



**EMINENT**

**EM394X**  
**UPS 600-1000-1500VA**

**en**

Manual



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# EM394X - UPS 600-1000-1500VA

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## 1.0 Introduction

Congratulations with the purchase of this high-quality Eminent product! This product has undergone extensive testing by Eminent's technical experts. Should you experience any problems with this product, you are covered by Eminent

warranty. Please keep this manual and the receipt in a safe place.

**Register your product now on [www.eminent-online.com](http://www.eminent-online.com) and receive product updates!**

## 1.1 Functions and features

The EM3940/41/42 are UPS systems designed to effortlessly handle a power failure without the loss of important data. Because these devices are also equipped with a ten-minute backup function, you can shut down your computer or have it make a backup without the chance of losing data. These UPS systems are all equipped with a sound alarm which is activated as soon a power failure occurs, warning you to shut down your computer or to make a backup. The capacity of the available models is explained below:

Model	Capacity
EM3940	600VA
EM3941	1000VA
EM3942	1500VA

## 1.2 Packing contents

The following parts need to be present in the packing:

- The EM3940/41/42 UPS
- Serial cable (EM3941/42)
- USB cable (EM3940/41/42)
- Detachable power cable (to power the UPS) (only for EM3942)
- Power cable (to power 1 PC)

## 1.3 Connections of the UPS

The UPS has the following connections:

- 1 RS232 serial port (only for EM3941 and EM3942)
- 1 USB port
- 1 AC connection (Power input) (only for EM3942)
- Output connections (the number differs per model)

## 2.0 Remarks about Safety

In order to keep safe in using the UPS, please comply with the following:

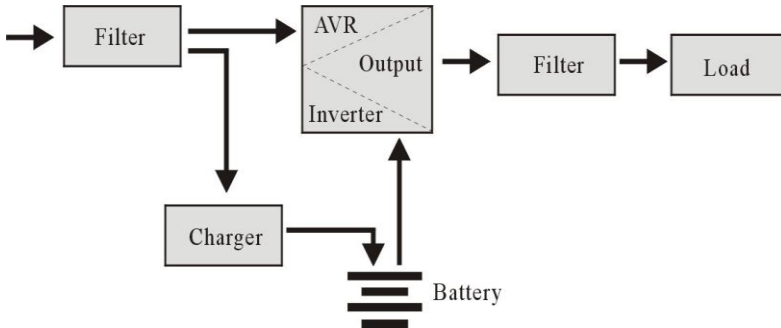
- Please charge the battery at least 24 hours before the UPS is in operation.
- After the battery is discharged or over three months without operation, the battery should be charged immediately for at least 12 hours, ensuring the battery is full and avoiding any unnecessary damage of the battery.
- The UPS is specially designed for computer only and it should not be connected with any inductive or capacitive load, like electromotor, daylight lamp, laser printer, etc.
- The UPS is not suitable for being used in life support systems, because it may have some problems and bring trouble to the life support systems. The responsibility will be users', if they insist on using the UPS in life support systems.
- It is normal that the temperature of the UPS surface reaches up to 50°C when it is in operation.
- When AC fails and the "ON" button on the front panel is pressed, the UPS will output voltage; if the "OFF" button on the front panel is pressed, the UPS will not output voltage.
- It is forbidden to open the case, because there is danger with electricity. If there is problem, please handle with the instruction of experts.
- It is forbidden to put container containing liquid inside on the UPS, because it will cause danger of electric shock or fire when the UPS short-circuits.
- When the UPS is abnormal, please cut off power immediately and turn to experts or the dealer for help.
- As there is no overload protection of the UPS, it cannot be overloaded. Otherwise, it would cause danger.
- It is strictly forbidden to place and operate the UPS in the following environment :
  - Place with inflammable gas or corrosive gas or much dust ;
  - Place with very high temperature or very low temperature(above 42°C or below 0°C) or high humidity(above 90%) ;
  - Place with direct sunlight or near heater ;
  - Place with strenuous vibration ;
  - Outside
- Please use dry powder fire extinguisher in case of fire; it is forbidden to use fluid fire extinguisher because it will cause electric shock.
- Please put the socket near the UPS, in this way, it is convenient to disconnect the socket and cut off power in case of emergency.

Attention! Please ground the UPS for safety purpose

## 3.0 Working Principle

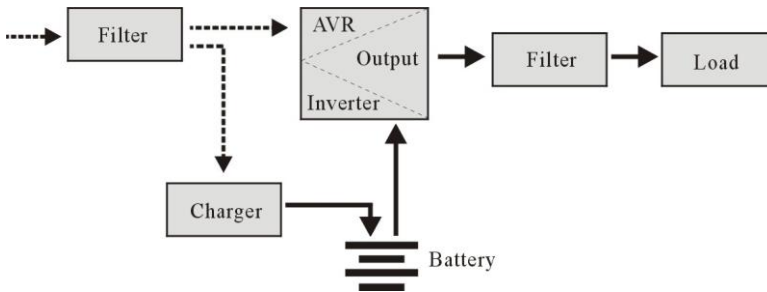
### 3.1 In AC mode

When UPS is in normal working mode, AC goes through the filter and the harmful waves are filtered. After that, AC charges the battery and meanwhile, passes UPS AVR and the filter and provide power for the equipment.



### 3.2 AC Failure

When AC fails, the battery will supply power to the inverter and then passes filter and provide power for the equipment, ensuring the continuous power supply.



### 3.3 Connections of the UPS

The UPS has the following connections:

- 1 RS232 serial port (only for EM3941 and EM3942)
- 1 USB port
- 1 AC connection (Power input) (only for EM3942)
- Output connections (the number differs per model)

### **3.4 Battery and Charging:**

- When the UPS is connected to AC, the charger will charge the battery fully in about 10 hours.
- When the battery is used up, please turn off the UPS and charge the battery for a least 10 hours when. Then turn on the UPS

## **4.0 Main Features**

### **4.1 Unattended Operation**

- Please connect the UPS to AC and press the ON button on the front panel, the UPS is turned on and the AC outputs stabilized voltage.
- When AC fails, UPS will supply power to the equipment immediately. And when the battery is used up, UPS will turn off automatically.
- When AC comes back, UPS will turn on automatically.

### **4.2 Protection**

- Battery discharge protection: when the battery discharges and the UPS is in inverter mode, the UPS will check and monitor the working status of the battery; when the battery voltage drops to the limited lowest voltage, the inverter will turn off automatically and protect the battery; When AC comes back, the UPS will turn on automatically.
- Short-circuit Protection: when the UPS is in inverter mode and there is shock or short-circuit, UPS will output limited currency, protecting the UPS( When in AC mode, the UPS will be protected first by input fuse and then transfers to the inverter working mode).

### **4.3 Four Kinds of Alarm Function**

- When AC fails, and the UPS supplies power, UPS will alarm once every 10 seconds and the beep stops about 40 seconds later.
- When the battery is nearly used up, the UPS will alarm automatically and the beep frequency is once every 1 second.
- Overload, when the UPS is overloaded, UPS will alarm once every 0,5 second
- Fault, if there is a faulty operation of the UPS, UPS will alarm continuously.

### **4.4 Lock Phase Function**

In AC mode, the UPS system automatically tracks AC phase and ensures that the output wave form of the inverter is the same with AC voltage wave form. In this way, it reduces the peak pulse and surge voltage to minimizes the interference and damage to the equipment.

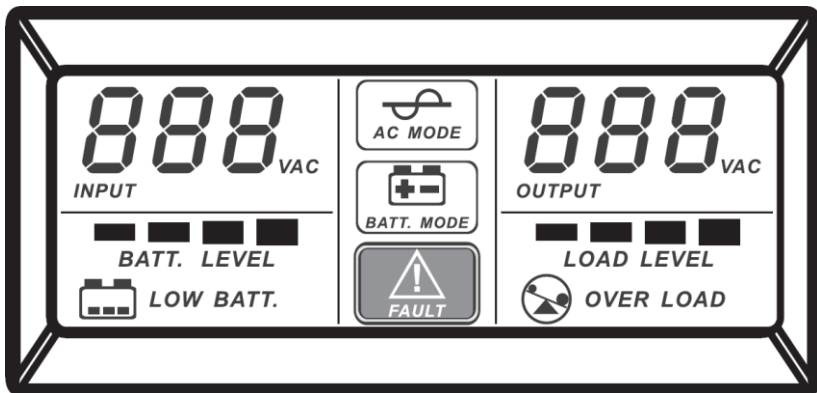
## 4.5 The Function of the Self-set Frequency

When the UPS is turned on for the first time, the acquiescence frequency is 50/60Hz; when it is connected to AC, the frequency is automatically set to 50Hz or 60Hz in accordance with AC.

## 5.0 LCD Display

The UPS is equipped with an LCD display. The display shows the following information:

- Input voltage
- Output voltage
- The battery status/level
- Power usage in percent
- UPS status indication
- Low Battery indication
- Over load indication



## 6.0 Installing the UPS

Follow the instructions below to connect the UPS:

1. Shut down the load (for example PC)
2. Put UPS on the proper position
3. Connect load (for example PC) to the UPS
4. Connect the serial or USB cable to the computer and to the UPS.
5. Plug the UPS power cable into a wall outlet.

**SUGGESTION:** This UPS is the power supply for the computer, monitor and hard disk(CD) etc. It has a limited backup time for the load, so you'd better not connect a printer or other equipment to it.

6. Press the ON/OFF button on the front of the UPS to turn it on. You will hear a short beep.

*Remark :*

1. Generally speaking, don't turn off the UPS so the battery keeps charging.
2. When AC fails the UPS will turn to battery mode. Please save important documents in time.

## 7.0 UPSilon 2000 software

The EM3940/41/42 is supplied with UPSilon 2000 software. This software package enables you to view the status of the UPS and change multiple settings. During a long lasting power failure the software will correctly shut down your computer before the battery of the UPS is drained.

### 7.1 Installing the software

1. Download the software to your computer .
2. The Setup menu of the software will automatically appear.
3. Click '**Install Program**'.
4. Choose your operating system.
5. Click '**Next**'.
6. Click '**Yes**'.
7. You will now be asked to enter a username, company name and serial number. Enter this information. The serial number can be found on the card supplied with the UPS.
8. Click '**Next**'.
9. Click '**Yes**'.
10. Click '**Next**'.
11. Click '**Next**'.
12. Click '**Finish**' to finish the installation of the software.
13. Start the UPSilon 2000 software.
14. A new screen with four options and a log field will appear.
15. Click the option '**Settings**'.
16. Select the correct communication for serial communication select "**MegaTec**" and COM port number near '**Select Comm Port**'. Usually this is '**COM1**' for USB communication select "**Mega(USB)**".
17. Click '**OK**'. The message 'UPS connected' will appear in the log field. If this message does not appear, it is possible you selected an incorrect COM port or the cable is incorrectly connected. If the serial cable is correctly connected, you will need to choose another COM port, as explained in steps 15 and 16.



## 7.2 UPSilon 2000 options and settings

When starting UPSilon 2000 four tabs will appear. These tabs allow you to change the status view. You can choose, amongst others, between voltage meters (*Meter*) or graphs (*Chart*). In the status screen itself you can view items such as Input/Output voltage, temperature, battery status and power consumption.

In the left part of the screen you will see a number of menu options. We will summarize these options below:

### 7.2.1 Settings

The menu option '**Settings**' allows you the change a large number of settings.

#### General

By clicking '**General**' you can set the communication protocol, the COM or USB port and a password if the UPS is managed from another computer. You can also choose whether the status information generated by the UPS has to be saved and how often this needs to be done.

#### Shutdown

The option '**Shutdown**' enables you to establish the steps UPSilon 2000 needs to take as soon a problem with the power supply occurs. Enable 'Turn Off UPS' to specify the number of minutes after which UPSilon 2000 will shutdown the computer and the UPS after problems with the power supply have been detected.

#### Warning Message

The option '**Warning Message**' enables you to display a message on the screen when a specific event occurs. Here you can also disable the pop-up messages if preferred.

#### Email

The option '**Email**' Enables you to setup E-mail messages that will be send from UPSilon 2000 to a specified email. You can also specify which events you wish to receive an e-mail for.

#### SMS

The option '**SMS**' is not supported by Eminent

#### ACPI

The option '**ACPI**' (Advanced Configuration and Power Interface) provide the possibility to change the UPS Name/Manufacturer/Date of installation. And also provide a self-test function.

### 7.2.2 Tasks

The menu '**Tasks**' allows you to plan when UPSilon 2000 will turn on the UPS or turn off both the computer and the UPS. You can also plan for the UPS to execute a number of self-tests.

Choose a date and click '**Add**' to add a task. You can then select a time and determine the frequency of this task, for instance every week.

### 7.2.3 Control

Using '**Control**' you can immediately run a number of self-tests. This option also allows you to shut down the computer.

### 7.2.4 Close File

Here you can view which files and which programs were most recently saved and closed by UPSilon 2000.

### 7.2.5 Log File

In the '**Settings**' menu under '**General Settings**' you already specified whether the status information generated by the UPS has to be saved and how often this needs to be done. The result can be viewed by clicking the option '**Log File**'. A maximum of 2000 rows can be recorded. You can also print the information or save it to a file.

### 7.2.6 About

Here you can find certain information about UPSilon 2000, such as the version and the serial number.

## 8.0 Maintenance

### 8.1 Preventative Maintenance

Preventive Maintenance ensures the longer Service life of UPS. Please check the following steps every month:

1. Turn off the UPS;
2. Make sure the air grid is not blocked;
3. Make sure that the UPS surface is not covered by dust;
4. Check whether the input and output connectors are firmly connected
5. Make sure that the UPS is not affected with damp;
6. Turn on the UPS;
7. Let the UPS work in battery mode for about 5 minutes. If there is no other alarm in this period, then the UPS is working normal; if there is another alarm message, please contact the local dealer for help.

## 8.2 Battery Maintenance

The UPS contains a sealed lead-acid maintenance-free battery (batteries). Bad environmental conditions, to high discharge frequency, to high temperature, etc will dramatically reduce the battery life. The battery life will also reduce even if it is not used. It is suggested to discharge the battery once every 3 months when AC is normal. The following steps explains how to check the battery. When the battery is near the end of its life, the battery will end in bad performance. So, please remember the following steps of checking and maintenance:

1. Connect the UPS to AC and turn on the UPS, charge the battery for at least 10 hours. Do not attach any load to the UPS while charging.
2. Connect any load to the UPS (UPS and Surge outputs) and remove the input plug from the UPS to simulate AC failure. The battery of the UPS will discharge until the UPS turns off automatically.
3. Please record the connected load and discharge time for a later check.
4. When the discharge time is 80% of the initial discharge time, the performance of the battery will be weakened faster and accordingly the checking frequency of the battery should be changed to every month.

## 8.3 Handling of abnormality

The UPS can serve and provide protection to users equipment, but if there is something abnormal, please turn to local UPS dealer for help, avoiding unnecessary damage to the UPS.

When the UPS has the following problems, please follow the Steps below and if the problem still cannot be solved, Please contact the local dealer.

Phenomenon	Trouble Shooting
Battery fails to supply power.	Check whether the battery isn't charged enough? Check whether the UPS is turned on correctly?
UPS doesn't turn to AC (the input plug of the UPS has been plugged into the AC socket and AC is normal, and the "on/off" button has been pressed, but the AC indicating light is not bright and the alarm beeps.	Check whether the fuse is broken? The fuse is placed on the UPS back panel or near the AC input After disconnecting the AC plug, put out the fuse and check whether the fuse is broken, if so, please replace it with a new fuse.
When AC fails, the computer doesn't work.	When AC is working normal, please turn on the UPS and charge the battery for at least 10 hours. Please be sure the load is connected to the correct output

AC output is normal, but the alarm beeps.	AC is over voltage or low voltage.
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## 9.0 Frequently Asked Questions and other related information

The latest Frequently asked questions for your product can be found on the support page of your product. Eminent will update these pages frequently to assure you have the most recent information. Visit [www.eminent-online.com](http://www.eminent-online.com) for more information about your product.

## 10.0 Service and support

This user manual has been carefully written by Eminent's technical experts. If you have problems installing or using the product, please fill out the support form at the website [www.eminent-online.com/support](http://www.eminent-online.com/support).

You can also contact us by phone. Please check [www.eminent-online.com/support](http://www.eminent-online.com/support) for the helpdesk phone number and opening hours.

## 11.0 Warning and points of attention



Due to laws, directives and regulations set out by the European parliament, some (wireless) devices could be subject to limitations concerning its use in certain European member states. In certain European member states the use of such devices could be prohibited. Contact your (local) government for more information about this limitations.

Always follow up the instructions in the manual\*, especially where it concerns devices which need to be assembled.

Warning: In most cases this concerns an electronic device. Wrong/improper use may lead to (severe) injuries!

When you connect the device to the mains, make sure it will not be damaged or subject to (high) pressure.

A power socket is needed which should be close and easy accessible from the device.

Repairing of the device should be done by qualified Eminent staff. Never try to repair the device yourself. The warranty immediately voids when products have undergone self-repair and/or by misuse. For extended warranty conditions, please visit our website at [www.eminent-online.com/warranty](http://www.eminent-online.com/warranty).

Dispose of the device appropriately. Please follow your countries regulation for the disposal of electronic goods.

Please check below safety points carefully:

- Do not apply external force on the cables
- Do not unplug the device by pulling the power cable
- Do not place the device near heating elements
- Do not let the device come in contact with water or other liquids
- If there is any strange sound, smoke or odor, remove the device immediately from the power outlet.
- Do not put any sharp objects into the venting hole of a product
- Do not use any damaged cables (risk of electric shock)
- Keep the product out of reach of children
- Wipe off the product with soft fabric, not water mop.
- Keep the power plug and outlet clean
- Do not unplug the device form the power outlet with wet hands
- Unplug the device when you don't use it for a long time
- Use the device at a well ventilated place

*\*Tip: Eminent manuals are written with great care. However, due to new technological developments it can happen that a printed manual does not longer contain the most recent information.*

*If you are experiencing any problems with the printed manual or you cannot find what you are looking for, please always check our website [www.eminent-online.com](http://www.eminent-online.com) first for the newest updated manual.*

*Also, you will find frequently asked questions in the FAQ section. It is highly recommended to consult the FAQ section. Very often the answer to your questions will be found here.*

## 12.0 Warranty conditions

The Eminent warranty applies to all Eminent products. After buying a second-hand Eminent product the remaining period of warranty is measured from the moment of purchase by the product's initial owner. Eminent warranty applies to all Eminent products and parts, indissolubly connected or mounted to the product it concerns. Power supply adapters, batteries, antennas and all other products not directly integrated in or connected to the main product or products of which, without reasonable doubt, can be assumed that wear and tear during use will show a different pattern than the main product, are not covered by the Eminent warranty. Products are not covered by the Eminent warranty when exposed to incorrect/improper use, external influences or when opening the service parts of the product by parties other than Eminent. Eminent may use refurbished materials for repair or replacement of your defective product. Eminent cannot be held responsible for changes in network settings by internet providers. We cannot guarantee that the Eminent networking product will keep working when settings are changed by the internet providers. Eminent cannot guarantee the working of web services, apps and other third party content that is available through Eminent products.

### When my product gets defective

Should you encounter a product rendered defective for reasons other than described above: Please contact your point of purchase for taking care of your defective product.



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