

# EM3000 Access Control System



## **User's Guide**

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## About the EM3000 Access Control System

The basic functions the EM3000 access control system include the following:

- Enables you to manage which individuals can access specific doors.
- Allows you to define the time of day each individual will be allowed to enter/exit a door.
- When an access door is opened without authorization, the system can create an alarm condition.

#### CARDS AND CARD READERS

Individuals use cards to gain access to a controlled area of the complex. Each card contains a unique card code and a facility code that, when presented to a card reader, can prompt the system to grant access.

- Cards are read by a card reader. If the card is valid, the system will grant access.
- **Card Readers** are devices that read cards, allowing the system to allow or reject entry based on the validity of the cards.
- Facility Codes are assigned to a group of access cards, allowing the cards to be associated with a facility or complex.

#### TIME ZONES

The Time Zones feature allows you to set up time periods when cards are valid. That is, if you want a cardholder to have access to the complex only during certain hours (e.g., 8:00 am - 5:00 pm) and/or days of the week, you need to create a time zone, link it to an access level, and then assign an access level to the cardholder.

#### ACCESS LEVELS

You may define an access level by linking specific readers to a time zone and then assigning cardholders a level. When the cardholder presents the card to a reader, the system validates authorization from the access level definition. The EM3000 system has a capacity of up to 255 access levels.

## Installing EMWIN

### SYSTEM REQUIREMENTS

Windows-based software offers many advantages in terms of usability and versatility, but requires a computer configuration powerful enough for it to work effectively. For this reason, to use EMWin software, the following items are required:

- An IBM PC-compatible computer running Windows 98, 2000, or NT. **Windows NT Users:** You must have service pack 5 or above installed.
- An available RS-232 COM port (DB-9 connector)
- CD ROM (with 4x or greater speed)
- Mouse

MINIMUM	RECOMMENDED
Pentium II – 300 mhz	Pentium III – 300 mhz
64 MB RAM	128 MB RAM
50 MB free hard disk space	100 MB free hard disk space

#### **Hardware Requirements**

### INSTALLATION

EMWin is designed to automatically launch when you place the EMWin CD in the CD-ROM drive. If the software does not launch automatically, please perform the following steps:

**Windows NT/2000 Users:** You must have administrator privileges to install EMWin.

- 1 Enter Windows® Explorer to find out the letter name of the CD-ROM drive.
- 2 Click on Start and then select Run. See Figure 1.
- **3** Type in the letter of the CD-ROM drive followed by ":\setup". See Figure 2.

This will start the loading process.

- 4 The InstallShield Wizard will guide you through the rest of the process (8 screens).
- 5 Click **Finish** to complete the process.

**NEW USERS:** Once EMWin is installed, you may enter unit data (e.g., adding cardholder records) without being connected to a unit. Once you connect to a unit, EMWin will download all the data you previously entered. This feature enables you to set up a unit's data before the unit is even installed.



Figure 1: Selecting Run

Run	?×
7	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
<u>O</u> pen:	F:\setup
	OK Cancel Browse

Figure 2: The Run Window

### SELECTING THE COM PORT, IF NECESSARY

Once EMWin starts, it will automatically attempt to detect EMCs via the COM 1 port.

If using another COM port, you must manually select the port on the Serial Communications screen (see Figure 3).

To access the screen, at the menu bar, select **<u>EMC</u>** ---> **EMC** Communications.

To manually select another COM port:

- 1 Select the number from the Port dropdown box.
- 2 Click Apply.
- 3 Click <u>Scan</u>. *EMWin will attempt to* detect an *EMC*. The number of detected units will appear under the Scan button.
- 4 Click <u>OK</u> to exit.

#### NOTES:

- If EMWin doesn't detect any units after you complete the above steps, consult your computer *User's Guide(s)*.
- The Com Speed, Poll Rate and Poller Delay boxes are not editable. The preset values in these fields ensure proper system communications.

🖥 Serial Communica	tions	_ 🗆 🗵
Port	Com Speed	
2	9600 🔽	<u>S</u> can
		0 EMC's Found
Poll Rate 2( (msecs)		Poller Delay 20 ¥ (msecs)
<u>0</u> K	Cancel	Apply

Figure 3: Serial Communications Screen

 If using COM port 3 or above, your I/O and IRQ settings for the port must be set according to their standard configuration (i.e., default settings).

## **Configuration Wizard**

### **COMPANY INFORMATION**

- **1** Enter the following information:
  - Your Name
  - Company Name
  - Address
  - Phone number
- 2 Select the region (from the **Regional Setting** box) that most closely matches your region. Keep in mind, the regional settings affect EMWin's predefined holidays (see page 16).

For example, if you select Mexico, EMWin will load all the holidays celebrated in that region (e.g., Benito Juarez's Birthday).

3 To define a password, click the Password button and enter a new password (Figure 5).

After defining a password, you must enter it each time you login to the application (Figure 6).

- 4 Click <u>Apply</u> to save and <u>OK</u> to exit.
  - The <u>Clear</u> button clears all the screen's data fields.
  - The **<u>Reset</u>** button resets the data to its default settings.

### DOOR NAMES

1 Enter the number of EMCs connected together on this system.

This tells the program how many to expect.

- 2 Add or **Delete** doors related to this site or location.
- 3 Click <u>Apply</u> to save and <u>OK</u> to exit.

(This will create the list of selections that will be used on the next tab, Door Assignments).

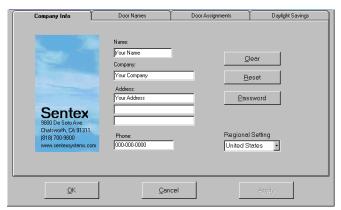


Figure 4: Company Information

💐 New Password		×
New Password:	*****	
Verify Password:	*****	
ОК	Cancel	

Figure 5: New Password

💐 Login				×
	Enter Password:		_	
	ОК	<u>C</u> ancel		

Figure 6: Login

Company Info	Door Names	Door Assignments	Daylight Savings
Total #	of EMC Controllers to be ins	italled? 1	
	Available Doors		
Accounting D	oor		Add
Back Door			
Engineering			
Front Door			Delete
Lobby			Jelete
Machine Roo	m Door		
Shipping			
	1		1
<u>0</u> K	<u>a</u>	ncel	Apply

Figure 7: Door Names

### DOOR ASSIGNMENTS

- 1 For each door on the system, select the name of the door by clicking the down arrow and highlighting the name of the door assigned to the unit.
- 2 Click <u>Apply</u> to store the names and <u>OK</u> to exit.

Compa	any Info	Door Nan	nes	Door Assignment	s Daylig	ght Savings
EMC#	DoorAAs	ssignment	Door B Assig	nment		
1	Front Door	🗾 Ba	ack Door	<b>*</b>		
2	Engineering	• Ma	achine Room Do	oor 🔹		
3	Accounting E	)oor 💽 🔹 📢	lone>	-		
						1
	<u></u>	1				
	<u>0</u> K		<u>C</u> ancel		Apply	
_		_				

Figure 8: Door Assignments

### **DAYLIGHT SAVINGS**

There are no steps required on this screen unless you need to change or disable daylight savings times.

The daylight savings times have been factory set through 2008. To modify any of the settings, you can either change the Daylight Savings Time field or the Start or End dates in the column to the right.

Selecting the No Daylight Savings option will cause the program to ignore daylight savings.

Company Info	Do	or Names		Ì	Door Assignments		Daylight Savings			
				Davl	iaht S	Savi	ngs Time	_ Year	Start	End
			۵	- oril 20	-	_		2001	4/1/01	10/28/01
		_	мт	W	т	F	s	2002	4/7/02	10/27/02
			2 3	4	5	6	7	2003	4/6/03	10/26/03
			9 10	-	12	13	14	2004	4/4/04	10/31/04
			16 17	-	_	20	21	2005	4/3/05	10/30/05
	Non-Line of the local division of the local		23 24	-	_	27	28	2006	4/2/06	10/29/06
			30					2007	4/1/07	10/28/07
				+				2008	4/6/08	10/26/08
			_	-		_				
							∏ No	Daylight Savin	gs	
				_	_	_				
<u>0</u> K				Jano					Apply	

Figure 9: Daylight Savings

## **Door Configuration**

This area defines the operating parameters for all of the access controlled doors or gates.

	Configure Doors								
		Configure Door							
	Door Properties	Access Parameters	Readers	Counter Properties					
	Contact Used		Request to Exit Used		Factory Defaults				
Select the door	Valid Card Resets Alarm	Alarm Shutoff Time 10 💌 Seconds							
from the table to edit its properties, —	Number Description           Number         Description           1         Front Door           2         Back Door	EMC # Unlock	10	ng Unlock Time Long Open Tim 10 20 10 20					
configure its parameters, etc.									
	<u></u> K	2	ancel	Apply					

**Figure 10: Door Properties** 

### **Door Properties**

Set up the Door Properties as follows:

**Contact Used:** Check this box if a door contact will be monitored to audit door open or closed status.

**Contact Supervised:** Check box if contact circuit is monitored for tampering using 4 state calibration (check with your installer if your system was installed with supervised contacts).

**Request to Exit Used (REX):** Check box if REX has been installed. REXs, when prompted via a motion sensor or push button, allow individuals to exit through a controlled door.

**Request to Exit Supervised:** Check box if the REX circuit is monitored for tampering using 4 state calibration (check with your installer if your system was installed with a supervised REX).

**Factory Defaults:** Selecting this will cause the program default values to be re-entered into the door configuration section.

Valid Card Resets Alarm: Check this box if you want the local alarm that is sounded to be turned off by the first valid card that is read after the alarm is triggered.

**Enable Alarm Shutoff Time:** When enabled, the alarm (e.g., alarm buzzer or light) at the door will shut off after a predefined amount of time when a "door held open too long" alarm condition occurs. All other alarm conditions, such as a "door forced open" alarm, must be manually reset or turned off by:

- Presenting a valid card to the door's reader (when the Valid Card Resets Alarm box is enabled – see above). OR
- Manually turning off the alarm from EMWin (see EMC Menu Selection on page 24).

Alarm Shutoff Time: Determines the amount of time an alarm remains active from a "door held open too long" alarm condition.

**NOTE:** The Number column displays sequential line item record numbers (not door numbers).

### **Access Parameters**

The access parameters define the amount of time doors are unlocked and allowed to remain open prior to any action reported as an alarm.

Configure Doors							
Configure Door							
Door Properties	Access Parameters	Readers	Counter	r Properties	E		
Unlock Time	5 🗲	Auto Unlock T	Fime Zone		Factory Defaults		
Open Time	10 +	Normal Work W	eek				
Long Unlock Time	10	Card Unlo	ck				
Long Open Time	20 🕂	Card Lock					
Number Description	EMC # Unlock Time		ng Unlock Time	Lana Osan Tin			
Number Description 1 Front Door	EMC# Unlock Time	Open Time Lo 10	10	Long Open Tim 20			
2 Back Door	1 5	10	10	20			
				F			
<u></u> K	Cancel		Apply				

Figure 11: Access Parameters

Configure the Access Parameters as follows:

**Unlock Time:** Set the amount of time in seconds that the door lock is energized (door unlocked) when a valid card is granted access or a REX is activated.

**Open Time:** Set the amount of time that the door can remain open prior to an alarm being activated (if an alarm has been selected for this door).

**Long Unlock Time:** Set this time for cardholders who require additional time to gain access through a door, such as someone in a wheelchair.

**Long Open Time:** Set the amount of time that the door can remain open prior to an alarm being activated (if an alarm has been selected for this door).

Auto Unlock Time Zone: Select the Time Zone (e.g., 8am to 5pm) that defines the time you want a door (e.g., a lobby door) to automatically unlock and relock.

Card Unlock: See page 10.

Card Lock: See page 10.

Click <u>Apply</u> to save the information and/or <u>O</u>K to exit.

### CARD UNLOCK / LOCK FUNCTIONALITY

Auto Unlock Time Zone Normal Work Week Card Unlock Card Lock	<ul> <li>Each day during the Time Zone, the door(s) will be automatically <i>unlocked</i> (and remain unlocked) at the start of the time period. Example: Door unlocks at 8am.</li> <li>Each day during the Time Zone, the door(s) will be automatically <i>locked</i> (and remain locked) at the end of the time period. Example: Door locks at 5pm.</li> <li>Cards <i>won't</i> affect the Auto Unlock Time Zone.</li> </ul>
Auto Unlock Time Zone Normal Work Week Card Unlock Card Lock	<ul> <li>Door will NOT be automatically unlocked at the start of the Time Zone. Example: Employee arrives late (9am) and the door remains locked until his/her card unlocks it.</li> <li>Valid card will unlock door when presented during the Time Zone. Door will remain unlocked during the remaining duration of the Time Zone.</li> <li>Subsequent presentations of valid card(s) during the Time Zone (after door has been unlocked) will NOT lock the door.</li> </ul>
Auto Unlock Time Zone Normal Work Week Card Unlock Card Lock	<ul> <li>Door will be automatically unlocked at the start and locked at the end of the Time Zone.</li> <li>Valid card will lock door (and door will remain locked) when presented during the Time Zone.</li> <li>Subsequent presentations of valid card(s) during the Time Zone (after door has been locked) will NOT unlock the door.</li> </ul>
Auto Unlock Time Zone Normal Work Week Card Unlock Card Lock	<ul> <li>Door will NOT be automatically unlocked at the start of the Time Zone.</li> <li>Door will be automatically locked at the end of the Time Zone.</li> <li>Valid card will unlock a locked door when presented during the Time Zone. Door will remain unlocked during the remaining duration of the Time Zone or until a valid card is presented to the reader.</li> <li>Valid card will lock an unlocked door when presented during the Time Zone. Door will remain locked during the remaining duration of the Time Zone or until a valid card is presented to the reader.</li> </ul>

#### On Holidays:

- Auto Unlock functions are normally overridden on holidays. To have a door Auto Unlock on holidays, the day(s) must be manually enabled in the Holiday Time Zone (corresponding to the Standard Time Zone selected for the Auto Unlock schedule).
- If enabled on holiday day(s), Auto Unlock functionality is IDENTICAL to non-holiday Auto Unlock functionality, including Card Lock / Card Unlock options.

### Readers

Use this screen to configure each of the readers.

Select the reader by checking the box next to Reader A or Reader B and clicking the **Config** button to bring up the Reader Configuration screen (Figure 13).

**Reader A/B:** Description fields (not editable) show the name assigned to each reader.

**Reader Description:** This field displays the Door # and name assigned to that door. You cannot edit the description.

**Reader Type:** Select the down arrow and select the reader type being used with this door position on this EMC.

Anti-Passback Time: Select the amount of time to pass before the same card can be used again at this reader. *This is to prevent someone from passing their card back to someone else to use to get through the doorway.* 

**Assignment:** If you select the reader as Entry or Exit, the "true" anti-passback feature will be enabled. "True" antipassback forces cardholders to exit (present their cards to Reader B) before they can enter again (through Reader A).

**NOTE:** If only one reader is connected to an EMC, **do NOT check the Entry or Exit boxes**.

	(	Configure D	oor			
Door Properties	Access Paran	neters	Readers	Counte	r Properties	Factory
🖍 Reader A			Rea	der B		Default
Config			C	onfig		
Description			Descrip	tion		
Reader A			Reade	r B		
Number Description 1 Front Door	EMC #	Unlock Time 5	Open Time 10	Long Unlock Time 10	Long Open Tim 20	
2 Back Door	1	5	10	10	20	
					F	

#### Figure 12: Readers

PReader Configuration		
Reader Description	Reader Type	Anti-Passback Time
Door #1 Reader A	All Proximity	▼ 0 ▲ Minutes ▼ (0 - 60)
Assignment		PIN Pad Disable Time Zone 1
<u>O</u> K	<u>C</u> ancel	Apply

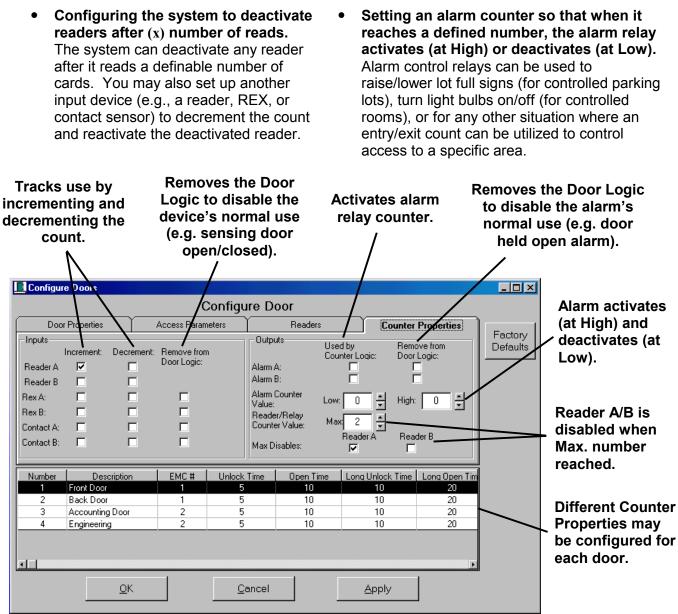
Figure 13: Reader Configuration

**PIN Pad Disable Time Period:** If the reader includes a PIN pad, you may assign a time zone to disable the PIN pad feature during the time defined in the time zone (refer to **Time Zones** on page 15). When the PIN pad is disabled, the cardholder will not be required to enter a PIN code when entering/exiting the complex.

#### Click <u>Apply</u> to save your selections and/or <u>OK</u> to exit.

### **Counter Properties**

The Counter Properties tab allows you to configure your EM3000 system to perform special functions such as:



**Figure 14: Counter Properties** 

### **TYPES OF INPUTS**

Your installation may include any of the following input counter devices:

**Card Readers (Reader A/B):** Reader use may be tracked with a counter that increments or decrements to (1) disable the reader after a certain number of uses or (2) to trigger an alarm relay.

**Request to Exit Devices (REX A/B):** These devices allow manual exits through the use of a button or motion sensor (e.g., loop detector). You may track the use by incrementing or decrementing the count to trigger an alarm relay.

**Door Status Contact (Contact A/B):** Door contacts sense door open/closed status and can trigger an alarm if the door is held or forced open. You may track the use by incrementing or decrementing the count to trigger an alarm relay.

### **TYPES OF OUTPUTS**

Configure your outputs according to your system configuration and security needs.

Alarm A/B (Used by Counter Logic): When you select to use an alarm's counter logic, the system will activate/deactivate the alarm relay based on (1) the number you define in the Alarm Counter Value fields and (2) the number of times an input device is used to increment/decrement the count (i.e., the number of times a card reader, REX, or contact sensor is activated for entry or exit).

Alarm A/B (Remove from Door Logic): When you remove the door logic from an alarm, the alarm will no longer operate as originally intended (e.g., will not respond to door held open or forced open conditions).

Alarm Counter Value: Set the alarm counter values according to the capacity of the control area (e.g., number of persons allowed in a room or number of spaces in a parking lot).

When the counter reaches the **High**, the alarm relay will **activate** (raise a lot full sign). When the counter reaches the **Low**, the alarm relay will **deactivate** (lower a lot full sign).

**Reader/Relay Counter Value:** When reader use reaches the value in this field, Reader A or B can be disabled.

**Max Disables:** Allows you to select which reader will be disabled when using this field in conjunction with the Reader/Relay Counter Value field.

#### WHAT DO YOU WANT TO DO?

Below are two common counter configurations.

- Disable a reader after (x) number of reads.
  - 1 Select the readers to **Increment** and **Decrement**.
  - 2 Set the **Reader/Relay Counter Value**. When the number of reads matches this number, the reader will be disabled. When the number of reads falls below this number, the reader will be enabled.
  - 3 At the **Max. Disables** field, select the reader that will be disabled when max. number is reached.
  - 4 Click <u>Apply</u>.
- Set the alarm relay to activate (raise a lot full sign) and deactivate (lower the sign) after (x) number of cars enter/leave a controlled area (parking lot).
  - 1 Select the devices that will **Increment** and **Decrement** the count.
  - 2 Select (under the **Used by Counter Logic** column) the Alarm (A/B) that will be used as a counter.
  - 3 Select (under the **Remove from Door Logic** columns) the device(s) and/or alarm(s) that will have door logic removed.
  - 4 Enter the Alarm Counter Value.
  - 5 Click <u>Apply</u>.

#### NOTES

- Entry Readers are commonly used to *increment* the count. REXs are commonly used to *decrement* the count.
- Any combination of devices may be used to increment and decrement a count. For example, you may use a reader to increment a count and a reader to decrement it.
- A loop detector (commonly used in parking lot applications) should be connected as a REX device.

## **Time Zones**

## **Standard Time Zones**

This screen brings up the factory default and any user-defined Time Zones.

**NOTE:** You cannot change the times for NEVER and ALWAYS Time Zones.

To change the times within the periods:

- **1** Highlight the Time Zone you want to change.
- 2 Left click on the red bar at the top of the screen at either end and adjust its length to your requirements.

**NOTE:** Notice the change in the Start and End columns as you change the size of the red bar.

### 

Double click on the times to the right of the period name and use the up and down arrows in the box to change the start and end times.

Select <u>Apply</u> to save your data and/or <u>O</u>K to exit.

🛞 St	andard Time Zones										_	
1,1		6 7 8	9 10	11   12	1.1	2 3	.4 .5	6	.7 8	9 1	0  11	12
		11111111111	uhhhhh	lilili.	hhh	11111	du lu lu	htiti	htiti		uuu	ш
	Standard Time	Start	End	Mon	Tue	Wed	Thu	Fri	Sat	Sun	All	-
1	NEVER	12:00 AM	12:00 AM									1-1
2	ALWAYS	12:00 AM	11:59 PM	V	1	V	M	V	×	V		
3	Normal Work Week	07:45 AM	05:30 PM	V	M	M		V				
4	Early Work Week	06:45 AM	04:30 PM	V	M	M	M	V				
5	Long Work Week	07:45 AM	05:30 PM	V	V	<b>V</b>	V	V	M			
6	Long Day and Week	06:00 AM	09:00 PM	V	M	V		V	M			
7	Cleaning Crew	07:45 AM	05:30 PM	×		×	V	M				
8	All Weekend	12:00 AM	11:59 PM						M	1		
9	Normal Weekend	08:00 AM	05:00 PM						K	1		
10	Long Weekend	06:00 AM	06:00 PM						M	×		
11	Custom11	06:00 AM	09:00 PM						M	<b>1</b>		
12	Custom12	09:00 AM	05:00 PM	V	V	1	1	1				
13	Custom13	09:00 AM	05:00 PM	V	V	M	V	V				
14	Custom14	09:00 AM	05:00 PM	×	V	M	V	V				
15	Custom15	09:00 AM	05:00 PM	V	M	M	M	V				-
		OK		Canc	- I		Analu	1				
		UK		Canc	ei		Apply					

#### Figure 15: Standard Time Zones

### **CREATING CUSTOM TIME ZONES**

To create a new (custom) time zone, click on one of the rows labeled "Custom" followed by the row number (e.g., Custom11, Custom12, etc.).

Enter the name of your custom time zone and define the days/times.

**NOTE:** EMWin will automatically create an exact copy of the new time zone as a holiday time zone. However, the holiday time zone's days will be disabled.

### **Holiday Time Zones**

Holiday Time Zones are the controlling times for the corresponding Standard Time Zones (see page 15) and are active on Holidays only.

Follow the same steps to change the Holiday Periods as you did on page 15.

## Select <u>Apply to save your data and/or</u> <u>OK to exit.</u>

111		hhhh	<u>ah h</u> hh	hhh	htiti	htti	սերը	lilili	http://	հերր	) li li li	1
		-										
	Holiday Time	Start	End	Mon	Tue	Wed	Thu	Fri	Sat	Sun	All	4
1	NEVER	12:00 AM	12:00 AM									ł
2	ALWAYS	12:00 AM	11:59 PM	Ľ	Ľ	Ľ	Ľ	Ľ	Ľ	Ľ		ł
3	Normal Work Week	07:45 AM	05:30 PM	M	×	M	×	<b>V</b>				1
4	Early Work Week	06:45 AM	04:30 PM	V	V	V	V	V				1
5	Long Work Week	07:45 AM	05:30 PM	V	V	V	V	V	V			1
6	Long Day and Week	06:00 AM	09:00 PM	M	V	M	V	V	V			1
7	Cleaning Crew	07:45 AM	05:30 PM	M	M	M	M	V	M	V		1
8	All Weekend	12:00 AM	11:59 PM						V	V		1
9	Normal Weekend	08:00 AM	05:00 PM						V	V		1
10	Long Weekend	06:00 AM	06:00 PM						M	V		1
11	Custom11	06:00 AM	09:00 PM						M	V		1
12	Custom12	09:00 AM	05:00 PM	V	V	V	V	V				1
13	Custom13	09:00 AM	05:00 PM	V	V	V	M	V				1
14	Custom14	09:00 AM	05:00 PM	V	V	V	M	V				1
15	Custom15	09:00 AM	05:00 PM	V	V	V	V	V				1

Figure 16: Holiday Time Zones

**NOTE:** To create a custom holiday schedule, you must create a custom time zone (see page 15) and return to the Holiday Time Zones screen to define the days/times. **EXAMPLE:** You want a select group of people (e.g., the cleaning crew) to have access to a building on a normal holiday (e.g., Memorial Day). You create a custom Time Zone (called "Cleaning Schedule").

Since Memorial Day falls on a Monday, you enable Monday on the Holiday Time Zone schedule (on the Cleaning Crew row).

Finally, on the Card Manager screen, you must assign the "Cleaning Crew" access level to each cardholder who will have access that day.

## **Holiday Schedule**

The Holiday Schedule determines the days when the Holiday Time Zones will be active.

Holidays can be added by selecting the appropriate month and clicking on a day and filling in the information in the Holidays Column.

#### Select <u>Apply to save your data and/or</u> <u>OK to exit.</u>

							F	lolidays
							4/15/01	Easter
◀		A	pril 20	01		►	5/13/01	Mother's Day
	1						5/28/01	Memorial Day
S	М	Т	W	Т	F	S	6/14/01	Flag Day
-	2	3		5	6	-	6/17/01	Father's Day
1	2	3	4	5	ь	7	7/4/01	Independence Day
8	9	10	11	12	13	14	9/3/01	Labor Day
-	Ŭ	<u> </u>	· ·			· ·	10/12/01	Columbus Day
15	16	17	18	19	20	21	10/31/01	Halloween
	00	0.4	05	00	07		11/6/01	Election Day
22	23	24	25	26	27	28	11/11/01	Veteran's Day
29	30						11/29/01	Thanksgiving Day
20	<u> </u>						12/24/01	Christmas Eve
							12/25/01	Christmas Day
							12/31/01	New Year's Eve
							- רמעוינים	Man Vaada Dan
							Add	Delete

Figure 17: Holiday List

## **Access Levels**

An Access Level (AL) is used with the cardholder record. The Access Level consists of a list of doors/readers and the Time Zone during which these are authorized. Each cardholder can be assigned up to 4 Access Levels. When a card is presented to the reader, the EMC checks the cardholder's access level to verify that the card is valid at the reader. If the reader is not found in the list, EMWin will continue its search with the next access level. If the reader is not found in any of the levels assigned to the cardholder, the system will deny access due to "Invalid Reader".

When a reader is found within the access level, the current time is checked with the associated Time Zone. If the time is not valid, an "Invalid Time Zone" transaction will be generated and access will be denied.

- Select the Access Level you would like to modify, or select New Group to generate the desired configuration.
- 2 Select the Time Zone to assign to this Access Level. After clicking on the Time Zone, the Time Zone next to the ID will be changed accordingly.
- 3 Select from the Doors Available to be allowed for the current group and use the transfer arrows to move those doors into the Doors Assigned Column.
- 4 Select <u>Apply</u> to save your data and/or <u>OK</u> to exit.

Access Levels				<u> </u>
Time Zone	ID	Access Levels	Time Zone	4
ALWAYS	1	Executive	ALWAYS	
	2	Administration	Normal Work Week	
	3	Accounting	Normal Work Week	
	4	Engineering	Normal Work Week	
	5	Manufacturing	Normal Work Week	
	6	Quality Assurance	Normal Work Week	
	7	Shipping	Normal Work Week	
		Destine	Managed Streets Streets	•
Doors Available Select All Clear All		Coors Assigned     Front Door Back Door	Select All Clear All	
New Group Delete	Group	ОК	Cancel App	ly –

Figure 18: Access Levels

## **Adding Cardholders**

## **Adding Cardholder Records**

Before adding cardholders to the database, you must enter the facility code for the cards before card will be recognized (refer to page 26).

To add cardholders to the database, . . .

- 1 Click <u>D</u>atabase, <u>C</u>ard Manager (see Figure 19). The Card Manager Screen appears.
- 2 At the Detail tab (Figure 20, click the <u>New Card</u> button.
- 3 Enter the Beginning Card ID and click **OK**.
- 4 Enter the Ending Card ID and click **OK**.
- 5 Enter the Name, Department, Company Name and address.
- 6 Enter Phone number and extension if appropriate.

The Activation Date defaults to today's date. If the card will become active on a different date and/or expire on a date other than the default, you may change those dates in the boxes provided.

All cards have a default expiration date of ten years from issuance.

- 7 Select an Access Level(s) for the cardholder.
- 8 Set Card Active to activate the card.

The Activation/Expiration Dates will be displayed (e.g., *M/D/YY*) according to your computer's Control Panel Regional Settings.

**9** Select Long Access to increase the amount of time the door can stay open without triggering an alarm.

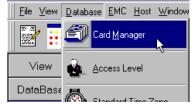


Figure 19: Card Manager Location

Overviev	/	Detail	Bulk Chan	ige
Card ID (6 digit): 000003	Last Name: Everlearn	First Name: William		
PIN (4 digit):	, Company Name: Your Company	Address: 12345 Elsewhere		
Authorization Groups	Department:	Charleston, SC 92666		
None	713-555- Activation Date:	1212 345 Expiration Date:	No Picture	Picture
None	1/1/00	1/1/10	🔀 Card Active	
None	Next R	ecord	Long Acces	85
New Card	elete Card Re-a	assign <u>O</u> K	Cancel	Арр

### Figure 20: Card Manager (Detail Tab)

- **10** Click of the Next Record tool to apply these entries and go to the next record.
- **11** Return to the Overview screen (Figure 21) to verify that the card you entered has been properly accepted.
- **12** Enter the data that will appear in each of the card records and then use the Batch Change button to set up the range of cards to be affected.
  - Use the **Re-Assign** button to change the Card ID code of an existing card.
  - Use the **Delete Card** button to remove a cardholder record.
  - Use the **Picture** button to add a photo (.bmp or .jpg file) of the cardholder. The picture's dimension ratio must be 5" wide x 7" tall or equivalent (e.g., 2.5" x 3.5") to minimize any distortion.

### **Cardholder Overview**

	Overview	×		Detail 🛛 👔 Bulk Change					
Card ID	First Name	Last Name	Addr Line1	Addr Line2	Addr Line3	Long Acces	Card Active	Activation Date	F
000003	William	Everlearn		Charleston, 1		No	Yes	1/1/00	1
000004			1 120 10 2001	enditeriori,		No	Yes	1/1/00	i.
000005						No	Yes	1/1/00	1
000006						No	Yes	1/1/00	1
000007						No	Yes	1/1/00	1
800000						No	Yes	1/1/00	1
000009						No	Yes	1/1/00	1
000010						No	Yes	1/1/00	1
000011						No	Yes	1/1/00	1
000012						No	Yes	1/1/00	1
000013						No	Yes	1/1/00	1
000014						No	Yes	1/1/00	1
000015						No	Yes	1/1/00	1
000016						No	Yes	1/1/00	1
000017						No	Yes	1/1/00	1
000017						No	Yes		

The Overview tab allows you to view multiple cardholder records at once.

Figure 21: Card Manager (Overview Tab)

### **Making Bulk Changes**

Bulk Changes allows data to be populated into series of cards at one time rather than changing each record individually.

- 1 At the Bulk Change tab, Edit the Bulk Change fields as necessary. *All gray-colored fields are editable.*
- 2 Click the <u>Batch Change button</u>.
- 3 Enter the Beginning and Ending Card ID codes of the cards that will be edited.
- 4 Click <u>Apply</u> to save your changes and/or <u>OK</u> to exit.

😂 Card Manager		<u>-0×</u>
Overview	Detail	Bulk Change
Department: Company Name: Accounting Sentex Systems Access Levels	Address: 9800 De Soto Ave. Chatsworth, CA 91311	Card Active
Accounting		
None	Phone: E: (818) 700-9800	tension:
		piration Date: / 1 /00
	Batch Change	
New Card Delete Card	Re-assign <u>O</u> K	<u>Cancel</u> Apply

Figure 22: Card Manager (Bulk Change)

## **Downloading Database Information**

The Download screen allows you to manually select and download databases (e.g., Card Manager) to one or all EMCs.

**Important:** After EMWin performs a full download (see below), subsequent changes (e.g., adding a new cardholder record) will be automatically downloaded.

**Factory Defaults:** This button deletes all entered data and reverts the system back to its original settings/data.

<u>WARNING</u>: Before selecting Factory Defaults, export to back-up your data or you will lose any entered data!!!

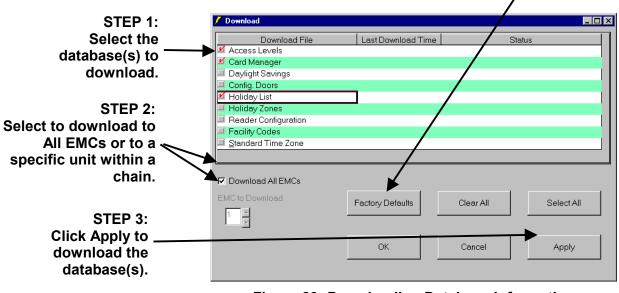


Figure 23: Downloading Database Information

- **Select All:** Selects all database selections from Download File column.
- Clear All: Clears any database selections from Download File column.

During Downloading, a progress bar appears near the bottom of the screen to give a visual progress status.

### WHEN EMWIN PERFORMS A FULL DOWNLOAD

EMWin will perform a full download (i.e., download all the databases) when . . .

- An EMC powers up.
- EMWin is OFF for a significant amount of time. If the software and unit clock times differ significantly, the system will perform a full download.
- You manually prompt the unit to do so.

### IMPORTANT NOTES ABOUT DOWNLOADING

During a full download, the system performs a number of complex processes (e.g., rebuilding the database structure, erasing all the field data, and downloading the new database and all cardholder records). For this reason, the download time will vary from several minutes to possibly several hours. Download times are primarily determined by . . .

- (1) The number of existing cardholder records in the database AND
- (2) The number of EMC panels linked (a maximum of 32 may be linked).

The more cardholder records and panels you have, the longer the download time.

## **Transaction Monitoring**

The Transaction Monitor screen presents each of the transactions occurring on the system.

Click the **Browse** box to prevent the screen from updating while you are cruising through the entries.

Archive the transactions by clicking the **Archive** button. You will be asked for the number of days prior to today to archive and remove from the screen.

Select **OK** to close this screen.

Date/Time	Event	EMC	Door Name	Reader	Card #	Card Holder Nar
/21/01 9:52:59 AM	Door Forced Open	1	Front Door	A		
/21/01 9:52:59 AM	Door Forced Open	1	Back Door	В		
/22/01 8:56:46 AM	Communication Lost	1	Front Door	A		
/22/01 8:57:02 AM	Communication Lost	1	Front Door	A		
/22/01 8:57:35 AM	Door Forced Open	1	Front Door	A		
/22/01 8:57:35 AM	Door Forced Open	1	Back Door	В		
/25/01 8:18:17 AM	Communication Lost	1	Front Door	A		
/25/01 8:18:46 AM	Door Forced Open	1	Front Door	A		
/25/01 8:18:47 AM	Door Forced Open	1	Back Door	В		
/25/01 10:10:23 AM	Communication Lost	1	Front Door	A		
/25/01 10:10:24 AM	Communication Established	1	Front Door	A		
/25/01 10:33:06 AM	Communication Lost	1	Front Door	A		
/25/01 10:33:08 AM	Communication Established	1	Front Door	A		
/25/01 10:46:42 AM	Communication Established	1	Front Door	A		
/25/01 10:50:10 AM	Communication Established	1	Front Door	A		
/25/01 10:51:34 AM	Communication Established	1	Front Door	A		
/25/01 11:21:54 AM	Communication Established	1	Front Door	A		
/25/01 11:23:21 AM	Communication Established	1	Front Door	А		
/25/01 11:25:21 AM	Communication Established	1	Front Door	A		
/25/01 11:53:34 AM	Communication Established	1	Front Door	А		
I	🗖 Browse		Archi	ve	1	ОК

Figure 24: Transaction Monitor

## **Appendix A: Operations Screens**

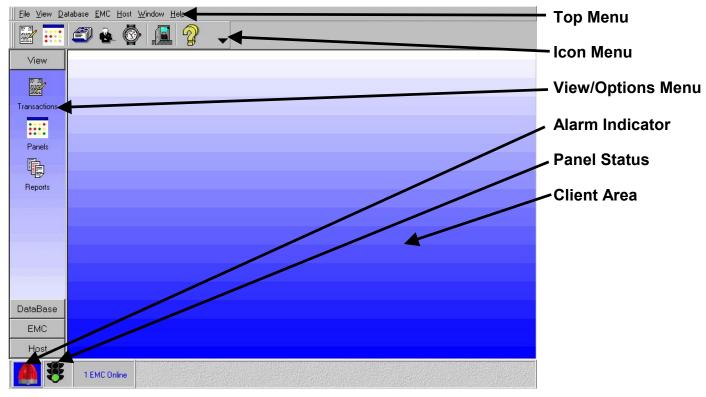


Figure 25: Operations Screen

### **File Menu Selection**

**<u>P</u>rint:** Creates an on-screen report of information (associated with the active window in the client area) which may then be printed. See also **Display Reports** on page 23.

**Printer <u>Setup</u>:** Allows operator to select a printer on the system and control its properties.

**<u>Exit</u>:** Causes EMWIN to cease operating. By doing this, you will cause the controllers to operate in standalone mode until program is restarted.



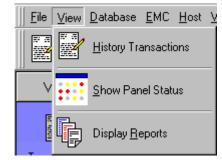
Figure 26: File Menu

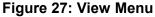
### View Menu Selection

<u>History Transactions</u>: Allow the operator to view all transactions as they are received from the panels.

**Show Panel Status:** View status of all panels (i.e., EMCs) on the system.

**Display <u>Reports</u>:** Predefined reports available to the operator.





### Database Menu Selection

**Card <u>M</u>anager:** Allows operator to add/delete/change cards in the EMWin database.

<u>Access Level</u>: Displays all Access Levels and allows operator to view/change/add/delete groups.

**<u>Standard Time Zone:</u>** Allows operator to view/change/add standard Time Zones.

<u>Holiday Time Zone:</u> Allows operator to view/change/add holiday Time Zones.

Holiday List: Displays the entered holiday list.

Facility <u>Codes</u>: Allows operator to view/change facility codes.

**Organize Database:** Compacts and repairs your database.

**Export Data:** Allows you to export an EMWin database (e.g., Cardholders.mdb) for back-up purposes or to use in another application

**NOTE:** Sentex strongly recommends that you regularly back up your EMWin databases.

**Import Data:** Allows you to import a database (e.g., Cardholders.mdb) into the EMWin system. Use this feature to re-load lost data from your back-up .mdb file(s).



Figure 28: Database Menu

### **EMC Menu Selection**

**Download Data to EMC:** Used to initiate a download of parameters to the EMCs.

<u>Unlock/Lock Doors</u>: Enables operator to unlock or lock a specific door.

<u>**Turn On/Off Alarm(s):**</u> Enables/disables alarms.

<u>Calibrate Sensors</u>: Calibrates all supervised circuits.

**<u>EMC</u> Communications:** Allows you to manually select a COM port for computer-to-EMC communications.

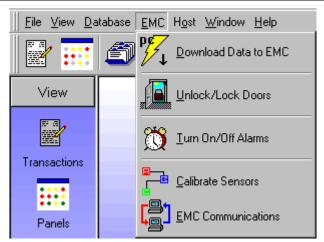


Figure 29: EMC Menu

### **Host Menu Selection**

<u>Configuration Wizard:</u> Used to set up company information, Door Names, Door Assignments and Daylight Savings times.

**Configure Doors:** View/change Door Properties, Access Parameters and Readers.

<u>**Turn Host Alarm Off:**</u> Enables operator to manually turn off host alarm.

**Test <u>Host</u> Alarm:** Tests the alarm logic in program.

**Show/Hide Poller:** Turns poller information at bottom of screen on/off.

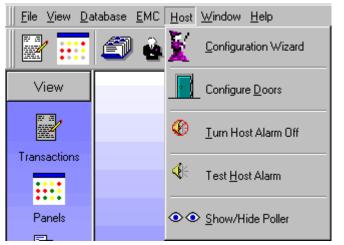


Figure 30: Host Menu

### Window Menu Selection

<u>Close All Windows</u>: Closes all windows previously opened.

**Default Window Sizes:** Restores all windows to their default sizes.

**Cascade <u>W</u>indows:** Arranges selected windows in a cascaded orientation.

**Tile Windows <u>H</u>orizontally:** Arranges selected windows one above the other horizontally.

Tile Windows <u>Vertically</u>: Sets up selected windows side by side vertically.

**<u>Arrange lcons</u>**: Arranges minimized screens along the bottom of the client area.

## Help Menu Selection

Provides application information about author, version, and license.

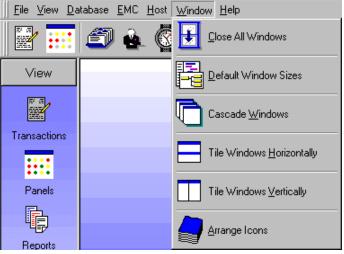


Figure 31: Window Menu



Figure 32: Help Menu

### **Icon Toolbar Reference**

Transaction History	
Show Panel(s) Status	
Card Management Tool	
Access Levels	
Standard Time Zones	
Unlock/Lock Door(s)	
Author and Version	
More Tools ————	

## Appendix B: Adding Facility Codes

1 Select Facility <u>Codes</u> from the <u>Database</u> top menu or vertical menu selection.



#### Figure 33: Facility Codes Location

2 Enter all facility codes under the Facility Code column.

For each facility code, double-click inside a cell, erase the dash, and enter the code.

- **3** Enter a Description (optional).
- 4 Select Apply and OK to confirm.

	Facility Code	Description	L 1
1	5	Card Codes 025000 to 025999	
2	6	Card Codes 026000 to 026999	
3	—	Unassigned	
4	—	Unassigned	
5	—	Unassigned	
6	—	Unassigned	
7	—	Unassigned	
8	—	Unassigned	
9	—	Unassigned	
10	—	Unassigned	
11	—	Unassigned	
12	—	Unassigned	
13	—	Unassigned	
1.4		Linocoionad	<b>•</b>
	ОК	Cancel Apply	

Figure 34: Facility Codes Screen

## **Appendix C: Reports**

1 Select Display <u>Reports</u> from the <u>View</u> top menu or vertical menu selection.

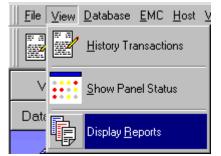


Figure 35: Display Reports Location

 Report

 Card Holder Report

 Card Holder Report

 Holiday List

 History Log

 Particular Concerns

 O By Activation Date

 O Department

 A

 B
 C

 D

 A

 B
 C

Figure 36: Selecting a Report

2 At the Reports screen, select the Report you wish to print by highlighting it with the mouse.

 Now select the sorting mode you want.
 Select **Preview** to view the report on the screen before printing it out.

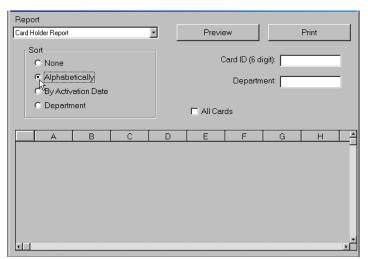


Figure 37

- 4 Selecting the **Print** button after previewing will show you a sample page of the report on the screen before printing it out.
- **5** Click on the printer icon to send the report to the default printer on your system.

S. View Report						
X 🖨 📜 100% 💽 🗍		1 of 1+	► ► =	<i>i</i> 4		
Preview						
Card Holder Report						
<u>Card ID (6 digif):</u>	000013					
Name:				Company:		
Address:				Department:		
				Phone:		
				Extension:		
Long Access:	Мо			Card Active:	Yes	
Activation Date:	January 01, 2000			Expiration Date:	January 01, 2010	
Auth Group 1:	2			Auth Group 2:	0	
<u>Auth Group3:</u>	0			Auth Group4:	0	
Card ID (6 digit):	000001					
					ľ	

Figure 38

## **Appendix D: Changing the Language**

During installation, EMWin prompts you to select the language to use in the application. If you need to change the language after installation, perform the steps in this chapter.

### EXPORT THE ENTIRE DATABASE

- 1 At the menu bar, select <u>Database</u> and then <u>Export Data</u>.
- 2 Click Select All.
- 3 Click <u>Apply</u>.
- 4 Select the location of the database (.mdb) and click <u>Save</u>.

Remember the location of the database, since you will need to import it later.



Figure 39: Exporting the Databases

### UNINSTALL AND RE-INSTALL EMWIN

- 1 At the Windows Start menu, select <u>Settings</u> and then <u>Control Panel</u>.
- 2 Select Add/Remove Programs.
- 3 Select **EMWin** from the software list.
- 4 Click Add/<u>Remove</u>.
- 5 **Re-install** EMWin and select the new language during the Install Wizard.

29

### CHANGE THE REGIONAL SETTING

- 1 At the menu bar, select **Host** and then **Configuration Wizard**.
- 2 Select the Company Info tab.
- 3 Select the region (from the **Regional Setting** box) that most closely matches your region.

**NOTE:** Changing the region will affect, for example, the Holiday Schedules (e.g., Mexico's will differ from those of the United States).

4 Click <u>Apply</u> to save and <u>OK</u> to exit.



Figure 40: Changing the Regional Setting

### SET THE FACTORY DEFAULTS AND EXIT EMWIN

- 1 At the menu bar, select <u>EMC</u> and then <u>Download Data to EMC</u>.
- 2 Click Select All.
- 3 Click Factory Defaults.
- 4 Click **Apply** to save and **OK** to exit.
- 5 Exit EMWin.

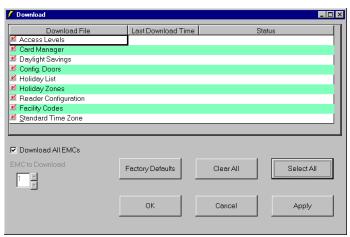


Figure 41: Setting the Factory Defaults

### **RESTART EMWIN AND RE-IMPORT THE DATABASE**

- **1** Restart EMWin.
- 2 At the menu bar, select **Database** and then **Import Data**.
- 3 Click Select All.
- 4 Click <u>Apply</u>.
- 5 Select the location of the database to import (.mdb) and click **Save**.

ia, Imp	🐃 Import Data 📃 🗆 🗙				
	DataBase	Status			
1	Access Levels				
1	Card Database				
1	Transaction History				
	Daylight Savings				
1	Door Configuration				
1	Door List				
1	Holiday List				
	Holiday Time Zone				
1	Reader Configuration				
R	Standard Time Zone				
	Select All S	elect None			
	OK <u>C</u> ancel				

Figure 42: Importing EMWin Data



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