Chapter 1: Getting Started

Welcome to EZ-Time, the comprehensive digital clock-control software that will revolutionize the way you handle all aspects of your clock system. EZ-Time utilities will enable you to set up your clock preferences one time, and then forget it! Your clock times will match to the second and all other clock-related events will occur exactly when you want them to. (I.e., bells, lights, emergency drills, etc.)

With EZ-Time, you will be able to plan your clock-related events years in advance. But to use EZ-Time to its fullest capacity, you need to fully assess your clock event needs. For example, ask yourself:

- What times do I want my bells and tones to ring?

- Are there exceptions to these times?

- Do I want to have an established time for tornado drills to occur?

These are just a few of the questions that you should ask yourself. You will enter the answers to these questions into EZ-Time so that it may use this information to control your clock system.

System Requirements

Here is a list of software and hardware requirements for using EZ-Time:

- Windows 95 or greater

- A serial port that is not being used by any other peripheral attached to your computer

- A CD-ROM drive , 4X speed or greater

- A hard drive with at least 50 megabytes of space available

- 16 megabytes of RAM

- A VGA monitor set to a resolution of 800 x 600 or greater, and 16-bit color

Understanding The EZ-Time Main Menu

The *EZ-Time Main Menu* is always displayed when you open EZ-Time. The purpose of this window is to enable you to access EZ-Time functions. But this window also enables you to view all the instructions that have been entered into EZ-Time. In this section, all fields of the *EZ-Time Main Menu* are defined and demonstrated.
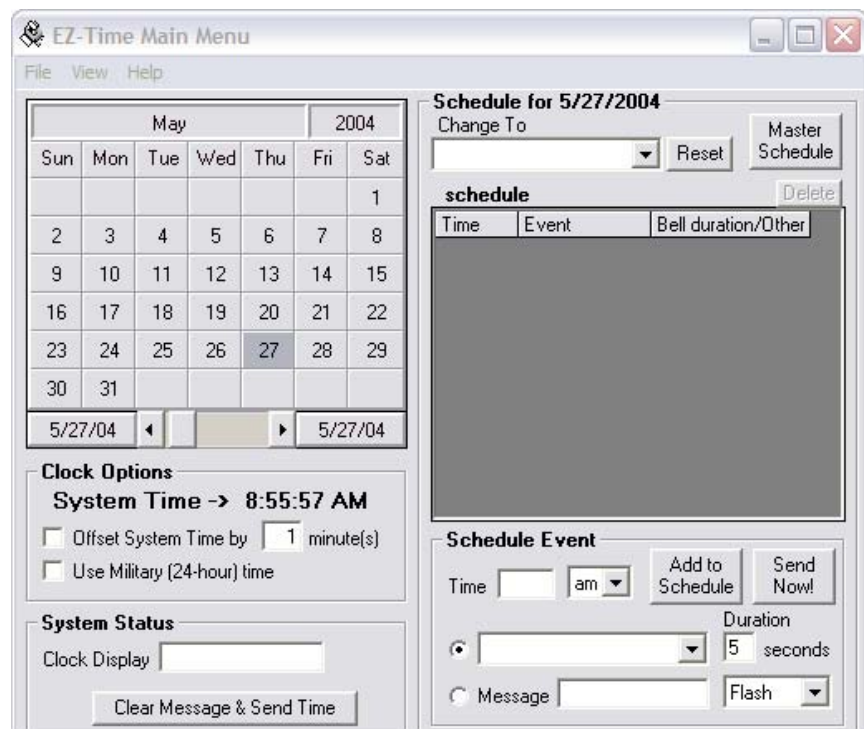

Figure 1. EZ-Time Main Menu

The File Pull-Down Menu

This option in the top, left-hand corner of the *EZ-Time Main Menu* enables you to select the serial port for EZ-Time to use. It is also used for troubleshooting the software.

The View
Pull-Down Menu

Also located in the top, left-hand corner of the *EZ-Time Main Menu*, this option gives access to the most important functions. With these functions, you can:

- Connect EZ-Time to your hardware

- Assign names to your hardware elements

- Enter information about your building's schedules.

The Calendar

The calendar enables you to display the schedule for any given day. You can point and click on a date, use the arrow buttons to advance by months, or use the scroll bar to advance by years up to 2099.
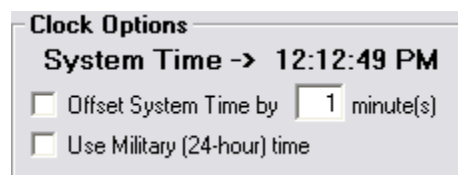
By default, the calendar displays the current date when you open EZ-Time.

Figure 2.   Calendar

Clock Options

The **Clock Options** of the *EZ-Time Main Menu* enables you to set basic clock-related parameters.

Figure 3.   Clock Options

This section is defined as follows:

This item:	Does this:
System Time	Displays the current PC system time in a 12 or 24-hour format, including seconds. This is the time used by all your clocks connected to EZ- Time.
Offset System	Enables you to offset the system time that is sent to your clocks by plus or minus 99 minutes.
Use Military time	Causes the clocks to display military time.

System Status

Located in the lower left corner of the window, the **Clock Display** field shows what time your clocks are currently displaying. If **Clock Display** shows {Current Time}, then the clocks are displaying the **System Time** shown in the *Clock Options* window.

If the clocks are currently displaying a word (i.e., FIRE or TORN), this word is displayed in **Clock Display**.

The **Clear Message and Send Time** button enables you to instantly override information displayed on your clocks and send the current time to those clocks. For example, when a tornado drill is completed, click this button to override TORN with the current time.
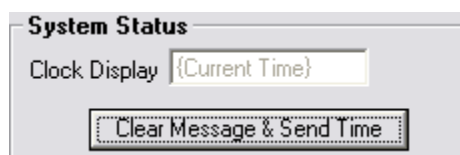

Figure 4. System Status

Schedule

The primary purpose of this section is to display the current schedule for the current date. The current date is located at the top of the section.

The schedule screen enables you to reset the current default schedule to an alternate schedule for today, only. You can also view or modify the existing schedule for today, only.

The schedule screen enables you to go to the master schedule to modify the weekly schedule.

Figure 5. Schedule

Schedule Event

Located in the lower right corner of the window, this section enables you to add events to today's schedule, only. You can also use it to turn on and off lights, door holders, air handlers and manually ring bells, etc.

The most useful part of Schedule Event is the Message field, which enables you to type a custom message such as TORN (for tornado) or LOCK (for lock-down), and then send that message to every clock in the system instantly.

Figure 6. Schedule Event

Chapter 2: Initializing EZ-Time

EZ-Time is extremely flexible -- you customize it to meet the needs of your facility. This chapter lists the tasks necessary for you to perform in order to customize EZ-Time.

These tasks require information that is unique to your facility, such as what time the bells ring, what time the parking lights turn on and off, what time the doors lock, etc. Once you have defined the unique attributes of your facility requirements and input this information into EZ-Time, you will rarely have to use these tasks again.

Setting the Communication Port

In order for EZ-Time software to communicate with devices such as bells and DC-Digital clocks, the communication port (frequently referred as a "com port") must be selected from the back of the PC on which EZ-Time resides. On most PCs there are two ports, known as Com1 and Com2. One of these ports will serve as the communication link between EZ-Time and the devices.

The com port will be connected through a converter box which is part of the EZ-Time package.

Figure 7. Converter Box

Note: If your computer does not have an available serial port or has only USB ports, a USB-to-serial port converter can be purchased from a local computer store.

To set a com port, follow these steps: *(If you have multiple com ports available for your use on the back of your PC, see note below.)*

1. On the back of your computer, plug the converter box cable into the available com port.

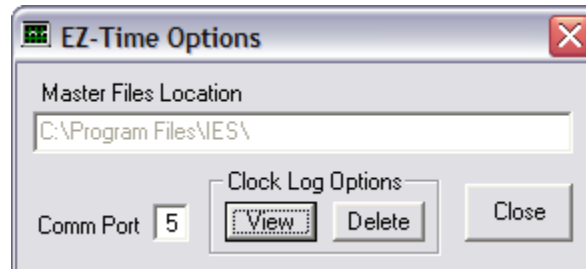2. Click on **File** on the *EZ-Time Main Menu*.

Figure 8. EZ-Time Options

3. Click on **Options.**

   The *EZ-Time Options* window is displayed.

4. In the **Comm Port** field, type the number of the com port you want to use.

5. Click on **Close** to save the com port setting.

Note: If you have more than two com ports available, you must determine which port will work with the converter box. To do this, connect the cable to a potential port and reset the com port number by following the previous steps 1 through 5, choosing a different port number (between one and nine). Then, on the *EZ-Time Main Menu*, click on **Clear Message and Send Time**.

If the **Data** light on the front of the converter box flashes in response, then this is the correct port. If the light does not flash, select another port and repeat this procedure until you have identified a port that will work with the converter box.

Naming and Defining Devices

In this manual, the word *device* refers to the implements that you can control with EZ-Time. Device can refer to any of the following:

• Bell or tone on intercom system

• Magnetically locked door

• Lights

• Words

• Air Handler

DC-Digital Clocks are also devices that are controlled by EZ-Time, but this control is automatic and seamless. However, all other devices must be named and defined using the **EZ-Time Relay Admin** window. For example, a bell in your lobby might be *named* LOBBY BELL. You must *define* the bell by establishing the relay to which it is connected.

Follow these steps to name and define a device:

1. On the *EZ-Time Main Menu*, click on **View**.

2. Click on **EZ-Time Relay Admin**.

    The *EZ-Time Relay Admin* window is displayed. This is the only window you will need to name and define your devices.
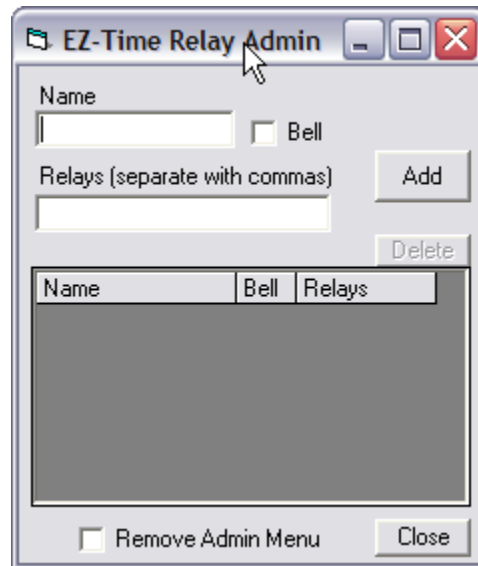

Figure 9. EZ-Time Relay Admin

3. In the **Name** field, type in the name of a device. (For example: Outside Bells.)

4. If the device is going to run only a few seconds (i.e., a bell or a word sent to a DC-Digital Word Clock), then checkmark the **Bell** Box.

    If the device needs to be on a long time (i.e., lights on in a parking lot from 8 P.M. until 7 A.M.), then do not checkmark the **Bell** box.

5. In the **Relays** field, type the two-digit number of the factory-programmed relay connected to the device. (For example, 01).

    You can find this number printed on the relays inside the RM-1 module, which your hardware installer is familiar with. See Figure 10.

Figure 10. RM-1 Module With Relay Numbers Displayed

> Note: If you want to create a "virtual device", i.e., all bells ringing at once, then type all relay numbers associated with all the bells. Separate the numbers with commas.

6. Click the **Add** button.

    The device and the relay are added to the list of devices.

7. Repeat steps 3 through 6 for every device you want to add to the list.

8. After you are finished naming devices and addresses, you can close this window. If you have other devices to add later, you can open this window again and add them to the list.

    However, if you are concerned about unauthorized personnel using this important EZ-Time feature, you can checkmark **Remove Admin Menu** before closing this window. This window will no longer be accessible unless you reinstall the EZ-Time software.

Creating Schedules

In order for EZ-Time to run your clocks and other devices, it must have your schedule of events. EZ-Time enables you to create many types of schedules other than "regular". You can define schedules such as "plan b snow", "pep assembly", "exam", "test", "early dismissal", etc.

To create a schedule, you must first *name* it, and then you must *define* it. These procedures are as follows.

Naming Schedules

To *name* a schedule is to simply assign it a name. For example, your regular schedule could be called "Regular". For days in which students are dismissed early, you can name another schedule "Early Dismissal".

1. On the *EZ-Time Main Menu*, click on **View**.

2. Click on **Schedule Definitions**.

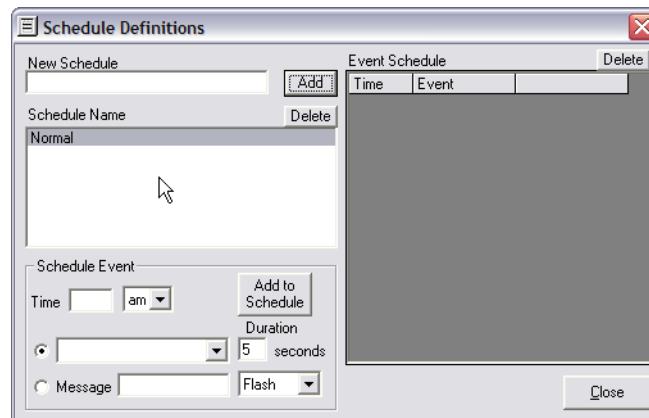   The *Schedule Definitions* window is displayed.

Figure 11. Schedule Definitions

3. In the **New Schedule** field, type in the name of the schedule.

4. Click the **Add** button.

   The schedule name is displayed in the **Schedule Name** field. If you want to add more schedule names, return to step 1. You can add as many schedule names as you want.

Defining Schedules

After naming a schedule, you must *define* it. That is, you set the times in which you want the bells/tones to ring, lights to turn off, etc. The *Schedule Definitions* window must be displayed before beginning this procedure.

1. Click on the schedule name you want to define in the **Schedule Name** field. Now you are ready to enter all the events that will occur during that schedule.

2. Type the time of the first event in the **Time** field. Use the pull-down menu to select either AM or PM.

3. In the field located directly below the **Time** field, enter the type of device you wish to activate at that time. Use the pull-down menu that shows your named devices, such as Lobby Bell, etc.

   Note: If this field is blank, then no devices have been named and defined yet. Refer to the **Naming and Defining Devices** section.

4. Type the amount of time the event will last in the **Duration** field. An event can last from 1 to 99 seconds. The default duration is 5 seconds. Three seconds is adequate for most indoor bells and tones.

    For longer duration events such as parking lot lights, air handlers, etc., the **Duration** field is replaced with an **On/Off** box. This box allows the event to be started and stopped over a period of time. This period of time cannot be less than one minute.

5. To send a message to a DC-Digital clock during this event, click the button next to message.

5b. Type the message in the **Message** field.

5c. Select either **Flash** or **Hold**. (Urgent messages are often flashed repeatedly on the clock face.)

6. Click the **Add to Schedule** button. The event is added to the **Event Schedule** located on the right side of the window.

Figure 12. Completed Schedule Definitions

   Note: If you want to create a message to be sent without associating it with a bell function, then you must return to the **EZ-Time Relay Admin** window and add a virtual device.

7. Repeat steps 2-6 until all events are entered for that schedule.

8. When you are done defining schedules, click the close button to save the schedules and events.

Note: To delete an event, click on the event in the **Event Schedule** and then click on the **Delete** button located in the upper right hand corner.

Designing the Master Schedule

The Master Schedule enables you to:

• Set a routine schedule for each day of the week

• Assign special schedules for specific dates

For example, most weeks you will probably use the same schedule of events Monday through Friday. However, there may be certain days of the year when an Early Release schedule is required. In this procedure, you can assign special schedules to specific days of the year.

1. On the *EZ-Time Main Window*, click on **View**.

2. Click on **Master Schedule**.

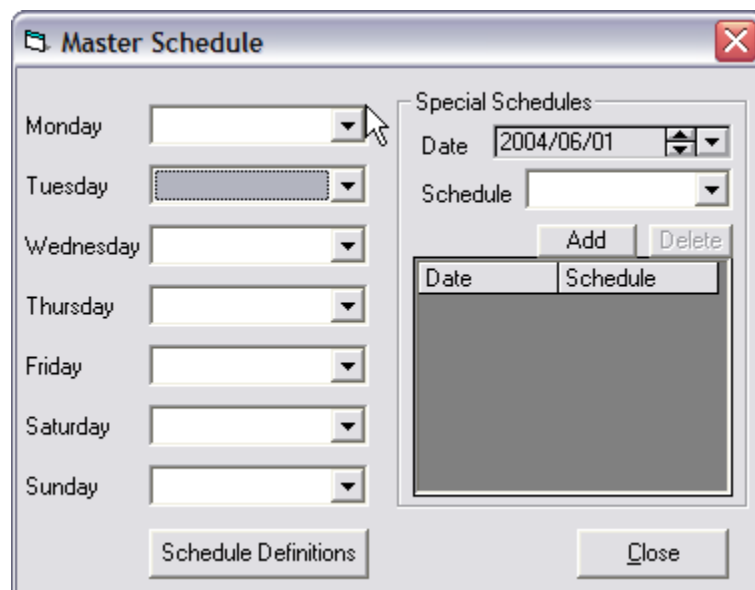   The *EZ-Time Master Schedule Window* is displayed.

Figure 13.   Blank Master Schedule

3. Use the pull-down menu next to each day of the week to enter the schedule for each day. Remember to leave Saturday and Sunday blank if you do not want any bells to ring during those days.

4. For special days of the year that do not follow the typical schedule, enter their schedules in the **Special Schedule** box, one date at a time.

4a. Type the special date (YYYY/MM/DD format) in the **Date** field. Alternatively, you can use the pull-down menu to select the date from a calender.

4b. Use the pull-down menu next to **Schedule** to select the type of schedule to run on that special date.

4c. Click the **Add** button enter this special date on the Master Schedule.

4d. Repeat steps 4a through 4c until you have completed entering special schedules. See Figure 14 for an example of a completed Master Schedule.
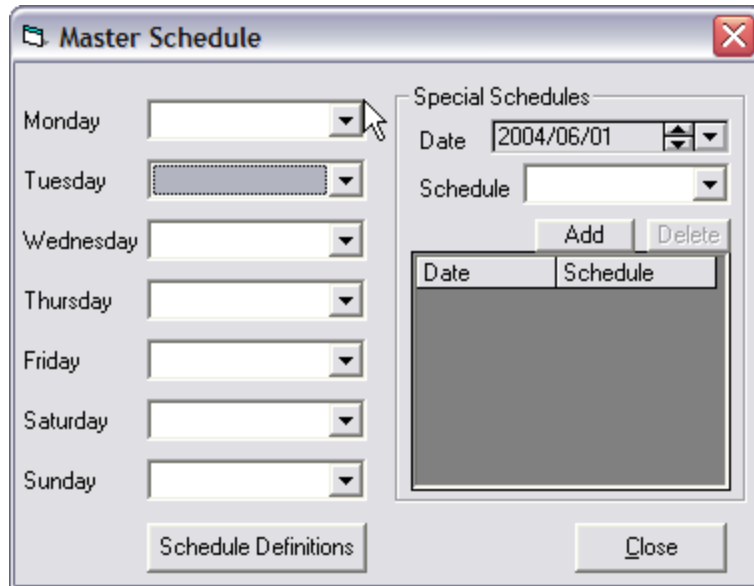

Figure 14. Completed Master Schedule

5. Click **Close** when all schedules have been entered into the Master Schedule.

Note: You can also remove schedules from the **Special Schedule List**. Click on the schedule in the **Date/Schedule** box and then click the **Delete** button.

Controlling the Daily Schedule

Occasionally, there will be a day in which you want to change the schedule of events that are set in EZ-Time.

To manually control the schedule for today's date, begin on the *EZ-Time Main Menu*. Today's schedule of events is detailed on the right-hand side of the window. Today's date is shown at the top.

Used to change a schedule or delete an event

Used to add a new event to the schedule

Figure 15. EZ-Time Main Menu

To change the schedule for today's date, only:

1. Click on the pull-down menu next to the **Change To** box.

2. Select a new schedule for today.

3. Click on the **Reset** button.

    This has changed today's schedule to the new schedule.

    The new schedule name and all the associated events and durations are displayed under **schedule**. If the new schedule does not match your exact needs you can modify the new schedule as shown in the following procedures.

To delete an event on today's schedule:

1. Click on any event that you want to delete.

2.   Click on the **Delete** button.

To add a new event to today's schedule:

1. Type the time of the new event in the **Time** field. Use the pull-down menu to select either AM or PM.

2. In the field located directly below the **Time** field, enter the type of device you wish to activate at that time. Use the pull-down menu that shows your named devices, such as Lobby Bell, etc.

Note: If this field is blank, then no devices have been named and defined yet. Please refer to the **Creating Devices** section of this manual.

3. Type the amount of time that the event will last in the **Duration** field. An event can last from 1 to 99 seconds. The default duration is 5 seconds. Three seconds is adequate for most indoor bells and tones.

For longer duration events such as parking lot lights, air handlers, etc., the **Duration** field is replaced with a **On/Off** box. This box allows the event to be started and stopped over a period of time. This period of time cannot be less than one minute.

4. To send a message to a DC-Digital clock during this event, click the button next to message.

5b. Type the message in the **Message** field.

5c. Select either **Flash** or **Hold**. (Urgent messages are often flashed repeatedly on the clock face.)

6. Click the **Add to Schedule** button. The event is added to today's **Schedule**.

Ringing Bell and Tones Instantly

On occasion, you may need to manually ring the bells or tones.

Follow this procedure to ring bells or tones on demand.

1. On the *EZ-Time Main Menu*, select the type of event you would like to activate from the pull-down menu next to the event display field.
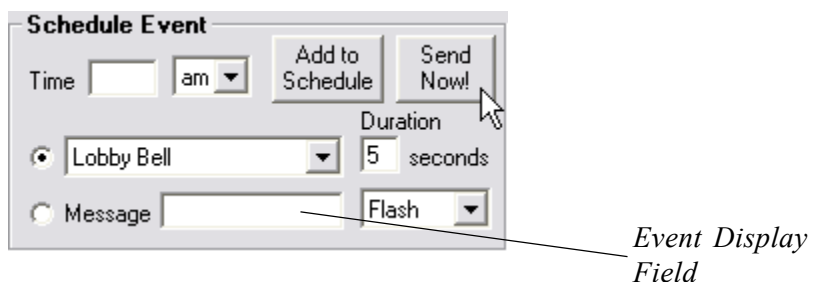

Figure 16. Schedule An Event Manually

The length of the event is displayed in the **Duration** field.

2. If you want to change the length of the event, type the new length in the **Duration** field. The length must be between 1 and 99 seconds. (In the case of parking lot lights, etc., you will type a start/stop time, instead.)

3. Click on the **Send Now!** button.

The event is now activated for whatever duration you have set.

Sending Messages Instantly

You may decide to arbitrarily send instant messages to the DC-Digital clocks.   Follow this procedure to send instant messages.

1. Click on the button next to the **Message** field.

2. Type the message "FIRE", "BELL", etc. You can type any four-character alphanumeric word.
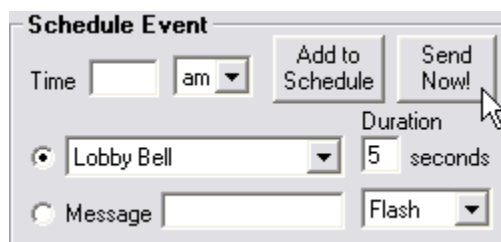

Figure 17.   Send A Message Manually

3. Press the **Send Now!** button.

   The message will be displayed on the DC-Digital clocks. This message will be displayed until **Clear Message & Send Time** button is pressed. This button is located on the bottom left-side of the *EZ-Time Main Menu*.