

# LIQUITRON™ DR5000 SERIES

## ORP Controller

### Applications

- Cooling tower
- Waste treatment
- Surface finishing
- Chlorination
- De-chlorination
- Food processing

The **Liquitron DR5000** is a dual-channel **ORP (redox) Controller** providing either relay or proportional pulse outputs to drive chemical metering pumps. A custom backlit display provides constant information regarding controller and system conditions.

High and low alarm points, delay and limit timers, and other user programmable features make the DR5000 the most adaptive ORP (redox) Controller available.

### Features

- Custom Backlit LCD Display
- High and Low Set Points
- Limit Timers for Each Output
- ±2000 mV Scale
- ORP Programmable Response Delay
- 4–20 mA Output (Option)
- Proportional Pulse or Relay Output both Standard

### Display Items

- Current mV Value
- Current mA Output Level
- Current Pump Speed
- Timer Settings and Readings
- Alarm Conditions

### Enclosure

NEMA 12X Type (prewired version)	Hard wiring makes the unit suitable for NEMA 4X applications
Material	Housing - Flame retardant, molded TPE
	Cover - Clear molded polycarbonate, padlockable
Environment	32° F to 122° F (0° C to 50° C) 0% to 95% relative humidity (non-condensing)
Hardware	115 VAC & 230 VAC Proportional units provided with a 6 ft (2 m) grounded power cord & plug and two (2) 10 ft (3 m) output cables for direct connection to "non-ROYTRONIC" 7 Series and 9 Series LMI pumps. A different version of the Controller is available with compatible cables for ROYTRONIC® Series 7 and ROYTRONIC EXCEL™ Series 8 and Series 9 metering pumps.
	115 VAC On/Off units provided with 6 ft (2 m) grounded power cord & plug and two (2) 1 ft (30 cm) output power cords with grounded receptacles for pumps.
	230 VAC On/Off units provided with 6 ft (2 m) grounded power cord & plug and throughput connectors for hardwire connection of pumps.



## Liquitron DR5000 Series Specifications

### Electrical

Input	115 VAC, 50/60 Hz or 230 VAC, 50/60 Hz
Control Output (On/Off)	Five (5) relays, 10 Amp @ 115 VAC, 5 Amp @ 230 VAC, Unit fused for 10 Amp total load
Control Output (Proportional)	Pulse output signal (100ms pulse width), open collector
Alarm Output	Switch closure, 2 relays, 10 Amp @ 115 VAC (5 Amp @ 230 VAC) 1 relay for pump A, 1 relay for pump B
Signal Input	BNC type
Data Output	4-20 mA spanning the ORP range

### Operational

Display	Custom multiline backlit LCD
ORP Scale	± 2,000 millivolts
Limit Timers	Adjustable 0-11 hours
Differential (hysteresis)	Keypad adjustable

### Dimensions

