# **MODEL DP1 and MODEL DP2 Control Panels**

#### Subsurface drip panel controllers for irrigation systems.

The Model DP1 and Model DP2 control panels are PLC-based (Programmable Logic Controller) subsurface drip panels which control one single phase (120V or 230V) pump and two valves (flush and spin valves) for irrigation systems. The PLC can be programmed to contain all timer settings and monitoring information for the system via a touch pad and screen displays. Each panel features these PLC log functions:

- Pump Elapsed Time Meter
- Pump Cycle Counter
- Pump Fail Counter
- High Alarm Counter
- Override Float Counter

## **PANEL COMPONENTS**

- 1. **NEMA 4X enclosure** (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use) for Model DP1 measures 14" x 12" x 6"; Model DP2 measures 16" x 14" x 6".
- 2. Magnetic Motor Contactor controls pump by switching electrical lines.
- 3. HOA (Hand/Off/Automatic) Switch for manual pump control.
- 4. Programmable Logic Controller
- 5. HOA (Hand/Off/Automatic) Switch Flush Valve
- 6. Incoming Power Terminal Block/Pump/Control/Alarm
- Circuit Breaker provides pump disconnect and branch circuit protection.
- 8. Float/Valves Terminal Block
- 9. Ground Lugs
- 10. Fuses
- 11. HOA (Hand/Off/Automatic) Spin Filter
- 12. HOA (Hand/Off/Automatic) Switch Zone Valves

# **PANEL OPERATION**

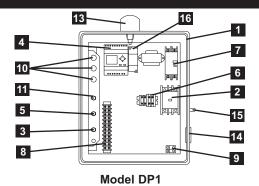
Four (4) float switches (low level float, timer on float, override float, and high level float) control the operation. Timers internal to the PLC control the pump dosing cycles. When the liquid level reaches the timer on float, the following operations occur:

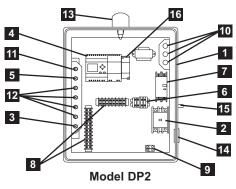
- 1. The pump will turn on and the spin filter valve will be activated for the user-programmed length of time.
- 2. The spin filter valve will then close and the pump will continue to run for the user-programmed timer on or override timer on time.
- 3. The pump will continue to run and the flush valve will be activated for the user-programmed length of time.
- 4. The pump will then be turned off and the flush valve will remain on for the user-programmed drain time.
- 5. The flush valve will then close for the user-programmed off time.

After the user-programmed number of cycles, the flush valve will remain activated during a dose for each zone. This will occur until each zone has been fully activated.

# PRICING/ORDERING INFORMATION

Model Number		VAC		Circuit Breaker	List Price
	Operates with a hydraulically-controlled ratcheting valve for zone control (valve not included).				\$1440
DP2	Operates up to 4 independent electro-mechanical valves for zone control (valve not included).	120/230V	7-15	Yes	\$1865





#### STANDARD ALARM PACKAGE

- **13.** Red Alarm Beacon provides 360° visual check of alarm condition.
- **14. Alarm Horn** provides audio warning of alarm condition (83 to 85 decibel rating).
- 15. Exterior Alarm Test/Normal/Silence Switch allows horn and light to be tested and horn to be silenced in alarm condition. Alarm automatically resets once alarm condition is cleared.
- 16. Horn Silence Relay

## **FEATURES**

- Entire control system (panel and switches) is UL Listed to meet and/or exceed industry safety standards
- Dual safety certification for the United States and Canada
- Standard package includes four 20' Sensor Float® control switches
- Complete with step-by-step installation instructions
- Three-year limited warranty



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CONTROLS	

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