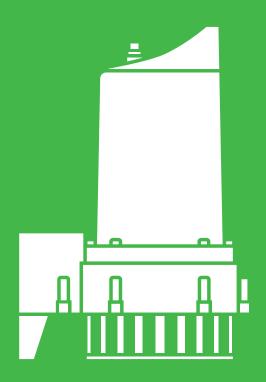


12 VOLT BATTERY BACKUP SYSTEM

INSTRUCTION AND OPERATING MANUAL



MODEL: PS1200

GENERAL INFORMATION

The PumpSpy 12 Volt Battery Backup System is designed to automatically remove water from a sump pit during a power outage or if the primary sump pump fails to operate properly. It is not intended as a long term replacement for a primary sump pump. This unit must be installed with a working primary sump pump. This complete kit includes a high performance DC sump pump, solid state system controller, float sensor and battery case.

SAFETY INFORMATION

Please review and follow the safety information listed below.



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

- To reduce the risk of electrical shock, this pump 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).
- To reduce the risk of electrical shock, always disconnect the pump from the power source BEFORE handling or servicing.
- Never remove the ground prong from the plug, or use an adapter that eliminates the ground prong.
- Never plug this pump into an electric outlet while standing on a wet surface.
- Cable 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.
- This Submersible Sump Pump 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.
- 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.



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

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

!WARNING

NOT SUITED FOR POTABLE WATER APPLICATIONS.

 Do not use this pump to transfer water that will be used for potable (drinking) water. This pump is only to be used in applications for which it is designed.

!WARNING

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

- Do not block or restrict discharge hose. Discharge hose may whip under pressure. It is strongly recommended to use rigid piping and fittings to secure the pump in the sump basin to reduce movement.
- Do not install the pump if it has been damaged in any way.
- · For indoor use only.
- This pump is designed to pump ground water only. Do not drain washing
 machines or other appliances into the sump pit. This will void your warranty.
- Do not attempt to disassemble any part of the system. There are no user-serviceable parts or repair options.

PUMP PERFORMANCE

LIFT	GALLONS/HR
15'	1624
10'	2400
5'	2990

SYSTEM OPERATION

The PumpSpy 12 Volt Battery Backup System is an automatic system and will automatically operate during a power outage or when the primary sump pump fails to operate. The System automatically maintains and recharges the battery.

The PumpSpy 12 Volt Battery Backup System performs a full system test every day. The system will cycle the backup pump and test the battery performance. If any issues are found during the self test, the appropriate alarm message will be displayed, and the audible alarm will be activated.

BATTERY INFORMATION

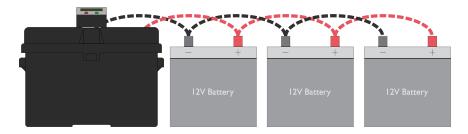
This system is designed to operate reliably with a 12V Deep Cycle Battery (not included). A PumpSpy Maintenance Free AGM Deep Cycle Battery is recommended. The use of wet-cell batteries is strongly discouraged. Automotive batteries are not suitable for this application and will result in system failure.

!WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY:

- · Wear safety glasses when connecting or disconnecting the battery.
- Keep sparks or flames away from the battery.
- Keep metal tools from contacting the battery posts and creating a short across the terminals. A short circuit may cause an explosion.
- Follow all instructions published by the battery manufacturer. Failure to do so may result in property damage, serious injury, or death.

Multiple 12VDC Deep Cycle Batteries may be connected in parallel. A PumpSpy Maintenance Free AGM Deep Cycle Battery is recommended.



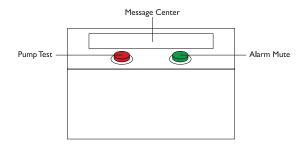
USING THE CONTROLLER BUTTONS

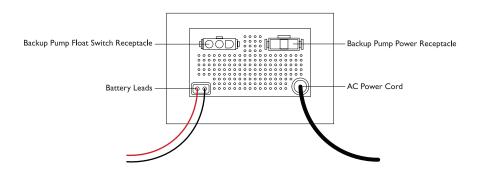
The PumpSpy 12 Volt Battery Backup System features two push buttons on the controller.

The PUMP TEST button activates the backup pump. The pump will continue to run as long as the button is pressed. Do not run the backup pump in a dry sump pit for extended periods.

The ALARM MUTE button will silence the audible alarm for 24 hours when pressed. It will also clear the alarm message from the LCD screen, so take note of the cause of the alarm. If the same alarm repeats during the 24 period, the audible alarm will not sound. If a different alarm is triggered during this period, the audible alarm will sound. Pressing the alarm mute button a second time will cancel the alarm mute.

To activate the system test, press and hold the ALARM MUTE button. This will activate the full system test sequence.





MESSAGES

The PumpSpy 12 Volt Battery Backup System displays **Informational** and **Alarm** messages on the Message Center.

Informational messages do not require immediate attention and do not sound an alarm. If more than one message is active, they rotate on the display.

INFORMATIONAL MESSAGES			
System OK	Displayed when no messages active or after alarm muted.	System working properly.	
Pump Running	Displays when the pump is on, showing in seconds the length of time the pump is on.	System working properly.	
AC Power Failure	Displayed if AC power is lost.	Check that the unit is plugged in. Check GFI/breaker for trip. Normal during power loss.	

Alarm messages require your immediate attention and will sound the unit's audible alarm. If more than one alarm is active, they rotate on the display. Alarm messages take precedence over information messages, no informational messages are displayed when there is an active alarm.

ALARM MESSAGES			
Reverse Polarity	Battery Red/Black leads are connected backwards.	Connect leads to correct terminals.	
PWR OK/ Backup ON	Backup pump is on while AC power is present.	Check primary sump pump for proper orientation. Replace pump if necessary.	
CHECK PUMP	Backup pump active but no current draw is detected.	Check that pump cord is firmly connected to controller jack. Call for service.	
Batt Low Voltage	Battery voltage drops below 11.4 volts (50% discharged).	Check that Unit is plugged in. Check GFI/breaker for trip. Normal during extended power loss.	
Batt Crit Voltage	Battery voltage drops below 11.4 volts (50% discharged).	Check that unit is plugged in. Check GFI/breaker for trip. Replace battery if power remains out.	
Auto test Failed	System fault detected during system self-test. Alarm message will be displayed alternately.	Correct the issue in the displayed alarm message.	
Excessive Runtime	Backup pump has run more than 50 seconds.	Check that backup float sensor can move freely, not caught on wires. Normal during extremely heavy rains.	
Check Fuse / Batt	Blown fuse.	Check that pump cord is firmly connected to controller jack. Call for service.	
Batt Not Detected	No battery is detected.	Check Battery connections. Replace battery if necessary.	

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 a full three 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 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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