

## USING A TERMINAL PROGRAM WITH SK-ACP OR 28SA-PLUS

Programming the **SK-ACP or 28SA-PLUS** with a personal computer or terminal is easy because all programming functions are accomplished using simple to understand menus. Just choose what you want to do from the menu, and you will then either be given a sub-menu to further describe the required function, or you will be asked to enter information necessary to carry out the programming function you desire.

If you use a personal computer, and it does not have a built-in terminal or communications program, use one of the many available commercial programs, such as Procomm or a Windows terminal program. Your computer or terminal (or serial printer) should be set as follows:

Baud	38,400
Start bit	1
Data bits	8
Stop bit	1
Parity	None
Emulation	ANSI (or compatible)

**BAUD RATE** . The Baud Rate of the **SK-ACP/28SA-PLUS** defaults to 38,400, but may be changed via the menu system using a PC or terminal. Once changed, the new Baud Rate will become effective the next time you log onto the system or connect a printer.

**LOGGING ON AND OFF.** To prevent unauthorized programming of the **SK-ACP/28SA-PLUS** when using a PC or terminal, it is necessary to enter a password at the beginning of every programming session. When communications are first established with the **SK-ACP**, the screen will say:

**WELCOME TO SK-ACP            CONTROLLER ID:  
ENTER PASSWORD:**

When communications are first established with the ENTRACOMP® 28SA-PLUS the screen will say:

**WELCOME TO ENTRACOMP® 28SA-PLUS  
ENTER PASSWORD:**

The default password is "12345". When you begin your first programming session, enter "12345" and press the "ENTER" key when the password is requested. The main menu will then be displayed.

During this first programming session, use the "Password" menu selection of the System Settings Menu to set a password of your choice. You may change your password at any time using the "Password" selection of the menu.

Note that when using Secura Key's **SK-NET™** software, the **SK-ACP/28SA-PLUS** password and the **SK-NET™** password must be the same.

If you should forget your password, you must turn off the power to the unit. Then, while holding in the reset button, turn the power back on. This will reset the password to "12345." While the reader LED is flashing alternately Red and Green, present one card for each Facility Code that should be recognized. Wait for the red/green flashing LED to time out (stop blinking) before resuming normal operation.

This same operation, called a Power-Up Reset, recalibrates the sensors in the 28SA-PLUS. Be sure that there is no card on the reader plate, or other nearby source of magnetism, while performing the reset. Do not perform a Power-Up Reset on a 28SA-PLUS in extremely hot or cold temperatures.

### SECURA KEY

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DATE: 12/3/01  
REV.: #1  
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When the reader is connected to a PC or data terminal, the reader will automatically logoff after four minutes with no keyboard activity. You will then be required to enter the password again to access the system. Automatic logoff occurs while in any menu or sub-menu except when displaying current transactions. It is advisable to exit the system when you are finished by using the "Logoff" selection of the main menu.

## SELECTING WHICH PASSAGEWAY TO PROGRAM

When logging on to the SK-ACP, the Main Menu screen will appear. The upper left of the screen will say "Reader 1: (Reader name, if any)." If you wish to program the passageway corresponding to Reader 2, key in "R" while holding down the **CTRL** key. The screen will now show "Reader 2: (Reader name, if any)." "CTRL R" may be used while on any menu screen to toggle between readers.

## COMMAND SET 2: ACCESS CARD PROGRAMMING/STATUS

### PROGRAMMING ACCESS CARDS INTO TIME ZONES

Access Cards are programmed into one of 15 Time Zones. The particular Time Zone into which an Access Card is programmed determines if and when a cardholder will be granted access. **Programming an Access Card into Time Zone "0" makes the card void (it is never allowed access).** Programming an Access Card into Time Zone "1" makes a card valid for entry without restriction as long as the reader is in an active mode. Programming an Access Card into any other Time Zone restricts the card's usage, depending upon how the Time Zone is set (see page 7 for setting Time Zones).

To program cards, select item 2 (Cards) from the main menu. Then select 1 (Program Cards Into a Time Zone) from the Card menu. Then in the Program Cards dialog box, enter the Time Zone into which the cards are to be programmed, the starting number of the block of cards to be programmed, and the ending number of the block of cards to be programmed. To program one card only, use its number as the starting and ending number.

### PROGRAMMING CARDS FOR LIMITED USE

Only those Access Cards that have been designated as Limited Use Cards may be programmed for limited use (see page 8). Access Cards in Time Zones "0" or "1" may not be programmed for limited use. Changing the Time Zone of an Access Card will have no effect on its limited use status except that an Access Card programmed into Time Zones "0" or "1" will be deleted from limited use.

Limited use restrictions may be set for either limited number of uses, limited number of days from "now", limited number of weeks from "now", limited number of days from first use, use counter, or no limited use restrictions.

Any Access Card within the block of cards configured for limited use may be set to have one of these limited use functions, each with its own number of days, or uses as described below. **In the SK-ACP the limited use settings are common for both readers. Changing limited use settings for one reader will also change it for the other reader.**

**LIMITED NUMBER OF USES.** Number of uses may be set to from 1 to 500. Each time access is granted, the number of uses is reduced by one until there are no uses left. At this point, further access will be denied until more uses are programmed. Access Cards are still subject to Time Zone restrictions.

**LIMITED NUMBER OF DAYS.** The number of days that the Access Card will be granted access (up to 500) may be set when this limited uses option is selected. Each day the number of days counter will be reduced by one until no days are left. At this point the Access Card will be denied further access until more days are programmed. Time Zone restrictions must also be met for access to be granted.

**LIMITED NUMBER OF WEEKS.** The number of weeks that the Access Card will be granted access (up to 500) may be set when this limited uses option is selected. Each week the number of weeks counter will be reduced by one until no weeks are left. At this point the Access Card will be denied further access until more weeks are programmed. Time Zone restrictions must also be met for access to be granted.

**LIMITED NUMBER OF DAYS FROM FIRST USE.** This Limited Use option is similar to the limited number of days selection, except that the number of days of access (up to 500) is counted from the day the Access Card is first granted access.

**COUNT NUMBER OF USES.** This selection does not actually restrict access but counts how many time access has been granted. Therefore, no number of days or uses are entered. Selecting this choice for a card merely resets the counter to 0. Each time access is granted, the counter is incremented by one. The number of access granted may be viewed using the Status Menu. The counter can only count to 500. If more than 500 accesses have been granted since the counter was last reset, the status report will indicate ">500".

**NO LIMITED USE.** This option is used to remove any of the above limited use settings. To program Access Cards for Limited Use, choose 2 (Cards) from the Main Menu. Then select 2 (Program Limited Use Cards) followed by the Limited Use selection from the Limited Use Menu and enter the required number and the first and last card numbers for the range of cards to be programmed.

## CARD STATUS

Reports on the status of Access Cards may be obtained by choosing 2 (Cards) from the Main Menu and then selecting 3 (Display Card Status) from the Cards Menu. Card status is always displayed in numerical order of the block specified. If a particular Time Zone is selected, only those cards of the selected block that are in the Time Zone will be displayed. If "ALL" is chosen for the Card Time Zone entry, all cards of the selected block will be displayed.

If a particular Time Zone is chosen, the number of the card, the limited use status (i.e., None, Days, Weeks, Uses, or Times), and the remaining uses, days, weeks, or the times access has been granted will be displayed. If "ALL" is selected, the same information as above plus the Time Zone of each card will be displayed.

## ANTIPASSBACK FORGIVE

This selection allows you to specify all cards or a range of cards to be immediately set to a Neutral status for Real Antipassback. This allows access to any card previously denied access due to a Real Antipassback violation (e.g. attempting a second badging at an IN reader). This only affects cards programmed into Time Zones with Real Antipassback enabled. The range may be set to apply to one card or all cards. Once forgiven, a card's Real Antipassback status (IN or OUT) will be determined by the next Real Antipassback reader in which the card is used.

Choose 2 (Cards) from the Main Menu, then choose 4 (Antipassback Forgive) from the Cards Menu. You may then specify All or Range. If you select Range, you must enter beginning and ending card numbers for the range and enter Y (Yes) to the confirmation prompt.

## COMMAND SET 3: DOOR CONTROL

The **SK-ACP and 28SA-PLUS** provides complete control of each passageway via the menu system. (If you wish to open the door of the other reader controlled by the **SK-ACP** press "CNTRL R." This will switch you to the other door.)

### REMOTE OPEN VIA THE MENU

To open the door using the menu system, choose 3 (Door Control) from the Main Menu and then 1 (Open Door Now) from the Door Menu. You will be asked if you are sure. If you answer yes, the door will be opened for the same latch time period as when a card is used to open the door. An appropriate message will be recorded and sent to the PC (if monitoring real-time transactions) or Printer (if connected).

### DOOR UNLOCK MODE

The relay may be set to stay latched (door unlocked) during periods when access control is unwanted. While in the "DOOR UNLOCK" mode, the relay stays activated, and the reader LED indicator will flash green approximately once every second. The unit will not recognize Access Cards while in the "DOOR UNLOCK" mode.

**DOOR UNLOCK VIA THE MENU .** To activate the Door Unlock mode, choose 3 (Door Control) from the Main Menu. Then choose 2 (Unlock Door Indefinitely) from the Door Menu. An appropriate message will be recorded and will be sent to the PC (if monitoring real-time transactions) or Printer (if connected). To deactivate the Door Unlock Mode, choose 5 (Return To Normal Mode) from the Door Menu.

## DOOR UNLOCK UNTIL A SET TIME

Using the Menu System, the reader may be put into the door unlock mode until a user selected date and time. Choose 3 (Door Control) from the Main Menu. Then choose 3 (Door Unlock Until A Set Time). From the dialog box enter the date and time that the Door Unlock mode is to expire. An appropriate message will be recorded and sent to the PC (if monitoring real-time transactions) or Printer (if connected).

You may cancel the door unlock mode at any time choosing 5 (Return To Normal Mode) from the Door Menu.

## INACTIVE MODE

The reader may be made inactive for entry with a card by choosing 3 (Door Control) from the Main Menu and then 4 (Make Reader Inactive Indefinitely) from the Door Menu. An appropriate message will be recorded and sent to the PC (if monitoring real-time transactions) or Printer (if connected).

While the reader is in the Inactive Mode, the LED indicator will flash red approximately once every second. To reactivate the reader, choose 5 (Return To Normal Mode) from the Door Menu.

# COMMAND SET 4: SYSTEM SETTINGS

## DATE AND TIME

The **SK-ACP and 28SA-PLUS** store 5000 transactions. In order to know when a transaction has occurred, it is necessary to set the internal clock to the correct date and time. Time is kept in a 24 hour (military) manner. Even if you do not intend to use transaction information, it is necessary to set the date and time for proper operation of Time Zones. Once set, the Automatic Daylight Savings Time Adjustment feature will automatically change the time to activate and deactivate Daylight Savings Time. **In the SK-ACP the time and Date settings are common for both readers. Changing these settings for one reader will also change it for the other reader.**

Note that the SK-ACP, 28SA-PLUS and the various SK-NET™ software are “Year 2000 Compliant.”

SETTING DATE AND TIME. To set the date and time choose 4 (System Settings) from the Main Menu. Then select 1 (Date) from the System Settings Menu to set the date followed by 2 (Time) from the System Settings Menu to set the time.

## LATCH TIMER

The output from the relay may be set to any number of seconds from 1 to 30. Setting the latch timer to “0” produces a 0.25 second output, timed from when a valid card is presented to the reader.

SETTING THE LATCH TIMER. To set the Latch Timer, choose 4 (System Settings) from the Main Menu. Then from the System Settings Menu, select 3 (Latch Timer).

## ANTIPASSBACK

Antipassback is a feature designed to prevent or discourage an authorized cardholder from passing their card back to an unauthorized person who wishes to reuse the same card to obtain access. The most common application for Antipassback is Parking. Antipassback is not generally practical for use by office or factory personnel, unless turnstiles are in use.

When Antipassback is enabled, the SK-A/CP28SA-PLUS will temporarily void a card after the first use, so that any person attempting to reuse the same card in the same reader will be denied access. This temporary void status is stored in memory in the SK-ACP/28SA-PLUS. Different types of Antipassback use different methods to void and reset the card.

The SK-ACP and 28SA-PLUS offers two types of Antipassback: Real and Timed.

## REAL ANTIPASSBACK

Real Antipassback requires at least one “In” reader or one “Out” reader; If multiple **SK-ACP or 28SA-PLUS** units are connected into a network, only one “IN “ reader and one “OUT” reader are required for the system. (The 28SA-PLUS can be connected to an SK-029W “slave reader”. In this configuration the 28SA-PLUS can be designated “OUT” and the slave reader “IN”, or vice versa.) In memory, each cardholder has In, Out, or Neutral Antipassback status, which is determined by the antipassback type of the reader where the card was last used. The cardholder must have Out status to use an In reader and vice-versa. As long as the IN and OUT readers are used in alternating sequence, there will be no restriction; if a card is used at an IN reader twice in a row, or at an OUT reader twice in a row, the second access attempt is denied.

## CONFIGURING REAL ANTIPASSBACK

To set reader IN/OUT status, choose 5 (System Configuration Menu), select 6 (Network Configuration), select 1 (Reader [IN/OUT]), then select N (None), I (In), O (Out), or press ESC to exit.

To be affected by Real Antipassback, cards must be assigned to a Time Zone with Real Antipassback enabled. See **Page 2** for information on how to assign a card to a Time Zone, and see **Page 7** for information on how to set Real Antipassback in a Time Zone.

The DAILY APB FORGIVE HOUR feature is also available on the Configuration Menu. During the course of the day, cardholders’ Antipassback (APB) status may get out of synchronization when entering or exiting without using a card (due to disabled parking gates, exiting after-hours, etc.) DAILY APB FORGIVE will set all cards to a Neutral status, so that all cards will work the first time they are used on the following day, regardless of their Antipassback status at the end of the previous day. After the first usage, the card’s Real Antipassback status will change normally.

## TIMED ANTIPASSBACK

Timed Antipassback sets the card to Void status for a user-defined time period. Once the time period expires, the card can be reused in the reader. For every card use, a comparison is made in transaction history to that card’s previous use to see if the time period has elapsed. **Timed antipassback only applies at a single reader; the other reader controlled by the SK-ACP Panel as well as other readers controlled by other SK-ACP units at the same site will not be able to make a time comparison.**

## CONFIGURING TIMED ANTIPASSBACK

If Timed Antipassback is selected, a card used for entry is made temporarily void for a user-definable amount of waiting time. The antipassback waiting time may be set to any number of minutes from 1 to 30. However, the actual waiting time will fluctuate between the time set and the time set plus one minute. Thus, if the antipassback time is set to 5 minutes, users will have to wait a minimum of 5 minutes and a maximum of 6 minutes before reentry will be allowed. **Setting the antipassback waiting time to 0 will disable the Timed Antipassback feature and reentry will be allowed immediately.**

SETTING ANTIPASSBACK WAITING TIME. To set the Antipassback Waiting Time using the Menu System, choose 4 (System Settings) from the Main Menu. Then from the System Settings Menu, select 4 (Antipassback Timer).

## PASSWORD PROTECTION

To prevent unauthorized programming of the **SK-ACP/28SA-PLUS** when using a personal computer or terminal, it is necessary to enter a password at the beginning of every programming session. The default password is “12345”. When you begin your first programming session, enter “12345” and press the “ENTER” key when the password is requested.

The **SK-ACP/28SA-PLUS** will automatically logoff after four minutes with no keyboard activity. You will then be required to enter the password again to access the system. Automatic logoff occurs while in any menu or sub menu except when displaying current transactions. It is advisable to exit the system when you are finished by using the “Logoff” selection of the main menu.

CHANGING THE PASSWORD . During this first programming session it is advisable to change the Password. To change the Password, choose 4 (System Settings) from the Main Menu followed by 5 (Password) from the System Settings Menu. The Password may be up to 16 characters long and may consist of numbers, letters, and symbols. You may change your password at any time. **The password is common to both doors controlled by the SK-ACP unit. Changing the password for one reader will also change it for the other reader.**

**RESETTING THE PASSWORD.** If you should forget your password, you must turn off the power to the unit. Then, while holding in the reset button (see Figure 1), turn the power back on. This will reset the password to "12345.". Wait for the red/green flashing LED to time out before presenting cards to the reader.

## **BAUD RATE**

The Baud Rate is the speed at which the **SK-ACP/28SA-PLUS** communicates with the outside world (PC, terminal, or printer) via the RS-232 Port. The default Baud Rate (speed of communication) is 38,400. The allowable Baud Rates are 300, 1200, 2400, 4800, 9600, 19200 and 38400, 57600 and 115200. (Note that the serial interface cards in some older PCs are not capable of communicating at Baud Rates above 9600.)

**SETTING THE BAUD RATE.** The Baud Rate of the **SK-ACP/28SA-PLUS** may be changed via the menu system using a PC or terminal. Once changed, the new Baud Rate will become effective the next time you log onto the system or connect a printer. To change the Baud Rate, choose 4 (System Settings) from the Main Menu. Then from the System Settings Menu, choose 6 (Baud Rate) and select the desired Baud Rate from the Baud Rate Menu.

Be sure to also change the baud rate of the PC or Printer that will be communicating with **SK-ACP or 28SA-PLUS**.

## **READER ID**

Each **SK-ACP and 28SA-PLUS** has the capability of being given an ID or Name. This ID is shown on all status reports at the beginning of the report. If the **SK-ACP/28SA-PLUS** is connected to a printer, each transaction includes the reader ID. This feature is very useful when multiple **SK-ACP/28SA-PLUS** units are networked and connected to the same printer or PC.

To set the reader ID, choose 4 (System Settings) from the Main Menu and then 8 (Reader ID) from the System Settings Menu (Option 7 in the 28SA-PLUS). The reader ID may be up to 16 characters long and may include numbers, letters, and symbols. If a reader ID is not desired, use "NONE" for the ID request.

## **MODEM STRING**

Whenever the SK-ACP/28SA-PLUS senses that a modem is present (according to the Communications input wiring) it sends setup instructions to the modem via the RS-232 Communications Port . This series of ASCII characters sets the modem to Dumb Mode and Auto Answer Mode. The default string is:

ATQ1E0S0=1&D0&K0&R1&S0&W0

where 0 = the number Zero. .

To change the modem string, from the Main menu choose 5 (System Configuration) then choose 5 (Modem String). The modem string may be changed from the main menu of either reader.

## **CONTROLLER ID**

Each **SK-ACP** unit may be given a name. This is usually not necessary since each reader controlled by the unit may be given a name. However, there are some planned future enhancements of the product that will use this feature when in a networked environment and using SK-NET™.

To set or change the Controller ID, choose 4 (System Settings) from either reader's Main Menu, then choose 7 (CONTCLR ID).

## **TIME ZONES**

Time Zones are schedules that determine when an Access Card is to work. Access Cards are programmed into one of 16 Time Zones (0 thru 15).

Programming an Access Card into Time Zone "0" renders the Access Card "Void"- it is never granted access. Programming an Access Card into Time Zone "1" will allow the Access Card access without restriction as long as the reader is in the Active Mode. Access Cards programmed into Time Zones 2 and higher will be granted access within time restrictions as set into each Time Zone.

## THE WEEKLY SCHEDULE

Each Time Zone is a Weekly Schedule consisting of 8 days (Sunday thru Saturday and Holiday). Each Day of the Weekly Schedule is broken up into 48 one half hour segments. An Access Card programmed into a given Time Zone will be allowed access only during those time segments that are "ON". The day designated "Holiday" is the schedule for any day that has been defined as a holiday, no matter on what day of the week it falls (see **Page 8** for defining holidays).

**SETTING THE WEEKLY SCHEDULE.** To set or change a Time Zone's Weekly Schedule, choose 2 (Cards) from the Main Menu. Select 5 (Time Zone) from the Cards Menu followed by 1 (Time Zones) from the Time Zone Menu. **(In the 28SA-PLUS the sequence is "4" then "8", then "1")** Enter the Time Zone to be edited (only Time Zones "2" or greater may be edited).

Once in the Weekly Schedule for the Time Zone, select the number of the day to be edited. The cursor will move up to the day to be edited. An "." indicates the one-half hour segment is on, a blank space indicates that the segment is off. Using the arrow keys, move the cursor to the segment to be changed and use the space bar to turn the time segment off. Use any other key to turn the segment on.

**BEGINNING AND ENDING DATES .** Each Time Zone (except Time Zone 1) may be set to begin and/or end on specified dates. Access Cards programmed into the Time Zone will not be allowed access before the beginning date (if set) or after the ending date (if set).

To set a beginning date choose "B" when in the weekly schedule. Enter the beginning date (enter "C" if no beginning date restriction is desired).

To set an ending date, choose "E" when in the weekly schedule. Enter the beginning date (enter "C" if no ending date restriction is desired).

**ANTIPASSBACK CONTROL .** The Time Zone into which an Access Card is programmed determines if and how the Access Card is affected by the Antipassback restriction. A Time Zone may be set to one of the following Antipassback types:

- |               |               |
|---------------|---------------|
| 1- Timed Hard | 2- Timed Soft |
| 3- Real Hard  | 4- Real Soft  |
| 5- Off        |               |

**NOTE: Since Time Zone 1 has no restrictions, cards programmed into Time Zone 1 are not affected by Antipassback.** REAL HARD Real Antipassback requires at least one "In" reader or one "Out" reader; If multiple **SK-ACP/28SA-PLUS** units are connected into a network, only one "IN" reader and one "OUT" reader are required for the system. Once used in the IN reader, an access card must be used in the OUT reader before a second use at the IN reader.

**TIMED HARD** If the Time Zone is set for Timed Hard Antipassback, once used, an access card must wait the full waiting time before access is again allowed. This applies to both Primary and Remote readers.

**REAL SOFT** If the Time Zone is set for Real Soft Antipassback, basic operation is similar to Real Hard Antipassback. The term "soft" means that access will not be denied to cards used twice in succession at an IN reader, but that an error message will be recorded and sent to the PC (if monitoring real-time transactions) or Printer (if connected).

**TIMED SOFT** If the Time Zone is set for Timed Soft Antipassback, access will not be denied to cards used twice in succession before the Antipassback Waiting Time has expired, but an Antipassback error message will be recorded and sent to the PC (if monitoring real-time transactions) or Printer (if connected). This applies to both Primary and Remote Readers.

If a Time Zone is set to Antipassback "Off", Access Cards programmed into that Time Zone will not be affected by Antipassback. To set the Time Zone Antipassback status, choose "A" when in the Weekly Schedule. Then choose 1 - Timed Hard, 2 - Timed Soft, 3 - Real Hard, 4 - Real Soft, 5 - Off, or ESC to exit.

## DOOR UNLOCK TIME ZONE

The Door Unlock Time Zone is a special Weekly Schedule that puts the **SK-ACP/28SA-PLUS** reader into the Door Unlock Mode during days of the week and times of the day where time segments are set to be "on." To set or change the Door Unlock Time Zone's Weekly Schedule, choose 2 (Cards) from the Main Menu. Select 5 (Time Zone) from the Cards Menu followed by 2 (Door Zone) from the Time Zone Menu. **(In the 28SA-PLUS the sequence is "4" then "8" then "2".)**

Once in the Weekly Schedule for the Door Time Zone, select the number of the day to be edited. The cursor will move up to the day chosen. An "\*" indicates the one half-hour segment is on, a blank space indicates that the segment is off. Using the arrow keys, move the cursor to the segment to be changed and use the space bar to turn the time segment off. Use any other key to turn the segment on. The **Reader** will be in the Door Unlock Mode during those time segments that are "ON".

Choose D to set the Door Zone Mode Option, which allows a Door Zone to be set to either (A) Auto Open or (C) Card Open. In Auto Open Mode, the door unlocks automatically when the Door Zone begins. In Card Open Mode, the door remains locked when the Door Zone begins, and unlocks when the first valid card is used. Card Open Mode should be selected when it is important that the controlled door remains locked whenever the reader location is unattended.

## DEFINE HOLIDAYS

Up to 32 holidays may be defined. When one of the defined holidays occurs, the holiday schedule of the particular time zone is followed rather than the weekday schedule. Holidays may be defined for the particular year or they may be defined to reoccur every year. If a particular year is entered when defining a holiday, the Weekly Time Zone schedule will treat only that date of the year specified as a holiday. If, instead of entering a year, a "Y" is entered, then the specified date will be treated as a holiday every year.

To define or edit the Holiday list, choose 2 (Cards) from the Main Menu. Then choose 5 (Time Zones) from the Cards Menu and 3 (Holidays) from the Time Zone Menu. **(In the 28SA-PLUS the sequence is "4" then "8" then "3".)**

Once in the Holiday Setting Menu, select the number of the Holiday to be set or edited and enter the appropriate date.

## DAYLIGHT SAVINGS TIME

The **SK-ACP/28SA-PLUS** provides Automatic and Manual Daylight Savings Time correction. In the Automatic Mode, Daylight Savings Time is corrected on the first Sunday in April and the last Sunday in October at 2:00 AM every year. The Manual Mode is provided to allow the user to set the beginning and ending Daylight Savings Time dates in areas where the Automatic mode does not correspond to the actual days of change.

For areas where there is no Daylight Savings Time, the correction function may be disabled. The factory default is Automatic Daylight Savings Time Correction.

To set the Daylight Savings Time Correction status, choose 2 (Cards) from the Main Menu. Then select 5 (Time Zones) from the Cards Menu followed by 4 (Daylight Savings) from the Time Zone Menu. **(In the 28SA-PLUS the sequence is "4" then "8" then "4".)** The Daylight Savings dialog box will show the current mode and the current beginning and ending dates for Daylight Savings Time. Choose "A" to select the Automatic Mode. Choose "O" to deactivate Daylight Savings Time Correction. To set the unit for Daylight Savings Time dates of your choice, choose "M" (Manual) and then enter the desired beginning and ending dates by choosing "B," then "E."

## COMMAND SET 5: CONFIGURING THE SK-ACP AND 28SA-PLUS

### LIMITED USE CARDS

The maximum number of cards that may be used as limited use cards is 4000. The default setting always starts at card number one and ends at 4000. However, it is possible to choose the exact block of cards that you wish to have operate as limited use cards. To change the block of cards that may be set for limited use, choose 5 (System Configuration) on the Main Menu. Then select item 4 (Limited Use Cards) on the Configuration Menu. Enter the first number of the desired block of cards. The starting sequential number for limited use cards can be set to any value (1 - 65000). The ending number will automatically be the Starting Number + 4000 (65000 maximum), but it may be changed. **Note: On the SK-ACP the limited use settings are common for both readers. Changing limited use settings for one reader will also change it for the other reader.**

### DEFINING INPUTS

The **SK-ACP** has four inputs, two for each reader. In the default configuration, the inputs for each reader are set as 1) Door Monitor and 2) Disabled. The **28SA-PLUS** has three inputs. In the default configuration, the inputs are set as 1) Door Monitor, 2) Disabled and 3) Disabled. Using the menu system these inputs may each be programmed to function in one of seven ways (described below). If the input feature is not needed, use the System Configuration menu to set each input to Disabled.

**TAMPER** . When the input is activated, a “Tamper” message is recorded, and the unit becomes inactive until the input is deactivated. If the unit is connected to a printer, the message is also sent immediately.

**ARMING CIRCUIT** . This configuration is normally used in parking lot situations. The input would normally be connected to an output of a vehicle detector. The unit will not allow access without the detector sensing the presence of a vehicle. If an entry attempt is made while the input is not activated, entry will be denied and an “Arming Input” error message will be recorded. If the unit is connected to a printer, the message is also sent immediately.

**DOOR MONITOR** . If the door is open, other than during a valid entry, a “Door Forced” message is recorded. If the unit is connected to a printer, the message is also sent immediately. If, during a valid entry, the Door Monitor senses that the door has been opened and closed prior to expiration of the latch timer, the latch relay will immediately be reset; this feature is sometimes called “anti-tailgate.” If the door is left open after the expiration of the entry timer, a “Door Held Open” message will be recorded and sent.

**BELL** . When activated, the unit sends an ASCII “bell” signal to the PC (if monitoring real-time transactions) or Serial Printer (if connected). This will cause a PC and some serial printers to “beep.”

**REMOTE INACTIVE** . The unit may be made inactive remotely using a switch. While inactive the LED blinks Red slowly, and no cards will be granted access. An appropriate message will be recorded and will be sent to the PC (if monitoring real-time transactions) or Printer (if connected).

**REMOTE OPEN** . (Also called Request to Exit). The passageway may be opened remotely using a push button, switch or contact output from an Exit PIR designed for access-controlled doors. Remote Open functions even when the unit is in an inactive mode. An appropriate message will be recorded and will be sent to the PC (if monitoring real-time transactions) or Printer (if connected).

**USER DEFINED** . This selection allows the user to define the action taken when the input is activated. The user may create the transaction text message to be recorded and decide if the **SK-ACP** is to grant access and if the Bell signal is to be sent.

To change the definition of an input, choose 5 (System Configuration) from the Main Menu. Then, from the System Configuration Menu, choose 1, or 2 depending whether input 1, or 2 is to be redefined. Then select the desired input function from the Input Definition Menu.

## DEFINING OUTPUTS

Each door controlled by the **ENTRACOMP® SK-ACP** has two double pole, double throw relay outputs associated with it. One relay for each door (the latch relay) is used to operate the door operating device, such as an electric strike or magnetic lock. (The **28SA-PLUS** only has a latch relay) On the **SK-ACP**, the second relay (the auxiliary relay) functions as programmed by the user. In the default configuration, the output for each reader is set as 1) Output Disabled. Using the menu system this output may be programmed to function in one of seven ways (described below). To change the definition of an output, choose 5 (System Configuration) from the Main Menu. Then, from the System Configuration Menu, choose 3 (Define Output). Then select the desired output function from the output Definition Menu.

**DISABLED**. The output is turned off.

**INPUT 2 FOLLOW/LATCH**. When input 2 is activated, the output activates and stays activated until input 2 is deactivated. Select 2 on the Define Output menu.

**DOOR MONITOR ALARM**. If one of the inputs is programmed to be a “Door Monitor” input and a “Door Held Open” or a “Door Forced” event occurs, the output will activate and will stay activated until a valid card is presented to the reader. A programmable grace period of from 0 seconds to 99 minutes, 59 seconds can be programmed for the “Door Held Open” event to allow more time to close the door. A “Door Forced” event always activates the output immediately. Select 3 on the Define Output menu. Then select the Grace period (Expiration Time) on the sub-menu.

**DOOR FORCED ALARM**. If one of the inputs is programmed to be a “Door Monitor” input and a “Door Forced” event occurs, the output will activate and will stay activated until a valid card is read by the reader. Select 4 on the Define Output menu.

CARD RANGE. Any valid access via a card in the defined range will activate the output. The output can be programmed to toggle (requiring another valid access from a card in the defined range to deactivate the output) or be set to turn off after a given amount of time. Select 5 on the Define Output menu. Use the sub-menu to select "Toggle or Timed" option, the Expiration Time, and the Card Range.

ERROR ALARM. Any of the following error conditions will activate the output. The output will stay activated until a Valid card is presented to the reader. Error Conditions that will activate the output are:

- ANTIPASSBACK
- VOID CARD
- ARMING CIRCUIT
- TAMPER
- INACTIVE?
- INVALID FACILITY CODE
- INVALID ID?
- TIME ZONE ERROR
- TIME ZONE DATE
- LIMITED USE?
- ANTIPASSBACK ERRORS
- DOOR FORCED
- DOOR HELD OPEN

To set, Select 6 on the Define Output menu.

SERIOUS ALARM. Any of the following error conditions will activate the output. The output will stay activated until a Valid card is presented to the reader. Error Conditions that will activate the output are:

- VOID CARD
- INVALID FACILITY CODE
- TAMPER
- DOOR FORCED
- DOOR HELD OPEN

To set, Select 7 on the Define Output menu.

ZONE ACTIVE. Output is activated whenever a selected Time Zone (or Door Zone) is on.

To set, Select 8 on the Define Output menu. Select the Time Zone (or Door Zone) from the sub-menu.

## COMMAND SET 6: TRANSACTIONS

The **SK-ACP/28SA-PLUS** stores 5000 date and time stamped transactions. When the transaction buffer is full, the oldest entries are deleted as new transactions occur; therefore, the newest transactions are always available. (The transaction data base is combined for both readers controlled by the **SK-ACP**.)

### DISPLAY STORED TRANSACTIONS

To display the transactions that are stored in the transaction buffer, choose 6 (Transactions) from the Main Menu of either reader and then 1 (Display Stored Transactions) from the Transaction Menu. Transactions will be displayed in reverse chronological order (newest transactions first).

### DISPLAY TRANSACTIONS AS THEY OCCUR

Transactions may be displayed to the screen of the PC or terminal as they occur. When in this mode, the automatic log off feature is disabled. Error messages will also include a bell or buzzer sound (depending on the terminal or PC used).

To put the **SK-ACP/28SA-PLUS** into the Display Transactions As They Occur mode, choose 6 (Transactions) from the Main Menu of either reader followed by 2 (Display Transactions As They Occur) from the Transaction Menu.

## DISPLAY TRANSACTION BUFFER STATUS

The Transaction Buffer is where transactions are stored. The user may examine the status of the Transaction Buffer by choosing 6 (Transactions) from the Main Menu followed by 3 (Display Transaction Buffer Status).

The screen will display how many transactions are currently in the transaction buffer, what percentage of the buffer is used, and, if more transactions occurred than there was room to store, how many transactions were lost.

## CLEAR TRANSACTION BUFFER

To clear (erase) the Transaction Buffer, choose 6 (Transactions) from the Main Menu and then 4 (Clear Transaction Buffer) from the Transaction Menu.

## COMMAND SET 7: UTILITIES

### SELF TEST

The Self Test feature is normally used by your serviceman to check out the **SK-ACP/28SA-PLUS**. When run, the Self Test checks various functions of the unit.

To run the Self Test, choose 7 (Utility) from the Main Menu of either reader and then select 1 (Self Test) from the Utility Menu.

### UPLOAD/DOWNLOAD

The settings and card status of a SK-ACP/28SA-PLUS unit may be uploaded (backup) to a file on your PC. This file may then be downloaded (restore) to any compatible SK-ACP/28SA-PLUS unit to program it exactly as the original unit. The Transaction Buffer, Date, and Time are not downloaded. **(NOTE: The 28SA-PLUS backup files are not compatible with earlier 28SA units.)** If you are using SK-NET™, see the SK-NET™ user manual or the contextual help for detailed instructions.

**BACKUP.** To copy the settings and card status of an **SK-ACP/28SA-PLUS** to a file, choose 7 (Utility) from the Main Menu, then choose 3 (Receive Settings From **SK-ACP/28SA-PLUS**).

If you are using a generic terminal program, at this point you will be prompted to create a binary receive file in which to store the settings. You must also at this time choose the appropriate receive file and settings within your terminal program to begin the transfer of data using XMODEM protocol with checksum.

When the transfer is completed, the message "File Transfer OK" will be displayed.

**RESTORE.** Restore is the opposite of Backup. This function sends the settings and card status that were transferred from (Backup) an **SK-ACP/28SA-PLUS** and sends them to an **SK-ACP/28SA-PLUS**. To restore settings, choose 7 (Utility) from the Main Menu and 2 (Send Settings To SK-ACP) from the Utility Menu. The screen will prompt the user "Transferring Config File From PC To Reader Now." At this point, the user should begin the binary file transfer of the file using the XMODEM with checksum protocol as per the directions of the terminal program in use. When the transfer is complete, the screen will say, "File Transfer OK". If an error occurs, an "Error Transferring File" message will be given.

**RE-INITIALIZE.** This command is used by your serviceman to restore all settings to factory defaults. **All card programming, time zones and transactions will be erased.** Choose 7 (Utility) from the Main Menu and select 4 (Re-initialize) from the Utility Menu.

### GLOBAL NETWORK OPTIONS

SK-NET™ software has been designed to maximize the performance and ease of operation of a network of **SK-ACP/28SA-PLUS** units. However there are a number of commands that can be sent to all the readers in the system globally using any of the **SK-ACP/28SA-PLUS** units as a gateway. (This option only appears in the 28SA-PLUS Utility Menu when an SK-NM485 Network Module is installed in connector J4 in the unit.)

The following operations are accessed via the Global Network Options menu. To access Global Network Options from the Main Menu, choose 7 (Utilities), then select 5 (Global Network Options), to display the following menu:

### GLOBAL NETWORK MENU

<u>KEYSTROKE</u>	<u>SELECTION</u>
1	DOOR OPTIONS
2	ANTIPASSBACK FORGIVE
3	PROGRAM CARDS INTO A TIME ZONE
4	CLONE READER SETTINGS

### DOOR OPTIONS

**OPEN DOORS NOW.** This will activate the latch relay on all connected readers for the latch time programmed at each reader. You will be prompted to confirm this command; press Y to proceed or N to cancel.

To open all the doors in the system, choose 1 (Door Options) from the Global Network Options menu, then choose 1 (Open Doors Now).

**OPEN DOORS INDEFINITELY.** This will activate the latch relay on all connected readers continuously, until the command is canceled. You will be prompted to confirm this command; press Y to proceed or N to cancel.

To open all doors indefinitely, choose 1 (Door Options) from the Global Network Options menu, then choose 2 (Open Doors Indefinitely).

**MAKE READERS INACTIVE INDEFINITELY.** This will put all readers into inactive mode: the red light will blink slowly and the readers will not accept any cards. This will continue until the command is canceled. You will be prompted to confirm this command; press Y to proceed or N to cancel .

To make all system readers inactive, choose 1 (Door Options) from the Global Network Options menu, then choose 3 (Make Readers Inactive Indefinitely).

**RETURN TO NORMAL MODE.** This will cancel either the Open Doors Indefinitely or Make Readers Inactive Indefinitely Commands. To return all readers to the normal operating mode, choose 1 (Door Options) from the Global Network Options menu, then choose 4 (Return To Normal Mode).

**ANTIPASSBACK FORGIVE.** When Real Antipassback is in use, cardholders' Antipassback status often becomes out of synchronization due to tailgating (one cardholder uses his card to enter a door and others follow without using their cards), parking lot gate arms being left up after hours, repairs being done to gates or doors, etc. The result is that card users are locked out because they are trying to get IN when the system thinks they are already IN (or vice versa). Antipassback Forgive allows all or designated card users one "free" entrance or exit regardless of their present Antipassback status, so that they can get back in sync. Select 2 (Antipassback Forgive) from the Global Network Menu. You will be prompted to forgive A(All) or a R(Range) of cards. If you select R, enter the first and last card numbers, then Confirm by pressing Y to proceed or N to cancel.

**PROGRAM CARDS INTO A TIME ZONE.** This option is the same as for a single reader, except that here, it applies to all readers on the network.

Select 3 (Program Cards Into a Time Zone) from the Global Network Menu. Select a Time Zone, then enter the first and last card numbers of the range that you wish to program for the selected Time Zone. To program only one card, enter the first card number, then press Enter twice. You will be asked if you are sure: press Y to proceed or N to cancel.

**CLONE READER SETTINGS.** This option allows you to copy settings from the reader currently connected to the PC to all readers on the network.

Select 4 (Clone Reader Settings) from the Global Network Options Menu. The following menu is displayed:

### NETWORK CLONE MENU

<u>KEYSTROKE</u>	<u>SELECTION</u>
1	CLONE BASIC SETTINGS
2	CLONE HOLIDAYS
3	CLONE TIME ZONES
4	CLONE ANTIPASSBACK
5	SYNCHRONIZE TIME

When you select any option, you are prompted "Are you sure?" Enter Y to proceed or N to cancel.

The Network Clone Menu offers four groups of reader settings plus a Synchronize Time option.

**CLONE BASIC SETTINGS.** This option copies the following basic settings from the connected reader to all readers on the network:

- Timed Antipassback Time Value
- Latch Timer Value
- Primary Reader IN/OUT Type
- Antipassback Type
- Terminal Baud Rate
- Limited Use Base Number
- Limited Use End Card Number
- Real Antipassback Forgive Hour

**CLONE HOLIDAYS.** This option copies all Holiday Dates from the connected reader to all readers on the network.

**CLONE TIME ZONES.** This option copies all Time Zone schedules from the connected readers to all readers on the network. **It does not copy any of the associated Antipassback settings.**

**CLONE ANTIPASSBACK.** This option copies the Antipassback settings assigned to each Time Zone from the connected reader to all readers on the network.

**SYNCHRONIZE TIME.** This option copies the time of day and the date from the connected reader to all readers on the network.

### OTHER: USING A PRINTER WITH THE SK-ACP/28SA-PLUS

A serial printer may be connected to the **SK-ACP/28SA-PLUS** in order to print transactions as they occur. If the unit is networked with other units, the printer will print all transactions occurring for any reader of the network.

**The wiring for a printer is different than the wiring for a computer or terminal. Be sure to follow the wiring instructions carefully. The unit must be powered down and powered up again after the printer has been installed.**

The above describes how you may program the SK-ACP and the 28SA-PLUS units without any special software, using a terminal program such as Windows HyperTerminal. In most case it would be preferable to use SK-NET™ software to program these products. Basic SK-NET™ is available for free at [www.securakey.com](http://www.securakey.com) in the "Downloads" section.



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DATE: 12/3/01  
REV.: #1  
AF#: 5463

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