

## INTRODUCTION

Thank you for purchasing a Belkin Uninterruptible Power Supply (UPS). 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.

## IMPORTANT SAFETY INSTRUCTIONS

### Please save this manual!

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

### 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.

### For installation:

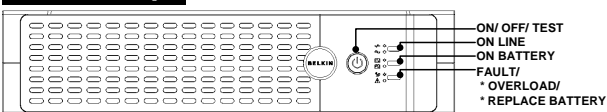
- The equipment is operator installable and can be operated by any individual with no previous training.
- The socket outlet should be located near the equipment and easy to access.

### Other safety instructions:

The UPS contains electrical voltage, which makes it potentially hazardous. Qualified service personnel should perform all repairs. The UPS has its own internal energy source (battery). The output receptacles may be alive even when the UPS is not connected. When replacing batteries, always use the same type and quantity as the previous one. Battery type for 1000VA/ 1250VA:BP5-12 (BB) x2, RT1250F2 (RITAR) x2; Battery type for 1500VA: GP1272F2 (CSB) x 2, BP7-12 (BB) x 2, NP7-12 (YUASA) x 2, CP1270F2 (VISION) x 2, RT1270 (RITAR) x 2. Do not dispose of the battery or batteries in fire as they may explode. Do not open or mutilate the battery or batteries as released electrolyte is toxic and harmful to skin and eyes. A battery can present a risk of electric shock and high short circuit current. The following precautions should be observed when working on batteries: Remove watches, rings, or other metal objects. Use tools with insulated handles. Fully trained personnel should maintain the battery.

## UPS FEATURES AND FUNCTIONS

FRONT PANEL fig. 1



Your UPS features 3 LED indicators which specific's certain functions on your UPS. Please review the Front Panel diagram and with this chart, as it will assist you in the use of your UPS.

Indicator	Condition	Meaning
<b>ON LINE</b> (Green LED)	Solid Green	AC Power is on
	Flashing Green	AVR is active
<b>ON BATTERY</b> (Yellow LED)	Flashing Yellow LED with Audible Alarm (Beeping)	This condition for the On-Battery LED can indicate 1 of 2 problems: 1. The UPS is on battery backup and an intermittent audible alarm is on. The UPS will begin shutdown procedure. 2. Battery is low. The UPS will start shutdown. The buzzer sounds an audible alarm.
	Solid Red	The Fault/Overload can indicate 1 of 2 problems. 1. There is a problem with the UPS. The LED will be lit continuously, and the unit will sound an audible alarm for 10 seconds. 2. Battery is weak or bad; the battery needs to be replaced.
<b>FAULT/ OVERLOAD/ REPLACE BATTERY</b> (Red LED)	Flashing Red	Battery output is drawing more power than the UPS can provide.

## BATTERY REPLACEMENT PROCEDURE

Replacement requires removing the battery cover plate on the front of the UPS. No tools are needed. To replace the batteries:

1. Press fastener to remove the battery cover plate on the front of the UPS (Fig. 1 & 2).
  2. Disconnect the insulated connectors from the battery terminals (Fig. 3 & 4).
  3. Remove the battery then insert a new battery pack, and push the connectors onto the battery terminals (black to black & red to red) (Fig. 3 & 4).
- NOTE:** There may be a small spark at the battery terminals when reconnecting the connectors. This is normal and will not harm you or the UPS.
4. Close the battery cover (Fig. 1).

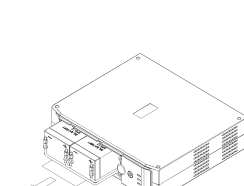
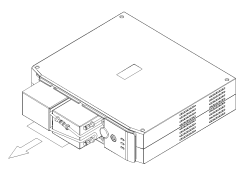
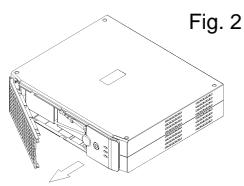
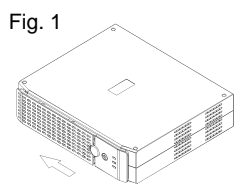


Fig. 3

Fig. 4

for Model: F6C1500eiTW-RK

for Model: F6C1000eiTW-RK  
F6C1250eiTW-RK

# BELKIN®

## USERS MANUAL BELKIN TOWER-RACK SERIES UPS

F6C1000eiTW-RK

F6C1250eiTW-RK

F6C1500eiTW-RK

## ALARMS

### BATTERY BACK UP (Slow Alarm)

When in the UPS is in battery BACK-UP mode, the On Battery (Yellow LED) illuminates and the UPS sounds an audible alarm. The alarm stops when the UPS returns to normal ON LINE operation.

### LOW BATTERY (Rapid Alarm)

When the UPS is in battery BACK-UP mode and the battery energy begins to run low, the UPS will beep rapidly until it shuts down from a depleted battery or returns to ON LINE normal operation.

### 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.

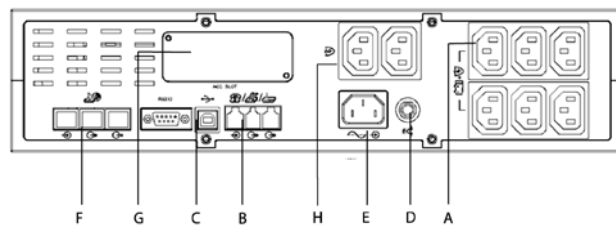
### FAULT (10 Seconds Continuously)

When the UPS occur fault, the UPS emits a 10 seconds continuous alarm to warn of a fault condition. Disconnect the equipment from the UPS prior to checking the equipment.

### To Silence Audible Alarm

While in battery BACK-UP mode, push on/off/test button less than 1.5 seconds to silence the audible alarm. (This does not work if the UPS is under LOW BATTERY or OVERLOAD condition.)

## REAR PANEL



### A BATTERY BACK UP SURGE PROTECTION 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 back up outlets).

**Note!** During the AVR Mode, the total load that you will be placing on the battery back up outlets should not exceed 80% of the unit's capacity.

### B PHONE/FAX/ MODEM PROTECTION

The phone/fax/modem lines are surge protected and provide complete safety for line connection.

### C INTERFACE PORTS (USB & RS232)

The UPS provides both a USB and RS232 port for use with your computer. **NOTE: Choose one port only.**

### D AC INPUT BREAKER (CIRCUIT BREAKER)

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

### E AC INPUT

### F NETWORK PROTECTION

This connector is used for protecting the transmission line of Ethernet card from surge, noise and spike.

### G ACCESSORY SLOT

Optional SNMP Slot

### H SURGE PROTECTED ONLY OUTLETS

## CONTENTS

You should have received the following:

- 1 – UPS unit
- 1 – Bulldog Plus Shutdown Software
- 1 – USB Cable
- 1 – Serial Cable
- 1 – Phone Line Cable
- 1 – European power cord
- 1 – UK power cord

## 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 8 hours prior to initial use. The UPS charges its battery whenever it is connected to the utility power.

### Plug in Power Devices

Plug your devices into the AC outlets on the rear 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 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.**



Laser Printer

### Turning on the UPS

Turn on your UPS by pressing and holding the On/Off/Test button for approximately 2 seconds until the "ON LINE" Green comes on.

### Turning off the UPS

Turn off the UPS by pressing and holding the On/Off/Test button for more than 2 seconds until the "ON LINE" or "ON BATTERY" LED goes off.

### To Conduct a Self Test

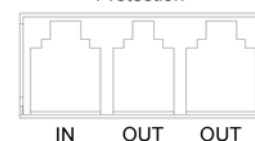
Use the self-test to verify both the operation of the UPS and the condition of the battery. In normal utility power, push the On/Off/Test button less than 1.5 seconds and the UPS performs a self-test function. During the self-test, the UPS operates in back-up mode.

**Note! During the self-test, the UPS briefly operates on-battery backup power (the on-battery LED comes on). If the UPS passes the self -test, it returns to on-line operation. If the UPS fails the self-test, it immediately returns to on-line operation and lights the replace battery LED. The loads are not affected. Recharge the battery overnight and perform the self- test again. If the replace battery LED is still on, the battery will need to be replaced.**

### Connect the phone/ fax/ modem/ lines

Connect a single phone/ fax/ modem line into the surge-protected sockets on the back of the UPS. The RJ-11 modular sockets accepts standard single line telephone connections. The connection will require another length of telephone cable, which is supplied.

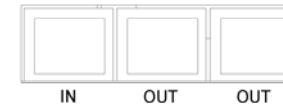
Phone/Fax/Modem Protection



**Note!** This connection is optional but highly suggested as phone/ fax/modem lines often carry dangerous surges and spikes. The UPS works 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".

Network Protection



### Connect the Network Protection Lines

Connect the network line from the wall to the connector marked "IN", then connect the device (Ethernet card) to be protected to the connector marked "OUT".

\* All equipment must be turned off prior to hardware installation.

## 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: 95/ 98/ ME/ NT4/ 2000/ 2003/ XP & Linux & Higher and have a Serial or USB port.

## SERIAL OR USB COMMUNICATION PORT (INSTALLATION OPTIONAL)

To fully utilize the Bulldog Plus Shutdown Software; you will need to connect the UPS to your computer.

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

#### Software Installation (Installation Optional)

- A)** To fully utilize the UPS and its software, your computer must be able to operate the following operating systems: Windows98/ ME/ NT4/ 2000 / 2003/ XP and have a USB port.
- B)** Your UPS features the Bulldog Plus Shutdown Software. This allows you to protect and save your data should a power outage occur, as well as safely shutdown your computer in your absence. Please be sure to close out of all applications prior to installing the software.
- To install the software, please place the CD into the CD drive of your computer.
  - Your computer should autorun the CD. If this does not occur, go to the Run feature on your Start icon (lower left corner) on your screen. Please enter the CD drive, it may be D: Upon entering the drive run setup.exe. to execute the software. Should you continue to have a problem, please refer to your computer's owner's manual for the correct drive.
  - The "Welcome to the Belkin Bulldog Plus Product Installation Browser" will appear. Please click Install and select the Windows version.
  - The Bulldog Plus Installation window will appear. Please choose the appropriate software to install.
  - Install Shield Wizard will appear onscreen, click Next.
  - Please read the License Agreement and click Yes.
  - On Setup Type, ALL (Standalone) is the default. Standalone is for UPS management for your computer only. Networking management is for administrators who need to manage several UPSes in a workstation environment. You should not install the networking files unless you are technically qualified to use these features. For more information on networking, please refer to the software user's manual.
  - On Choose Destination Folder, you have the option to choose the location of where you would like the Software located on your computer. We recommend using the default option as shown on screen. To use the default option, click Next.
  - On Select Program Folder, you have the option to choose the program folder for your Software. We recommend using the default option as shown on screen. To use the default option, click Next.
  - On the Select Language screen, please select your language choice.
  - The software will now be installed. Once completed, please click Finish.

#### Note!

Please refer to the help feature found on the Belkin On-line Screen. To access this screen, please click the Belkin shield found in the lower right corner on your task bar of your screen.

Once the Belkin On-line screen appears, choose help. The Bulldog Online Help screen will appear. You may use the Contents, Index or Search tabs to assist you with your help issues and to get more information on the specific features and functions of the software.

#### C) User Manual Installation

You will need Adobe Acrobat Reader to review the User's Manuals. If you do not have the reader, please go to [www.adobe.com](http://www.adobe.com) to download a free version of the software.

- From the "Welcome to the Belkin Bulldog Plus Product Installation Browser" window, locate and choose User Manual's.
- The "Bulldog Plus User Manuals" window will appear. Please move your pointer to the manual you wish to open and click.
- An Adobe PDF file will be opened. To save a copy to your hard drive, you will need to go to "File" on your menu bar and choose "Save a copy".
- On the Save a Copy window, please choose a destination folder for the manual.

#### D) Uninstall for Windows 98/ Me/ NT4/ 2000 / 2003/ XP

There are two options to uninstall the Belkin Shutdown Software.

##### Option 1

- Click the Start icon in the lower left hand corner of your screen and go to the Programs folder. Scroll to the Belkin Bulldog Plus folder and choose setup. Install Wizard will appear.
- Choose Remove and click Next.
- The Program Files and Audio Files will be checked. If they are not, please check them. Click Next. The uninstall procedure will begin.
- Click Finish when complete.

##### Option 2

(Note: Windows2000/ 2003/ XP users choose the Control panel function from your Start icon and then go to step 2.)

- Click the Start icon in the lower left hand corner of your screen and go to the Settings icon. Go to and choose the Control Panel folder. The Control Panel window will appear.
- Locate and click the Add/Remove Programs icon. The Add/Remove Programs window will appear.
- Locate and choose the Belkin Bulldog Plus software. Click the Change/Remove button on the right. Install Wizard will appear.
- Choose Remove and click Next.
- The Program Files & Audio Files will be checked. If they are not, please check them. Click Next. The uninstall procedure will begin.
- Click Finish when complete.

### TECHNICAL SPECIFICATIONS

MODEL		F6C1000ei	F6C1250ei	F6C1500ei
		TW-RK	TW-RK	TW-RK
INPUT	Capacity	1000VA/ 615W	1250VA/ 680W	1500VA/ 830W
	Voltage Range	190-264 Vac		
	Frequency	50 / 60HZ (±3HZ)		
OUTPUT	Voltage	Simulated sine wave, 230 vac ±10%		
	Frequency (On battery)	50 / 60HZ (±1HZ)		
BATTERY	Back up time 10% load	80 min.	100 min.	120 min.
	Typical Recharge Time	16 hours recover 85% capacity		
ENVIRONMENT	Ambient operation	0-85% humidity non-condensing, 0-40 °C		
CONFORMANCE	Safety	GS / CE / EMC, EN 62040-1 N/ F/ S/ D		
PHYSICAL	Dimension (W X H X D)	1.46 x 14.96 x 13.13 inches (88 x 380 x 333.5 mm)		
	Net weight	9.2kg/ 20.24lbs		10.7kg/ 23.54 lbs

All specifications are subject to change without prior notice.

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

#### Note:



Away from sunlight



Away from heat



Away from water

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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.

### TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
UPS not on, LED not lit	On/ Off /Test button not pushed or pushed less than 2 second	Press the On/Off /Test button for more than 2 seconds
	Battery voltage is too low	Recharge the UPS at least eight hours
	UPS fault	Contact service personnel
UPS always on battery mode	Power cord loose	Re-plug the power cord
	AC breaker is burned out or tripped	Replace or reset the breaker
Back up time too short	Ac utility voltage is too high or too low, or black out	Normal condition
	Battery not fully charged	Recharge the UPS at least eight hours
	UPS is overload	Remove some un-necessary loads
The UPS continuously beeps	Charger fault or other reason	Replace battery. Contact belkin.com
	Overload	Remove the non-critical loads
Red LED lit	Battery failure	Replace battery. Contact belkin.com

### CONTACT US

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