

# USER'S MANUAL

## 800L/1000L/1500L/1800L/2200L



This manual contains important safety instructions. Please follow all instructions during installation. Read this manual thoroughly before unpacking, installing or operating.

### Caution: Risk of Electric Shock

- The UPS contains batteries. The output outlets may be electrically live even when the UPS is disconnected from the AC mains.
- The UPS contains potentially hazardous voltages. Do not open the units as there are no user serviceable parts. All maintenance and servicing should be performed by qualified service personnel.
- Risk of electric shock, Battery Circuit is not isolated from AC input, hazardous voltage may exist between battery terminals and ground. Test before servicing and use insulated tools.

**NOTE:** The UPS is designed to be for use with computer loads only.

Caution : Do not connect a laser printer to the UPS.

A laser printer draws significantly more power than other types of equipment and may overload the UPS.

## SETUP

<b>1 Inspection</b>  Inspect the UPS upon receipt. Notify the carrier and dealer if there is damage. The package is recyclable; save it for reuse or dispose of it properly.  <b>Inspect accessories:</b> ① Power cable 1PCS USER MANUAL 1PCS	<b>2 Choose an installation location</b>  <ul style="list-style-type: none"> <li>Avoid locations that are excessively humid, near water, near heat sources or in direct sunlight</li> <li>Allow 1inch (2.5cm) clearance on each side of the UPS.</li> </ul>	<b>3 Connecting Equipment and Power to the UPS</b>  Step1: Connect the UPS to the AC mains. Step2: Connect the equipment to the UPS output outlets. Step3: Switch on the AC Mains, follow by the UPS then the equipment last. *Plug the UPS into the AC Mains to charge for 8 hours before using the UPS.
<b>4 Connect Modem/ Phone / Network for Surge Protection (Optional)</b>  <ul style="list-style-type: none"> <li>For modem/phone line protection, connect equipment to the RJ11 port using RJ11 cable.</li> <li>For surge protection, connect equipment to the RJ45 port using Ethernet/RJ45 cable.</li> </ul>	<b>5 Connect Interface Device</b>  The UPS is equipped with two interface ports: a USB port (Standard) and a 9-pin RS232 port (Optional) allowing advanced communication network between the UPS and a computer (network).	<b>6 Turn ON/OFF the UPS</b>  Turn on the UPS: Press the UPS On/OFF Switch for approx. 3 seconds, then the Buzzer sounds twice, the UPS will start-up. Turn off the UPS: Press the UPS On/OFF Switch for approx. 3 seconds, then the Buzzer sounds twice, the UPS will shutdown.
<b>7 Cold Start Function</b> When the UPS is OFF and no utility input power is present, use the "Cold Start" feature to apply power to the loads from UPS's battery. Press the "ON/OFF" switch until the UPS beeps.	<b>8 Software Download and Installation</b> Please follow steps below to download and install monitoring software: 1. Go to the website <a href="http://www.ablerex.com.sg/downloads.html">http://www.ablerex.com.sg/downloads.html</a> 2. Depending on the computer OS, select Emily software (for Win 7&8 OS, select Emily2) and click download. 3. Follow the on-screen instructions to install the software. 4. When the computer restarts, the monitoring software automatically search and connects to the UPS.	

## FRONT PANEL EXPLANATIONS

800L / 1000L-LED FRONT PANEL (STANDARD)	Symbol	LED Color	Description/function	1500L/1800L/2200L - LED FRONT PANEL (STANDARD)	Symbol	LED Color	Description/function
		N/A	Turn-on/Turn-off Switch			N/A	Turn-on/Turn-off Switch
		Green	Lit: Line mode Dim: Abnormal input voltage and frequency			Green	Lit: Line mode Flashing: Battery mode
		Yellow	Lit: Battery mode Flashing: Battery Low			Red	Lit: System malfunction or abnormal
		Red	Lit: System malfunction or abnormal			N/A	Load
						N/A	Battery
						Green	Load Percentage/ Battery Capacity

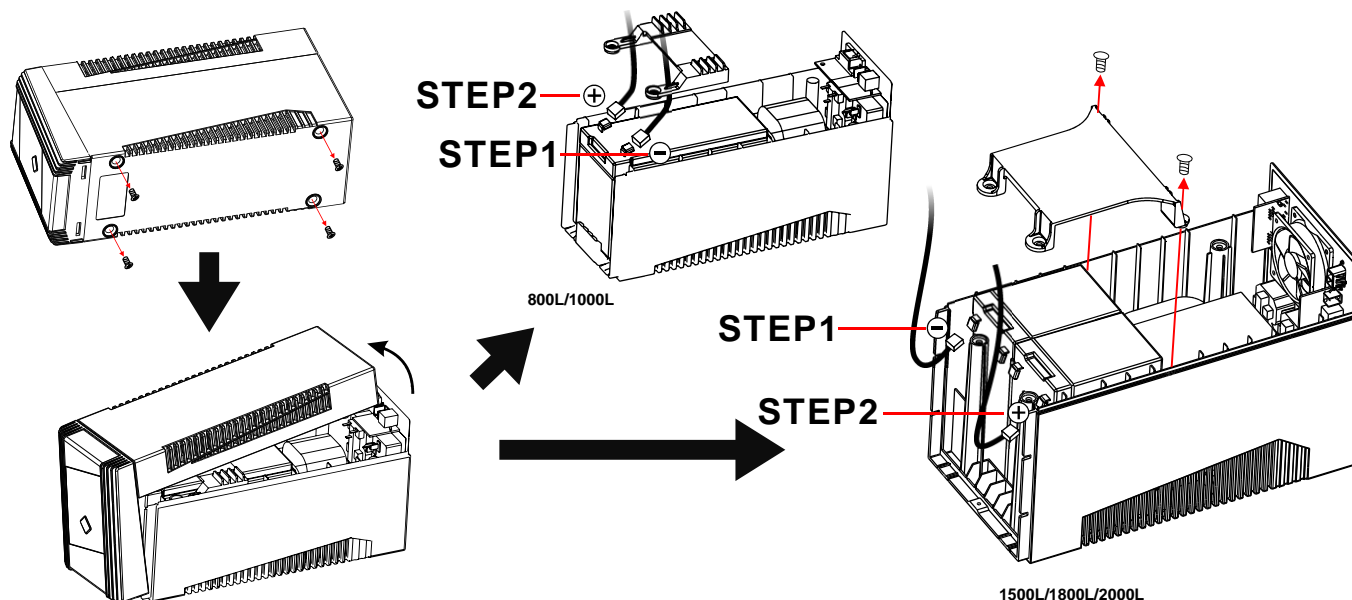
## REAR PANEL EXPLANATIONS

800L/1000L REAR PANEL	1500L/1800L/2200L REAR PANEL
1. AC Input Outlet 2. Fuse 3. Output Connector: 4x IEC Outlets or 3x Universal Outlets or 1x Schuko Outlet or 4x Thailand Outlets 4. USB (Standard) or RS232 (Optional) 5. Modem/Network Surge protection (Optional)	1. AC Input Outlet 2. Fuse 3. Output Connector: 6x IEC Outlets or or 4x Universal Outlets or 2x Schuko Outlets or 6x Thailand Outlets 4. USB (Standard) or RS232 (Optional) 5. Modem/Network Surge Protection (Optional) 6. Fan

## REPLACING THE BATTERY

**Note :** Once the battery is disconnected, the loads are not protected from power outages.

1. Use an insulated philip screwdriver to remove the four screws located at the base of the UPS.
2. Remove the front panel and top cover.
3. Use an insulated philip screwdriver to remove the two screws from the battery holding plate. (for 1500L/1800L/2200L only)
4. Disconnect the battery cable terminals before removing the battery from the UPS.  
Step1: Loosen the black cable from the negative (-) terminal.  
Step2: Loosen the red cable from the positive (+) terminal.
5. Connect the battery cables to the terminals of the new battery.  
Step1: Insert the black cable to the negative (-) terminal.  
Step2: Insert the red cable to the positive (+) terminal.  
Note: Small sparks at the battery connectors are normal during connection.
6. Slide the battery into the UPS.
7. Use an insulated philip screwdriver to fasten the two screws on the battery holding plate. (for 1500L/1800L/2200L only)
8. Close the front panel and fasten the four screws located at the base of the UPS.
9. Dispose off the old battery properly at an appropriate recycling facility.



## TROUBLESHOOTING

Refer to the steps below should the UPS fail to function correctly

- Step 1: Is the AC Mains switch in the "ON" position?  
 Step 2: Is the UPS plugged into the AC power supply?  
 Step 3: Is the power supply within specified unit values?  
 Step 4: Has the fuse gone in the mains plug?  
 Step 5: Is the UPS overload?  
 Step 6: Is the battery flat or defective?

Situation	Problem / Possible Causes	Solution
No LEDs display on the front panel.	Battery voltage is low.	Charge the UPS at least 6 hours.
	Battery is defective.	Replace the battery with the same capacity.
	The UPS is not turned on.	Press the power switch again to turn on the UPS.
Alarm beeps continuously when the Utility is normal.	The UPS is overloaded.	Remove some loads/equipment first. The connected equipment exceeds the UPS specified 'capacity/load'.
	The UPS is overloaded.	Remove some loads/equipment first. The connected equipment exceeds the UPS specified 'capacity/load'.
UPS does not provide expected backup time.	Battery voltage is too low.	Charge the UPS at least 6 hours.
	Battery is defective.	Replace the battery with the same capacity.
	The Utility is normal but LED is flashing.	Reconnect the power cord properly.

Description	Ablerex 800L / 1000L SPECIFICATIONS		Ablerex 1500L / 1800L / 2200L SPECIFICATIONS		
Model	800L	1000L	1500L	1800L	22000L
Capacity	800VA	1000VA	1500VA	1800VA	2200VA
Input					
Voltage	220/230/240VAC				
Voltage Range	160~290Vac				
Output					
Voltage Regulation	+/- 10%				
Transfer Time	Typical 2-6ms, 10 ms max.				
Waveform	Simulated Sine Wave				
Battery					
Type & Number	12V/7Ah x 1	12V/9Ah x 1	12V/7Ah x 2	12V/7Ah x 2	12V/9Ah x 2
Charging time	4-6 hours recover to 90% capacity				
Physical					
Dimension (WxHxD, mm)	100 x 140 x 292		148 x 198 x 315		
Net Weight (kg)	5	5.5	9	10.5	11.8
Packaging Dimension (WxHxD, mm)	137 x 226 x 321		229 x 302 x 411		
Gross Weight (kg)	5.5	6	10	11.5	12.8
Environment					
Humidity	0-90 % RH @ 0-40 C (non-condensing)				
Noise level	Less than 40 dB				
Safety					
Security certificate	CE				