

# LIVFAST

25%

FASTER  
CHARGING

**SMART FLASH 1125+**



USER MANUAL | SINE WAVE 



Battery Deep  
Discharge Protection



Regulated  
Mode



Battery Gravity  
Builder



+91-7428191000

+91-7428191001



Dear Customer,

We congratulate you for your excellent choice of our Livfast Smart Home UPS system with latest technology. Please do spare some time to read this manual. This manual will provide you a thorough understanding of your Home UPS system and its optimum use. Please take a note of the installation and operating instructions in this manual carefully before installing and using your Home UPS. Pay special attention to the section under Precaution. In this section, the manual lists out conditions and/or practices which can not only result in damage to your Home UPS or to the other equipment but may result in personal injury or loss of life also. For any help please feel free to contact our dealer or e-mail us at customer support. Any query/suggestion of yours will help us to improve our quality and provide you with better services.

The Livfast Sine wave Home UPS is designed to provide smooth power back up to the loads like TV, PC, fan, tube light, bulb, CFL etc. It operates on raw mains supply and delivers output for computer and other loads, parallelly its battery charger uses to charge the battery and keeps the battery at optimum level. When the mains failure occurs, the UPS handles the load with the support of battery.

### **SAFETY GUIDELINES:**

Please read guideline thoroughly before connecting the UPS

- Connect UPS to 220V, 16A, 3pin type mains socket with proper earthing. The connection socket should be appropriately connected through MCB and ON / OFF switch as shown in connection diagram.
- UPS must be installed in such manner that, it avoids exposure to direct sunlight, Place should have proper ventilation and should be easily accessible for servicing.
- To switch off the UPS output, in case of emergency. Switch off the front panel switch of UPS and disconnect the UPS input power cord from the Mains and remove at least one battery terminal.
- Foreign particles and water must not enter the UPS, always ensure that no objects containing liquid are kept near the unit.
- Place the battery compartment as near as possible to the UPS. Don't allow any spark / flammable part near battery. Be sure not to come in contact with battery acid by any means.
- Always switch off the UPS and disconnect the mains when disconnecting the battery.
- Do not open the cover of UPS as there are dangerous high voltages inside even when power switch is off. Contact company service engineer only if it is not working properly.
- Replace batteries, circuit breaker and the fuse only with the same Rating and Type.

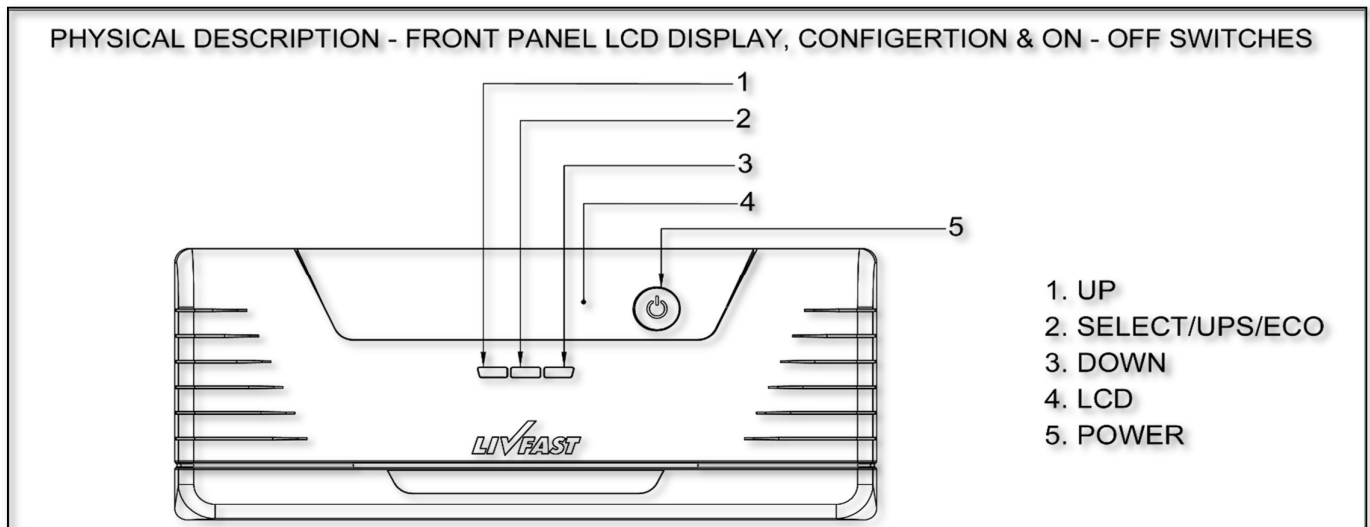
### **DO'S & DON'TS RELATED TO UPS**

<b>DO'S RELATED TO UPS</b>	<b>DON'TS RELATED TO UPS</b>
Unplug and switch-off the UPS before touching or cleaning the surface.	Don't block the side ventilation slot by cloth and other material, it may result in a fire hazard.
Unplug the UPS from the wall outlet during a lightning storm.	Don't place the UPS near radiation or heat source.
	Don't install the UPS near kitchen sink, laundry, wash bowl or bath tub.

## Livfast Smart Flash (Sine Wave) UPS equipped with following smart features:

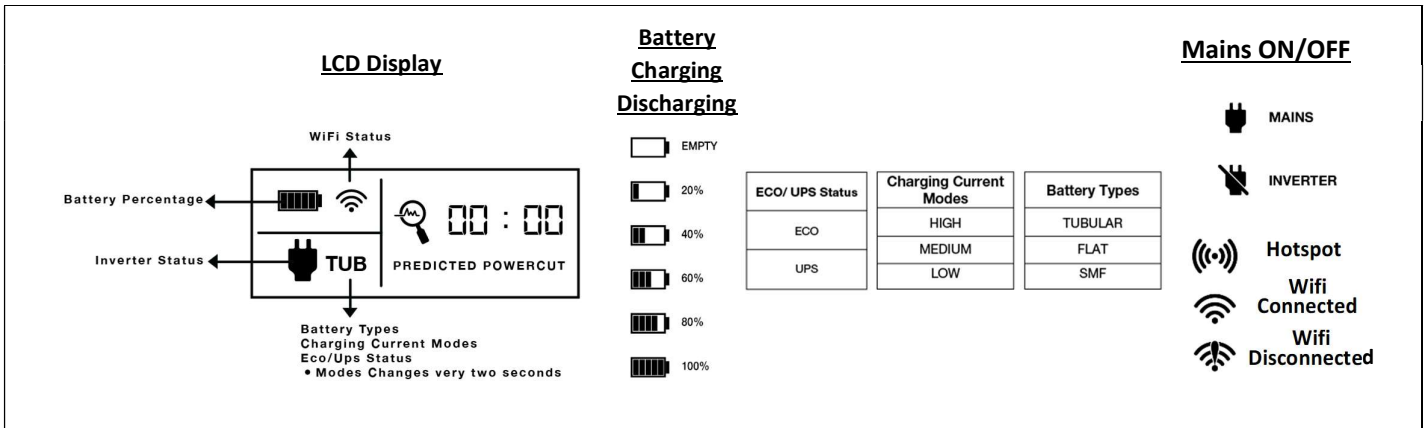
- Safe for sensitive appliances with Sine wave out-put and Noiseless Operations with the help of low harmonic distortion.
- Smart LCD display: User-friendly display shows Running status, Settings view, Protections, and Errors.
- LCD Display for status of Power back up / Power cut Prediction in Hours and Minutes.
- Wi-Fi connectivity on Smartphone (Android & IOS) with remote App monitoring and control.
- Provided battery electrolyte level sensor gives alert for electrolyte top-up, when electrolyte level is low.

## PHYSICAL DESCRIPTION – FRONT PANEL LCD DISPLAY, CONFIGURATION & ON- OFF SWITCHES

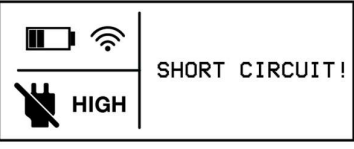
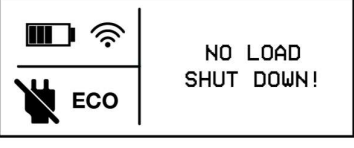
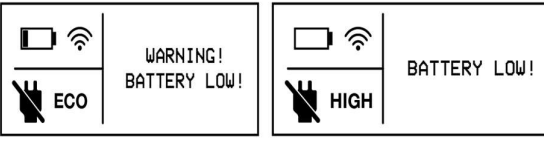
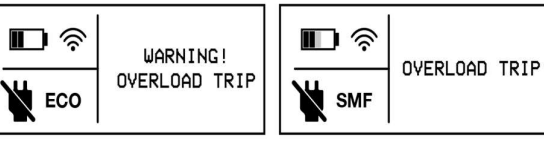
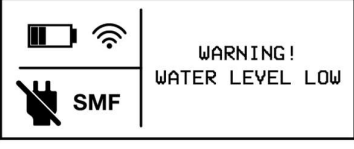
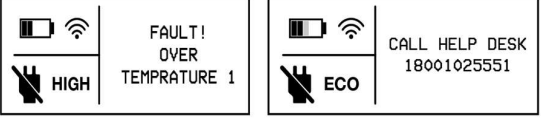
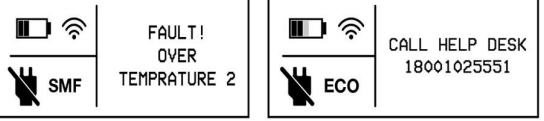
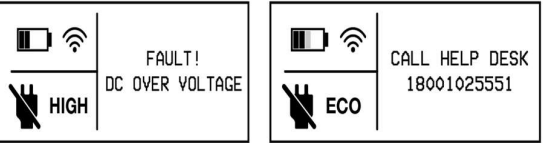


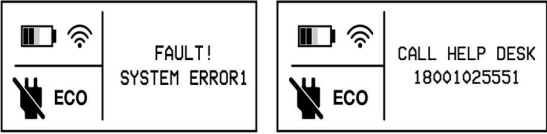
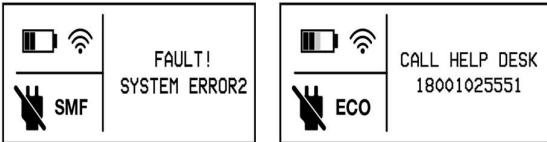
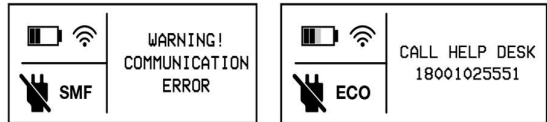

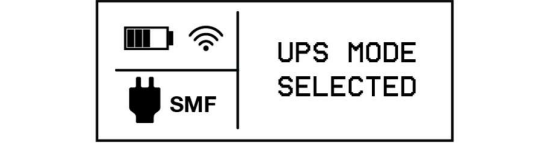
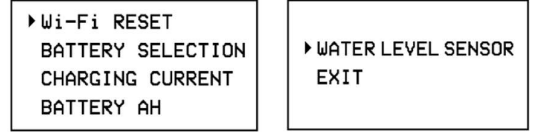
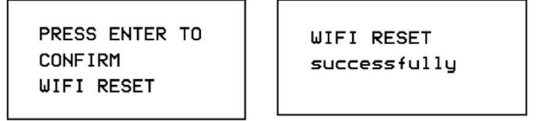
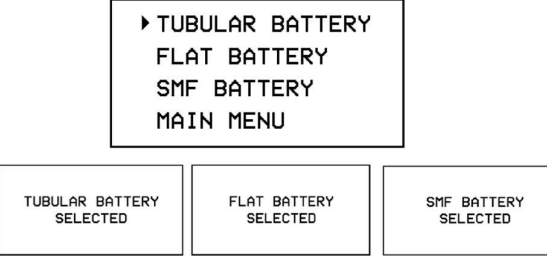
- 1. UP Button** – During normal function this key will not have any impact. During Battery type, charging current & battery Ah pressing this bottom will move cursor Upper option.
- 2. ECO/UPS Mode selector / Enter button** – During normal function this key used to select mode ECO to UPS or vice versa by pressing few seconds. During Battery type, charging current and battery Ah, this button will act as enter button to confirm the selection.
- 3. Down Button** – During normal function this key will not have any impact. During Battery type, charging current & battery Ah, pressing this bottom will move cursor lower option.
- 4. LCD** – It displays and indicates various status of UPS, kindly refer the following LCD descriptions.
- 5. Power (ON/ OFF Switch)** – This switch is for UPS ON/OFF. If switch is off the UPS will not work in event of mains failure. However, the charging will continue if mains is within the normal limit. This switch will also work as a reset in the event of overload, low battery shunt down and protections.

# DESCRIPTION OF LCD DISPLAY



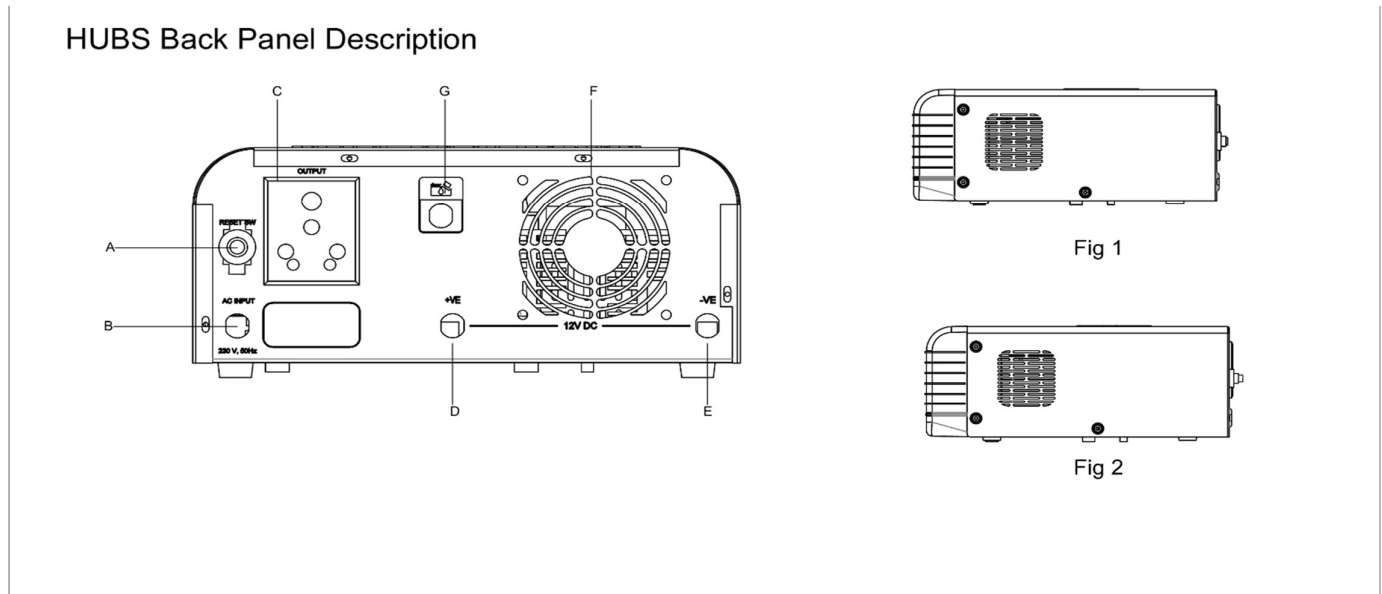
<p><b>Initializing</b></p>		<p>During initial turn on the UPS / Reset supply, It will show the model number and version detail of product (HW: X.XX SW: X.XX).</p>
<p><b>When Mains On and System ON</b></p>		<p>During this condition, bottom line shows mains line voltage and predicted power cut in alternative screens.</p> <p>During charging, battery symbol shows the charge state, Stable show as completed and blinks indicate present state. After fully charged, it will show as charged on bellow battery symbol.</p> <p>Mains symbol is ON, Other setting parameters are display as per steted during installation.</p>
<p><b>When Mains On and System OFF</b></p>		<p>During this condition bottom line show as “UPS IS SWITCHED OFF”.</p> <p>Battery symbol show the status of battery charging, as per present battery state (charging, if battery is not fully charged / charged, if battery is fully charged),</p> <p>Mains symbol is ON, Other setting parameters are display as per steted during installation.</p>
<p><b>When Mains OFF and System is running on battery.</b></p>		<p>During this condition, bottom line shows load percentage and remaining backup duration in HH:MM, in alternative screens.</p> <p>Battery symbol show the charge balance level, Stable show as remaining and blinks indicate present discharge level and blanks shows as completed.</p> <p>Mains symbol is OFF, Other setting parameters are display as per steted during installation.</p>
<p><b>When Mains OFF and System OFF</b></p>		<p>During this condition bottom line show as “UPS IS SWITCHED OFF”.</p> <p>Battery symbol show the present battery charge balance.</p> <p>Mains symbol is OFF, Other setting parameters are display as per steted during installation.</p>
<p><b>Operational Error</b></p>		

<b>Short Circuit</b>		<p>This message indicates the error due to connect some heavy load or any short circuit in the line of inverter output.</p> <p>Check load and rest system. Check inverter wiring and the load connected to the system for remove the fault and then reset system</p>
<b>No Load Shutdown</b>		<p>This message indicates the error is due to the unavailability of mains for &gt;=15 hours with no load connected at the output.</p> <p>Press the power switch to reset.</p>
<b>Battery Low Warning and Low Battery</b>		<p>The Battery low warning messages give before the battery Low, this is due to full exhaust of battery on backup mode. User can shut down their computer to avoid direct off / reduce the connected load to get some more backup. The fault will be removed only with the restore of mains</p>
<b>Over Load Warning and Over load Trip</b>		<p>The warning over load trip messages give due to the increasing in the connected load more than inverter capacity, so reduce the connected load as per inverter capacity.</p> <p>The overload trip message indicates the error due to the put some heavy / extra load on the system beyond the capacity of the system and system is off.</p> <p>Check the connected output load and reset the system by remove the extra load.</p>
<b>Warning Water level Low</b>		<p>This message is due to the battery electrolytic level is goes bellow lower limit. Check and refill DM water in all the all cells battery to its Maximum limit and reconnect the sensor any one of its cell. The messages will resume to normal after refill.</p>
<b>Critical Fault Messages</b>		
<b>Over Temperature (PCB)</b>		<p>This message indicates the fault due to over temperature of the system. Call for authorized service center.</p>
<b>Over Temperature (TX.)</b>		<p>This message indicates the fault due to over temperature of the system. Call for authorized service center.</p>
<b>Battery Sensing Fault</b>		<p>This message indicates the fault due to the error in no of batteries / faulty battery connected with system / internal error. Call for authorized service center.</p>
<b>System Errors</b>		

<b>Feedback Error</b>		<p>This message indicates the fault due to the internal circuit error. Call for authorized service center.</p>
<b>Heat Sink NTC Error</b>		<p>This message indicates the fault due to the internal circuit error. Call for authorized service center.</p>
<b>Warning communication</b>		<p>This message continuous, then call for authorized service center.</p>
<b>Configurations Settings Instructions</b>		
<b>Eco mode Selection</b>		<p>To select the input voltage window wider, Press Eco/ UPS button display show the message" ECO MODE SELECTED". The mode selected can observe in front panel as ECO.</p>
<b>UPS mode Selection</b>		<p>To select the input voltage window, narrow for computer system or required more voltage regulation for connected load, Press Eco/ UPS button display show the message" UPS MODE SELECTED". The mode selected can observe in front panel as UPS.</p>
<b>System Configurations</b>		<p>Press Up &amp; Down Button Simultaneously for few seconds, Display will show the menu of system configuration. Select the required menu scroll though up / down button and press enter button (UPS / ECO) for enter into the menu and configure accordingly.</p>
<b>Wi-Fi Reset</b>		<p>Keep the device to hotspot, while connecting the device to Wi-Fi</p>
<b>Battery Selection</b>		<p>After selecting menu "BATTERY SELECTION", Display show the battery types. TUBULAR BATTERY, FLAT BATTERY AND SMF. Select the battery type, which is connected to the system by scrolling though up / down button and press enter button (UPS / ECO) for configure battery type. Display shows selected battery type accordingly. The selected battery type can observe in front panel as TUB / FLAT / SMF.</p>

<p><b>Charging Current</b></p> <table border="1"> <thead> <tr> <th>Charging Mode</th> <th>Battery Ah</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>100Ah-120Ah</td> </tr> <tr> <td>M</td> <td>135Ah-150Ah</td> </tr> <tr> <td>H</td> <td>160Ah-230Ah</td> </tr> </tbody> </table>	Charging Mode	Battery Ah	L	100Ah-120Ah	M	135Ah-150Ah	H	160Ah-230Ah	<div style="text-align: center;"> <p>▶ HIGH CURRENT MEDIUM CURRENT LOW CURRENT MAIN MENU</p> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">HIGH CURRENT MODE SELECTED</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">MEDIUM CURRENT MODE SELECTED</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">LOW CURRENT MODE SELECTED</div> </div>	<p>After selecting menu "CHARGING CURRENT", Display show the charging current modes HIGH CURRENT, MEDIUM CURRENT AND LOW CURRET. Select the charging current according the battery Ah, which is connected to the system (refer the charging selection table for set the same) by scrolling though up / down button and press enter button (UPS / ECO) to configure battery charging current. Display shows selected battery charging current accordingly.</p> <p>The selected battery type can observe in front panel as HIG / MED / LOW.</p>
Charging Mode	Battery Ah									
L	100Ah-120Ah									
M	135Ah-150Ah									
H	160Ah-230Ah									
<p><b>Battery Ah</b></p>	<div style="display: flex; justify-content: space-around; margin-bottom: 10px;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">▶ 100 AH 110 AH 120 AH 135 AH</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">▶ 150 AH 160 AH 180 AH 200 AH</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">▶ 210 AH 220 AH 230 AH MAIN MENU</div> </div> <div style="border: 1px solid black; padding: 10px; text-align: center; margin: 0 auto; width: 80%;"> <p>BATTERY AH SELECTED SUCCESSFULLY</p> </div>	<p>After selecting Menu BATTERY AH, Display shows the different AH values. Select the battery Ah according to the battery connected to the system by scrolling up/down button and press enter button ( UPS/ ECO) to select the Ah value, After entering display shows message " BATTERY AH SELECTED SUCCESSEFULLY"</p>								
<p><b>WATER LEVEL SENSOR</b></p>	<div style="border: 1px solid black; padding: 10px; text-align: center; margin: 0 auto; width: 80%;"> <p>ENABLE SENSING DISABLE SENSING</p> </div>	<p>To enable / disable battery level sensor feature, Select menu "WATER LEVEL SENSOR" and press enter button (UPS/ECO). Select ENABLE SENSING for enable feature.</p>								

**HUPS Back Panel DESCRIPTION**

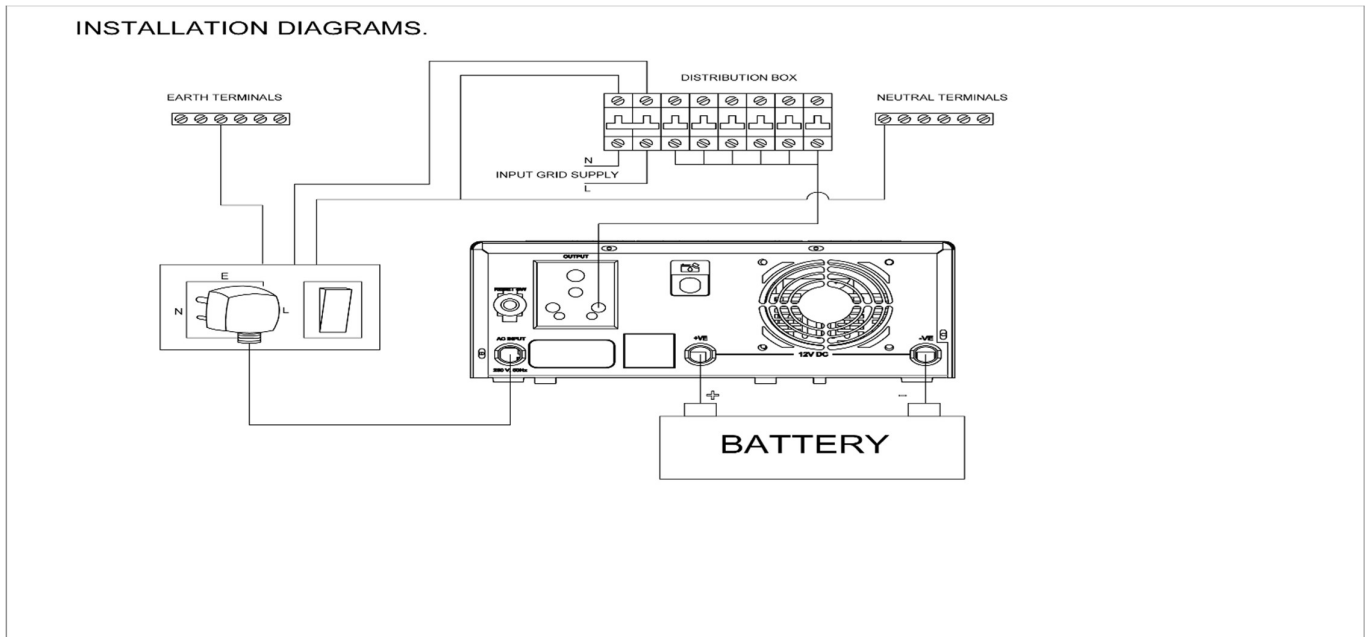


**\*Note: Images are subject to reference only original product may be differ.**

- A. **THERMAL CIRCUIT BREAKER:** The thermal circuit breaker is used for protecting UPS in case of very high load connected in mains mode. In this case this circuit breaker knob comes out as shown in fig 2. During this event UPS will not detect mains presence and will continue to operate in battery mode, please reduce the connected load as per capacity and press the knob to reset this circuit breaker (fig.1 shows the working condition of knob).
- B. **MAINS CORD:** This is used to connect input AC Mains to the HUPS.
- C. **OUTPUT SOCKET:** This socket is provided for connecting the output of the UPS to the load.
- D. **POSITIVE BATTERY LEAD:** The positive end of the battery should be connected to this lead.
- E. **NEGATIVE BATTERY LEAD:** The negative end of the battery should be connected to this lead.
- F. **FAN:** This is used to keep the system cool.
- G. **BATTERY ELECTROLYTE LEVEL SENSOR:** The connector for the battery electrolyte level sensor, connect at this point.

## UNPACKAGING & PLACEMENT

- a) **Unpacking:** On receiving the HUPS, inspect for any transit damage. The packing can be saved for future use.
- b) **Placement:** HUPS shall be kept at a place which is protected from dust, water, temperature and humidity.



## **BATTERY INSTALLATION**

**Caution:** Battery polarity must be checked before connection. Wrong polarity connection with HUPS will cause Reverse protection FUSE to blow and may lead to fire hazard.

Installation shall be done by qualified technician.

- \*Take precautions while connecting the battery cable to the battery post, avoid short circuit by spanner etc.
- \*Battery terminal and thimble should be cleaned and properly fastened otherwise it may give false indications of battery charged and low battery trip.

## **STEPS FOR HUPS INSTALLATION**

- Installation shall be done by a qualified Technician.
- Switch OFF the supply to the distribution point to which the HUPS is to be connected. Check the building wiring. Improper wiring could result in unit damage which is not covered in warranty.
- Keep the front switch of HUPS in OFF position. Connect the battery to HUPS as per its correct polarity.
- Switch ON the front switch & measure the output voltage on output socket, it should be as per the specification & switch off the HUPS.
- Connect the load wire to the line point of output plug & place the output plug into the socket of the HUPS
- Switch on the HUPS through the front panel.
- Gradually put the load on HUPS and verify the load as specified.
- Connect the input plug of HUPS to the commercial Mains socket in correct polarity.

## **TROUBLESHOOTING**

<b>PROBLEM</b>	<b>POSSIBLE CAUSES</b>	<b>ACTION SUGGESTED</b>
Mains supply is normal but UPS working on battery	a. Dead wall socket b. Line cord plug is loose c. Mains input is too low / too high d. Miniature Circuit Breaker trip	a. Check the socket with lamp b. Plug the line power cord properly c. Wait for mains to normalize d. Shift MCB knob upwards to ON condition
UPS trips frequently at backup mode	The load is more	Reduce the load and reset the UPS from front switch
UPS mode, but no power a. Battery Low! b. Overload Warning! c. Short Circuit!	a. Battery has discharged b. The load is more c. Output short circuit	a. Recharge the battery after mains restoration b. Reset thermal circuit breaker trip c. Verify connected load one by one

## SPECIFICATIONS

Models		SMART FLASH 1125+
<b>Apparent Power (VA)</b>		900
<b>Active Power (W)</b>		765
<b>INPUT</b>	<b>UPS Mode</b>	
	Rated Voltage	220V AC
	Under Voltage cut off	180±5V
	Under Voltage restoration	190±5V
	Overvoltage Cut off	260±5V
	Overvoltage restoration	250±5V
	<b>Unregulated Mode</b>	
	Under Voltage cut off	100±10V
	Under Voltage restoration	110±10V
	Overvoltage Cut off	290±10V
	Overvoltage restoration	280±10V
	<b>Output</b>	Rated Voltage (UPS Mode)
Mains Voltage		Same as input
Frequency (UPS/Inverter mode)		50± 0.5Hz.
Frequency (Mains mode)		50± 5Hz.
Overload		>105%
Changeover Time (UPS Mode)		< 20 ms
<b>Battery</b>	Type/Voltage	100Ah-230Ah Tubular, Flat, SMF
	Number	1N-12V
	Typical Recharge Time	10-12Hrs.
	Protection	Low Battery, Reverse Polarity, Mains Reset.
<b>Alarms</b>	Low battery Pre alarm	5 Second beep on every 1minute.
	Low Battery	5 Second continuous beep.
	Over load& Short Circuit	5 Second continuous beep.
	Over load Pre-alarm	0.5 Second beep on every 1 second.
	UPS ON	0.5 Second beep on every 3 second -5 times.
	Mains Sensing	Single beep of 2 second.
	Regulated/ Unregulated Mode Selection	Single beep of 0.5 second.
	Over temperature	5 second continuous beep.
<b>Environmental</b>	Storage Temperature	0 - 45°C
	Operating Temperature	0 - 45°C
	Humidity	0 – 95% RH non condensing

- Specifications are subject to change without prior notice due to continuous product improvement.