

Installation & Operation Quick Guide

ENGLISH

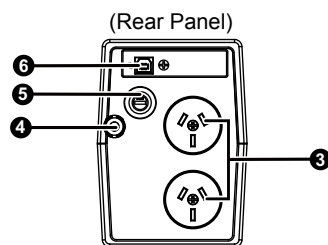
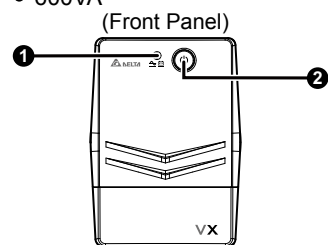
1 Package Inspection

No.	Item	Q'ty
1	UPS	1 PC
2	Quick Guide	1 PC
3	USB Cable	1 PC

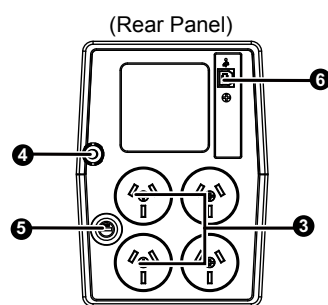
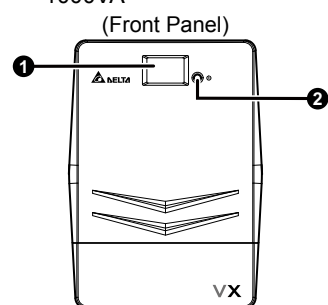
Remove the UPS from its package and inspect it for damage that may have occurred during shipping. If any damage is discovered, re-pack the unit and return it to the place of purchase.

2 Front Panel & Rear Panel

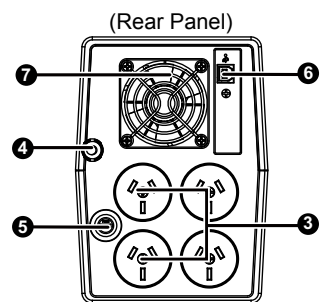
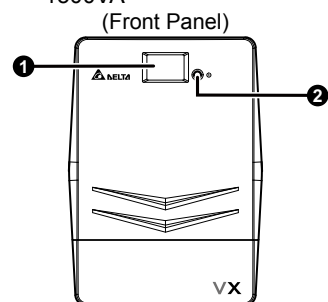
• 600VA



• 1000VA



• 1500VA



No.	Item	No.	Item
1	LED Indicator (Only For 600VA Model) LCD Touch Panel (Only For 1000VA/ 1500VA Model)	4	AC Input
2	ON/ OFF Button	5	Fuse
3	Output Socket	6	USB Port
		7	Cooling Fan (Only For 1500VA Model)

3 Operation

• Placement

Install the UPS in a protected area that is free of excessive dust and has adequate air flow. Place the UPS away from other units at least 20 cm to avoid interference. For best performance, keep the indoor temperature between 0° C and 40° C.

• Connect to Utility Power

Connect the AC power cord to the utility power. Then, the UPS will start to charge its inside battery (batteries). For best result, charge the battery (batteries) for 6 hours prior to initial use. It is not recommended to connect the UPS's AC power cord to any generator.

• Plug in Equipment

Plug your equipment to the Output Socket on the rear panel of the UPS.



WARNING:

1. Make sure that the UPS is powered on to protect all important devices from data loss during power failure.
2. **NEVER** connect a laser printer or scanner to the Output Socket of the UPS. The equipment may draw significant power to overload the UPS.

• Connect to USB Port and Install Software

Connect one end of the supplied USB cable to your PC and the other to the USB port located at the rear of the UPS. Download the latest version of ViewPower software (<http://www.deltapowersolutions.com/en/mcis/600va-1500va-single-phase-ups-vx-series-software-download.php>) to your hard drive. Follow on-screen instructions to complete the software installation.

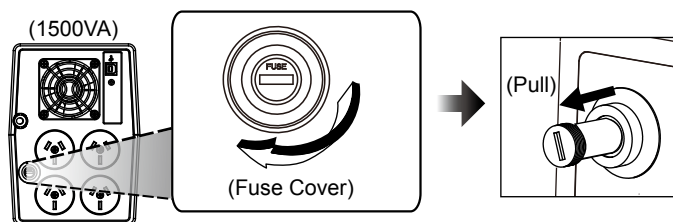
• Turn On/ Off the UPS

When the UPS is OFF, press the ON/ OFF Button to turn on the UPS and the LED/ LCD will be on. When the UPS is ON, press the ON/ OFF Button to turn off the UPS and the LED/ LCD will shut off.

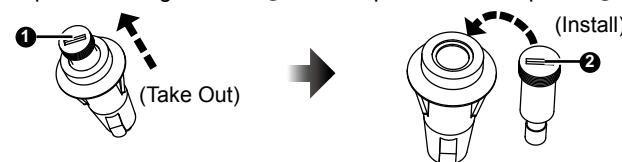
• Fuse Replacement

When the UPS always runs in battery mode, it might be because the fuse is damaged. If yes, please follow the following procedures to replace the fuse.

- 1 Remove the fuse cover from the rear panel.



- 2 Replace the original fuse 1 with the provided backup fuse 2.



- 3 Put the fuse cover back to the rear panel.

• Storage






All connected equipment should be turned off and disconnected from the UPS to avoid battery drain. Unplug the UPS from the wall outlet and turn off the UPS for storage. Store the UPS unit covered and upright in the environment where the ambient temperature is -20°C to 50°C with its battery fully charged.

4 LED Indicator (Only For 600VA Model)

LED	Alarm	UPS Status
ON	OFF	The main AC power is normal and the UPS runs normally.
ON	Sounds all the time	UPS fault.
Flashing	Sounds every 10 seconds	Power failure occurs and the UPS runs in battery mode.
Flashing	Sounds every second	Low battery.
OFF	OFF	The UPS is off.

5 LCD Display (Only For 1000VA/ 1500VA Model)

• Operation Display:

UPS Mode	LCD Touch Panel	Description
UPS Power On		When the UPS is powered on, it will enter this mode for 4 seconds.
AC Mode	 When AVR is functioning, icon will flash every second.	LCD information will be displayed in the following order when the LCD is touched. 1. Output voltage 2. Input voltage 3. Load level 4. Battery capacity
Overload In AC Mode	 icon will flash.	When overload occurs, alarm will beep every 0.5 second.
Battery Mode	 When battery level is low, icon will flash.	Alarm will beep every 10 seconds and LCD information will be displayed in the following order when the LCD is touched. 1. Output voltage 2. Input voltage 3. Load level 4. Battery capacity
Overload In Battery Mode	 icon will flash.	When overload occurs, alarm will beep every 0.5 second.



NOTE:

If backlight shuts off, you can activate it by touching the screen.

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• **Fault Code Table:**

Fault Condition	LCD Touch Panel	Solutions
Output Short Circuited	F01	Disconnect short-circuited loads and restart the UPS again.
Overload Fault	F02	Disconnect all output loads and restart the UPS again.
Over Charge Fault	F03	Call for service immediately.
Battery Too Low Fault	F04	Please replace the battery (batteries).
Battery Mode Output High Fault	F05	Call for service immediately.
Over Temperature	F06	1. Turn off the UPS and wait for cooling. 2. Or remove excessive loads and wait for cooling.

If any fault alarm occurs, please call for service immediately.

6 Safety Caution

SAVE THESE INSTRUCTIONS-This quick guide contains important instructions that should be followed during installation and maintenance of the UPS and battery (batteries).

- The UPS utilizes voltage that may be hazardous. Do not attempt to disassemble the unit. The unit contains no user replaceable parts. Only factory service personnel may perform repairs.
- This pluggable type A equipment with battery (batteries) already installed by the supplier is operator installable and may be operated by laymen.
- The mains socket outlet that supplies the UPS shall be installed near the UPS and shall be easily accessible.
- During the installation of this equipment it should be assured that the sum of the leakage current of the UPS and the connected loads does not exceed 3.5mA.
- Connection to any other type of receptacle other than a two-pole, three-wire grounded receptacle may result in shock hazard as well as violate local electrical codes.
- In the event of an emergency, press the ON/ OFF Button and disconnect the power cord from the AC power supply to properly disable the UPS.
- Do not allow any liquid or any foreign object to enter the UPS. Do not place beverages or any other liquid-containing vessels on or near the unit.
- The unit is intended for installation in a controlled environment (temperature controlled, indoor area free of conductive contaminants). Avoid installing the UPS in any location 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 the UPS.
- Do not dispose of battery (batteries) in a fire as they may explode.
- Do not open or mutilate the battery or batteries. Release 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 hands.
 2. Use tools with insulated handles.
 3. Wear rubber gloves and boots.
 4. Do not lay tools or metal parts on top of battery (batteries).
 5. Disconnect charging source prior to connecting or disconnecting the terminals of battery (batteries).
 6. Remove battery grounds during installation and maintenance to reduce likelihood of shock. Remove the connection from ground if any part of the battery is determined to be grounded.
- Internal battery voltage is 12Vdc. Battery type is sealed, lead-acid, 6-cell battery.
- 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 battery (batteries), replace with the same number and type of sealed lead-acid battery (batteries).
- Attention! Hazardous through electric shock. Even disconnection of this unit from the mains, hazardous voltage still may be accessible through supply from the battery (batteries). The battery supply should be therefore disconnected in the plus and minus pole at the connectors of the battery (batteries) when maintenance or service work inside the UPS is necessary.
- To reduce the risk of overheating the UPS, do not cover the UPS's cooling vents and avoid exposing the unit to direct sunlight or installing the unit near heat emitting appliances such as heaters or furnaces.
- Unplug the UPS prior to cleaning and do not use liquid or spray detergent.

7 Troubleshooting

Problem	Possible Cause	Solutions
LED doesn't illuminate or nothing is displayed on the LCD panel.	The UPS is not on.	Press the ON/ OFF Button again to turn on the UPS.
	Battery voltage is too low.	Charge the battery (batteries) at least 6 hours.
	Battery fault.	Replace the battery (batteries).
The UPS always runs in battery mode.	The power cord becomes loose.	Re-plug the power cord.
	The fuse is damaged.	Replace the fuse. For how to replace the fuse, please refer to 3 Operation .
The UPS continuously beeps.	Please check the Fault Code Table for the details.	Please check the Fault Code Table for the details.
Backup time is too short.	Battery voltage is too low.	Charge the battery (batteries) at least 6 hours.
	Overload.	Remove some unnecessary loads. Before reconnecting equipment, please verify that the load matches the UPS capability specified in the specs.
	Battery defect.	Replace the battery (batteries).

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

8 Technical Specifications

Model	600VA	1000VA	1500VA
Capacity	600VA/360W	1kVA/600W	1.5kVA/900W
Nominal Input Voltage	230 Vac		
Input Voltage Range	170 ~ 280 Vac		
Output Voltage	230 Vac \pm 10% (Bat. mode)		
Transfer Time	Typical 2 ~ 6 ms		
Waveform	Simulated Sine Wave		
Battery Type & No.	12V/7Ah x 1	12V/7Ah x 2	12V/7Ah x 2
Charging Time	Typical 6 ~ 8 hours		
Dimensions (D x W x H)	279 x 101 x 142 mm	320 x 130 x 182 mm	
Net Weight (kgs)	4.2	8.2	10.4
Humidity	0 - 90% RH @ 0 - 40°C (non-condensing)		
Noise Level	Less than 40dB		Less than 45dB

* Specifications are subject to change without notice.

9 Warranty

Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in material and workmanship within the warranty period. If the product has any failure problem within the warranty period, Seller will repair or replace the product at its sole discretion according to the failure situation.

This warranty does not apply to normal wear or to damage resulting from improper installation, operation, usage, maintenance or irresistible force (i.e. war, fire, natural disaster, etc.), and this warranty also expressly excludes all incidental and consequential damages. Maintenance service for a fee is provided for any damage out of the warranty period. If any maintenance is required, please directly contact the supplier or Seller.

! WARNING:

The individual user should take care to determine prior to use whether the environment and the load characteristic are suitable, adequate or safe for the installation and the usage of this product. The Quick Guide must be carefully followed. Seller makes no representation or warranty as to the suitability or fitness of this product for any specific application.

WARNING: This is a category C2 UPS product. In a residential environment, this product may cause radio interference, in which case the user may be required to take additional measures.

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