



# SJE VerticalMaster® II LC Control Switch Installation Instructions

**Mechanically-activated control switch designed to activate low current control panels and alarms.**

This control switch offers reliable control for AC and DC applications in non-potable water, and wastewater. The internal switching mechanism has gold cross-point contacts for reliable low current operation. Common applications include PLC (programmable logic controller) panels, IS panels, with intrinsically safe barriers, low current solar barriers, low current solar applications, and other low current control panel and alarm applications.

The SJE VerticalMaster® II LC (Low Current) switch is not sensitive to turbulence.

It is available in normally open (high level) operation only.

## SJE VERTICALMASTER® II LC (LOW CURRENT) CONTROL SWITCH



- Adjustable activation range of .75 to 6.5 inches (2 to 17 cm).
- Low current, non-arcing applications down to 0.160 mA at 125 VAC
- Includes standard boxed packaging.
- UL Recognized for use in non-potable water.
- CSA Certified.
- Five-year limited warranty.

U.S. Patent No. 6,140,925  
CA Pats. 2,367,577 and 2,694,446  
Euro Pat. 1203360  
German Pat. DE69931196T2  
China Pat. 201110089665.0

### PREVENTATIVE MAINTENANCE

- Periodically inspect the product. Check that the cable has not become worn or that the housing has not been damaged so as to impair the protection of the product. Replace the product immediately if any damage is found or suspected.
- Periodically check to see that the float and rod are free to move and operate the switch.
- Use only SJE-Rhombus® replacement parts.

## SJE-RHOMBUS® FIVE-YEAR LIMITED WARRANTY

**SJE-RHOMBUS®** warrants to the original consumer that this product shall be free of manufacturing defects for five years after the date of consumer purchase. During that time period and subject to the conditions set forth below, **SJE-RHOMBUS®** will repair or replace, for the original consumer, any component which proves to be defective due to defective materials or workmanship of **SJE-RHOMBUS®**.

**THIS EXPRESS WARRANTY DOES NOT APPLY TO THE MOTOR START KIT COMPONENT. SJE-RHOMBUS® MAKES NO WARRANTIES OF ANY TYPE WITH RESPECT TO THE MOTOR START KIT.**

**ELECTRICAL WIRING AND SERVICING OF THIS PRODUCT MUST BE PERFORMED BY A LICENSED ELECTRICIAN.**

**THIS WARRANTY DOES NOT APPLY:** (A) to damage due to lightning or conditions beyond the control of **SJE-RHOMBUS®**; (B) to defects or malfunctions resulting from failure to properly install, operate or maintain the unit in accordance with printed instructions provided; (C) to failures resulting from abuse, misuse, accident, or negligence; (D) to units which are not installed in accordance with applicable local codes, ordinances, or accepted trade practices, and (E) to units repaired and/or modified without prior authorization from **SJE-RHOMBUS®**.

*Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.*

**TO OBTAIN WARRANTY SERVICE:** The consumer shall assume all responsibility and expense for removal, reinstallation, and freight. Any item to be repaired or replaced under this warranty must be returned to **SJE-RHOMBUS®**, or such place as designated by **SJE-RHOMBUS®**.

**ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. SJE-RHOMBUS® SHALL NOT, IN ANY MANNER, BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES AS A RESULT OF A BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.**

### NOTICE!

Products returned must be cleaned, sanitized, or decontaminated as necessary prior to shipment to ensure that employees will not be exposed to health hazards in handling said material. All applicable laws and regulations shall apply.

**⚠ WARNING****ELECTRICAL SHOCK HAZARD**

Disconnect power before installing or servicing this product. A qualified service person must install and service this product according to applicable electrical and plumbing codes.

**⚠ WARNING****EXPLOSION OR FIRE HAZARD**

Do not use with flammable liquids. Install in accordance with ANSI/NFPA 70. Suitable for usage with intrinsically safe circuit extensions as defined by UL 698A.



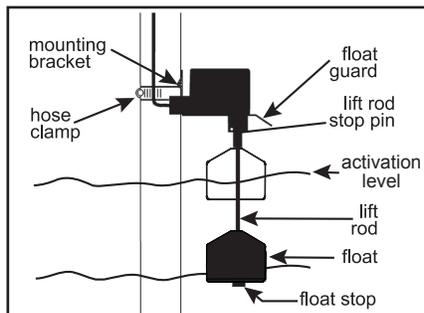
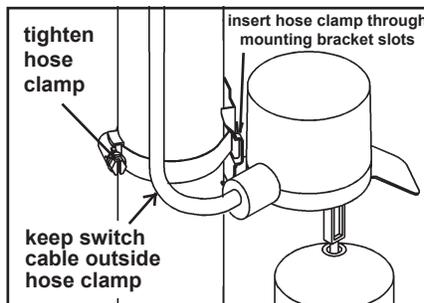
Failure to follow these precautions could result in serious injury or death. Replace product immediately if switch cable becomes damaged or severed. Keep these instructions with warranty after installation. This product must be installed in accordance with National Electric Code, ANSI/NFPA 70 so as to prevent moisture from entering or accumulating within boxes, conduit bodies, fittings, float housing, or cable.

*For detailed specifications on this product, or for the complete line of SJE-Rhombus® panel, alarm, and switch products, visit our web-site at [www.sjerrhombus.com](http://www.sjerrhombus.com).*

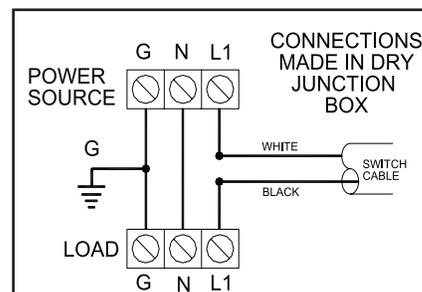
**MOUNTING THE SWITCH**

**Warning:** Do not install switch in direct line of incoming liquid.

1. Determine desired activation level as shown in Figure A. Activation level can be adjusted by moving the float stop up or down the rod.
2. Insert hose clamp through slots in mounting bracket as shown in Figure B.
3. Position hose clamp around discharge pipe with bracket gripping tabs against pipe. Cable should remain outside of hose clamp.
4. Tighten the hose clamp securely.
5. Secure switch cable to discharge pipe as shown in Figure A.

**Figure A****Figure B****DIRECT WIRE INSTALL**

1. Follow steps 1 through 5 of "Mounting The Switch."
2. Wire switch as shown below.
3. Check installation. Allow system to cycle to insure proper operation.

**⚠ WARNING**

Ensure cable connections are performed in a **dry** junction box or other watertight seal that seals both conductors and cable jacket. Failure to do so could result in electrical shock hazard and/or water traveling down cable and entering the switch. Failure to guard against this may affect switch performance.



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