

PondMAX

WATERGARDENING TO THE MAX

SOLAR KIT BATTERY BACKUP

INSTRUCTION MANUAL



DATE
NOV 2017 v1.0

TOLL FREE 888.868.1185

MODEL
22PS570

CONGRATULATIONS ON YOUR PURCHASE OF THIS PRODUCT BY **PONDMAX**, THE ANSWERS FOR YOUR WATERGARDEN MADE EASY.

TECHNICAL SPECIFICATIONS

| Description | PM700SB |
|----------------------|----------------|
| PART NUMBER | 22PS570 |
| LEAD ACID BATTERY | 12V, 7AH |
| CHARGING VOLTAGE | 12V-24V |
| OUTPUT VOLTAGE | 12V-24V |
| MAXIMUM INPUT POWER | 20W |
| MAXIMUM OUTPUT POWER | 12W |
| SIZE | 7.5" X 6" X 5" |
| NET WEIGHT | 6.5 LBS |
| CABLE LENGTH | 16 FT |

DESIGN HIGHLIGHTS

- This Solar Battery Backup is designed to store solar energy for the PondMAX Solar Pump Kits and has enough charge to run pump for 3-4 hours on its own.
- 1 Year Warranty
- The battery backup has built-in overcharge protection.
- LED indicator lights provide the working status of the battery backup.
- The output voltage can be adjusted in the range of 12V-24V, for optimal pump performance.



IMPORTANT SAFEGUARDS

Please read these instructions and familiarize yourself with the equipment before placing it in service. Correct and safe use of the system requires strict compliance with the safety instructions. For safety reasons persons less than 16 years of age or people that are not familiar with these instructions should not use this equipment.

- Do not connect the solar battery backup to any AC voltage power for charging; it is ONLY for DC voltage power.
- Do not leave the battery backup in direct sunlight or expose it to extreme heat or cold temperatures.
- Do not leave this battery backup in bad weather conditions or a bad ambient environment.
- Do not expose this battery backup system to water.



WARNING: Batteries are known to contain toxic chemicals. NEVER DISPOSE OF A BATTERY BY THROWING IT INTO THE TRASH OR A LANDFILL. Take it to a authorized hazardous waste service center to dispose of properly.

SOLAR KIT BATTERY BACKUP

INSTALLATION AND MAINTENANCE

1. For first time use, check that the wires are connected to battery inside plastic casing and connect if needed. You can access the battery by removing 6-Phillips head screws from bottom side, where the lid and bottom portion of plastic casing meet.
2. Next connect the "INPUT" cable from the battery backup to the solar panel (provided separately with solar pump kit) and tighten the threaded connection.
3. The "CHARGE" yellow LED indicator should illuminate when the battery begins to charge, regardless of whether the system switch is On or Off.
4. Now insert the pump cable to the "OUTPUT" socket on the battery backup, and tighten the threaded connection.
5. Then press the "System On/Off" switch to the "On" position and the "SYSTEM" green LED indicator should then illuminate and the solar pump should start to operate. However if the red LED illuminates while it operates for the first time, it indicates that the battery lost charge while in inventory. In this case the battery will need to be charged for 2 to 3 hours while the solar panel is in direct sunshine. Once its charged the green LED indicator will illuminate to let you know that the battery is charged and the pump is ready to operate
6. The pump will automatically stop running when the battery is at its minimal voltage, and the "SYSTEM" indicator will be red.
7. The "SYSTEM" indicator will stay red until the battery is recharged to its maximum voltage. While the voltage rises, the "SYSTEM" indicator will change to flashing red-green twice every 10 seconds. It will take another 2 hours before indicator changes back to green and then pump will start to run again.
8. The "Timer On/Off" switch allows the pump to operate in intermittent mode and continuous mode. In the intermittent mode (i.e. "Timer On"), the timer will allow the pump to operate 10 minutes per hour to conserve the battery's energy, and can be especially useful during winter or on cloudy days. When the Timer is off (continuous mode), the built-in timer is disabled and the pump will run continuously. The Timer function is available only when the system LED indicator shows green. NOTE: While the timer is used, the "TIMER" indicator will be green while the pump operates and will flash green (once per second), when the pump is not operating due to the intermittent function.
9. The pump performance can be adjusted by the potentiometer (output voltage adjustment knob). Adjust the potentiometer to minimal output power (operating voltage of 12V) and the pump runs at minimal performance but with extended run-time capacity. If adjusted to maximum output power(operating voltage of 24V), the pump runs at maximum performance but will exhaust the battery at a faster rate, so that pump operating time will be shorter.
10. The battery will still charge in the daylight, even if the switch is "Off". The system will automatically cut off the charging current when the battery is fully charged.

AVAILABLE REPLACEMENT PARTS

| DESCRIPTION | PART NO. |
|---|----------|
| REPLACEMENT BATTERY FOR BATTERY BACKUP | 31SP366 |
| REPLACEMENT PLASTIC CASING FOR BATTERY BACKUP | 31SP367 |

Please consult with your retailer for additional replacement parts.
Visit www.pondmax.com for your nearest dealer.



TROUBLESHOOTING

If the SYSTEM indicator shows RED and the pump does not work even though the solar module is in full sunlight, please check the possible failures below:

1. The CHARGE yellow indicator doesn't light - Check connection to the solar module.
2. The battery is out of its service life and needs to be replaced - Replace the battery (Part No. 31SP366)

If the SYSTEM indicator is GREEN but the pump still doesn't work, please check possible options below:

1. Check if the "Timer On/Off" switch is on. Please note, in this mode, the pump runs intermittently.
2. The pump is blocked, clean the pump by referring to pump manuals.

WARRANTY

- This product is warranted to the initial purchaser to be free of defects in materials and manufacture workmanship at the time of initial purchase and for a period of 1 year after. Some parts are consumable (e.g. battery) and may need to be replaced as part of ongoing product maintenance and are not covered by this Warranty. In the event this unit malfunctions within 1 year from the date of purchase, the sole obligation of PondMAX™ (hereinafter referred to as PondMAX™) will be to repair the unit or replace with an equivalent new or factory refurbished unit at PondMAX's discretion, subject to the following condition:
- The malfunction is proved attributable to a defect in materials or manufacture workmanship, including repairs performed under this warranty. Malfunction for any other reason including but not limited to misuse, negligence, accident, or tampering with parts, incorrect wiring, or improper installation-will not be remedied under this warranty.
- PondMAX™ specifically does not guarantee chemical compatibility, and expressly does not warrant units from any problems caused by chemical attack or failure due to incompatibility of fluid used near this aeration system.
- All warranty repairs must be performed by PondMAX™ or a PondMAX™ authorized company.
- Purchaser must retain the purchase receipt and present it with this certificate as proof of ownership and entitlement to warranty repairs. Unauthorized repairs will not be compensated by PondMAX™, and are not the responsibility of PondMAX™, and if such repairs damage the product, such damages are not remedied under this warranty.
- Purchaser shall bear all onsite labor, shipping, packing and insurance costs and all other costs, excluding in house labor and parts necessary to effectuate repairs under this warranty.
- This warranty is in lieu of all other express warranties which now or hereafter might otherwise arise with respect to this product. Any and all limited warranties, including the warranties of merchantability and fitness for particular purpose, shall have no greater duration than the duration period of the express written warranty applicable to this product, and shall terminate automatically the expiration of such duration period.
- Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. No action shall be brought for breach of any implied or express warranty after one year subsequent to the expiration of the duration period of the express written warranty.
- Incidental and consequential damages caused by malfunction, defect, or otherwise, and with respect to breach of any express or implied warranty, are not the responsibility of PondMAX™, and, to the extent permitted by law, are hereby excluded for property damage, loss of livestock and, to the extent not unconscionable, for personal injury damage. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- This warranty does not apply to any malfunction arising out of any application of this product other than normal use, unless such application is upon request specifically approved in writing by PondMAX™.
- The provisions of this warranty are severable and if any provision shall be deemed invalid, the remaining provisions shall remain in full force and effect.
- Rights under this warranty are not assignable without the express prior consent in writing by PondMAX™ and, regardless of the terms of such consent in writing, such assignee shall have no greater rights than his assignor had against PondMAX™.

**Please consult your retailer for quality original PondMAX replacement parts.
Visit www.pondmax.com for your nearest dealer.**



WATERGARDENING TO THE MAX

PONDMAX USA
Toll Free 888.868.1185
email: info@pondmax.com
www.pondmax.com