

Instruction Manual
UltimaSwitch™

12/24 V

IB-116 R01 (0502)



UltimaSwitch™

The UltimaSwitch™ is a highly reliable solid state switch which uses no moving mechanical parts or toxic mercury to sense water level and automatically controls a 12V DC or 24V DC bilge pump. The UltimaSwitch™ automatically adjusts between a 12V DC and 24V DC bilge pump without any adjustments necessary.

Security

- Connect an in-line fuse of the appropriate amperage (specified on the pump)
- Always install the switch according to the wiring diagram on pages 22-25.
- The wire connections must be sealed with a marine sealant.
- Insulation of cable sheathings must be placed above the highest bilge water level.
- The UltimaSwitch™ is designed for 12 and 24V DC operation only. Do not use any other voltages; do not use AC or AC-DC converted power sources.
- Failure to use the appropriate fuse and connecting wires according to the instructions provided will void any Johnson Pump warranty and may cause serious damage or personal injury.

Type designation

	V DC	Max Amp draw	Part No
UltimaSwitch™	12/24 V	20 A	34-36303

Operation

See illustration on page 21

1. When the bilge water rises and reaches the second detector cell at 50 mm (2") the switch starts the pump, with a 3 second delay.
2. When the water level has sunk to a level of 20 mm (¾"), and the first detector cell is above the water level, the pump is stopped.

Installation

The UltimaSwitch™ is designed to attach to all Johnson Pump bilge pumps. Just snap in on the T-slot on the base of the pump. When using it with other pump brands, or when installing the switch stand alone please follow these instructions:

- Mount the UltimaSwitch™ in a vertical position (mount holes towards the bottom of the vessel), and close to the pump, such that the water level is equal on both pump and the UltimaSwitch™.
- Do not screw the UltimaSwitch™ directly to the hull of the boat. Either glue the switch to the hull or use a mounting block of marine plywood epoxy glued to the bottom of the hull to fasten the UltimaSwitch™.

- The bottom of the UltimaSwitch™ can be mounted higher than the pump, but never lower than the base of the pump.

Test

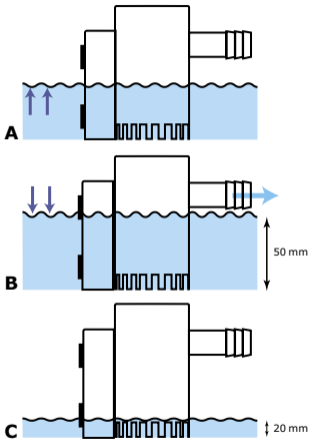
- To test the functionality of the UltimaSwitch™ hold two fingers over the raised circular areas on the side for approximately 10 seconds. If the wiring is correct the bilge pump will activate. If you remove a finger from the top circle the pump should still be on. On removal of both fingers from the circles, the bilge pump should no longer run after a short delay.
- Make sure to test the UltimaSwitch™ with water in the bilge of the vessel to re-affirm that the pump will turn on and off properly.

Electrical installation

See wiring diagram on page 22-25

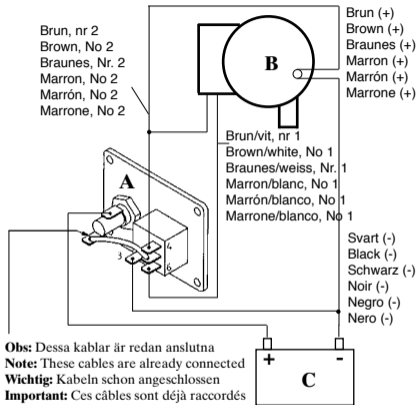
Warranty

Your UltimaSwitch™ is covered by a 3-year limited warranty



Elektrisk intsallation med Johnson Pump panel
Electrical installation with Johnson Pump Panel
Elektrischer Anschluss mit Johnson Pump Schalttafel
Schéma de raccordement avec le tableau de
commande Johnson Pump
Instalación eléctrica con panel Johnson Pump
Schema collegamento elettrico con pannello
di controllo Johnson Pump

- | | | | |
|----------|---|----------|---|
| A | Panel
Panel
Schalttafel
Tableau de commande
Panel
Pannello | B | Länsump
Bilge pump
Bilgenpumpe
Pompe de cale
Bomba de sentina
Pompa di sentina |
| C | Batteri
DC supply
DC-Versorgung
Batterie
Batería
Batteria | | |



Elektrisk installation utan panel
Electrical installation without panel
Elektrischer Anschluss ohne Schalttafel
Schéma de raccordement sans tableau de commande
Instalación eléctrica sin panel
Schema collegamento elettrico senza pannello
di controllo

A	Länspump Bilge pump Bilgenpumpe Pompe de cale Bomba de sentina Pompa di sentina	B	Batteri DC supply DC-Versorgung Batterie Batería Batteria
C	Säkring Fuse Sicherung Fusible Fusible Fusibile		

