



**ECS 100**  
**User Manual**

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## **Section 1 – General Information**

The *ECS 100* is a single door, stand alone access control system which features on-site programming using a built-in keypad and LED display.

The system communicates using Dallas 16 bit output format and can also communicate with all reader technologies that use Wiegand 26 Bit output format using the *ECS* data format converter module. Most reader technologies can be used, including ComKeys (button technology), Proximity Cards and Tags, RF Remote Controls, Keypads, Swipe Cards, RFID Tags and Biometrics.

The Model 100 requires 12 VDC power supplied by a plug-in DC transformer or a power supply/charger if a back-up battery is utilized. Output control is accomplished with one form C relay contact configured for latching or momentary activation.

The *ECS-100* system kit includes the following standard equipment:

- ◆ An *ECS-100* Controller Board mounted in a heavy duty steel enclosure; Also mounted in the enclosure is a 12 volt DC power supply/charger with a 4 ampere hour back up battery and , if required, a data format converter;
- ◆ One (1) credential reader based on your technology choice (ComKey Reader, Proximity Reader, RF Receiver, etc.);
- ◆ One (1) Request-To-Exit push button station;
- ◆ Twenty Five (25) Credentials (ComKeys, Proximity Cards, Proximity Tags or RF Remote Controls, based on your technology selection);
- ◆ Fifty (50) feet of Six (6) conductor flat cable hook up wire (for connection of the reader to the controller board);
- ◆ Two (2) RJ-12 connectors, one (1) crimping tool, mounting screws, installation manual and user manual.

You may also request optional equipment, including:

- ◆ Additional credential reader;
- ◆ Additional credentials (the *ECS-100* supports up to 500 users);
- ◆ Parallel port printer interface module to permit real time event tracking;
- ◆ Power Supply/Charger with 7 ampere hour battery back up;
- ◆ Request-To-Exit Motion Detector or Exit Release Push Bar;
- ◆ Magnetic Door Locks or Electric Strikes

## **Section 2 – Features**

The *ECS-100* controls up to 500 users.

Access is controlled by communication between a site reader and a site controller, upon presentation of a valid access credential.

Reader options include: ComKey, Proximity, RF Receiver, Keypad, Swipe, RFID, AVID and Biometric. For reader technologies using Wiegand output (i.e.-other than ComKey), additional equipment will be needed to perform user enrollment , additions and deletions.

The *ECS-100* communicates through a link between the controller board and the reader device. When a valid credential is presented at the reader, it is identified by the reader and validated by the controller, which will activate a dry contact relay. The controller then sends a GREEN feedback LED signal to the reader. (An invalid credential will result in a RED signal)

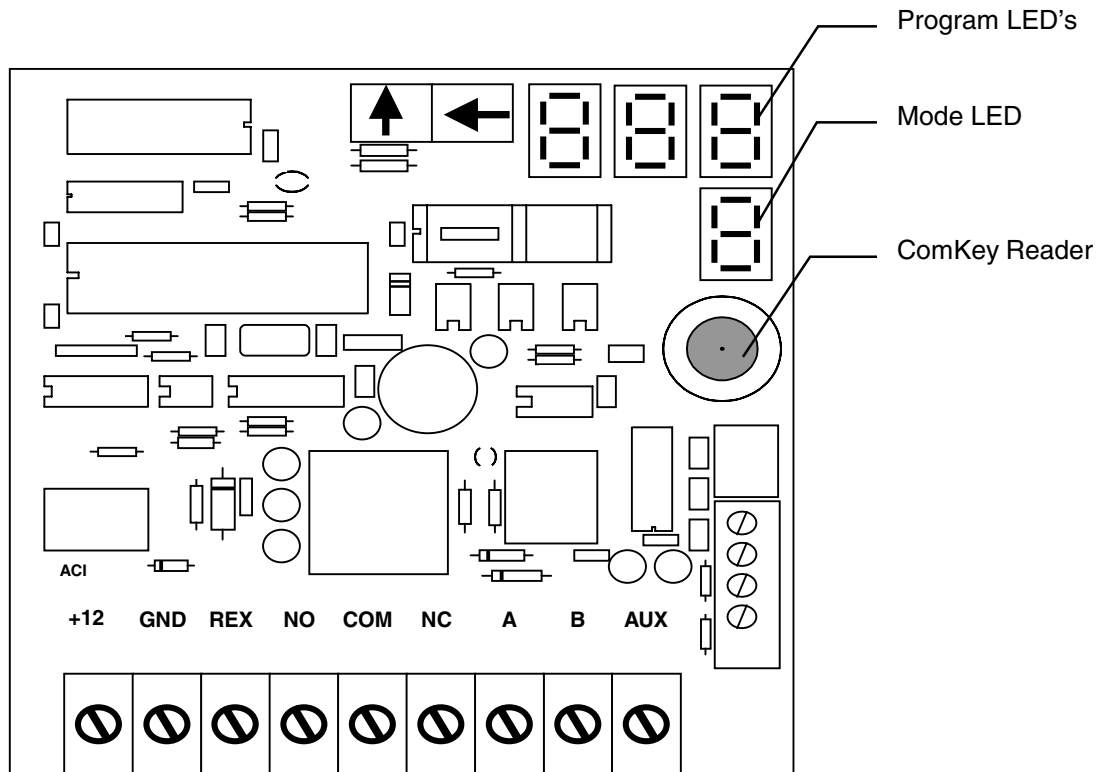
A normally closed circuit connection is provided on the controller board for a Request to Exit or Emergency Lock Release input.

Real time event tracking and database user reports can be produced. A printer output connection is included on the *ECS-100* controller and when used in conjunction with an optional printer interface module will allow connection to any parallel port printer.

## Section 3 - Programming The Controller

### Is the system easy to program?

Yes. All programming is initiated by presenting the system Administrator Credential and accessing one of 13 available program modes. The system verifies the Administrator Credential and enters program mode. The Mode LED stops flashing when in program mode.



**Program LED's:** Displays the value associated with the Programming Mode LED setting.

For example, if you have set the relay time (Mode 6) equal to 10 seconds, the Program LED's will display '010'. If you are about to add the credential #25 to the system (Mode 3) the Program LED's will display '025'. If you have set the Hours of the internal clock (Mode 9) at 4pm, the Program LED's will display '016'.

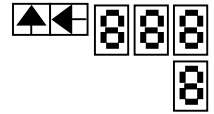
While in operating mode, the program LED's will display the slot assigned to the last Credential presented.

**Mode LED:** When steady, displays the Programming Mode. When flashing, displays the system Operating Mode.

**ComKey Reader:** Convenient On-board reader for ComKey Administrator Credentials, which are required to authorize system, programming.

## Initial Programming

The ECS 100 Controller is ready for initial programming when all LED displays contain the number “8”, indicating that the controller’s database is empty.



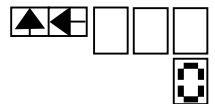
This condition will exist when the system is first being installed or in instances where the RAM has been completely erased

## Administrator Credentials

Administrator Credentials authorize the controller to allow entry into the programming modes. Each system includes two (2) ComKeys to use for this purpose. Even if your system is utilizing credentials other than ComKeys, you may still use the ComKeys as Administrator Credentials, which you may find to be both efficient and convenient. However, if you choose, you may also use the credential type that will be programmed into the system.

The controller can be programmed only after a valid **ADMINISTRATOR CREDENTIAL** is presented. **The FIRST Credential presented when the controller’s database is empty, becomes the Administrator Credential.**

If you touch and hold the initial ComKey, the MODE LED will display a solid “0” and the PROGRAM LED’s will all be blank, indicating that the controller is ready and authorized to be programmed.



[If you touch but do not hold the initial ComKey or if you are using other credential types, you will first see a blinking “0” and will need to re-present the Administrator Credential to activate the programming functions]

**This Administrator Credential, and only this Credential, can be used to start the programming modes and input data to the controller.**

It is **strongly recommended** that this Administrator Credential be clearly labeled and also that you make at least one additional Administrator Credential as a back-up (see *Adding An Administrator Credential* – page 14). Once created, Administrator Credentials should be kept secure.

Note: Any credential can be programmed as an Administrator. However, **Administrator Credentials can not be used for door access**; they can only be used for system programming. If you carry an Administrator Credential, you must also carry a regular valid credential to unlock the door.







**CAUTION:** If all Administrator Credentials are lost, the entire system RAM must be erased (see procedure on page 28) and the complete credential programming process must be repeated from the beginning.

## Program Mode vs. Operating Mode

When the system is in operating Mode, either Normal (momentary) or latching, The Mode LED will be a **blinking** “0” or “1”, respectively.

When the system is in Programming Mode (Upon presentation of an Administrator Credential), the Mode LED will become **steady**.

For all programming the actions required are as follows:

1. Present an Administrator Credential to authorize Program Mode
  2. Once in Programming Mode the programming function is accessed using the “**UP**” arrow until the desired Program Mode is displayed (0 through .2) 
  3. Press the **SIDE** arrow key to lock in the Program Mode and allow entry of the related program value(s). 
  4. If necessary, press the **UP** arrow key until the numerical value is displayed in the program LED’s 
  5. Press the **SIDE** arrow key to program additional values for the mode, if required, or to return to the Programming mode 
  6. Press the **Up** arrow key to either access another programming mode or to exit the Programming function. To exit, scroll until mode, “0” is displayed. (or mode “1” if latching operation is desired) 
- [CAUTION: Modes 10 and 11 are displayed as .0 (Decimal Point – Zero) and .1 (Decimal Point-One), respectively. Be sure that you do not stop at these values but that you scroll to the plain 0 or plain 1 value]**
7. Press the **SIDE** arrow key to return to Operating Mode. The Mode LED will start blinking. 

**If the Mode LED does not start blinking and the Program LED’s Display values, you have tried to exit from .0 (point-zero) [or .1 if latching mode was desired].**

**If this happens, press the SIDE arrow key until the Program LED’s are cleared, then press the UP arrow key until the Mode LED displays 0 (or 1, if so elected) and Press the SIDE arrow key again to return to Operating Mode.**

**Programming Modes Quick Reference**

<b>PROGRAMMING MODES QUICK REFERENCE</b>		
<b>MODE</b>	<b>PROGRAM FUNCTION</b>	<b>DESCRIPTION</b>
<b>0</b>	<b>NORMAL OPERATION (MOMENTARY)</b>	Factory default setting. When a valid credential is presented, the lock remains disengaged only for the desired RELAY TIME, set using MODE 6
<b>1</b>	<b>LATCHING OPERATION</b>	Relay time is disabled. Upon presentation of a valid credential the lock will disengage and remain disengaged until a valid credential is presented again
<b>2</b>	<b>ADD CREDENTIALS</b>	Allows the Administrator to add new credentials into the controller's database
<b>3</b>	<b>DELETE CREDENTIALS</b>	Allows the administrator to remove/delete specific credentials from the controller's database
<b>4</b>	<b>ADD ADMINISTRATOR CREDENTIAL</b>	Allows an authorized administrator to create an additional administrator credential (Maximum of 10) in the controller's database
<b>5</b>	<b>DELETE ADMINISTRATOR CREDENTIAL</b>	Allows an authorized administrator to remove a specific administrator credential from the controller's database
<b>6</b>	<b>SET RELAY TIME</b>	Allows the administrator to set the number of seconds a door lock will remain disengaged when a valid credential is presented and the system is in NORMAL mode
<b>7</b>	<b>PRINT</b>	If the system is configured for printing and connected to a printer, this mode produces a printout of the controller's database
<b>8</b>	<b>DOOR RELAY ENERGIZE STATE</b>	Allows the administrator to set the energize state to 'on' or 'off'
<b>9</b>	<b>SET CLOCK</b>	Allows the administrator to set(or re-set) the controller for Hour, Minute, Day, Date, Month and Year
<b>.0</b>	<b>SET UNLOCK TIME</b>	Allows the administrator to instruct the controller to disengage the door lock at a pre-set time (Unlock)
<b>.1</b>	<b>SET LOCK TIME</b>	Allows the administrator to instruct the controller to engage the door lock at a pre-set time (Lock)
<b>.2</b>	<b>SET DAY(S) FOR UNLOCK TIME</b>	Allows the administrator to instruct the controller as to which days of the week the Lock and Unlock times apply

## NORMAL MODE (Mode Setting 0)

Normal Mode is the factory default operating setting and is also referred to as Momentary operation.

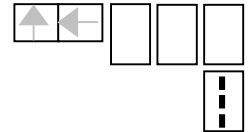
Normal operation means that the door can be opened by presenting a valid access credential to the reader and the lock will remain disengaged for the number of seconds established as the relay time. At that time, the lock will re-engage. The door can then only be opened by either another valid access credential or a free egress device.

If the door is held open or remains ajar, the door lock will remain disengaged for this period plus the established relay time.

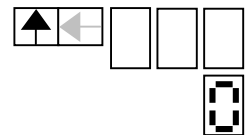
### To Program

Since the default operating mode setting is '0', you should only need to re-program this setting if the operating mode has been changed (either intentionally or accidentally), to '1'.

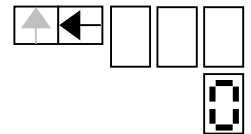
- Present an Administrator Credential  
[the mode LED will stop blinking]



- Press the **UP** arrow key until the Mode LED displays '0'



- Press the **SIDE** arrow key to return to Operating Mode  
[the mode LED will start blinking]



**If the Mode LED does not start blinking and the Program LED's display values, see procedure outlined in step 7, page 6.**

## LATCHING OPERATION MODE (Mode Setting 1)

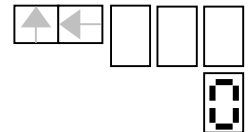
Latching operation means that a valid access credential must be presented to EITHER Open OR Lock a door. Upon presentation of a valid access credential the lock will disengage. However, in latching mode, the relay time does not apply and the lock will remain disengaged until a valid credential is presented again.

Latching mode is useful when there is a need for frequent traffic through a door in a short period of time and the conditions do not allow the door to be physically left open (i.e.- furniture delivery, movement of stock or supplies, etc.)

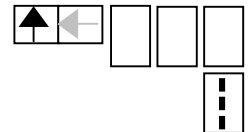
**CAUTION:** You can only leave the programming mode while the Program Mode setting is either '0' or '1'. Since Latching Mode is a valid exit setting, you must change the Mode to '0' to avoid the security risk of having the lock remain disengaged for extended periods of time.

### To Program

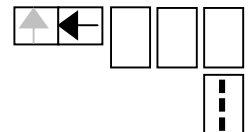
- Present an Administrator Credential  
[the mode LED will stop blinking]



- Press the **UP** arrow key until the Mode LED displays '1'



- Press the **SIDE** arrow key to return to Operating Mode  
[the mode LED will start blinking]



If the Mode LED does not start blinking and the Program LED's display values, see procedure outlined in step 7, page 6.

## ADD CREDENTIALS (Mode Setting 2)

Each individual authorized to open the door must have a credential whose embedded personal identification number (PIN) has been programmed into the controller. This is accomplished by setting the controller program mode to accept the input of a new or incremental PIN and then presenting the credential in the appropriate manner to be read by the controller. The adding of credential PIN's is referred to as enrollment.

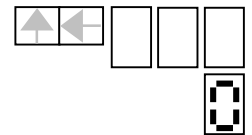
The ECS-100 can control up to 500 individual users (credentials assigned as Administrator). There are 500 available slots (#000 – #499), which are empty spaces in the controller's database, where credential PIN's can be stored.

**IMPORTANT:** The ECS-100 assigns an internal slot number for each credential enrolled. It does not identify the name of the individual assigned that credential. Therefore, a log book should be created for each enrolled credential listing, at a minimum, the Individual's Name and the assigned slot number.

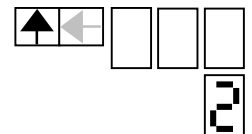
As the ECS-100 allows for a specific, individual credential to be removed/deleted from the database by slot number, without the need to have the actual credential physically available, accurate record keeping of the assigned slot numbers will be essential for this feature to be utilized.

### To Add a Credential

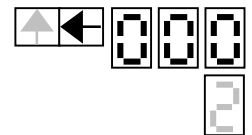
- Present an Administrator Credential  
[the mode LED will stop blinking]



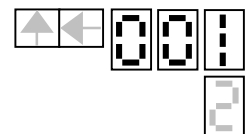
- Press the **UP** arrow key until the Mode LED displays ' 2 '



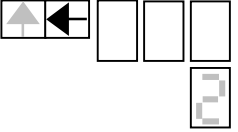
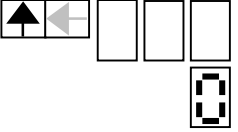
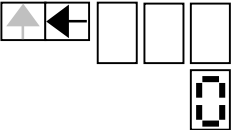
- Press the **SIDE** arrow key to enter the Add Credentials mode. The Program LED's will display the next available EMPTY location (see note 2)



- Introduce the Credential to be added to the reader (i.e.-touch a ComKey, present a Proximity Tag, etc.). A separate LED on the Board will flash GREEN, indicating the credential has been added and the Program LED's will automatically increment to the next available empty location. **Remember to label the credential with the slot number and log the slot number and user for that credential in your log book.** You can now add another new credential or exit the Add Credentials programming mode



### ADD CREDENTIALS (continued)

- If you have finished adding new credentials, you can exit the mode by pressing the **SIDE** arrow key. The program LED's will turn off. 
  
- Press the **UP** arrow key until the Mode LED displays ' 0 ' 
  
- Press the **SIDE** arrow key to return to Operating Mode [the mode LED will start blinking] 

**If the Mode LED does not start blinking and the Program LED's display values, see procedure outlined in step 7, page 6.**

**NOTE 1:** A Credential may only be entered into the database one time. You cannot accidentally enter a credential into two or more different slots. If you inadvertently attempt to add a credential already in the controller, the system will not accept it and the LED on the controller board will flash RED

**NOTE 2:** If Credentials have been deleted from the system, the system will display these deleted slots as the first available, rather than starting from the point of the last addition. This ensures that all slots can be utilized but requires caution and awareness when logging new additions.

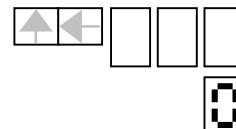
You can also specifically choose an open slot number for a given credential by scrolling once in the Add Credential mode. This provides the potential convenience of assigning a slot number that corresponds with another identifying number for the individual (i.e.- employee number, apartment number, parking space assignment, etc)

## DELETE CREDENTIALS (Mode setting 3)

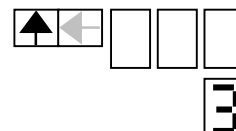
Credentials can be removed/deleted from the controller's database by an administrator regardless of whether the credential to be deleted is physically available or not, and without affecting the other credentials within the database. **To delete a credential without it being physically available, you must know the exact slot number to which it was assigned.**

### To Delete A Credential

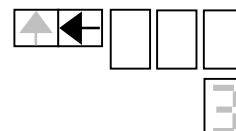
- Present an Administrator Credential  
[the mode LED will stop blinking]



- Press the **UP** arrow key until the Mode LED displays ' 3 '

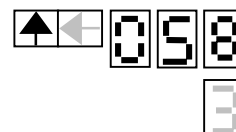


- Press the **SIDE** arrow key to enter the Delete Credentials mode.



### IF THE CREDENTIAL TO BE DELETED IS NOT AVAILABLE

- Press the **UP** arrow key until the Program LED's display the slot number of the credential to be deleted. The LED's will flash.

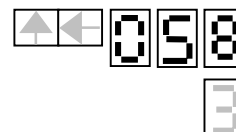


Present the Administrator Credential. The Board LED will flash GREEN and the Program LED's will stop Blinking. The selected credential has been deleted.

Repeat the procedure if additional Credentials are to be deleted.

### IF THE CREDENTIAL TO BE DELETED IS AVAILABLE

- Present the Credential to be deleted. The Board LED will flash GREEN and the slot number assigned to that Credential will display in the Program LED's. The credential has been deleted.

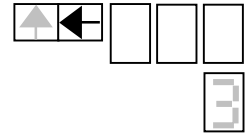


Repeat the procedure if additional Credentials are to be deleted.

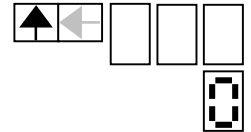
## DELETE CREDENTIALS (continued)

### AFTER THE CREDENTIAL(S) HAVE BEEN DELETED

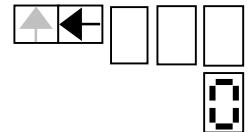
- Exit the Delete Credentials mode by pressing the **SIDE** arrow key. The program LED's will turn off.



- Press the **UP** arrow key until the Mode LED displays ' 0 '



- Press the **SIDE** arrow key to return to Operating Mode [the mode LED will start blinking]



If the Mode LED does not start blinking and the Program LED's display values, see procedure outlined in step 7, page 6.

## ADD AN ADMINISTRATOR CREDENTIAL (Mode Setting 4)

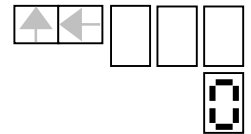
Once an initial Administrator Credential has been created, it is recommended that at least one back-up be created. You may also want to authorize more than one individual as an administrator. The ECS-100 allows up to 10 total Administrator Credentials and any unassigned credential can be used. Administrator Credentials occupy their own slots in the controller's database and do not conflict with user credentials.

**Reminder: Administrator Credentials cannot be used for access.**

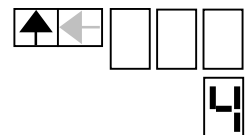
**As with user credentials, the ECS-100 assigns a slot for each Administrator Credential, but it does not identify the assigned administrator by name. Here again, a log book should be created to maintain a record each administrator and their assigned slot number.**

### To Add an Administrator Credential

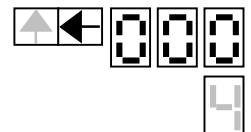
- Present an existing valid Administrator Credential [the mode LED will stop blinking]



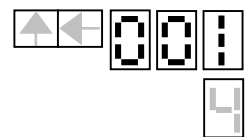
- Press the **UP** arrow key until the Mode LED displays '4'



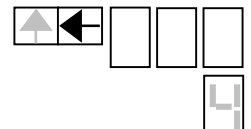
- Press the **SIDE** arrow key to enter the Add Administrator Credentials mode. The Program LED's will display the next available EMPTY location (see note 2)



- Present the Credential to be added(i.e.-touch a ComKey, present a Proximity Tag, etc.). The LED on the Board will flash GREEN, indicating the credential has been added and the Program LED's will automatically increment to the next available empty location. **Remember to label the Administrator Credential with the slot number and log the slot number and administrator for that credential in a log book.** You can now add another new Administrator Credential or exit.

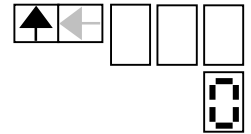


- To exit, press the **SIDE** arrow key. The program LED's will turn off.

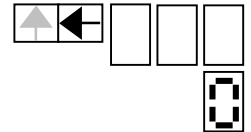


### ADD AN ADMINISTRATOR CREDENTIAL(continued)

- Press the **UP** arrow key until the Mode LED displays ‘ 0 ‘



- Press the **SIDE** arrow key to return to Operating Mode [the mode LED will start blinking]



**If the Mode LED does not start blinking and the Program LED's display values, see procedure outlined in step 7, page 6.**

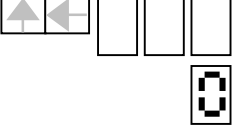
**NOTE 1:** An Administrator Credential may only be entered into the database one time. You cannot accidentally enter a credential into two or more different slots. If you inadvertently attempt to add a credential already in the controller, the system will not accept it and the LED on the controller board will flash RED

**NOTE 2:** If Credentials have been deleted from the system, the system will display these deleted slots as the first available, rather than starting from the point of the last addition. This ensures that all slots can be utilized **but requires caution and awareness when logging new additions.**

## DELETE AN ADMINISTRATOR CREDENTIAL (Mode setting 5)

Similar to User Credentials, Administrator Credentials can be deleted from the controller's database easily. An Administrator Credential can only be deleted by using another valid Administrator Credential and by its designated slot number assigned in the database.

### To Delete an Administrator Credential

- Present any valid Administrator Credential [the mode LED will stop blinking]
 
- Press the **UP** arrow key until the Mode LED displays ' 5 '
- Press the **SIDE** arrow key to enter the Delete Administrator Credentials mode.
- Press the **UP** arrow key until the Program LED's display the slot number of the Administrator Credential to be deleted. The LED's will flash.

Present a different Administrator Credential. The Board LED will flash GREEN and the Program LED's will stop Blinking, indicating that the selected Administrator Credential has been deleted.

Repeat the procedure if additional Administrator Credentials are to be deleted.

- Exit the Delete Administrator Credentials mode by pressing the **SIDE** arrow key. The program LED's will turn off.
- Press the **UP** arrow key until the Mode LED displays ' 0 '
- Press the **SIDE** arrow key to return to Operating Mode [the mode LED will start blinking]

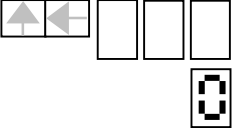
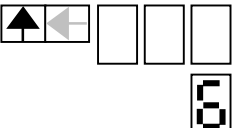
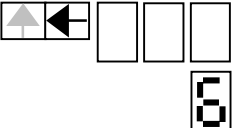
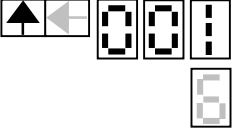
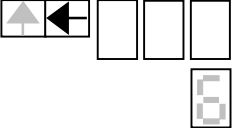
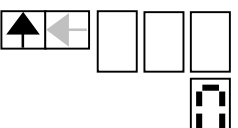
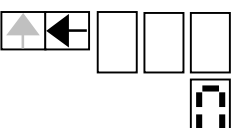
**If the Mode LED does not start blinking and the Program LED's display values, see procedure outlined in step 7, page 6.**

## SETTING THE RELAY TIME (Mode Setting 6)

Relay time is the length of time, in seconds, that the door lock will remain disengaged when a valid credential has been presented. The value can be set from 1 to 255 seconds, and for settings over 10 seconds the values are made available in 5 second increments.

Relay time should be set to be long enough to allow a regular user to present a credential and open the door without undue haste, but short enough to avoid the potential security risk of the lock being disengaged for an unnecessary extended length of time.

### To Program Relay Time







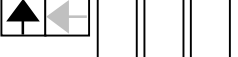



- Present an Administrator Credential [the mode LED will stop blinking]
 
- Press the **UP** arrow key until the Mode LED displays ' 6 '
 
- Press the **SIDE** arrow key to enter set relay time program mode.
 
- Press the **UP** arrow key to set the number of seconds you want the board relay to remain open (lock is disengaged) [1-10 seconds in 1 second intervals; 15 to 255 seconds in 5 second intervals]
 
- To exit, press the **SIDE** arrow key. The program LED's will turn off.
 
- Press the **UP** arrow key until the Mode LED displays ' 0 '
 
- Press the **SIDE** arrow key to return to Operating Mode [the mode LED will start blinking]
 

**If the Mode LED does not start blinking and the Program LED's display values, see procedure outlined in step 7, page 6.**

## PRINTING THE SYSTEM CONFIGURATION AND DATABASE (Mode Setting 7)

If you *ECS-100* is equipped with an *ECS* Printer Interface Module and is connected to a printer, you can print out a list of all user and administrator slots currently being utilized in the controller. As well as any programmed configuration within the controller (i.e.- relay time, time, date and year, unlock time, etc.)

### To Print

- Present an Administrator Credential  
[the mode LED will stop blinking]
 

- Press the **UP** arrow key until the Mode LED displays ' 7 '
 

- Press the **SIDE** arrow key to activate the print process. The letter "P" will display in the Program LED to indicate printing in progress. The system will generate a printout each time the SIDE arrow key is pressed.
 

- To exit, press the **UP** arrow key until the Mode LED displays ' 0 '
 

- Press the **SIDE** arrow key to return to Operating Mode  
[the mode LED will start blinking]
 


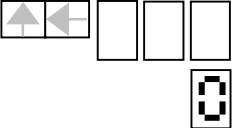
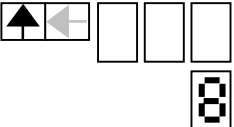
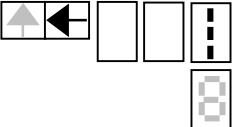
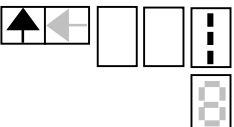
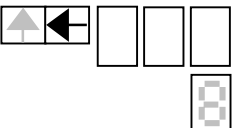
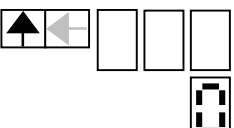
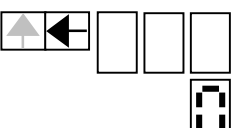
**If the Mode LED does not start blinking and the Program LED's display values, see procedure outlined in step 7, page 6.**

## SETTING THE DOOR RELAY ENERGIZE STATE (Mode Setting 8)

The Door Relay Energize State determines whether the lock receives power or does not receive power when a valid credential is present or an access override event occurs. There is a standard installation configuration and four additional Fail Safe/Fail Secure alternative configurations which are detailed in the *ECS-100 Installation Manual*. Each of these alternatives designates the appropriate energize state setting, “1” to energize or “0” to de-energize.

The factory default setting is “1” or Energized.

### To change the Energize State

- Present an Administrator Credential  
[the mode LED will stop blinking] 
- Press the **UP** arrow key until the Mode LED displays ‘ 8 ‘ 
- Press the **SIDE** arrow key to enter set door energize program mode. 
- Press the **UP** arrow key to toggle between the two available options, “1” and “0”. Leave the setting you want and exit the mode. 
- To exit, press the **SIDE** arrow key. The program LED’s will turn off. 
- Press the **UP** arrow key until the Mode LED displays ‘ 0 ‘ 
- Press the **SIDE** arrow key to return to Operating Mode  
[the mode LED will start blinking] 

**If the Mode LED does not start blinking and the Program LED’s display values, see procedure outlined in step 7, page 6.**

## SETTING THE CLOCK (Mode Setting 9)

The controller's internal clock needs to be set to utilize the automatic Unlock and Lock programming features, and to provide accurate reference times for access event tracking.

There are Six (6) individual value fields that are needed to accurately fill the complete clock (time/date) settings. In ORDER OF PROGRAMMING, these are:

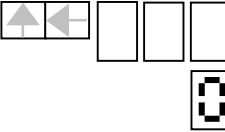
- HOUR:** The Hour is value between 0 and 23, in military 24-hour form (i.e.- 0 hours=12 midnight; 10=10 am; 16=4 pm; etc.)
- MINUTE:** Enter a value between 0 and 59.
- DAY:** This field is for the Day of the Week, entered in coded form with:
 

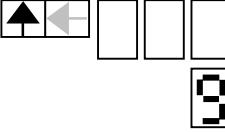
Sunday	=	1
Monday	=	2
Tuesday	=	3
Wednesday	=	4
Thursday	=	5
Friday	=	6
Saturday	=	7
- DATE:** Entered as the numerical calendar date: value between 1 and 31
- MONTH:** Entered as the standard numeric designation for the month: January=1; February=2, etc.; value between 1 and 12
- YEAR:** Entered as the last two(2) digits of the current year. Note-the *ECS-100* is Y2K ready. The year field has no active function in the operation of the controller. It is entered to provide a complete date on data printouts.

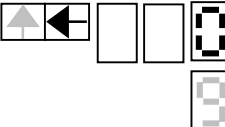
For the programming instructions listed below the setting will be for:  
3:00 PM – WEDNESDAY – MAY 12 - 1999

### To Program The Clock Settings



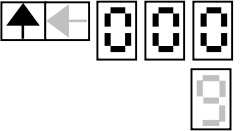
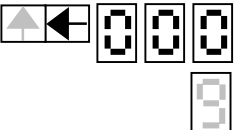
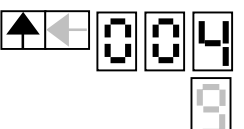
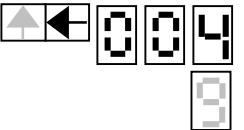
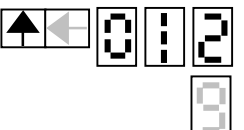

- Present an Administrator Credential [the mode LED will stop blinking]
 


- Press the **UP** arrow key until the Mode LED displays ' 9 '
 


- Press the **SIDE** arrow key to enter clock setting mode.
 

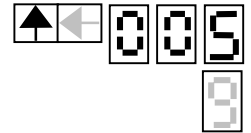


### SETTING THE CLOCK (continued)

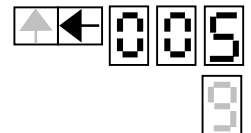
- Press the **UP** arrow key until the correct HOUR is displayed 
  
- Press the **SIDE** arrow key to accept the hour. The LED's are ready for Minutes. 
  
- Press the **UP** arrow key until the correct MINUTES are displayed. 
  
- Press the **SIDE** arrow key to accept the Minutes value. The LED's are ready for Day Of The Week. 
  
- Press the **UP** arrow key until the correct DAY OF THE WEEK is displayed. (1=Sunday; 2=Monday, etc.) 
  
- Press the **SIDE** arrow key to accept the Day Of The Week value. The LED's are ready for Calendar Date. 
  
- Press the **UP** arrow key until the correct DATE is displayed. 
  
- Press the **SIDE** arrow key to accept the Date value. The LED's are ready for Month. 

### SETTING THE CLOCK (continued)

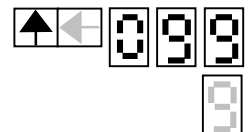
- Press the **UP** arrow key until the correct MONTH is displayed.



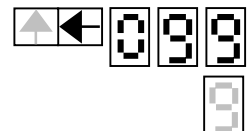
- Press the **SIDE** arrow key to accept the Month value. The LED's are ready for Year.



- Press the **UP** arrow key until the correct YEAR is displayed.

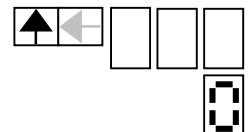


- Press the **SIDE** arrow key to accept the Year value. The Clock/Date settings are complete. This also exits the Clock/Date mode and the LED's will go blank.

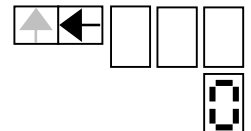


To review your settings, press the side arrow key to observe each of the six(6) entries. Press again to exit.

- To return to Operating Mode, Press the **UP** arrow key until the Mode LED displays '0'



- Press the **SIDE** arrow key to return to Operating Mode [the mode LED will start blinking]



**If the Mode LED does not start blinking and the Program LED's display values, see procedure outlined in step 7, page 6.**

## SETTING UNLOCK TIME (Mode Setting .0)

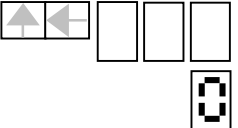
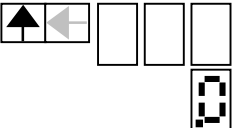
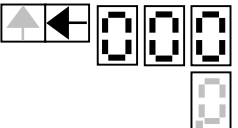
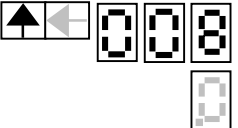
The ECS-100 can be programmed to automatically Unlock a door at a pre-set time on pre-determined days of the week. This can be useful for a building lobby or office entrance where access convenience is desired during normal daytime hours but the higher security is needed at all other times.

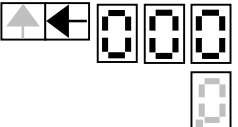
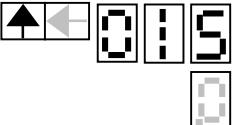
### IMPORTANT NOTES

If you set an UNLOCK TIME, BE SURE to also set a corresponding LOCK TIME (see next section-Mode .1). Failure to do so will risk leaving the door unlocked until 12:00 midnight, which is the factory default Lock Time setting (also the default Unlock setting)

Unlock Time will not function until you program the day(s) of the week for the time to be effective (see final section-Mode .2). If at any time you want to disable the Unlock time, this is accomplished by disabling all active days of the week.

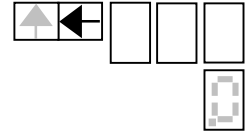
### To Set Unlock Time

- Present an Administrator Credential  
[the mode LED will stop blinking] 
- Press the **UP** arrow key until the Mode LED displays  
' .0 ' (**Decimal Point-Zero**) 
- Press the **SIDE** arrow key to enter Set Unlock Time mode. [On initial setting the default hour of 0 will display, on subsequent settings, the last entered hour will display] 
- Press the **UP** arrow key until the correct HOUR is displayed. (8 am displayed in diagram) 

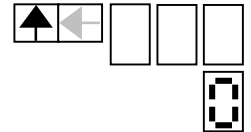
[Hours are in 24 hour format - 0 hours=12:00 Midnight; 12 hours=12:00 Noon; 16 hours=4:00 pm; etc.]
- Press the **SIDE** arrow key to accept the hour. The LED's are ready for Minutes and will display the default setting of 0 or the last setting programmed. 
- Press the **UP** arrow key until the correct MINUTES are displayed. (15 minutes past the hour displayed) 

**SETTING UNLOCK TIME (continued)**

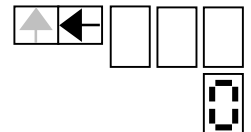
- Press the **SIDE** arrow key to accept the Minutes value. The LED's will go off indicating you are exiting the mode. To review your settings press the side arrow key once to view the Hour and again to view the minutes. Press the side arrow key again to exit.



- To return to Operating Mode, Press the **UP** arrow key until the Mode LED displays '0'



- Press the **SIDE** arrow key to return to Operating Mode [the mode LED will start blinking]



**If the Mode LED does not start blinking and the Program LED's display values, see procedure outlined in step 7, page 6.**

## SETTING LOCK TIME (Mode Setting .1)

Used in conjunction with setting an unlock time, The ECS-100 can also be programmed to automatically Re-Lock an unlocked door at a pre-set time on pre-determined days of the week. This can be useful for a building lobby or office entrance where access convenience is desired during normal daytime hours but the higher security is needed at all other times.

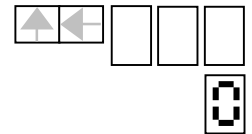
### IMPORTANT NOTES

Since the door is normally already locked, there is no reason to set a lock time by itself. Lock time should ONLY be set when you have set an unlock time first. If you set a lock time and day(s) of the week without setting a desired UNLOCK time, the door will unlock at the default unlock time of 12:00 Midnight.

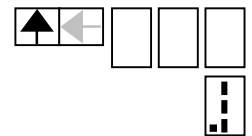
Unlock Time will not function until you program the day(s) of the week for the time to be effective (see next section-Mode .2). If at any time you want to disable the Lock and Unlock times, this is accomplished by disabling all active days of the week.

### To Set Lock Time

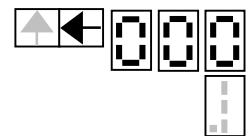
- Present an Administrator Credential  
[the mode LED will stop blinking]



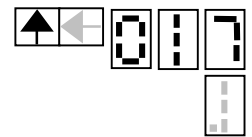
- Press the **UP** arrow key until the Mode LED displays  
' .1 ' (**Decimal Point-One**)



- Press the **SIDE** arrow key to enter Set Lock Time mode. [On initial setting the default hour of 0 will display, on subsequent settings, the last entered hour will display]

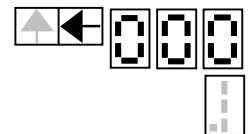


- Press the **UP** arrow key until the correct HOUR is displayed.  
(5 pm displayed in diagram)



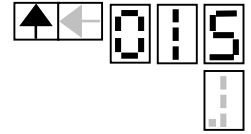
[Hours are in 24 hour format - 0 hours=12:00 Midnight;  
12 hours=12:00 Noon; 16 hours=4:00 pm; etc.]

- Press the **SIDE** arrow key to accept the hour. The LED's are ready for Minutes and will display the default setting of 0 or the last setting programmed.

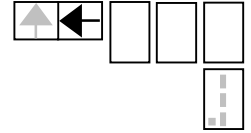


**SETTING LOCK TIME (continued)**

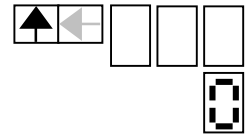
- Press the **UP** arrow key until the correct MINUTES are displayed.  
(15 minutes past the hour displayed)



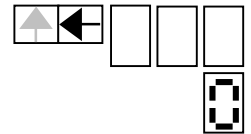
- Press the **SIDE** arrow key to accept the Minutes value. The LED's will go off indicating you are exiting the mode. To review your settings press the side arrow key once to view the Hour and again to view the minutes. Press the side arrow key again to exit.



- To return to Operating Mode, Press the **UP** arrow key until the Mode LED displays '0'



- Press the **SIDE** arrow key to return to Operating Mode [the mode LED will start blinking]



**If the Mode LED does not start blinking and the Program LED's display values, see procedure outlined in step 7, page 6.**

## SETTING DAY(S) OF THE WEEK FOR LOCK/UNLOCK TIME (Mode Setting .2)

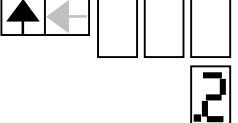
Unlock and Lock times will not take effect until the controller is programmed as to which Day(s) of the week these settings apply towards. In this mode the day(s) of the week for Unlock and Lock times are enabled or disabled.

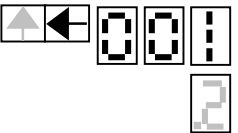
Each day of the week is has a numerical designation (i.e.-Sunday=1; Monday=2, etc.), as detailed on page 20 (Setting the Clock/Date).

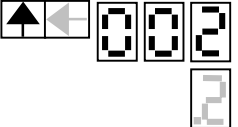
Day(s) of the week must be enabled to become active. Once enabled, they must also be proactively disabled, to be made inactive.

### To Set Day(s) of the Week

- Present an Administrator Credential [the mode LED will stop blinking]
 

- Press the **UP** arrow key until the Mode LED displays '.2' (**Decimal Point-Two**)
 

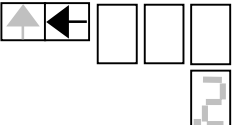
- Press the **SIDE** arrow key to enter Set Day(s) of the Week mode. [On initial setting the default day of Sunday, 001) will display, on subsequent settings, the last day acted upon will display]
 

- Press the **UP** arrow key until the desired DAY OF THE WEEK is displayed. (1=Sunday; 2=Monday, etc.)
 

Present the Administrator Credential. The Program LED's will blink to indicate that the Day selected has been ENABLED.

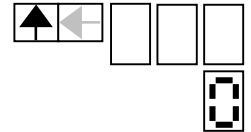
If the day has already been enabled the LED's will be blinking when you first display it. To DISABLE the day, present the Administrator Credential. The Program LED's will stop blinking and remain steady, indicating that the Day has been disabled.

Repeat the steps to enable/disable additional days.

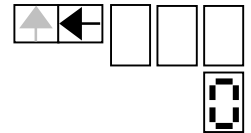
- To exit, press the **SIDE** arrow key. The program LED's will turn off.
 

### SETTING DAY(S) OF THE WEEK FOR LOCK/UNLOCK TIME (continued)

- Press the **UP** arrow key until the Mode LED displays ' 0 '



- Press the **SIDE** arrow key to return to Operating Mode [the mode LED will start blinking]



If the Mode LED does not start blinking and the Program LED's display values, see procedure outlined in step 7, page 6.

## ERASING SYSTEM RAM

In the event that all Administrator Credentials are lost, the *ECS-100* controller RAM must be completely erased and re-programmed from the beginning to permit any future database programming. There may also be other reasons you may choose to erase the system's database and re-program from the start.

### To Erase the System RAM

- Turn the system power off (usually by unplugging it);
- PRESS and HOLD the UP ARROW key while simultaneously turning the power back ON.

All LED's will begin incrementing indicating that the RAM is being erased.

When the erasure is complete, all LED's will display 8's, indicating the system is ready for initial programming again.

**REMEMBER:** The FIRST Credential presented will now become an Administrator Credential.

## **Section 4 - Using Wiegand Credentials**

All Wiegand credentials, and associated reader technology can be used with the *ECS-100* system.

To use Wiegand output credentials you will need the *ECS Model 100W* controller and you will also need a way to enroll, add or delete (using the physical credential) individual credential PINs into (from) the controller's database.

If you are using Proximity Credentials or Keypad at a limited number of access locations, a special use proximity reader (*ECS - 3100P*) or keypad (*ECS - 3100K*) can be installed directly into the housing of the *ECS-100W* controller to provide a convenient fixed on-site programming interface.

If you are using RF Remote Controls, you do not need any additional enrollment equipment provided the RF Receiver is within range of the Control Cabinet.

In all other cases where Wiegand technology is being utilized, you will need to use an *ECS-300* series credential Programmer. The programmer is a portable, externally connected device that houses the necessary components to interface with the *ECS-100W* Controller. The connection from the Programmer to the Controller Board is via a simple RJ12 plug-in (the same as plugging in a telephone) which is provided with the Programmer.

The available Programmers are as follows:

Proximity Credentials -	<i>ECS - 301</i>
RF Remote -	<i>ECS - 302</i>
Keypad -	<i>ECS - 304</i>
Swipe Cards -	<i>ECS - 304</i>
Biometrics -	<i>ECS - 304</i>
RFID/AVI -	<i>ECS - 304</i>

The *ECS-301* and *ECS-302* Programmers (Proximity or RF Remote) contain both a reader/receiver and interface module.

The *ECS-304* contains only the interface module. You will need to connect the appropriate reader device to the Programmer (using a 9-Pin input port) and then connect the Programmer to the Controller to add new users (PINs) the database.

**ECS-100 ADMINISTRATOR CREDENTIAL LOG**

CREDENTIAL SLOT NUMBER	ADMINISTRATOR NAME	DATE ASSIGNED	OTHER INFORMATION
000			
001			
002			
003			
004			
005			
006			
007			
008			
009			



## ECS Customer Feedback Form

We would like to hear from you. If you have any suggestions or questions, please feel free to call your distributor or you may call Access Controls International: National: 1-888-810-6060 International: 1-732-462-7236

### Customer Information

Date: \_\_\_\_\_  
Name: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State/Province: \_\_\_\_\_  
Country: \_\_\_\_\_ Zip Code/Postal Code: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Fax Number: \_\_\_\_\_  
E-Mail Address: \_\_\_\_\_

### Controller Information

Model Number: 25\_\_\_ 100\_\_\_ 100W\_\_\_ 200\_\_\_ 200W\_\_\_ 400\_\_\_ 400W\_\_\_ TURBO\_\_\_  
Date of Purchase: \_\_\_\_\_ Date of Installation: \_\_\_\_\_  
Controller Serial #: \_\_\_\_\_  
Controller Configuration:  
Number of Doors: \_\_\_\_\_ Number of Readers: \_\_\_\_\_ Number of Users: \_\_\_\_\_  
Credential Technology: \_\_\_\_\_

Please attach a printout of your system configuration.

### Suggestion – Question – or Description of Problem

Attach additional sheets if necessary:

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### Office Use Only

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Date Reported: \_\_\_\_\_ Date Responded: \_\_\_\_\_  
Resolution: \_\_\_\_\_

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**NOTES**

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**NOTES**

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