



User manual

Important safety instructions (save this sheet)

Thank you for purchasing a Forza NT-1011/1011D/1012U Series UPS System. To enjoy all the features and benefits of this unit, please read and follow all the instructions thoroughly during the installation and maintenance of this UPS.

CAUTION!

- 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.
- This easy to operate pluggable type A equipment comes with a factory-installed battery.
- The wall socket shall be installed nearby the UPS and must be easily accessible.
- 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 3.5 mA.
- Connection to any receptacle other than a two-pole, three-wire grounded one may result in electrical shock or may violate local electrical codes.
- In case of emergency, turn the power switch "off" and disconnect the power cord from the AC mains outlet.
- 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.
- 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.
- Do not plug the UPS AC input power cord into its own output.
- Do not connect any power strip or surge suppressor to the UPS.
- Do not connect non-computer related peripheral devices, such as medical equipment, life-support equipment, microwave ovens, or vacuum cleaners to the UPS.

SAFE HANDLING OF BATTERIES

- The UPS contains an internal 12VDC, sealed, 6-cell lead-acid battery.
- Do not dispose of batteries in a fire. Batteries may explode if exposed to high temperatures.
- Never try to open a battery. The cell contains a toxic electrolyte which is harmful to the skin and eyes.
- A battery can present the risk of short-circuit current and electrical shock. The following precautions should be taken:
 - Remove watches, rings, or other metal objects from your hand.
 - Use tools with insulated handles.
 - Wear rubber gloves and boots.
 - Do not place tools or metal parts on the top of batteries.
 - Disconnect charging source prior to connecting or disconnecting battery terminals.
- Servicing of batteries should be performed or supervised by experts who possess the knowledge to closely follow all required precautions.
- When replacing the battery, make sure to use the same type and number of sealed lead-acid batteries specified.
- Never try to open or mutilate a battery. Released electrolyte is harmful to the skin and eyes, and also can be toxic.
- 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.
- 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.
- Unplug the UPS before cleaning, and do not use liquid or spray detergents.

Installation and operation

1. Inspection

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



UPS unit



User manual



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.

2. Choose a location

Install the UPS unit in any protected environment that provides adequate airflow 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.

For best performance, keep the indoor temperature between 0° C and 40° C. Place the UPS unit at least 20 cm away from monitors to avoid interference.

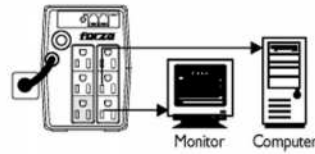
3. Charge the UPS

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 at least 6 hours.

4. Connection of equipment to the UPS

Connect one device into each power receptacle provided on the back of the UPS.

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



5. Powering on the UPS

To start up the UPS, push down the power switch. (When the power is on, the LED will light up).

6. Powering off the UPS

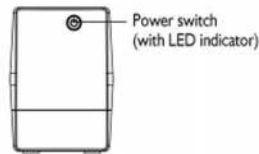
To turn off the unit, press the switch again. (When the power is off, the LED will go out).

7. Cold start function

The Cold Start Function enables the UPS to be started up when AC utility power is not available but the battery is fully charged. Simply press the power switch to turn on the UPS.

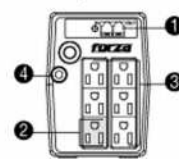
System description

Front panel



Indicator	Description
Blue LED illuminated	Utility power is normal. The UPS is on AC mode
Blue LED flashing	Utility power fails and the UPS is supplying power from battery

Rear panel



1. Modem/Phone line surge protection:

Connect incoming modem or phone line into the IN jack on the back of the UPS. Then connect another phone line cable from the OUT jack on the UPS to the modem input jack.

2. Surge-only outlet

3. Battery backup outlets:

Plug sensitive equipment into battery backup outlets. Battery power is automatically provided in case of a power outage.

4. AC input

Alarms

Battery mode

When the UPS is in battery backup mode (battery mode), the Blue LED will flash and the UPS will sound an audible alarm every 10 seconds.

Low battery

When the UPS is in battery backup mode (battery mode) and battery power begins to dwindle, the unit will beep every second.

Overload

When the UPS is overloaded, the unit will beep every 0.5 second to warn about such condition.

Fault

The beep will sound continuously when the UPS has detected a fault.

Technical specifications

Model	1011	1011D	1012U
Capacity	1000VA/500W		
Input			
Nominal voltage	120V		220V
Voltage range	78-145VAC		162-268VAC
Frequency	45-65Hz (autosensing)	40Hz - ∞ (autosensing)	45-65Hz (autosensing)
AC plug style	1 NEMA 5-15P		
Output			
Nominal voltage	120V +/- 10%		220V +/- 10%
Frequency	50/60Hz		
Frequency stability	+/- 1Hz battery mode		
Waveform	Modified sine wave		
Total outlets	6 (NEMA 5-15R)		
Full battery / Surge protection outlets	5		
Surge-only protection outlets	1		
Phone/modem/fax protection	RJ-11		
Battery			
Battery type and quantity	12V 9Ah (1)		
Backup time	25min.*		
Recharge time	6 hours to 90% after complete discharge		
Voltage regulation			
Voltage regulation (120/220V)	120V		220V
Boost feature (120/220V)	Vin x 1.18		
Buck feature (120/220V)	Vin x 0.85		
Frequency regulation			
Automatic frequency selection	Yes		
Line/Battery transfer			
Typical transfer time	2-4ms typical		
Low line transfer to battery (120/220V)	78VAC		162VAC
High line transfer to battery (120/220V)	145VAC		268VAC
Alarms/Indicators			
Visual indicators	AC mode: solid blue Battery mode: flashing blue Fault mode: blue light goes out		
Audible	Battery mode: sounds every 10 seconds Low battery: sounds every second Overload: sounds every 0.5 second Fault: continuous sound		
Protection			
Full protection	Line mode: 110%+20%/-10%; shutdown after 5 minutes and go to fault mode. 120%+20%/-10%; shutdown immediately and go to fault mode. Battery mode: 120%+20%/-10%; shutdown immediately		
Joules	200J		
Special features			
Cold start option	Yes		
Auto charge	Yes		
Environment			
Operating temperature	32-104° F		
Storage temperature	5-113° F		
Relative humidity	0-90% non-condensing		
Audible noise	<40 dB at one meter		
Physical appearance			
Power switch	Yes (lighted)		
Housing	ABS plastic (flame retardant)		
Color	Black		
Cord length	3ft		
Product dimensions	11x4x5.6in		
Product weight	10.81lb		
Additional information			
Warranty	Three years**		

* Calculated with a single PC plus monitor
** Limited to 2 years on batteries

Troubleshooting guide

Problem	Possible Cause	Solution
The LED is not illuminated	The UPS is not on	Press the power switch again to turn on the UPS
	Battery voltage is too low	Allow the battery to recharge for at least 6 hours
	Battery fault	Replace the battery
The UPS remains in battery mode	Power cord loose	Reconnect the power cord properly
The UPS emits a sustained alarm tone	Overload	Remove the least critical loads. Before reconnecting the equipment, please verify that the load matches the UPS capability specified in the specs
	Battery voltage is too low	Allow the battery to recharge for at least 6 hours
Backup time shorter than expected	Overload	Remove the least critical loads. Before reconnecting the equipment, please verify that the load matches the UPS capability specified in the specs
	Defective battery	Replace the battery

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