

PowerShield®

USER MANUAL

Pilot DC 50 (PSDCP50)



INSTALLATION

1 INSPECTION

The following items are included with your new PowerShield DC Pilot 50 24Vdc UPS (Model: PSDCP50) carton:

- DC UPS
- User Manual
- 3m Phoenix connector to DC plug cable

Please remove the PSDCP50 UPS from its packaging and check the unit. Re-pack and return the unit to the place of purchase if there are any signs of damage or mishandling during delivery.

2 CONNECTION OF PSDCP50 TO THE AC TO DC ADAPTER

Connect the UPS DC input to the DC Adapter and turn on the power to the adapter to commence charging the batteries. It is recommended to charge the batteries for 6 hours prior to initial use.

3 EQUIPMENT CONNECTION

Connect your 24Vdc equipment to the 24Vdc output via the 3m Phoenix connector to DC plug cable.

NOTE: Make sure that the UPS is powered on to protect all important devices from data loss during power failure.

OPERATION & FUNCTIONS

1 TURN ON THE UPS

To turn on the PowerShield DC Pilot 50 UPS, simply press the power switch. The LED will turn ON.

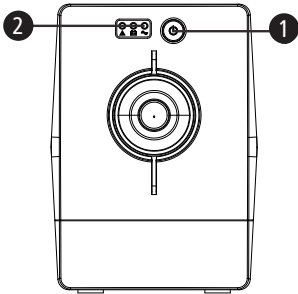
2 TURN OFF THE UPS

To turn off the UPS unit, press the power switch again. The LED will turn OFF.

3 COLD START FUNCTION

When the UPS is off and there is no DC input power, it is still possible to cold start the UPS using the battery to power the loads.

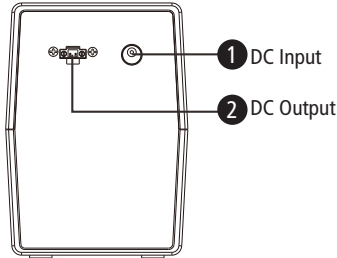
LED INDICATORS



- 1 Power switch
- 2 LED indicators

| LED | ALARM | UPS STATUS |
|----------|---------------------------|---|
| •Green | Off | The UPS DC input power is normal and UPS is operating normally. |
| ★Green | Off | UPS is charging battery but no output |
| ★Yellow | Sounding every 10 seconds | DC input power failure and UPS is supporting loads by battery. |
| ★Yellow | Sounding every second | Low battery |
| •Red | Continuously sounding | UPS fault |
| ○All LED | Off | There is no DC output |

REAR PANEL



SPECIFICATIONS

| | |
|------------------------------|-----------------------------------|
| MODEL | PSDCP50 UPS |
| CAPACITY | 50W |
| Input Voltage | 24Vdc |
| Input Voltage Range | 21.6~26.4Vdc |
| Output Voltage | 24Vdc |
| DC Output Voltage Regulation | ± 10 % (Bat. mode) |
| Transfer Time | <10ms |
| Battery Type & No | 12V/10Ah x 2 |
| Charging Time | 6-8 hours recover to 90% capacity |
| Dimension (DxWxH) | 320 x 130 x 182 |
| Net Weight (kgs) | 6.8Kg |
| Humidity | 0-90% RH @ 0-40°C non-condensing) |
| Noise Level | Less than 40dB |

*Specifications are subject to change without notice.

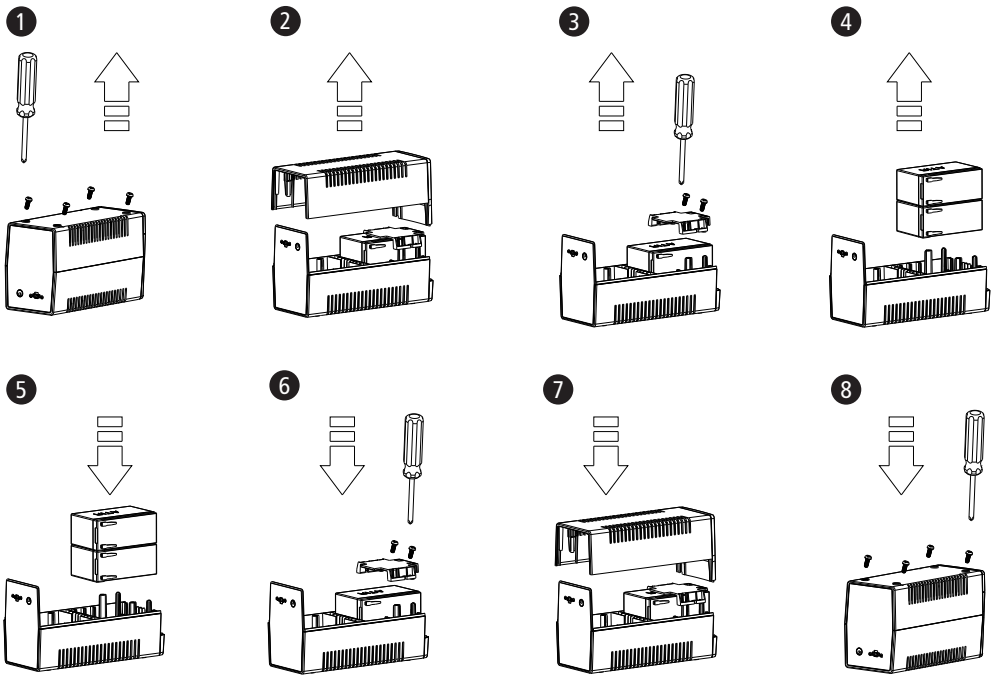
TROUBLESHOOTING

| PROBLEM | POSSIBLE CAUSES | SOLUTIONS |
|--------------------------------|---|---|
| LED not lit | The UPS is not on. | Press the power switch again to turn on the UPS. |
| | Battery voltage is too low. | Charge the battery at least 6 hours. |
| | Battery fault. | Replace the battery. |
| The UPS always on battery mode | DC input power cord loose. | Re-plug the power cord. |
| | Input adapter is not connected to mains or mains is OFF or adapter is faulty. | Connected input adapter to mains |
| The UPS continuously beeps | Please check the fault code for LEDs and UPS status details. | Please check the fault code for LEDs and UPS status details. |
| Backup time too short | Battery voltage is too low. | Charge the battery at least 6 hours. |
| | Battery defect. | Replace the battery. |
| Output voltage is too low | Overload. | Remove some unnecessary loads. Before reconnecting equipment, please verify that the load matches the UPS capability specified in the specifications. |

If any abnormal situations occur that are not listed above, please call for service immediately.

BATTERY REPLACEMENT

Battery replacement should be performed or supervised by persons knowledgeable of batteries and their required precautions. Follow the illustration sequence below to replace the batteries.



SAFETY CAUTION

- PowerShield DC Pilot 50 (PSDCP50) is a 24Vdc input and 24Vdc output UPS. Please make sure the input power is 24Vdc.
- Do not connect the DC UPS to AC utility power.
- In the event of an emergency, press the 'OFF' button to properly disable the UPS.
- Do not allow any liquids or any foreign object to enter the UPS. Do not place beverages or any other liquid-containing vessels on or near the unit.
- This unit is intended for installation in a temperature and humidity controlled indoor environment free of conductive contaminants. Avoid installing the UPS in locations where there is standing or running water, or excessive humidity.
- Do not connect the UPS input into its own output.
- Dispose of batteries in an environmentally friendly manner.
- To reduce the risk of overheating the UPS, do not cover the UPS's cooling vents and avoid exposing the unit to direct sunlight or installing the unit near heat emitting appliances such as space heater or furnaces.
- Disconnect the UPS prior to cleaning and do not use liquid or spray detergent.
- A battery can present a risk of electrical shock and high short circuit current.
The following precautions should be observed when working with batteries:
 - 1 Remove watches, rings, or any metal objects from hands.
 - 2 Use tools with insulated handles.
 - 3 Wear rubber insulated gloves and shoes or boots.
 - 4 Do not lay tools or metal parts on top of the batteries.
 - 5 Disconnect the charging source prior to connecting or disconnecting battery terminals.
- The internal battery voltage is 12Vdc, and the type is a sealed, lead-acid, 6-cell battery.
- Servicing of batteries should be performed or supervised by personnel knowledgeable of batteries and their required precautions. Keep unauthorized personnel away from batteries.
- When replacing batteries, replace with the same number and type of sealed lead-acid batteries.
- Do not open or damage the batteries as released electrolyte is harmful to the skin and eyes and may be toxic.
- **ATTENTION:** Hazardous electric shock.
A hazardous electrical condition may still be present through the stored electro-chemical energy of the battery. The battery supply cables should always be disconnected at the positive and negative terminals of the battery when maintenance or service work inside the UPS is necessary.

