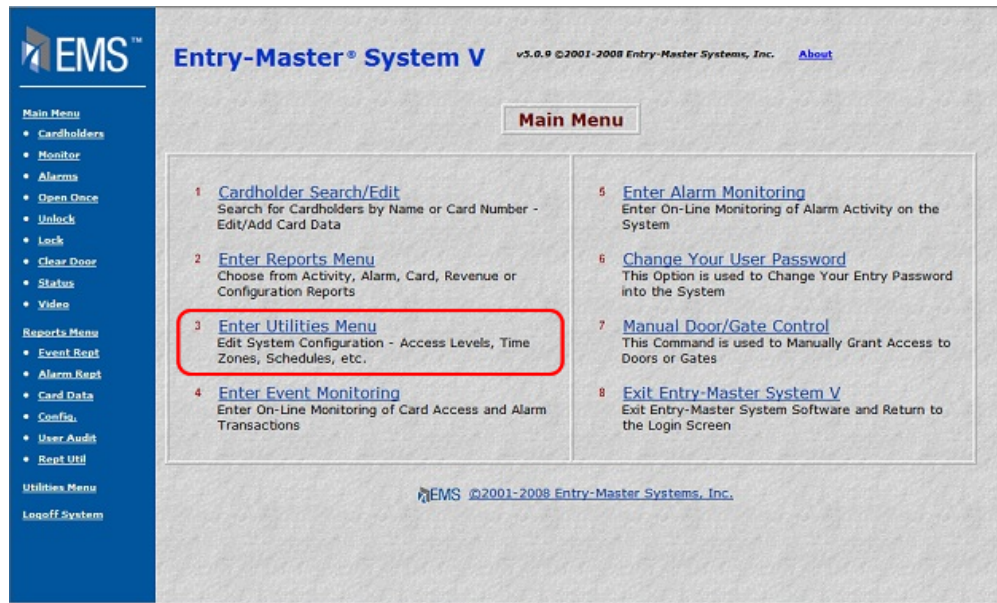


## Lesson 4 – Defining Card Readers

Before using *Entry-Master*® you must define the card reader (sensor) configurations, the time zones, holidays, and the access levels for your facility. This lesson shows you how to define the card reader configurations. Subsequent lessons show you how to define time zones, holidays and access levels. Card reader configurations define the following:

- Reader Number
- Reader Location Description
- Reader I/O (In/Out) Status
- Reader Activity Status
- Alarm Report Level
- Alarm Record Level
- Nesting Level
- Anti-Passback Mode
- Door Contact Information
- Request to Exit (REX) Information
- Arming Mode
- Door Alarm Time Zone
- Auto-Map Setup
- Primary Map File

You should be logged into the *Entry-Master*® System and the *Entry-Master*® Main Menu should be displayed on the screen as shown next. If you are not logged in, see Lesson 1.



**Figure 2-4.1 The Entry-Master® Main Menu**

You define card reader configurations using the Utilities Menu. Click on the [Enter Utilities Menu](#) link to display this menu. The next figure illustrates the Utilities Menu.

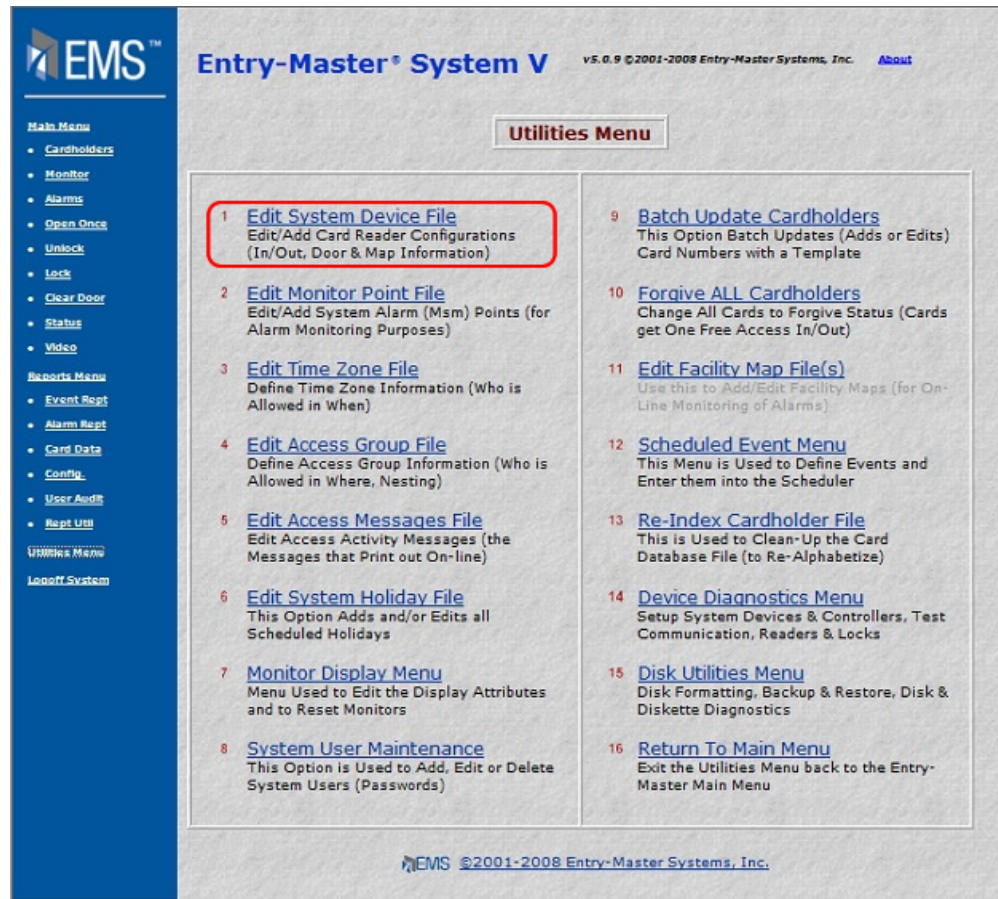
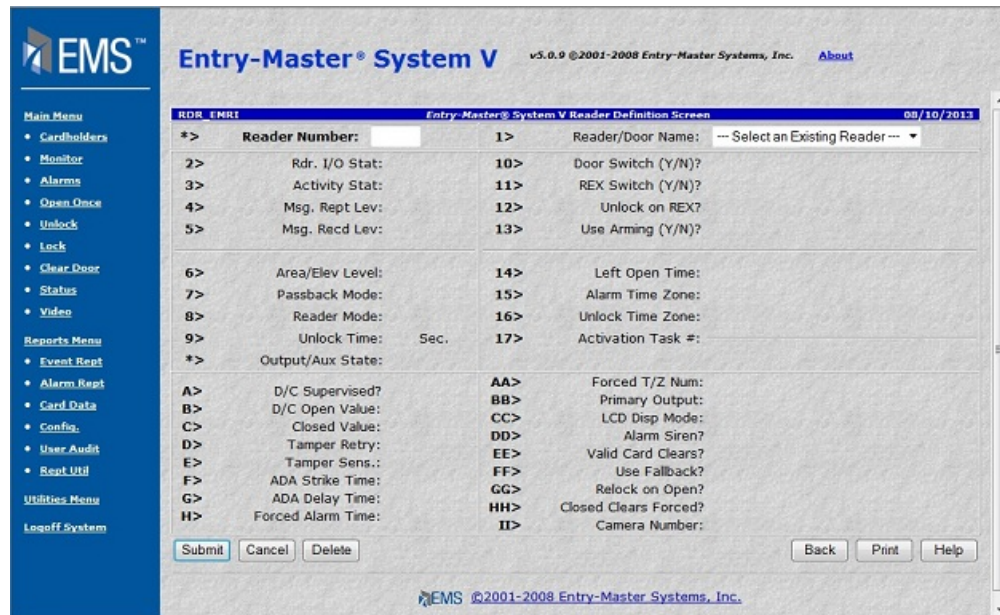


Figure 2-4.2 The *Entry-Master*® Utilities Menu

There are several choices on the Utilities Menu. Click on the [Edit System Device File](#) link and the following screen displays:

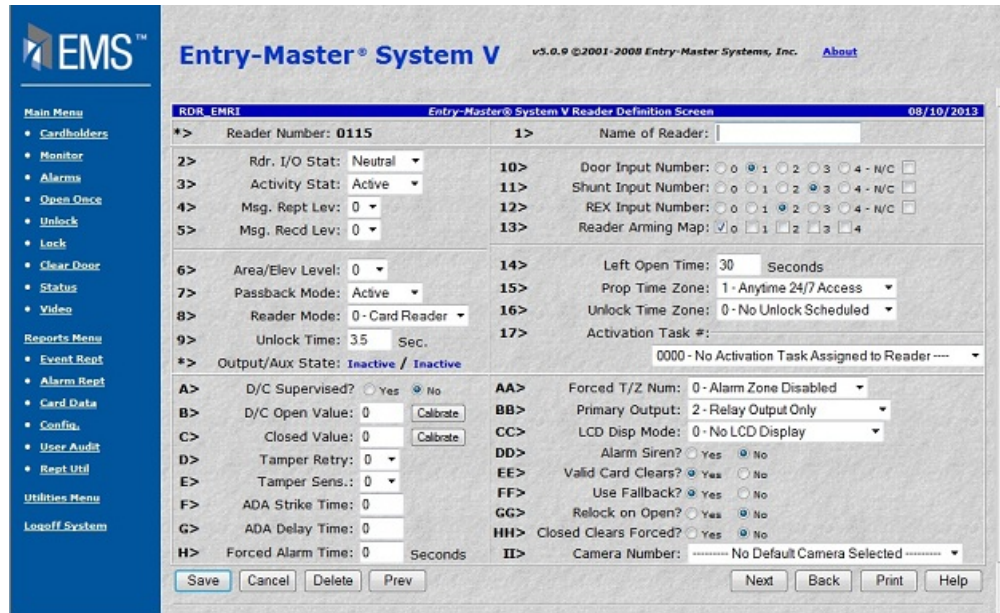


**Figure 2-4.3 Card Reader Database Screen**

In this example, you will define card reader 0115 located at the Main Entrance. The I/O status of the reader will be IN and the reader will be active. The Message Report Level and the Message Record Level will both be 0. This reader will not have a nesting level and the Anti-Passback Mode will be Active. In addition, since this example is for a pedestrian door, an electric lock, door contact, request to exit device, door alarm time, and map information may be defined. The following takes you systematically through the card reader configuration process.

**Note...** Your *Entry-Master*® dealer usually sets up the card readers and assigns them the identifying numbers. You can get a listing of the card readers defined on your system by printing the system report, *Card Reader Report*. See Lesson 14, *Generating and Printing Reports*, for more information about printing the reports.

1. Define the **Controller Reader Number**. This is a 4-character field in the form “xyz,” where:
  - “xx” is the Port Number, in this example, 01
  - “y” is the Controller Number, in this example, 1
  - “z” is the Reader Number, in this example, 5
2. In the Reader Number field, type **0115**. This number represents Port 01, Controller 1, and Reader Number 5. Click on the **Submit** button. All appropriate data entry fields display for this setup as shown in the next figure.



**Figure 2-4.4 Reader Door Definition Screen with Defaulted Fields**

- The cursor is in the **Reader/Door Name** field, which describes the location of the card reader. Type **Main Entrance** in this field.

The next six (6) fields are *drop-down lists*. A drop-down list allows you simply to click on the down arrow next to the data entry field and a list of all possible selections appears.

- Change **Neutral** to **In** by clicking on the drop-down list. The following are valid values for the **Rdr. I/O Stat** (Reader In/Out Status) field:

- **In** – IN only
- **Out** – OUT only
- **Neutral** – Neutral setting does not affect the IN/OUT status of the card
- **Elevator** – Elevator control feature (Contact your authorized *Entry-Master®* Dealer for more information about this feature)

- The following are valid values for the Activity Stat(us) field:

- **Active** – Reader is active and can process cards
- **Inactive** – Reader is not active and cannot process cards
- **Malfunctioning** – When the system polls the reader and the reader does not respond, the reader is given a **malfunctioning** status

The **Active** status defaults (already displays) in the **Activity Status** field. No selection is necessary.

6. The **Msg. Lev** (Message Report Level) tells the *Entry-Master*® System what alarm report level this reader will have. Report levels are defined so that the *Entry-Master*® System will know which system activity to *report* to the on-line alarm printer. Report levels range from **0-9**, where **0** is the least severe and **9** is the most severe. Once again, data entry is not required for this field because Message Report Level **0** already displays in this field.
7. The **Msg. Recd Lev** (Message Record Level) tells the *Entry-Master*® System what alarm record level this reader will have. Record levels are defined so that the *Entry-Master*® System will know which system activity to write to the activity and alarm database files for future reporting. Record levels range from **0-9**, where **0** is the least severe and **9** is the most severe. Leave the defaulted **0** in the Message Record Level field.

**Note...** The messages generated for the alarm report level and the alarm record level are tailored for each individual site. See your dealer for more information.

8. The **Nesting Level** field is used specifically for parking locations. When a garage, for example, has three levels and each level has a card reader in it, a person who is supposed to park in Level 3 must pass through Levels 1 and 2 to get to 3. These levels are *nested* and each level is assigned a *nesting level*. The person who parks in Level 3 is allowed to pass through Levels 1 and 2, but may only remain in Levels 1 and 2 for a specific period of time. If the person remains in Level 1 or 2 past the specified time, then the system records a nesting violation for the card number of the person who caused the violation.

Nesting levels range from **0-9**, meaning that you can have up to 9 nesting levels. In the example described above the reader does not have a nesting level. **0** (no nesting) already appears in this field.

9. The **Passback Mode**, which defaults to **Active**, lets you indicate the anti-passback category for this reader. Anti-Passback has two possible values:
  - **Active** – deny access if the In/Out status of the card is incorrect for the reader.
  - **Passive** – allow access regardless of the In/Out status of the card.

**Note...** See *Global Anti-Passback* for more information.

10. The **Keypad (Y/N)** field lets you use a keypad as an additional level of security. The cardholder is required to enter a **PIN** (Personal Identification Number, similar to a Bank ATM or credit card) after presenting the card to the reader, before access is granted. In this example, no keypad is being used. Leave the **N/A** entry that appears in this field.

11. The **Unlock Time** field defines how long the door will be unlocked after a valid card is presented and access is granted. The time can be in tenths of a second. Click in the **Unlock Time** field and change the **5** seconds to **3.5** seconds.
12. The **Door Switch(Y/N)** field defaults to **Yes**. A door switch is used to determine the status of a door (or gate), to determine if it has been left open too long, or has been forced open. Leave the defaulted value in this field.
13. The **REX Switch (Y/N)** field also defaults to **Yes**. A request-to-exit device (REX) is used:
  - To either *shunt* a door-forced alarm when a door is opened from the inside (i.e. without an access card).
  - Or, to actually **unlock** the door from the inside (e.g. for a magnetic lock).

A REX device is usually either a push-button or a motion detector, but other devices are possible. The response to this field is also either a **Yes** or a **No**. In this example, a REX is being used so do not change this field's entry.

14. The **Unlock on REX** field is set to **No**. As mentioned above, a **REX** device can either *shunt* a door alarm or *unlock* the door. The response to this field is either a **Yes** or a **No**.
  - If answered **No**, the **REX** device will only *shunt* the alarm for the door in question.
  - If **Yes**, the **REX** device will *unlock* the door in question (which, as a matter of course, will also shunt the door).

Since this example does not require the **REX** to unlock the door you leave **No**, the defaulted value, in this field.

15. The **Use Arming (Y/N)** field is used at parking locations. Arming is typically used only in parking situations, usually on a parking gate. In such a case, the *Door Sense* input is used to monitor the *Gate Arm Status* and the *Request to Exit* input is used to monitor the *Arming Loop*. This setup enables a parking operator to monitor the status of the gate arm (e.g. has it been open too long?) and provide *Arming* for the parking gates.

A parking gate's reader is considered *armed* when a vehicle passes over the arming loop. When a gate's reader is armed, this reader will not read cannot be affected unless a vehicle is present. Since this example is for a door, do not change the **No** that already displays for this field.

16. The **Left Open Time** field enables you to set the limit (in whole seconds) that the door or gate can be in the **Open** position before a **Door/Gate Left Opened** message would be displayed and recorded. The field will accept values from **0-999**, but you

should check with your *Entry-Master*® dealer for the specifications of the controller equipment to which the *Entry-Master*® System is connected. For this example, we wish a Left Open Time of **30 seconds**, which already appears in this field.

17. The **Alarm Time Zone** field is used to define during what periods of time alarms are desired for a particular door or gate. For instance, during business hours a door might be propped open starting at **6:00am**, and then closed at **6:00pm**. During the time that the door is propped, it may be desirable to shunt the door alarms, since the door is open all day.

In this example, we want door alarms to be active only on *Evenings and Weekends*. Click on the drop-down list to display all possible Time Zone selections then click on **Evenings and Weekends**. For more information on Time Zones, see Lesson 5, *Defining Time Zones*, later in this manual.

18. The **Auto-Map Level** field lets you specify to the *Entry-Master*® System what report level (from **0** to **9**) a message must have in order for the Event and Alarm Monitoring Screens to automatically display a map of the facility and the alarm message in question. For more information on messages and their report levels, see *Appendix B – The Entry-Master System Activity/Alarm Messages*, later in this manual.

The Auto Map Level will be either zero (**0**) or a number, which is **6** or greater. A higher number represents a message of higher priority; **7** is the most common non-zero number to be entered into this field. A **7** means that most severe alarms (**Door Forced, Duress**, etc) will automatically display a map, but lower priority alarms, such as **Invalid Card, Invalid Time Zone** or **Anti-Passback** messages will not automatically display a map (but will, depending upon the configuration setup by the dealer, display the Alarm Monitoring Screen). For this example, select Auto Map Level **7** from the drop-down list.

19. Specify the **Primary Map File field**. The Primary Map File specifies to the Event or Alarm Monitoring Screens which of the facility maps defined in the system should be displayed when an alarm occurs at this door.

**Note...** The *Auto Map Level* could be **"0"** and we still may want to enter a Primary Map File, because even though we do not wish to display a map *automatically* in the event of an alarm, we still may want the guard or other personnel to be able to display a map, if necessary.

In this example, we wish to select the *Miami Ctr. Bldg. – First Floor Alarms* map. Click on the down arrow to display the drop-down list for Primary Map File field. Select *Miami Ctr. Bldg. – First Floor Alarms* from this list.



The screenshot displays the 'Entry-Master® System V Reader Definition Screen' for card reader 0115. The interface is divided into a left sidebar menu and a main configuration area. The sidebar menu includes options like 'Main Menu', 'Cardholders', 'Monitor', 'Alarms', 'Open Once', 'Unlock', 'Lock', 'Clear Door', 'Status', 'Video', 'Reports Menu', 'Event Rept', 'Alarm Rept', 'Card Data', 'Config', 'User Audit', 'Rept Util', 'Utilities Menu' (highlighted with a red box), and 'Logoff System'. The main configuration area is titled 'Entry-Master® System V Reader Definition Screen' and shows the following settings:

- \*> Reader Number: 0115
- 1> Name of Reader: Main Entrance
- 2> Rdr. I/O Stat: In
- 3> Activity Stat: Active
- 4> Msg. Rept Lev: 0
- 5> Msg. Recd Lev: 0
- 6> Area/Elev Level: 0
- 7> Passback Mode: Active
- 8> Reader Mode: 0 - Card Reader
- 9> Unlock Time: 3.5 Sec.
- \*> Output/Aux State: Inactive / Inactive
- A> D/C Supervised? Yes No
- B> D/C Open Value: 0 Calibrate
- C> Closed Value: 0 Calibrate
- D> Tamper Retry: 0
- E> Tamper Sens.: 0
- F> ADA Strike Time: 0
- G> ADA Delay Time: 0
- H> Forced Alarm Time: 0 Seconds
- 10> Door Input Number: 0 1 2 3 4 - N/C
- 11> Shunt Input Number: 0 1 2 3 4 - N/C
- 12> REX Input Number: 0 1 2 3 4 - N/C
- 13> Reader Arming Map: 0 1 2 3 4
- 14> Left Open Time: 30 Seconds
- 15> Prop Time Zone: 3 - Evenings & Weekends
- 16> Unlock Time Zone: 0 - No Unlock Scheduled
- 17> Activation Task #: 0000 - No Activation Task Assigned to Reader
- AA> Forced T/Z Num: 0 - Alarm Zone Disabled
- BB> Primary Output: 1 - Transistor Output Only
- CC> LCD Disp Mode: 0 - No LCD Display
- DD> Alarm Siren? Yes No
- EE> Valid Card Clears? Yes No
- FF> Use Fallback? Yes No
- GG> Relock on Open? Yes No
- HH> Closed Clears Forced? Yes No
- II> Camera Number: No Default Camera Selected

Buttons at the bottom include Save, Cancel, Delete, Prev, Next, Back, Print, and Help.

Figure 2-4.5 Completed Card Reader Database Screen

20. Click on the **Save** button to save the card reader configuration for card reader **0115**. You can exit this menu. Click on the **Utilities Menu** link to return to the Utilities Menu.

You have learned how to define card reader configurations on the *Entry-Master®* System.

You can edit existing card reader configurations by entering the number of a defined card reader, using the Edit feature on the Bottom Line Menu, and following the procedures described in this lesson. See Lesson 14, *Generating and Printing Reports*, for information about displaying and printing the Card Reader Report.

Proceed to Lesson 5, *Defining Time Zones and Holidays*.