

STAGE
ZERO



Volta 40 Portable Power Station

Product Manual

This Product Manual contains important instructions that should be followed during the operation of the Stage Zero Volta 40 product. The information contained in this manual is subject to change by Stage Zero (Pty) Ltd (hereinafter referred to as Stage Zero) without prior notice. Please refer to the Stage Zero Customer Portal for the latest version of the Product Manual.

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1. Safety Precautions

1.1 General

This section contains important instructions that should be followed during operation of the Volta 40 Unit (hereinafter referred to as "Device/s").

It is important and necessary to read the Stage Zero User Manual carefully before using the Device. Failure to do so or to follow any of the instructions or warnings contained in said document can result in electrical shock, serious injury, or death.

1.2 Risk of Unsafe Operation

When using this Device, basic safety precautions should always be followed to reduce the risk of personal injury. Improper operation, maintenance or modification of this Device could result in serious injury and property damage. This Device may not be modified and/or used for any application other than for which it was designed for.

1.3 Shock Hazard Warning



Any contact with electrically active parts of the Device, such as electrical terminals can result in injury or death, irrespective of whether the Device and the other electrical equipment of the property have been disconnected.

1.4 Battery Safety

The Device contains LiFePO₄ cells (battery).

The following safety instructions must be followed:

- Do not locate the Device near external heat sources or in direct sunlight.
- **Do not attempt to open the Device and connect additional batteries of any type**
- Do not pack flammable or hazardous materials around the Device.
- Do not generate steam or store corrosive chemicals in the vicinity of the Device.
- Do not mutilate the batteries, the batteries contain an electrolyte that is toxic and harmful to the skin and eyes.

1.5 General Safety

The following list highlights the general safety precautions that need to be followed:

- Before attempting to operate the Device and other electrical equipment, all instructions should be read and understood. All other maintenance and repair requirements must be reported to the help line (via the customer portal) who will arrange for the necessary work to be conducted.

• **Reliance on Life Sustaining Equipment**

- The backup services are scoped on variable assumptions that may change over time and should **NEVER** be relied on as sustainable source of power for any life sustaining equipment.
- Examples of life sustaining equipment include, but are not limited to, breathing apparatus, life monitoring systems or lung and heart respiratory machines.
- This device is intended for **indoor use only**. To prevent the risk of fire or electric shock, locate the Device in a temperature (0 – 40 °C) and humidity controlled indoor area, free of conductive contaminants.
- **Do not** allow children to touch or handle any part of the Device under any circumstances
- **Do not** repair problematic Devices (except for fuse replacement) on your own. If the Device is faulty or not operational, please call the help line for assistance or log a ticket via the customer portal.
- This Device is not intended for operation by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning operation of the Device by a person responsible for their safety.
- It is hazardous for anyone other than a competent authorised Stage Zero accredited Contractor to carry out any service or repair on the Device.

1.6 Emergency Situations

1.6.1 Leaking Batteries

If the Device (or any part thereof) has any indication of a liquid like substance leaking from it, avoid contact with the substance and contact Stage Zero **immediately**.

If one is exposed to the leaked substance, immediately perform the actions described below:

- Inhalation: Evacuate the contaminated area and seek medical attention.
- Contact with eyes: Rinse eyes with flowing water for 15 minutes and seek medical attention.
- Contact with skin: Wash the affected area thoroughly with soap and water and seek medical attention.
- Ingestion: Induce vomiting and seek medical attention.

1.6.2 Fire

NO WATER!

DO NOT use water to extinguish fires that arise from the Device (or any part thereof). Should a fire occur, use a specialist Lithium fire extinguisher to extinguish the fire, alternatively use a DCP (dry powder) or CO₂ (carbon dioxide) type fire extinguisher.

1.6.3 Wet Batteries

If the Device (or any part thereof), is wet or submerged in water, do not let people access it, and contact Stage Zero for technical support.

1.7 Prohibitions

It is prohibited to:

- Connect any additional batteries of any type to the Device
- Disassemble the Device (or any part thereof) in any form or manner
- Cosmetically change the exterior of the Device, e.g., painting, etc.

2. Stage Zero Volta 40 Portable Power Station package

- 1) Volta 40
- 2) AC power cable
- 3) Volta 40 output cables
- 4) User Manual

3. Features

1. Built-in adapter allows for a wide AC voltage range 85Vac-265Vac.
2. Built-in, high capacity lithium batteries provide long backup time to loads.
3. Suitable for most digital devices.
4. Power over Ethernet (POE) can transmit the data and power at the same time to simplify wiring and set-up.
5. 5V USB output can charge mobile phones, PSPs, PDAs, iPods and MP4 players and more.
6. Intelligent circuit design with over-charging, over-discharging and short circuit protection.

4. Operation

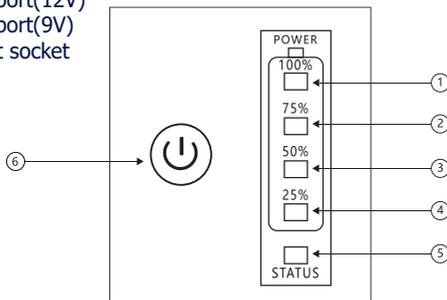
1. In order to avoid over-discharging of the lithium batteries, please restart the Portable Power Station when the AC is available after low battery cutoff.
2. Before connecting the loads to the Portable Power Station, it is important to check their nominal working voltage, current and polarity, which you can find on their original adapters.
3. Please ensure the Portable Power Station battery is fully charged before connecting it to the loads.
4. The output power of this model is controlled by total power capacity. The total power of the loads connected to all the ports can't exceed the maximum output power of the Portable Power Station. Otherwise, all the output ports will close, and the Portable Power Station will shut down automatically once the status light flashes for 5 seconds. In this situation, please remove the excess loads.
5. Press and hold the power button for 2-3 seconds to switch the Portable Power Station on. The output voltage of POE ports can be selected between 15V and 24V by moving the POE voltage switch. Once plugged into a power supply, the status light turns green to indicate charging. 100% means full of charge. While the Portable Power Station is charging, the power indicator lights will show the battery

capacity moving from 25% to 50%, 75% and 100% respectively. When disconnected from the power supply, the status lights turn red for battery backup mode, and the power indicator lights will turn off one by one from 100%, 75%, 50% to 25%. When the light of 25% is flashing, it means that the battery power is very low - simply press and hold the power button for 2-3 seconds to turn off the Portable Power Station and stop output voltage.

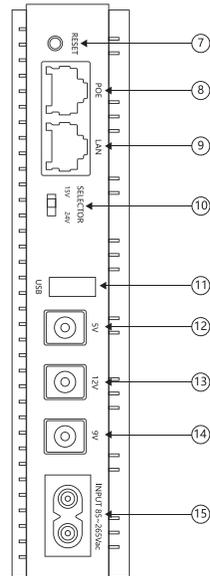
6. The USB provides stable charging to 5V digital products with their original charging cables.
7. The Portable Power Station shuts down automatically when the battery runs low but will restart output power when it begins charging.
8. If the Portable Power Station is not used for a long time, please keep it full of charge and in a cool place. If it won't turn on after being in storage for too long, plug the Portable Power Station into a power supply to charge until the status lights turn green. We recommend charging the Portable Power Station battery at least once a month.

5. Components

- 1) 100% Battery capacity LED indicator
- 2) 75% battery capacity LED indicator
- 3) 50% battery capacity LED indicator
- 4) 25% battery capacity LED indicator
- 5) Work status indicator
- 6) ON/OFF Switch
- 7) Reset button for POE
- 8) Ethernet output interface
- 9) LAN Ethernet interface
- 10) Output voltage Selector
- 11) USB (5Vdc) output port.
- 12) Output port(5V)
- 13) Output port(12V)
- 14) Output port(9V)
- 15) AC input socket



Volta 40



6. Specifications

Model	Volta 40
Input	85-265Vac/50-60Hz
Output	USB 5V/2A DC 5V/2A DC 9V/2A DC 12V/2A POE 15V/1A POE 24V/1A
Output power (Max.)	36W
Capacity and cell chemistry of battery	x4 2000mAh LiFePO4 cells 25.6Wh Battery
Operate temperature	-10°C ~ 40°C
Humidity	10%-90%RH
Dimension	175x110x33mm
Net Weight	0.42kg

7. Customer Portal

The Customer portal is where the User can review, order and manage Stage Zero solutions. It is also from where the User can request support via logging a ticket on the Help tab.

The Customer Portal has the following tabs:

- **Dashboard** (default) – general overview of account.
- **Accounts** – detailed overview of customer’s account containing personal information, account payments and billing, installation Certificate of Compliance and application documentation. The User can also settle payments from the Accounts tab.
- **Services** – general overview of what services (subscriptions) are contracted and paid for.
- **Messages** – list of messages regarding account/device status.
- **Help** - allow the customer to submit a ticket/query when a fault occurs.

Note:

When a serious issue occurs such as a fire or complete power outage outside of loadshedding, it is recommended to call the Stage Zero help line which is shown on the customer portal under the help tab.

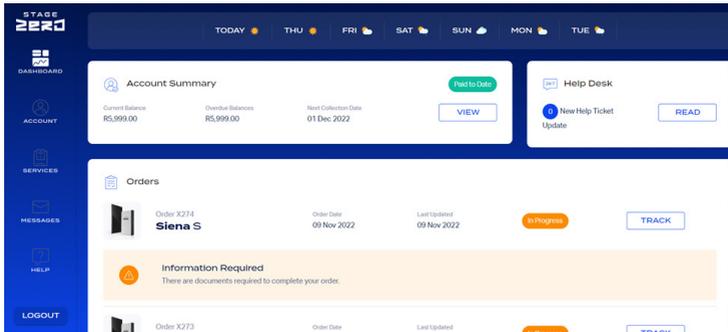


Figure 6: Example of Dashboard

7.1. How to submit a ticket

Use the following steps to log a ticket on the Customer Portal:

1. Navigate to Help tab from the Dashboard
2. Select 'Submit Ticket'
3. **Select Service** - From drop down, select most applicable option for type of ticket, e.g., account, PPA service, hardware service, inverter service, solar panel service, etc.
4. **Problem Subject** - Insert a brief description of the problem, e.g., for a noisy inverter use 'Inverter noisy'
5. **Request Description** - Insert more detailed description of the problem
6. Attach any supporting information of the problem, e.g., photos, video clips, etc.
7. **Submit**

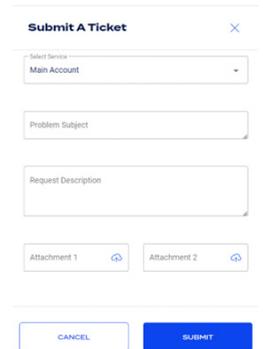


Figure 7: Example of Ticket

All tickets that have been logged will be time stamped and can be tracked either on the dashboard or on the help tab.

8. Warnings

1. Double-check the working voltage, current and polarity of the loads before connecting them to the Portable Power Station, then choose the corresponding voltage.
2. Please ensure the Portable Power Station is fully charged before initial use.
3. Avoid dropping or hitting the Portable Power Station. Don't try to open and repair the unit yourself.
4. Don't submerge the Portable Power Station in water or get it wet.
5. Don't dispose of the Portable Power Station in fire or heat.
6. Don't use the Portable Power Station in any flammable environments.
7. Keep the Portable Power Station out of reach of children.

9. Warranty

Stage Zero warrants this Device against defects in materials and workmanship. This warranty does not apply to defects resulting from normal wear and tear, accidents; damages sustained during; alterations; unauthorised use or repair; neglect, misuse, abuse; and failure to follow instructions for care and maintenance for the product.

10. Legal Notice

10.1 Information contained in this manual

- Stage Zero gives no warranty of any kind whatsoever, either explicitly or implicitly, with respect to the information contained herein.
- Stage Zero's copyrighted designs, products and processes contained or described in this document are confidential. This document, either in part, or as a whole, may not be copied or reproduced by any means whatsoever, nor disclosed to third parties for purposes other than for which it is supplied, without the prior written consent of Stage Zero and shall not be furnished to any third party without the prior written consent of Stage Zero.
- Stage Zero, its subsidiaries, the directors, employees, and agents cannot be held liable for the use of and reliance of the information in these documents.

10.2 Disclaimer and Indemnification

Stage Zero shall not be liable for:

- The losses of damage to property, death or personal injury arising from non-compliance with this Stage Zero User Manual.
- The losses not caused by Stage Zero's negligence.
- Stage Zero shall not be liable to either the Customer or any other third party under any applicable law, law of delict, in equity, restitution or otherwise for any kind of indirect or consequential loss or damage including loss of actual or anticipated profit or revenue, loss of use or productivity, loss of production or business interruption, loss of goodwill, loss of any contract or loss of opportunity that is connected with any claim arising under or in connection with use of the Stage Zero Device. By operating the Stage Zero Device, you indemnify Stage Zero and shall hold Stage Zero harmless against any liability arising from non-compliance with this Stage Zero User Manual.

11. Queries and Support

Email support@stagezero.co.za or visit www.stagezero.co.za for more information.

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