



ULTRA NATOR™ System Installation Instructions

This Ultra Nator™ control and alarm system provides a pre-wired control panel for an indoor duplex pump application. The Ultra Nator™ employs two receptacles to accept two 120 VAC pump plugs (120V Model) or two 230 VAC pump plugs (230V Model).

In normal operation pumps will alternate based on the pump switch level. If an alarm condition occurs (top float activates), the alarm light and horn turn on. The pump in use will turn off and the other pump will turn on. Pumping will continue until the pump switch deactivates (bottom float).

ULTRA NATOR™ FEATURES

- 120AC Voltage - Primary: 120 VAC, 60Hz; Secondary: 9 VDC (120V Model)
- 230AC Voltage - Primary: 230 VAC, 60Hz; Secondary: 9 VDC (230V Model)
- If primary power fails, the alarm system continues to work due to battery backup feature. Battery Backup Power - 9VDC (Battery not included) (Battery back up will not run pumps)
- Pump failure indicator, alerts of potential pump problems.
- NEMA 1 rated for indoor use.
- Alternating pump action equalizes pump wear.
- Factory-installed 10ft power cord.
- Factory-installed pump activation and alarm activation switches for easy installations. (Various switch configurations available).
- Red LED high water indicator.
- Amber LED horn disabled indicator.
- Green LED pump run indicators (pump 1 & pump 2).
- Green LED power on indicator.
- Audible and visual high water alarm.
- Entire system is UL and cUL Listed to meet and/or exceed industry safety standards.
- Alarm test press button switch.
- Horn Silence press button switch.
- Pump Run press button switch.
- Test-Reset press button switch.
- Five-year limited warranty.
- Auxiliary Contacts (normally open and normally closed).

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 floats are free to move and operate the pump and alarm.
- Use only SJE-Rhombus® replacement parts.
- Replace battery as specified in instructions.
- Test/check battery once a week.

SJE-RHOMBUS® THREE-YEAR LIMITED WARRANTY

SJE-RHOMBUS® warrants to the original consumer that this product shall be free of manufacturing defects for three 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 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.

⚠ 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 this product with flammable liquids. Do not install in hazardous locations as defined by National Electrical Code, ANSI/NFPA 70.

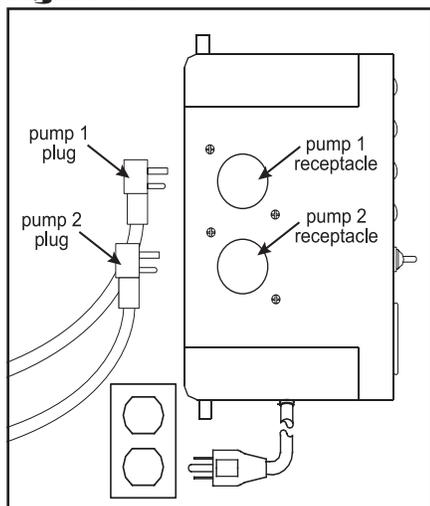
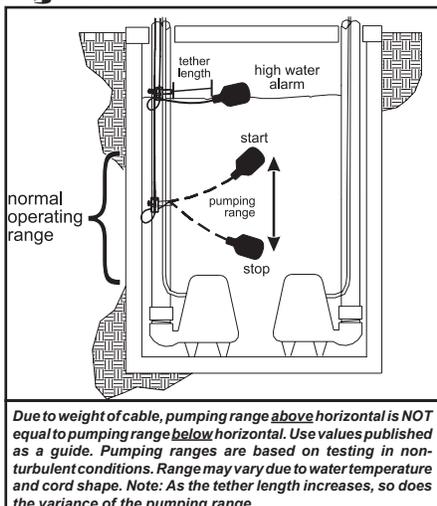
Failure to follow these precautions could result in serious injury or death. Replace product immediately if switch cable becomes damaged or severed. Keep these instructions with warranty after installation. This product must be installed in accordance with National Electric Code, ANSI/NFPA 70 so as to 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.sjrhombus.com.

INSTALLING THE ULTRA NATOR™

NEMA 1 enclosures are for indoor use only, primarily to provide a degree of protection against contact with enclosed equipment. The Ultra Nator™ is designed to operate with two floats. These floats operate pump stop/start and high level alarm functions.

1. Choose a dry wall location within 10 feet of the incoming power receptacle and close enough for installation of the floats. Mount the UltraNator™ securely to the wall. (Caution: Do not mount the control panel in a riser, tank, or any area that will be susceptible to moisture or flooding)
2. Open battery door and install 9vdc battery and close door. (Battery not included, use heavy-duty alkaline battery)
3. Verify battery backup alarm system works by tipping high water alarm float. (Red LED on front of panel and audible alarm will sound)
4. Plug the pump plugs into the receptacles as shown in Figure A.
5. Plug in the power cord from panel into incoming power receptacle as shown in Figure A.
6. Check installation by manually tipping the pump float (one pump will start running); lower float until pump stops running; tip pump float again (the other pump will start running); lower float. Manually tip alarm float (Red LED will illuminate and audible alarm will sound). To silence the horn press the Horn Silence switch. The Horn Disabled light will flash. To reset the horn to activate mode, press the Horn Silence switch until the Horn Disabled light stops flashing.
7. Test the unit (weekly) to ensure proper operation.
8. Replace 9VDC battery every 12 months or when pressing battery Test-Reset switch results in a yellow or red LED or a low battery chirp sounds.

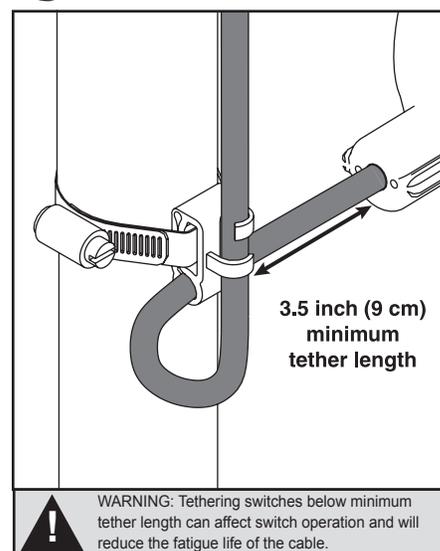
Figure A**Figure B****MOUNTING THE SJE MICROMASTER®**

1. Determine the required cord tether length according to chart below and as shown in Figure B.

tether length (inches)	3.5 min.	6	9	12	15	18	22
pumping range (inches)	8	11	15	21	28	31	36

2. Place the cord into the clamp as shown as shown in Figure C.
3. Locate clamp at desired activation level and secure the clamp to the discharge pipe as shown in Figure C. **Note:** Do not install cord under hose clamp.
4. Tighten the hose clamp using screwdriver. Over tightening may result in damage to the plastic clamp. Make sure the float cable is not allowed to touch the excess hose clamp band during operation.
5. Check installation. Allow system to cycle to insure proper operation.

Note: All hose clamp components are made of 18-8 stainless steel material. See your SJE-Rhombus® supplier for replacements.

Figure C

INSTALLING THE VERTICALMASTER® II

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

1. Determine desired activation level and pumping range as shown in Figure D. Pumping range 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 E.
3. Position hose clamp around discharge pipe with bracket gripping tabs against pipe as shown in Figure E and F. Cable should remain outside of hose clamp.
4. Tighten the hose clamp securely.
5. Secure pump cable and switch cable to discharge pipe as shown in Figure D with wire ties (not supplied).
6. Check the installation. Verify that the float is free to move and activate the switch. Allow system to cycle to ensure proper operation.

Note: All hose clamp components are made of 18-8 stainless steel material. See your SJE-Rhombus® supplier for replacements.

Figure D

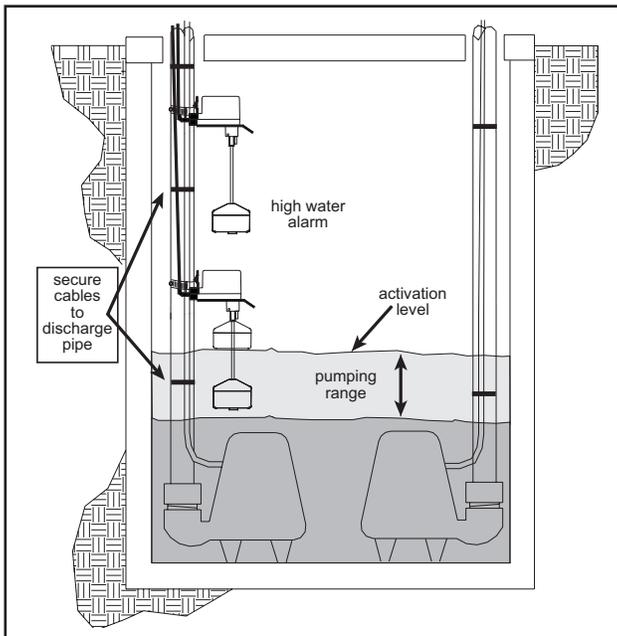
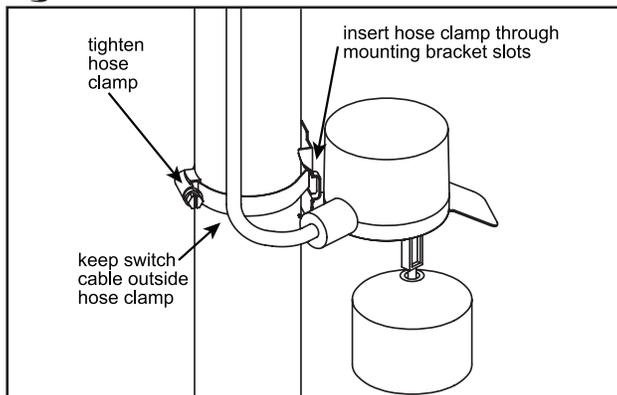


Figure E



MOUNTING THE VERTICAL REED SWITCH

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

1. Place the clamp into the VRS switch housing as shown in Figure G.
2. Locate clamp at desired activation level and secure the clamp to the discharge pipe as shown in Figure F & G. **Note:** Do not install cord under hose clamp.
3. Tighten the hose clamp using screwdriver. Over tightening may result in damage to the switch housing.
4. Check installation. Allow system to cycle to insure proper operation.

Note: All hose clamp components are made of 18-8 stainless steel material. See your SJE-Rhombus® supplier for replacements.

Figure F

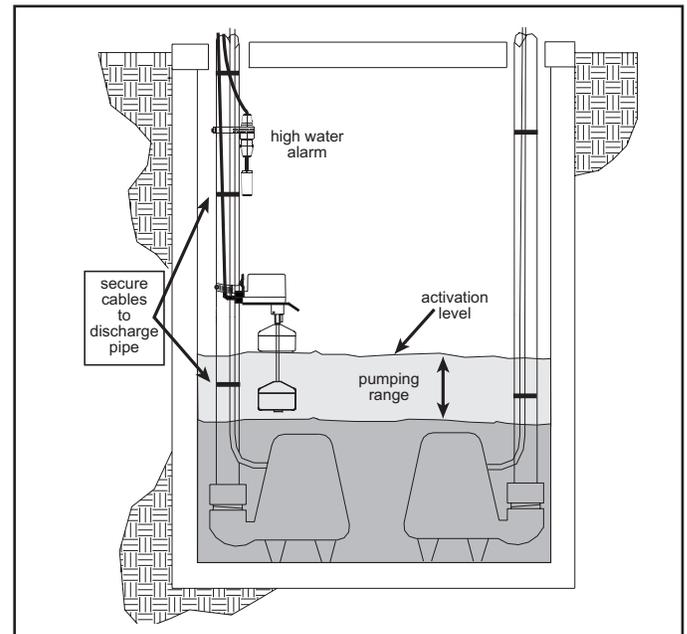


Figure G

