

USER MANUAL Digital 600 EX



CONGRATULATIONS!

We are delighted to welcome you to our family of customers. Thank you for choosing Numeric as your reliable power solution partner, you now have access to our widest network of 250+ service centers in the country. Since 1984, Numeric has been enabling its clients to optimize their business with top-notch power solutions that promise seamless and clean power with controlled environmental footprints. We look forward to your continued patronage in the years to come. This manual contains detailed instructions on how to use, install and operate this product.



Disclaimer

- The contents of this manual are bound to change without prior notice.
- We have exercised reasonable care to give you an error-free manual. Numeric disclaims liability for any inaccuracies
 or omissions that may have occurred. If you find information in this manual that is incorrect, misleading or incomplete,
 we would appreciate your comments and suggestions.
- Before you begin the installation of the product, please read this manual thoroughly. The warranty
 of this product is null and void, if the product is abused/misused.

INTRODUCTION

Digital 600 EX is designed for personal computers. Equipping double boost and single buck AVR, Digital EX UPS can stabilize a wide voltage range from 140 to 300VAC. The fast charger recharge battery ensures that battery is always ready for power backup. Built-in DC start function and generator compatibility makes UPS adapt to various operational conditions. The following points shows other handy features of Digital EX UPS.

- Microprocessor control guarantees high reliability
- Double boost & single buck AVR stabilize wide voltage fluctuations
- Fast charger ensures battery readiness for power backup
- DC start function
- Generator compatibility
- Auto restart while AC recovery
- · Compact size, light weight



IMPORTANT SAFETY INSTRUCTIONS

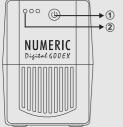
Save these instructions: This manual contains important instructions for the model Digital 600 EX that should be followed during installation and maintenance of the UPS and batteries.

- 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 2-pole, 3-wire grounding receptacle may result in 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 is 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.
- Unplug the UPS prior to cleaning and do not use liquid or spray detergent.
- Do not dispose off battery or throw 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 type and number of the sealed lead-acid batteries. The maximum ambient temperature rating is 40 °c.
- This pluggable type-A equipment with battery already installed by the supplier is operator installable and may be operated by laymen.
- During the installation of this equipment it should be assured that the sum of the leakage currents of the UPS and the connected loads does not exceed 3.5 mA.
- Beware of hazards that may arise through electric shocks. Also, while disconnecting this unit from the mains, may be available through. supply from battery. The battery supply should be therefore disconnected in the plus and minus pole of the battery when maintenance or service work inside the UPS is necessary.
- The mains socket outlet that supplies to the UPS shall be installed near the UPS and shall be easily accessible.

SYSTEM DESCRIPTION

Front panel



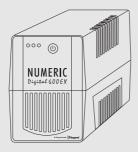
- 1. Power switch
- 2. Status indicator
 AC Mode: solid green LED
 Battery Mode:
 flashing green LED

1. Output receptacles

INSTALLATION AND OPERATION

1. Inspection

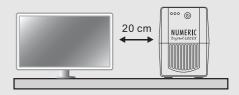
Remove the UPS from its packaging and inspect it for damage that may have occurred during shipping. If any damage is discovered, repack the unit and return it to the dealer from whom you had purchased.



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.

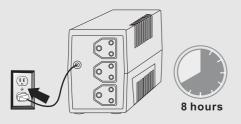
On the other hand, place the UPS at least 20 cms away from the monitor to avoid interference.





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 with no load (no electrical devices such as computers, monitors, etc.) connected.



5. Turn On/Off

To turn on the UPS unit, press the power switch lightly. To turn off the UPS unit, press the power switch again.



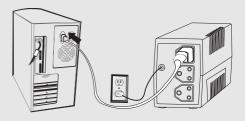
6. DC Start

This series is equipped with DC Start. To start the UPS when AC utility power is not available, simply press the power switch.

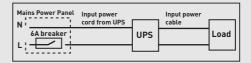
4. Connection

Plug the UPS into a 2-pole, 3-wire grounded receptacle. Then connect one computer related device into each of the power receptacles supplied on the back panel.

Note: Circuit breaker rating of the branch circuit supplied from the mains input panel sizing must be 6 A/250 Vac in accordance with National Electrical Codes and Standards as per schematic (based on N.E.C NFPA 70 -2014; Reference: Article 240)



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7. Green Power Function

UPS is equipped with Green Power function. If no load is connected, UPS will automatically shut down in 5 minutes for energy saving during power failure. The UPS will restart while AC recovery.

SPECIFICATION

Model	Description	Digital 600 EX
Capacity	VA/W	600 VA/360 W
Input	Voltage range	140-300 Vac
	Frequency	50 Hz
Output	Voltage	190-253 Vac
	Voltage regulation (Batt. mode)	230 Vac +/- 10%
	Frequency regulation (Batt. mode)	50 +/-1 Hz
	Waveform	Modified sine wave
Battery	Battery type and number	12 V/7 Ah x 1 pc (sealed, lead-acid, maintenance free, 6 cells battery)
	Back up time (1 PC load)	10 min
	Recharge time	4-8 hours to 90% after complete discharge
Transfer time	Typical	4-8 ms, max 10 ms
Indicator	AC mode	Green lighting
	Back up mode	Green flashing
Audible alarm	Back up mode	Sounds every 10 seconds
	Low battery	Sounds every second
	Overload	Sounds 0.5 seconds
	Fault	Continuously sounds
Protection	Full protection	Discharge, overcharge and overload protection
Physical	Dimension (DXWXH)	279 X 101 X 143 mm
	Net weight	4.23 kg
Environment	Operating environment	0-40°C, 0-90% relative humidity (non-condensing)
	Noise level	Less than 40 dB

^{*}Product specifications are subject to change without further notice



TROUBLE SHOOTING

Use the following table to solve minor problems. If any abnormal situation occurs that are not listed above, please call service technician for assistance.

Problem	Possible cause	Remedy
No LED light on the front	1. Battery weak	Re-charge battery up to 4-6 hours
panel after pressing the power on/off switch.	2. Battery defect	Replace with the same type of battery
power onyon switch.	Power on/off switch is not firmly pressed.	Press the power switch again
Alarm beeps continuously when utility power is normal	Overload of the UPS	Verify that the connected load is equal to or less than the UPS capability as specified
Green LED flashes, and UPS	1. Fuse blowout or breaker trips	Replace with same type of fuse or reset breaker.
keeps running in battery mode when utility power exists.	Utility power fluctuation exceeds UPS voltage range	Normal condition. No action is needed.
	3. Loosen power cord	Reconnect the power cord properly.
UPS provides inadequate	1. Overload of the UPS	Remove some non- critical load
run-time.	2. Battery voltage is too low	Charge battery 4-6 hours or more
	Battery defect due to high temperature environment, or improper operation to battery.	Replace with the same type of battery

Head Office

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Regional Offices

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B-225, Okhla Industrial Area, 4th Floor, Phase-1, New Delhi - 110 020 Phone: +91 11 2699 0028

Bhakta Tower, Plot No. KB22, 2nd & 3rd Floor, Salt Lake City, Sector - III, Kolkata - 700 098. Phone: +91 33 4021 3535 / 3536

Mumhai

C/203, Corporate Avenue, Atul Projects, Near Mirador Hotel, Chakala, Andheri Ghatkopar Link Road, Andheri (East), Mumbai - 400 099. Phone: +91 22 3385 6201

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405. Fraser Road. Hemplaza. 4th Floor, Patna - 800 001. Phone: +91 612 220 0657

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Nagpur

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