

USER MANUAL

UPS Management Software

For Version 2.90, 2.91 and 2.92

I. Operating System and Interface Specifications:

a. O/S: Windows XP, Vista, 7, 8 2000/2003/2008 Server and Linux.

b. Comm Ports:

- i. Windows: RS-232 on COM1, COM2, COM3, COM4 or USB.
- ii. Linux: ttyS0 (COM1 of Unix) or ttyS1 (COM2 of Unix)

II. Installation and Setup:

- a. Plug one end of the supplied cable into the UPS. Plug the other end into one of the computer's COM or USB ports.
- b. Insert the installation CD into the CD-ROM drive and then execute *Setup.exe* to initiate the installation of the software. The CD is no longer necessary once the installation procedure has been completed.

(Setup.exe is also available via Marathon Power's website)

III. Description of the Main Window Functions



The Menu Bar:

Access to all of the UPSMON monitoring software functions and features can be obtained through the items on the Menu Bar, as follows:

- A. System the System menu contains the following items:
 - System Configuration
 - Self Test
 - 1. The System Configuration System menu item allows configuration of several UPS shutdown options, selection of shutdown type, control of the power outlets, status message setup, Power Failure UPS Sound Control, language selection, and selection of an automatic command file.

The options and settings provided are as follows

- a. 'Shutdown options':
 - Power Failure Windows Shutdown Delay (in seconds)
 - o Battery limited capacity shutdown (in percentage)
 - Low battery shutdown (enabled or disabled)
 - UPS shutdown delay time (in minutes)
- b. 'Power outlets' setup (see Figure 2-B)
- c. 'Shutdown type':
 - Shut down
 - o Hybernate
- d. 'Message setup' (see Figure 2-C)
- e. Power Failure UPS Sound Control
 - Sound ON
 - Sound OFF
 - o Sound OFF During a specific time period
- f. 'Select language' (12 languages are available):
 - English
 - o Chinese (Traditional)
 - Chinese (Simple)
 - o Japanese
 - o **Thai**
 - German
 - French
 - Spanish
 - Korean
 - Polish
 - TurkishRussian
- g. 'Execute Command File':

This allows the user to enter an executable file to launch on the host computer and time delay before command file is executed.

Fig. 2a – System Configuration

🙀 System Configuration		
Power Failure Windows Shutdown Delay (sec)	300	
Battery limited capacity shutdown (%)	30	Shutdown
Low battery shutdown		Options
UPS Shutdown Delay (min)	2	[
	Outlet Setup	Fig. 2b
Shut down type	Shut down 🗨	
Message Setup	Setup	 Fig. 2c
Enable Power Failure UPS Sound Control		
C Sound ON		
 Sound OFF Sound OFF 		
From 12:00:00 AM - To	12:00:00 AM	
Select Language	English 🗨	
Execute Command File		
Time to Execute Command File (sec)	60	
🗸 ок 🛛 🔀 Са	ncel	

'Outlet Setup' provides control of the UPS power outlets as shown in Fig 2B. Controls include enabling/disabling the outlets. The <u>Outlet 2 Setup</u> section provides:

- Windows Shutdown Delay (in seconds)
- Battery capacity limit (in percentage)
- a Low battery shutdown function.
- UPS Shutdown Delay (in minutes)

🎲 Outlet Setup		- • •
🔲 Enable Multi Outlet Control		
Outlet 1 ON 💌	Outlet 2	ON 💌
Main Outlet Outle	et 1	
Outlet 2 Setup		
Power Failure Windows Shutdo	own Delay (sec)	30
🗖 Battery limited capacity shutdown (%)		30
🔽 Low battery shutdown		
🔽 UPS Shutdown Delay (min)		1
✓ or	Cancel	

Fig. 2b - Outlet Setup

'Message Setup' allows entering a custom message *or* selecting a message file for each UPS event. Fig 2c shows enabling/disabling of events and message entry fields.

Other Message Setup controls include enabling/disabling "Count" and "No count" events and their display times (in seconds):

🙀 Message Window Setup	
Show event	
Start monitor	
Connection error	
Bad battery	
🗖 Overload	
✓ UPS Self test	
Power restored	
Power failure	
Low battery	
Scheduled shutdown	
✓ Bypass	
No count event Count event	
🗖 Always show 🔽 Always show	🗖 Don't show again
Time to show (sec) 10 Time to show (sec) 10 Time to show again (sec) 10
ок	🗙 Cancel

Fig. 2c – Message Window Setup

2. The Self Test System menu item initiates a manual test of the UPS:

Fig. 3 - Self Test



- B. Setup the Setup menu contains the following seven items:
 - COM Port
 - Schedule
 - Call Pager
 - E-Mail
 - UPS Setup
 - Password Setup
 - Green Mode Setup
 - **1.** The *COM Port* setup menu item is used by the UPSMON software to detect the serial communications port being utilized on the local machine.

Three selections are provided:

- o Auto Select
- Select a specific COM port
- o Select USB

🛃 Search UPS	<u>- </u>
Auto Search COM1 to COM4 Select Port COM 2 USB	
✓ OK X Cancel	

Fig. 4– Select COM port

The Schedule setup menu item provides a calendaring page with selectable year, month and day
parameters to schedule <u>five</u> different UPS actions on a Monthly, Weekly, Daily and 'Special Day'
basis.

Schedulable items are: (See Fig. 5)

- a. Self Test
- b. Beep ON
- c. Beep OFF
- d. Startup
- e. Shutdown

Buttons along the bottom edge of the Schedule window allow Monthly, Weekly, and Daily schedule configuration. The 'Special Day' configuration is accessed by clicking a date directly on the calendar. Click "Message ON" at the bottom of the page to activate the 'calendar view' feature. Moving the mouse over any particular day will bring up the schedule for that day (shown as a memo). Click "Schedule time" at the bottom of the page to display time settings for each available action.



3. The *Call Pager* setup menu item allows the entry of telephone numbers to be dialed whenever any of <u>nine</u> UPS events occur. Selection of a COM used by an external modem is also provided:

🌭 Pager Setup	
Message Type	Dial Number
Start monitor	
Connection error	
Power failure	0123456789,,,#000*01#
Low battery	
Power restored	0123456789,,,#000*02#
Overload	
Bad battery	0123456789,,,#000*03#
UPS Shutdown	
Scheduled shutdown	
Modern Port Setup Dis	abled 💌 📝 OK 🗙 Cancel

The format for the dialed-number string in the figure above is as follows:

- 1. <0123456789> is the Pager number to be dialed.
- 2. <,,,> By default, each comma represents a two-second delay. The delay time can be changed. In the figure, modem is instructed to wait for 6 seconds.
- 3. <#000*01#> is the Message to be displayed. This setting can be customized.

4. The *E-Mail* setup menu item is similar to the Call Pager function above, but will transmit an e-mail message to a recipient rather than a page. The E-Mail setup provides *fourteen* different UPS events that can be selected to trigger transmission of an e-mail message.

An e-mail message can be triggered by any of the following events:

- 1. Program Startup
- 3. Start Monitor
- 5. System Shutdown
- 7. Low Battery
- 9. UPS Shutdown
- 11. Bad Battery
- 13. Self Test

- 2. Program Stopped
- 4. Connection Error
- 6. Power Failure
- 8. Power Restored
- 10. Overload
- 12. Scheduled Shutdown
- 14. Other

Standard configurable e-mail client parameters include:

- -a. Message headers: "Send To:" and "Subject:"
- b. Host: SMTP server address, user login ID and Secure Password Authentication.
- c. Message text: A separate message is allowed for each event type. -
- d. **Sender:** Sender's name and email address.

Host SMTP server: User ID:		Sender's Data Name: E-Mail Address:	
Using Secure F) Password Auther		
Send To:			
Subject:			
Event Type		Message	
9.UPS shutdown			- +
10.Overload			← ·
11.Bad battery			- →
12.Scheduled shut	:down		+ -
13.UPS Self test			• •
14.Bypass			
14.Bypass			

5. The UPS Setup setup menu item appears only when a Vault series UPS is connected via serial or USB port. It permits setting limits or selecting modes for <u>eleven</u> different UPS functions, as follows:

UPS Function	Function Settings		
	• 100v		
	• 110v		
1. Output Voltage setting	• 115v		
	• 120v		
	• 127v		
	• 2%		
2. Input Frequency setting	• 5%		
	• 7%		
	• +10% to -10%		
3. Input Bypass setting	 +10% to -15% 		
	• +15% to -20%		
	Free Run mode OFF		
4. Free Run mode setting	 Free Run mode ON - Bypass Enable 		
	 Free Run mode ON - Bypass Disable 		
	• 10%		
5. High Efficiency mode setting	• 15%		
	High Efficiency mode OFF		
C Manual Durages setting	Manual Bypass setting		
6. Manual Bypass setting	Normal mode		
7 Cilance cetting	• ON		
7. Silence setting	OFF		
	• ON		
8. Generator setting	OFF		
	Battery Cabinet 00 Pack		
9. Battery Cabinet setting	Battery Cabinet 01 Pack		
	Battery Cabinet 02 Pack		
	English		
	French		
10. Language setting	Italian		
	German		
	Spanish		
	• ON		
11. Site Fault setting	• OFF		
NOTE: The UPS firmware version is also displayed on the main UPS Setup screen.			

Fig. 8a – UPS Setup

UPS Function Setting			
Output Voltage setting	Setup	Input Frequency setting	Setup
Input Bypass setting	Setup	Free Run mode setting	Setup
Hight Efficiency mode setting	Setup	Manual Bypass setting	Setup
Silence setting	Setup	Generator setting	Setup
Battery Cabinet setting	Setup	Language setting	Setup
Site Fault setting	Setup	UPS Firmware Version	Model 1500 Ver 02.9B
	🗸 ок	Cancel	



6. The *Password Setup* setup item allows running the UPSMON software to be password protected:

Fig. 9 – Password Setup

Fassword Setup	
New Password:	
Confirm Password:	
_ OK	X Cancel

7. The Green Mode Setup setup item permits turning 'green' mode on or off:

While the UPS is discharging with zero load : To save the battery capacity, the UPS will automatically turn the output voltage off in a period of time. Then the output voltage will not turn on until the utility is restored.

- Setup Green Mode ON : Enable this function to support the Green Mode.
- Setup Green Mode OFF : Disable this function.

Fig. 10 – Green Mode Setup



NOTE: Some types of the UPS do not provide this function.

- C. View the View menu contains the following items:
 - Record Viewer
 - Event Viewer
 - **1.** The *Record Viewer* allows chart-recording of <u>seven</u> UPS monitored measurements, as well as the "playback' and viewing of the data for a span of 12 months.

Recording enable/disable is available for the following data:

- 1. Input Voltage (in Volts)
- 2. Output Voltage (in Volts)
- 3. Load Level (in Percent)
- 4. Input Frequency (in Hertz)
- 5. Battery Level (in Percent)
- 6. Temperature (in degrees Centigrade)
- 7. Data Timestamp (Format: M/D hh:mm:ss)

The Setup button at the bottom of the Record Viewer window permits the selection of:

- i. Timestamp format displayed along the X-axis.
- ii. The data sample record time interval.
- iii. The displayed icon size.
- iv. Y-axis display size.

120 0 / 0 110 Show Month 3 € 100 ✓ UP Voltage [V] 90 Show Time by X 90 ✓ None 0 O/P Voltage [V] 90 ✓ Hour:Min 90 ✓ D/P Voltage [V] 90 ✓ D/P Voltage [V] 90 ✓ Day:Hour:Min 90 ✓ Load Level [%] 90 ✓ Day:Hour:Min:Sec 90 ✓ Day:Hour:Min:Sec 91 ✓ Day:Hour:Min:Sec 92 ✓ Day:Hour:Min:Sec 93 ✓ Day:Hour:Min:Sec
100 Show Month 3 100 ✓ I/P Voltage [V] 90 ✓ None 80 ✓ O/P Voltage [V] 70 ✓ Hour:Min 60 ✓ Day:Hour:Min ✓ Load Level [X]
100 IVP Voltage [V] 90 Show Time by X 90 None 80 IVP Voltage [V] 70 IVP Voltage [V] 60 Day:Hour:Min IVP Voltage [V] IVP Voltage [V] 10 IVP Voltage [V] 11 IVP Voltage [V] 12 IVP Voltage [V]
90 Show Time by X 0 80 ○ None ○ O/P Voltage [V] 70 ○ Hour:Min 0 60 ○ Day:Hour:Min ✓ Load Level [%]
80 ○ Hour:Min ○ Hour:Min:Sec ○ Day:Hour:Min ○ Day:Hour:Min ○ Day:Hour:Min ✓ O/P Voltage [V]
70 ○ HouriMiniSec 0 60 ○ Day:HouriMiniSec 0 C Day:HouriMiniSec ✓ Load Level [%]
C Hour:Min:Sec U C Day:Hour:Min ✓ Load Level [%]
C Dayt loar Mini
40 Record Interval Time 60 I VP Frequency [Hz]
20 Icon Size
10 Size of Y-axis
OK Cancel
Setup Save 12/30 00:00:00

Fig. 11 – Record Viewer.

The <u>Toolbar</u> along the bottom of the Record Viewer also contains control buttons that allow the user to advance or reverse through the displayed data.

2. The Event View displays data from the UPS event log.

There are *fifteen* events that can be enabled/disabled.

ALL events can be selected for display, or a range of events can be specified via a Starting year and month and an Ending year and month.

Displayable events are:

- 1. Program Startup 2. Program Stopped
- 6. Power Failure
- 7. Low Battery
- 3. Start Monitor
- 8. Power Restored
- 4. Connection Error
- 9. UPS Shutdown

- 11. Bad Battery
- 12. Scheduled Startup
- 13. Scheduled Shutdown
- 14. Self Test

- 5. System Shutdown
- 10. Overload
- 15. Other

Q Even	t Log					
NO.	Туре	Time		Event		
1	1	10/15/2013 10:1	1:40	Program startup		
2	2	10/15/2013 14:5	3:36	Program stopped		
3	5	10/15/2013 14:5	3:36	System shutdown		
4	1	10/15/2013 14:5	5:17	Program startup		
5	1	10/15/2013 14:5	9:02	Program startup		
6	3	10/15/2013 15:4	1:23	Start monitor		
7	6	10/15/2013 16:2	1:18	Power failure		
8	2	10/15/2013 16:2	4:24	Program stopped		
9	2	10/15/2013 16:3	2:50	Program stopped		
10	0	10/15/0010 16:0	0.15	Program stopped	• •	
✓ 1.Pr	ogram st	artup	☑ 6.Power fail	ilure	✓ 11.Bad battery	1
🔽 2.Pr	ogram st	opped	▼ 7.Low batte	ery	12.Scheduled started	
🔽 3.St	art moni	tor	✓ 8.Power restored		13.Scheduled shutdown	
🔽 4.Co	nnection	n error	▼ 9.UPS shutdown		14.UPS Self test	
🗹 5.Sy	stem shi	utdown	🔽 10.Overloa	d	15.Bypass]
	s	Start Year/Month	2013 👤 10	End Year/Month	2013 🜩 10 🜩 🖉 Save]

Fig. 12 – Event Log

Events displayed in the Event Viewer window are sequenced top to bottom in the order of their occurrence with: event number, the type number, the date/timestamp and the event name.

D. *Help* - the Help menu contains the a link to the UPSMON ReadMe document

The ReadMe document is an HTML file that is store in the default UPSMON install directory. The typical directory path to the ReadMe on a Windows machine in the U.S. is: *C:\Program Files\UPSMON\Help\ReadmeE\ReadMeE.htm*

The *C:\Program Files\UPSMON\Help* directory contains folders for 11 other languages with a ReadMe doc in each language.

The ReadMe document contains more information about:

- Using the UPSMON-Plus Monitoring Software
- Opening the UPSMON-Plus UPS Monitoring software
- UPSMON-Plus buttons and indicators
- Setting up the UPSMON-Plus configuration
- Configuring the E-mail notification feature
- Checking the Event List and Event Graph
- Scheduling UPSMON-Plus events
- UPSMON-Plus self test
- UPSMON-Plus Green Mode
- UPSMON messages
- Setting up the PC BIOS to enable PC startup

2 The Tool Bar:

The UPSMON version 2.90, 2.91 and 2.92 have <u>nine</u> buttons in the tool bar located near the top of the Main page:



These buttons repeat several of the menu items described in section above. Refer to that section for descriptions of the functions of the following buttons:

- System Configuration [Section 1-A-1]
- Self Test [Section 1-A-2]
- COM Port [Section 1-B-1]
- Schedule [Section 1-B-2]
- Record Viewer
 [Section 1-C-1]
- Event Viewer [Section 1-C-2]
- Call Pager [Section 1-B-3]
- E-Mail [Section 1-B-4]
- UPS Setup [Section 1-B-5] (Button appears when a Vault UPS is connected to PC.)

The Meters:

3

The Meters display provides scaled and numeric readings for each of the following items:

- Input Voltage, (in Volts)
- Output Voltage, (in Volts)
- Load Level, (in percentage)
- Input Frequency, (in Hertz)
- Temperature, (in degrees Centigrade)
- Battery Level, (in percentage)

Fig. 14 – The Meters.



UPS Status Indicators:

Three UPS status indicators are located along the right-side of the Main page:

- AVR Mode
- Line State
- UPS State
- AVR (Automatic Voltage Regulator) Mode: The AVR Mode indicator can display <u>four</u> different states, as shown in Figure 15:



2. Line State:

Indicates the current state of the power source, as shown in Figure 16:



3. UPS State:

Indicates one of *five* current UPS states, as shown in Figure 17:



Scheduled Shutdown Indicators:

5

The "UPS Down Time" and the "UPS Up Time" indicators are located on the lower-right side of the Main page.

When a UPS shutdown and restart is configured using the procedure in Section 1-B-2 above, these indicators will display the shutdown and restart times:

