

## INTRODUCTION

Thank you for purchasing a SurgeMaster Battery Backup by Belkin. Each year, several natural and man-made occurrences put the power supplied to your electronics in your home or office in jeopardy. At risk are your hardware, software, and data because of these power problems.

This product is designed to provide clean power to all computer systems and peripherals with maximum protection. It integrates quality surge protection and battery backup capabilities to provide complete power protection for your computer, modem, hard drive, and other related equipment. This product will safeguard against power disturbances of all kinds; blackouts, surges, spikes and line noise contamination.

## IMPORTANT SAFETY INSTRUCTIONS

### Please save this manual!

It contains important operating instructions and warranty information pertaining to your UPS.

### NOTE:

During the installation of this equipment, it should be assured that the sum of the leakage currents of the UPS and the connected loads does not exceed 3.5mA.

### Please save or recycle the packaging materials!

The UPS packaging was designed with great care to provide protection during shipment and delivery. These materials are invaluable if you ever have to return the UPS for service. Damage sustained during transit is not covered under the warranty.

## CONTENTS

You should have received the following:

- 1 – Battery Backup Product
- 1 – Shutdown Software CD w/Software Manual
- 1 – Users Manual (Multilanguage) CD
- 1 – USB Cable
- 1 – Serial Cable
- 1 – Phone Line Cable

## UPS FEATURES AND FUNCTIONS

Before installation, please inspect the UPS upon receipt. Make sure that nothing is damaged.

Your UPS features 4 LED indicators that specify certain functions on your UPS. Please review this chart and it will assist you in the use of your battery backup.

Indicator	Condition	Meaning
<b>POWER ON</b> (Green LED)	Solid Green	AC Power is on
	Flashing Green every 10 seconds	Battery Backup is on
<b>CHECK BATTERY</b> (Yellow LED)	Solid Yellow LED with Audible Alarm (Beeping)	Indicator will test itself when unit turns on.
		1. In a low-battery scenario, the check battery LED will stay lighted until the battery is charged to acceptable level.  2. If while under battery backup mode the battery becomes too low, the Power On LED will start flashing every 1 second, and the audible alarm will sound every 1 second.
<b>FAULT/ OVERLOAD</b> (Red LED)	Solid Red LED with Audible Alarm (Beeping)	Illuminates when the AC load exceeds the normal range. During this condition, the LED will be lit continuously, and the unit will sound an audible alarm intermittently until condition is restored to normal.
<b>PROTECTED</b> (Green LED)	Solid Green	Indicates that surge protection is working properly. If this indicator is not lit, you have lost your surge protection. Please consult your warranty information and contact Belkin Corporation.

## ALARMS

### Battery BACKUP (Slow Alarm)

When in the UPS is in battery backup mode, the On Battery (Yellow LED) illuminates and the UPS sounds an audible alarm every 10 seconds. The alarm stops when the UPS returns to normal ONLINE operation.

### Low Battery (Rapid Alarm)

When the UPS is in battery backup mode and the battery energy begins to run low, the UPS will beep every 1 second until it shuts down from a depleted battery or returns to ONLINE normal operation.

# BELKIN®

## USERS MANUAL

### BELKIN SUPERIOR SERIES UPS

F6H350ukUNV

F6H500ukUNV

F6H650ukUNV

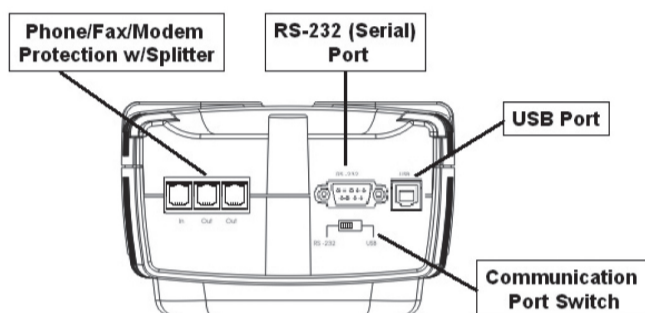
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## ALARMS (cont.)

### OVERLOAD (Continuous Alarm)

When the UPS is overloaded (the connected loads exceed the maximum rated capacity), the UPS emits a continuous alarm to warn of an overload condition. Disconnect nonessential equipment from the UPS to eliminate the overload.

## REAR PANEL



### INTERNET/PHONE/FAX/DSL/NETWORK PROTECTION

The Internet/phone/fax/DSL/network lines are surge-protected and provide complete safety for line connection.

### ON/OFF Master Switch

("I" means ON; "O" means OFF)

### INTERFACE PORTS

The UPS provides both a USB and RS232 port for you use with your computer.

**NOTE: Choose one port only.**

### BATTERY BACKUP OUTLETS

Only data-sensitive equipment such as a computer, monitor, and external drive should be plugged into these outlets. Battery power is automatically provided in case of a power outage. Power (AC or battery) is not supplied to these outlets when the UPS is switched off. (Do not plug surge protectors or power strips into the battery backup outlets).

### SURGE-ONLY PROTECTED OUTLETS

Equipment such as a printer, fax machine, scanner, or a desk lamp can be plugged into these outlets. These outlets do not provide power during a power outage. These outlets are always on (when AC power is available) and are not controlled by the front panel switch.

### AC INPUT BREAKER (CIRCUIT BREAKER)

The 10-amp resettable circuit breaker button will be triggered if an overload condition forces the UPS to disconnect itself from utility power. If the black button sticks out, disconnect nonessential equipment and depress breaker.

## SYSTEM REQUIREMENTS

The UPS can be used without the software and can be used with any computer using a monitor or a flat-panel screen. Also, you do not have to have the software installed to utilize the battery backup outlets.

To fully utilize the UPS and its software, your computer must be able to operate the following operating systems: Windows® 95, 98, 98SE, ME, NT® 4, 2000, XP, or Linux® and higher and have a serial or USB port.

## INSTALLATION

### Note!

Before installation, please inspect the UPS upon receipt. Make sure that the UPS is not damaged.

### Connect to AC Utility Power

Connect the AC inlet to utility power via the power cord.

### Charging the Battery

For best results, charge the battery for 6 hours prior to initial use. The UPS charges its battery whenever it is connected to the utility power. Should you see the yellow check battery light come on, the battery may need immediate replacement.

### Plug-In Power Devices

Plug your devices into the AC outlets on the top of the UPS. To use the UPS as a master on/off switch, make sure all of the loads are switched on.

**Caution: Never connect a laser printer or scanner to the backup outlets of the UPS with other computer equipment. A laser printer or scanner draws significantly more power when in use than when idle. This may overload the UPS.**

### Turning on the UPS

The UPS will perform a self-test each time the UPS is switched on that determines whether the battery can support the connected loads.

**Note! The UPS maintains the battery charge when in the off position and will respond to commands received through the computer interface port.**

### To Conduct a Self-Test

Use the self-test to verify both the operation of the UPS and the condition of the battery. In normal utility power, recycle the power switch On/Off. During the self-test, the UPS operates in backup mode.

**Note! During the self-test, the UPS briefly operates on-battery backup power (the green Power LED comes on and the unit emits a beep every 10 seconds). If the UPS passes the self-test, it returns to online operation. If the UPS fails the self-test, it immediately returns to online operation. See details regarding the Check Battery Indicator below in the next section.**

### Check Battery Indicator

This indicator is lighted when the unit has detected a weak or worn-out battery during the self-test. Please follow the procedure below to bring the battery up to normal operating levels:

1. Allow unit to charge for at least 12 hours
2. Re-test the battery by recycling the power switch off/on. The unit will run a 2-second self-test again to determine the strength of the battery.
3. If the Check Battery Indicated is lighted again, contact Belkin to replace the battery.

### To Silence Audible Alarm

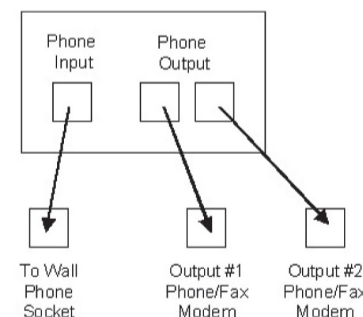
While in battery backup mode, push On/Off/Test button less than 2 seconds to silence the audible alarm. (This does not work if the UPS is under LOW BATTERY or OVERLOAD condition.)

All equipment must be turned off prior to hardware installation.

## PHONE/FAX/MODEM PROTECTION

Connect a single Internet, phone or fax line into the surge-protected ports on the back of the UPS. This comes with a built-in line splitter to provide you with 2 output lines. The RJ11 modular sockets accept standard, single-line telephone connections. The connection will require another length of telephone cable, which is included FREE with your purchase.

Phone-Line Connection with Built-In Splitter:



**Note!** This connection is optional but highly suggested as Internet, phone, fax lines often carry dangerous surges and spikes and need to be protected. The UPS will still work properly without a phone/fax/modem connection.

**Caution!** The phone/fax/modem protection feature could be rendered inoperable if improperly installed. Make sure that the telephone line from the wall is plugged into the connector marked "IN", and the device to be protected is plugged into the connector marked "OUT".

### Serial or USB Communication Port (Installation Optional)

To fully utilize the Shutdown Software; you will need to connect the UPS to your computer so they can communicate to each other.

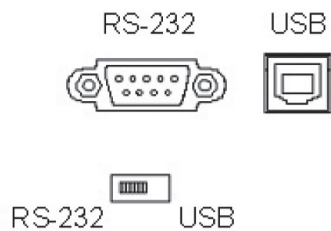
The communication port will provide the following features:

1. Monitoring charger status
2. Monitoring UPS status
3. Monitoring battery status and condition
4. Monitoring the utility status
5. Use the ON/OFF/TEST UPS power switch function to schedule UPS for power saving

You may connect the UPS to your computer by choosing either the serial or USB ports with the selector.

**Note: Choose one port only. Do not connect your computer through both ports.**





Using the Serial or USB cable (included with purchase), connect the desired cable to your UPS then connect the other end to the Serial or USB port on your computer.

**Caution: Use only the Belkin-supplied UPS monitoring cables.**

**USB: HID Windows Setup Procedure**

*\*For installation on other operating systems, please consult the software's manual*

**Hardware Installation**

1. Connect the Serial/USB cable to the battery backup's communication port.
2. Connect the Serial/USB cable to the PC's communication port.
3. Make sure the communication port selector on the back of the battery backup is either on "USB" or RS-232 (Serial). Only one communication port can be used. Do not connect both USB and Serial at the same time.

**Software Installation**

1. Insert the Belkin Power Management Software CD to the CD-ROM. The software will display the installation menu, or you can select 'run' from windows start menu and execute 'setup.exe'. Belkin Power Management Software files will be copied into the directory you appointed. When the software has been launched, the operating system will select the local language in the software for displaying. If there is no preferred language, the Software will default to use English interface.

(Default:C:\Program Files\Belkin Power Management Software)

2. After installation. For Windows 95/98, check if there is a 'Rupsmon Daemon' icon in task bar. For Windows NT, go to 'control panel->service' and check if 'Rupsmon' service has started
3. Click 'Belkin Power Management Software' for parameter settings.
4. Click 'Select UPS' to monitor local or remote UPS.
5. Click 'Settings' to set 'Communication Type' and 'Select Comm Port'. If you see 'Communication with UPS' on the main screen, this means you have connected with UPS.

**Uninstall Belkin Power Management Software**

To uninstall the shutdown software and remove it from the system, please go to Windows start menu \ "Belkin Power Management Software Uninstall."

**TECHNICAL SPECIFICATIONS**

All specifications are subject to change without prior notice.

MODEL	F6H350ukUNV	F6H500ukUNV	F6H650ukUNV
INPUT	Capacity	350VA / 210W	500VA / 300W
	Voltage Range	220-250 VCA/ 10 A	
	Frequency	50 Hz (±3 Hz)	
OUTPUT	Voltage	230 VCA +/- 6 %	
	Frequency (on battery)	50 Hz (±1 Hz)	
BATTERY	Backup time	5-10 min.	7-12 min.
	Under/Over Voltage Transfer to Battery	165-276 VCA +/- 6 %	
	Typical Recharge Time	12 hr. (charge prior to use)	
SURGE PROTECTION	Max. Spike Amps / Joules	Max. Spike Amperage: 45,000 Amps / 1620 Joules	
Conformance	Safety	Complies to British Safety Standards	
PHYSICAL	Dimensions (L X W X H)	363x141x90 mm	363x141x107 mm
	Net Weight	4.89 kg	5.94 kg

**STORAGE**

**Storage Conditions**

Store the UPS covered and upright in a cool, dry location with its battery fully charged. Before storing, charge the UPS for at least four hours. Disconnect any cables connected to the computer interface port to avoid unnecessary drainage of the battery.

**Extended Storage**

During extended storage in environments where the ambient temperature is +5 o F to +86 o F, charge the UPS battery every six months. During extended storage in environments where the ambient temperature is +86 o F to +113 o F, charge the UPS battery every three months.

**Note:**



Away from sunlight    Away from heat    Away from water

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The license is governed by the laws prevailing in the State of New York, without regard to its conflicts of laws principles.

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By opening the package on which this Agreement is printed, or through which it is visible, you acknowledge that you have read this Agreement, understand it, and agree that this Agreement is the complete and exclusive statement of agreement between yourself and Belkin and supersedes any prior agreements, oral or written, and any other communications relating to the subject matter of this Agreement.

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**SAFETY INFORMATION**

**CAUTION!**

- Internal battery voltage is 12V DC.
- The unit is intended for installation in a controlled environment (temperature controlled, indoor area free of conductive contaminants).
- All batteries used are sealed lead batteries. Batteries must be recycled.

Please visit [belkin.com](http://belkin.com) for battery replacement information.

**Recycling Information**

Your UPS contains a non-spillable, sealed lead battery. On the battery, you will find the battery name. Please take the time to properly recycle the battery in a proper manor.

**CONTACT BELKIN**

To contact Belkin for any reason, please find our international office contact information below.

**Belkin Corporation**

501 West Walnut Street  
Compton, CA, 90220-5221, USA  
+1 310 898 1100  
+1 310 898 1111 fax

**Belkin Ltd.**

Express Business Park  
Shipton Way, Rushden, NN10 6GL, United Kingdom  
+44 (0) 1933 35 2000  
+44 (0) 1933 31 2000 fax

**Belkin B.V.**

Boeing Avenue 333  
1119 PH Schiphol-Rijk, The Netherlands  
+31 (0) 20 654 7300  
+31 (0) 20 654 7349 fax

**Belkin GmbH**

Hanebergstrasse 2  
80637 Munich, Germany  
+49 (0) 89 143405 0  
+49 (0) 89 143405 100 fax

**Belkin SAS**

5 Rue du Petit Robinson, 3ème étage  
78350 Jouy en Josas, France  
+33 (0) 1 34 58 14 00  
+33 (0) 1 39 46 62 89 fax

**Belkin Nordic**

Knarrarnäsgatan 7  
164 40 Kista, Sweden  
+46 (0) 8 5229 1870  
+46 (0) 8 5229 1874 fax

**Belkin Ltd.**

7 Bowen Crescent, West Gosford  
NSW 2250, Australia  
+61 (0) 2 4372 8600  
+61 (0) 2 4372 8603 fax

**Belkin Tech Support**

Europe: 00 800 223 55 460  
US: 877 736 5771

**TROUBLE SHOOTING**

PROBLEM	POSSIBLE CAUSE	SOLUTION
UPS not on, LED not lit	On/Off/Test button not pushed or pushed less than 3 seconds	Press the On/Off /Test button for more than 3 seconds
	Battery voltage is too low	Recharge the UPS at least 12 hours
UPS always on battery mode	UPS fault	Contact Belkin Technical Support
	Power cord loose	Re-plug the power cord
	AC breaker is burned out or tripped	Replace or reset the breaker
Backup time too short	AC utility voltage is too high or too low, or blackout	Normal condition
	Battery not fully charged	Recharge the UPS at least 12 hours
	UPS is overloaded	Check wattage of connected equipment and remove some unnecessary loads
The UPS continuously beeps	Charger fault or other reason	Replace battery. Contact Belkin Technical Support
	Overload	Remove the non-critical loads

[www.belkin.com](http://www.belkin.com)