VIKING LLC 1-6 Pump Pro Relay Laundry System

The Pro Relay Laundry System can pump one to six products in response to a trigger signal. Each pump responds to and runs as long as a trigger is present. Each pump produces approximately 18 ounces per minute. This dispenser is ideal for Microprocessor controlled laundry machines. The trigger inputs are isolated from each other, but can be jumped together if necessary. Input trigger signal conditioning is provided. The unit will accept triggers of 24-240 volts AC or DC. The unit is powered with a standard 110 volt AC outlet.

MOUNTING & INSTALLATION

MOUNTING & POWER SUPPLY - For a unit with 1-3 pumps, mount it with the two screws provided. For a unit with 3-6 pumps, mount it with all four screws provided. Make sure that the unit is within reach of a 110-volt outlet. Plug the unit in but do not turn it on at this point.

TRIGGERS - Make sure that power to the washing machine is turned off at the breaker before making any trigger connections. Always verify voltages with a voltmeter. Always run all trigger signals through conduit or seal tight from the washing machine to the dispenser.

There are three .250 quick disconnect tabs on each board for triggers. Each tab is marked. The LEFT hand tab is always for the trigger. The two on the RIGHT are for the common, one for common in, and the other to jump to the next board if using a single common.

Use the quick disconnects and refer to the SILK SCREENING in order to hook up your triggers. Each circuit board will accept trigger signals of 24-240 volts AC or DC. They may be jumped together in order to dispense two products simultaneously. Do not run three pumps together if possible.

The triggers should only be present when the product is to be dispensed during the wash cycle – it should not activate the pump(s) at any other time. AS SOON AS A TRIGGER IS PRESENT, THE CORRESPONDING PUMP WILL BEGIN TO RUN. ALWAYS VERIFY PUMP OUTPUTS / SIGNAL TIMING WITH A MEASURING CUP.

CAUTION

Never attempt to install this piece of equipment without a voltmeter (and the knowledge of how to use it). Only a qualified electrician should connect signal wire(s) for triggers of 110 to 240 volts. Connect trigger signal wires to the trigger(s) inside the machine. Turn electrical power off to the washing machine before making any electrical connections. Check local electrical code regarding the use of conduit/seal tight. Use lockout/tag out procedures. High voltage can cause serious injury or death.

VOLTAGE REJECT - There is a red jumper on two pins of a three pin base labeled Voltage Reject (SW3) on the left hand side of the board. The red two pin jumper comes from the factory installed on the left hand and center pins. With the jumper in the factory position, the board will accept triggers of any voltage equal to or greater than 24 Volts AC / DC (but not exceeding 240 Volts AC / DC). If you would like the board to disregard triggers from the machine with a voltage of less than 75 Volts AC / DC, pull the red jumper off and place it on the center and right hand pins.

TUBING - Measure and cut a piece of supply tubing to go between the dip tube and the intake (left) side of the pump(s). Use the compression nuts provided to secure the tubing. Measure and cut a piece of supply tubing to go between the output (right) side of the pump and the laundry machine. Use the compression nut on the output side of the pump to secure the line.

SETUP & PRIMING - Because the run time of this unit is determined by the length of a programmed external signal, you need only keep in mind that each pump in this unit produces 18 OUNCES OF WATER PER MINUTE, APPROXIMATELY ONE OUNCE EVERY THREE SECONDS. The output will be reduced by the viscosity of each product, temperature, and other factors. Always calibrate your pumps to determine how many ounces per minute of each product you can expect, and then program according to what you need.

The three-position switch in the bottom right hand corner of the board controls the main functions you will need during the installation.

LEFT HAND POSITION (Pump Priming) – the pump will prime as long as the switch is in this position.

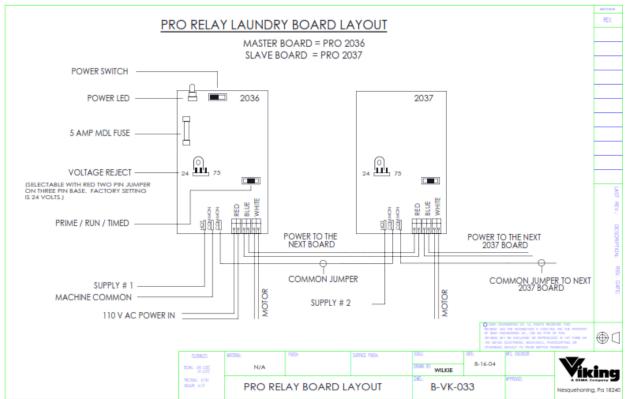
CENTER POSITION (Run) – Once the installation is complete, run times have been checked, and you are ready to leave, THE SWITCH MUST BE IN THE CENTER POSITION TO OPERATE. It will recognize a trigger and run the pump in this position.

RIGHT HAND POSITION (Verify run time) – Because of the nature of this unit, this position will act as a prime position as well. Because there is no preset run time, there is no run time to verify.

BEFORE LEAVING THE INSTALLATION:

- 1. Make sure that the three position switch (on each board if more than a 1 pump unit) is in the center position and that the green trigger indicator light (on each board if more than a 1 pump unit) is OFF.
- 2. Make sure that the unit is plugged in and the power switch is turned on by checking the power indicator light on the front left side of the lid.
- 3. Run a load in the washing machine to verify that everything has hooked up properly; triggers are indicated by green lights, the proper trigger length (i.e. quantity of product) has been programmed, and the pumps run in the correct order.

DIAGRAM:



WARRANTY

Viking LLC, A DEMA Company products are warranted against defective material and workmanship under normal use and service for one year from the date of manufacture. This limited warranty does not apply to any products which have a normal life shorter than one year or failure and damage caused by chemicals, corrosion, improper voltage supply, physical abuse or misapplication. Rubber and synthetic rubber parts such as "O" rings, diaphragms, squeeze tubing and gaskets are considered expendable and are not covered under warranty. This warranty is extended only to the original buyer of Viking LLC products. If the products are altered or repaired without prior approval of Viking LLC, this warranty will be void.

Defective units or parts should be returned to the factory with transportation prepaid. If inspection shows them to be defective, they will be repaired or replaced without charge, F.O.B. factory. Viking LLC assumes no liability for damages. Return Merchandise Authorization (RMA) number to return units for repair or replacement must be granted in advance of return.