## USER'S GUIDE

# **LEONICS**<sub>®</sub>



UPS Monitoring and Management Software

## User's Guide: Easy-Mon X

## 1. Configuration

Before Easy-Mon X software can display the electrical data of *LEONICS* UPS, user has to configure parameters first such as COM port, *LEONICS* UPS model, computer shutdown condition, UPS schedule test, computer start-up and shut-down time (applicable to some particular UPS models only), event log location and Event log size. To set up the configuration, go to Microsoft **Start** menu, point to **Programs**, point to **Easy-Mon X** and click **SetupEasyMonX**, as shown in Figure 1.

			🌃 Easy-Mon X Setup	
We concern				Easy-Mon Retup
n daaraan Coordaa		-	TEasyMon X Configurations Schedule Setup 1 Others UPS Communication Device Name	LEDNICS UPS Model
Noowit Lodes Noderange 25 Ontering Office altriansmoothics Store Destroy			Selected UPS No Device Selected	UV: Series     Ultra Series     Ultrado Series     Ultrado Series     Generic Series (Dry Contact)
Program           Documents           Image: Settings           Image: Setings           Image: Set	Common Comm	Windows Home Edition	Shutdown computer when     Power       V Overload Shutdown in     7       V Power fail for     1       Power fail for     1       Recommended backup time = 0 Minute       And computer will shutdown when low battery	fail shutdown parameter uto Save Applications Jown Computer Type Force Shutdown 💌 hutdown UPS
Log Off Lear Start Cff Computer		n <b>635435</b> 053 на	Save	× Cancel

Figure 1 Path to load Easy-Mon X

Then, Easy-Mon X configuration screen is open. There are 3 tabs, **Easy-Mon X Configuration** tab, **Schedule Setup** tab and **Others** tab.

#### 1.1 Easy-Mon X Configuration tab

This tab is to configure Easy-Mon X. The screen is as shown in Figure 2.

Easy-Mon X Setup	
and the second s	Easy-Mon Setup
Easy-Mon X Configurations	hers
UPS Communication Device Name	LEONICS UPS Model UX Series Ultra Series Ultra Series
Selected UPS No Device Selected	Detect
Overload Shutdown in     7     7     FMinute     Power fail for     1     FMinute	Auto Save Applications Shutdown Computer Type Force Shutdown

Figure 2 Easy-Mon X Configuration tab

Easy-Mon X Configuration tab consists of

## • UPS Communication Device Name

This section shows the lists of UPS in the system. The UPS that is selected to communicate with Easy-Mon X is shown in "**Selected UPS**" box.

## • LEONICS UPS Model

This section shows the UPS model which is connected to the computer. After the search of UPS list is finished, the model is automatically detected.

## • Run Easy-Mon X When start up

Check if you want to run Easy-Mon X when starts the computer.

## • Shutdown computer when

Select the events to shutdown the computer. There are 3 events.

- 1. **Overload shutdown in ...... Minute**: If the UPS is overload, the computer will be shut down within the specified period.
- 2. **Power fail for ...... Minute**: If power fails, the computer will be shut down within the specified period.
- 3. **Recommended backup time = 0 Minute**: If the backup time is 0 minute, the computer will be shut down.

Note : You can select either event 2 or event 3 at one time.

Besides this, the computer will shutdown itself automatically when the battery level of the UPS is low.

## • Power fail shutdown parameter

This section is to configure how you want the computer to perform before shutdown if

power fails.

- 1. Auto Save Applications: Select if you want the computer to save pending files automatically.
- 2. Shutdown Computer Type: Select shutdown type. There are 3 types.
  - Normal Shutdown
  - Force Shutdown: All pending files will not be saved. The computer will not ask you if you want to save the change before shutdown. The only way to save your updated files is to select Auto-save Application.
  - **Hibernate**: The computer will store whatever it has in memory on your hard disk and then shuts down. When you turn on the computer, it returns to its previous state.

 Shutdown UPS: This section is to shut down the UPS after the computer is shut down by Easy-Mon X.

## 1.2 Schedule Setup Tab

This tab is to schedule the computer start up time, computer shut down time and UPS test time. The schedule set up tab is as shown in figure 3.

asy-M	on X Seti	up	4	4			Easy-M	on Retu
"Easy-M	ton×Confi tonth Augu	gurations	Sche	dule Setup Year 20		iers	Schedule Setup	
Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Hour	Minute
			1	2	3	4		Dau
5	6	7	8	9	10	11	warning	Sunday
12	13	14	15	16	17	18	Current Day     Operation     Shutdown	Monday
19	20	21	22	23	24	25		Wednesday
26	27	28	29	30	31		<ul> <li>Start Up</li> <li>Test UPS</li> </ul>	Friday
Shut Start	down Ni Up Ni UPS Ni	ot Define ot Define ot Define		hutdown Co Auto Sa Shutdown C Normal Sh Shutdov	omputer Pa ive Applica Computer T utdown wn UPS	arameter tions ype	Apply	Clear X Reset All

Figure 3 Schedule Setup tab

Main sections are

- Calendar
- Shutdown computer Parameter

This section is to configure how you want the computer to perform before shutdown.

- 1. Auto Save Applications: Select if you want the computer to save pending files automatically.
- 2. Shutdown Computer Type: Select shutdown type. There are 3 types.
  - Normal Shutdown
  - Force Shutdown: All pending files will not be saved. The computer will not ask you if you want to save the change before shutdown. The only way to save your updated files is to select Auto-save Application.
  - **Hibernate**: The computer will store whatever it has in memory on your hard disk and then shuts down. When you turn on the computer, it returns to its previous state.
- Shutdown UPS: This section is to shut down the UPS after the computer is shut down by Easy-Mon X.

## Schedule Setup

This section is to set the computer start up time, computer shut down time and UPS test time. It consists of

- 1. Hour: Time to start performing the task (Hour)
- 2. Minute: Time to start performing the task (Minute)
- 3. Warning: Select if you want the Easy-Mon X to alarm you before it performs the task.
- Current Day: Select if you want to fix the date from calendar. If you did not select Current Day, you also can fix the schedule by what day of the week. Easy-Mon X will perform the task every selected day of the week.
- 5. **Operation**: Select one of the following operations.
  - Shutdown computer
  - Start up computer
  - UPS test
- <u>Note</u>: Start up computer setup should be setting System After AC back in section Power Management Setup is ON (CMOS Setup Utility of the computer).
  - 6. **Apply** button: The confirm button to set date, time and operation. There will be a small color code tab shown at that date you set schedule.
  - 7. Clear button: The button to clear all schedules of selected date.
  - View All button: The button to show all schedules. The screen is as shown in figure
     4.

۷	iew All Schedule		X
	Date	Time	Type Warning
	Shutdown Time : 00:00 Sunday Monday Tuesday Wednesday Thursday Friday Saturday	Start Up Time : 00:00 Sunday Monday Tuesday Wednesday Thursday Friday Saturday	Test UPS

Figure 4 View all schedule screen

9. Reset All button: The button to cancel all schedules.

#### 1.3 Others tab

This tab is to specify maximum events to log, location of log file and language selection. The screen is as shown in figure 5. This tab consists of

2	-		Lus	Se Se
Easy-Mon: vent Log S Maximum Location	Configu etup 500 CNEass	Record(s) Record(s) Monk, DMEventLog log		Select Language • English • Thai

Figure 5 Others tab

## • Event Log Setup

Event Log Setup is the section that keeps events. The data are kept by date and time of events. It consists of

- Maximum ...... Record(s): Show the maximum of event records
- Location: Show location of EventLog.txt.

## Select Language

Select interface language

## 2. How to use Easy-Mon X Spy

Easy-Mon X Spy is the software for viewing electrical data. It also monitors, reports and logs events.



Figure 6 Easy-Mon X Spy

You can view these following data from Easy-Mon X Spy

- AC input voltage
- UPS model
- AC output voltage
- Load level

- Battery voltage
- Battery level
- Input frequency
- AC output current
- Recommended backup time
- Last event log
- Event log
- <u>Note</u>: In some particular UPS models, Easy-Mon X Spy is unable to show electrical data due to protocol type is dry contact. In this case, Easy-Mon X Spy will present only electrical status, recommended backup time, shut down setting if power fails or battery level is low.
  - 2.1 Electrical data
    - 2.1.1 AC input voltage

AC input voltage is the input voltage from utility power to the UPS. Click the **INPUT** button to show or hide the input voltage data as shown in figure 7.



Figure 7 How to view AC input voltage

## 2.1.2 UPS Model

Click the UPS button to show or hide the model of UPS that is operating

as shown in figure 8.



Figure 8 How to view UPS Model

#### 2.1.3 AC output voltage and load level

PC image button represents loads. Click the **PC image** button to show or hide load level operating and AC output voltage as shown in figure 9.



Figure 9 How to view AC output volt and load level

## 2.1.4 Battery

Battery image button represent battery and its voltage. Click the **battery image** button to show or hide battery level as shown in figure 10.



Figure 10 How to view battery level

## 2.1.5 Other detail

The bottom right button represent the other details of the system. Click this button to show or hide input frequency, AC output current, recommended backup time (unit in hours)and last event log as shown in figure 11.





Figure 11 How to view details

## 2.1.6 Event log

Event log is the information of the events such as date, time and event happened in the system. The button that represents this log is the left arrow-head image button at the bottom right corner. Click this button to show or hide event log as shown in figure 12.



Figure 12 How to view event log

If you want to print the event log, click the **Print** button. To change the font, click the **Font** button. If you want to clear the log, click the **Delete** button.

#### 2.1.7 Communication error

When Easy-Mon X Spy detects that the UPS cannot communicate with the computer, it will warn the user as shown in figure 13.



Figure 13 Communication error warning

Normally, Easy-Mon X Spy searches for the UPS all the time. If this warning shows, check the USB cable from the UPS to the computer. Go to **Easy-Mon X Configuration tab** of **SetupEasyMonX** to check if any UPS is detected. If yes, exit **SetupEasyMonX**. If no, restart the computer and follow item 3.3 – 3.8.

#### 2.1.8 Overload

When Easy-Mon X Spy detects that the UPS is overload, it will warn user as shown in figure 14.



Figure 14 Overload warning

The user has to disconnect some loads. The recommended load level is not more than 75% of the UPS capacity. The 25% remaining capacity reserves for surge from some electrical appliances.

### 2.1.9 AC Input fail / Power fail

When Easy-Mon X Spy detects that the AC input fails caused by over voltage, sag or blackout, it will warn the user no matter what the user is doing because this is quite a critical event. The screen in as shown in figure 15.



Figure 15 AC Input fail / Power fail warning

## 2.1.10 Low battery

When Easy-Mon X Spy detects that the AC input fails caused by over voltage, sag or blackout and the UPS is supplying backup power to loads until the battery level is low, Easy-Mon X Spy will show a screen to warn user as shown in figure 16.



Figure 16 Low battery warning

In this case, user has to shut down the computer, appliances and the UPS. Wait until AC input power is normal, then restart the UPS, the computer and appliances.

- 2.2 How to use Easy-Mon X Spy
  - 2.2.1 Open Easy-Mon X Spy

If you select to Run Easy-Mon X when start up at Easy-Mon X

**Configuration** tab, **W** icon will be shown at the bottom right corner of the screen.

Double-click the 👭 icon to open Easy-Mon X Spy.

If at the taskbar has no **W** icon, go to Microsoft **Start** menu, point to **Programs**, point to **Easy-Mon X** and click **Spy**.

## 2.2.2 Close Easy-Mon X Spy

Double-click the *icon* at the taskbar to open Easy-Mon X Spy. Then, click the blue oval at the top right corner as shown in figure 17.



Figure 17 How to close Easy-Mon X Spy

2.2.3 Minimize Easy-Mon X Spy

Click the dash below the blue oval at the top right corner as shown in figure 18. Easy-Mon X Spy will minimize into  $\frac{44}{34}$  icon on the taskbar. The program is still running and check the status all the time.



Figure 18 How to minimize Easy-Mon X Spy

## 3. First use of Easy-Mon X

- 3.1 Connect the USB cable from the USB port of the *LEONICS* UPS to the USB port of the computer.
- 3.2 Turn on the *LEONICS* UPS and the computer respectively.
- 3.3 Go to Microsoft Start menu, point to Programs, point to Easy-Mon X and click SetupEasyMonX to configure Easy-Mon X.



Figure 19 Path to load configuration page of Easy-Mon X

- 3.4 Press the **Detect** button to search for UPS Communication Port automatically.
- 3.5 The lists of UPS that are detected display in the UPS Communication Device Name box. Select the UPS. The selected UPS name displays in Selected UPS box. (If you do not select the UPS, the Selected UPS box will display No device Selected and there will not be any communications between the UPS and computer.
- 3.6 Configure the settings and click the **Save** button.
- 3.7 Confirm dialog box shows. If you want to save the setting and exit configuration window, click the Yes button. If you do not want to change the settings, click the No button. The confirm dialog box is closed.



Figure 20 Confirm new settings dialog box

3.8 If you choose to save the new settings, another dialog box shows to confirm to exit the configuration page. If you want to exit, click the **Yes** button.

Confirm	X
Do you	want to exit?
Yes	<u>N</u> o

Figure 21 Confirm to exit the configuration page dialog box

3.9 Go to Microsoft **Start** menu, point to **Programs**, point to **Easy-Mon X** and click **Spy** as shown in figure 22 to view the electrical data of the UPS.



Figure 22 Path to run Easy-Mon X Spy

3.10 Notice 🙀 icon at the taskbar. If you want to view electrical data, double-click 🚑 icon. Easy-Mon X Spy is open as shown in figure 23.



Figure 23 Easy-Mon X Spy