SOLA

USER GUIDE

ups **520**

750 VA, 1050 VA, 1425 VA, and 2250 VA

A Best Power *Company*

UNINTERRUPTIBLE POWER SYSTEMS

Important Notice

The UPS ground (earth) conductor carries leakage current from the loads in addition to any leakage current generated by the UPS. This UPS generates no more than 0.5 mA of current (U model), or 1 mA of current (A & E model). To limit the total leakage current to 3.5 mA, the load leakage must be limited to 3 mA on the U model and 2.5 mA on the A & E model. The three-wire receptacle that you plug the UPS into must have a good (low-impedance) ground (protective earth) connection to provide a safe path for leakage current.

SOLA

ups 520®

750 VA, 1050 VA, 1425 VA and 2250 VA

User Guide

STM-0408A

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Best Power
UNINTERRUPTIBLE POWER SYSTEMS

Languages

If You have a question

Customer Support

If you have a question or problem, Table 4, Troubleshooting, may help. If you need more help, **please have your UPS model number and serial number (on the back label) nearby, and call the SOLA office nearest you (see the SOLA Offices Section).** SOLA's service technicians have in-depth knowledge of the UPS and power problems.

SOLA may tell you the UPS must be returned. If this happens, we will give you a Return Authorization (RA) number. **When you return a SOLA 520 to the factory for any reason, please use the original packing material in which your unit was shipped to you. You may be responsible for repair charges for shipping damaged units which are not packed in SOLA packing material.** If you have discarded the original packing material, please call the nearest SOLA office so that we can ship new packing material to you. If you have any questions, please feel free to call or fax the nearest SOLA office. Please do not return your SOLA 520 without calling SOLA. SOLA will advise you where to ship your SOLA 520.

Table of Contents

Trademarks

Windows is a registered trademark of Microsoft Corporation.

All other brand and product names are trademarks or registered trademarks of their respective holders.

Safety Instructions

IMPORTANT SAFETY INSTRUCTIONS! SAVE THESE INSTRUCTIONS!

This User Guide contains important instructions for your SOLA 520 that must be followed during installation and maintenance of the UPS and batteries.

CAUTION!

Whenever the unit's On/Off switch is "On," there may be dangerous voltage present at the unit's outlets. This is because the unit's battery supplies power even if the unit is not plugged into the wall outlet. The unit contains dangerous voltages.

To reduce the risk of electric shock, install in a temperature-controlled and humidity-controlled indoor area free of conductive contaminants.

The power supply cord is intended to serve as the disconnect device. The socket-outlet shall be near the equipment and shall be easily accessible.

All servicing of this equipment must be performed by qualified service personnel.

Before maintenance or repair, all connections must be removed. Before maintenance, repair, or shipment, the unit must be completely switched off and unplugged or disconnected.

The installation and use of this product must comply with all national, federal, state, municipal, or local codes that apply. For assistance, call SOLA Service or your local SOLA office.

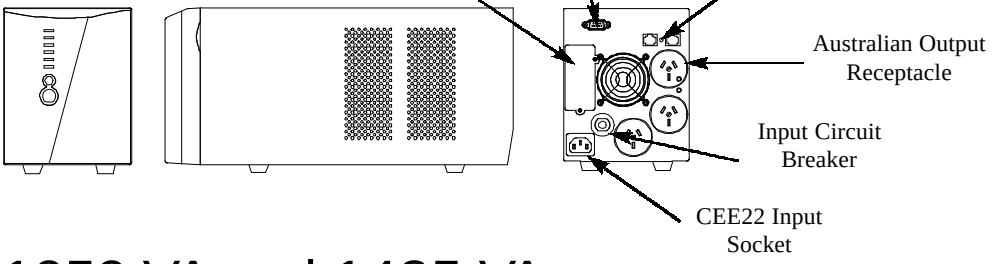
If the SOLA 520 unit has been damaged during shipment, call your vendor immediately.

If the SOLA 520 unit is stored, the batteries should be recharged every 6 months. *If stored above 25 ° Celsius, recharge the batteries more often.*

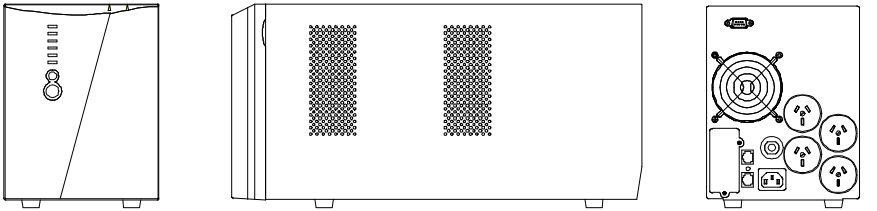
UPS Features

The SOLA 520 provides protection against power problems, including power outages, brownouts, and sudden increases in power. It also provides spike suppression and line noise filtering to protect your equipment. Front panel LEDs and an audible alarm keep you aware of the unit's status. Use the drawings below to identify features of the unit.

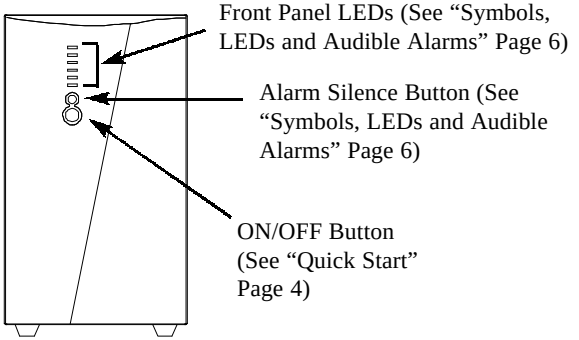
750 VA

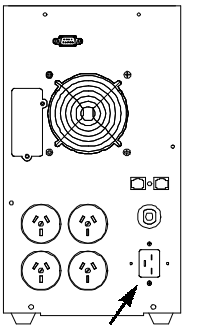


1050 VA and 1425 VA



2250 VA





Quick Startup

1 If your SOLA 520 UPS has a removable power cord, connect the power cord to the back of the unit. Plug the UPS into a wall outlet. Even if the UPS is turned off, the battery charger will operate when input power is applied to the UPS.

2 Let the unit charge the battery for at least 8 hours. You may use the unit while the battery charges, but the battery backup runtime will be reduced until the battery is fully charged.

3 Note: The On/Off button must be pressed and held for about one second to turn the SOLA 520 unit on or off. To start the unit, press and hold the On/Off button (the bottom button on the front panel). When the unit starts, it will beep, then light all of the front panel lights for a moment, and then light them one at a time. Next, the UPS will do a battery test. While it does this test, the battery light , and other lights are on that indicate the amount of charge in the battery. After the battery test, the top green light should remain on.

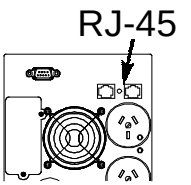
If the unit beeps, or if the top light does not remain on even though input power is available from the wall outlet, go to the Troubleshooting section.

4 Switch off the equipment you want to protect, and plug it into the outlets on the back of the SOLA 520.

5 Switch on the protected equipment, one at a time. If the UPS beeps an alarm when you start your equipment, the UPS may be overloaded. See the Troubleshooting section.

The bottom four lights on the front of the UPS show the % of the UPS's power that your equipment is using. See Symbols, LEDs and Audible Alarms Section for more information.

6 The Surge Protection jacks will protect network equipment that uses an RJ-45 connection. Plug the 10BASE-T network connection into the surge protection jack labeled "IN" on the back of the SOLA 520. Plug the protected equipment into the surge protection jack labeled "OUT." Network cabling is not provided. *This connection is optional. It is not needed to use the SOLA 520.*



7 Please fill out the warranty registration card and return it to your local SOLA office.

Installing CheckUPS II Software

Your UPS is supplied with a CD-ROM and communications cable to install and operate Check-UPS II.

To install CheckUPS II on your computer, follow the installation enclosed with the CD-ROM.

BestDock™

Installation and Operation of the SNMP Card Option

The SOLA 520's BestDock communication slot accepts optional communication cards, like the internal BestLink SNMP/WEB adapter. The insertion of a card into the BestDock communication slot replaces the normal communication channel from the SOLA 520's DB-9 Communication Port. The DB-9 port becomes the connection point
for configuring the card in the BestDock.

Symbols, LEDs and Audible Alarms

The front panel LEDs and an audible alarm indicate the unit status. The unit beeps whenever the unit is on battery power or an alarm is present. See Table 3 for information on beep coding.

In the figure below, bucking means that SOLA 520 is reducing high input voltage, and boosting means SOLA 520 is increasing low input voltage.

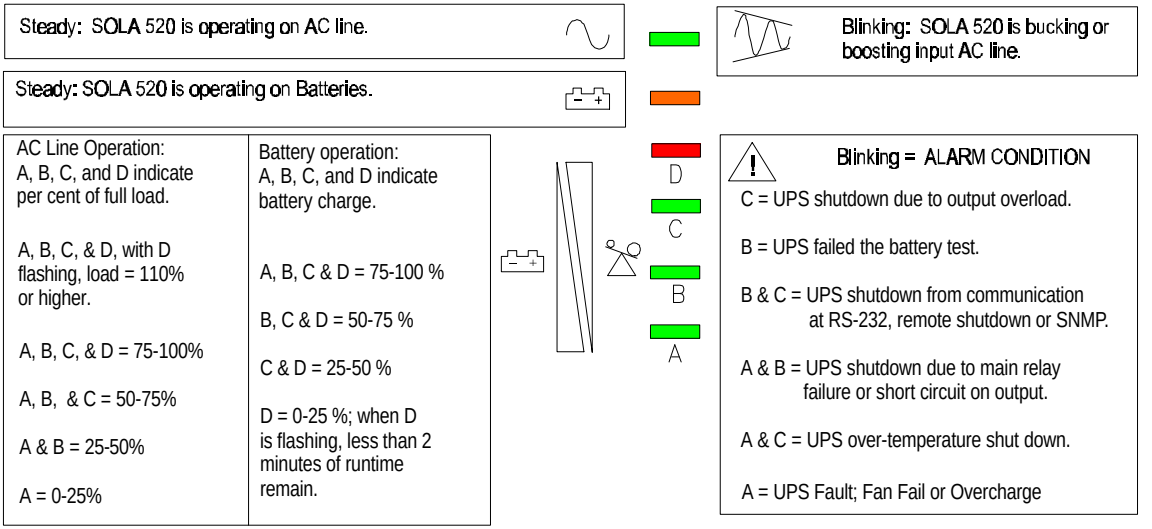


Table 2: Symbols and LEDs

Symbols and LEDs	What It Means
 AC LINE (Green)	***Steady:*** Acceptable input power is present. The unit is running on line power. ***Off:*** No input power is present or the unit is switched off.
 LINE CORRECTION (Green)	***Blinking:*** The unit is boosting or bucking utility power. ***Boost*** = Automatically increases low input power to prevent the unit from switching to battery. ***Buck*** = Automatically decreases high input power to prevent the unit from switching to battery.
 BATTERY MODE (Yellow)	The unit is running on battery power.
 OVERLOAD (Yellow)	***Output Overload:*** Refer to Tables 3 and 4.
 WARNING (Yellow)	Replace the battery or UPS Fault. Refer to Tables 3 and 4

Table 3: Audible Alarms

To silence an alarm, press the ALARM SILENCE button on the front panel (see Page 3 for the location of this button). The beep will stop, but the alarm light will stay on. **Note:** Silencing the alarm does not solve the problem that caused it. See Tables 3 and 4.

If your SOLA 520 runs on batteries frequently because the input utility line varies often, you may want to adjust your SOLA 520 to accept wider voltage variations before switching to batteries. Appendix A describes how to adjust the SOLA 520 from the front panel in response to specific utility power problems. You should have an electrician check your nominal line voltage and determine if the problem is due to a "Surge" (high) voltage or "Brownout" (low) voltage. Changing the setting without this knowledge could make the problem worse.

Number of Beeps	What It Means
1 every 15 seconds	***Line Loss:*** The unit is on battery power. See Table 4 for more information.
2 every 15 seconds	***Low Battery Alarm:*** The unit was running on battery power and shut down due to very low battery voltage. The unit will restart automatically when acceptable power returns.
3 every 5 minutes	***Replace the Battery:*** The battery needs to be replaced. See "Replacing the Batteries" on page 10.
1 beep every second	***Output Overload:*** Too much load equipment.
Continuous	***1) Output Short Circuit*** ***2) Starting Fault:*** Input voltage out of range when unit is turned on.
Continuous	***UPS Fault:*** UPS internal failure

Troubleshooting

If you have a question or problem, the troubleshooting table may help. (See Table 4.) If you need assistance, phone SOLA Service or your local SOLA office. Please have the model number and serial number (located on the rear of the unit) available.

If the unit must be returned, SOLA will give you a Return Authorization (RA) number. Please phone SOLA for an RA number before returning the unit for any reason.

Table 4: Troubleshooting

Problem	Possible Reasons	What To Do
Yellow BATTERY LED on, green LINE LED off, one beep every ten seconds.	1. Utility power outage. 2. Loose plug. 3. Tripped circuit breaker. 4. Power cord failure.	1. Wait for power to return. 2. Make sure the power cord is connected. 3. Reset the circuit breaker. 4. Phone SOLA Service.
Yellow BATTERY LED on, green LINE LED off, two beeps every ten seconds.	Very low battery voltage.	Plug the unit into a working wall outlet for at least 8 hours to allow the batteries to charge. After recharge, if the UPS will not operate on batteries, or UPS beeps twice every ten seconds on batteries, phone SOLA Service.
Green LINE LED on, Amber WARNING LED on, three beeps every five minutes.	Unit has failed the battery test	Turn the unit off and back on to reset the "Replace Battery" alarm and LEDs. Replace the battery. See "Replacing the Batteries" on page 10.
Yellow OVERLOAD LED on, one beep every second.	The power required by the equipment is too high.	1. Remove load equipment. 2. Reduce load level until the beeping stops.
Yellow WARNING LED on. Continuous beep.	1. Output short circuit. 2. UPS Fault 3. Input voltage out of range when UPS switched on.	1. Remove load and reset UPS. 2. Phone SOLA Service.
Green LINE LED flashing.	Input voltage is high or low.	Nothing. The UPS is correcting the input voltage. You may require an electrician to investigate the reason for the input voltage deviation.

Replacing the Batteries

SOLA 520's batteries are user-replaceable and can be replaced while the SOLA 520 has AC input applied and powers the loads. This means that, if necessary, you can replace the batteries while the UPS is running. Before you replace the batteries, make sure that you read the safety information below.

Note: If you have a power outage while you are replacing the batteries, the UPS will not be able to run on battery power and your protected equipment will shut down.

CAUTION!

The batteries used in the UPS and battery pack can produce dangerous voltage and high current. Therefore, the batteries may cause severe injury if their terminals contact a tool or the UPS cabinet. Be very careful to avoid electrical shock and burns from contacting terminals while you replace the batteries.

Batteries contain caustic acids and toxic materials and can rupture or lead if mistreated. Remove rings and metal wristwatches or other jewelry. Do not carry metal objects in your pockets: these objects could fall into the UPS.

Never allow any tool to contact both a battery terminal and the UPS cabinet or another battery terminal. Do not lay tools or metal parts on top of batteries.

To ensure continued superior performance of your UPS and to maintain proper charger operation, you must replace the UPS batteries with the same number and type of batteries. These batteries must be the same type as the original batteries: valve-regulated, low maintenance. The replacement batteries should have the same voltage and ampere-hour rating as the original batteries.

Assume that old batteries are fully charged. Use the same precautions you would use when handling a new battery. Do not short battery terminals with a cable or tool! Batteries contain lead. Many areas have regulations about disposing of used batteries. Please dispose of old batteries properly. DO NOT dispose of batteries in a fire because the batteries could explode. Do not open or mutilate batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.

This equipment may produce ozone. Take precautions to ensure that the concentration of ozone is limited to a safe value (0.1 ppm {0.2 mg / m} calculated as an 8-hour time-weighted average).

Replacement Instructions

1 Phone Best Power's Worldwide Service to order a replacement battery pack. It must be the same type and rating of the original batteries. See *Battery* information in Specifications.

2 If it is necessary, the batteries may be replaced while the Fortress is running with the protected equipment attached. **Option:** You may switch off and unplug the protected load equipment from the Fortress. Then, turn off the Fortress and disconnect the line cord.

3 Grab the bottom of the front cover and carefully remove it from the unit by pulling up and away from the unit. Place the front cover, with the LED panel and ribbon cable attached, on top of the unit so it is out of your way while replacing the batteries.

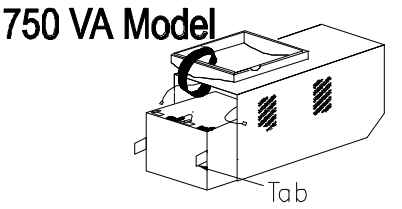
4 Remove the two screws from the interior panel to gain access to the batteries.Go to step 5 if you have a 750, 1050, or 1425 model. For 2250 models go to step 8.

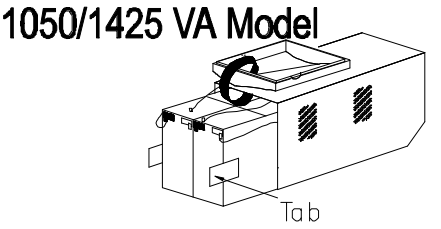
5 **For 750, 1050 and 1425 models:** Use the flap attached to the batteries to remove the batteries from the Fortress.

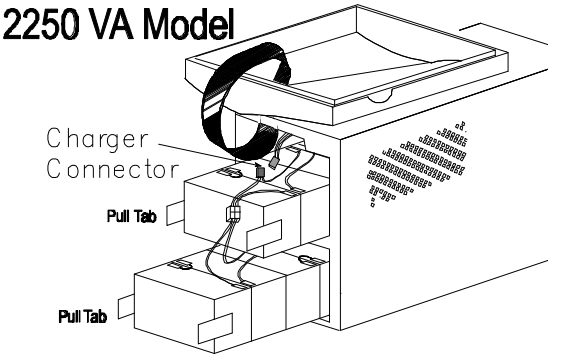
6 Disconnect the red and black cables from the used battery pack. Dispose of old batteries properly.

7 Reconnect the cables to the new battery pack; red to positive (+), black to negative (-), and slide them back into the unit.

8 **For 2250 models:** Loosen the cable tie on the battery cables. Then push down the tab and disconnect the large connector from the bottom batteries. Push the tab and disconnect the Charger Connector from the top batteries. Use the flaps to pull the top and bottom batteries out. Slide in the new battery packs and reconnect the Charger connector and then the large connector. Fasten cable tie.







9 **For all models:** Position the battery cables so they will not be pinched by the interior panel. Use the two screws removed earlier to re-install the interior panel.
Carefully snap the front cover, with the attached LED panel and ribbon cable, back onto the unit.

10 **If you followed the option in step 2:** Reconnect the line cord to the Fortress and turn the unit on. Reconnect the load equipment. Switch on the protected load equipment one piece at a time.

Communication Port

The SOLA 520 is plug-and-play compatible with Windows 95.

CheckUPS II management software is provided with the SOLA 520. An interface cable for the following systems is also provided.

SCO UNIX/XENIX	UNIX and Compatible Systems	OS/2
Windows 3.X, 95 and NT	Novell NetWare	

SOLA offers interface kits that allow you to connect many other computer systems to the SOLA 520's communication port. For the following computer systems, or specific information on SOLA interface kits, call SOLA Service or your local SOLA dealer.

Banyan VINES	IBM RS/6000 AIX	IBM AS/400 special
Lantastic v4.0	LAN Manager/Server v2.0	

Pinouts

Pin 1 ***RS232 Receive Data:*** Receives incoming RS232 communication data.
Pin 2 ***RS232 Transmit Data:*** Sends outgoing RS232 communication data.
* **Pin 3** ***Normally Open On Battery Contact:*** A normally open contact that closes 15 seconds (pulls to Common) after the UPS switches to battery power.
Pin 4 ***Common:*** The signal ground for all signal pins.
* **Pin 5** ***Normally Open Low Battery Alarm Contact:*** A normally open contact that closes (pulls to Common) during a Low Battery Alarm. This tells CheckUPS II and other shutdown software when to start a computer shutdown.
Pin 6 ***Plug and Play Sense for Windows 95.***
Pin 7 ***Remote Shutdown:*** Shorting this pin to Common for at least 5 seconds while the UPS is operating on battery, shuts the UPS off after 120 seconds.
* **Pin 8** ***Normally Closed On Battery Contact:*** A normally closed contact that opens 15 seconds (releases from Common) after the UPS switches to battery power.
Pin 9 ***Unused.***

* Contacts consist of open collector circuits capable of switching up to +30 VDC at 6 mA into a resistive load.

Specifications

SOLA reserves the right to change specifications without prior notice.

Line Transient Protection: Passes ANSI/IEEE C62.41 Category A testing.

Safety Compliance: TUV/GS Listed, AS3260

EMC Compliance: CISPR 22 Class B, Vfg 243-91/46-92 B, EN55022, CE Mark Self-certified to: CE Marking Directive 93/68/EEC, Low Voltage Directive 73/23/EEC, C-Tick, AS3548.

Noise (RF) Suppression: Full-time EMI/RFI filtering.

Efficiency: > 95% on line.

Capacity VA/Watts: 750VA / 450W; 1050VA / 670W; 1425VA / 950W; 2250VA / 1600W.

***Voltage Nominal: (A** Model):* 240 VAC

***Voltage Range: (A** Model):* 0 - 300 VAC, operating on battery and buck/boost, 197 - 283 VAC without battery discharge.

Frequency: 50/60 Hz auto-sensing 57 - 63 Hz (60 Hz); 47 - 53 Hz (50 Hz) (50/60 Hz ± 0.5 Hz on battery.)

Typical Runtime (minutes): *750VA Models:* Full load: 5 minutes. Half load: 12 minutes.
1050VA and 1425VA Models: Full load: 5 minutes. Half load: 12 minutes.
2250VA Models: Full load 5 minutes. Half load: 12 minutes.

Transfer Time: 4 ms typical.

Battery: Sealed, maintenance-free, valve-regulated, UL 924 recognized.
750 VA Models: Two 12 V, 7.0/7.2 AH batteries.Nominal Voltage is 24 VDC.
1050 VA Models: Three 12 V 7.0/7.2 AH batteries. Nominal Voltage is 36 VDC.
1425 VA Models: Four 12 V 7.0/7.2 AH batteries. Nominal Voltage is 48 VDC.
2250VA Models: Eight 6V, 12.0 AH batteries. Nominal Voltage is 48 VDC.

Automatic Battery Test: Automatic battery test occurs upon startup and every 14 days thereafter. Alarm will sound if the battery fails this test.

Battery Recharge Time (to 95% of capacity): *750 VA, 1050 VA, 1425 VA, and 2250 VA:*3 hours; *1425 VA:* 7 hours with output fully loaded.

Overcurrent Protection (on line): *All Models:* Circuit Breaker.

Input Fault Current (maximum): *750 and 1050 Models:* 15 A. *1425 Model:*26.1 A *2250 Model:*35 A.

AC input Plug/Cord Information: 750VA CEE 22 recessed plug
1050VA CEE 22 recessed plug
1425VA CEE 22 recessed plug
2250VA CEE 19 recessed plug

AC Output Distribution: 750VA three Australian 10 ampere receptacles
1050VA four Australian 10 ampere receptacles
1425VA four Australian 10 ampere receptacles
2250VA four Australian 10 ampere receptacles

Load Compatibility: Can support 100% power factor corrected, switch-mode power supply load.

Audible Noise: < 45 dBa at one meter, except 2250 model which is < 50 dBa at one meter.

Ventilation: Air around the unit must be free of dust, chemicals, or other materials that corrode or contaminate. Air must be free to move around the unit.

Operating Temperature: 0° - 40° C.

Storage Temperature: -15° to +50° C. Battery life is reduced above 25 ° C.

If the SOLA 520 unit is stored, the batteries should be recharged every 6 months. *If stored above 25° Celsius, recharge the batteries more often.*

Humidity: 5% - 95% RH (non-condensing).

Dimensions (Height x Width x Length): *750 VA:* 178 x 140 x 365 mm
1050 and 1425VA: 227 x 172 x 454 mm
2250 VA: 336 x 194 x 511 mm

Weight: *750:* 14 kg,
1050: 22 kg,
1425: 25 kg,
2250: 40 kg

Warranty

Warranty Information

This Warranty is subject to Sola's standard Conditions of Sale which govern all sales of products by Sola Australia Ltd.

1. SOLA products, in general, are warranted against failure due to faulty materials and/or workmanship for a period of two years from despatch date (ex Sola store) as per invoice. The Ferroresonant and 95 Series Power Conditioners and SOLA Dry Type Transformers have an extended warranty - 5 years from date of despatch.

2. If, within the applicable Warranty period, any Sola product does not meet the warranty specified above, and the product was installed and operated in accordance with Australian standards and Sola standard installation procedures, Sola shall thereupon correct any defects due to faulty materials and/or work manship.

3. Any modification made to the product other than those made by Sola or its authorised representative may cause the Warranty to be void.

4. For units up to 3kVA that are installed as a portable device, the Warranty covers repair or replacement of defective parts at the factory, or other service locations as nominated by Sola Australia, provided the unit has been returned by the user packed adequately to prevent shipping damage, and approval has been obtained from SOLA Australia Ltd before shipment. All costs associated with the return of the product to Sola Australia are at the customer's expense.

   For hardwired products 3kVA and above, the Warranty covers on site repair (Metropolitan area, Capital Cities only), during normal working hours, by Sola technicians or appointed agents. For units installed in remote locations, Sola Australia may, at its discretion, request the equipment to be recovered and returned to the factory or other nominated service locations. In this case, it is the customer's responsibility to pack the equipment adequately to prevent shipping damages and pay freight charges to the location nominated by Sola Australia. Approval to return goods must be obtained from SOLA Australia Ltd before the goods are despatched.

5. Units returned for in-warranty repairs, which are found not to be defective, will be subject to an inspection and handling charge, plus transportation charges.

6. High grade batteries, designed for Uninterruptible Power Supply (UPS) applications, are supplied by Sola for use with Sola UPS equipment. These batteries have a finite life expectancy depending on a number of variables, including rate of discharge, depth of discharge, operating temperature, etc.

7. Providing that the batteries are used within the limits as set out in the battery manufacturer's warranty statement and are provided as an integral part of new equipment, they are guaranteed for two years, from despatch date as per invoice. A copy of this warranty statement is available on request. Batteries provided as spare parts or replacements have a one year warranty. Other optional warranty terms for batteries are available on request.

8. Sola reserves the right to charge for replacement batteries if within the one year guarantee period replacement batteries are necessary as a result of misuse or misapplication by the purchaser or end user.

Standard Warranty Registration

UPS Model Number: ..... UPS Serial Number: .....

Date of Purchase: ...../...../.....

Contact Person: .....

Company/Organisation: .....

Address: .....

City: ..... State: ..... Country: ..... Postcode: .....

Telephone: ..... Fax: ..... E-mail: .....

1. Where did you purchase this SOLA UPS from?

❑Retail Store ❑Computer Store ❑SOLA Distributor ❑Direct from SOLA

❑Electrical Wholesaler ❑Mail Order Catalogue ❑Internet ❑Other .....

2. Why did you purchase a SOLA UPS? (Check all that apply)

❑Recommendation ❑Reputation ❑After Purchase Support ❑Features

❑Price ❑Other .....

3. What price did you pay for this SOLA UPS? .....

4. What features of a UPS are important to you?

❑Appearance ❑Front Panel Display ❑Backup Time ❑RS232

Communications ❑UPS Management Software ❑Other .....

5. What equipment do you intend to protect with this SOLA UPS?

❑Personal Computer(s) ❑Workstation(s) ❑Service/Network Equip.

❑Midrange Computer(s) ❑Mainframe(s) ❑Industrial Automation

❑Telecommunications Equipment ❑Retail/Point-of-Sale Equipment ❑Facilities/

Building wide protection ❑Other .....

6. Please specify the equipment being protected by your SOLA UPS?

Brand.....Model ..... Operating System .....

7. How would you classify your type of business?

❑Retail ❑Wholesale/Distribution ❑Manufacturing ❑Telecommunications

❑Government/Eduction ❑Banking/Finance ❑Restaurant/Hotel ❑Other .....

8. What is your company's annual revenue?

❑Less than $1m ❑$1m-5$m ❑$5m-$20m ❑$20m-$100m ❑Greater than $100m

9. Approximately how many personal computers are there in your company?

❑Less than 10 ❑10-20 ❑20-50 ❑50-200 ❑Greater than 200

10. Do you plan to purchase more UPS or Power Protection products?

❑ Within 1 month ❑1-6 months ❑6-12 months ❑Unlikely

11. Would you like information about SOLA Extended Warranty and Fastfix Exchange programs?

❑Yes ❑No

12. Would you like to be kept informed about new SOLA product developments and be added to our customer service database?

❑Yes (you will receive mail from SOLA at least three (3) times per year) ❑No

AFFIX
POSTAGE
STAMP

SOLA Australia Ltd

13 Healey Road

DANDENONG VIC 3175

AUSTRALIA

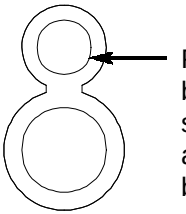
Appendix A: Adjusting Voltage Settings

When the unit is not sounding an alarm, you can use the button shown below to change the following:

- Nominal Voltage — The normal voltage the UPS is programmed to expect, and the nominal UPS output voltage under line loss conditions.
- Buck — The input voltage at which the SOLA 520 decreases voltage before providing output because the input voltage is too high.
- Boost — The input voltage at which the SOLA 520 increases voltage before providing output because the input voltage is too low.
- Transfer to Inverter — The point at which the UPS switches to inverter (battery power), either because AC input voltage is very low or because it is very high.

Note: Make sure you want to change these values *before* you start the procedure below. Once you press the button shown for 10 seconds, the values will change to the default values, and any previous changes you have made will be lost. If you have questions, contact the nearest Sola office, or call National Service and Repair Centre on: 1800 034 401 (except Melbourne); 9768 3105 (Melbourne only).

Do not change voltage settings when unit is operating on inverter. To change the values, follow these steps:



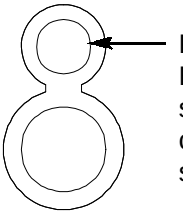
Press this button for 10 seconds (until all of the lights blink).

1. Press the button shown until the LEDs on the front of the SOLA 520 blink (approx. 10 seconds). After the LEDs blink, three or four will stay lit.and the SOLA 520 will beep for one second.

2. The LEDs that are lit show which voltage settings are selected. The LEDs are numbered in the drawing below to help you identify them. Table 5 on page 18 shows the voltage settings for each possible combination of LEDs.
   For example, by default, LEDs 1, 2, and 3 will be lit (see diagram). If your UPS is an A model, you will find this combination of LEDs in the first row of Table 5. This row shows the following:
   - With 197 volts input or lower, the SOLA 520 switches to battery power.
   - When input voltage drops to 221, the SOLA 520 begins to increase the output voltage.
   - 240 is the nominal or expected input voltage.
   - When input voltage rises to 254, the SOLA 520 begins to decrease the output voltage.
   - With 283 volts input or higher, the SOLA 520 switches to battery power.

3. Use the table below to decide which combination of settings you need; note which LEDs must be lit for this combination. Then, press the button shown **briefly (about 1 second) and release** to move to the next combination of LEDs. **If you hold the button in longer than ten seconds, the SOLA 520 will save the setting that is displayed.** Continue pressing the button until the proper LEDs are lit.

4. Once the correct LEDs are lit, **continue to hold** the button for ***ten seconds*** to save your changes. If the SOLA 520 is running on AC input power, the display will change back to the percent of full load. The new values will take effect after the display returns to normal mode.



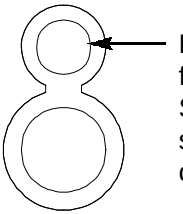


Table 5: Voltage Settings for A Models (750A, 1050A, 1425A, and 2250A)

LEDs Lit	To Inverter (Input AC is Low)	Boost	Nominal Voltage	Buck	To Inverter (Input AC is High)
1, 2, 3 (Default)	197	221	240	254	283
1, 2, 4	193	216	240	254	283
1, 2, 5	182	204	240	254	283
1, 2, 6	178	199	240	254	283
2, 3, 4	189	212	230	244	271
2, 3, 5	185	207	230	244	271
2, 3, 5, 6	175	196	230	244	271
2, 3, 6	170	191	230	244	271
3, 4, 5	181	202	220	233	259
3, 4, 6	167	187	220	233	259

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