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Balder Series

User Manual

UPCMCOP110HBAAZ01B
UPCMCOP120HBAAZ01B
PWUP-OL150BA-AZ01B
PWUP-OL300BA-AZ01B
UPCMCOP130HBAAZ01B

Manual de utilizare

141.33.23.0

Before using this product, carefully read all product documentation and retain it for future reference.

Thank you for purchasing our products!

Please read this manual before using the product.

***nJoy** is a brand of power and backup protection products that create solutions for multiple levels of environment complexity, residential to industrial.*

This UPS will protect your electronic equipment from physical damage and will provide emergency battery backup power to prevent data loss in the event of power problems.

The following models belong to the **Balder Series**:

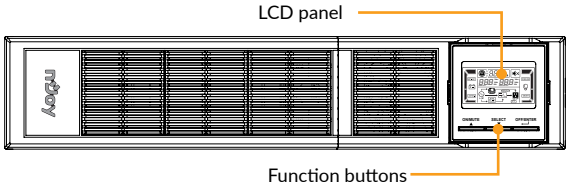
- 1000 VA **Balder 1000**
- 1500 VA **Balder 1500**
- 2000 VA **Balder 2000**
- 3000 VA **Balder 3000**

1 Package contents

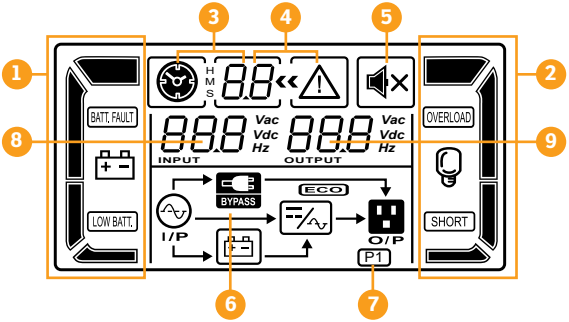
- ✓ UPS unit
- ✓ Power cord
- ✓ USB cable
- ✓ Rack mounting holders
- ✓ Tower mounting stand
- ✓ Screws
- ✓ User manual
- ✓ Warranty card
- ✓ USB cable (only for models with HID USB communication port).

2 Product overview

Front View 1000/1500/2000/3000



LCD Panel



1. Battery info
2. Load info
3. Backup time info
4. Configuration and fault info
5. Mute operation
6. Mode operation info
7. Programmable outlet info
8. Input and battery voltage info
9. Output info

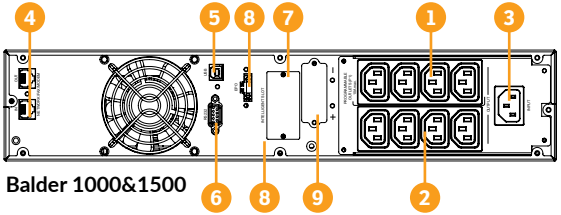
NOTE!

The HID USB communication port port is only available for Balder 1000, Balder 1500, Balder 2000 and Balder 3000.

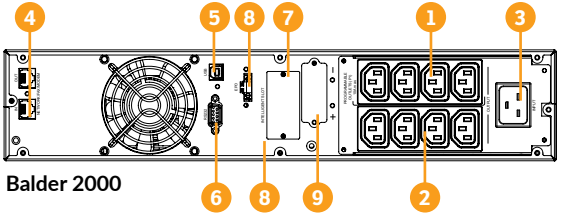
NOTE!

Before installation, please inspect the unit. Be sure that nothing inside the package is damaged. Keep the original package in a safe place for future use.

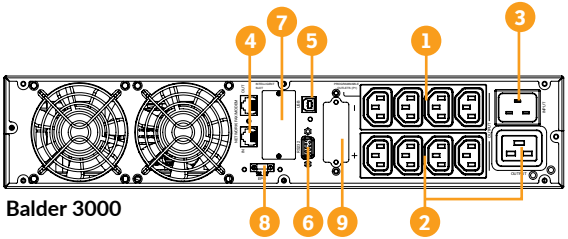
Back View



Balder 1000&1500



Balder 2000



Balder 3000

1. Programable Output receptacles: connect to non-critical mission loads (max 10A)
2. General Output receptacles: connect to critical mission loads (max 10A)
3. AC input
4. Network/Fax/Modem surge protection
5. USB communication port
6. RS-232 communication port
7. SNMP intelligent slot
8. Emergency power off function connector (EPO)
9. Connector for battery pack

3 Important Safety Warnings

Please comply with all warnings and operating instructions in this manual strictly. Save this manual properly and carefully read the following instructions before installing the unit. Do not operate this unit before reading through all safety information and operating instructions carefully:

Transportation

- Please transport the UPS system only in the original package to protect against shock and impact.

Preparation

- Condensation may occur if the UPS system is moved directly from cold to warm environment. The UPS system must be absolutely dry before being installed. Please allow at least two hours for the UPS system to acclimate to the environment.
- Do not install the UPS system near water or in moist environments.
- Do not install the UPS system where it would be exposed to direct sunlight or near heat sources.
- Do not block ventilation holes in the UPS housing.

Installation

- Do not connect appliances or devices which would overload the UPS system (e.g. laser printers) to the UPS output sockets.
- Place cables in such a way that no one can step on or trip over them.
- Do not connect domestic appliances such as hair dryers to UPS output sockets.

- The UPS can be operated by any individuals with no previous experience.
- Connect the UPS system only to an earthed shockproof outlet which must be easily accessible and close to the UPS system.
- Please use only VDE-tested, CE-marked mains cable (e.g. the mains cable of your computer) to connect the UPS system to the building wiring outlet (shockproof outlet).
- Please use only VDE-tested, CE-marked power cables to connect the loads to the UPS system.
- When installing the equipment, it should ensure that the sum of the leakage current of the UPS and the connected devices does not exceed 3.5mA.

Operation

- Do not disconnect the mains cable on the UPS system or the building wiring outlet (shockproof socket outlet) during operations since this would cancel the protective earthing of the UPS system and of all connected loads.
- The UPS system features its own, internal current source (batteries). The UPS output sockets or output terminals block may be electrically live even if the UPS system is not connected to the building wiring outlet.
- In order to fully disconnect the UPS system, first press the OFF/ Enter button to disconnect the mains.
- Prevent fluids or other foreign objects from entering the inside of the UPS system.

Maintenance, service and faults

- The UPS system operates with hazardous voltages. Repairs may be carried out only by qualified maintenance personnel.
- Caution - risk of electric shock. Even after the unit is disconnected from the mains (building wiring outlet), components inside the UPS system are still connected to the battery and electrically live and dangerous.
- Before carrying out any kind of service and/or maintenance, disconnect the batteries and verify that no current is present and no

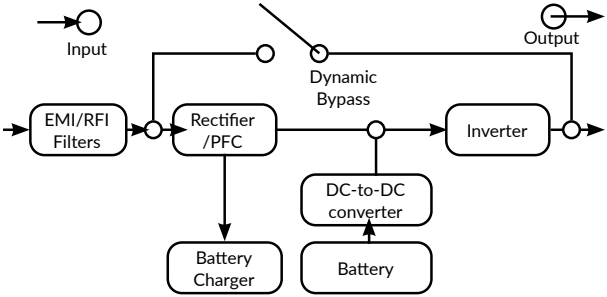
hazardous voltage exists in the terminals of high capability capacitor such as BUS-capacitors.

- Only persons are adequately familiar with batteries and with the required precautionary measures may replace batteries and supervise operations. Unauthorized persons must be kept well away from the batteries.
- Caution - risk of electric shock. The battery circuit is not isolated from the input voltage. Hazardous voltages may occur between the battery terminals and the ground. Before touching, please verify that no voltage is present!
- Batteries may cause electric shock and have a high short-circuit current. Please take the precautionary measures specified in this manual and any other measures necessary when working with batteries: remove wristwatches, rings and other metal objects, use only tools with insulated grips and handles.
- When changing batteries, install the same number and same type of batteries.
- Do not attempt to dispose of batteries by burning them. This could cause battery explosion.
- Do not open or destroy batteries. Escaping electrolyte can cause injury to the skin and eyes. It may be toxic.
- Please replace the fuse only with the same type and amperage in order to avoid fire hazards.
- Do not dismantle the UPS system.
- **WARNING:** This is a category C2 UPS product. In a residential environment, this product may cause radio interference, in which case the user may be required to take additional measures. (only for 220/230/240 VAC system).

4 Installation

4.1 Operating principle

The operating principle of the UPS is shown below:



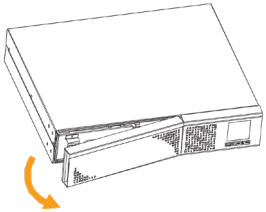
The UPS is composed of mains input, EMI/RFI filters, rectifier/PFC, inverter, battery charger, DC-to-DC converter, battery, dynamic bypass and UPS output.

The UPS can protect your equipment from all power problems such as surges, spikes, blackouts, brownouts and line noise. When AC power is present and the ON/ Mute switch is turned ON, the UPS will provide pure and stable AC power to the output. The UPS will also charge the battery in the on-line mode.

4.2 Connecting your equipment and first usage

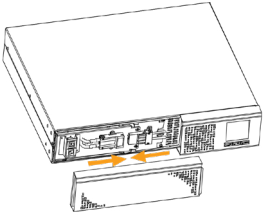
The UPS is simple to install and operate. Please read the following steps before connecting any equipments to this UPS:

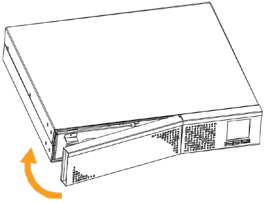
Step 1. Connecting the batteries: For safety consideration, the UPS is shipped out from factory without connecting the battery wires. To re-connect battery wires please follow below steps:



I. Remove front panel

II. Connect the AC input and re-connect battery wires.

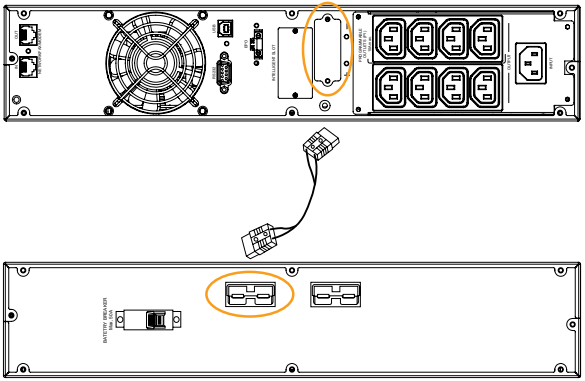




III. Put the front panel back to the unit.

Step 2. Connect to External Battery Cabinet: When connecting external battery cabinet, please be sure to connect polarity correctly. Connect positive pole of battery cabinet to positive pole of external battery connector in UPS and negative pole of battery cabinet to negative pole of external battery connector in UPS. Polarity mis-connection will cause UPS internal fault.

Connect only compatible Balder battery cabinet provided by nJoy. Please read the manual of the UPS and battery cabinet and set the UPS battery total capacity in Ah and the charging current accordingly. The use of another battery cabinet may damage the UPS and void the warranty.



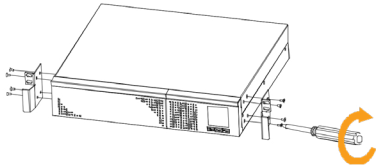
NOTE!

These battery cabinets care compatible with the following UPS:

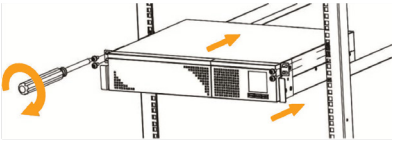
- ***CA0312GX-AZ (36Vdc):*** *UPS Balder 1000 / 1500*
- ***CA0712GX-AZ (72Vdc):*** *UPS Balder 2000 / 3000*

Step 3. Mounting the UPS: Balder series UPS can be either displayed on the desk or mounted in the 19" rack chassis. Please choose your favourite way to position this UPS.

A. Rack - mount installation

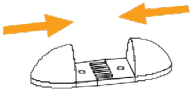


First fix the holders of the rack on the UPS.



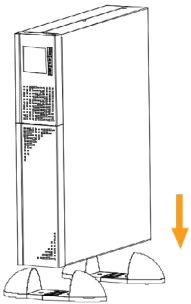
Then fix the UPS on the rack through the holders

B. Tower installation



First fix the holders to fit the UPS.

Then put the UPS in place.



Step 4. UPS input connection: Plug the UPS into a two-pole, three-wire, grounded receptacle only. Avoid using extension cords.

Step 5. UPS output connection: For socket-type outputs there two kinds of output: programmable outlets and general outlets. Please connect non-critical devices to the programmable outlets and critical devices to the general outlets. During power failure, you may extend the backup time to critical devices by setting shorter backup time for non critical devices.

⚠ CAUTION

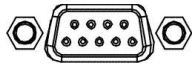
Do **NOT** plug **LASER PRINTERS** into any of the outlets.

Do **NOT** plug any **SURGE STRIPS** into any of the outlets.

Step 6. Communication connection: To allow for unattended UPS shutdown/start-up and status monitoring, connect the communication cable one end to the USB/RS-232 port and the other to the communication port of your PC. With the monitoring software installed, you can schedule UPS shutdown/start-up and monitor UPS status through PC. The UPS is equipped with a slot for either SNMP or AS400 card. When installing either SNMP or AS400 card in the UPS, it will provide advanced communication and monitoring options.

Communication port:

USB Port



RS-232 Port

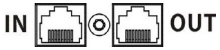
Intelligent slot

NOTE!

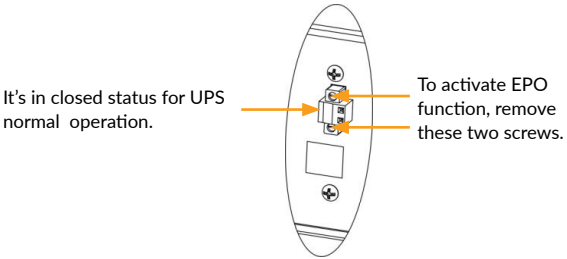
USB port and RS-232 port can't work at the same time.

Step 7. Network connection: Connect a single modem/phone/fax line into surge-protected “IN” outlet on the back panel of the UPS unit. Connect from “OUT” outlet to the equipment with another modem/fax/phone line cable.

Network/Fax/Phone surge port:



Step 8. Disable and enable EPO function: Keep the pin 1 and pin 2 closed for UPS normal operation.



Step 9. Turn on the UPS: Press the ON/Mute button on the front panel for two seconds to power on the UPS.

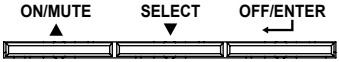
NOTE!

The battery charges fully during the first five hours of normal operation. Do not expect full battery run capability during this initial charge period.

Step 10. Install software: For optimal computer system protection, install UPS monitoring software to fully configure UPS shutdown. Use supplied RS-232 or USB communication cable to connect RS-232/USB port of UPS and RS-232/USB port of PC. Install the UPS monitoring software from *https://www.power-software-download.com/viewpower.html* to fully configure UPS shutdown.

5 Operations

5.1 Button operations



ON/Mute Button

- Turn on the UPS: Press and hold ON/Mute button for at least 2 seconds to turn on the UPS.
- Mute the alarm: After the UPS is turned on in battery mode, press and hold this button for at least 5 seconds to disable or enable the alarm system. But it's not applied to the situations when warnings or errors occur.
- Up key: Press this button to display previous selection in UPS setting mode.
- Switch to UPS self-test mode: Press ON/Mute buttons simultaneously for 5 seconds to enter UPS self-testing while in AC mode, ECO mode, or converter mode.

OFF/Enter Button

- Turn off the UPS: Press and hold this button for at least 2 seconds to turn off the UPS. The UPS will be in standby mode under normal power or transfer to Bypass mode if the Bypass setting is enabled.
- Confirm selection key: Press this button to confirm selection in UPS settings mode.

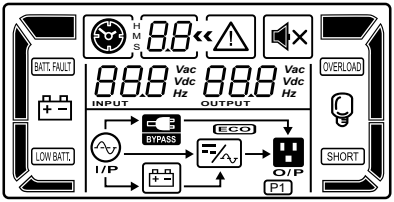
Select Button

- Switch LCD message: Press this button to change the LCD message for input voltage, input frequency, battery voltage, output voltage and output frequency.
- Settings mode: Press and hold this button for 5 seconds to enter UPS settings mode when the UPS is in standby mode or bypass mode.
- Down key: Press this button to display next selection in UPS settings mode.

ON/Mute + Select Button

- Switch to bypass mode: When the main power is normal, press ON/Mute and Select buttons simultaneously for 5 seconds. Then the UPS will enter to bypass mode. This action will be ineffective when the input voltage is out of acceptable range.

5.2 LCD Panel Indicators



Display	Function
Backup time information	
H M S	Indicates the estimated backup time. *H: hours, M: minute, S: second.*
Configuration and fault information	
	Indicates the configuration items, and the configuration items are listed in details in section 5.5.
	Indicates the warning and fault codes, and the codes are listed in details in section 5.7 and 5.8.
Mute operation	
	Indicates that the UPS alarm is disabled.

Output & Load information	
	Indicates the output voltage and output frequency. *Vac: AC voltage, Vdc: DC voltage, Hz: frequency*
Load information	
	Indicates the load level by 0-24%, 25-49%, 50-74% and 75-100%.
	Indicates overload.
	Indicates the load or the UPS output is short circuit.
Programmable outlets information	
	Indicates that programmable management outlets are working.
Mode operation information	
	Indicates the UPS connects to the mains.
	Indicates the battery is working.
	Indicates the bypass circuit is working.
	Indicates the ECO mode is enabled.
	Indicates the AC to DC circuit is working.

	Indicates the inverter circuit is working.
O/P	Indicates the output is working.
Battery information	
	Indicates the battery level by 0-24%, 25-49%, 50-74%, and 75-100%.
BATT. FAULT	Indicates the battery is fault.
LOW BATT.	Indicates low battery level and low battery voltage.
Input & battery information	
	Indicate the input voltage, input frequency and battery voltage. *Vac: AC voltage, Vdc: DC voltage, Hz: frequency*

5.3 Audible Alarm Indicators

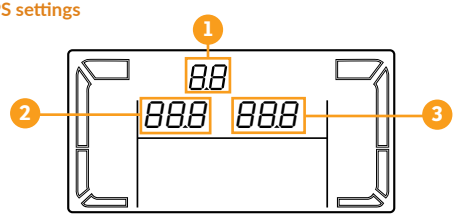
Mode	Alarm
Battery Mode	Sounding every 5 seconds
Low Battery	Sounding every 2 seconds
Overload	Sounding every second
Fault	Continuously sounding
Bypass Mode	Sounding every 10 seconds

5.4 LCD display wordings index

Abbreviation	Display content	Meaning
ENA		Enable
DIS		Disable
ESC		Escape
HLS		High loss
LLS		Low loss
BAT		Battery
BAH		Battery AH
CHA		Charger current
CBV		Charger boost voltage
CFV		Charger float voltage
EPO		EPO
AO		Active open
AC		Active close
OIT		Output isolation transformer
EAT		Estimated autonomy time
RAT		Running autonomy time
CF		Converter

ON		ON
SD		Shutdown
OI		Over input current
TP		Temperature
CH		Charger
FU		Bypass frequency unstable
BR		Battery Replacement
EE		EEPROM error
OK		OK
BL		Battery Low
OL		Over Load
NC		Battery No Connect
OC		Over Charge
SF		Site wiring fault
BF		Battery Fault
BV		Bypass Out Range

5.5 UPS settings

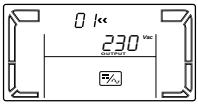
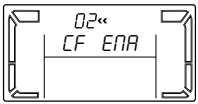


NOTE!

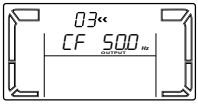
Most parameters can be set only in bypass/standby mode; please set the UPS to bypass/standby mode (see section 5.1) and then change parameters.

There are two parameters to set up the UPS.

- **Parameter 1:** *For program alternatives. Refer to the table below.*
- **Parameter 2&3:** *The settings options or values for each program.*

Interface	Settings
***01:** Output voltage settings*	
	**Parameter 2:** Output voltage: **200:** presents output voltage is 200Vac **208:** present output voltage is 208Vac **220:** present output voltage is 220Vac **230:** present output voltage is 230Vac **240:** present output voltage is 240Vac ***NOTE:** Derate capacity to 80% when the output voltage is adjusted to 200VAC/208VAC.*
***02:** Frequency Converter enable/disable*	
	**Parameter 2:** Enable or disable converter mode. You may choose the following two options: **CF ENA:** converter mode enable **CF DIS:** converter mode disable (Default) ***NOTE:** Derate capacity to 80% when Frequency Converter mode is enabled.*

***03:** Output frequency settings*



Parameter 2: You may set the initial frequency on battery mode:
BAT 50: presents output frequency of 50Hz
BAT 60: presents output frequency of 60Hz

If converter mode is enabled, you may choose the following output frequency:
CF 50: present output frequency is 50Hz
CF 60: present output frequency is 60Hz

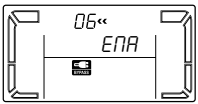
***04:** ECO enable/disable*

Parameter 2: Enable or disable ECO function. You may choose the following two options:
ENA: ECO mode enable
DIS: ECO mode disable (Default)

***05:** ECO voltage range setting*

Parameter 2: Set the acceptable high voltage point and low voltage point for ECO mode by pressing Down key or Up key.
HLS: High loss voltage in ECO mode in parameter 2.
The setting range in parameter 3 is from +7V to +24V of the nominal voltage. (Default: +12V)
LLS: Low loss voltage in ECO mode in parameter 2.
The setting range in parameter 3 is from -7V to -24V of the nominal voltage.
(Default: -12V)

***06:** Bypass enable/disable when UPS is off*



Parameter 2: Enable or disable Bypass function. You may choose the following two options:
ENA: Bypass enable
DIS: Bypass disable (Default)

***07:** Bypass voltage range setting*

Parameter 2: Set the acceptable high voltage point and acceptable low voltage point for Bypass mode by pressing the Down key or Up key.

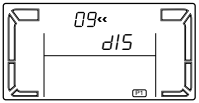
HLS: Bypass high voltage point
230-264: setting the high voltage point in parameter 3 from 230Vac to 264Vac. (Default: 264Vac)
LLS: Bypass low voltage point
170-220: setting the low voltage point in parameter 3 from 170Vac to 220Vac. (Default: 170Vac)

***08:** Bypass frequency range setting*

Parameter 2: Set the acceptable high frequency point and acceptable low frequency point for Bypass mode by pressing the Down key or Up key.

HLS: Bypass high frequency point
51-55Hz: setting the frequency high loss point from 51Hz to 55HZ(Default: 53.0Hz).
LLS: Bypass low Frequency point
45-49Hz: setting the frequency low loss point from 45Hz to 49HZ(Default: 47.0Hz)

***09:** Programmable outlets enable/disable*



Parameter 2: Enable or disable the programmable outlets function.
You may choose the following two options:
ENA: Programmable outlets enable
DIS: Programmable outlets disable (Default)

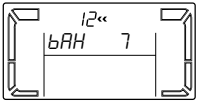
***10:** Programmable outlets setting*

Parameter 2: Set up backup time limits for programmable outlets.
0-999: setting the backup time limits in minutes from 0-999 for programmable outlets which connect to non-critical devices on battery mode. (Default: 999).

***11:** Autonomy limitation setting*

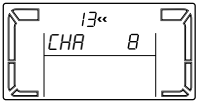
Parameter 2: Set up backup time on battery mode for general outlets.
0-999: setting the backup time in minutes from 0-999 for general outlets on batt. mode.
DIS: Disable the autonomy limitation and the backup time will depend on battery capacity. (Default)
***NOTE:** When setting as "0", the backup time will be only 10 seconds.*

***12:** Battery total AH setting*



Parameter 2: Set up the battery total AH of the UPS.
7-999: setting the battery total capacity from 7-999 in AH. Please set the correct battery total capacity if external battery bank is connected.
EXAMPLE: if you use Balder 1500 together with one battery cabinet with 6 pcs of HR09122F batteries (two strings of 3 batteries), total battery AH setting will be: 9AH (UPS battery string capacity) + 2xHR09122F (2 strings of HR09122F batteries inside battery cabinet) = 23AH

***13:** Maximum charger current setting*

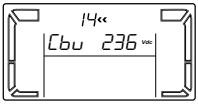


If you use external battery pack please set the appropriate charging current based on battery capacity used. Please use the following table as reference:

Battery capacity(AH)	Total charging current (A)
7~20	2
20~40	4
40~60	6
60~80	8
80~100	10
100~150	12

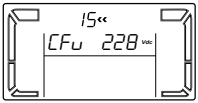
NOTE: If you connect Battery Pack 2U for Balder 1500 to Balder 1500 you should set maximum charger current to 4A.
If you connect Battery Pack 2U for Balder 3000 to Balder 3000 you should set maximum charger current to 4A.

***14:** Charger Boost voltage setting*



Parameter 2: Set up the charger boost voltage.
2.25-2.40: setting the charger boost voltage from 2.25 V/cell to 2.40V/cell. (Default: 2.36V/cell)

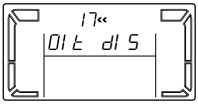
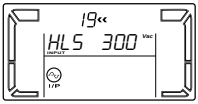
***15:** Charger Float voltage setting*



Parameter 2: Set up the charger float voltage.
2.20-2.33: setting the charger float voltage from 2.20 V/cell to 2.33V/cell. (Default: 2.28V/cell)
NOTE: Parameters 14 and 15 should be set based on batteries specifications.

***16:** EPO logic setting*

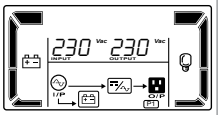
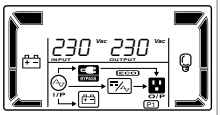
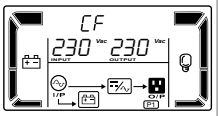
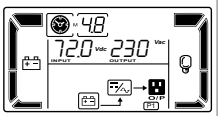
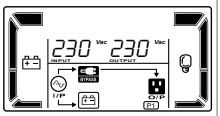
Parameter 2: Set up the EPO function control logic.
AO: Active Open (Default). When AO is selected as EPO logic, it will activate EPO function with Pin 1 and Pin 2 in open status.
AC: Active Close. When AC is selected as EPO logic, it will activate EPO function with Pin 1 and Pin 2 in close status.

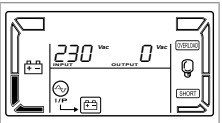
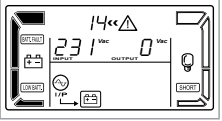
***17:** External output isolation transformer connection*	
	**Parameter 2:** Allow or disallow external output isolation transformer connection. **ENA:** If selected, it's allowed to connect to an external output isolation transformer. **DIS:** If selected, it's not allowed to connect to external output isolation transformer. (Default)
***18:** Display setting for autonomy time*	
	**Parameter 2:** Set up the display setting for autonomy time **EAT:** If EAT is selected, it will display the remaining autonomy time. (Default) **RAT:** If RAT is selected, it will show accumulated autonomy time so far.
***19:** Acceptable input voltage range setting*	
	**Parameter 2:** Set the acceptable high voltage point and acceptable low voltage point for input voltage range by pressing the Down key or Up key. **HLS:** Input high voltage point 280/290/300: setting the high voltage point in parameter 2. (Default: 300Vac) **LLS:** Bypass low voltage point 110/120/130/140/150/160: setting the low voltage point in parameter 2. (Default: 110Vac)
***00:** Exit setting*	
	Exit the setting mode.

English

Română

5.6 Operating mode description

Operating mode	Description	LCD display
Online mode	When the input voltage is within acceptable range, UPS will provide pure and stable AC power to output. The UPS will also charge the battery in online mode.	
ECO mode	Energy saving mode: When the input voltage is within voltage regulation range, UPS will bypass voltage to output for energy saving. The UPS will also charge the battery at ECO mode.	
Frequency Converter mode	When input frequency is within 40 Hz to 70 Hz, the UPS can be set at a constant output frequency, 50 Hz or 60 Hz. The UPS will still charge battery under this mode. The capacity of the UPS should be derated to 80% when Frequency Converter mode is enabled.	
Battery mode	When the input voltage is beyond the acceptable range or power failure, the UPS will backup power from battery and alarm is sounding every 5 seconds.	
Bypass mode	When input voltage is within acceptable range but UPS is overload, UPS will enter bypass mode or bypass mode can be set by front panel. Alarm is sounding every 10 seconds.	

Standby mode	UPS is powered off and there is no output supply power, but the UPS still can charge batteries.	
Fault mode	When a fault has occurred, the ERROR icon and the fault code will be displayed.	

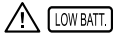
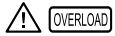
5.7 Faults Reference Code

Fault event	Fault code	Icon
Bus start fail	01	-
Bus over	02	-
Bus under	03	-
Inverter soft start fail	11	-
Inverter voltage high	12	-
Inverter voltage Low	13	-
Inverter output short	14	SHORT
Battery voltage too high	27	BATT. FAULT
Battery voltage too low	28	BATT. FAULT
Charger output short	2A	-
Over temperature	41	-
Overload	43	OVERLOAD
Charger failure	45	-
Over input current	49	-

English

Română

5.8 Warning indicator

Warning	Icon (flashing)	Code	Alarm
Low Battery			Sounding every 2 seconds
Overload			Sounding every second
Over input current		OI	Sounding 2 beep every 10 seconds
Battery is not connected			Sounding every 2 seconds
Over Charge			Sounding every 2 seconds
Site wiring fault			Sounding every 2 seconds
EPO enable		EP	Sounding every 2 seconds
Over temperature		TP	Sounding every 2 seconds
Charger failure		CH	Sounding every 2 seconds
Battery fault			Sounding every 2 seconds
Out of bypass voltage range			Sounding every 2 seconds
Bypass frequency unstable		FU	Sounding every 2 seconds
Battery replacement		br	Sounding every 2 seconds
EEPROM error		EE	Sounding every 2 seconds

NOTE!

"Site Wiring Fault" function can be enabled/disabled via software. Please check software manual for the details.

6 Replacing the battery

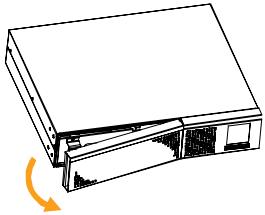
NOTE!

This UPS is equipped with internal batteries. When your battery lifetime is over you can replace them without shutting down the UPS or connected loads thanks to the hot-swappable battery design. Replacement is a safe procedure, isolated from electrical hazards.

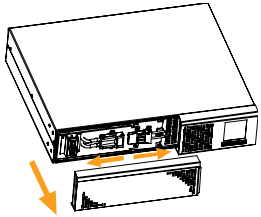
⚠ CAUTION

Consider all warnings, cautions, and notes before replacing the batteries.

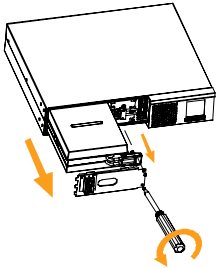
Step 1. Remove front panel.



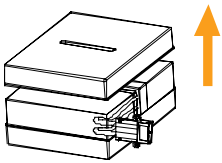
Step 2. Disconnect battery wires.



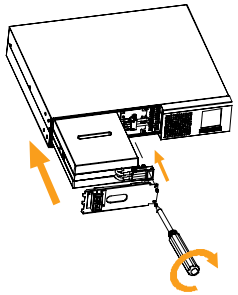
Step 3. Pull out the battery box by removing the two screws on the front panel.



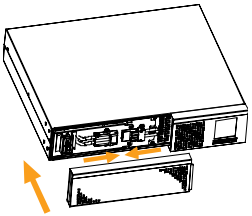
Step 4. Remove the top cover of battery box and replace the inside batteries following the **battery kit assembly procedure**.



Step 5. After replacing the batteries, put the battery box back to original location and screw it tightly.

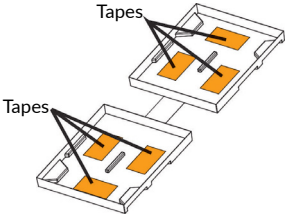


Step 6. Re-connect the battery wires and put the front panel back to the unit.

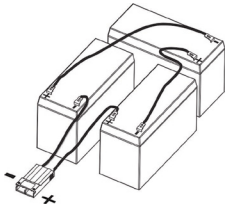


Balder 1000 / 1500

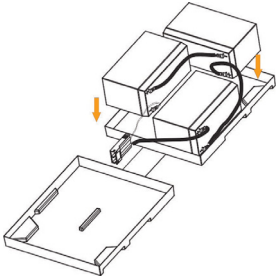
Step 1. Remove adhesive tapes.



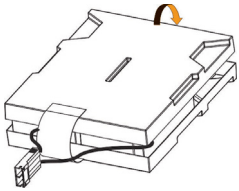
Step 2. Connect all battery terminals by following below chart.



Step 3. Put assembled battery packs on one side of plastic shells.

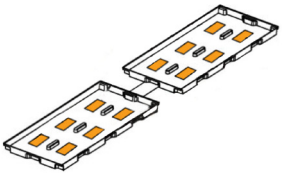


Step 4. Cover the other side of plastic shell as in the below picture.

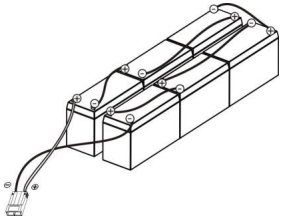


Balder 2000 / 3000

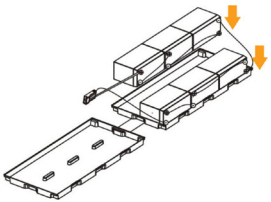
Step 1. Remove adhesive tapes.



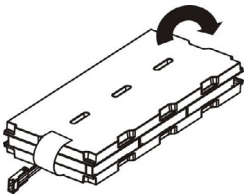
Step 2. Connect all battery terminals by following below chart.



Step 3. Put assembled battery packs on one side of plastic shells.



Step 4. Cover the other side of plastic shell as in the below picture.



7 Troubleshooting

Problem	Possible cause	Solutions
No indication and alarm even though the main is normal.	The AC input power is not connected well.	Check if input power cord is firmly connected to the mains.
	The AC input is connected to the UPS output.	Plug the AC input power cord to the AC input correctly.
The icon ⚠ and the warning code EP are flashing on LCD display and alarm is sounding every second.	EPO function is activated.	Set the circuit in closed position to disable EPO function.
The icon ⚠ and  the warning code SF are flashing on LCD display. Alarm is sounding every 2 seconds.	Line and neutral conductors of UPS input are reversed.	Rotate mains power socket by 180˚ and then connect to UPS system.
The icon ⚠ and  and warning code NC are flashing on LCD display. Alarm is sounding every 2 seconds.	The external or internal battery is incorrectly connected.	Check if all batteries are connected well.
Fault code is shown as 27 and the icon BATT. FAULT is lighting on LCD display and alarm is continuously sounding.	Battery voltage is too high or the charger is fault.	Contact service unit.
Fault code is shown as 28 and the icon BATT. FAULT is lighting on LCD display and alarm is continuously sounding.	Battery voltage is too low or the charger is fault.	Contact service unit.

The icon ⚠ and OVERLOAD are flashing on LCD display. Alarm is sounding every second.	UPS is overloaded.	Remove excess loads from UPS output.
	UPS is overloaded. Devices connected to the UPS are fed directly by the electrical network via the Bypass.	
	After repetitive overloads, the UPS is locked in the Bypass mode. Connected devices are fed directly by the mains.	Remove excess loads from UPS output first. Then shut down the UPS and restart it.
Fault code is shown as 49 on LCD display and alarm is continuously sounding.	UPS is over input current.	Remove excess loads from UPS output.
Fault code is shown as 43 and the icon OVERLOAD is lighting on LCD display. Alarm is continuously sounding.	The UPS shut down automatically because of overload at the UPS output.	Remove excess loads from UPS output and restart it.
Fault code is shown as 14 and the icon SHORT is lighting on LCD display and alarm is continuously sounding.	The UPS shut down automatically because short circuit occurs on the UPS output.	Check output wiring and if connected devices are in short circuit status.

Fault code is shown as 01, 02, 03, 11, 12, 13 and 41 on LCD display and alarm is continuously sounding.	A UPS internal fault has occurred. There are two possible results: 1. The load is still supplied, but directly from AC power via bypass. 2. The load is no longer supplied by power.	Contact service unit.
Battery backup time is shorter than nominal value.	Batteries are not fully charged.	Charge the batteries for at least 5 hours and then check capacity. If the problem still persists, consult your dealer.
	Batteries defect.	Contact your dealer to replace the battery or replace them by yourself.
Fault code is shown as 2A on LCD display and alarm is continuously sounding.	The short circuit occurs on the charger output.	Check if battery wiring of connected external pack is in short circuit status.
Fault code is shown as 45 on LCD display. At the same time, alarm is continuously sounding.	The charger does not have output and battery voltage is less than 10V/PC.	Contact service unit.

Disposal of Old Electrical & Electronic Equipment

(Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste.

Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment.

By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

The recycling of materials will help to conserve natural resources.

Multumim pentru ca ati ales produsele noastre!

Va rugam cititi cu atentie manualul de utilizare inainte de a pune in functiune acest produs.

nJoy este un brand de solutii UPS dedicate protectiei si rezervei de energie din diferite medii de utilizare, de la rezidential la industrial

UPS-ul va protejeaza echipamentele electronice de daune fizice si ofera o baterie de rezerva pentru a preveni pierderile de date in cazul intreruperilor accidentale ale energiei electrice.

Din seria **Balder** fac parte urmatoarele modele:

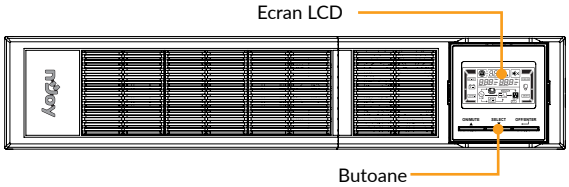
- 1000 VA **Balder 1000**
- 1500 VA **Balder 1500**
- 2000 VA **Balder 2000**
- 3000 VA **Balder 3000**

1 Continutul pachetului

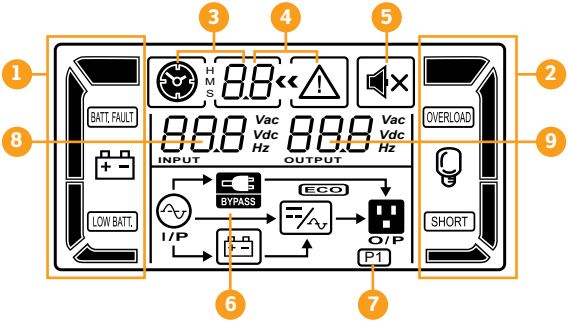
- ✓ UPS
- ✓ Cablu de alimentare
- ✓ Cablu USB
- ✓ Suporti pentru montarea in rack
- ✓ Suport pentru montarea pe verticala
- ✓ Suruburi
- ✓ Cablu USB (doar pentru modelele cu port de comunicare HID USB)

2 Prezentarea produsului

Vedere din fata 1000/1500/2000/3000



Ecran LCD



1. Informatii si nivel baterie
2. Informatii si nivel incarcare
3. Informatii timp de backup
4. Erori si configuratii
5. Modul "Mute"
6. Informatii mod operare
7. Informatii prize programabile
8. Informatii tensiune de intrare si stare baterie
9. Informatii tensiune de iesire

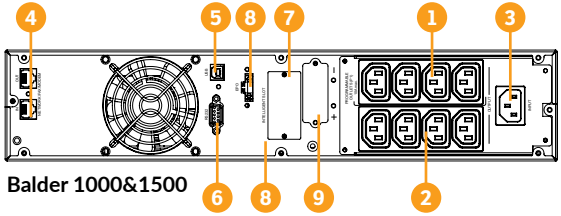
NOTA!

Inainte de instalare inspectati unitatea. Fiti siguri ca nimic din interiorul pachetului nu este stricat. Tineti pachetul original intr-un loc sigur pentru o utilizare ulterioara.

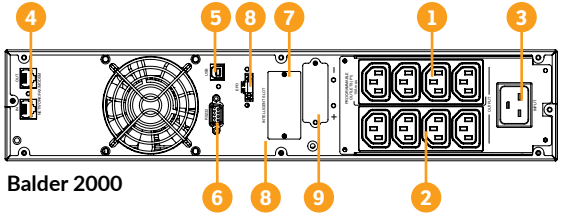
NOTA!

Portul HID USB este disponibil doar pentru modelele Balder 1000, Balder 1500, Balder 2000 and Balder 3000.

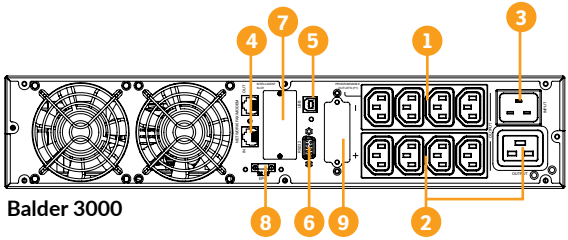
Vedere din spate



Balder 1000&1500



Balder 2000



Balder 3000

English

Română

1. Prize de iesire programabile destinate echipamentelor non-critice (max 10A)
2. Prize de iesire programabile destinate echipamentelor critice (max 10A)
3. Alimentare AC
4. Priza protectie supratensiune pentru Retea / Fax / Modem
5. Port comunicare USB
6. Port comunicare RS-232
7. Slot pentru cardul SNMP
8. Conector pentru functia EPO (oprire de urgenta)
9. Conector pentru cabinetul de baterii

3 Avertizari de siguranta

Va rugam sa respectati toate avertismentele si instructiunile de utilizare din acest manual. Pastrati acest manual in mod corespunzator si cititi cu atentie urmatoarele instructiuni inainte de instalarea aparatului. Nu folositi aceasta unitate inainte de a citi toate instructiunile de siguranta si de utilizare cu atentie:

Transport

- Va rugam sa transportati sistemul UPS numai in ambalajul original pentru a-l proteja impotriva socurilor.

Pregatire

- Condensul poate aparea daca sistemul UPS este mutat dintr-un mediu rece in unul cald. Sistemul UPS trebuie sa fie uscat inainte de a fi instalat. Va rugam sa alocati cel putin doua ore pentru ca sistemul UPS sa se aclimatizeze cu mediul unde doriti sa il instalati.
- Nu instalati sistemul UPS langa apa sau in medii umede.
- Nu instalati sistemul UPS acolo unde ar fi expus la lumina directa a soarelui sau in apropierea surselor de incalzire.
- Nu blocati orificiile de ventilatie ale carcasei UPS-ului.

Instalare

- Nu conectati aparate sau dispozitive care ar suprasolicita sistemul UPS (de exemplu: imprimantele laser) la mufele de iesire UPS.
- Instalati cablurile in asa fel incat nimeni sa nu calce pe ele.
- Nu conectati aparate de uz casnic, cum ar fi uscatoare de par la prizele de iesire UPS.

- UPS-ul poate fi folosit de orice persoana, fara a necesita nicio experienta anterioara.
- Conectati sistemul UPS numai la o priza cu impamantare, care trebuie sa fie usor accesibila si aproape de sistemul UPS.
- Va rugam sa folositi numai cabluri de alimentare testate VDE si cu marcaj CE (de exemplu: cablul de alimentare de la computer) pentru a conecta sistemul UPS la reteaua electrica a cladirii.
- Va rugam sa folositi numai cabluri de alimentare testate VDE si cu marcaj CE pentru a conecta sarcinile la sistemul UPS.
- La instalarea echipamentului, trebuie sa va asigurati ca totalul curentului de scurgere al UPS si al dispozitivelor conectate nu depaseste 3,5 mA.

Operare

- Nu deconectati cablul de alimentare de la sistemul UPS sau de la priza cladirii in timpul utilizarii, deoarece acest lucru ar anula impamantarea de protectie a sistemului UPS si a tuturor sarcinilor conectate.
- Sistemul UPS are propria sursa de curent intern (baterii). Prizele de iesire sau terminale de iesire pe categorii pot fi incarcate electric, chiar daca sistemul UPS nu este conectat la sistemul electric al cladirii.
- Pentru a deconecta complet sistemul UPS, apasati intai butonul OFF/Enter pentru a deconecta sursa de alimentare.
- Nu lasati sa ajunga in interiorul unitatii UPS niciun obiect strain sau lichide.

Intretinere, Service si Defecte

- Sistemul UPS functioneaza cu tensiuni periculoase. Reparatiile pot fi efectuate numai de catre personalul de intretinere calificat.
- Atentie - risc de soc electric. Chiar si dupa ce aparatul este deconectat de la reteaua electrica, componentele din interiorul sistemului UPS sunt inca conectate la baterie si sunt incarcate electric si periculoase.
- Inainte de a efectua orice fel de service si / sau intretinere, deconectati bateriile si verificati sa nu existe curent sau tensiune periculoasa in terminalele condensatorului de mare capacitate, cum

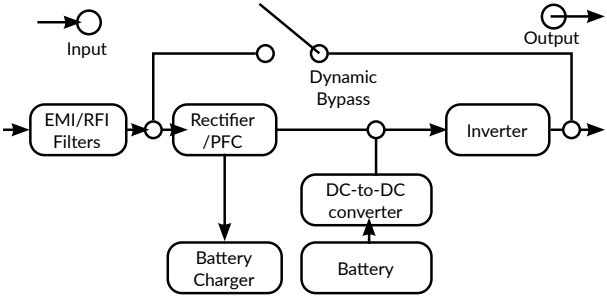
ar fi condensatorul BUS.

- Numai persoanele care sunt familiarizate in mod adecvat cu baterii si cu masurile de precautie necesare pot inlocui bateriile si supraveghea operatiunile. Persoane neautorizate trebuie sa fie tinute departe de baterii sistemului UPS.
- Atentie - risc de soc electric. Circuitul bateriei nu este izolat de tensiunea de intrare. Tensiuni periculoase pot aparea intre bornele bateriei si pamant. Inainte de a atinge, va rugam sa verificati ca nu exista tensiune!
- Bateriile pot provoca soc electric. Va rugam sa luati masurile de precautie specificate mai jos, precum si orice alte masuri necesare atunci cand se lucreaza cu bateriile sistemului: dati-va jos ceasurile de mana, inelele si alte obiecte metalice si folositi doar instrumente cu manere izolate.
- La schimbarea bateriilor, instalati acelasi numar si acelasi tip de baterii.
- Nu incercati sa distrugeti bateriile prin arderea lor. Acest lucru poate cauza explozia bateriilor.
- Nu deschideti sau distrugeti bateriile. Scurgerea de electrolit poate provoca leziuni la nivelul pielii si ochilor, totodata acesta este foarte toxic.
- Va rugam sa inlocuiti siguranta numai cu acelasi tip de siguranta si amperaj pentru a evita pericolele de incendiu.
- Nu dezasamblati sistemul UPS.
- **ATENTIE:** Acesta este un produs din categoria C2. Intr-un mediu rezidential, poate cauza interferente radio, caz in care utilizatorul este rugat sa ia masuri suplimentare!

4 Instalare

4.1 Principiu de functionare

Principiul de functionare a acestui UPS este urmatorul:



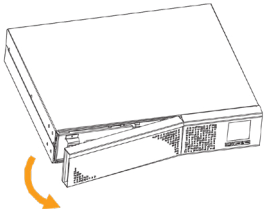
Sursa neintreruptibila de tensiune are in componenta sa: intrarea de la retea, filtrele pentru EMI / RFI (interferente electromagnetice / interferente radio-frecventa), redresorul si PFC (corectia factorului de putere), incarcatorul bateriilor, bateriile, convertorul DC-DC (tensiune continua la tensiune continua), invertorul, bypassul dinamic si iesirea sursei neintreruptibile de tensiune.

UPS-ul va poate proteja echipamentul de toate problemele legate de tensiunea electrica cum ar fi: suprasarcini, fluctuatii de tensiune, caderi de tensiune si zgomotul de pe retea. Cand curentul este prezent la reteaua de alimentare si comutatorul (ON/Mute) este pornit (ON) UPS-ul isi incarca bateria si asigura echipamentului energia necesara functionarii direct de la retea.

4.2 Conectarea echipamentelor si prima folosire

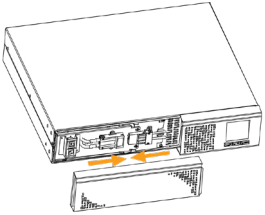
UPS-ul este simplu de folosit si de instalat. Urmati pasii de mai jos inainte de a conecta echipamentul la UPS:

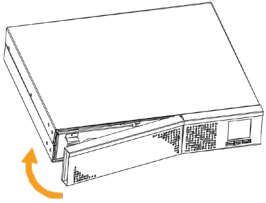
Pasul 1. Conectati bateriile: Pentru masuri de siguranta, UPS-ul este livrat fara sa aiba conectate cablurile bateriei. Pentru a reconecta aceste cabluri va rugam sa urmati pasi de mai jos:



I. Detasati panoul frontal.

II. Conectati alimentarea si reconectati cablurile bateriei.

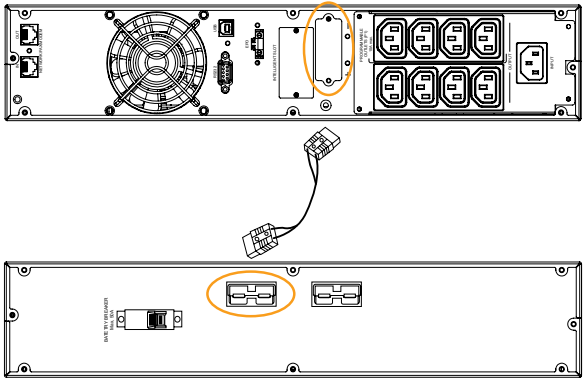




III. Puneti panoul frontal la loc.

Pasul 2. Conectare cabinet de baterii extern: Atunci cand conectati UPS-ul la un cabinet de baterii extern asigurati-va ca polaritatea este corecta (polul pozitiv al cabinetului de baterii la polul pozitiv al conectarii la UPS si polul negativ al cabinetului de baterii la polul negativ al conectarii la UPS). Polaritatea inversata va aduce daune UPS-ului.

Folositi doar cabinete de baterii nJoy compatibile cu seria Balder.
Va rugam sa cititi manualul de utilizare al UPS-ului si al cabinetelor de baterii si sa setati valoarea capacitatii totale a bateriilor in Ah si curentul de incarcare in consecinta. Folosirea altor cabinete de baterii poate duce



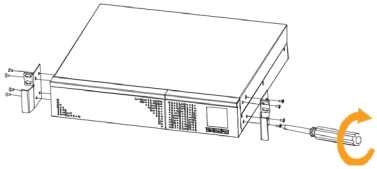
NOTA!

Cabinetele de baterii sunt compatibile cu urmatoarele modele:

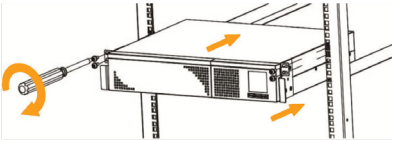
- ***CA0312GX-AZ (36Vdc):*** *UPS Balder 1000 / 1500*
- ***CA0712GX-AZ (72Vdc):*** *UPS Balder 2000 / 3000*

la deteriorarea UPS-ului si la pierderea garantiei.
Pasul 3. Montarea UPS-ului: Acest model de UPS poate sa fie pozitionat fie vertical fie orizontal - montat intr-o carcasa rack de 19”. Va rugam sa alegeti pozitia in care doriti sa pozitionati UPS.

A. Montarea in Rack:

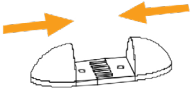


Intai fixati suportii rack-ului pe UPS.

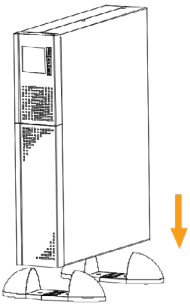


Apoi fixati UPS-ul pe rack cu ajutorul suruburilor.

B. Montarea verticala



Fixati suportii pentru a sustine UPS-ul.



Apoi fixati UPS-ul.

Pasul 4. Conexiune de intrare UPS: Conectati UPS-ul la priza tripolara, impamantata. Nu utilizati prelungitoare.

Pasul 5. Conexiune de iesire UPS: Pentru iesirile de tip priza exista doua variante: prize programabile si prize generale. Conectati dispozitivele non-critice la prizele programabile si dispozitivele critice la prizele generale. In timpul unei caderi de curent, puteti extinde timpul de backup la dispozitivele critice, setand un timp mai scurt de backup pentru dispozitivele non-critice.

⚠ ATENTIE

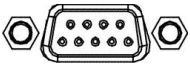
NU conectati **imprimante laser** la nici una din prizele UPS-ului.

NU conectati alte **ACCESORII CU PROTECTIE** la niciuna din prize.

Pasul 6. Conexiunea de comunicare: Pentru a permite oprirea/pornirea nesupravegheata a UPS-ului si monitorizarea starii acestuia, conectati un capat al cablului de comunicare la portul USB/RS-232 si celalalt la portul de comunicare al PC-ului. Cu software-ul de monitorizare instalat, puteti programa oprirea si pornirea UPS-ului si sa monitorizati starea UPS prin intermediul PC-ului. UPS-ul este echipat cu un slot inteligent, perfect pentru card SNMP sau AS400. Cand instalati cardul SNMP sau AS400 in UPS, veti obtine optiuni de comunicare si monitorizare avansata.

Port de comunicare

Port USB



Port RS-232

Slot inteligent

NOTA!

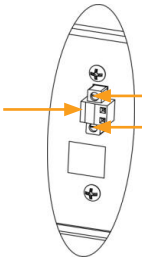
Porturile USB si RS-232 nu pot functiona in acelasi timp.

Pasul 7. Conexiunea in retea: Conectati o linie de modem/telefon/fax in priza protejata IN ce se afla in spatele UPS-ului. Conectati in priza OUT echipamentul cu o alta linie de modem/telefon/fax.

Port Retea/Fax/Telefon:

Pasul 8. Activati si dezactivati functia EPO: Tineti pin-ul 1 si 2 inchisi pentru modul de operare normal al UPS-ului. Pentru a activa functia EPO taiati cablul dintre pin 1 si pin 2.

Pentru modul de operare normala conectorul este in stare inchisa.



Pentru a activa functia EPO inlaturati cele doua suruburi.

Pasul 9. Pornirea UPS-ului: Apasati si tineti apasat butonul ON / Mute pentru cel putin 2 secunde pentru a porni UPS-ul.

NOTA!

Bateria se incarca complet in decursul primelor cinci ore de functionare normala. In aceasta perioada de incarcare initiala bateria nu va functiona la capacitatea maxima.

Pasul 10. Instaleaza programul software: Instalati programul de management: pentru o configurare completa a UPS-ului este recomandata instalarea programului de management de la urmatorul link *https://www.power-software-download.com/viewpower.html*

5 Operatii

5.1 Butoane

Butonul ON/Mute

- Pornirea UPS-ului: Apasati si tineti apasat butonul ON / Mute pentru cel putin 2 secunde pentru a porni UPS-ul.
- Oprirea alarmei: Cand UPS-ul este in modul de baterie, tineti apasat acest buton timp de cel putin 5 secunde pentru a activa sau dezactiva sistemul de alarma. Nu se aplica la situatiile in care apar avertismente sau erori.
- Tasta sus: Apasati acest buton pentru a afisa selectia anterioara in modul de setare UPS.
- Comutarea la modul UPS de auto-testare: Apasati si tineti apasat butonul ON / Mute timp de 5 secunde pentru a accesa modul UPS de auto-testare in timp ce sunteti in modul AC, ECO sau convertor.

Butonul OFF/Enter

- Oprirea UPS-ului: Apasati si tineti apasat acest buton timp de cel putin doua secunde pentru a opri UPS-ul. UPS-ul va fi in modul de asteptare (standby) in caz de prezenta normala a tensiunii sau va fi transferat in modul bypass in cazul in care acest modul este activat.
- Tasta de confirmare a selectiei: Apasati acest buton pentru a confirma selectia in modul de setare UPS.

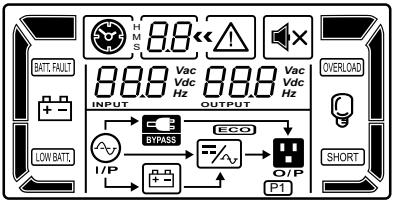
Butonul de Selectare

- Comutare mesaj LCD: Apasati acest buton pentru a schimba mesajul de pe LCD in informatii pentru tensiune de intrare, frecventa intrare, tensiunea bateriei, tensiunea de iesire si frecventa de iesire. Acesta va reveni la afisajul implicit dupa o pauza de 10 secunde.
- Modul de setare: Apasati si tineti apasat acest buton timp de 5 secunde pentru a intra in modul de setare al UPS-ului atunci cand UPS-ul este in modul de bypass sau standby.
- Tasta jos: Apasati acest buton pentru a afisa selectia urmatoare in modul de setare al UPS-ului.

ON/Mute + Butonul de Selectare

- Comutarea la modul de bypass: Atunci cand tensiunea la retea este normala, apasati butoanele ON / Mute si Select simultan pentru 5 secunde. In acest fel, UPS-ul va intra in modul de bypass. Aceasta actiune va fi ineficienta atunci cand tensiunea de intrare este in afara intervalului acceptabil.

5.2 Indicatori ecran LCD



Afisaj	Functie
Informatii despre timpul de back-up	
H M S 8.8	*Indica estimativ timpul de back-up ramas. H: ore, M: minute, S: secunde.*
Informatii despre configurare si erori	
8.8«	Indica metodele de configurare detaliate in sectiunea 5.5.
8.8«⚠	Indica codurile de eroare detaliate in sectiunea 5.7 si 5.8.
Functionare in modul Mute	
🔇	Indica alarma oprita.

Informatii despre tensiunea de iesire, nivel baterie si nivel incarcare	
	Indica voltajul la intrare, frecventa la intrare, curentul electric la intrare, voltajul bateriei, curentul electric al bateriei, nivel baterie, temperatura ambientala, voltajul la iesire, frecventa la iesire, incarcare curent electric si nivel de incarcare in procente. *Vac: AC voltage, Vdc: DC voltage, Hz: frecventa*
Informatii incarcare	
	Indica nivelul de incarcare astfel: 0-24%, 25-49%, 50-74% si 75-100%.
	Indica supraincarcare.
	Indica scurt-circuit.
Informatii despre prizele programabile	
	Indica faptul ca prizele programabile functioneaza.
Stare de functionare UPS	
	Indica UPS conectat la retea.
	Indica baterie functionala.
	Indica faptul ca circuitul bypass functioneaza.
	Indica faptul ca Modul ECO e activat.
	Indica faptul ca circuitul AC-DC functioneaza.

	Indica faptul ca circuitul invertorului functioneaza.
	Indica faptul ca este tensiune la iesire.
Battery information	
	Indica nivelul de incarcare astfel: 0-24%, 25-49%, 50-74%, si 75-100%.
	Indica eroare baterie.
	Indica baterie slaba.
Informatii despre tensiunea de intrare, nivel baterie si nivel incarcare	
	Indica tensiunea la intrare, frecventa si tensiunea bateriei. *Vac: AC voltage, Vdc: DC voltage, Hz: frecventa*

5.3 Indicatori sonori alarma

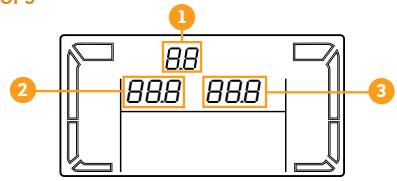
Mod	Alarma
Modul Baterie	Suna la fiecare 5 secunde
Baterie Slaba	Suna la fiecare 2 secunde
Supraincarcare	Suna la fiecare secunda
Eroare	Suna neintrerupt
Mod Bypass	Suna la fiecare 10 secunde

5.4 Index Afisaj LCD

Abreviere	Cod ecran	Semnificatie
ENA		Activat
DIS		Dezactivat
ESC		Renunta
HLS		Prag superior
LLS		Prag inferior
BAT		Baterie
BAH		Amperaj baterie
CHA		Curent de incarcare
CBV		Incarcare rapida
CFV		Tensiunea de mentinere a bateriilor
EPO		EPO
AO		Deschidere activa
AC		Inchidere activa
OIT		Transformator de izolare extern
EAT		Autonomie estimata
RAT		Autonomie acumulata
CF		Convertor

ON		Pornit
SD		Inchidere
OI		Supra-curent la intrare
TP		Temperatura
CH		Incarcator
FU		Frecventa de bypass instabila
BR		Inlocuieste bateriile
EE		Eroare EEPROM
OK		OK
BL		Baterie slaba
OL		Supra-incarcare
NC		Bateriile nu se conecteaza
OC		Supra-incarcare
SF		Eroare la cablurile de conectare
BF		Eroare baterie
BV		Bypass in afara ariei acceptate

5.5 Setari UPS

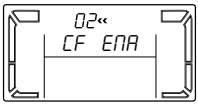


NOTA!

Majoritatea paremetrilor pot fi setati doar in mod standby sau bypass. Setati prima oara UPS-ul in mod standby sau bypass (vezi sectiunea 5.1) si apoi setati parametrii.

Exista doi parametrii de setari.

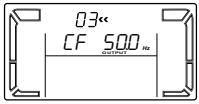
- **Parametrul 1:** *Pentru alternative de program. Consultati tabelul de mai jos.*
- **Parametrele 2 si 3:** *Pentru setarea informatiilor de afisaj.*

Interfata	Setari
***01:** Setari tensiune la iesire*	
	**Parametrul 2:** Tensiune la iesire **200:** tensiunea de iesire este 200Vac **208:** tensiunea de iesire este 208Vac **220:** tensiunea de iesire este 220Vac **230:** tensiunea de iesire este 230Vac **240:** tensiunea de iesire este 240Vac ***NOTA:** Capacitatea UPS-ului scade la 80% atunci cand tensiunea la iesire este ajustata la 200VAC/208VAC.*
***02:** Convertor de tensiune Activat/Dezactivat*	
	**Parametrul 2:** Activati sau dezactivati modul convertor. Puteti alege urmatoarele optiuni: **CF ENA:** Mod de conversie activat **CF DIS:** Mod de conversie dezactivat (Setare implicita) ***NOTA:** Capacitatea UPS-ului scade la 80% cand Modul convertor de tensiune este activat.*

English

Română

***03:** Setarea frecventei la iesire*



Parametrul 2: Setare frecventa iesire. Puteti seta frecventa initiala in modul baterie:
BAT 50: frecventa de iesire este 50Hz
BAT 60: frecventa de iesire esteHz

Daca modul de conversie este activat, atunci puteti selecta urmatoarele frecvente de iesire:
CF 50: frecventa de iesire este 50Hz
CF 60: frecventa de iesire este 60Hz

***04:** ECO Activat/Dezactivat*

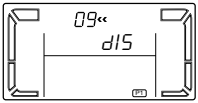
Parametrul 2: Activati sau dezactivati functia ECO. Puteti alege urmatoarele optiuni:
ENA: mod ECO activat
DIS: mod ECO dezactivat (Setare implicita)

***05:** Setarea plajei de tensiune ECO*

Parametrul 2: Stabiliti valoarea maxima, respectiv minima acceptata a tensiunii pentru modul ECO prin apasarea butoanelor Down si Up.
HLS: Pragul superior de tensiune in Modul ECO - parametrul 2.
Plaja de setari ale parametrului 3 este de la +7V la +24V fata de tensiunea nominala (implicit: +12V).
LLS: Pragul inferior de tensiune in Modul ECO - parametrul 2.
Plaja de setari ale parametrului 3 este de la -7V la -24V fata de tensiunea nominala (implicit: -12V).

***06:** Activare/dezactivare bypass cand UPS-ul este oprit*

Parametrul 2: Activeaza sau deactiveaza functia de bypass. Puteti alege una din urmatoarele optiuni:
ENA: Activare bypass
DIS: Dezactivare bypass (implicit)

07: Setarile plajei tensiunii de bypass	
	**Parametrul 2:** Stabiliti valoarea maxima, respectiv minima acceptata a tensiunii pentru modurile Bypass prin apasarea butoanelor Down si Up. **HLS:** Pragul superior de tensiune pentru Bypass. 230-264: setarea valorii de sus a pragului de tensiune este in parametrului 3 de la 230V la 246V (implicit: 264V). **LLS:** Pragul inferior de tensiune pentru Bypass. 170-220: setarea pragului inferior de tensiune este in parametrul 3 de la 170V la 220V (implicit: 170V)
08: Setarea plajei de frecventa in modul Bypass	
	**Parametrul 2:** Stabiliti valoarea maxima, respectiv, minima acceptata a frecventei pentru modul Bypass prin apasarea butoanelor Down si Up. **HLS:** Valoarea superioara a frecventei. 51-55Hz: setarea valorii pragului superior al frecventei de la 51 Hz la 55Hz (implicit 53 Hz). **LLS:** Valoarea inferioara a frecventei. 45-49Hz: setarea valorii pragului inferior al frecventei de la 45Hz la 49Hz (implicit: 47 Hz)
09: Activare/dezactivare prize de iesire programabile	
	**Parametru 2:** Activeaza sau dezactiveaza functia de prize de iesire programabile. **ENA:** Activarea prizelor programabile. **DIS:** Dezactivarea prizelor programabile (implicit).

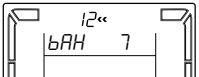
***10:** Setari pentru prizele programabile*

Parametrul 2: Seteaza limita timpului de backup al prizelor de iesire programabile.
0-999: puteti seta limita timpului de backup de la 0-999 pentru prizele programabile care sunt conectate la dispozitive necritice în mod baterie. (implicit: 999)

***11:** Setari privind limitele de autonomie*

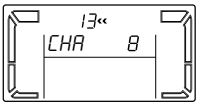
Parametrul 2: Stabileste timpul de backup pentru prizele generale in modul baterie.
0-999: stabilirea timpului de backup in minute de la 0 la 999 pentru prizele de iesire generale in modul baterie.
DIS: Dezactivarea limitarii autonomiei astfel ca timpul de backup va depinde de capacitatea bateriei (implicit).
NOTA: Pentru valoarea "0" a setarii, timpul de backup va fi de doar 10 secunde

***12:** Setarea valorii capacitatii totale a bateriei in Ah*



Parametrul 2: Stabileste capacitatea totala a bateriei UPS-ului in Ah.
7-999: setarea capacitatii totale a bateriei de la 7 la 999 Ah. Va rugam sa setati corect capacitatea totala a bateriilor daca conectati cabinete externe de baterii.
EXEMPLU: daca folositi UPS-ul Balder 1500 impreuna cu un cabinet cu 6 baterii de HR09122F (doua siruri de cate 3 baterii), capacitatea totala a bateriei este: 9Ah (capacitatea bateriei din UPS) + 2 x HR09122F (2 siruri de baterii de HR09122F din cabinet) = 23Ah

***13:** Setari pentru valoarea maxima a curentului de incarcare*

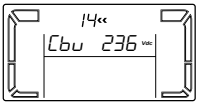


Daca folositi cabinete de baterii externe va rugam sa setati valoarea maxima a curentului de incarcare conform cu tabelul de mai jos:

Capacitate baterie (AH)	Curent de incarcare total (A)
7~20	2
20~40	4
40~60	6
60~80	8
80~100	10
100~150	12

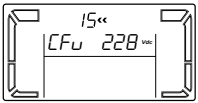
NOTA: *Daca la modelele Balder 1500 si 3000 este conectat cabinetul de baterii 2U atunci valoarea maxima a curentului de incarcare va fi 4A.*

14: *Setari tensiune de incarcare rapida a bateriei*



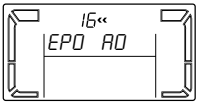
Parametrul 2: Seteaza valoarea tensiunii de incarcare.
2.25-2.40: seteaza valoarea tensiunii de incarcare intre 2.25 V/cell si 2.40V/cell. (Implicit: 2.36V/cell).

15: *Setari pentru valoarea voltajului de mentinere a bateriei*

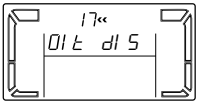
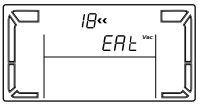
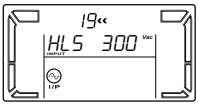
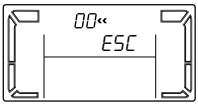


Parametrul 2: Seteaza valoarea voltajului de mentinere a bateriei.
2.20-2.33: seteaza valoarea de mentinere intre 2.20 V/cell si 2.33V/cell. (Implicit: 2.28V/cell).
NOTA: *Setati parametrii 14 si 15 in functie de specificatiile bateriilor utilizate.*

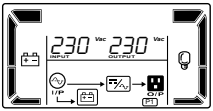
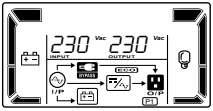
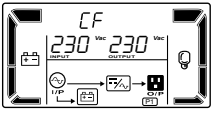
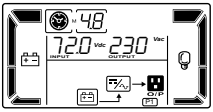
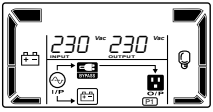
16: *Setari EPO*



Parametrul 2: Setarea controlului logic al functiei EPO.
AO: Activ deschis (implicit). Cand AO este selectat ca si functie logica EPO, va activa functia EPO aunci cand PIN1 si PIN2 sunt in status deschis.
AC: Activ inchis. Cand AO este selectat ca si functie logica EPO, va activa functia EPO aunci cand PIN1 si PIN2 sunt in status inchis.

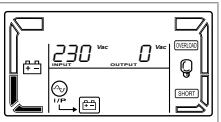
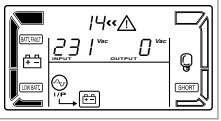
***17:** Conectarea unui transformator de izolare extern*	
	**Parametrul 2:** Permite sau nu conectarea unui transformator de izolare extern. **ENA:** Daca este selectata aceasta optiune, este permisa conectarea unui transformator de izolare extern. **DIS:** Daca este selectata aceasta optiune, nu este permisa conectarea unui transformator de izolare extern. (Implicit).
***18:** Setari ecran pentru autonomie*	
	**Parametrul 2:** Seteaza ecranul pentru a arata autonomia ramasa sau acumulata. **EAT:** Daca EAT e selectat ecranul va arata durata autonomiei ramase. (implicit) **RAT:** Daca RAT e selectat ecranul va arata durata autonomiei acumulate pana in acel moment.
***19:** Setari pentru plaja de tensiune de intrare acceptata*	
	**Parametrul 2:** Seteaza valoarea maxima ti minima a tensunii de intrare acceptate apasand butoanele Down si Up. **HLS:** valoare maxima de intrare. 280/290/300: setare valoare maxima a voltajului - parametrul 2. (Implicit: 300Vac) **LLS:** valoare minima bypass. 110/120/130/140/150/160: setare valoare minima a voltajului - parametrul 2. (Implicit: 110Vac).
***00:** Iesire din setari*	
	Iese din modul de setari.

5.6 Descrierea modului de operare

Mod de operare	Descriere	Afisaj ecran
Mod Online	Atunci cand tensiunea de intrare este in intervalul acceptabil, UPS-ul va asigura curentul pur si stabil catre iesire. UPS-ul va incarca in acelasi timp si bateria in modul online.	
Mod ECO	Mod economisire energie: Cand tensiunea de intrare este in parametrii acceptati, UPS-ul va face bypass la tensiunea de iesire pentru a economisi energie. UPS-ul va incarca bateria in acest mod.	
Mod Convertor Frecventa	Cand frecventa de intrare este intre 40Hz SI 70Hz, UPS-ul poate fi setat la o frecventa de iesire constanta de 50-60Hz. Bateria va fi incarcata in acest mod. Capacitatea UPS-ului va scadea la 80% cand acest mod este activat.	
Mod Baterie	Atunci cand tensiunea de intrare este inafara intervalului acceptabil sau cand a cazut curentul si alarma suna o data la fiecare 5 secunde, UPS-ul va functiona de pe baterie.	
Mod Bypass	Cand tensiunea de intrare este in limitele acceptate, dar UPS-ul este supraincarcat, va intra in Modul Bypass automat. Alarma va suna o data la fiecare 10 secunde.	

English

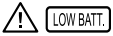
Română

Mod Standby	UPS-ul este oprit si nu exista tensiune de iesire, dar acumulatorii se incarca.	
Mod Eroare	UPS-ul trece in mod eroare, caz in care nu va furniza tensiune de iesire iar iconita de eroare va clipi pe ecran.	

5.7 Coduri de Eroare

Eroare	Cod	Icoana
Eroare pornire BUS	01	-
Supratensiune BUS	02	-
Subtensiune BUS	03	-
Eroare la pornirea invertorului	11	-
Supratensiune la invertor	12	-
Subtensiune la invertor	13	-
Scurt-circuit la iesire invertor	14	SHORT
Tensiunea la baterii prea mare	27	BATT. FAULT
Tensiunea la baterii prea mica	28	BATT. FAULT
Scurtcircuit la iesirea bateriei	2A	-
Supraincalzire	41	-
Suprasarcina	43	OVERLOAD
Eroare Baterie	45	-
Supra sarcina la iesire UPS	49	-

5.8 Indicatori de atentionare

Avertizare	Icoana (palpaie)	Cod	Alarma
Baterie descarcata			Suna la fiecare 2 secunde
Suprasarcina			Suna la fiecare secunda
Supra sarcina la iesire UPS		01	Suna de 2 ori la fiecare 10 secunde
Bateria nu este conectata			Suna la fiecare 2 secunde
Supraincarcare			Suna la fiecare 2 secunde
Conectare gresita			Suna la fiecare 2 secunde
Activare EPO		EP	Suna la fiecare 2 secunde
Supraincalzire		TP	Suna la fiecare 2 secunde
Eroare de incarcare		CH	Suna la fiecare 2 secunde
Eroare la baterie			Suna la fiecare 2 secunde
Iesire din intervalul de bypass			Suna la fiecare 2 secunde
Frecventa de bypass instabila		FU	Suna la fiecare 2 secunde
Inlocuire baterie		br	Suna la fiecare 2 secunde
Eroare EEPROM		EE	Suna la fiecare 2 secunde

NOTA!

Avertizarea "Conectare gresita" poate fi activata sau dezactivata prin software.

6 Inlocuirea bateriei

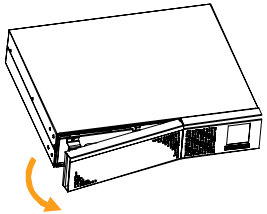
NOTA!

Acest UPS este echipat cu baterii interne si utilizatorul poate sa inlocuiasca bateriile fara sa opreasca UPSul sau sarcinile conectate. Inlocuirea bateriei este o procedura sigura, lipsita de pericole electrice.

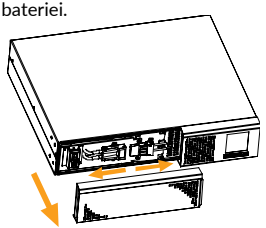
⚠ ATENTIE

Luati in considerare toate avertismentele, atentionarile si notele inainte de inlocuirea bateriilor.

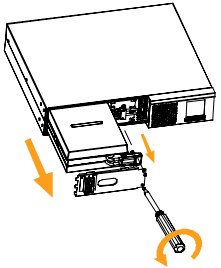
Pasul 1. Inlaturati panoul frontal.



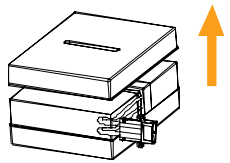
Pasul 2. Deconectati cablurile bateriei.



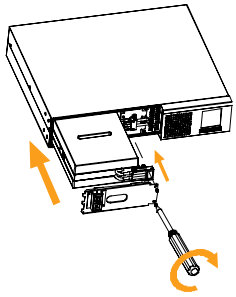
Pasul 3. Scoateti cutia bateriei prin eliminarea celor 2 suruburi de pe panoul frontal.



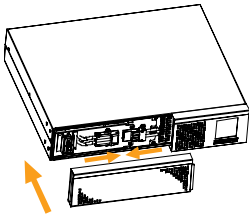
Pasul 4. Inlaturati capacul superior al cutiei bateriei si inlocuiti bateriile din interior urmand procedura de asamblare a kit-ului de baterii.



Pasul 5. Dupa ce ati inlocuit bateriile, puneti cutia bateriei inapoi in locatia originala si insurubati strans.



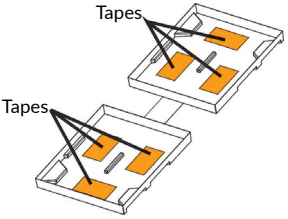
Pasul 6. Reconectati cablurile bateriei si puneti panoul frontal inapoi.



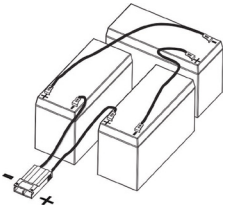
6.1 Procedura de asamblare a kit-ului de baterii

Balder 1000 / 1500

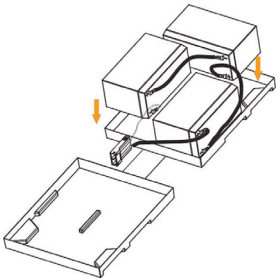
Pasul 1. Indepartati benzile adezive.



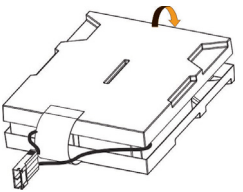
Pasul 2. Conectati toate bornele bateriei urmarind graficul de mai jos.



Pasul 3. Puneti acumulatorii pe o parte a capacului de plastic.

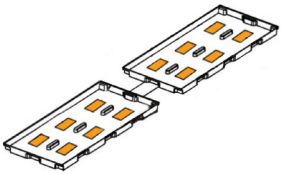


Pasul 4. Acoperiti cealalta parte a carcasei de plastic conform graficii de mai jos.

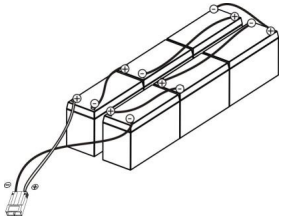


Balder 2000 / 3000

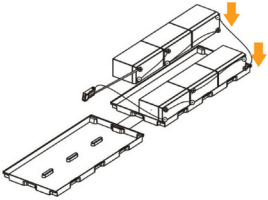
Pasul 1. Indepartati benzile adezive.



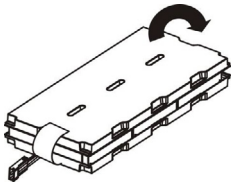
Pasul 2. Conectati toate bornele bateriei urmarind grafica de mai jos.



Pasul 3. Puneti acumulatorii pe o parte a capacului de plastic.



Pasul 4. Acoperiti cealalta parte a carcasei de plastic conform graficii de mai jos.



7 Probleme si Solutii

Problema	Cauza posibila	Solutie
Indicatoarele nu se aprind si alarma nu functioneaza, chiar daca curentul este normal.	Cablul de curent nu este conectat corespunzator.	Verificati daca cablul de curent este conectat la reteaua electrica.
	Reteaua electrica este conectata la iesirea UPS-ului.	Conectati cablul de curent corespunzator, la reteaua electrica.
Icoana ⚠ impreuna cu eroarea EP apar pe ecran. Alarma suna la fiecare 2 secunde.	Functia EPO este activata.	Setati circuitul in pozitie inchisa pentru a dezactiva functia EPO.
Icoanele ⚠ si I/P impreuna cu eroarea SF apar pe ecran. Alarma suna la fiecare 2 secunde.	Plusul si minusul conductorilor UPS-ului sunt inversati.	Rotiti stecherul in priza de la retea cu 180 de grade iar apoi conectati UPS-ul.
Icoanele ⚠ si [🔋] impreuna cu eroarea NC apar pe ecran. Alarma suna la fiecare 2 secunde.	Bateria este incorect conectata.	Verificati daca toate bateriile sunt conectate corect.
Codul de eroare 27 si icoana [BATT. FAULT] palpaie pe ecranul LCD si alarma suna continuu.	Tensiunea bateriei este prea mare sau incarcatorul este defect.	Contactati unitatea de service.
Codul de eroare 28 si icoana [BATT. FAULT] ipalpaie pe ecranul LCD si alarma suna continuu.	Tensiunea bateriei este prea mica sau incarcatorul este defect.	Contactati unitatea de service.

Icoanele ⚠ si OVERLOAD palpaie pe ecranul LCD. Alarma suna la fiecare secunda.	UPS-ul se afla in suprasarcina.	Inlaturati sarcinile in exces din iesirile UPS-ului.
	UPS-ul se afla in suprasarcina. Dispozitivele conectate la UPS sunt alimentate direct din reteaua electrica prin Bypass.	
	Dupa suprasarcini repetate, UPS-ul s-a blocat in modul Bypass. Dispozitivele conectate la UPS sunt alimentate direct din reteaua electrica.	Inlaturati sarcinile in exces din iesirile UPS-ului intai. Apoi opriti UPS-ul si reporniti-l.
Codul de eroare 49 palpaie pe ecranul LCD si alarma suna continuu.	UPS-ul s-a oprit in mod automat din cauza suprasarcinii de la iesirea UPS-ului.	Inlaturati sarcinile in exces din iesirile UPS-ului.
Codul de eroare este 43 iar icoana este OVERLOAD impreuna cu alarma care suna incontinuu.	UPS-ul se stinge automat datorita supraincarcarii de la iesire.	Inlaturati sarcinile in exces din iesirile UPS-ului si reporniti-l.
Codul de eroare 14 si icoana SHORT palpaie pe ecranul LCD si alarma suna continuu.	UPS-ul s-a oprit in mod automat din cauza scurtcircuitului aparut la iesirea UPS-ului.	Verificati cablarea iesirilor si daca dispozitivele conectate se afla in stare de scurtcircuit.

Codul de eroare este afisat ca 01, 02, 03, 04, 11, 12, 13 sau 41 pe panoul LCD si alarma suna continuu.	O eroare interna a avut loc. Exista doua posibile rezultate: 1. Sarcina este inca furnizata, dar direct de la sursa de curent prin bypass. 2. Sarcina nu mai este furnizata.	Contactati unitatea de service.
Timpul de backup al bateriei este mai scurt decat valoarea nominala.	Bateriile nu sunt complet incarcate.	Incarcati bateriile pentru cel putin 5 ore si apoi verificati capacitatea. Daca problema persista, contactati unitatea de service.
	Baterie defecta.	Schimbati bateria.
Codul de eroare 2A apare pe ecran iar alarma suna incontinuu.	Scurtcircuitul apare la iesirea bateriei.	Verificati daca si statusul cabinetului de baterii semnaleaza un scurtcircuit.
Codul de eroare 45 apare pe ecran iar alarma suna incontinuu.	Bateria nu functioneaza iar tensiunea este mai mica de 10V/PC.	Contactati unitatea de service.

Dezafectarea echipamentelor electrice si electronice vechi

(Se aplica pentru ţarile membre ale Uniunii Europene si pentru alte tari europene cu sisteme de colectare separata).

Acest simbol aplicat pe produs sau pe ambalajul acestuia indica faptul ca acest produs nu trebuie tratat ca pe un deseu menajer.

El trebuie predat punctelor de reciclare a echipamentelor electrice si electronice.

Asigurandu-va ca acest produs este dezafectat in mod corect, veţi ajuta la prevenirea posibilelor consecinte negative asupra mediului si a sanatatii umane, care ar fi putut surveni daca produsul ar fi fost dezafectat in mod necorespunzator.

Reciclarea materialelor va ajuta la conservarea resurselor naturale.

Memo

Memo

EU Declaration of Conformity

We, manufacturer / importer

DAI-TECH SA
Str. Berlin, Nr 6, C.P. 307160,
Dumbrăvița, Timiș, România

declare that the products

UPS BALDER SERIES:
UPCMCOP110HBAAZ01B
UPCMCOP120HBAAZ01B
PWUP-OL150BA-AZ01B
PWUP-OL300BA-AZ01B
UPCMCOP130HBAAZ01B

are in conformity with

CE (EC conformity marking)

Tested with the listed standards, the above mentioned products were found in compliance with **2004/108/EC EMC Directive** *and with* **2006/95/EC LVD Directive**.

EN 62040 – 2: 2006	IEC 6100 – 4 – 5: 2005
IEC 61000 – 4 – 2: 2001	IEC 6100 – 2 – 2: 2002
IEC 61000 – 4 – 3: 2002	EN 62040 – 1 - 1: 2003
IEC 6100 – 4 – 4: 2004	IEC 60950 – 1: 2001

and in conformity with

RoHS (RoHS conformity marking) in accordance with European Directive 2011/65/EU.

TIMIȘOARA SC DAI-TECH SA ROMANIA

Stamp

Mar. 25, 2023
Timisoara

Date and location

Tommy Lee

Signature and name

Declaratie UE de conformitate

Noi, in calitate de producator / importator

DAI-TECH SA
Str. Berlin, Nr 6, C.P. 307160,
Dumbrăvița, Timiș, România

declaram ca urmatoarele produse

UPS BALDER SERIES:
UPCMCOP110HBAAZ01B
UPCMCOP120HBAAZ01B
PWUP-OL150BA-AZ01B
PWUP-OL300BA-AZ01B
UPCMCOP130HBAAZ01B

sunt conforme cu

CE (simbolul de conformitate europeana)

Testate in standardele acceptate, produsele mentionate sunt conforme cu directiva **2004/108/EC EMC** *si cu directiva* **2006/95/EC LVD** .

EN 62040 – 2: 2006	IEC 6100 – 4 – 5: 2005
IEC 61000 – 4 – 2: 2001	IEC 6100 – 2 – 2: 2002
IEC 61000 – 4 – 3: 2002	EN 62040 – 1 - 1: 2003
IEC 6100 – 4 – 4: 2004	IEC 60950 – 1: 2001

si in conformitate cu

RoHS (simbolul de conformitate RoHS) in acord cu directiva europeana 2011/65/EU.

TIMIȘOARA SC DAI-TECH SA ROMANIA

Stampila

Mar. 25, 2023
Timisoara

Data si locatia

Tommy Lee

Semnatura si nume