15 | -23456--- |
| 11    | -23—————        | 00 | 00:00 | 23:59 | 1234567-  |
| 12    | —————           | 00 | 00:00 | 23:59 | 1234567-  |
| 13    | —————           | 00 | 00:00 | 23:59 | 1234567-  |
| 14    | —————           | 00 | 00:00 | 23:59 | 1234567-  |
| 15    | —————           | 00 | 00:00 | 23:59 | 1234567-  |

**SHOW ACCESS GROUPS**

Pressing "5" will send Access Groups (4.2.9.5) to a CRT or printer. In this example, 3 Access Groups of the possible total of 16, are shown.

| AG | AL | ENTRANCE        | TZ | STIME | ETIME | SMTWTFSH |
|----|----|-----------------|----|-------|-------|----------|
| 01 | 01 | 12-456789012345 | 01 | 07:45 | 08:30 | -23456-- |
| 02 | 02 | 123—67—1-345    | 02 | 16:30 | 17:15 | -23456-- |
| 03 | 00 | -23—————        | 00 | 00:00 | 23:59 | 1234567- |

**SHOW ENTRANCES**

Pressing "6" displays the entrances information on the LCD display located on the front panel of the CAT. When first selected, the display will show:

| ENT NO | OPEN TIME | OPEN TONE | AUTO GROUP | LATCH TONE | AJAR TIME | SPEC RLY | OPEN PROG |
|--------|-----------|-----------|------------|------------|-----------|----------|-----------|
| 01     | 10        | 6         | 00         | 0          | 20        | 0        | 0         |
| 16     | 10        | 0         | 00         | 0          | 20        | 0        | 0         |

(Entrances 2-16 Typical)

Press "\*" to return to the Display Data menu.

**SHOW ENTRANCES BY GROUP**

Pressing "7" displays the Group information on the LCD display located on the front panel of the CAT. When first selected, the display will show qny active entrances by group.

Press "\*" to return to the Display Data menu.

**SHOW LATCH BY STATE**

Pressing "8" displays the Latch State information by Entrance and whether it was latched by Time Zone (T) Program mode (P) or Command ©

| ENT | T | P | C |
|-----|---|---|---|
| 01  |   | 1 |   |
| 16  | 1 |   |   |

(Entrances 2-16 Typical)

Press "\*" to return to the Display Data menu.

**SHOW MODULE STATE**

Pressing "9" displays Module State for any CR-4 Reader Modules attached to the CAT. It shows each of the three addresses (1, 2, 3) and a 0 or a 1 to show whether there is a module present.

| MOD | STATE |
|-----|-------|
| 1   | 1     |
| 2   | 0     |
| 3   | 0     |

In this example only 1 DR-4 is attached to the CAT.

Press "\*" to return to the Display Data menu.

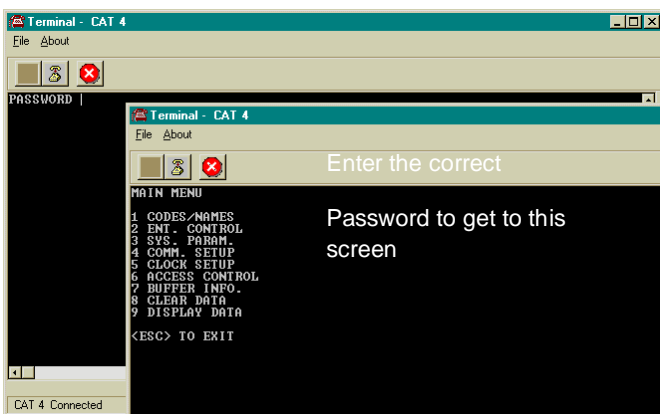
## USING A TERMINAL TO PROGRAM

It is occasionally necessary to directly program CAT / TEC units' memory. The following example uses SES's Program SELCOM 7 or newer as an example. To use other terminal programs, consult their manual for setup and use. Using Selcom 7 or newer, proceed with the following.

- 1) Select the desired site.
- 2) Click on Menu Driven Direct.
- 3) Click on Connect icon.

If connecting with a serial connection, you must press the [ESC] key for the unit to prompt you for the password. If you do not press [ESC], the unit will send transaction data to the terminal as it occurs.

If connecting with a modem, Selcom 7 or newer will call the CAT unit and prompt you for the password by changing the screen from white to black and prompting with the word PASSWORD. This is the programming password found in your System CFG menu. Key in the 6 digit password and press "Enter" You should get a selection that says Main Menu and has 9 selections available.



If you make a mistake at any time, before pressing the <Enter> key you can correct it by using the <Backspace> or <BkSp> key. This will depend on what it is called on your keyboard.

<< This shows on the display window first with a modem or after pressing <Esc> using a serial connection.

<< This shows after entering the correct password window

After you see this in the window, you have six seconds to start to press the six digit pass code. The factory default pass code is 777777. Each time you press a key, a "\*" will appear in the window to keep the pass code confidential. After entering the sixth key, press the <Enter> key. This should bring you to the main menu. If you don't press a key in any 6 second period, the CAT automatically reverts to operational mode. If during programming, you don't press any key for 60 seconds, the CAT automatically reverts to operational mode.

The choices for the main menu are:

- |                         |  |
|-------------------------|--|
| 1. CODES / NAMES        | Change Directory items (Codes, Names, Card No's, Phone No's) |
| 2. ENT. CONTROL         | Setup Entrance Timing, Open Tones, Latch Tones, etc.         |
| 3. SYSTEM PARAMETERS    | Change Title Page Text, Talk Time, PIN Length, Unit ID, etc. |
| 4. COMMUNICATIONS SETUP | Modify Baud Rate, Site Code, Password, PIN Entrance, etc..   |
| 5. CLOCK SETUP          | Check Internal Clock Time/Date, Holidays, Time Zones, etc..  |
| 6. ACCESS CONTROL       | Setup Access Groups, Levels, External Readers                |
| 7. BUFFER INFO          | View and Erase Transaction Log Buffer                        |
| 8. CLEAR DATA           | Erase Holidays, Time Zones, Reset Entrance Timing, etc...    |
| 9. DISPLAY DATA         | Examine System, Access Control and Entrance Parameters, etc. |

The nine choices above may have from 1 to 9 additional choices in a particular category. After you make a menu selection and completed the task or want to return, pressing the <Enter> key will return to the main menu.

To examine the complete Menu structure continue to the next page.

To see how to use the Codes/Names (Directory) Menu go to page 54

To use the terminal to change operating parameters, go to page 57

**MANAGER PASSCODE**

The first 3 digits of the 6 digit pass code are for programming main menu choice 1 (CODES/ NAMES) only. This is useful for on site maintenance of names and codes. This prevents the system parameters and configuration from being inadvertently modified after installation.

On the following is an overview of the menu selections possible on a CAT.

**PROGRAMMING CHOICES**

**MAIN MENU**

**1 = CODES / NAMES**

- |                      |                        |
|----------------------|------------------------|
| 1 = ADD / FIND NAME  | FOLLOW MENU            |
| 2 = FIND NAME        | 1 -6 ALPHA NUMERIC     |
| 3 = FIND PIN         | FINDS PIN              |
| 4 = FIND CARD        | FINDS CARD             |
| 5 = CODES USED       | DISPLAYS # USED        |
| 6 = SHOW ALL CODES   | CRT ONLY               |
| 7 = SHOW ALL NAMES   | CRT ONLY               |
| 8 = ENA ACC GRP = 1  | ENABLES ACCESS GROUPS  |
| 9 = ENA SPEC RLY = 1 | ENABLES SPECIAL RELAYS |

**2 = ENT. CONTROL**

- |                  |                     | FACTORY<br>DEFAULTS |
|------------------|---------------------|---------------------|
| SEL ENT 1 - 16   | SELECT ENTRANCE     |                     |
| ENT XX           |                     |                     |
| 1 = UNLOCK TIME  | 1 -99 SECONDS       | 10                  |
| 2 = UNLOCK TONE  | 0 -9 T-TONE RECV'D  | 6                   |
| 3 = AUTO GROUP   | 0 -7                | 0                   |
| 4 = LATCH TONE   | 0 - 9 T-TONE RECV'D | 0                   |
| 5 = AJAR TIME    | 0 - 99 SECONDS      | 20                  |
| 6 = SPEC RLY ENA | 0-1, (1 = ENABLE)   | 0                   |
| 7 = OPEN IN PROG | 0-1, (1 = ENABLE)   | 0                   |

**3 = SYS. PARAMETERS**

- |                 |                          |    |
|-----------------|--------------------------|----|
| 1 = TALK TIME   | 1 -99 MINUTES            | 01 |
| 2 = ALARM TIME  | 1 -99 SECONDS            | 10 |
| 3 = CODE LENGTH | 1 -6 DIR LENGTH          | 3  |
| 4 = PIN LENGTH  | 0 -6 PIN LENGTH          | 4  |
| 5 = BACK BEEP   | 0-1, (1 = ENABLE)        | 0  |
| 6 = TONE DIAL   | 0-1, (1 = T-TONE DIAL)   | 1  |
| 7 = UNIT ID     | 0 -9                     | 3  |
| 8 = STRIKE OUT  | 0-9, (0 = NO STRIKE-OUT) | 3  |
| 9 = TITLE PAGE  |                          |    |

**PROGRAMMING CHOICES continued**

**4 = COMM. SETUP**

- 1 = TERMINAL TYPE
- 2 = RS-232 BAUD
- 3 = PROGRAM. PSWD
- 4 = PIN ON ENT = 1
- 5 = SITE CODE = 000
- 6 = DIRECTORY ON =1
- 7 = KEYPAD ON = 0
- 8 = SPKR TONE = 0

|                         | FACTORY DEFAULT |
|-------------------------|-----------------|
| 0 - 1, (1 = VT100A)     | 1               |
| 0 - 6, (0=300, 6=19200) | 5               |
| 1 - 6 DIGITS            | 777777          |
| 1 DIGIT                 | 1               |
| 0 - 255                 | 000             |
| 0 - 1, (1 = ON)         | 1               |
| 0 - 1, (1 = ON)         | 0               |
| 0 - 9                   | 0               |

**9 = UPDATE LCD (CATVISION ONLY)**

**5 = CLOCK SETUP**

- 1 = SET CLOCK
- 2 = SET TIME ZONES
- 3 = SET HOLIDAYS

**6 = ACCESS CONTROL**

- 1 = SET GROUPS
- 2 = SET LEVELS
- 3 = NUM RDR MOD

SETS NUM OF EXT READER MODULES

**7 = BUFFER INFORMATION**

- 1 = VIEW LOG
- 2 = SEND LOG
- 3 = LOG SIZE
- 4 = CLEAR BUFFER

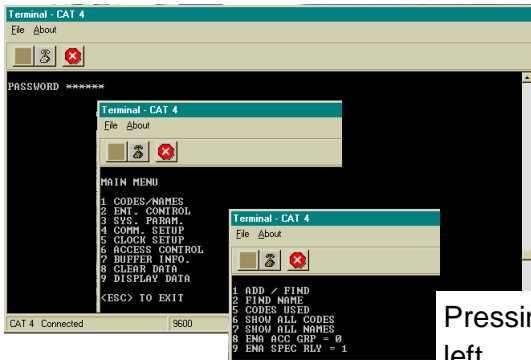
**8 = CLEAR DATA**

- 1 = SET PARAMETERS
- 2 = CLEAR TIME ZONES
- 3 = CLEAR HOLIDAYS
- 4 = CLEAR AC-LEVELS
- 5 = CLEAR AC-GROUPS
- 6 = CLEAR ENTRANCES
- 7 = CLEAN CODES

**9 = DISPLAY DATA**

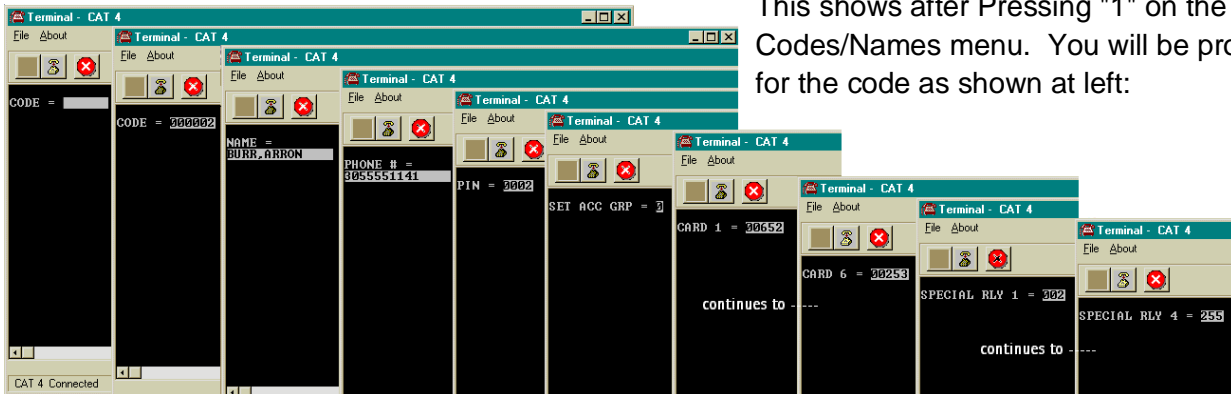
- 1 = SHOW INFO
- 2 = SHOW TIME ZONES
- 3 = SHOW HOLIDAYS
- 4 = SHOW AC-LEVELS
- 5 = SHOW AC-GROUPS
- 6 = SHOW ENTRANCES
- 7 = SHOW ENT BY GROUP
- 8 = SHOW LATCH STATE
- 9 = SHOW MODULE STATE

### CODES / NAMES



Pressing "1" (after entering the password) will show the choice at left.

### ADD / FIND NAME



This shows after Pressing "1" on the Codes/Names menu. You will be prompted for the code as shown at left:

To delete a code number, key in the code number then press the "DEL" (delete key) followed by the "Enter" key.

To delete a part of a code number, such as a phone number, PIN # or card #, go to that field by pressing the "Enter". When you reach the desired field, key in "0", and then the "Enter" key. This will delete the data in that field, but not any of the other fields associated with the code number.

**IF YOU TYPE ANY CHARACTER, IN THE FIRST POSITION OF A NAME FIELD, IT WILL DELETE ALL DATA ASSOCIATED WITH THAT CODE NUMBER.**

PHONE # =: You will be prompted for the phone number. Enter the numbers normally. For this field, letters are not possible. Press the ":" key to generate a 3 second pause.

**HIDE NAME FEATURE:** Place a pause as the first item in the phone number (ex. :5551212). The name will not display in the directory, but anyone who dials the code number will still be able to reach the resident. It is not necessary to enter phone numbers in a Cat Card but it is allowed for convenience.

PIN =: You will be prompted to enter a PIN. A PIN is a Personal Identification Number. This will allow anyone who knows this number to use the PIN entrance by entering a "\*" and this PIN code. Each name may have a PIN code. The PIN code length is from one to six digits, depending on what you selected from the system parameters menu All PIN codes must be the same length as what was selected from the system parameters menu. Enter the PIN code, and then the "Enter" to place the PIN code into memory. If you disable the PIN (PIN length = 0), this choice will not display.

**CARD X =:** Another selection in this sub-menu is the card reader numbers. The CAT system allows six card numbers per code entry. These are five digit numbers used with the card reader interface. If Facility Site code = 000, this selection may not display.

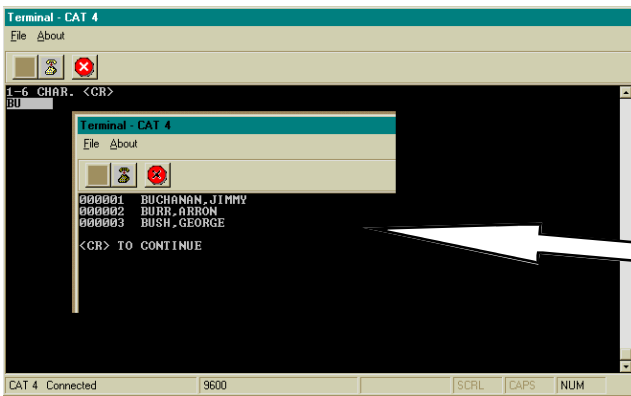
The card numbers for the six cards that will be given to the name or group must be known. Enter these numbers into memory. If you make mistakes while keying in the number, press the back arrow. This will backspace over the mis-keyed digit. After entering each Card code number, press the "Enter" or \* key to place the Card code number into memory.

**SPEC RLY X =:** The last selection in this sub-menu is the special relay numbers. The CAT system allows four external relays to be activated per code entry. These are three digit numbers used with the card reader interface. If Facility Site code = 000, this selection may not display.

The card numbers for the six cards that will be given to the name or group must be known. Enter these numbers into memory. If you make mistakes while keying in the number, press the back arrow. This will backspace over the mis-keyed digit. After entering each Card code number, press the "Enter" key to place the Card code number into memory.

**FIND NAME**

To select the find name function, press "2" from the Codes/Names menu. You will be prompted for 1 - 6 characters. Select characters in the same manner that you programmed names into memory. When you have entered all desired characters, press the "Enter" key.

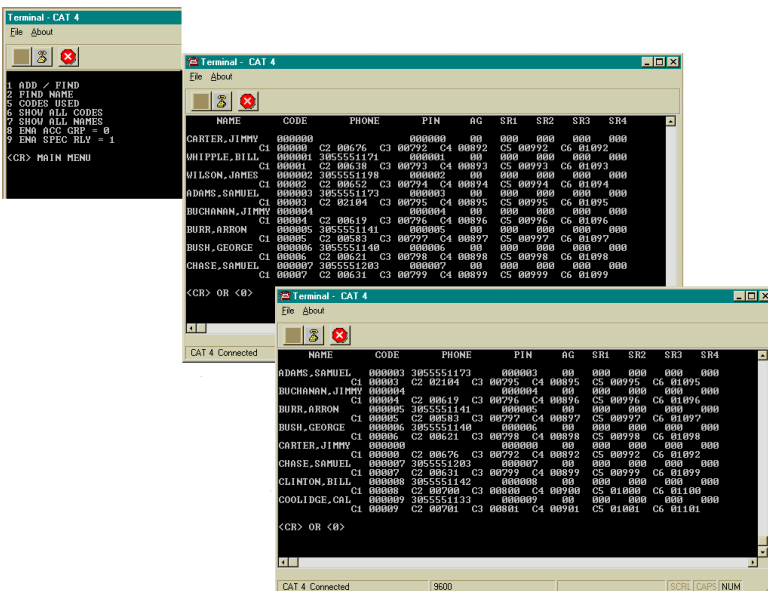


This message will display whatever code number matches the letters selected. If there is more than one name with similar letters, pressing the "Enter" key will display additional code numbers that meet the selection criteria.

If there is no match, you will be prompted to press "Enter" or \* key from the terminal. Pressing the "Enter" key will return to sub-menu 1 (See section on Codes / Names).

**SHOW ALL CODES**

**SHOW ALL NAMES**



**Codes:** Select this sub-menu from the Codes/Names menu by pressing "8". This selection will list code numbers and all data associated with code numbers, sorted by CODE NUMBER in ascending order. It sends this data out to the computer screen.

**Names:** Select this sub-menu from the Codes/Names menu by pressing "9". This selection will list code numbers and all data associated with code numbers, sorted by NAMES in ascending order. It sends this data out to the computer screen.

**ENABLE ACCESS GROUPS**

**ENA ACC GRP = 0**

Access Groups allow more control of a CAT by adding time zone control and increased card reader control. To enable Access Groups from the factory default of 0, press "8" from the Codes / Names menu to get this sub-menu. Press "1" to enable Access Groups, and press the "Enter" key. This will return you to the Codes / Names menu.

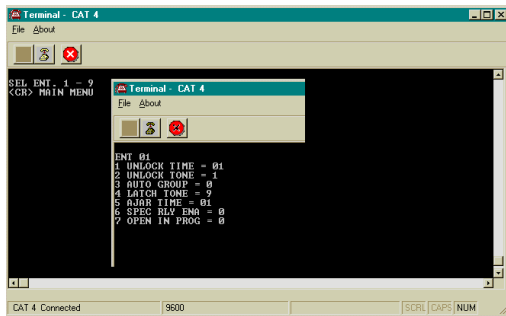
**ENA SPEC RLY =**

Special Relay option allows more control with a CAT by adding external relay control and adds four relay numbers to each directory entry.

To enable Spec Rly from the factory default of 0, press "9" from the Codes / Names menu to get this sub-menu. Press "1" to enable Spec Rly, and press the "Enter" key. This will return you to the Codes / Names menu.



**ENTRY CONTROL**



The Entry Control menu comes with factory defaults that should be sufficient for most installations. These default values are shown on Pg. 51 and 52 . Some functions work with options that may not be present on your CAT unit. To get the menu at left, press "2" and then select the entrance to modify, The CAT unit can support up to 16 entrances with options installed.

**ENTRANCE XX UNLOCK TIME**

Press "1" from the Entry Control menu to set the time in seconds from 1 to 99 seconds. This is the length of time the door control relay for door 1 will be energized. The factory default is 10 seconds. A good rule of thumb for entry time is 3 seconds plus 2 seconds for every step from the CAT to the entrance being controlled. To change time, key in the time desired and press the "Enter" key. You will be returned to the Entry Control menu.

**ENTRANCE XX UNLOCK TONE**

The Entrance XX tone refers to the Touch-Tone™ number from a telephone that must be pressed to energize the door control relay. This relay will be energized for whatever length of time was selected. Rotary or pulse type telephones must dial any number "6" or greater to energize the door control relay. This will energize only the primary door control relay. To change the number from the default setting of 6 to another number, press "2" from the Entrance 1 Control menu. Select the new number (from 1 - 9) and press the "Enter" key. You will be returned to the Entry Control menu.

**NOTE: SELECTING A "0" DISABLES ENTRANCE XX UNLOCK TONE FEATURE.**

**ENTRANCE XX AUTO GROUP**

The Entrance XX Auto Group refers to the group of Access levels and time zones that allow the entrance to automatically open on given days for the hours that match the time zone programmed. . To change the number from the default setting of 0 to another number, press "3" from the ENT 1 Control menu. Select the new number (from 0 - 9) and press the "Enter" key. You will be returned to the Entry Control menu. **SELECTING A "0" DISABLES THE AUTO GROUP FUNCTION.** Selecting a number from 1 - 9 allows that number to automatically open the door on the days and times set for that group.

## 5 TERMINAL PROGRAMMING

### ENTRANCE XX LATCH TONE

The Entrance XX Auto Group refers to the group of Access levels and time zones that allow the entrance to automatically open on given days for the hours that match the time zone programmed. To change the number from the default setting of 0 to another number, press "3" from the ENT 1 Control menu. Select the new number (from 0 - 9) and press the "Enter" key. You will be returned to the Entry Control menu. SELECTING A "0" DISABLES THE AUTO GROUP FUNCTION. Selecting a number from 1 - 9 allows that number to automatically open the door on the days and times set for that group.

**NOTE: IF ENT XX TONE AND ENT XX LATCH ARE THE SAME NUMBER, THE ENT 1 RELAY WILL NOT LATCH OR TIME OUT. IT WILL ENERGIZE BRIEFLY, AND THEN DE-ENERGIZE.**

### ENTRANCE XX AJAR TIME

Press "5" from the Entry Control menu to set the time the entrance may be left ajar before energizing the optional alarm relay. Present with 2 Entrance units installed with this CAT system. Also in the first two entrances in a four entrance system when the alarm function is turned off by setting alarm time to zero. Default is 0 (Off)

```

Terminal - CAT 4
File About
SEL ENT. 1 - 9
<CR> MAIN MENU

Terminal - CAT 4
File About

ENT 01
1 UNLOCK TIME = 01
2 UNLOCK TONE = 1
3 AUTO GROUP = 0
4 LATCH TONE = 9
5 AJAR TIME = 01
6 SPEC RLY ENA = 0
7 OPEN IN PROG = 0

CAT 4 Connected 9600 SCRL CAPS NUM

```

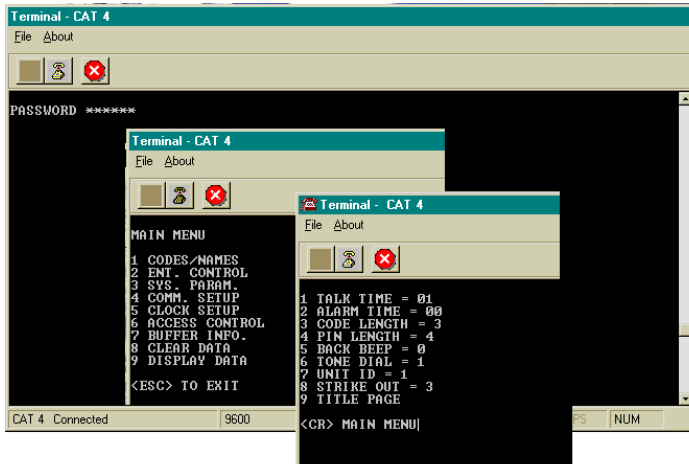
### ENTRANCE XX SPECIAL RELAY ENABLE

Press "1" from the Entry Control menu to enable the auxiliary relays with this entrance. If installed with this CAT system, you may want the the relays to activate with certain entrances only. Default is 0 (Off)

### ENTRANCE XX OPEN IN PROGRAMMING MODE

Press "1" from the Entry Control menu to enable this Entrance to open during programming. During programming, the keypad and card readers are inactive, preventing entry. Setting this entry to One causes this entrance to automatically open during programming.

**SYSTEM PARAMETERS**



The System Parameters menu comes with factory defaults that should be sufficient for most installations. These default values are shown on Pg. 51 and 52. Some functions work with options that may not be present on your CAT. For example, selection 2 Alarm Time is not valid unless the optional alarm control relay (OPTK3R) has been purchased. To get the menu at left, press "3" from the main menu.

**TALK TIME**

Talk Time is the time in minutes from 1 - 99 minutes that the CAT remains connected after dial out. In areas of the country where rate usage is a concern, the factory default is 1 minute. For other applications, the talk time can be adjusted upward by pressing "1" from the System Parameters menu to get this sub-menu. Key in the desired number (must be 2 digits) and press "Enter" key. This will return you to the System Parameters menu.

**ALARM TIME**

Alarm time is the time in seconds that the optional alarm relay control (OPTK3R) is energized. To change the alarm time from the factory default of 10 seconds, press "2" from the System Parameters menu to get this sub-menu. Key in the desired number (must be 2 digits) and press "Enter" key. This will return you to the System Parameters menu.

**CODE LENGTH**

Code length is the number of digits from 1 to 6 entered on the keypad to dial a phone from the CAT. To change the code length from the factory default of 3 digits, press "3" from the System Parameters menu to get this sub-menu. Key in the desired number from 1 - 6 and press "Enter" key. This will return you to the System Parameters menu.

**PIN LENGTH**

PIN length is the number of digits from 0 to 6, entered from the keypad to enter a PIN code from the CAT. To change the PIN length from the factory default of 4 digits, press "4" from the System Parameters menu to get this sub-menu. Key in the desired number from 0 - 6. SELECTING PIN LENGTH = "0" DISABLES THE PIN FUNCTION. Press "Enter" key to return to the System Parameters menu.

**BACK BEEP**

Back Beep is a background tone that will "beep" every 10 seconds when enabled. This allows a called party to determine if someone called from a CAT. To enable the back beep from the factory default of 0, press "5" from the System Parameters menu to get this sub-menu. Press "1" to enable Back Beep, and press "Enter" key. This will return you to the System Parameters menu.

**TONE DIAL**

Tone dial selects whether the CAT dials out with Touch-Tones™, or uses pulses, like rotary dial phones. In areas of the country where Touch-Tone™ is not available, tone dial may be disabled. To disable the Tone Dial from the factory default of 1, press "6" from the System Parameters menu to get this sub-menu. Press "0" to disable Tone Dial, and press "Enter" key. This will return you to the System Parameters menu.

## Unit ID or Ring Count

Unit ID or Ring Count is the number of rings the CAT listens to before it answers. This is useful for the software (Selcom 7 or newer ) to identify that it is connected to the correct unit and operating the door control relay without being called, or for Remote Programming. If ring count is 0, the CAT will not answer at all. To change the ring count from the factory default of 3 rings, press "7" from the System Parameters menu to get this sub-menu. Key in the desired number from 0 - 9 and press "Enter" key. This will return you to the System Parameters menu.

## STRIKE OUT

Strike Out refers to the number of incorrect PIN code entries that can be made before the CAT "locks up". Once the CAT "locks up", it ignores any key entries for 60 seconds. This is to discourage attempts to guess PIN codes. Select Strike Out from the Door Control menu by pressing "9". To change from the factory default setting of 3, press any key from 0 - 9 and then press "Enter" key.

**NOTE: IF 0 IS SELECTED, THE TEC WILL PERMIT UNLIMITED ATTEMPTS TO GUESS PIN CODES.**

If you enter an invalid PIN code, an error message like the one at right, will display. Wait until the title screen (if selected) appears, or until the error message goes away before re-keying the PIN code.

**INVALID PIN  
TRY AGAIN**

If the number of strike outs is exceeded, an error tone will sound. A message like the one at right, will be shown on the front display of the CAT.

**BUSY PLEASE WAIT**

If you enter a valid PIN code, the door control relay will energize and the open message shown at right, will display on the CAT for approximately 2 seconds and then revert back to the title page.

**OPEN**

## TITLE PAGE

The Title Page has two lines of up to sixteen characters per line, including punctuation. The Title Page can be programmed from the keypad in the same manner as names were programmed.

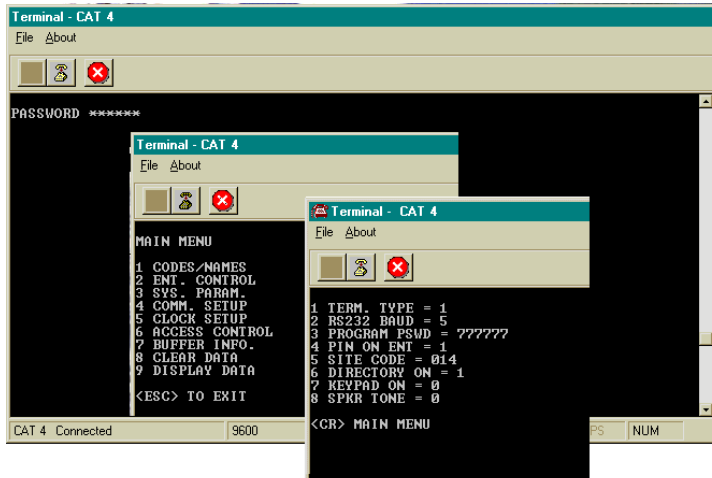
The CAT comes with a title page that says "PRESS # TO VIEW DIRECTORY", until the title page is reprogrammed. To program the Title Page from the factory default of "PRESS # TO VIEW DIRECTORY", press "9" from the System Parameters menu to get this sub-menu. Key in the desired characters. Press BkSpc to backspace one character. When the first line is complete, press "Enter" key to advance to the second line.

## TITLE PAGE additional Line

Continue the second line as required. If you require any modifications of line 2, then line 1 must be re-entered first. After completion, press "Enter" key. This will return you to the System Parameters menu.

**NOTE: REMEMBER TO PRESS <Enter> KEY AFTER LAST CHARACTER, OR IT WILL NOT BE PROGRAMMED.**

**COMMUNICATIONS SETUP**



The Communications Setup menu comes with factory defaults that should be sufficient for most installations. These default values are shown on Pg. 51 and 52. Some functions are used with options that may not be present on your CAT. For example, selection 2 RS-232 Baud is not valid unless you purchase the optional serial printer interface (OPTKPRT). To get the right menu, press "4" from the main menu.

**TERMINAL TYPE**

The CAT is designed to respond to terminals that follow VT-100B terminal control codes. It also can respond to "dumb terminal" codes. To disable the Terminal Type from the factory default of 1, press "1" from the Communications Setup menu to get this sub-menu. Press "0" to disable VT-100B emulation, and press "Enter" key.

**RS-232 BAUD**

The RS-232 Baud refers to the rate of speed for serial communications, such as a printer or terminal would need. This function requires the optional printer interface (OPTKPRT). The different rates are:

- |                                      |     |       |      |
|--------------------------------------|-----|-------|------|
|                                      | 0 = | 300   | BAUD |
|                                      | 1 = | 600   | BAUD |
|                                      | 2 = | 1200  | BAUD |
| Protocol for serial devices is fixed | 3 = | 2400  | BAUD |
| at 8 bits, No parity, 1 stop bit.    | 4 = | 4800  | BAUD |
| (8,N,1)                              | 5 = | 9600  | BAUD |
|                                      | 6 = | 19200 | BAUD |

To change the RS-232 Baud from the factory default of 5, press "2" from the Communications Setup menu to get this sub-menu. Next, select the number corresponding to the desired baud, and press "Enter" key. This will return you to the Communications Setup menu.

**PROGRAM PASSWORD**

The CAT leaves the factory with a default password of 777777. The Password may be alphanumeric (1 - 6 characters) if programmed from the terminal. From the front keypad, only numbers (1 - 6 digits) are supported. This provides an additional level of security if you connect a terminal to a CAT. It is possible to create passwords that can not be accessed from the front keypad. To change the Program Password from the factory default of 777777, press "3" from the Communications Setup menu to get this sub-menu. Key in the desired 6 digits for the new password, and press "Enter" key. You will be returned to the Communications Setup menu.

**NOTE: 1<sup>st</sup> 2 DIGITS OF PROGRAM PASSWORD ARE THE CONTROL PASSWORD, FOR REMOTE CONTROL OF CAT UNIT (SUCH AS ENTRANCE LATCH). 1<sup>st</sup> 3 DIGITS OF PROGRAM PASSWORD ARE THE MANAGERS PASSWORD THAT ALLOWS ONLY CODE, NAME, PHONE, PIN, CARD, AND GROUP CHANGES.**

**PIN ON ENTRANCE**

This function determines which door control relay is activated when a PIN code (or a Rotary "6" from a called unit) is received by the CAT. To change the number from the default setting of 1 to another number, select "4" from the main menu. Select "4" from this sub-menu. Select the new number (from 1 — 4) and press the "Enter" key. You will be returned to the COMM. SETUP menu.

The Site Code (sometimes called a Facility Code) is used with the Card Readers. Site Code is used to identify the group of cards being used with a particular CAT. This keeps cards on one facility from being used in another facility. The range of Site Codes is from 000 - 255. To change the Site Code from the factory default of 000, press "5" from the Communications Setup menu to get to this sub-menu. Key in the desired 3 digits corresponding to the Site Code of the cards you have purchased, and press "Enter" key.

**NOTE: IF SITE CODE = "000" THE CARD READER FUNCTION IS DISABLED, AND CARD # WILL NOT APPEAR IN CODE/NAMES PROGRAMMING MENU . IF SITE CODE IS SET TO 255, THE SITE CODE ON THE CARD WILL BE IGNORED, AND SECURITY OF CARDS WILL BE REDUCED.**

### DIRECTORY ON / OFF

This selection allows all directory names to be suppressed from the display. The codes keyed in will still display. All names will still print to the optional printer (OPTKPRT). To disable Directory from the factory default of 1, press "6" from the Communications Setup menu to get this sub-menu. Press "0" to disable Directory, and press "Enter" key.

### KEYPAD ON / OFF

This selection allows the keypad to remain active after dial out. This is useful for answering machines, voice mail, and other functions requiring a Touch-Tone™ signal after communications are established. To enable keypad from the factory default of 0, press "7" from the Communications Setup menu to get this sub-menu. Press "1" to enable the keypad, and press "Enter" key. Only the number keys are active, \* and # will not work. Press "Enter" key. This will return you to the System Parameters menu.

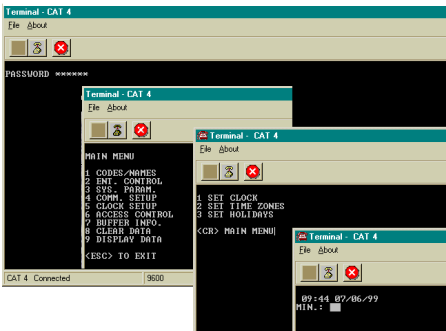
### SPEAKER TONE

This selection allows the speaker to be activated for remote control from a telephone in order to listen in. When enabled, the CAT has an open audio channel to permit conversation from someone calling in to the CAT (the microphone is also enabled at the same time). To enable speaker from the factory default of 0 (disabled), press "8" from the Communications Setup menu to get this sub-menu. Select a digit from 1 to 9 to enable speaker, and press "Enter" key. This will return you to the Communications Setup menu.

### UPDATE LCD (CATVISION ONLY)

This selection allows information in the CAT memory to be transferred to the display memory. Press 9 to enable update and then press "Enter" key. This will return you to the Communications Setup Menu.

### CLOCK SETUP



### SETTING TIME / DATE

**MIN.:** Select "1" to set the time & date. You will be prompted to enter the current time in minutes as a one or two digit number (0 to 59). If you make a mistake, press <BkSpc> to backspace one character. After the minutes are entered, press the "Enter" key.

**HOUR:** Enter a 1 or 2 digit number (0 to 23) to set the hour. If a mistake is made, press <BkSpc> to backspace each character. After the hour is entered, press the "Enter" key.

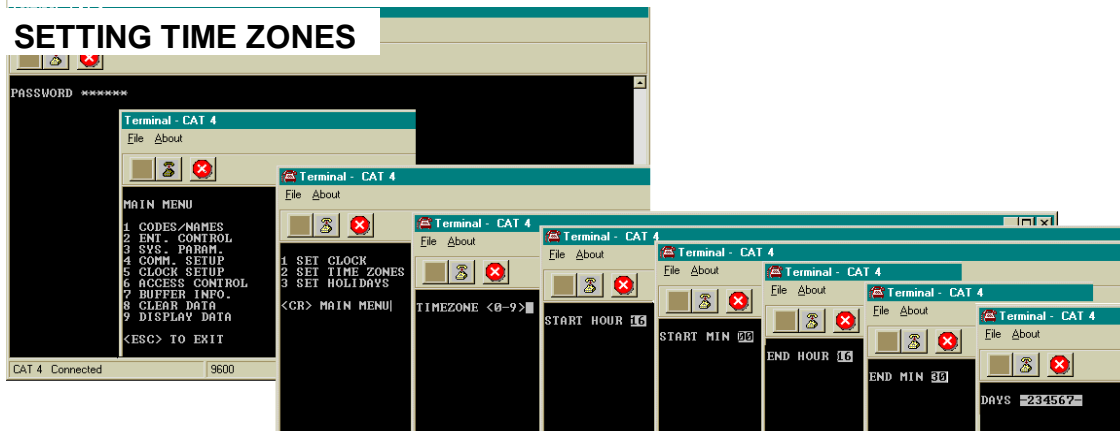
**DAY, 1..7:** This is NOT the day of the month. This is a number which corresponds to the day of the week. Enter a number corresponding to the day of the week. Sunday is "1", Saturday is "7" and so forth. If you make a mistake, press <BkSpc> to backspace one character. After the day of the week is entered, press the "Enter" key.

**NOTE: ONCE TIME/DATE PROGRAMMING HAS BEGUN, ALL SELECTIONS MUST BE COMPLETED FOR CHANGES TO TAKE EFFECT.**

**DATE:** Enter a 1 or 2 digit number to set the day of the month. If a mistake is made, <BkSp> to backspace one character. After the day is entered, press the "Enter" key.

**MONTH:** Enter a 1 or 2 digit number to set the month. If you make a mistake, <BkSp> to backspace one character. After the month is entered, press the "Enter" key.

**YEAR:** Enter a 2 digit number to set the year. If you make a mistake, <BkSp> to backspace one character. After the year is entered, press the "Enter" key.. You will be returned to the Clock Setup menu.



A time zone is a period of time that limits when the CAT is valid. Use this to control access to a facility, when a given condition is valid, based on:

- 1) The time of day.
- 2) The day of the week.
- 3) Whether or not the day of the week is a Holiday.

A time zone is valid only within a 24 hour period that begins at midnight. A time zone has a start time and an ending time. This can be as short as two minutes, or as long as 24 hours. This time period is valid in combinations from 1 to 7 days and Holidays. There are 16 times zones numbered 0 - 15 available for use on a CAT. Not all time zones can be reached from this menu. To access all of them you must use Selcom 7 or newer. Holidays may be set up at any time. A time zone can have valid Holidays, or invalid Holidays. A time zone can be set that is only valid on Holidays, for applications that require different hours of access on Holidays.

From the main menu, select "5" for clock setup, then "2" for time zone.

**TIMEZONE <0-9>:** You will be prompted to select a time zone between 0 and 9. If you make a mistake, press BkSp to backspace one character. Once programming of a time zone is begun, all choices must be keyed in or you will be returned to the beginning of the time zone menu.

**START HOUR 00:** After the time zone is selected, press the "Enter" key. You will be prompted to key in the hour. This is a 1 or 2 digit number. The hour is expressed in 24 hour format (e.g., 2:25 P.M. is keyed in as 14:25), from 00:00 to 23:59.

If you make a mistake, press <BkSp> to backspace one character. After the hour is entered, press the "Enter" key.

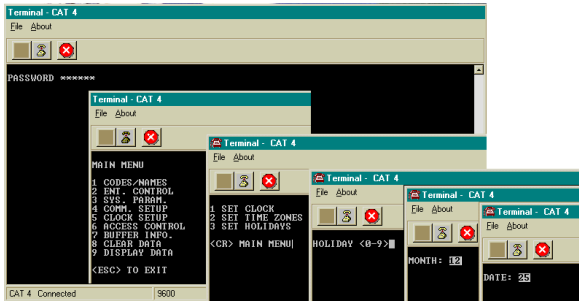
**START MIN 00:** You will be prompted to key in the minute. This is a 1 or 2 digit number between 00 and 59. If you make a mistake, press <BkSp> to backspace one character. After the minute is entered, press the "Enter" key.

**STOP HOUR 00:** . You will be prompted to key in the stop hour. This is a 1 or 2 digit number. The hour is expressed in 24 hour format (e.g., 2:25 P.M. is keyed in as 14:25), from 00:00 to 23:59.

If you make a mistake, press <BkSp> to backspace one character. After the hour is entered, press the "Enter" key.

**STOP MIN 00:** You will be prompted to key in the stop minute. This is a 1 or 2 digit number between 00 and 59. If you make a mistake, press <BkSp> to backspace one character. After the minute is entered, press the "Enter" key.

SETTING HOLIDAYS



Holidays can be used to keep time zones valid (or not) on Holidays, or by setting a different time zone to be valid for a different period of time on a Holiday. There are 16 Holidays numbered 0 - 15 available for use on a CAT. Not all holidays can be reached from this menu. Use Selcom 7 or newer to set all the holidays.

**HOLIDAY <0-9>:** Select "3" to set the Holiday. Holidays may be entered in any order. You will be prompted to select a Holiday between 0 and 9. If you make a mistake, press <BkSpc> to backspace one character.

**MONTH:** After the Holiday is selected, you will be prompted to key in the month. This is a 1 or 2 digit number. If you make a mistake, press <BkSpc> to backspace one character. Press the "Enter" key after the month is entered.

**DATE:** After the month is selected, you will be prompted to key in the date. This is a 1 or 2 digit number between 1 and 31. If you make a mistake, press <BkSpc> to backspace one character. Press the "Enter" key after the date is entered.

This table may be used to help keep track of which Holidays are required for this installation. Writing them down in the table provided will help reduce programming entry errors. Remember, Holidays may be entered in any order.

| Holiday | Month | Day | Holiday |
|---------|-------|-----|---------|
| 0       |       |     |         |
| 1       |       |     |         |
| 2       |       |     |         |
| 3       |       |     |         |
| 4       |       |     |         |
| 5       |       |     |         |
| 6       |       |     |         |
| 7       |       |     |         |
| 8       |       |     |         |
| 9       |       |     |         |
| 10      |       |     |         |
| 11      |       |     |         |
| 12      |       |     |         |
| 13      |       |     |         |
| 14      |       |     |         |
| 15      |       |     |         |

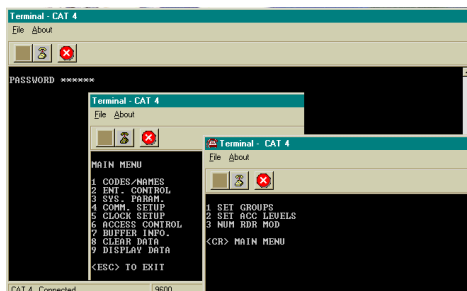
Access Control from a CAT is based on four general sets of conditions:

- 1) When a resident (who has been called from a CAT) keys in a valid door tone.
- 2) When a valid PIN code is presented at a door that is valid:
  - a) based on the time of day.
  - b) based on the day of week.
  - c) based on whether the day of the week is a Holiday or not.
- 3) When a valid card number is presented at a door card reader which is valid:
  - a) based on the card reader next to the entrance chosen for access.
  - b) based on the time of day.
  - c) based on the day of week.
  - d) based on whether the day of the week is a Holiday or not.
- 4) When an entrance group is valid, using automatic un-lock and re-lock.

The CAT has many combinations of access control based on these criteria. This versatility can be confusing, unless the access has been carefully defined BEFORE programming begins. The order in which to plan for an installation should be as follows:

1. Define access area. One entrance, or up to 16?
2. Define time zones.
  - What times is access allowed?
  - For Whom is access allowed? Everybody, or different groups of people?
  - What days is access to be allowed?
  - Are the time zones the same for different days, or different for different days?
  - Are Holidays used, and do Holidays require different time zones?
3. Define Access levels.
  - What time zone is valid for a given access level?
  - Which door is valid for an access level?
  - Is more than one door valid for a time zone?
4. Define Access Groups.
  - What combinations of access levels are in a group?
  - Is the access group to be used for PIN codes and Cards?
  - Is the access group to be used for automatic un-lock and re-lock?

The menu choices in this manual follow the order in which they appear on a CAT. These choices are in reverse order from how a site installation is typically planned. There are tables associated with each section. They are there to help with site planning. It is strongly recommended they be completely filled out BEFORE attempting any programming.



From the main menu select "6" for Access Control.

## ACCESS GROUPS

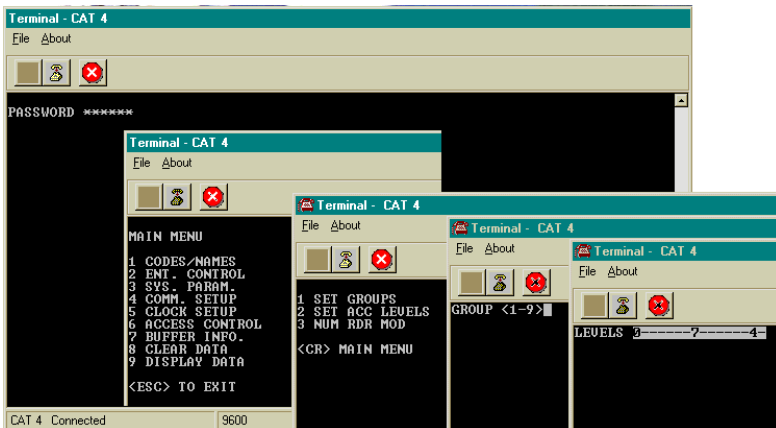
Access Groups are used to allow groups of individuals card or PIN access by assigning a level or combination of levels to their group. Access Group Zero is predefined as an unlimited group. Group Zero allows access 24 hours a day, ALL days of the year. Access Groups are assigned to the individuals in the Directory. If you do not assign a Group to an individual during the directory entry, Zero (0) is assigned by default.

Since Access Levels can have different Time Zone and entrance combinations, this creates many combinations for control of an entrance based on PIN, Card, or time of day.

The second application for Access Groups is for automatic Unlocking (Opening) and Relocking (Closing) Entrances. If an Access Group has no valid Access Levels assigned, it may be used to prevent any entrance access at all.

### SELECTING AN ACCESS GROUP

Select "6" from the main menu. Press the "Enter" from a terminal. Select "1" from this sub-menu. You will be prompted to select a group from 1 - 9 as shown below. Press the "Enter" key. Not all Groups can be reached from this menu. Use Selcom 7 or newer to set or use all the Groups.

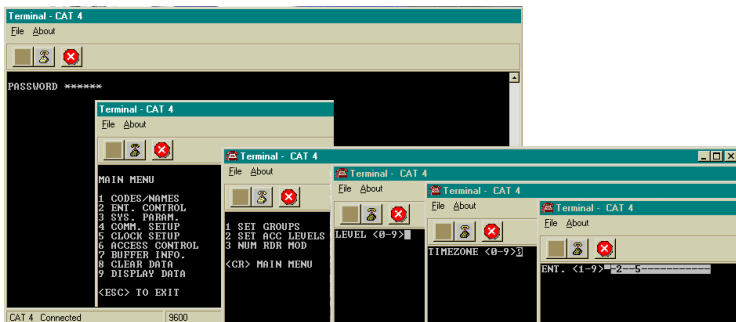


### SELECTING ACCESS LEVELS IN A GROUP

After selecting a group, you will be prompted for levels. These are any combinations from 0 - 15 in any order. To change access levels for a given group, Not all levels can be programmed from this menu. Use Selcom 7 or newer to set all levels.

Select "6" from the main menu. Press the "Enter" key. Select "2" from this sub-menu. You will be prompted to select levels from 0 - 9 as shown above. Key in the new levels desired and press the "Enter" key. To delete access levels entirely use Clear Access Levels. Not all Levels can be reached from this menu. Use Selcom 7 or newer to set or use all the levels in the Groups

### ACCESS LEVELS



Access Levels are used to attach Time Zones to specific Entrances. Only one Time Zone is allowed per Access Level. Any combination of entrances may be selected, but at least one entrance must be selected, or the affected Access Level will not function. From one to sixteen entrances may be assigned to an Access Level. Different combinations of control may be created. Do this by assigning one entrance a Time Zone

and an Access level, and another entrance the same Time Zone but a different Access Level. Now these Access Levels can be grouped in different combinations for the Access Groups.

### SELECTING A TIME ZONE

You will be prompted to select a time zone from 0 - 9 as shown at left. Select the desired zone number and press the "Enter" key. Not all time zones can be reached from this menu. Use Selcom 7 or newer to set all the time zones.

### SELECTING A ENTRANCE

You will be prompted to select a door 1 - 9 as shown at left. Select the desired door combination and press the "Enter" key. Your system may not have all of the entrances. Not all entrances can be reached from this menu. Use Selcom 7 or newer to set or use all the entrances.

Use the table across to help keep track of which Access Levels are required for this installation. Writing them down in the table provided will help reduce programming entry errors.

ACCESS LEVELS continued

| ACCESS | TIME |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9      |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10     |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11     |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12     |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13     |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14     |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15     |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**AUTOMATIC UNLOCK AND RELOCK BY TIME ZONE**

The following example shows how a business might keep two entrances open during peak employee traffic, and secure those two entrances at all other times. Time Zone 1 is valid for one half hour in the morning, Monday through Friday. Time Zone 2 is valid for one half hour in the afternoon, Monday through Friday. Time Zone 0 is valid all the time, except Holidays.

Each Time Zone is assigned to a different Access Level. Both entrances are selected in the Access Levels. The morning and the afternoon Access Levels are grouped together in Access Group 1.

By setting Entrance Group 1 to Access Group 1, the entrance will automatically unlock during peak traffic, and relock at all other times. Employees whose PIN codes or cards are set to Access Level 0, can open the entrance at all other times. If employees try to use their PIN code while the entrances are unlocked, the display on the CAT will show "OPEN".

**Time Zone Setting**

| Time Zone | Start Time |         | Stop Time |         | Day of the Wk |    |    |    |    |    |    |     |  |
|-----------|------------|---------|-----------|---------|---------------|----|----|----|----|----|----|-----|--|
|           | Hours HH   | Min. MM | Hours HH  | Min. MM | SU            | MO | TU | WE | TR | FR | SA | Hol |  |
| 0         |            |         |           |         |               |    |    |    |    |    |    |     |  |
| 1         | 07         | 45      | 08        | 15      |               | X  | X  | X  | X  | X  |    |     |  |
| 2         | 16         | 45      | 17        | 15      |               | X  | X  | X  | X  | X  |    |     |  |

**Access Level Setting**

- AL1 (USES TIME ZONE 1 MORNING HOURS M - F) , Entrances 1 & 2
- AL2 (USES TIME ZONE 2 AFTERNOON HOURS M - F), Entrances 1 & 2

**ENTRANCE**

| ACCESS LEVEL | TIME ZONE | 1 | 2 | 3 | 4 | 5 | 6 |
|--------------|-----------|---|---|---|---|---|---|
| 0            |           |   |   |   |   |   |   |
| 1            | 1         | X | X |   |   |   |   |
| 2            | 2         | X | X |   |   |   |   |

EXAMPLE OF AN AUTOMATIC UNLOCK APPLICATION . . .Continued. . .

AG1 (USES ACCESS LEVELS 1 AND 2 )

THEN USE AG1 TO AUTO UNLOCK ENTR. 1 AND ENTR. 2

| Access Levels |               |               |  |  |  |
|---------------|---------------|---------------|--|--|--|
| ACCESS        |               |               |  |  |  |
| 0             | Always Active | Always Active |  |  |  |
| 1             | X             | X             |  |  |  |
| 2             |               |               |  |  |  |

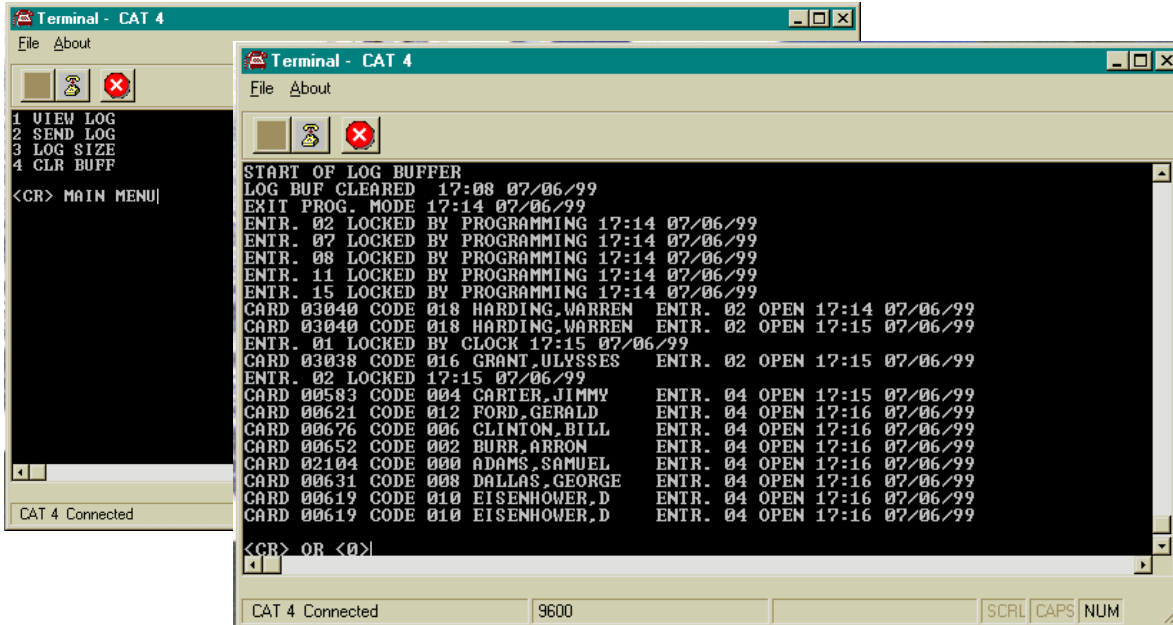
These are shorter versions of the other tables in this manual. Start by defining which entrance is to be unlocked, for how long, on which days. This is the time zone data. Next, define which combinations of doors are controlled by a time zone. This is an access level. Last, group access levels into an access group. The Entrance Group is that access group number.

TRANSACTION BUFFER INFORMATION

The transaction buffer stores any event that would normally create a logging printer message. For examples of report messages, see below. The size of the transaction buffer depends on the capacity of the CAT. Usually, the smaller the capacity the larger the transaction buffer space. After a transaction buffer becomes full, it begins to overwrite the oldest event in the transaction buffer storage space.

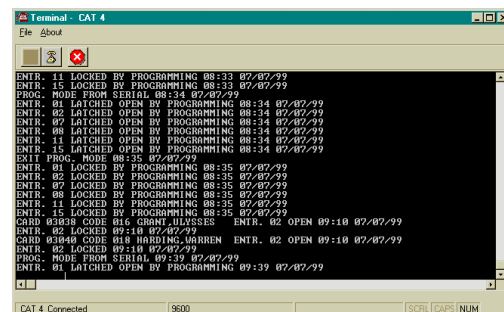
VIEW LOG

Press "7" then "1" from the main menu to get the selections shown below. View Log will display the Log one page at a time. Press "0" to stop and then "Enter" key to return to the Main menu

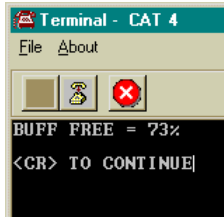


SEND LOG

Pressing "2" will send all logging data. This allows the log to be viewed from start to finish from the terminal. The log will be shown non-stop . **CAUTION:** No entry is accepted until the complete log is sent.

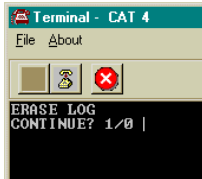


## TRANSACTION BUFFER FREE



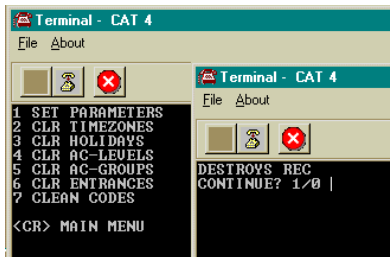
Pressing "3" will only show the approximate amount of space remaining in the buffer. A message similar to left will appear.

## CLR (Erase) BUFFER



**CLR BUFFER:** Press "4" to get to the selection at left. Pressing a "1" then "Enter" key clears all transactions stored in the buffer for the CAT. If you press a "1" by mistake, press BkSpC to backspace over the "1". Press "0" then "Enter" key to return to the main menu. If you press any key other than "1", the CAT will sound a long error beep. Press "Enter" key to return to the Buffer Information menu. Press "Enter" key again, to return to the Main menu.

## CLEAR DATA



The Clear Data selections enable you to reset the unit to zero values or factory defaults if zero would not be acceptable. A warning message requiring you to press "1" is present for each action. Press "Enter" key to return to the Main menu.

## SET PARAMETERS

Pressing "1" returns all Entrance Control, System Parameters and Communication Setup settings to the SES factory defaults. These defaults are shown on Pg. 51 and 52. Press "1" to reset the parameters. Press "Enter" key to return to the Main menu.

## CLEAR TIME ZONES

Pressing "2" causes this selection to clear any previously programmed time zone and resets all times to 00:00. Press "1" to reset the parameters. Press "Enter" key to return to the Main menu.

## CLEAR HOLIDAYS

Pressing "3" causes this selection to clear all Holidays from memory. This is useful for Holidays that are observed on different days from year to year, such as Thanksgiving or Labor Day. Press "1" to reset the parameters. Press "Enter" key to return to the Main menu.

## CLEAR ACCESS LEVELS

Pressing "4" causes this selection to clear all access levels of any previously programmed data. Press "1" to reset the parameters. Press "Enter" key to return to the Main menu.

## CLEAR ACCESS GROUPS

Pressing "5" causes this selection to clear all access groups of any previously programmed data. Press "1" to reset the parameters. Press "Enter" key to return to the Main menu.

## CLEAR ENTRANCES

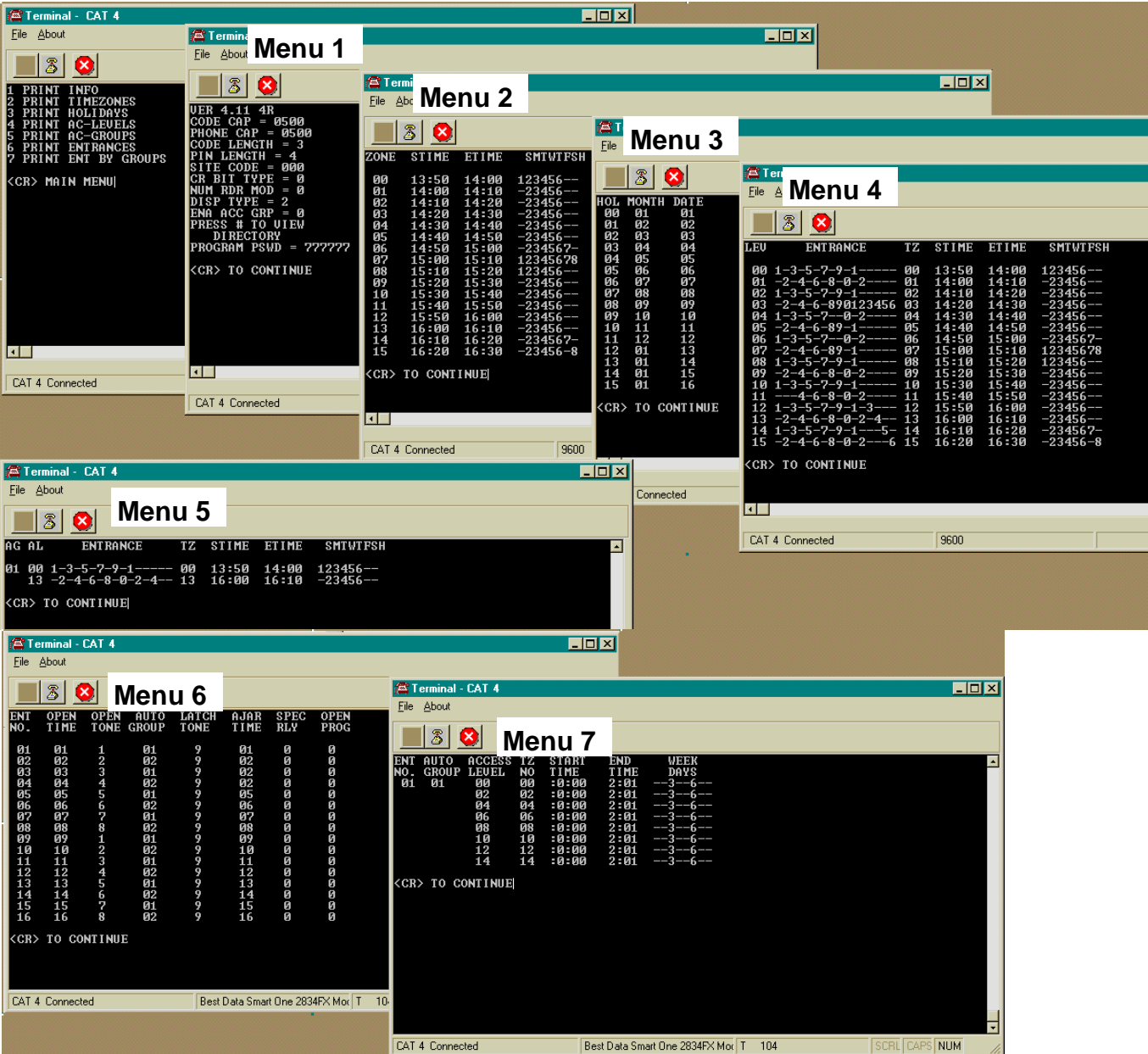
Pressing "6" causes this selection to clear all entrance data. Press "1" to reset the parameters. Press "Enter" key to return to the Main menu.

## CLEAN CODES

Pressing "7" causes this selection to clean all corrupted directory data. Press "1" to reset the parameters. Press "Enter" key to return to the Main menu.

DISPLAY DATA

Pressing the menu election "9" is used with a terminal for sub-menu choices 1 through 5. Data is sent to the screen. It is used to print various parameters, such as Time Zones, Holidays, Access Levels, Access Groups and general Information. Sub-menu choices 6 through 9 send data to the LCD display on the front panel of the CAT. To select this function, press "9" from the Main Menu. You will see the displays, shown below



### FCC REQUIREMENTS

The Federal Communications Commission (FCC) has established Rules which permits this device to be directly connected to the telephone network. Standardized jacks are used for these connections. This equipment should not be used on party lines or coin lines.

If this unit is malfunctioning, it may also be causing harm to the telephone network. This device should be disconnected until the source of the problem can be determined and until repair is made. If this is not done, the telephone company may temporarily disconnect service.

The telephone company may make changes in its technical operations and procedures. If such changes affect the compatibility or use of this device, the telephone company is required to give adequate notice of the changes. You will be advised of your right to a complaint with the FCC.

If the telephone company requests information on what equipment is connected to their lines, inform them of:

- a. The telephone number this unit is connected to
- b. The ringer equivalence number
- c. The USOC jack required
- d. The FCC Registration number

Items 'b' and 'd' are indicated on the label.

The ringer equivalence (REN) is used to determine how many devices can be connected to your telephone line. In most areas, the sum of the RENs of all devices should not exceed five (5.0). If too many devices are attached, they may not ring properly.

NOTICE: The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some areas.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

**Caution:** Users should not attempt to make such connections themselves, but should contact the appropriate inspection authority, or electrician, as appropriate.

The **Load Number** (LN) is assigned to each terminal device. This denotes the percentage of the total load to be connected to a telephone loop which is used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices. This is subject only to the requirement that the total Load Numbers of all devices does not exceed 100.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus. This is set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la Class A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

## CAT Series v 4.1X

### SERVICE REQUIREMENTS

In the event of equipment malfunction, all repairs should be performed by our Company or an authorized agent. It is the responsibility of users requiring service to report the need for service to our Company or to one of our authorized agents. Service can be obtained at:

---

---

---

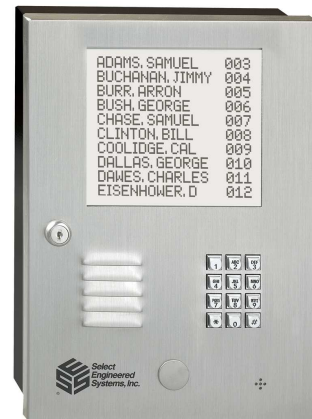
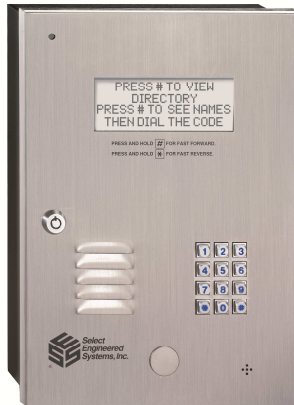
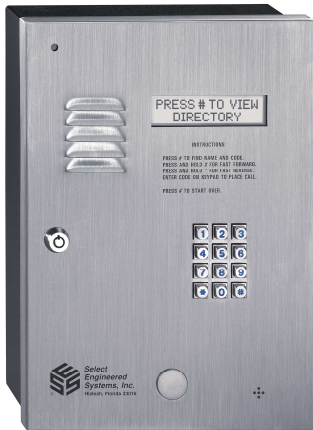
---

Phone:

**Warning:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This Equipment has been tested and found to comply with the limits for a Class A digital device. This is pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy. If not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residence is likely to cause harmful interference. If this is the case, the user will be required to correct the interference at his own expense.

**“BETTER TECHNOLOGY MAKES BETTER SYSTEMS”**



**09/14**

