# **USER'S MANUAL**



# Variable Speed Control (VSC)

MODEL(S): L1004B







When using electrical equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- 1. Read and follow all instructions before using the equipment
- 2. Keep the cord out of heavy traffic area. To avoid fire hazard NEVER put the cord under rugs, near heat generating devices
- 3. Always unplug power before servicing
- 4. Do not drop or insert any object into any openings
- 5. Do not operate any equipment with a damaged part
- 6. Any other use not recommended by the manufacturer may result in electrical shock or injury to persons
- 7. Never use outdoors
- 8. Do not attempt to repair or adjust any electrical or mechanical functions on this unit. Doing so will void the warranty.

After reading this owner's guide, if you have any questions or comments, please call +1-817-633-1080 or contact our technical support department at support @luraco.com or visit our website at www.luraco.com for more information

#### PLEASE READ AND SAVE THESE IMPORTANT SAFETY INSTRUCTIONS

## **FEATURES - OPERATIONS**

LURACO Variable Speed Control (VSC) -This system allows the bather to adjust the pump speed or jet pressure to any desired level electronically.

#### Other features:

- Integrated water sensor
- One extra outlet for LED light
- Built in 20 minute timer
- If the water sensor is installed, motor will not be turned on until water level is above the sensor electrodes (**Note**: There is a 10 second turn-off delay when water level goes below sensor)

# INSTALLATION GUIDE

## I) Overall System Integration

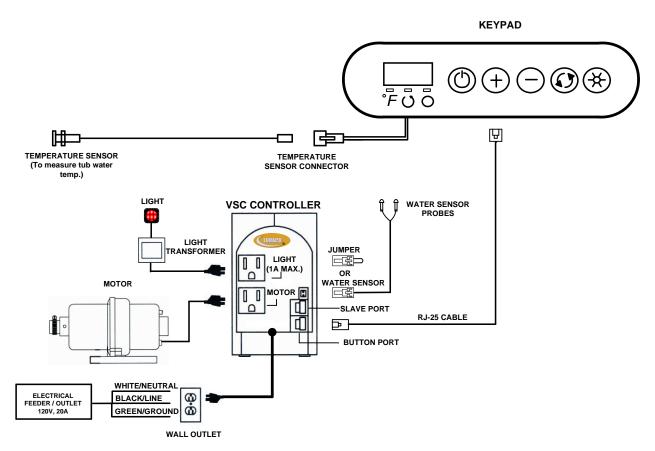


Fig. 1 Wiring Connection Diagram

## II) Installation Guide for the Water Level Sensor

Two conductive electrodes with advanced electronics and firmware are used to detect the water level. This is the same water level sensing technology that has been widely used in Bathtubs and Whirlpool tubs. This technology can work with any non-metallic spa tub materials, such as fiber glass, clear fiber glass, acrylic and even glass. A sensor proper installation is required. Important Note: if your tub is painted with metallic particles filled paint, you need to remove the paint surrounding the electrodes in order for the sensor to operate properly.

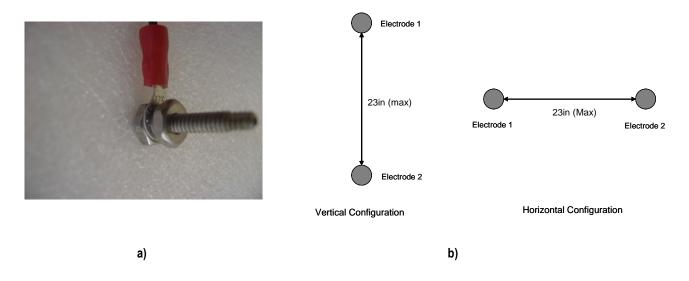


Fig. 2: a) Electrode mounting behind the tub

b) Electrode Configurations

#### Follow the steps below for the water level sensor installation

Locate the location for the sensor electrodes to be installed. **Note:** The electrodes can be installed in vertical or horizontal configuration (**Fig. 2b**)

- a) Drill two holes (9/64in diameter) on the tub with approximate distance as shown in **Fig. 2b** above. Insert the electrodes and tighten the nuts to secure the ring connectors as shown in **Fig. 2a** above.
- b) Connect the other end of sensor cable to the VSC port named "Level Sensor"
- c) Connect the control button to the VSC port named "Control Button".
- d) Connect the Light transformer to the VSC port named "**Light**" Note: The maximum current this port can provide is 1 A.
- e) Connect the Pump to the VSC port named "Motor"

### WARRANTY INFORMATION

#### One (1) YEAR LIMITED WARRANTY

- 1. This Warranty applies only to the original purchaser of this product.
- 2. This Warranty applies ONLY to repair or replacement of any supplied or manufactured parts of this product. The warranty does not cover normal wear, coating, dropped or abused unit.
- 3. Unless otherwise proscribed by law, The LURACO technologies, Inc. shall not be liable for any personal injury, property or any incidental or consequential damages of any kind resulting from malfunctions, defects, misuse, by improper installation or alteration of this product.

#### Attention: Any modification to the product will void the warranty

#### **Important Instructions**

If you need to send a unit to us for repair, please follow the steps below.

- 1. Carefully pack the item in its original carton or other suitable box to avoid damage in shipping.
- 2. Before packing your unit; be sure to enclose:
  - Your name with full shipping address and telephone number
  - A dated receipt as PROOF OF PURCHASE
  - Attach a paper detailing the problem you are having

## **VSC SPECIFICATIONS**

Ratings (Max):

**L1004B:** Motor (up to 13.5 Amp), Light (1 Amp)

Voltage: 120VACFrequency: 60Hz

• Dimensions: L: 5.9in, W: 3.1in, H: 5.31in

Weight: 3Lbs

This controller is not compatible with capacitor start motors

## **Disclaimers**

Limited warranty and liability — Information in this document is believed to be accurate and reliable. However, LURACO Technologies does not give any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information.

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