
BARNACLE

Bilge Pump Controller

INSTRUCTION MANUAL



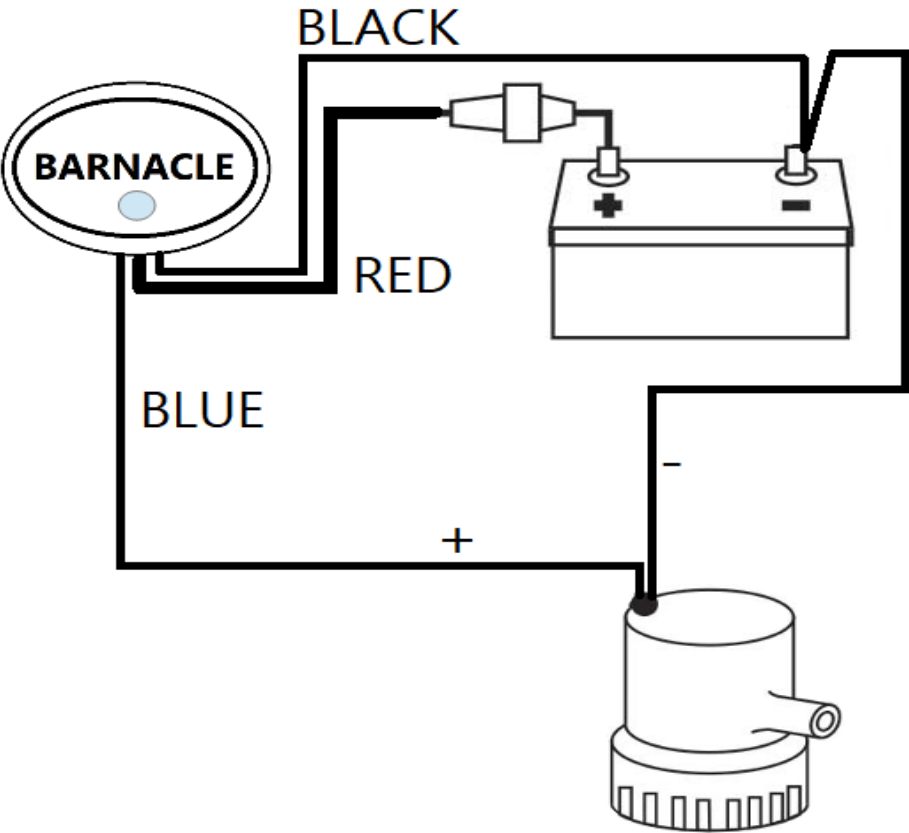
DANGER: This product is not intended for damage control or to deal with flooding resulting from hull damage. This product is to be used in Bilge Pumping Systems for small craft with a hull length up to 24 meters, as described within the scope of ISO 15083. Bilge pumping Systems, as specified in ISO 15083, are limited to normal amounts of water in an intact boat due to SPRAY, RAIN, SEEPAGE, SPILAGE, and occasional small amounts of water shifting from boat movements in heavy weather.



Use of this product in any other way could result in flooding, catastrophic damage to craft, serious personal injury or death.

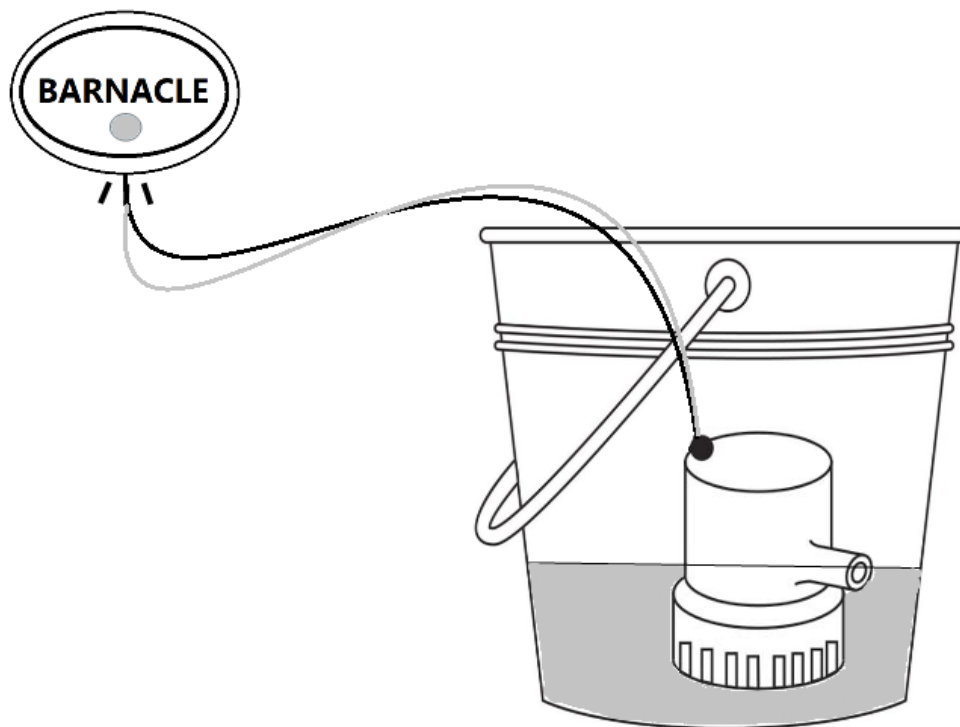
WARNING: Check the function of all bilge pumps at regular intervals. Detection of water and correct operation should be performed periodically by placing pump in water as shown.

BARNACLE WIRING DIAGRAM



TESTING AND COMMISSIONING

1. Confirm correct wiring on installation
2. Place wired bilge pump into a bucket of water, holding it to the bottom of the bucket. Wait at least 30 seconds for the default Barnacle timing to start the pump.
3. When the pump starts, wait 10 seconds and pull the pump out of the water. The pump should stop within 1 – 5 seconds.
4. When the pump stops, put the pump back in the water and wait another 30 seconds.



PERIODIC TESTING

REPEAT TEST ABOVE TO REMAIN SATISFIED THAT THE BARNACLE IS ACTIVELY LOOKING FOR WATER, PUMPING WATER AND SUCCESSFULLY STOPPING WHEN NO WATER, AS DESIGNED.

FIRMWARE VERSIONS

Release date: November 2025

Firmware approved pump list ("V.6" on back plate)

12V DC AND 24V DC COMPATIBLE

Rule – 360gph, 500gph, 1,100gph, 1,500gph, 2,000gph

TMC 1,500gph, 2,000gph

SPX 1,000

Johnson 400

Ozito 1,700

Release date: pre-Oct 2025

Firmware approved pump list ("V.5" on back plate)

12V DC COMPATIBLE ONLY.

Rule – 360gph, 500gph, 1,100gph

TMC 1,500gph, 2,000gph

SPX 1,000

Johnson 400

Ozito 1,700

BARNACLE TIMING ADJUSTMENT PROTOCOL

https://youtu.be/3pP5-_msZKk?si=ta0znBs9C9fXQcz1

The Barnacle comes with a pre-set default to check for water every 30 seconds. The Barnacle will work without any adjustments as soon as it is connected to power. However, depending on your boat's needs, you may want to access the other interval options (10 second and 60 second intervals).

If, for example you were heading out to sea for the day and were expecting to get water in the boat that you wanted to remove quickly, you could set your Barnacle to be more active and check for water every 10 seconds. Or maybe your boat is on the mooring and you want to maximize efficiency to conserve battery power. In this case, it would be better to set the Barnacle check

interval to 60 seconds. After an adjustment, the Barnacle holds the last custom interval setting in internal memory, and will continue on that setting until the timing is changed again.

To change the Barnacle check interval, please follow the separate Barnacle wiring diagram. The blue wire connects to pump (positive). The black wire connects to the common ground (pump negative and battery negative). Leave the red/power/battery positive 12v wire disconnected or wired to an on/off switch. You only need the single red wire to adjust the timing:

Legend:	/ ON / = connect positive wire
	/ OFF / = disconnect positive wire

Step 1

/ ON / and wait for Barnacle light to go on. When the light goes off, / OFF /. This is ONE completed step.

Step 2

Connect and disconnect 5 MORE times, each time waiting for the light to turn before disconnecting. 6 times TOTAL is required to enter the adjustment mode.

On the 6th connection, the Barnacle LED will start flashing quickly, meaning you have entered timing adjust mode.

Step 3

with the LED flashing, choose your preferred interval:

Option one: / OFF // ON / = the Barnacle is on and ready to check every 10 seconds.

Option two: / OFF // ON // OFF // ON / the Barnacle is on and ready to check every 30 seconds.

Option three: / OFF // ON // OFF // ON // OFF // ON / the Barnacle is on and ready to check every 60 seconds.

Troubleshooting: If the timing of connect and disconnect is not correct, the Barnacle may fail to enter timing mode. In this case disconnect then wait for 10 seconds and repeat from Step 1.)