

# UMP Ultra Micro-Pro Warewash Control System

Ultra Micro-Pro UMP-Series warewash systems provide the versatility of probe or probeless detergent control through advanced microprocessor design. With the capability of controlling up to two products, and the choice of liquid or dry detergent, virtually any warewash application can be accommodated. The UMP Series warewash control features simplicity and versatility at an "Ultra" low price.



UMP 100L



UMP 100D



UMP 200L



UMP 200D

- Value Priced System
- Compact, Watertight Plastic Case
- Easy To Set Concentration
  - Dual Range
- Long Life Detergent and Rinse Motors
  - Up To 3000 Hours
- Probe Or Probeless Operation
- For Liquid and Solid Chemicals
- For Door and Conveyor Dishwashers
- Rinse Saving Operation
- Built In Transformer
  - 115,208, or 230 VAC mains input
- Proven, Long Life Squeeze Tubes
- Custom Labeling Available
- Rinse Prime Button
- Alarm Volume Control
- Detergent Depletion Alarm
- On/Off Switch on Unit

**KNIGHT**

**IDEX**  
FLUID & METERING

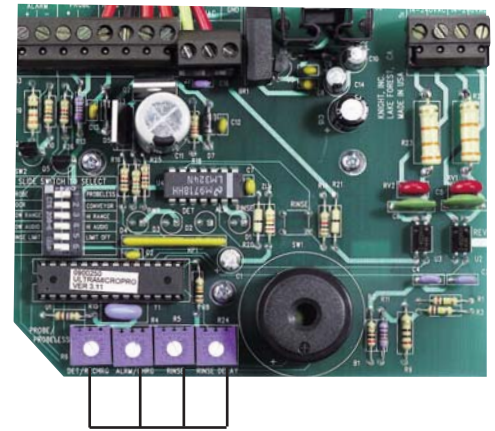
KITCHEN SYSTEMS

## Slide Switch Settings

- **Probe/Probeless Switch:** Allows you to select operation with or without a probe.
- **Door/Conveyor Switch:** Used if operating in probeless mode.
- **Low/High Range Switch:** Used if operating in probe mode. Selects concentration ranges.
- **Low/High Audio Switch:** Sets the alarm volume.
- **On/Off Rinse Limit Switch:** When on, the circuitry stops the rinse pump after 30 seconds.

## Potentiometer Settings

- **Concentration or Recharge Pot:** In "probe mode" sets detergent concentration level. In "probeless mode" sets the pump time necessary to recharge the detergent concentration after each wash-cycle.
- **Alarm Delay or Initial Charge Pot:** In "probe mode" sets the time before the alarm sound if the probe senses low detergent concentration. In "probeless mode" sets the pump time for detergent initial charge.
- **Rinse Speed Pot:** Adjusts the rinse speed.
- **Rinse Delay Pot:** Delays the rinse pump from 0 to 14 seconds.

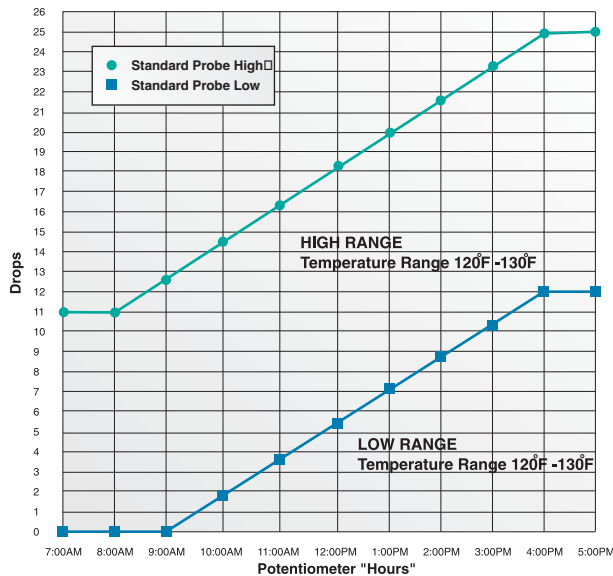


Adjustment Potentiometers

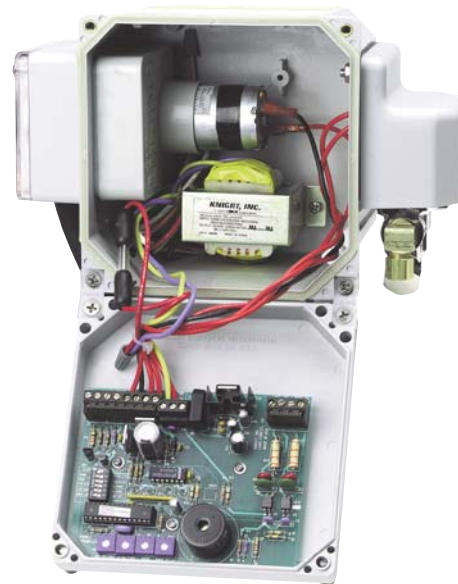
## Probe Life Enhancement Circuitry

Knight's unique probe life enhancement circuitry, first introduced in 1994, samples the wash tank solution in short bursts, 1/100 th of a second long. This rapid, short sampling greatly enhances probe life while holding the chemical concentration level steady. The Dual Range Concentration setting provides broad, linear adjustment ranges for easy setup in all types of water conditions. Knight's PWM (Pulse Width Modulation) variable speed circuitry ensures linear rinse motor speed adjustment and maximum brush life.

## UMP Concentration Curve



## Ultra Micro-Pro



## ORDERING INFORMATION

### Ultra Micro-Pro

Model	Part Number	Description
UMP-100 L	7162800-07	Ultra Micro Pro With KP-500 Pump for Liquid Detergent
UMP-100 D	7162805-07	Ultra Micro Pro With Water Solenoid for Dry Detergent
UMP-200 L	7162810-07	Ultra Micro Pro With KP-500 Pumps for Liquid Detergent and Rinse
UMP-200 D	7162815-07	Ultra Micro Pro With KP-500 Pump for rinse and a Water Solenoid for Dry Detergent

### KNIGHT LIMITED WARRANTY

Knights controls and pump systems are warranted against defects in material and workmanship for a period of ONE YEAR. All Electronic Control Boards have a TWO YEAR warranty. Warranty applies only to the replacement or repair of such parts when returned to the factory with a KRA number, freight prepaid and found to be defective upon factory inspection. Rubber and synthetic rubber parts such as "O" rings, diaphragms, squeeze tubing and gaskets are considered expendable and are not covered under warranty. Warranty does not cover liability resulting from performance of this equipment nor the labor to replace this equipment. Product abuse or misuse voids warranty. Knight products are not for use in potentially explosive environments. Any use of our equipment in such an environment is at the risk of the user. Knight does not accept any liability in such circumstances.

### KNIGHT DISCLAIMER

The information and specifications included in this publication were in effect at the time of approval for printing. Knight, LLC, reserves the right, however, to discontinue or change specifications or design at any time without notice and without incurring any obligation whatsoever.

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