

# BELKIN®

## Residential Gateway (RG) Battery Backup



BU3DC000-12V

User Manual

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# Introduction

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Thank you for purchasing the Residential Gateway (RG) Battery Backup. Natural and man-made power disturbances can disrupt the power supplied to your home electronics. These power problems can disrupt the normal operation of important electrical equipment and related services.

Battery Backups provide an uninterruptible power supply (UPS) to keep critical systems up and running in the event of a power loss. This RG Battery Backup, once properly installed and used, has been designed to maintain your AT&T U-verse<sup>SM</sup> Voice service in the event of a short disruption to your commercial power service.

## Safety Information

### CAUTION

- Internal battery voltage is 12V DC.
- Incorrect battery connection or replacement creates risk of explosion.
- The RG Battery Backup is intended for installation and operation in a controlled environment (temperature controlled, indoor area free of conductive contaminants).
- No user-serviceable parts exist inside the unit. Refer repair issues only to qualified personnel. Fuses or other parts must be replaced **ONLY** with parts of identical types and ratings. Substitution of non-identical parts can cause fire and other safety hazards.
- All batteries used are sealed lead batteries. Batteries should be recycled.

## System Requirements

The RG Battery Backup is designed for use with the AT&T U-verse<sup>SM</sup> Residential Gateway and your AT&T U-verse<sup>SM</sup> Voice service.

**NOTE:** Your AT&T U-verse<sup>SM</sup> Voice service, including 911 dialing, will not function without electrical or battery backup power. The RG Battery Backup supplies power for your AT&T U-verse<sup>SM</sup> Voice service; it does not supply power for cordless phones (and it does not supply power for your network interface device or optical network terminal, typically located on the outside of your home, which may also require battery backup power for your AT&T U-verse<sup>SM</sup> Voice service to function). Therefore, in the event of a power outage, you should ensure you have one corded single-line, touchtone phone connected directly to the AT&T U-verse<sup>SM</sup> Residential Gateway or your in-home wiring and the AT&T U-verse<sup>SM</sup> Residential Gateway connected to the RG Battery Backup. (Rotary/pulse phones do not work with AT&T U-verse<sup>SM</sup> Voice service.) If you connect more than one corded phone, it will use more power; if you connect a cordless phone, it will not function without a separate battery backup, and not all cordless phones are so equipped. If you have a monitored home alarm, you should never plug a multi-line phone directly into the Residential Gateway—it could interfere with the alarm signals. You should not connect the RG Battery Backup to any device other than the AT&T U-verse<sup>SM</sup> Residential Gateway or use it with any service other than your AT&T U-verse<sup>SM</sup> Voice service, and you should always have an alternative means of dialing 911, such as via a cellular telephone.

# Introduction

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## Package Contents

You should have received the following:

- 1 – RG Battery Backup unit (12V sealed lead battery included)



## Recycling

UNIT CONTAINS SEALED LEAD BATTERY. BATTERY SHOULD BE RECYCLED. Belkin International, Inc., advocates sound environmental management of used batteries. For battery-replacement and recycling information, please call us at 866-539-5791, or visit our website at [www.belkin.com/gatewaybattery](http://www.belkin.com/gatewaybattery).

# Product Layout and Function

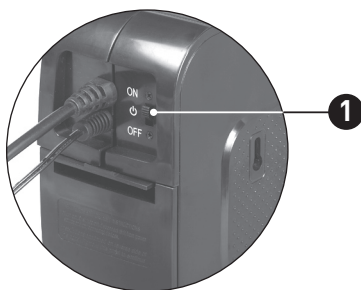
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## Controls and Status Indicators

Shown below are the controls and indicator lights on the RG Battery Backup.

### 1 Power on/off

Power on/off switch is located on the back panel. Use this switch to turn the RG Battery Backup on/off. The unit will not supply power to the AT&T U-verse<sup>SM</sup> Residential Gateway when power switch is in OFF position.



### 2 Status Indicators

Three LED status lights are located on the front panel. The status lights indicate specific conditions of the device. (See page 6.)

### 3 Mute on/off

Use this switch to turn the mute function on/off. The audible alarms will be silenced when mute switch is in ON (down) position.



# BELKIN®

## Residential Gateway (RG) Battery Backup

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# Product Layout and Function

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## Audible and Visual Alarms

The RG Battery Backup alarms to indicate certain events.

Front-Panel Label	Visual Indicator	Audible Alarm	Description
ON A/C	Green LED lights	None	The RG Battery Backup is operating on A/C.
Testing Battery	Green LED flashes	None	The RG Battery Backup is conducting a self-test. This automatic procedure is normal and will occur when the unit is switched on, and periodically thereafter. This procedure will last approximately 5 minutes.
ON Battery	Yellow LED lights	Tone every 5 seconds	The RG Battery Backup is operating on battery power. The alarm will stop when main power is returned.
Low Battery	Yellow LED flashes	Tone every 1 second	The battery energy is running low. This alarm will continue until the unit performs a forced shutdown when the battery is depleted.
Replace Battery	Red LED flashes	Tone every 2 seconds	This alarm warns that the battery has reached the end of its useful life. The user must replace the battery as soon as possible to ensure proper operation of the RG Battery Backup.
Fault	Red LED lights	Continuous tone	A fault has occurred. Disconnect equipment from the RG Battery Backup prior to checking equipment.

**NOTE:** Audible alarm will not sound when mute switch is in ON position.

# Installation

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**NOTE:** Before installation, please inspect the RG Battery Backup. Make sure that nothing inside the package is damaged. The RG Battery Backup must be installed near the Residential Gateway and be easily accessible.



## **STEP 1:**

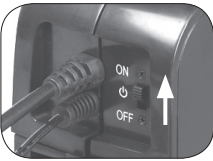
### **Connect to AC Utility Power**

Make sure that the power switch on the RG Battery Backup is in the OFF position. Plug the AC cord on the RG Battery Backup into a wall outlet.

## **STEP 2:**

### **Connect to the Residential Gateway**

Connect the DC plug on the RG Battery Backup into the Residential Gateway.



## **STEP 3:**

### **Turning on the RG Battery Backup**

Turn the switch on the RG Battery Backup to the ON position. The “ON A/C” LED light should illuminate. Note that the “Testing Battery” LED will flash for five minutes as the unit performs a self-test. This is normal.

**NOTE:** It takes approximately 18 hours to charge a new, fully depleted battery at normal indoor temperatures. If a power outage occurs before the battery is fully charged, the battery-backup time shown on page 11 will be reduced. Therefore, you should not rely on battery-backup power for at least 18 hours after your RG Battery Backup is initially installed or a replacement battery is thereafter installed. During these periods especially, and at all other times in general, you should ensure that you have an alternative means of dialing 911, such as via a cellular telephone. Your AT&T U-verse<sup>SM</sup> Voice service, including 911 dialing, will not function without electrical or battery-backup power.



# Operation

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- **Turning off the RG Battery Backup**

Turn switch to OFF position. The “ON A/C” LED light should turn off.

- **To Silence Audible Alarm**

Turn mute switch to ON (down) position.

- **To Conduct a Self-Test**

Use the self-test to verify both the operation of the RG Battery Backup and the condition of the battery. Turn the mute switch ON then OFF, then ON and OFF again within five seconds. During the self-test, the RG Battery Backup operates in backup mode.

The RG Battery Backup automatically conducts a self-test every 21 days.

**NOTE: During the self-test, the RG Battery Backup briefly operates on battery-backup power. The “Testing Battery” LED will flash for five minutes during the test period. If the RG Battery Backup passes the self-test, it returns to online operation. If the RG Battery Backup fails the self-test, it immediately returns to online 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 needs to be replaced.**

# Wall-Mounting Instructions (Optional)

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**NOTE:** Required hardware not included. Refer to the wall-mount instructions for required tools and materials.

**STEP 1:** Position the template on the wall where you want to mount the RG Battery Backup and tape in place.

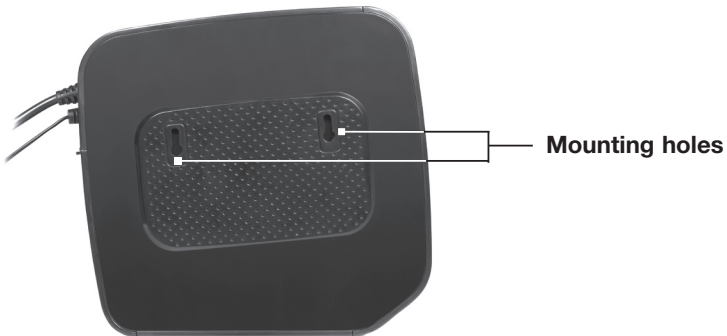
**STEP 2:** Make a mark on the wall in the 2 screw locations indicated on the template. Remove the template from the wall.

**STEP 3:** Use a drill to drill holes where you made the mark on the wall. If you drill into a wall stud, proceed to Step 5. If not, go to Step 4.

**STEP 4:** Insert anchor(s) into the hole(s).

**STEP 5:** Screw in the screw, leaving it protruding 1/4 inch from the wall.

**STEP 6:** Mount the RG Battery Backup on the screw heads.



# Battery-Replacement Procedure

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The RG Battery Backup is designed with an easy-access battery door. Replacement of the battery requires removing the battery door on the rear of the device.

**No tools are needed.**



## **STEP 1:**

**Turn off power switch. Disconnect the RG Battery Backup from power and any connected devices.**

Remove the battery door on the rear of the RG Battery Backup by pressing the tab on the top of the battery door and pulling outward.



## **STEP 2:**

Remove the battery from enclosure; remove the wire connections from the battery.



## **STEP 3**

Connect the new battery (black-to-black, red-to-red); place the battery into enclosure.

**WARNING:** Carefully connect the wires to the correct terminals. The red (+) wire is labeled with a tag. The replacement battery will have color-coded terminals (red = +, black = -). Do not misconnect the wires.



## **STEP 4:**

Securely reconnect battery door.

# Technical Specifications

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## Technical Specifications:

Input Voltage Range	0 to 150VAC
Input Frequency	50/60Hz
Nominal Output Voltage – On A/C Mode	13.7VDC
Nominal Output Voltage – On Battery Mode	12VDC
Max Power	30W
Cold-Start Functionality	Included
Output Transfer	< 1ns
Surge Protection	Included
Alarms	Visual and Audible

## Battery (@ 25 degrees C):

Type/Rating	12V/7.2Ah
Battery Low-Alarm Level	11.0V +/- 0.5V
Discharge Prevention	10.5V +/- 0.5V
Overcharge Protection	>14.5V +/- 0.25V – charge stop <13.6V +/- 0.25V – charge recover
Typical Battery Recharge Time	8 hours to 90%
Typical Backup Time	4 hours—With a new, fully charged, CSB- or YUASA-branded battery or other battery recommended or supplied by Belkin, with one corded single-line, touchtone phone connected to the AT&T U-verse <sup>SM</sup> Residential Gateway directly or through your in-home wiring, and with no other equipment and no service other than AT&T U-verse <sup>SM</sup> Voice service drawing power from the RG Battery Backup. Actual results will vary, depending, among other things, on battery age, usage patterns, and environmental conditions.