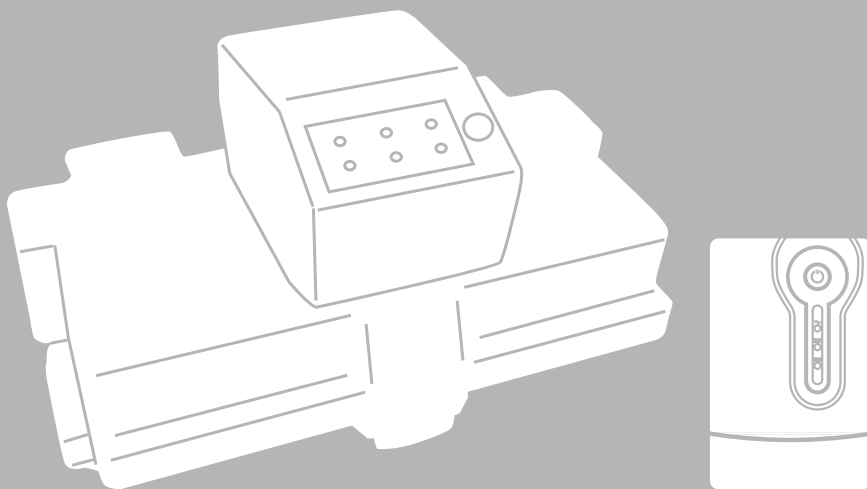




# CELLULAR CONVERSION KIT

## 24/7 AUTOMATED REMOTE SUMP PUMP MONITORING

INSTRUCTION AND OPERATING MANUAL



MODEL: PS2000UG

## 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.



### WARNING

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

## GENERAL INFORMATION

To ensure safe and reliable operation, please carefully read this service and installation manual in its entirety before installing and/or using this product. Reasonable care and safe methods in according with sound plumbing practices should be strictly adhered to. Before installation, refer to and understand all relevant local plumbing and electrical codes.

**DO NOT THROW AWAY THIS MANUAL.** Keep it in a safe place so that you may refer to it for periodic service and maintenance.

## SPECIFICATIONS

Power Supply Requirements	120 VAC, 60 Hz, 15 AMP
Electrical Ratings	12Amps @ 120 VAC; 18 Amps @ 12 VDC
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.**

## 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. REFILL BASIN WITH WATER.

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

## WiFi CONNECTION

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.



## ALARM MUTE BUTTON

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

## 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

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

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

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

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

<b>WIFI</b>	Y	WiFi Setup Mode
	R	Offline / Attempting to Connect

## UNINTERRUPTIBLE POWER SUPPLY (UPS)

### UPS - Introduction

This uninterruptible power supply (UPS) is designed to protect **routers and modems** from electrical surges during a power outage. When AC power is available, the UPS will pass through AC power and filter out any small fluctuations. During a power outage, the UPS will immediately switch to the internal battery to provide power to connected equipment.

### UPS - Installation

1. Plug the power cord from the UPS into an AC wall outlet. Ensure the voltage and frequency of the AC input meet the requirements of the UPS.

**ATTENTION: Charge the battery for at least 8 hours before using the UPS.**

2. Press and hold the red power button for two seconds to turn on the UPS.
3. Plug the power cord of the router and/or modem into the back panel of the UPS. Turn on the equipment.

**ATTENTION: Do not connect a laser printer to the UPS. Laser printers draw excess power and may damage the UPS.**

4. Ensure the UPS is placed in a safe location, out of direct sunlight and not exposed to extreme temperatures.

## UPS - LED and Audible Alarm

STATUS	LED	AUDIBLE ALARM
AC Power Operation	Top Green LED	
	Twenty second blinking Bottom Yellow LED	
	Solid Bottom Yellow LED	
Battery (DC) Power Operation	Middle Red LED	Sounding once every six seconds
Battery (DC) Power Exhausted	Middle Red LED	Continuous sounding

## UPS - Troubleshooting

ISSUE	POSSIBLE CAUSE	SOLUTION
LED not illuminating	Input power fault	Check power input
	Time pressing power button too short	Press the power button for at least two seconds
Audible alarm sounding every six seconds with blinking red LED	Power failed	Check power input
Red LED illuminating, constant audible alarm	Overload	Reduce equipment load
	Battery voltage low	Charge UPS

## UPS - Specifications

MODEL		650VA
Input	Voltage	110 VAC $\pm$ 15%
	Frequency	60 Hz
Output	Voltage	110 VAC
	Frequency	60 Hz
	Transfer Time	<10 msec
	Waveform	Sine wave during AC pass through, square wave during battery operation
Protection	Load Input	Overload and short circuit protection
	Short Circuit	
Battery	Type	Sealed Lead Acid Battery
	Capacity	7.2 Ah
	Protection	Auto-inspection, discharge protection, and battery fault caution
Audible Alarm	Sufficient Battery	Sounding every 6 seconds with a red LED flash
	Insufficient Battery	Sounding every 1 second with a red LED flash
	Low Battery Voltage	Continuous sounding with a constant red LED
	Overload/short circuit	

## 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 not apply to you. This warranty gives you specific rights. You may also have others that vary state to state.

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