

PUMPSPY[®] CELLULAR CONVERSION KIT

24/7 AUTOMATED REMOTE SUMP PUMP MONITORING

INSTALLATION AND OPERATING INSTRUCTIONS



PumpSpy™ PS2000UG

SPECIFICATIONS

System Solid State Pump Controller

Power Supply Requirements	120 VAC, 60 Hz, 15 AMP
Electrical Ratings	12Amps @ 120VAC; 18 Amps @ 12VDC
Relative Humidity	0 to 80%
Storage Temperature	0° to 70°C
Operating Temperature	0° to 50°C

The PumpSpy System requires a 12V Deep Cycle Battery (not included), 40 amp/hr minimum, 75 amp/hr or higher recommended. SLA/AGM Battery strongly recommended.

IMPORTANT!

READ ALL INSTRUCTIONS CONTAINED IN THIS MANUAL BEFORE USING THIS PRODUCT.

Save these instructions for future reference. Failure to read and follow the warnings and instructions within this instruction manual could result in property damage, serious injury or death.



Contact Tech Support: (833) 786-7779 | support@pumpspy.com

SAFETY FIRST!

This instruction manual contains very important information for you to know and understand. This information is provided for your safety and to help prevent equipment problems from occurring. Please observe all safety information labeled danger, warning and caution.



WARNING

WARNING INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH, SERIOUS INJURY OR MAJOR PROPERTY DAMAGE.



RISK OF ELECTRIC SHOCK. TO REDUCE THIS RISK, OBSERVE THE FOLLOWING WARNINGS:

- WARNING!** To reduce the risk of electrical shock, this system must be properly grounded in accordance with the National Electric Code (NEC) and all applicable state and local codes and ordinances. The receptacle should be protected with a Ground Fault Circuit Interrupter (GFCI).
- WARNING!** To reduce the risk of electrical shock, always disconnect the pump / system from the power source and battery BEFORE handling or servicing.
- WARNING!** Never remove the ground prong from the plug, or use an adapter that eliminates the ground prong.
- WARNING!** Never plug this system into an electric outlet while standing on a wet surface.
- WARNING!** Cables should be protected at all times to avoid punctures, cuts and abrasions that may result in exposed wiring. Never handle connected power cords with wet hands.
- WARNING!** The PumpSpy™ System has not been investigated for use in or around swimming pools, marine areas, recreational water installations, decorative fountains or any installation where human contact with the pumped fluid is common.
- WARNING!** Do not use an extension cord. Extension cords could present a safety hazard if not properly sized, become damaged or the connection falls into the sump pit. Do not attempt to disassemble the PumpSpy controller. There are no field serviceable parts or repair options!



RISK OF EXPLOSION. TO REDUCE THIS RISK, OBSERVE THE FOLLOWING WARNINGS:

- WARNING!** Do not use to pump flammable or explosive liquids such as gasoline, fuel oil, kerosene, etc.
- WARNING!** Do not use in a flammable or explosive atmosphere.



NOT SUITED FOR POTABLE WATER APPLICATIONS.

- WARNING!** Do not use sump pumps to transfer water that will be used for potable (drinking) water.



CAUTION

CAUTION INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR INJURY OR PROPERTY DAMAGE.



TO REDUCE THE RISK OF HAZARDS THAT CAN CAUSE INJURY OR PROPERTY DAMAGE, OBSERVE THE FOLLOWING WARNINGS:

- CAUTION!** Do not use discharge hose. Discharge hose may whip under pressure. Use rigid piping and fittings to secure a pump in the sump basin to reduce movement.
- CAUTION!** Do not connect any pump if it has been damaged in any way.
- CAUTION!** Do not carry or lift a pump by the power cord. Use the pump's lifting handle.

UNPACKING

Inspect this unit before beginning installation. Occasionally, products are damaged during shipment. If any components are damaged, contact PumpSpy™ at (833) 786-7779 for assistance.



The PumpSpy System requires a 12V Deep Cycle Battery with a minimum 40 AMP/HR rating, 75 AMP/HR rating (or higher) recommended. AGM Battery is strongly recommended.

INSTALLATION



WARNING! Electric shock hazard. DISCONNECT power before servicing.

1. Unplug the cellular controller from AC power.
2. Disconnect all connections from the back of the cellular controller.
3. Open the battery case and disconnect the battery leads from the battery. Dispose of the cellular control box and the affixed battery case lid.
4. Connect the battery leads from the WiFi controller to the battery. Secure the battery case lid to the existing battery case bottom.
5. Connect the included adapter to the end of your backup pump's power cable. Then, reconnect all connections to the WiFi controller.
6. Plug the WiFi controller into AC power.

TEST THE SYSTEM IN THIS ORDER! IT'S RECOMMENDED TO RUN INITIAL CYCLES WITH WATER AND CHECK ALL PLUMBING FOR LEAKS DURING TESTING.

Lift the lowest Battery Backup switch and hold. Release when the battery backup pump cycles. The BACKUP PUMP status LED will remain GREEN. The MAIN PUMP status LED will turn RED and the alarm will sound. Press ALARM MUTE to silence, if desired.

REFILL BASIN WITH WATER.

Cycle the Primary Sump Pump. The alarm will stop and the MAIN PUMP status LED will turn GREEN.

CONNECT TO A WIFI NETWORK.

Download the PumpSpy app from the App Store or Google Play. Follow the on-screen instructions to connect to a WiFi network.


The WiFi status LED will turn GREEN after completing the WiFi setup with the PumpSpy app.



STATUS INDICATOR REFERENCE CHART


Use the chart below to identify the message associated with the color of each LED light on the PumpSpy Controller.


Y = Yellow

 = Blinking Red


R = Red


R/G = Red/Green Alternating

MAIN PUMP	Y	No Cycle Recorded
	R	Main Pump Fail - Backup Pump Activated
		High Amp Draw - Jammed Pump
	R/G	Excessive Run Time

BACKUP PUMP	Y	No Cycle Recorded
	R	Backup Pump Fail
		High Amp Draw - Jammed Pump
	R/G	Excessive Run Time

WATER LEVEL	R	High Water Alert
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POWER	R	AC Outage
		No Battery / Reverse Polarity

BATTERY	Y	Low Battery - 25% Charge
	R	Critical Battery - 10% Charge
		No Battery / Reverse Polarity

WIFI	Y	WiFi Setup Mode
	R	Offline / Attempting to Connect

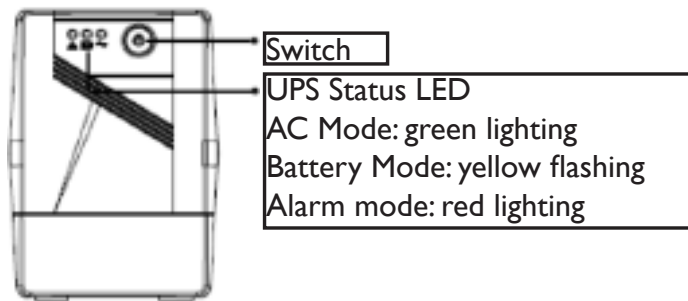
ALARM MUTE BUTTON

- Silences the alarm for 24 hours
- Press and hold for 10 seconds to initiate the system test for the backup pump

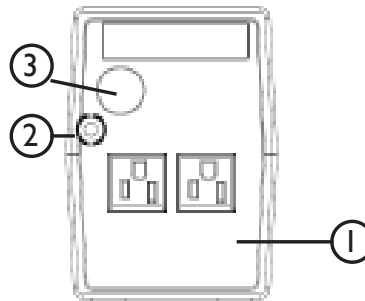
LINE INTERACTIVE UPS

PRODUCT OVERVIEW

Front View:



Rear View:



NOTE: Rear view receptacle type may differ from illustration

SPECIFICATIONS

Model: BU-360

Capacity: 650 VA / 360 W

Input	
Voltage	110V AC / 120VAC
Voltage Range	81-134VAC / 89-145VAC

Output	
Voltage Regulation	±10%
Transfer Time	Typical 2-6 ms, 10 ms max.
Waveform	Simulated Sine Wave

Battery	
Type & Number	12V / 7AH x 1
Charging Time	6 hours recover to 90% capacity

PHYSICAL	
Dimension (DxWxH mm)	297 x 101 x 142
Net Weight (kgs)	4.2

ENVIRONMENTAL	
Humidity	0-90 % RH @ 0-40°C (non-condensing)
Noise Level	Less than 40 dB

INSTALLATION & INITIAL STARTUP

Inspect this unit before beginning installation. Occasionally, products are damaged during shipment. If any components are damaged, contact PumpSpy™ at (833) 786-7779 for assistance.

PLACEMENT & STORAGE CONDITIONS

Install the UPS in a protected area that is free of excessive dust and has adequate air flow. Please place the UPS away from other units, at least 20 cm to avoid interference. Do NOT operate the UPS where the temperature and humidity is outside the specific limits. (Please check the specs for the limitations.)

CONNECT TO AC POWER TO BEGIN BATTERY CHARGING

Plug in the AC input cord to the wall outlet. For the best results, charge the battery at least 6 hours before initial use. The unit charges its battery while connected to the power.

INSTALLATION & INITIAL STARTUP (CONTINUED)

CONNECT TO MODEM AND ROUTER

Plug in your modem and wireless router into the receptacles on the rear panel of the UPS. Push the power button on the front of the unit. Connected devices will now be protected by the UPS.

CAUTION! NEVER connect a laser printer or scanner to the UPS unit. This may cause damage to the unit.

POWERING THE UPS

Turn on the UPS unit by pressing the power button on the front. Turn off the UPS unit by pressing the power button again.

COLD START FUNCTION

If the UPS is off and not connected to power, it's still possible to cold start the UPS to power connected devices if the battery has sufficient charge.

IMPORTANT SAFETY WARNINGS



TO REDUCE THE RISK OF HAZARDS THAT CAN CAUSE INJURY OR PROPERTY DAMAGE, OBSERVE THE FOLLOWING WARNINGS:

CAUTION! To prevent the risk of fire or electric shock, install in a temperature and humidity controlled indoor area free of conductive contaminants. (See the specifications for the acceptable temperature and humidity range.)

CAUTION! To reduce the risk of overheating the UPS, do not cover the UPS' cooling vents and avoid exposing the unit to direct sunlight or installing the unit near heat emitting appliances such as space heaters or furnaces.

CAUTION! Do not attach non-computer-related items, such as medical equipment, life-support equipment, microwave ovens, irons, or vacuum cleaners to UPS.

CAUTION! Do not plug the UPS input into its own output.

CAUTION! Do not allow liquids or any foreign object to enter the UPS. Do not place beverages or any other liquid-containing vessels on or near the unit.

CAUTION! In the event of an emergency, press the OFF button and disconnect the power cord from the AC power supply to properly disable the UPS.

CAUTION! Do not attach a power strip or surge suppressor to the UPS.

CAUTION! Hazardous through electric shock. Also with disconnection of this unit from the mains, hazardous voltage still may be accessible through supply from battery. The battery supply should therefore be disconnected in the plus minus pole at the quick connectors of the battery when maintenance or service work inside the UPS is necessary.

CAUTION! Servicing of batteries should be performed or supervised by personnel knowledgeable of batteries and the required precautions. Keep unauthorized personnel away from batteries.

CAUTION! When replacing the batteries, use the same number and type of batteries.

CAUTION! Internal battery voltage is 12VDC. Sealed, lead-acid, 6-cell battery.

CAUTION! Do not dispose of batteries in a fire. The battery may explode. Do not open or mutilate the battery or batteries. Released electrolyte is harmful to the skin and eyes.

CAUTION! Unplug the UPS prior to cleaning and do not use liquid or spray detergent.

CAUTION! A battery can present a risk of electric shock and high short circuit current.

TROUBLESHOOTING



WARNING! Always disconnect the power unit from power sources before handling. This guide is designed to help identify reasons for potential operating problems. It is not a service guide. Dismantling of the unit voids warranty. Servicing of the unit should be referred to the factory or its authorized service center.

Problem	Probable Cause	Solution
No LED display on the front panel	Low Battery	Charge the UPS at least 6 hours
	Battery Fault	Replace the battery with the same type of battery
	UPS is off	Press the switch again to turn on the UPS
Alarm continuously sounds when the LED's are normal and there is no other apparent issue	UPS is overloaded	Remove some devices first. Before reconnecting equipment, please verify that the load matches the UPS capability specified in the specs.
When power fails, backup time is short	The UPS is overloaded	Remove some devices
	Battery Voltage is too low	Charge the UPS at least 6 hours
	Battery Defect. It might be due to high temperature operation environment, or improper operation to battery	Replace the battery with the same type of battery
LED is flashing, but no apparent issue	Reconnect the power cord properly	Reconnect the power cord properly

LIMITED THREE-YEAR WARRANTY

WHAT THIS WARRANTY COVERS

When used and maintained in normal use and in accordance with the Installation and Operating Instructions, your PumpSpy™ product is warranted against original defects in material and workmanship for three full years from date of purchase (the “Warranty Period”). During the warranty period, PumpSpy™ will repair or replace at no cost to you, to correct such defects in products found upon examination by PumpSpy™ to be defective in materials or workmanship.

WHAT THIS WARRANTY DOES NOT COVER

This warranty does not cover or apply to PumpSpy™ WiFi monitoring services (which are subject to PumpSpy™ WiFi monitoring services terms and conditions) or to use of the product in a non-residential application, improper installation and/or improper maintenance of the product, damage due to misuse, acts of God, nature, vandalism or other acts beyond the control of PumpSpy™, owner’s acts or omissions, use outside the country in which the product was initially purchased and resales of the product by the original owner. This warranty does not cover pick up, delivery, transportation or house calls. However, if you mail your product to PumpSpy™ for warranty service, cost of shipping will be paid one way. This warranty does not cover products purchased from a party that is not an authorized retailer, dealer, or distributor of PumpSpy™ products.

OTHER IMPORTANT TERMS

This warranty is not transferable and may not be assigned. This warranty shall be governed and construed under the laws of the state of Michigan. The warranty period will not be extended by any replacement or repair performed under this warranty. THIS WARRANTY IS THE EXCLUSIVE WARRANTY AND REMEDY PROVIDED BY PumpSpy™. ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OR MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT WILL PumpSpy™ BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND OR NATURE TO OWNER OR ANY PARTY CLAIMING THROUGH OWNER WHETHER BASED IN CONTRACT, NEGLIGENCE, TORT OR STRICT PRODUCTS LIABILITY OR ARISING FROM ANY CAUSE WHATSOEVER. Some states do not allow for the exclusion of consequential damages, so the above exclusion may

Installed by: _____

Model: PS2000UG

Date of Installation: _____

Serial Number: _____