APC BV400XU

APC Back-UPS Slim BV400XU Instruction Manual

Model: BV400XU | Brand: APC

INTRODUCTION

This manual provides essential information for the safe and efficient operation of your APC Back-UPS Slim BV400XU. This Uninterruptible Power Supply (UPS) is designed to provide advanced power protection for digital signage, retail POS systems, and other IoT/Edge applications in various environments, including those with harsh conditions. It ensures consistent and reliable connectivity by protecting against power spikes, surges, and outages.

IMPORTANT SAFETY INFORMATION

Please read and understand these instructions carefully before installing, operating, servicing, or maintaining this equipment. Failure to follow these instructions can result in equipment damage, property damage, or serious injury.

- **DANGER:** Hazard of electric shock, explosion, or arc flash. Batteries may cause chemical hazard, electrical shock, and energy hazard. Refer to user manual for details on maintenance, handling, and disposal requirements for batteries. Failure to follow these instructions will result in death or serious injury.
- **NOTICE:** Equipment operation hazard. The output of this device is not purely sinusoidal. It has a normal total voltage harmonic distortion of 45 percent, with the nominal value of the largest single voltage harmonic of 40 percent. Failure to follow these instructions can result in equipment damage.
- This UPS is intended for indoor use only.
- Do not operate this UPS in direct sunlight, in contact with fluids, or where there is excessive dust or humidity.
- Ensure proper ventilation around the UPS.
- Connect the UPS power cable directly to a wall outlet, not to a surge protector or extension cord.

PRODUCT OVERVIEW

The APC Back-UPS Slim BV400XU is a compact and robust Uninterruptible Power Supply designed for environments requiring reliable power backup and surge protection. Its slim profile and flexible mounting options make it suitable for various applications.

Key Features:

- 400VA / 220W capacity for essential equipment.

- 3 battery backup & surge protector outlets (NEMA 5-15R).
- Flexible mounting options: VESA mount, Din-Rail mount, and Wall-mount.
- Slim design for space-saving installations.
- High temperature threshold (32-122°F / 0-50°C) for harsh environments.
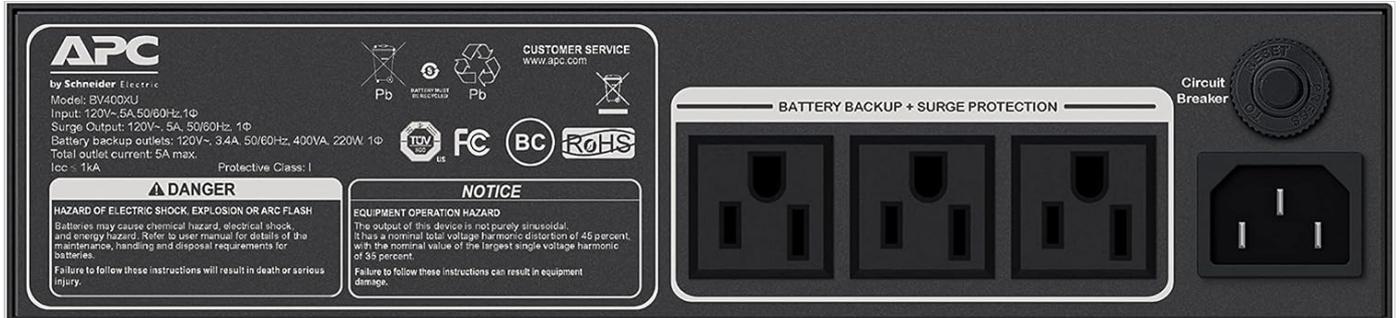- Energy-Star Certified for energy efficiency.

Components:

Figure 1: Rear Panel View. This image displays the rear panel of the APC Back-UPS Slim BV400XU, highlighting the three NEMA 5-15R battery backup and surge protector outlets, the circuit breaker, and the input power cord connection. Important safety and operational notices are also visible.

Figure 2: Communication Ports and Outlets. This diagram illustrates the various communication ports and power outlets on the APC Back-UPS. It points out the On-line LED, On-Battery LED, Alert LED, Data Port, and the three NEMA 5-15 outlets for surge and battery backup, along with the circuit breaker.

SETUP AND INSTALLATION

Follow these steps to properly set up your APC Back-UPS Slim BV400XU.

Unpacking:

1. Carefully unpack the UPS and inspect it for any shipping damage.
2. Retain the packaging materials for future use or recycling.

Mounting Options:

The BV400XU offers versatile mounting capabilities to suit various installation environments.

- **VESA Mount:** Attach the UPS to the back of a VESA-compatible display or monitor arm.

- **Din-Rail Mount:** Secure the UPS to a standard Din-Rail for industrial applications.
- **Wall Mount:** Directly mount the UPS to a wall using appropriate hardware.

Figure 3: VESA Mount Example. This image shows the APC Back-UPS Slim BV400XU discreetly mounted behind a computer monitor, which is attached to an articulating arm. This demonstrates the VESA mounting capability, ideal for saving space in workstations or digital signage setups.

Figure 4: Retail POS Stand Mount Example. The image illustrates the APC Back-UPS Slim BV400XU integrated into a retail point-of-sale (POS) system stand. This setup highlights its use in commercial environments where space is limited and reliable power is crucial for transaction processing.

Figure 5: Detailed Stand Mount. A closer view of the APC Back-UPS Slim BV400XU mounted on a stand, emphasizing the VESA mounting plate connection. This provides a clearer perspective on how the unit attaches securely to various fixtures.

Connecting Equipment:

1. Connect the UPS to a grounded 120V AC outlet using the provided 5-foot input power cord (NEMA 5-15P).
2. Plug your critical equipment (e.g., digital signage, POS terminal, router) into the three NEMA 5-15R outlets on the rear of the UPS. These outlets provide both battery backup and surge protection.
3. Ensure all connections are secure.

OPERATING THE UPS

Once installed, operating the BV400XU is straightforward.

Powering On/Off:

- To power on the UPS, press the power button located on the front panel.
- To power off the UPS, press and hold the power button until the unit shuts down.

LED Indicators:

The front panel features several LED indicators to provide status information:

- **On-line LED:** Indicates the UPS is operating on utility power.
- **On-Battery LED:** Indicates the UPS is operating on battery power (during a power outage).
- **Alert LED:** Illuminates to indicate a fault or warning condition. Refer to the troubleshooting section for details.

Audible Alarms:

The UPS uses audible alarms to signal various conditions:

- **Battery Mode:** Beeps every 30 seconds when operating on battery power.

- **Low Battery:** Beeps rapidly when battery power is critically low.
- **Overload:** Continuous tone indicates an overload condition.
- **Fault:** Continuous tone indicates a UPS fault.

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your UPS.

Battery Replacement:

The internal battery is a sealed lead-acid type and is not user-replaceable. Contact APC support for battery service or replacement. Attempting to replace the battery yourself can void the warranty and pose a safety risk.

Cleaning:

- Clean the exterior of the UPS with a soft, dry cloth.
- Do not use liquid or aerosol cleaners.
- Keep ventilation openings clear of dust and debris to ensure proper airflow.

TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your APC Back-UPS Slim BV400XU.

Problem	Possible Cause	Solution
UPS does not turn on.	No utility power; Battery not connected; UPS fault.	Verify utility power; Ensure UPS is plugged into a live outlet; Contact support if fault persists.
UPS beeps continuously.	Overload condition; UPS fault.	Reduce connected load; Check circuit breaker; Contact support.
UPS operates on battery frequently.	Unstable utility power; High/low voltage.	This is normal operation if utility power is fluctuating. If frequent, consult an electrician.
Short battery runtime.	Battery near end of life; Overload; Battery not fully charged.	Allow battery to charge for 24 hours; Reduce load; Contact support for battery replacement.

SPECIFICATIONS

Detailed technical specifications for the APC Back-UPS Slim BV400XU.

Specification	Value
Model Number	BV400XU
Capacity (VA/Watts)	400VA / 220W
Input Voltage	120 Volts
Output Voltage	120 Volts
Number of Outlets	3 (NEMA 5-15R, Battery Backup & Surge Protection)
Input Power Cord	5' (NEMA 5-15P)

Specification	Value
Battery Cell Composition	Sealed Lead Acid
Typical Runtime	8 hours (at low load)
Operating Temperature	32 - 122°F (0 - 50°C)
Dimensions (H x W x D)	10.24 x 4.72 x 12.48 inches
Certifications	Energy Star

WARRANTY

The APC Back-UPS Slim BV400XU comes with a **3 Year Manufacturer Warranty**. Please retain your proof of purchase for warranty claims. For full terms and conditions, refer to the official APC website or contact customer support.

CUSTOMER SUPPORT

For technical assistance, troubleshooting, or warranty inquiries, please contact APC customer support. You can find contact information and additional resources on the official APC website:

www.apc.com

Please have your model number (BV400XU) and serial number ready when contacting support.

PRODUCT VIDEO

Watch this official product video for an overview of the APC Back-UPS Slim BV400XU's features and applications.

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Video: Industrial Use - Flexible Mounting, Low Profile. This video demonstrates the APC Back-UPS Slim BV400XU's suitability for commercial and industrial environments, highlighting its flexible mounting options and low-profile design. It showcases how the UPS addresses common limitations in deploying power backup solutions in such settings.