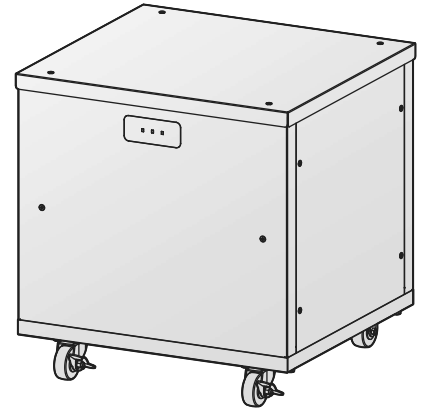


## User's Manual

Lithium-ion Storage Battery Unit (Home-use, 9.89 kWh)

EOW-LB100-PNUS2



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**Thank you for purchasing this product from Tabuchi Electric.**

- Read this User's Manual carefully to ensure safe use of the product.
- Familiarize yourself with the "Safety Precautions" (Page 2) before using this product.
- Keep this User's Manual in a safe handy place for future reference.

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# Safety Precautions ■ Observe all safety precautions.



Observe the following precautions in addition to performing the required equipment and safety checks.

- Tabuchi Electric assumes no responsibility for accidents or trouble if the equipment is used in any manner other than specified in this User's Manual.
- These precautions must be followed to prevent personal harm and property damage.

The symbols below indicate the potential hazards of improper use of this product.

	<b>WARNING</b>	May result in serious injury or death.
	<b>CAUTION</b>	May result in minor injury or property damage.

The symbols below indicate prohibited use of this product and safety precautions.

	Prohibited use of this product.
	Mandatory safety precautions.

## WARNING



PROHIBITED

- **Do not disassemble or remodel the storage battery unit.**  
This may result in electric shock, fire, burns, injury or equipment failure.
- **Do not climb or sit on the storage battery unit.**  
This may result in injury or electric shock.
- **Do not insert hands or objects into openings in the equipment.**  
This may result in injury or electric shock.
- **Do not subject the storage battery unit to sudden or strong impacts.**  
The storage battery unit may topple over, resulting in injury, or battery deformation or short-circuiting that may cause overheating or fire.
- **Do not touch the frame or operating panel with wet hands.**  
This may result in electric shock.



PROHIBITED

- **Do not allow the storage battery unit to get wet.**  
This may result in electric shock.



MANDATORY

- **Keep persons with pacemakers away from the storage battery unit.**  
The storage battery unit may adversely affect pacemakers.
- **Do not touch electrolyte liquid leaked from the batteries with bare hands. If electrolyte liquid contacts skin or clothing, immediately wash the affected area with clean water.**  
Electrolyte liquid may harm skin. Contact with eyes may result in blindness. Promptly seek the care of a physician.

## CAUTION



PROHIBITED

- **Do not use heaters or equipment that releases steam near the storage battery unit.**  
This may result in fire.
- **Do not use the storage battery unit in hot places.**  
This may result in overheating or fire.
- **Keep objects off and away from the storage battery unit.**  
This may result in fire, burns or injury.



PROHIBITED

- **Do not use insecticides or other combustible gases near the storage battery unit.**  
Combustible gases may ignite, resulting in injury or fire.
- **Keep gasoline, benzene, and other flammable agents away from the inverter.**  
This may result in fire or equipment failure.

### ■ Battery Recycling/ Discarding

This product contains lithium ion storage batteries. For the sake of the environment, recycle the batteries when dead. For information on recycling and discarding dead batteries, contact the vendor, the installer, or the service center.

# Features

## Normal Usage

The storage battery unit charges the batteries at night and utilizes the stored power during the peak rate to help reduce consumption from the grid.

## In a Power Outage

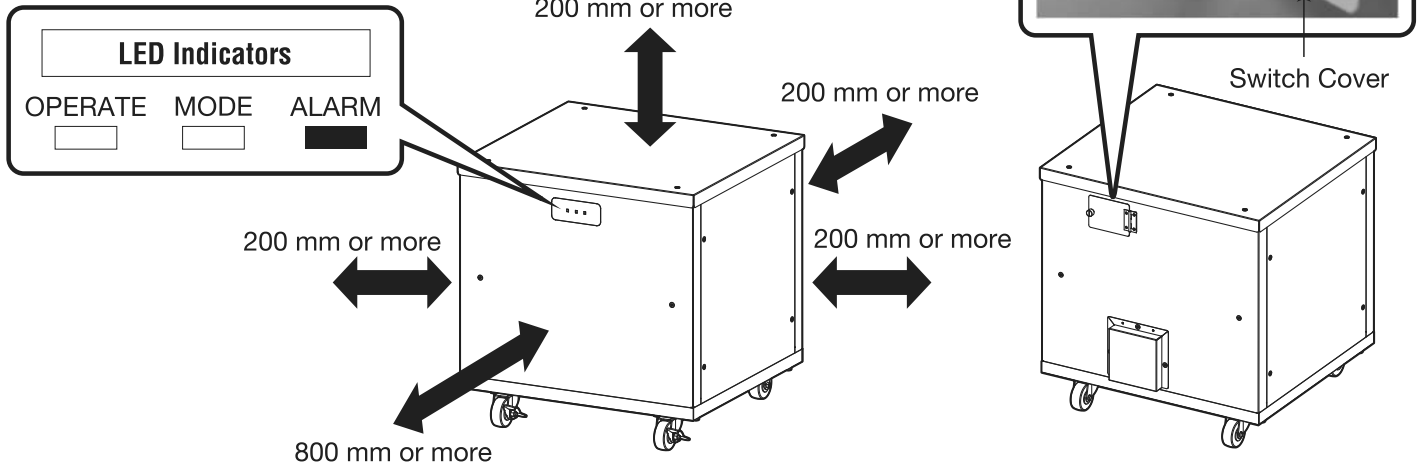
The solar panels and batteries jointly supply power needed for household consumption.

# Parts (Names & Functions)

## Installation Site

Ensure there is sufficient space around the storage battery unit for equipment checks and maintenance.

\* The storage battery unit may overheat without sufficient ventilation or if located where covered by other objects.



## Operating Status - LED Indicators

LED Indicators	Operating Status									
<table border="0"> <tr> <td>OPERATE</td> <td>MODE</td> <td>ALARM</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Lit green</td> <td>Lit green</td> <td>Off</td> </tr> </table>	OPERATE	MODE	ALARM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lit green	Lit green	Off	The storage battery unit is running normally. The batteries are being charged with power from the solar panels or the grid.
OPERATE	MODE	ALARM								
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>								
Lit green	Lit green	Off								
<table border="0"> <tr> <td>OPERATE</td> <td>MODE</td> <td>ALARM</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Lit green</td> <td>Lit orange</td> <td>Off</td> </tr> </table>	OPERATE	MODE	ALARM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lit green	Lit orange	Off	The storage battery unit is running normally. The batteries are being discharged for use by electric appliances in the home.
OPERATE	MODE	ALARM								
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>								
Lit green	Lit orange	Off								
<table border="0"> <tr> <td>OPERATE</td> <td>MODE</td> <td>ALARM</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Lit green</td> <td>Off</td> <td>Off</td> </tr> </table>	OPERATE	MODE	ALARM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lit green	Off	Off	The storage battery unit is running normally. The batteries are not being charged or discharged.
OPERATE	MODE	ALARM								
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>								
Lit green	Off	Off								

\* If lighting indications differ from those above, see "Troubleshooting" on Page 5 and contact Customer Support.

# Equipment Checks and Maintenance

## Routine Checks

- **Are the lights flashing?** ..... See “LED Indicator Notifications” on Page 5 and take the prescribed action.
- **Is the storage unit making strange noises?** ..... See “Troubleshooting” on Page 5 and take the prescribed action.
- **Is the storage unit emitting strange odors?** ..... Contact the vendor, the installer or Customer Support.
- **Are there objects around the storage battery unit?** ..... If so, relocate the objects. (See “Installation Site” on Page 3.)

## Periodic Safety & Equipment Checks

Periodic safety and equipment checks serve to ensure safe, long-lasting use of the product. Perform the safety and equipment checks on this chart once a month using the this checksheet.

Periodic Checks (Make copies of this table as needed.)			Check Date/Result (○/×)					
Scope	Check Item	What to look for	/	/	/	/	/	/
Surrounding Environment	Dust, Gas	Are there any combustible gases or flammable agents near the equipment?						
	Temperature, Humidity	Are conditions within 0°C to 40°C (32°F to 104°F) and 85%RH or less (no condensation)?						
		Is there sufficient space around the unit?						
	Installation Site	Is there sufficient space for service around the unit?						
Equipment condition	Appearance	Is the equipment scratched, dented, leaking, rusted, etc.?						
	Strange Noises	Is the equipment making unusual sounds?						
	Odors	Does the equipment smell like it is burning or emitting other odors?						
LED Indicators	Flashing	See “LED Indicator Notifications” on Page 5.						

## Battery Degradation

Lithium-ion batteries degrade over time and can no longer be used once degraded beyond a certain point. The rate at which batteries degrade will vary according to the installation environment and charging/discharging operations. If servicing is required, contact Customer Support. Without proper maintenance, the storage battery unit will eventually stop running.

See “LED Indicator Notifications” on Page 5 and take the prescribed action.












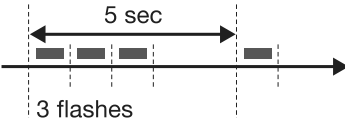



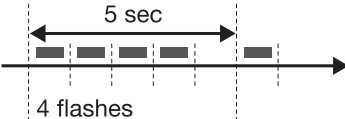






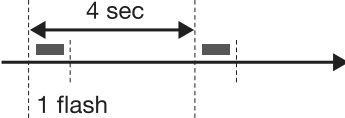



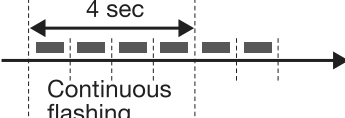
## Cleaning

- If the storage battery unit is dirty, wipe it clean with a dry piece of cloth.
- Do not use benzene, thinner, or petroleum-based solvents to clean the storage battery unit. Do not splash water on the storage battery unit.

# Troubleshooting

<p>If the storage battery unit is making noise</p>	<p>A high pitched mosquito-like sound is emitted when the batteries frequently switch between charging and discharging. This is normal. There is nothing wrong with the equipment.</p>
<p>If the storage battery LED indicators are not the colors shown in the User's Manual</p>	<p>If the ALARM indicator is flashing red: Trouble has been detected.          If the OPERATE indicator is flashing green: It is time to service the storage battery unit.          If the OPERATE light is out: The storage battery unit has stopped running.          See "LED Indicator Notifications" below.</p>
<p>If the Remote Controller indicates a battery check is needed</p>	<p>See "LED Indicator Notifications" below.          If the storage battery unit is running normally, normal operation has already been restored. Restart the inverter and the battery storage unit to eliminate the error display message on the monitor.          If this frequently occurs, contact Customer Support.</p>

## LED Indicator Notifications

LED Indicators	Flash Interval	Meaning (Action to take)
<p>OPERATE    MODE    ALARM</p> <p>        </p> <p>Lit green    Off    Single red flash</p>	 <p>5 sec</p> <p>1 flash</p>	<p>Temperature issue detected. If normal operation is not restored after eliminating the cause, contact Customer Support.</p>
<p>OPERATE    MODE    ALARM</p> <p>        </p> <p>Lit green    Off    Double red flash</p>	 <p>5 sec</p> <p>2 flashes</p>	<p>Charging/Discharging issue detected. Charging/discharging operations have stopped. If normal operation is not restored, contact Customer Support.</p>
<p>OPERATE    MODE    ALARM</p> <p>        </p> <p>Lit green    Off    Triple red flash</p>	 <p>5 sec</p> <p>3 flashes</p>	<p>System error detected. Charging/discharging operations have stopped. If normal operation is not restored, contact Customer Support.</p>
<p>OPERATE    MODE    ALARM</p> <p>        </p> <p>Lit green    Off    Quadruple red flash</p>	 <p>5 sec</p> <p>4 flashes</p>	<p>Error detected. The storage battery unit has stopped running. Contact Customer Support.</p>
<p>OPERATE    MODE    ALARM</p> <p>        </p> <p>Off    Off    Off</p>	<p>All lights off</p>	<p>Error detected or the storage battery unit has been stopped for maintenance. Contact Customer Support.</p>
<p>OPERATE    MODE    ALARM</p> <p>        </p> <p>Flashing green    *    Off</p>	 <p>4 sec</p> <p>1 flash</p>	<p>Servicing is required. Contact Customer Support. Without proper maintenance the storage battery unit will stop running within 6 months.</p>
<p>OPERATE    MODE    ALARM</p> <p>        </p> <p>Flashing green    *    Off</p>	 <p>4 sec</p> <p>Continuous flashing</p>	<p>Servicing is required. Contact Customer Support. Without proper maintenance the storage battery unit will stop running within 1 month.</p>

\* The lighting status of the MODE lamp does not matter.

# Specifications

Battery	Specifications
Max. input (charging) current	16.5 A
Max. output (discharging) current	26.0 A
Rated input/output voltage	86.4V DC
Rated capacity	114.48 Ah
Battery Type	Lithium ion
Nominal capacity	9.89 kWh
Required Charging Time	Approx. 8 hr (At 25°C(At 77°F))*
Cooling method	Natural air-cooled
Dimensions	W 580 x H 600 x D 551.5 mm (22 53/64 x 23 5/8 x 21 23/32 in.)
Weight	110 kg (3880 oz.)
Working surrounding temperature	0 – 40°C (32 - 104°F)
Working surrounding humidity	Max. 85% (No condensation)
Installation site	Indoors

\* The actual charging time will vary according to conditions of use and age of the equipment.

## FCC Compliance

### Notes

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



