HYDROQUIP™

THE SMART CHOICE™

PORTABLE BAPTISMAL SYSTEM

ORDER CODE:

PBES-6010	**1000W Advanced Heating System**
PBES-6040	**4000W Advanced Heating System**

Operation / Installation Instructions

85-0059 Rev.08 - 6/19

INTRODUCTION

The **Hydro-Quip** Portable Baptismal System has been designed to be used in an indoor environment only, do not use this system outdoors.

The **Hydro-Quip** Portable Baptismal System is a modular system that will provide years of trouble free operation when installed and used properly. It has been designed to quickly and efficiently heat the water of a portable baptistry and not designed for continuous (24/7) operation. As with all electrical equipment certain safety precautions should taken during installation and operation.

IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS

- **DANGER** - To reduce the risk of injury do not permit children to use this product.
- **WARNING** - RISK OF CHILD DROWNING. Extreme caution must be exercised to prevent unauthorized access by children, ensure that children cannot use the water vessel unless they are supervised at all times.
- **DANGER** - To reduce the rick of injury to persons, do not remove the suction fittings if equipped.
- The water vessel must accommodate sufficient drainage of water around the base of the structure as well as any power source compartment.
- **HYPERTHERMIA** - Prolonged immersion in water that is warmer than the normal body temperature can cause this condition. The symptoms of hyperthermia include dizziness, fainting, drowsiness, lethargy, and an increase in internal body temperature. The effect of hyperthermia include (1) unawareness of impending hazard, (2) failure to perceive heat, (3) failure to recognize the need to exit the water vessel, (4) physical inability to exit the water vessel, (5) fetal damage to pregnant women, (6) unconsciousness resulting in the danger of drowning. WARNING - The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia.
- **DANGER** - RISK OF ELECTRICAL SHOCK. Do not permit any electrical appliance, such as a light, telephone, radio, or television within 5 feet (1.5m) of the water vessel.

a) The temperature in the water vessel should never exceed 100°F (38°C). Water temperatures between 90°F (32°C) and 100°F(40°C) are considered safe for healthy adults. Lower water temperatures are recommended for extended use (exceeding 10 - 15 minutes) and for young children.

b) Excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy. Pregnant or potentially pregnant women should limit the temperature of the water vessel to below 100°F (38°C).

c) Before entering the water vessel the user should measure the water temperature with an accurate thermometer.

d) The use of alcohol, drugs, or medication before of during use of the water vessel may lead to unconsciousness with the possibility of drowning.

e) Persons suffering from obesity or with a medical history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before entering the water vessel.

f) Persons using medication should consult a physician before entering the water vessel since some medications may effect heart rate, blood pressure, and circulation.

SELECTION GUIDE FOR ELECTRIC HEATERS

Use this table to select the proper size Electric Heater for spas, hot tubs, and other vessels of water. This table is based on "Temp Rise per Hour" and assumes the vessel will be covered while heating. If the vessel is located outside in cold weather an increase in heater size may be required.

Kilowatt **AMPs** **Voltage**	1.0KW 8.3A 120V	4.0KW 16.6A 240V
Water Volume Gallons	**TEMPERATURE RISE IN 1 HOUR (F)**	
100	4.11	16.44
200	2.06	8.22
300	1.37	5.48
400	NA	4.11
500	NA	3.29
600	NA	2.74

TEMPERATURE RISE FORMULA

$$T = \frac{kW \times 411}{V}$$

V = Volume of water in Gallons
kW = Kilowatt of Heater
T = Temperature Rise per Hour in F°

8/10 - MBS

CARTON INCLUDES:

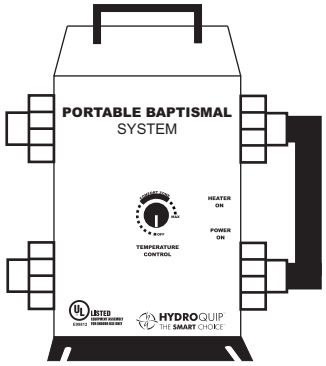
(1) Portable Baptimsal System
(1) 120V Submersible Pump
(1) Base & Hardware Kit
(2) 15' Hoses
(1) Installation & Assembly Instructions

EQUIPMENT DESCRIPTION AND OPERATION

CONTROL BOX:

The control box contains all the necessary electrical components to operate the system.

NOTE: No user serviceable parts inside.



SUBMERSIBLE PUMP:

The submersible pump provided has been sized and chosen for this light duty application of heating and draining small compact Portable Baptistry units. This pump and system are ***NOT*** designed for continuous operation or prolonged periods of use. If you require continuous operation or wish to operate and maintain the water temperature and water condition for long periods, please contact your supplier to learn more about our medium and heavy duty models.

Pump may differ

TEMPERATURE CONTROL:

The temperature control knob is located on the front of the advanced heating system called out as "Temperature Control". The temperature control knob may be adjusted from the "OFF" position to "MAX" which is a temperature of approx 104°F.

A "Comfort Zone" range has been provided to give the user the most desired range of temperatures 75°F - 90°F. It is recommended that when the unit is first used that the temperature control knob be set to the lowest portion of the "Comfort Zone" and allow the system to heat and stabilize.

Always use an accurate thermometer to monitor the water temperature.

TEMPERATURE CONTROL

HEATER "ON" LIGHT:

This indicator light activates when the advanced heating system is on.

HEATER ON

POWER "ON" LIGHT:

This indicator light activates when the power switch is on and verifies power is supplied to the pump power receptacle.

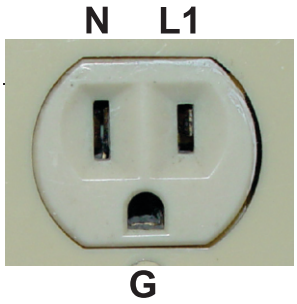
POWER ON

ELECTRICAL INSTALLATION

The Portable Baptismal system comes in three (3) pre-wired voltage configurations, 120V/15A, 240V/30A, & 240V/50A. Regardless of voltage supply the system must ALWAYS be connected to a GFCI.

120V/15A:

The 120V system may be simply connected to the nearest standard 15A receptacle with the included 15A GFCI power cord at least 5' away.

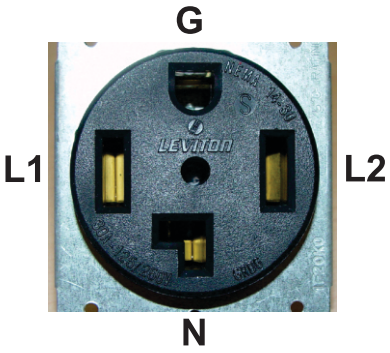


NEMA 15-5 Receptacle

Test Points	Voltage
L1 - N	120V
L1 - G	120V
N - G	0V

208-240V/30A:

The 240V system MUST be hard wired or plug connected to a GFCI protected circuit.

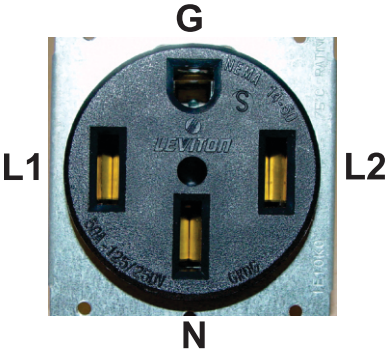


NEMA 14-30 Receptacle

Test Points	Voltage
L1 - L2	240V
L1 - N	120V
L1 - G	120V
L2 - N	120V
L2 - G	120V
N - G	0V

208-240V/50A:

The 240V system MUST be hard wired or plug connected to a GFCI protected circuit.

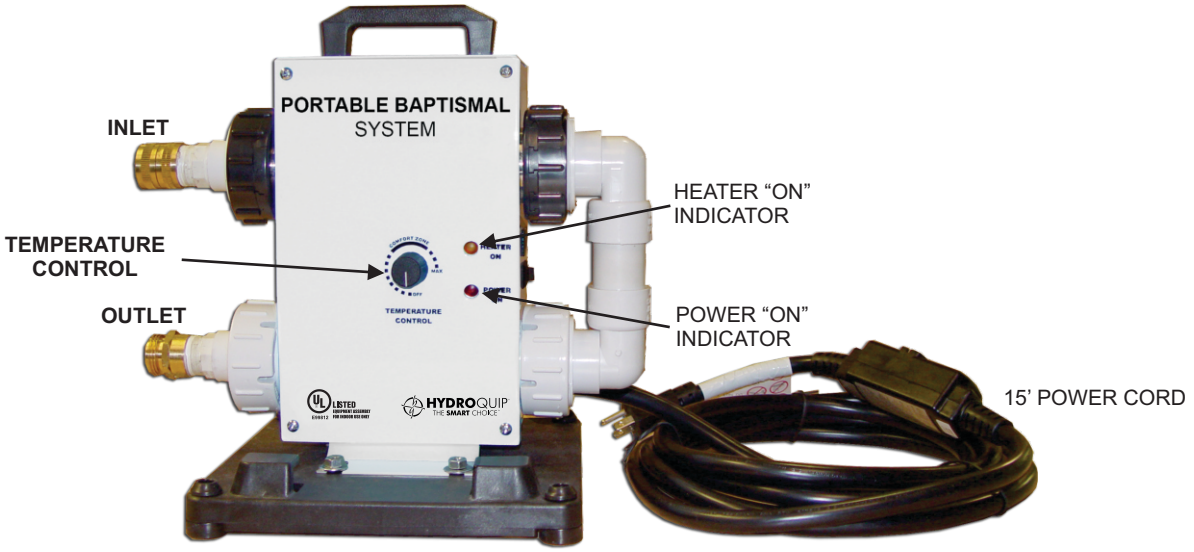


NEMA 14-50 Receptacle

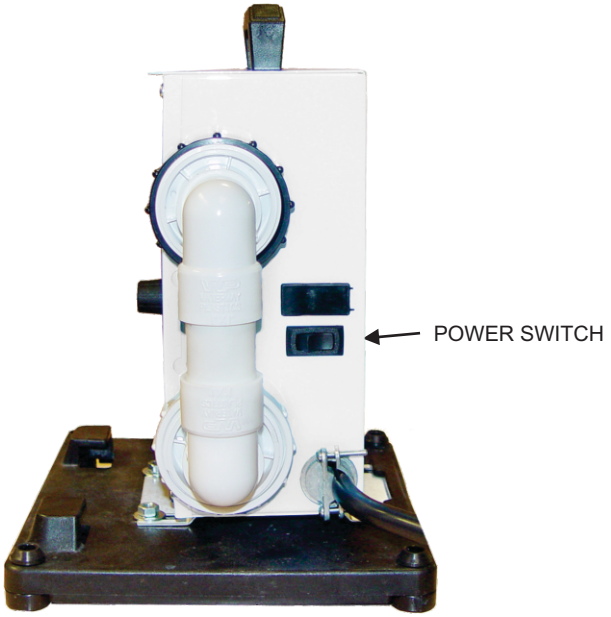
Test Points	Voltage
L1 - L2	240V
L1 - N	120V
L1 - G	120V
L2 - N	120V
L2 - G	120V
N - G	0V

WARNING: ***DO NOT, under any circumstances, use an extension cord***
WARNING: ***Any unauthorized electrical modifications to the advanced heating system voids any and all warranties.***

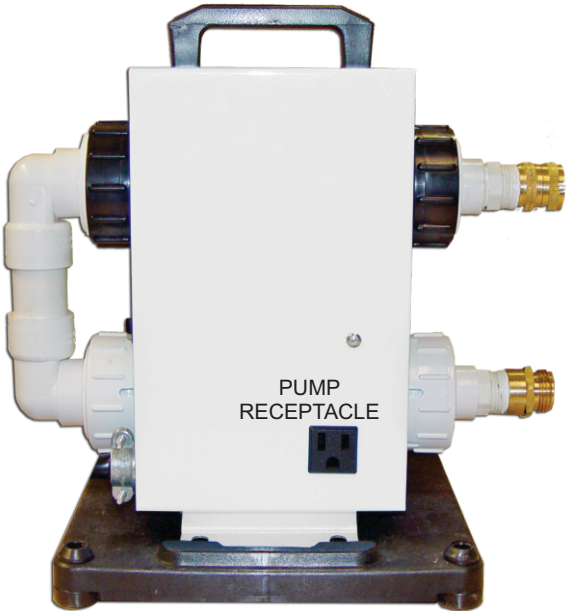
EQUIPMENT DESCRIPTION



FRONT



SIDE



BACK

NOTE: PBES-6010 SHOWN

SYSTEM START UP

1. Make sure gaskets are present and connect the hoses to the Heating System and Submersible Pump.
2. Place the submersible pump and return hose into the body of water.

****** DO NOT put the "Portable Baptismal System" into the water******

****** Place the "Portable Baptismal System" at least 5' from the water tank******

3. Rotate the Temperature Control knob counterclockwise to the OFF position
4. Plug the system into a receptacle within 15' of the unit
5. Place the Power Switch in the OFF position (Power light is OFF)
6. Plug the submersible pump into the receptacle on back of Heater System.
7. Place the Power Switch in the ON position (Power light is now ON)
8. The Pump should turn on and you will see air coming from the return hose. Let the System run for a couple of minutes while you check for leaks at all the hose and fitting connection points. You will feel a solid stream of water coming from the return hose.
9. Once water has been flowing for a couple of minutes and there are no leaks, rotate the Temperature Control knob clockwise to the beginning of the "Comfort Zone". The Heater ON Light will come on and the unit will begin to heat.

******See Page #2 for temperature settings details******

******You will NOT feel HOT water coming from the return hose******

!!!Be aware!!!

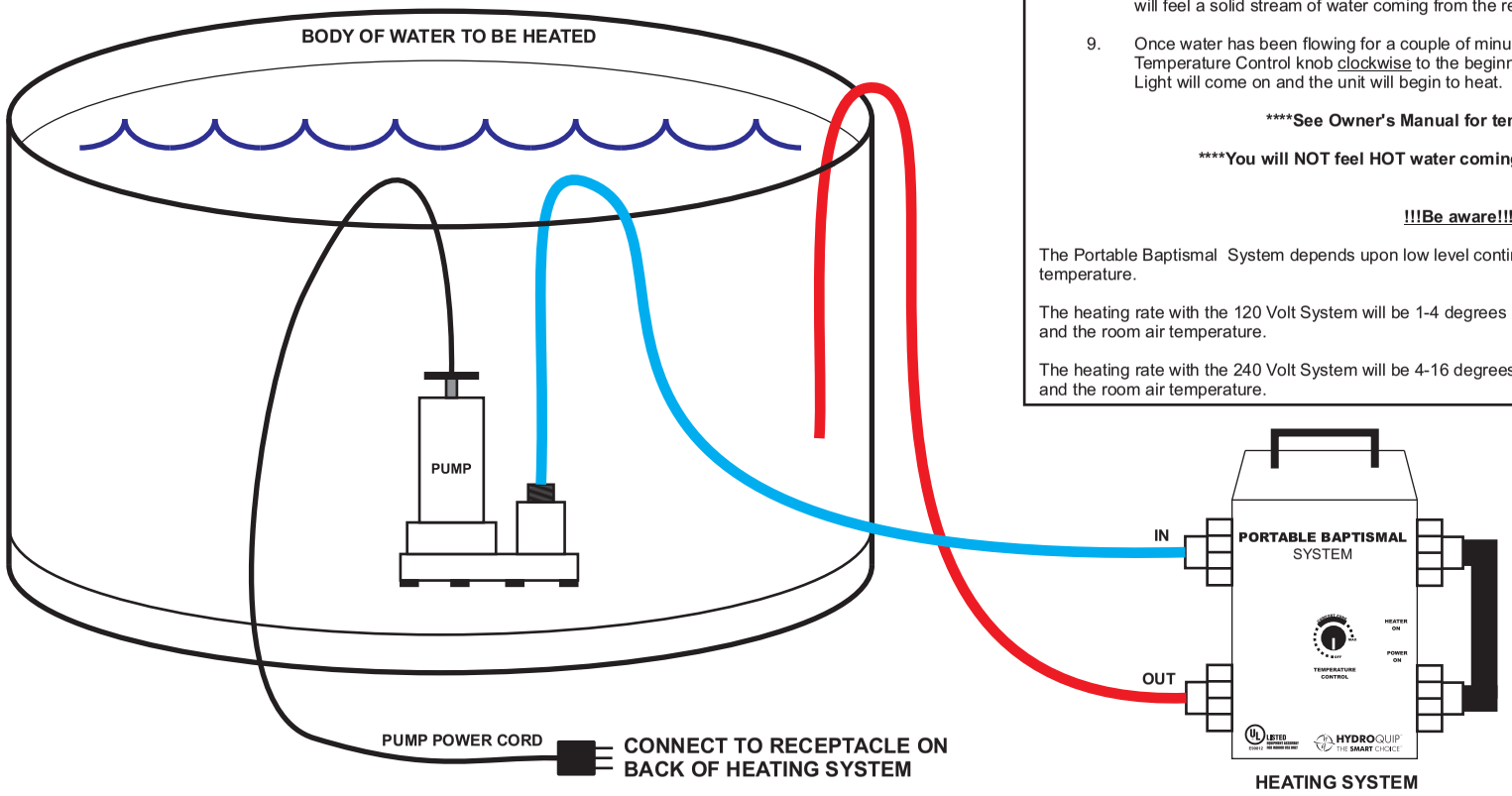
The Portable Baptismal System depends upon low level continuous heating to bring the water to a desired temperature.

The heating rate with the 120 Volt System will be 1-4 degrees per hour depending upon the amount of water and the room air temperature.

The heating rate with the 240 Volt System will be 4-16 degrees per hour depending upon the amount of water and the room air temperature.

PORTABLE BAPTISMAL SYSTEM

ALWAYS REMOVE THE PUMP BEFORE ENTERING THE BAPTISTRY



QUICK SET-UP INSTRUCTIONS

1. Make sure gaskets are present and connect the hoses to the Heating System and Submersible Pump.
2. Place the submersible pump and return hose into the body of water.

****** DO NOT put the "Portable Baptismal System" into the water******

****** Place the "Portable Baptismal System" at least 5' from the water tank******

3. Rotate the Temperature Control knob counterclockwise to the OFF position
4. Plug the system into a receptacle within 15' of the unit

******See Owner's Manual for proper use of extension cords******

5. Place the Power Switch in the OFF position (Power light is OFF)
6. Plug the submersible pump into the receptacle on back of Heater System.
7. Place the Power Switch in the ON position (Power light is now ON)
8. The Pump should turn on and you will see air coming from the return hose. Let the System run for a couple of minutes while you check for leaks at all the hose and fitting connection points. You will feel a solid stream of water coming from the return hose.
9. Once water has been flowing for a couple of minutes and there are no leaks, rotate the Temperature Control knob clockwise to the beginning of the "Comfort Zone". The Heater ON Light will come on and the unit will begin to heat.

******See Owner's Manual for temperature settings details******

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FREEZING TEMPERATURES

DO NOT EXPOSE the advanced heating system to freezing temperatures. Water, when frozen, will expand causing permanent damage to the advanced heating system.

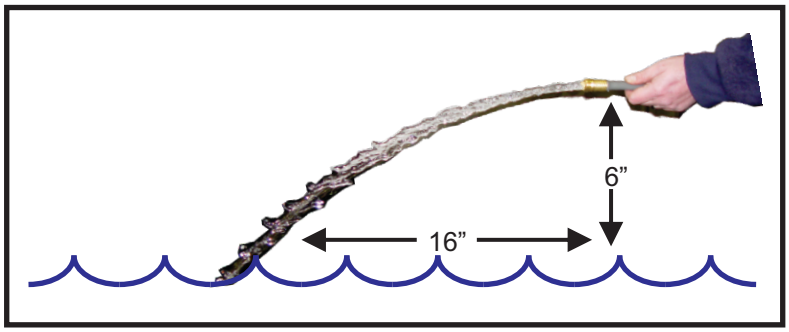
When freezing temperatures are expected the advanced heating system must be disassembled and stored in a dry location protected from the weather.

NOTE: Damage caused by freezing is not covered by the manufacture warranty.

TROUBLE SHOOTING

SYMPTOM	CAUSE	SOLUTION
NO HEAT	POWER SWITCH OFF	TURN POWER SWITCH ON
	PUMP NOT PLUGGED IN	PLUG PUMP INTO ADVANCED HEATING SYSTEM
	KINKED HOSE(S)	UN-KINK HOSES AS NECESSARY
	TEMPERATURE CONTROL SET TOO LOW	INCREASE THE SET POINT
	HIGH-LIMIT TRIPPED	REMOVE POWER FROM SYSTEM AND ALLOW TO COOL HIGH LIMIT WILL RESET AUTOMATICALLY
GFCI TRIPPING	WATER EXPOSURE	CHECK FOR SIGNS OF WATER. IF THE SYSTEM GETS WET THE GFCI MAY TRIP. ALLOW SYSTEM TO DRY COMPLETELY
	BAD COMPONENT	IF THERE ARE NO SIGNS OF WATER A COMPONENT MAY BE DEFECTIVE. CONTACT YOUR DEALER FOR REPAIR OPTIONS

TROUBLE SHOOTING PROPER FLOW



It is imperative that proper water flow be maintained while using the heater system. To confirm proper water flow hold the return hose horizontally 6” above the water level and observe the flow as it exits the hose. The stream should extend out a minimum 14” prior to returning to the tank. If proper flow is not observed look for kinked hoses or any other issues that would restrict flow. ***DO NOT*** use the system if the flow is not as described or damage to unit will occur.

Hydro-Quip Limited Warranty

Effective January 1, 2009

Hydro-Quip warrants its PBES Series of Portable Baptistry Products to the original purchaser to be free from defects in material and workmanship for the period of one (1) year from the original date of purchase, except as noted below. Products which become defective within the warranty period will be repaired or replaced (at the option of Hydro-Quip) except for damage related to freezing, water chemistry, negligence, abuse, misuse, misapplication, unauthorized modification, improper installation, normal wear and tear or chemical attack. This warranty extends only to normal, personal (non-commercial) usage by the original retail purchaser.

Hydro-Quip will not be responsible for labor incurred in removing, inspecting and reinstalling of warrantable products or any travel related charges or labor costs attributable to disassembly and reassembly of the Baptistry, enclosure or any other materials enclosing the PBES Series Products, or attributable to difficulties in gaining access to the PBES Series Products. Hydro-Quip will not be responsible for labor costs for routine maintenance, adjustments or alterations to the calibration of electrical devices.

Any products which are claimed to be defective must be shipped freight prepaid to Hydro-Quip and the repaired or replaced product will be returned to the sender freight collect. When sent to Hydro-Quip, the product must be accompanied by the sales receipt or other proof of the purchase date as well as the sender's name, mailing address, daytime phone number and any other information relating to this claim.

Unless state law expressly provides otherwise, Hydro-Quip will only be responsible for repair or replacement of any of its products that are found to be defective as provided above, and will not bear the cost of any consequential damages. This warranty gives you specific legal rights but you may have other rights which vary from state to state.

Hydro-Quip, Inc.

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