

# USER'S MANUAL

192321982060001

650VA / 1000VA / 1200VA / 1600VA / 2200VA



## IMPORTANT SAFETY INSTRUCTIONS

### SAVE THESE INSTRUCTIONS

This manual contains important safety instructions. Please follow all instructions carefully during installation. Read this manual thoroughly before attempting to unpack, install or operate.

**CAUTION-** To prevent the risk of fire or electric shock, install in a temperature and humidity controlled indoor area, free of conductive contaminants.

**CAUTION-** Risk of electric shock, do not remove the cover. No user serviceable parts. Refer servicing to qualified service personnel.

**CAUTION-** Risk of electric shock, hazardous live parts inside this UPS can be energized from the battery supply even when the input AC power is disconnected.

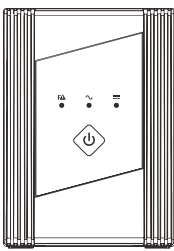

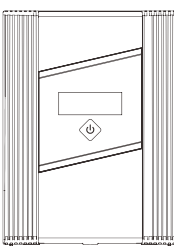
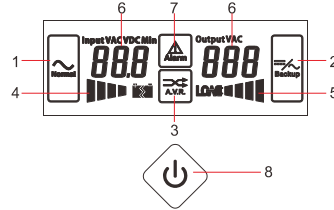



**CAUTION-** Risk of electric shock, Battery Circuit is not isolated from AC input, hazardous voltage may exist between battery terminals and ground. Test before touching.

**NOTICE-** The UPS is designed to be for use with computer loads only.

### 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 ② USER MANUAL 1PCS	<b>2 Choose an installation location</b> 	<b>3 Connect the loads</b> Plug in the AC input cord to the Utility (Make sure the voltage of Utility matches with the input voltage window of the UPS) ※Plug the UPS into the wall outlet to charge the UPS for over 8 hours before using the UPS. Plug in the loads to output receptacles on the rear panel of the UPS. <b>Caution :</b> Do not connect a laser printer to the outlets. These UPS outlets provide battery power to the equipment when utility voltage is outside acceptable limits.
<b>4 Connect Modem/ Phone / Network for Surge Protection(only for the mode with RJ-45)</b> Connect a single modem/phone line into surge-protected "IN" outlet on the back panel of the UPS unit. Connect from "OUT" outlet to the computer with another phone line cable.	<b>5 Connect Computer Interface Port(Optional)</b> Connect the optional interface cable to the USB interface port on the back of the UPS. Connect to the computer. See software document for installation instruction.	<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 once, the UPS will be start-up. Turn off the UPS : Press the UPS On/OFF Switch for approx. 3 seconds, then the Buzzer sounds once, the UPS will be shutdown.
<b>7 Cold Start Function</b> When the UPS is off and there is no power utility, it's still possible to cold start the UPS unit to power the loads.	<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.eu">http://www.Ablerex.eu</a> 2. Click EmiliYI software icon and then choose your required OS to down load the software. 3. Follow the on-screen instructions to install the software. 4. When your computer restarts, the monitoring software ※Software only for the model with communication port.	

### FRONT PANEL EXPLANATIONS

GR- 650/1000 – LED FRONT PANEL(STANDARD)	Symbol	LED Color	Description/function	GR-650/1000/1200/1600/2200 – LCD FRONT PANEL(OPTION))	
		N/A	Tack switch for Turn-on/Turn-off		
		Green	Lit: Line mode Dim: Abnormal input voltage and frequency Flashing: Standby mode		
		Yellow	Lit: Battery mode Flashing: Battery Low		
		Red	Lit: System malfunction or abnormal		

### REAR PANEL EXPLANATIONS

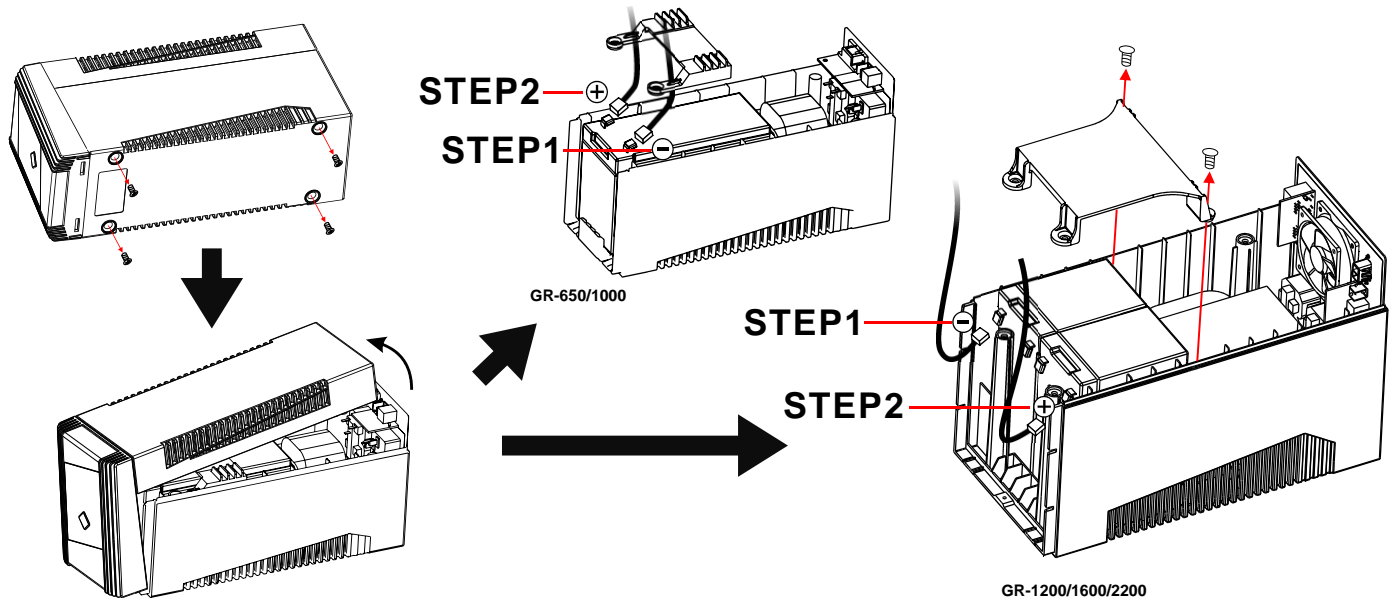
GR-1200/1600/2200 – LED FRONT PANEL(STANDARD)	Symbol	LED Color	Description/function	1. AC input outlet 2. Fuse 3. Output receptacles 4. RS-232 or USB port (option) 5. Load level 6. Fan(only for GR 1200/1600/2200)	
	     25% 50% 75% 100%	N/A Green Red N/A N/A Green	Tack switch for Turn-on/Turn-off Lit: Line mode Flashing: Battery mode Lit: System malfunction or abnormal Load Battery Load Percentage/ Battery Capacity		

## REPLACING THE BATTERY

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

1. Use a cross-type screwdriver to remove the four screws from bottom shell.
2. Take-up top cover and battery cover.
3. Loosen the black wire from the negative (-) terminal and red wire from the positive (+) terminal.

4. Connect the battery leads to the new battery.  
Note: Small sparks at the battery connectors are normal during connection.
5. Slide the battery into the UPS.
6. Close the front panel and fasten two screws.
7. Dispose of the old battery properly at an appropriate recycling facility.



## TROUBLE SHOOTING

	Situation	Check Items	Solution
<p>Should the UPS fail to function correctly we recommend you perform the following tests before calling the service.</p> <p>Check step:</p> <p>Step 1: Is the main switch in the "ON" position?</p> <p>Step 2: Is the UPS plugged into the mains power supply?</p> <p>Step 3: Does the power supply fall within specified unit values?</p> <p>Step 4: Has the fuse gone in the mains plug?</p> <p>Step 5: Is the UPS overload?</p> <p>Step 6: Is the battery flat or defective?</p>	No LED display on the front panel.	Low battery.	Charge the UPS at least 6 hours.
		Battery fault.	Replace the battery with the same type of battery.
	Alarm continuously sounds when the Utility is normal.	The UPS is not turned on.	Press the power switch again to turn on the UPS.
		The UPS is overload.	Remove some loads first. Before reconnecting equipment, please verify that the load matches the UPS capability specified in the specs.
	When power fails, back up time is shorten.	The UPS is overload.	Remove some critical load.
		Battery voltage is too low.	Charge the UPS at least 6 hours.
	The Utility is normal but LED is flashing.	Battery defect. It might be due to high temperature operation environment, or improper operation to battery.	Replace the battery with the same type of battery.
		Power cord is loose.	Reconnect the power cord properly.

	GR 650 / 1000 SPECIFICATIONS		GR 1200 / 1600 / 2200 SPECIFICATIONS		
Model	GR 650	GR 1000	GR 1200	GR 1600	GR 2200
Capacity	650VA/360W	1000VA/500W	1200VA/600W	1600VA/900W	2200VA/1200W
Input					
Voltage	220/230/240VAC				
Voltage range	160~290Vac				
Output					
Voltage Regulation	+/- 10%				
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 (DxWxH, mm)	292 x 100 x 140		315 x 148 x 198		
Net Weight (kg)	5	5.5	9	10.5	11.8
Packaging Dimension(DxWxH, mm)	321 x 137 x 226		411 x 229 x 302		
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				