

Uninterruptible Power Supply



USER'S GUIDE

1000VA, 1400VA, 2000VA

Models:

SBP1000U-TBF, SBP1400U-TBF,
SBP2000U-TBF, SBP1000U-TBF-LR,
SBP1400U-TBF-LR



A POWER QUALITY COMPANY

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS This manual contains important instructions for models SBP1000TBF - SBP1400TBF and SBP2000-TBF that should be followed during installation and maintenance of the UPS and batteries.

Safety CAUTION!

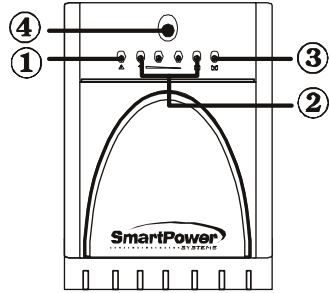
- This UPS utilizes voltages that may be hazardous. Do not attempt to disassemble the unit. The unit contains no user serviceable parts. Only factory service personnel may perform repairs.
- Connection to any other type of receptacle other than a two-pole, three-wire grounding receptacle may result in a shock hazard as well as violate local electrical codes.
- In the event of an emergency, turn the power switch to the “off” position and disconnect the power cord from the AC power supply to properly disable the UPS
- Do not allow any liquids or any foreign object to enter the UPS. Do not place beverages or any other liquid-containing vessels on or near the unit.
- This unit intended for installation in a controlled environment (temperature controlled, indoor area free of conductive contaminants). Avoid installing the UPS in locations where there is standing or running water, or excessive humidity.
- Do not plug the UPS input into its own output.
- Do not attach a power strip or surge suppressor to the UPS.
- Do not attach non-computer-related items, such as medical equipment, life-support equipment, microwave ovens, or vacuum cleaners to UPS
- To reduce the risk of overheating the UPS, do not cover the UPS' cooling vents and avoid exposing the unit to direct sunlight or installing the unit near heat emitting appliances such as space heaters or furnaces.
- CAUTION – To reduce the risk of fire, connect only to a circuit provided with 20 amperes maximum branch circuit overcurrent protection in accordance with the National Electrical Code, ANSI/NFPA 70.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.

- Unplug the UPS prior to cleaning and do not use liquid or spray detergent.
- Do not dispose of battery or batteries in a fire. The battery may explode.
- Do not open or mutilate the battery or batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.
- A battery can present a risk of electrical shock and high short circuit current. The following precautions should be observed when working on batteries:
 - 1). Remove watches, rings, or other metal objects from the hand.
 - 2). Use tools with insulated handles.
 - 3). Wear rubber gloves and boots.
 - 4). Do not lay tools or metal parts on the top of batteries.
 - 5). Disconnect charging source prior to connecting or disconnecting batteries terminal. Servicing of batteries should be performed or supervised by personnel knowledgeable of batteries and the required precautions. Keep unauthorized personnel away from batteries
- When replacing batteries, replace with the same number of the sealed lead-acid batteries.

3. System Description

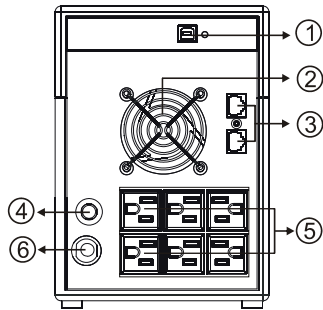
Front Panel — LED

- 1. Fault LED
- 2. AC Mode: Load Level LEDs
Backup Mode: Battery Capacity LEDs
- 3. AC Mode: Green Lighting
Backup Mode: Green Flashing
- 4. Power “ON/OFF” Switch

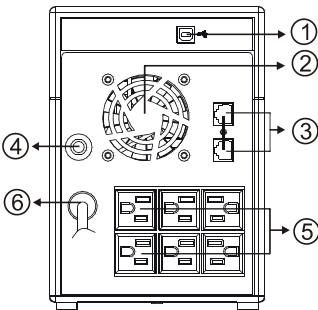


Back Panel

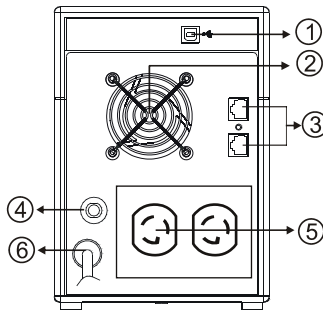
- 1. USB Port (Option)
- 2. Cooling Fan
- 3. Modem/Phone/Network Line Surge Protection
- 4. Circuit Breaker
- 5. AC Output
- 6. AC Input



SBP1400TBF / SBP2000TBF



SBP1000TBF



SBP1000TBF-LR / SBP1400TBF-LR

Installation and Operation

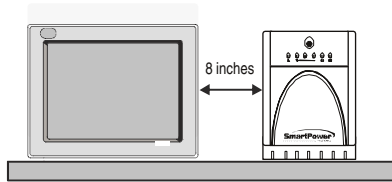
Installing the UPS is as easy as following the steps shown. Be aware the Power Switch must be kept in the “ON” position, otherwise, the UPS will be disabled and your equipment will not be protected during a power failure.

1. Inspection

Remove the UPS from its packaging and inspect it for damage that may have occurred during shipping. If any damage is discovered, repack the unit and return it to the place of purchase - (RMA) Please inform the transport agency immediately should you find signs of damage.) (Please keep the packaging in a safe place for future use.

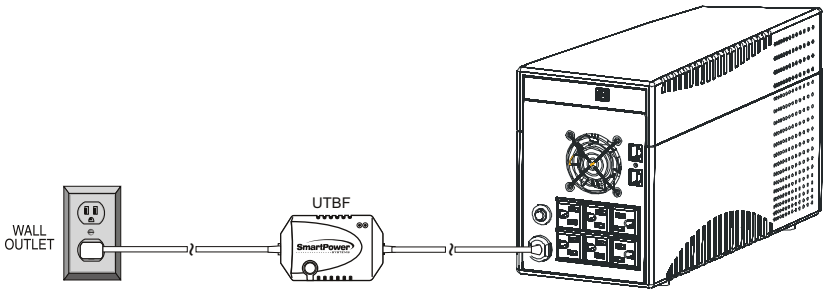
2. Placement

Install the UPS unit in any protected environment that provides adequate airflow around the unit, and is free from excessive dust, corrosive fumes and conductive contaminants. Do not operate your UPS in an environment where the ambient temperature or humidity is high. On the other hand, place the UPS unit away from monitor at least 8 inches to avoid interference.



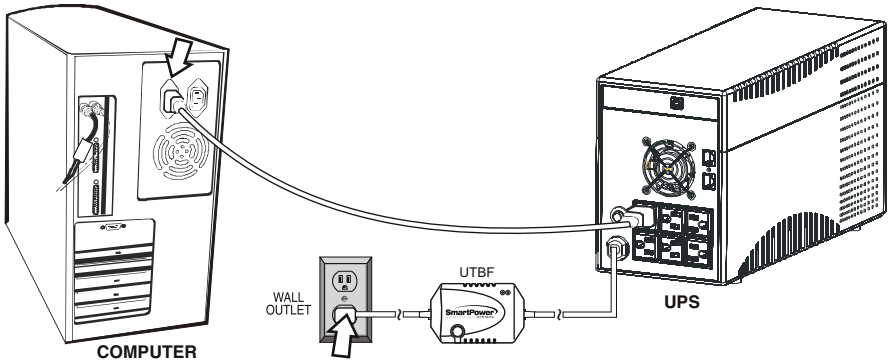
3. Charging

This unit is shipped from the factory with its internal battery fully charged, however, some charge may be lost during shipping and the battery should be recharged prior to use. Plug the unit into an appropriate power supply and allow the UPS to charge fully by leaving it plugged in for at least 8 hours.



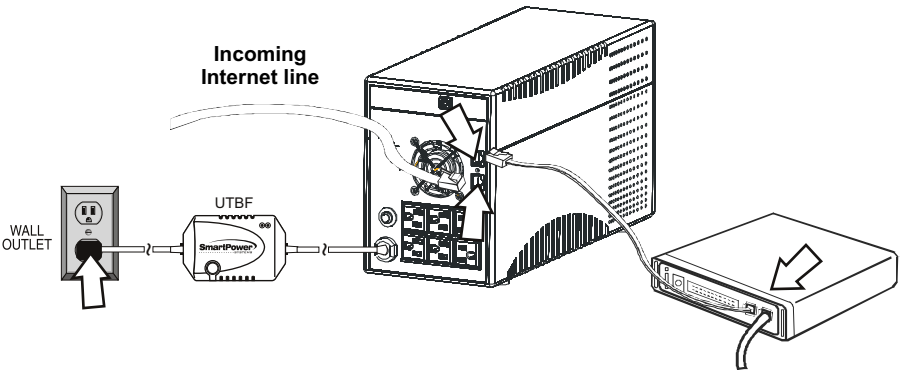
4. Computer Connection

Connect one computer-related device into each of the power receptacles supplied on the back of the UPS (maximum of three devices).



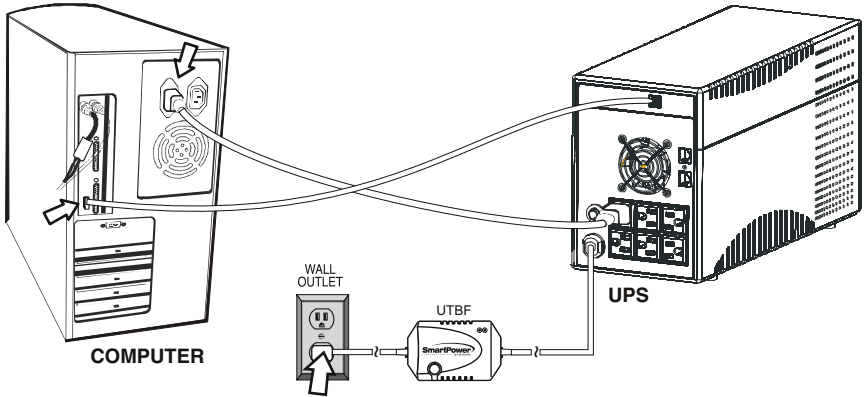
5. Modem/Phone line Connection

Plug incoming internet line into the "In" socket at the back of the UPS. Use one more Internet line cable and plug one end of the Internet line cable to the "Out" socket at the back of the UPS. Plug the other end to the modem input socket as shown.



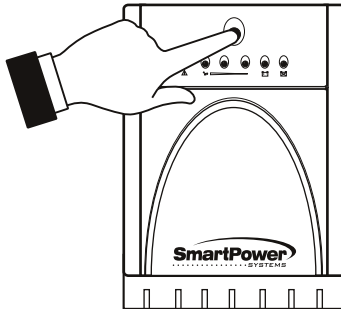
6. Serial Cable Connection

To allow for unattended system shutdown for your operating system, connect the serial cable as per diagram below.



7. Turn On/Off

The UPS will be turned on automatically at first plug-in. At this moment, press the power switch lightly to turn off the UPS. To turn on the UPS again, just simply press power switch again. Please **DO NOT** punch it to extend the life of the power switch.



8. DC Start Function

DC Start Function enables UPS to be started up when AC utility power is not available and battery is fully charged. Just simply press the power switch to turn on the UPS.

9. Green Power Function

All UPS are equipped with Green Power function. If no load connects to the UPS, it will automatically shut down in 5 minutes for energy saving while power failure. The UPS will restart while AC recovery.

10. Battery Removal (SBP1000)

Before replacing the battery, turn off the UPS and unplug the UPS cord from the wall outlet. Follow Chart 4 to remove the screw located on the bottom of the front panel and then open the front cover.

Remove the battery cover

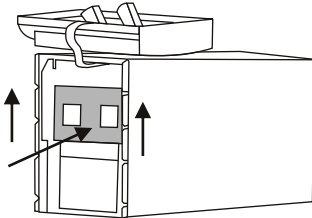


Chart 5

Remove the front panel

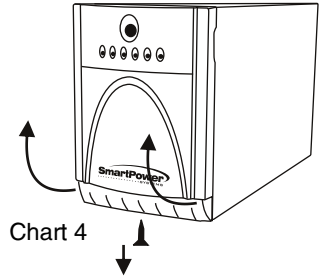


Chart 4

After removing battery cover (Chart 5), gently extract the battery by pulling attached white vinyl sheet (Chart 6). Disconnect the wires connected to the battery. Be sure to replace the same type of batteries and dispose of old batteries properly at an appropriate recycling facility.

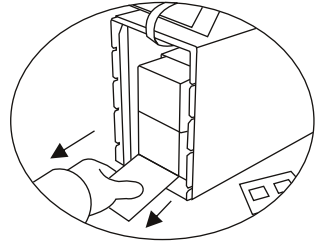


Chart 6

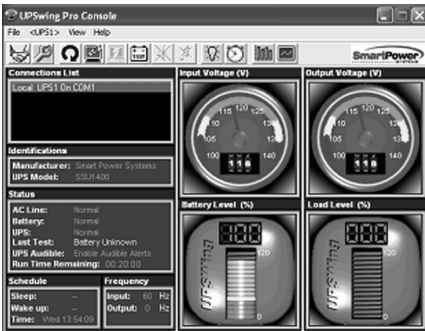
Free Software Download

SmartPower Systems provides a complete line of software solutions for standalone and networked computers, including SNMP support.



FEATURES

- Automatic Save and Shutdown for unattended PCs
- Reboot/Shutdown scheduling
- Self test scheduling
- Power condition analysis
- Online display of input / output voltage and frequency, battery capacity and load level
- Dashboard interface
- Send on-line commands to UPS such as Test, Shutdown, Sleep and restart
- Extensive logging of all UPS operation and power quality data
- Event & date analysis
- Events and data bar charts presentation
- Graphical display of power quality
- Run in background even before user login



Supports: Windows XP/ME/7/NT/2000/2003

UPSwing Pro™ is also available for SCO UNIX, Sun Solaris, LINUX, FreeBSD and Windows™ with Networking capability.

Downloading UPSWING from the internet is a simple process:

1. Go to www.smartpowersystems.com/downloads/Setup.exe
2. Double click on the Setup.exe file and follow instructions.

For Network support version contact us at support@smartpowersystems.com

Trouble Shooting

Symptom	Possible Cause	Remedy
No LED display on the front panel	<ol style="list-style-type: none"> 1. Missing battery 2. Battery defect 3. Power switch is not pressed at least 5 seconds. 	<ol style="list-style-type: none"> 1. Charge battery up to 10 hours 2. Replace with the same type of battery 3. Press power switch for at least 5 seconds
Alarm buzzer beeps continuously when AC supply is normal	Overload of the UPS	Verify that the load matches the UPS capability specified in the specs.
When AC power fails, back-up time is shorten.	<ol style="list-style-type: none"> 1. Overload of the UPS 2. Battery voltage is too low 3. Battery defect due to high temperature operation environment, or improper operation to battery 	<ol style="list-style-type: none"> 1. Remove some non-critical load 2. Charge battery 10 hours or more 3. Replace with the same type of battery
Communication lost between UPS and computer.	<ol style="list-style-type: none"> 1. Software is not installed correctly 2. Cable is not properly connected 	<ol style="list-style-type: none"> 1. Check the setting of the software 2. Check to see that the USB cable is firmly connected to the computer and confirm the setting again
Mains normal but the UPS is not working.	<ol style="list-style-type: none"> 1. Circuit breaker is tripped 2. Power cord is loose 	<ol style="list-style-type: none"> 1. Reset the circuit breaker 2. Reconnect the power cord properly

If abnormal situations occur that are not listed above, please call customer service immediately.

Specifications

MODEL	SBP1000U-TBF	SBP1000U-TBF-LR	SBP1400U-TBF	SBP1400U-TBF-LR	SBP2000U-TBF
OUTPUT					
Capacity VA / W	1000 / 600		1400 / 840		2000 / 1200
Voltage (on battery)	Simulated sine wave at 120V \pm 10%				
Frequency (on battery)	50 or 60Hz \pm 1%				
Voltage Regulation (AVR)	AVR automatically increases output voltage 17% above input voltage if -9% to -25% of nominal. AVR decreases output voltage 15% below input voltage if +9% to +25% of nominal				
Transfer Time	4-8 milli seconds, including detection time				
INPUT					
Voltage	89 - 145VAC				
Frequency	50 or 60Hz \pm 1% (auto sensing)				
PROTECTION					
Spike Protection	1270 Joules				
Lowest Pass through Voltage	<10V Normal Mode <0.5V Common Mode				
Overload	UPS automatic shutdown if overload exceeds: 1) Line mode: 110% of nominal at 5 minutes, 120% immediately 2) Battery mode: 110% of nominal at 10 seconds, 120% immediately				
Unit Input	Circuit breaker for overload & short circuit protection				
Tel / Fax / Modem / DSL / Network	RJ11/45				
BATTERY					
Short Circuit	UPS output cuts off immediately or input circuit breaker protection				
Battery Type	Sealed, maintenance-free lead acid				
Typical Recharge Time	10 hours (to 90% of full capacity) after complete discharge				
Protection	Automatic self-test & discharge protection, replace battery indicator				
Back-up Time (Minutes) Half Load	12		9		6
PHYSICAL					
Net Weight (Lbs. / Kg.)	22.80 / 10.4		24.86 / 11.28		26.36 / 11.96
Shipping Weight (Lbs. / Kg.)	25.25 / 11.5		26.85 / 12.18		28.35 / 12.86
Dimensions D x W x H In. (mm)	15.70 x 5.70 x 8.07 (399 x 145 x 205)				
Input Inlet	AC cord (5-15P)	CL5-15P	AC cord (5-15P)	CL5-15P	AC cord (5-15P)
Receptacles	6-NEMA 5-15R UPS	2-NEMA L5-15R	6-NEMA 5-15R UPS	2-NEMA L5-15R	6-NEMA 5-15R UPS
INDICATORS					
AC Mode	The 1st. green LED lighting, and the 2nd. to 5th. green LED gradually lighting indicating load level 1				
Backup Mode	The 1st. green LED flashing, and the 2nd. to 5th. green LED gradually lighting indicating battery capacity				
Fault	Red LED lighting				
AUDIBLE ALARM					
Backup Mode	Beeps every 10 seconds				
Low Battery	Beeps every second				
Overload	Beeps every 0.5 seconds				
Fault	Continuously Beeps				
Battery Replace	Beeps every 2 seconds				
INTERFACE					
UPS WING for Windows	Software detects power failure, battery low, schedule UPS on/off, AC power status display, bat / load level display				
Optional Software	UPSWING PRO for SCO UNIX, Sun Solaris, LINUX, FreeBSD and Windows™ with Networking capability				
CONFORMANCE					
Safety	cUL, UL				
Warranty	Two years for the SBP unit. Four years pro-rated battery warranty. \$25,000 Lifetime Connected Equipment Protection Warranty				
ENVIRONMENT					
Ambient Operation	0-90% humidity non-condensing 0-40 deg C				
Audible Noise	<40 dBA (1 meter from surface) (AC model) <45 dBA (DC model)				

220/230/240V models available. Consult factory for specifications and features.

Specifications and features subject to change without notice.

LIMITED PRODUCT WARRANTY

We warrant this product to be free from defects in material and workmanship for 2 years. The battery has a 2 year warranty. If a product proves to be defective in material or workmanship during the warranty period, we will at our sole option repair or replace the product with a like product. Visit our website for details - www.smartpowersystems.com

CONNECTED EQUIPMENT PROTECTION POLICY

If the Smart Power Systems equipment fails and this failure causes the surges to pass through and damage the connected equipment, Smart Power Systems will pay for the repair or replacement of the connected equipment up to \$25,000 in accordance to the Connected Equipment Protection Policy. Visit our website for details - www.smartpowersystems.com/claim.htm

In order to validate your Connected Equipment Warranty, you MUST complete the warranty registration card provided and mail it within 20 days of purchasing the unit. You can also register online at www.smartpowersystems.com/warranty.htm

IMPORTANT

If for any reason you need to return the unit to the manufacturer, you should obtain an RMA (Return Material Authorization) number before returning the unit. To request an RMA number please call 1-800-772-7633 or visit the website at www.smartpowersystems.com/rma.htm



1760 Stebbins Dr. • Houston, TX 77043
1-800-882-8285 • www.smartpowersystems.com
Email: support@smartpowersystems.com