# **DART Ware Wash Speed Control**



### Overview

Simple and value best describe the DEMA Dart. The system is extremely easy to setup and program. The Dart is suitable to deliver detergent, rinse aid and sanitizer to small low volume dish machines. The Dart is perfect for single rack dish machines such as door or under the counter.

## Warnings



Installation of DEMA products must meet all applicable electrical codes and regulations established by national, city, county, parish, provincial or other agencies. It is possible that electrical codes and regulations require that a certified electrical contractor or engineer perform the electrical installation. For questions, contact a certified electrician.



ALL ELECTRICAL POWER MUST BE TURNED OFF TO THE DISPENSER AND TO THE APPLIED MACHINE.



All installations must conform to local plumbing codes and use approved backflow prevention devices. A pressure indicating tee is to be installed with existing faucets according to local plumbing codes in the state of Wisconsin and any other state that requires the use of a pressure indicating tee.



ALWAYS WEAR PROTECTIVE CLOTHING AND EYEWEAR WHEN WORKING WITH CHEMICAL PRODUCTS.

# Nomenclature & Specifications

# **DART.DEJ**

L Pump Connections

J – ¼" Compression Nut (for ¼" OD LDPE or Vinyl tubing)

C – Cone Compression Nut (for ½" OD x 1/16 wall soft tubing)

Squeeze Tube Material (pump tube)

E - EPDM

S – Silicone

P – Supertube (PVC)

**Application Kit** 

D – Detergent Kit

R – Rinse Kit

S – Sanitizer Kit

X – General Kit (no bulk head or check valve hookup fittings)

	Detergent Kit						
DEMA P/N	QTY	Description					
81.260.1	1	Detergent Bulk Head Fitting (mounts in dish machine wash tank)					
81.312.2	1	Chemical Pick Up Tube Stiffener					
81.16.3	8	Cable Zip Tie					
24.10.11	1	<sup>1</sup> / <sub>4</sub> " x 1/8" x 16FT Vinyl Tubing					
30.41	1	Screw and Anchor Kit					
-	1	Squeeze (pump) Tube as ordered with DART – see nomenclature					
	Rinse Kit (For 1/4" Compression Version DART.REJ)						
DEMA P/N	QTY	Description					
904.8T	1	Rinse check valve					
81.312.2	1	Chemical Pick Up Tube Stiffener					
81.16.3	8	Cable Zip Tie					
100.12.SV1	1	1/4" x 1/8" x 16FT Vinyl Tubing					
30.41	1	Screw and Anchor Kit					
_	1	Squeeze (pump) Tube as ordered with DART – see nomenclature					
Sanitizer Kit (For ¼" Compression Version DART.SEJ)							
DEMA P/N	QTY	Description					
904.8KY	1	Sanitizer check valve (Kynar, compatible with chlorine)					
81.312.2	1	Chemical Pick Up Tube Stiffener					
81.16.3	8	Cable Zip Tie					
100.12.SV1	1	1/4" x 1/8" x 16FT Vinyl Tubing					
30.41	1	Screw and Anchor Kit					
-	1	Squeeze (pump) Tube as ordered with DART – see nomenclature					
DART.X Kit							
DEMA P/N	QTY	Description					
81.312.2	1	Chemical Pick Up Tube Stiffener					
81.16.3	8	Cable Zip Tie					
24.10.11	1	1/4" x 1/8" x 16FT Vinyl Tubing					
30.41	1	Screw and Anchor Kit					
-	1	Squeeze (pump) Tube as ordered with DART – see nomenclature					

#### **Electrical Specifications**

Main Power: 115/230VAC 50/60Hz 0.5A

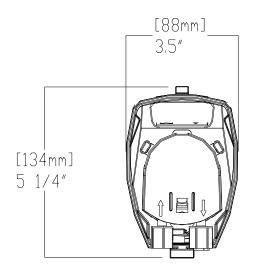
Factory set to 230VAC (see page X, how to change to main power setting)

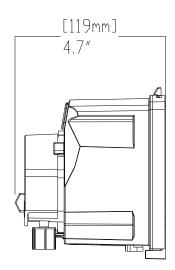
#### **Pump Performance**

1.3 oz/minute (40 ml/minute) MAX 40 PSI MAX

#### **Dimensions & Weight**

2.85lbs (1.3Kg) – Shipping weight





#### **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

Power selection switch



Figure 1. Input Voltage Switch

that meet all applicable electrical and building codes.

2. O-DDV Controls Only: 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 1. Reinstall the back cover

**WARNING:** This must be done *before* connecting power to the unit.

3. Connect to the appropriate power source.

Wiring Color Code			
Brown Wire	Line		
Blue Wire	Common		
Green/Yellow Wire	Ground		

#### **TUBING INSTALLATION:**

- 1. Install tube stiffener as shown in Figure 2.
- 2. Place stiffened tube into chemical container.
- 3. Cut tubing to the appropriate length. Attach tubing to the pump inlet.
- 4. Attach outlet tubing to pump outlet and to dish machine using the bulk head or check valve fittings that are supplied with the kit.

## **SETTING SPEED:**

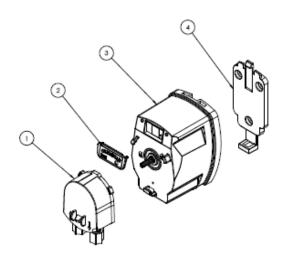
- 1. Apply power.
- 2. Remove the cover in Figure 3.
- 3. Adjust the potentiometer until the pump runs at the desired speed.
- 4. Replace the Olympian cover.

Figure 2

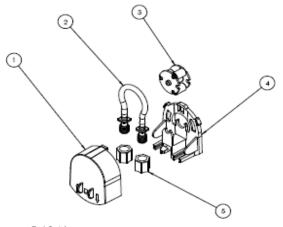


Speed adjustment potentiometer

Figure 3



Replac	Replacement Parts						
Item	DEMA <sup>®</sup> P/N	Qty	Description				
1	81-226-6	1	Dial Speed Control Pump Assembly				
2		1	Cover with Label				
3		1	Olympian Control (no pump included)				
4	81-223-1	1	Mounting Bracket				



Pump Replacement Parts						
Item	DEMA® P/N	Qty	Description			
1	81-240-2	1	Pump Bore			
2	81-231-1	1	Squeeze Tube Assembly			
3	81-219-1	1	Roller Block Assembly - Rinse			
4	81-241-2	1	Pump Base			
5	80-67-13	2	Compression Fittings			

Page 4 of 5

#### **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.

DEMA Engineering Company 10020 Big Bend Blvd. St. Louis, MO 63122 (800) 325-3362 or (314) 966-3533 www.demaeng.com