



BG-CP-E

Control Panel Mounted in Enclosure

USER MANUAL



PRODUCT DESCRIPTION

The BG-CP-E is the user interface for the Blue Guard Innovations bilge solution, with the BG-CP mounted in an enclosure for additional protection and convenient mounting. The panel provides a visual and audible status of the oil and high water detection system, bilge pump cycle count and allows automatic or manual override control of the bilge pump.

INSTALLATION

Four #8x0.75" 316 stainless steel screws are provided for mounting the enclosure. The panel has a silicone gasket to prevent water ingress around the edge of the panel and is mounted in an enclosure for extra protection, but the panel itself is not waterproof. Two cable glands are provided for cable entry into the bottom of the enclosure.

The *Blue Guard Installation Guide* shows the wiring for all supported configurations. All wiring connections are made using 14 gauge marine grade wire. Seven quick connect terminals are exposed on the back of the panel, and 16-14 AWG crimp terminals are provided.

INSTALL STEPS:

- 1) Remove the enclosure cover using a Philips-Head screwdriver and locate the four #8x0.75" 316 stainless steel screws and the two cable glands inside the enclosure.
- 2) Install the cable glands to the two openings and tighten lock nuts on the inside of the enclosure.
- 3) Select wall mounting position and mark hole locations. The enclosure should be positioned with cable entry points facing DOWN.
- 4) Drill four 0.125" diameter (1/8") pilot holes.
- 5) Mount the enclosure using the four #8x0.75" 316 stainless steel screws.
- 6) Run wiring from all peripheral equipment or BG-JBox to the enclosure (14 gauge marine grade recommended). Crimp quick connect terminals to wires per BG-CP (Refer to *Blue Guard Installation Guide* Electrical II or III).
- 7) Plug terminals to back of panel until seated firmly.
- 8) After system test, tighten cable glands on wires to prevent water intrusion.
- 9) Reattach cover and tighten screws until snug - do not overtighten.
- 10) Check fuse rating on pump and change if needed (5A pre-installed).
- 11) Reset the unit via the reset button after connecting to power. When power is first applied to the panel, the counter may display a random number and the alarms may be on.

OPERATION

1) Auto/Manual Pump Switch

Auto Mode — Applies power to the AUTO line. This mode allows the BG-One to automatically control the pump based on detection of oil or water. If oil is detected the pump will not run, but if water is detected the pump will run. This mode is used to aid in preventing pumping oil out of the bilge.

Manual Mode — Applies power to the MANUAL line. This mode forces the BG-One to power the pump regardless of the detection of oil or water.

Off (Middle Position) — The AUTO and MANUAL lines are powered off.

2) Pump ON/OFF LED and Cycle Count

A green LED indicator will illuminate when the pump power is on. Every time the pump power is cycled from off to on, the LED counter will increment up to a max of 99 cycles. The counter will roll over to 0 and begin counting again on the 100th pump power cycle. The counter can be reset by holding the reset button for two seconds. Note: This is a sensing input and no power is provided on the line.

3) Oil and High Water Alarm

There are two independent inputs on the back of the panel to wire the BG-One or BG-Oil and BG-HW alarm outputs to the control panel. If the alarm is triggered, the corresponding LED will illuminate and the audible alarm will sound. Since the alarms are latched, the alarm must be manually cleared using the reset button.

Since the LED and audible alarm are triggered by a rising edge, clearing the alarms does not mean that the alarm condition is resolved. The operator must check the bilge to make sure the oil or high water condition is cleared.

To mute the audible alarm, push the mute button.

4) Reset Button

When held for two seconds, this button resets the pump counter and latched alarms for oil and high water. The reset should only be done after the alarm condition is cleared (oil or high water) to prevent false triggering.

5) Mute Button

The mute button is used to mute the audible alarm. Push once and the button illuminates to indicate mute is active. Push again and the button turns off to indicate mute is off. The mute button does not affect the detection and latching of alarms.

6) Fuse

The control panel comes with a 5A fuse pre-installed. The fuse is inline with the power to the pump and BG-One on the Auto and Manual lines. If the bilge pump is rated for greater than 5 Amps, remove the 5A fuse and install the pump manufacturer recommended fuse. 10A and 20A fuses are supplied as a convenience. It is important that the right fuse is selected based on the bilge pump power rating of the bilge pump. Consult qualified electrician or electronic technician for proper fuse selection.

MAINTENANCE

Periodically check to ensure the fuse is not blown. The MANUAL and AUTO lights on the rocker switch will not turn on if the fuse is blown.

Note: The BG-CP will still power up if the fuse is blown.

WARRANTY INFORMATION

Blue Guard Innovations, LLC 4909 Nautilus Ct N, Suite 121 Boulder, Colorado 80301 warrants to the original consumer purchaser that this product will be free from defects in material and workmanship, providing that the unit is not opened or otherwise abused for a period of three (3) years from the date originally purchased unless otherwise noted or sold by the manufacturer. The exclusive remedy of the consumer purchaser in the event the product is defective is to return the product to Blue Guard Innovations, LLC at the above address, freight prepaid with original sales receipt. IMPORTANT: FOR THIS WARRANTY TO BE EFFECTIVE, the product MUST BE SUPPLIED WITH PROOF OF ORIGINAL PURCHASE DATE OF THE PRODUCT. THE ACCEPTANCE BY BLUE GUARD INNOVATIONS, LLC OF ANY PRODUCT RETURNED SHALL NOT BE DEEMED AN ADMISSION THAT SUCH PRODUCT IS DEFECTIVE OR IN VIOLATION OF ANY WARRANTY. THE COMPANY RESERVES THE RIGHT TO REPAIR OR REPLACE THE PRODUCT. NO REPRESENTATIVE OR OTHER PERSON IS AUTHORIZED TO ASSUME FOR BLUE GUARD INNOVATIONS, LLC ANY ADDITIONAL LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS OR TO ALTER THIS WARRANTY IN ANY WAY. IN NO EVENT WILL BLUE GUARD INNOVATIONS, LLC BE LIABLE FOR MORE THAN THE SALES PRICE OF THE PRODUCT. UNDER NO CIRCUMSTANCES WILL BLUE GUARD INNOVATIONS, LLC BE LIABLE FOR ANY LOST PROFITS, INCIDENTAL OR CONSEQUENTIAL COSTS, EXPENSES, OR DAMAGES. THE LIMITATION ON LIABILITY FOR LOST PROFITS, INCIDENTAL OR CONSEQUENTIAL COST EXPENSES OR DAMAGES SHALL SURVIVE ANY FAILURE OF ESSENTIAL PURPOSE OF THIS LIMITED WARRANTY. All wiring on the vessel shall be performed by a QUALIFIED MARINE ELECTRICIAN and in accordance with the "Fire Protection Standard for Motor Craft", NFPA No. 302. The Standards of the American Boat and Yacht Council, Inc., and the USCG Safety Standards for Boat Electrical Systems (33 CFR 183). Some states do not allow the exclusive or limitation of incidental or consequential damages, so the above limitation may not apply to you. NO EXPRESS OR LIMITED WARRANTY, INCLUDING WARRANTY OF MERCHANTABILITY AND FITNESS SHALL EXTEND FOR ANY PERIOD OF TIME GREATER THAN THREE (3) YEARS FROM THE DATE OF ORIGINAL PURCHASE OF THIS PRODUCT. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you. CAUTION - Warranty void if seal on product is broken or product is tampered with in any way, if any electric cord is cut back more than 4 inches, if electric splices become submerged, or if product is installed contrary to instructions or warnings. Blue Guard Innovations, LLC 4909 Nautilus Ct N, Suite 121 Boulder, Colorado 80301.