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Important safety instructions

⚠ CAUTION!

1. The voltage used by this UPS may be hazardous. The unit contains no user serviceable parts; do not attempt to disassemble the unit. Only factory service technicians can perform maintenance on the unit.
2. This unit is intended for installation in a controlled environment (temperature-controlled indoor area location, free of conductive contaminants). Avoid installing the UPS where there is standing or running water, or excessive humidity.
3. To reduce the risk of overheating, do not cover the cooling vents. Avoid exposing the UPS to direct sunlight or installing the unit near heat-emitting appliances, such as electric heaters or furnaces.
4. Do not connect non-computer related peripheral devices, such as medical devices, life-support equipment, microwave ovens, or vacuum cleaners to the UPS.
5. Do not connect any power strip or surge suppressor to the UPS.
6. Do not plug the UPS AC input power cord into its own output.
7. Do not allow any kind of liquid or foreign object to enter this UPS unit. Do not place beverages or any other containers with liquid on or nearby the unit.
8. During the installation of this equipment, make sure that the sum of the leakage currents of the UPS and the connected loads shall not exceed 3.5mA.
9. In case of emergency, turn the power switch "off" and disconnect the power cord from the AC mains outlet.
10. Unplug the UPS before cleaning, and do not use liquid or spray detergents.
11. Never try to open or mutilate a battery. Released electrolyte is harmful to the skin and eyes, and also can be toxic.
12. Servicing of batteries should be performed or supervised by experts who possess the knowledge to closely follow all required precautions.
13. When replacing the battery, make sure to use the same type and number of sealed lead-acid batteries specified.

⚠ Attention: Risk of electric shock

SAFE HANDLING OF BATTERIES

A battery can present the risk of short-circuit current and electrical shock. The following precautions should be taken:

- 1) Remove watches, rings, or other metal objects from your hand.
- 2) Use tools with insulated handles.
- 3) Wear rubber gloves and boots.
- 4) Do not place tools or metal parts on the top of batteries.
- 5) Disconnect charging source prior to connecting or disconnecting battery terminals.

Attention:

- Potentially hazardous voltages from the battery can still be present even after disconnecting the UPS from the AC mains. Therefore, the positive and negative terminals of the battery shall be disconnected prior to performing any maintenance or repair inside the unit.
- The UPS contains internal 12VDC, sealed, lead-acid batteries.
- Do not dispose of batteries in a fire. Batteries may explode if exposed to high temperatures.

1. Introduction

Thank you for purchasing the HT-750LCD / HT-1000LCD UPS system from Forza. To enjoy all the features and benefits of this unit, we encourage you to read this manual and follow the installation and operation procedure thoroughly.

2. Package content

2.1 Inspection

Upon opening the box, make sure the following items are included.



UPS unit



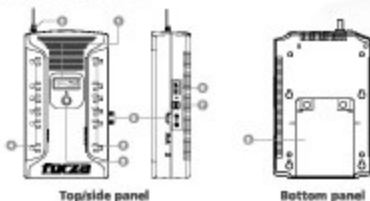
User guide



Warranty certificate

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

3. Product description



Topside panel

Bottom panel

1. LCD display
2. Main power switch
3. AC power cord
4. Surge protected outlets
5. Battery backup and AVR protected outlets
6. Telephone/modem/network protection
7. USB charging ports
8. Coaxial line jacks
9. Battery compartment

4. Installation and operation

4.1 Choose a location

Install the UPS unit in any protected environment that provides adequate air-flow around the unit, and 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.



4.2 Charge the UPS

- This unit is shipped from the factory with its internal battery fully charged; however, some charge may be lost during shipping. Therefore, it is recommended to recharge the battery prior to initial use.
- Simply plug the unit into an appropriate AC outlet, and allow it to charge to maximum capacity for 6 hours.



4.3 Connection of the loads

- Connect one device into each power receptacle provided on top of the UPS.
- Plug sensitive equipment into the battery backup outlets.
- Battery power is automatically provided to the loads in case of a power outage.

NOTE: Make sure that the UPS is powered on to protect all important devices from data loss during power failure.



⚠ NEVER connect a laser printer or scanner to the UPS with other computer equipment. A laser printer or plotter periodically draws significantly more power than when idle, and may overload the UPS.

- Simply connect mobile devices into a USB charger port. This will automatically start charging the connected device.

4.4 Operation

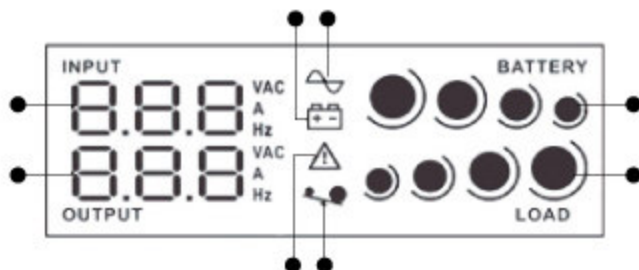
- Push down the power switch once on the top panel to start the UPS. The LCD display lights up.
- To turn off the unit, simply push down the power switch again.
- When operating in AC mode and utility power is interrupted, the unit will beep twice every 8 seconds to indicate that it has gone into battery mode.
- When operating in battery mode, the unit will beep every time the battery voltage falls under or rises above the acceptable limits.
- This UPS is designed for "off-mode charging", that is when it is switched off, it will automatically recharge the internal battery as long as it remains connected to utility power.
- The display turns off in battery mode when the unit is powered off. In AC mode, the display remains on, but no output will be provided to the outlets.

4.5 DC start function

- The DC start function enables UPS to be started up when AC utility power is not available and battery is fully charged. Simply push the power switch to turn it on.

5. LCD display



- The UPS comes equipped with an easy to read LCD with blue backlight that displays the battery status, input voltage, output voltage, and operation mode of the UPS.



1.	AC normal mode	This icon is displayed when utility power is normal
2.	Back-up mode	This icon is displayed when the unit is operating in battery mode
3.	Overload	This icon is displayed when the connected load is beyond the accepted range
4.	Fault mode	The icon becomes illuminated and the alarm will sound continuously in the event of abnormal operation of the UPS
5.	Load capacity	Indicates current loads at increments of 25% of its capacity
6.	Battery level	Indicates charging level at increments of 25%
7.	Input voltage	Indicates input line voltage
8.	Output voltage	Indicates output voltage value

Operation and status indicators

AC mode	<p>When AVR is functioning, the icon blinks once every second</p>	When the input voltage is within acceptable range, UPS will provide pure and stable AC power to the output. The UPS will also charge the battery in AC mode.
Overload in AC mode	<p>The icons will blink</p>	In case of an overload, the alarm will beep once every 0.5 second
Battery mode	<p>When battery level is low, the icon will blink once every second.</p>	The alarm will beep once every 10 seconds.
Off-charging mode		It will always show 0 on the output voltage indicator.

Overload in battery mode	 <p>The ... icons will blink.</p>	When an overload occurs, the alarm will beep once every 0.5 second.
Fault mode		When a fault event is detected, the UPS alarm will beep continuously.

6. Storage

- All connected equipment should be turned off prior to disconnecting them from the UPS to avoid battery drain. Unplug the UPS from the wall outlet and then turn it off for storage.
- Store the UPS unit covered in environments where the ambient temperature ranges from 5 to 85 °F with its battery fully charged.
- During extended storage, charge the UPS battery for 6 hours at least once every 6 months.

7. Troubleshooting guide

- If the UPS fails to operate normally, please refer to the following table to solve most common installation and operation problems.

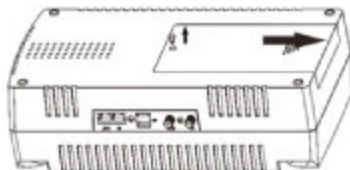
UPS fails to turn on and the LCD is not illuminated	The UPS is not on	Press the power switch again to turn on the UPS
	Battery voltage is too low Battery fault	Allow the battery to recharge for at least 6 hours. Replace the battery.
The UPS remains in battery mode	Power cord is loose	Plug the power cord again into the wall outlet.
Backup time shorter than expected	Battery voltage is too low	Allow the battery to recharge for at least 6 hours
	Defective battery	Replace the battery when it is weak or its performance degraded
	Overload	Verify that the load matches the UPS capability specified. Remove the least critical equipment until load levels are back to normal.

If any other abnormal situation not listed above should occur, please call our service department for further assistance.

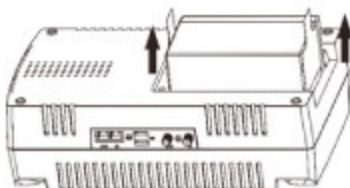
8. Battery replacement

Forza makes the replacing of batteries a simple and quick installation process. Simply follow the steps described below.

- Turn off and unplug all connected equipment.
- Unplug the unit from the AC power source.
- Turn the UPS upside down.
- Use a screwdriver to remove the compartment screw. Slide the cover towards the back in order to remove it completely from the unit.



- Using the tabs, carefully lift the battery from the compartment.



- Disconnect the battery wires from the terminals. Be sure to replace the same type of batteries and dispose of old batteries properly at an appropriate recycling facility.
- Install the replacement battery by connecting the red wire and black wire to the positive (+) and negative (-) terminals of the battery. It is normal to see small sparks upon connecting the red/black wires on the positive (+)/negative (-) terminals of the battery when replacing it.

- Put the battery back into the compartment.
- Slide the cover of the battery compartment until it locks in place and replace the screw.
- The new battery must be charged for at least 6 hours to its full capacity.

9. Technical specifications

MPN		750VA/375W	1000VA/500W	
Input	Capacity			
	Nominal voltage		120V	
Output	Voltage range		81-145VAC	
	Frequency		45-65Hz (autosensing)	
	AC plug style		NEMA 5-15P	
	Nominal voltage		120V +/- 10%	
	Frequency		50/60Hz	
	Frequency stability		+/- 1Hz battery mode	
	Waveform		Modified sine wave	
	Total outlets		12 NEMA 5-15R	
	Full battery / Surge protection outlets		6	
	Surge protection outlets only		6	
Battery	Network protection		RJ-45	
	Phone/modem/fax protection		RJ-11	
	Surge/Cable protection		Included	
	USB charger		2.1A max (2)	
	Battery type and quantity	12V/7Ah (1)	12V/9Ah (1)	
	Backup time	25 min.**	32 min.**	
	Recharge time	4 hours to 90% after complete discharge		
	Battery replacement design	Yes		
	Voltage regulation	Voltage regulation	120V	
		Boost feature	98-105V	
Buck feature		120-128V		
Frequency regulation	Automatic frequency selection	Included		
	Typical transfer time	2-4ms		
Line/Battery transfer line	Low line transfer to battery (110/120V)	81VAC		
	High line transfer to battery (110/120V)	145VAC		
Alarms/Indicators	Visual indicators	Easy to read LCD with a blue backlight that displays the input voltage, output voltage, battery capacity, load level, and UPS status		
	Audible	Battery mode: Beeps once every 10 seconds Low battery: Beeps once every second Overload: Beeps once every 0.5 second Fault: Continuous beep		
Protection	Full protection	Voltage regulation, overload, discharge and overcharge protection		
	Joules	510J		
Special features	"Cold start" option	Included		
	Auto charge	Included		
Physical appearance	Housing	ABS fire-retardant plastic		
	Dimensions	13.6x7.8x4in		
	Weight	12.3lb	13.7lb	
Additional information	Warranty	3 years*		

*2 years on batteries

**Calculated with a single PC plus monitor