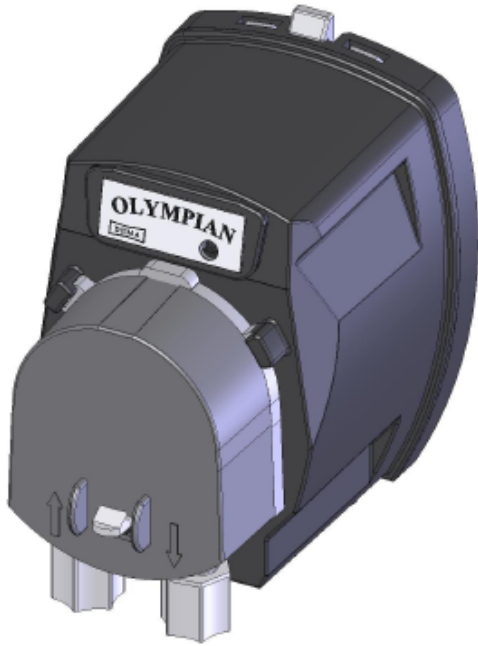


# DEMA<sup>®</sup> Olympian

## Probeless Warewash Control

### O-PDV (White)

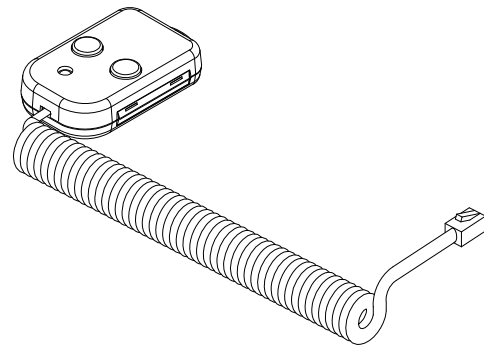


*Please read all instructions before proceeding with the Olympian installation.*

### **PURPOSE:**

The Olympian™ probeless warewash system controls chemical delivery functions for door-type dish machines and similar warewash applications. They require an 81-245-1 Two Button Programmer (see below) to set up the initial programming. Only one Two Button Programmer is required as it can be used to program as many Olympian models as desired.

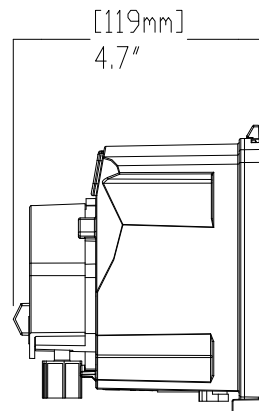
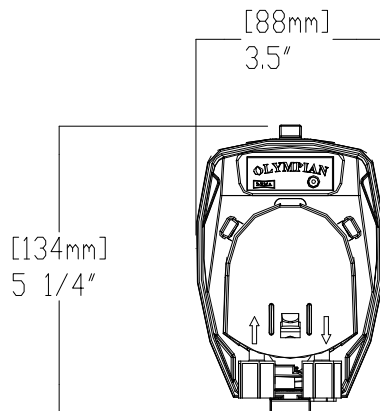
This detergent control can be powered from a wash motor signal or a rinse valve signal.



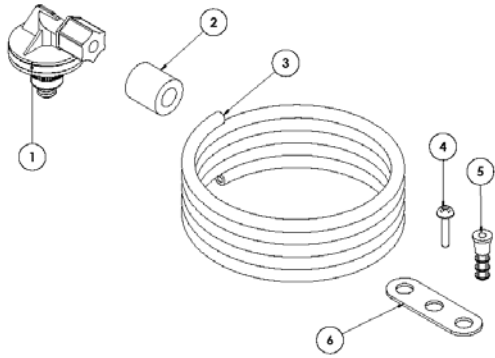
**81-245-1 TWO BUTTON PROGRAMMER**  
(Optional; not included.)

Power Specifications		
Model	Voltage	Current
O-PDV*	115/230V 50/60 HZ	0.5 A

\*Factory set at 230V.



Shipping Weight: 2.75 lb (1.25 kg)



## PARTS CHECKLIST BY OLYMPIAN MODEL

ITEM	PART NO.	DESCRIPTION	White O-PDV
Model	81-234-2	Olympian	1
1.	81-260-1	Detergent Bulkhead Fitting	1
2.	61-107-2	Ceramic Weight	1
3.	24-10-11	Tubing Vinyl ¼"OD x 1/8"ID	1
4.	30-37	Screw	3
5.	66-121	Wall Anchor	3
6.	81-248-1	Weight Retainer	1

### ELECTRICAL INSTALLATION:

All installations must be in accordance with city, county, parish, state, or provincial electrical codes and be performed by a certified electrician. For questions, please contact a local licensed electrical contractor.

- All electrical power must be turned off to the dish or cleaning machine and any other circuit that is to be used for this installation. Lockout and tag procedures must be observed when installing this device. Never open the Olympian enclosure while power is applied. Signals may be active from the dish or cleaning machine, even with Olympian power turned off. Use appropriately rated insulated wiring, electrical fixtures, and other materials that meet all applicable electrical and building codes.
- O-PDV Controls:** This control has a switch to select the proper line voltage. The unit is factory set to 230VAC. To change the voltage to 115VAC, remove the back of the control. Move the switch from 230VAC to 115VAC as shown in Figure

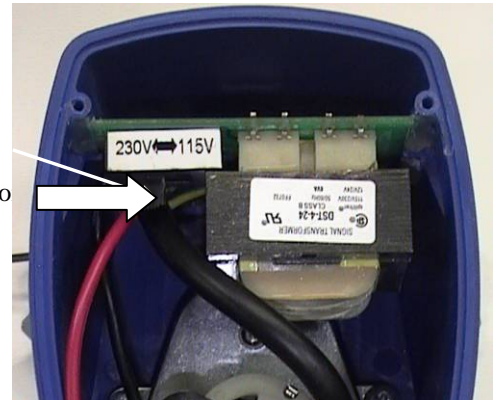


Figure 1. Input Voltage Switch

- WARNING: This must be done before connecting power to the unit.**
  - The unit can be powered from either the wash motor or the rinse valve. If the control is wired from the rinse valve, remove the battery from the circuit board as shown in Figure 2.
- WARNING: This must be done before connecting power to the unit.**

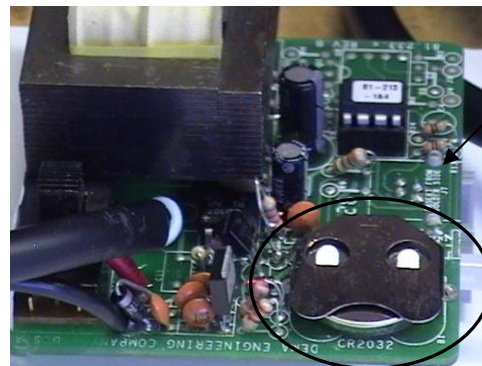


Figure 2. Battery

Brown Wire	Line
Blue Wire	Common
Green/Yellow Wire	Ground

### TUBING INSTALLATION:

- Install weight and weight retainer as shown in Figure 3.
- Place weight and retainer in chemical container.
- Cut tubing to the appropriate length. Attach tubing to pump inlet.
- Attach outlet tubing to pump outlet and to dish or cleaning machine.
- A fitting (81-16) is supplied to attach the tubing to the machine.



Figure 3. Tubing, Weight, & Retainer

**PROGRAMMING:**

**NOTE:** Due to the short wash and rinse cycles, the programming of the unit may require several wash cycles.

**Step 1:** Apply power.

**Step 2:** Remove the cover and connect the Two Button Programmer as shown in Figure 4.



**Figure 4. Programmer Installation**

**Step 3:** Push either button on the programmer to toggle the LED to the desired program mode as shown in Figure 5. See below for the program mode.



**Figure 5. Program Mode Selection**

**Step 4:** Push both buttons, simultaneously, to start programming the time or door counts as shown in Figure 6.



**Figure 6. Programming Start / Stop**

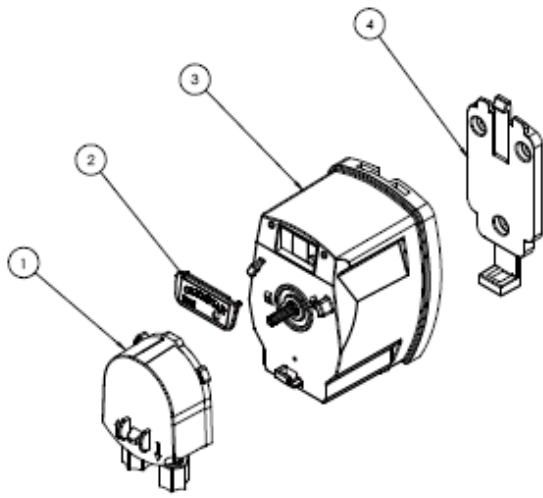
**Step 5:** Push both buttons, simultaneously, to stop programming the time or door counts.

**Step 6:** Repeat steps 3-5 for each program mode.

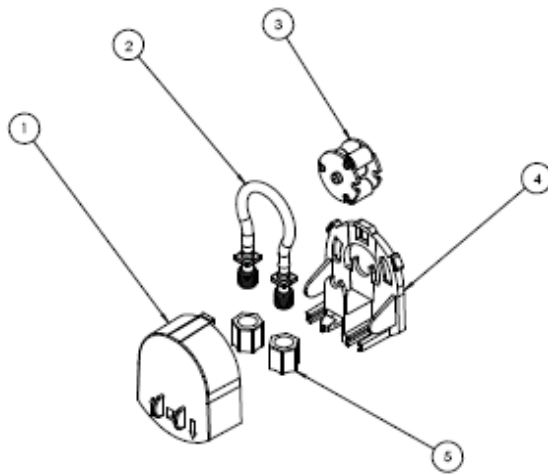
**Step 7:** After the Olympian Unit has been programmed with the desired values, remove the Two Button Programmer from the Olympian and replace the Olympian cover.

	Program Mode	LED Color	Description		Programming	Factory Default Settings	Max	Min
			Wash Motor Signal	Rinse Valve Signal				
1	Initial Charge	Yellow	Amount of chemical added after 1 hour of no triggers	Total amount of chemical added after 20+ seconds of power is applied	Push both buttons to start run time and both buttons to stop run time	30 Seconds	60 Seconds	0
2	Recharge	Green	Amount of chemical added after door count is met	Amount of chemical added after door count is met AND if less than 20 seconds of power is applied	Push both buttons to start run time and both buttons to stop run time	30 Seconds	60 Seconds	0
3	Door Count	Red	Number of washes between charges (3 maximum)		Push both buttons. Red LED will flash. Each flash is one door count. Push both buttons after the desired number of door counts is achieved	0	3	0

**Note:** A coin cell battery type CR2032 is located in the control. This battery controls the 1-hour recharge time.



Replacement Parts			
Item	DEMA® P/N	Qty	Description
1	81-226-2	1	Detergent Pump Assembly
2		1	Cover with Label
3		1	Olympian Detergent Control (no pump included)
4	81-223-1	1	Mounting Bracket



Pump Replacement Parts			
Item	DEMA® P/N	Qty	Description
1	81-240-1	1	Pump Bore
2	81-231-1	1	Squeeze Tube Assembly
3	81-218-2	1	Roller Block Assembly - Detergent
4	81-240-2	1	Pump Base
5	80-67-13	2	Compression Fittings

**Return Policy** No merchandise may be returned for credit without DEMA® Engineering Company’s written permission. Return Merchandise Authorization (RMA) number required in advance of return.

**Warranty** DEMA® 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 products that 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 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 DEMA® products. If products are altered or repaired without prior approval of DEMA®, 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 DEMA® assumes no liability for damages. Return merchandise authorization number to return units for repair or replacement must be granted in advance of return.

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