

MULTI - FLOW 2

Laundry Chemical Dosing System for Single Washers

The Multi-Flow 2 is built upon the rugged and reliable Multi-flow platform with the expanded programming features and data management capabilities. What makes the Multi-flow 2 different from the Multi-flow is the versatile remote, which offers an increased 30 formula capability and the ability to collect critical data regarding your chemical dispensing usage and costs. The remote was designed to seamlessly work with the existing Multi-flow pump housing to allow you to switch, replace, or update your existing Multi-flow units. The Multi-flow 2 continues to offer the full range of AC pump options from 10 to 226 oz/min (300 to 6700 ml/min) and the options of both the high and low flow manifold.

Multi-flow 2 Remote



Pump housing



Flush Manifold

- For washers with up to 450 lb. (200 kg) wash load capacity
- Up to 8 chemical capability
- Increased 30 wash formula capability
- Multiple product volumes per wash formula
- Peristaltic pumps flow rates: 10, 23, 40, 155, 226 oz./min. (300, 680, 1200, 4500, 6700 ml/min)
- Programming: drain mode, signal mode, relay mode, and soil mode
- Chemical usage / operator activity reports exported into Excel
- Remotely manage the dispenser using the Knight Reporter hardware/software
- Multi-lingual menus (English, Spanish, French, German, Italian)

MULTI - FLOW 2 Laundry Chemical Dispenser



Multi-flow 2 Remote

6 Pump Multi-flow with 10 oz/min (300 ml/min) pump

Peristaltic Pumps with Multiple Flow Rates

Each Multi-flow 2 system can house up to six pumps. You can select any combination of pump rates to meet your requirement.

Peristaltic Pump Features:

- Completely Self Priming
- Positive Displacement
- Accurate and Consistent Flow
- Long Life Squeeze Tubing

Feed Rate:

- | | |
|----------------------------|-----------|
| • 10 oz/min (300 mL/min) | KP-5100X |
| • 23 oz/min (680 mL/min) | KP-8120AX |
| • 40 oz/min (1200 mL/min) | KP-8120BX |
| • 155 oz/min (4500 mL/min) | KP-9130XP |
| • 226 oz/min (6700 mL/min) | KP-9270XP |



Features and Benefits

Features

- Password protected
- File transfer function (remote to remote)
- 30 wash formula capability
- Multiple product volumes per wash formula
- Drain mode, signal mode, relay mode, soil mode
- Multi-lingual menus (English, Spanish, French, German, and Italian)
- Automatic formula select with signal qualifier
- Load count by formula
- Product lock-out function
- One to one, assigned step, and assigned signal
- Chemical costs
- Formula weight
- Detailed data management report capability

High Flow and Low Flow Flush Manifold



Low Flow Flush Manifold
with 1/4" Water Solenoid Valve

Flush Manifold Features:

- "Ball" check valve with optional Viton or EPDM O-ring
- Water inlet solenoid
- Optional proof of flow switch
- Pressure regulator
- Water inlet back check valve
- Injection molded eight port manifold with high flow check valves
- Nylobraid tubing and barb fittings

Increased 30 Formula Capability

The new versatile Multi-flow 2 remote offers multiple programming options with an increased 30 formula capability with unique run and delay times for each pump. This offers a greater control of chemical costs with better wash results over a wide range of soil loads.

New quick Soil Select mode "Heavy/Medium/Light"

The Multi-flow 2 now offers a quick, simple formula select depending on the type of laundry load. This operation allows three different soil classifications "Light/Medium/Heavy" and the option of selecting bleach or softener. The soil select modes allows the operator to simply press the type of wash and the unit is ready to go.

The Light/Medium/Heavy buttons can also be individually programmed to become quick favorite buttons for specific formulas.

Multi-Flow 2 Remote Control

The Multi-flow 2 remote is the new force behind the Multi-flow 2 platform, which now offers a whole wide range of new options. The remote offers all the programming features of the Knight-Trak, Multi-flow remote, and more. The Multi-flow 2 remote is also increasing the formula capability from 16 to 30 formulas. In addition to the programming features, the new remote now offers the ability of data management with the Multi-flow 2 unit.



Programming Feature Comparison

Features	Multi-flow 2	Multi-flow	Knight-trak
Dispenser ID	•		•
Access Code	•	•	•
Date and Time	•	•	•
Auto Formula Reset	•		•
Bleach Defeat	•	•	•
Soft Defeat	•		•
Signal Lockout	•	•	•
System Lockout	•	•	•
Flush Mode	•	•	•
User Access Code	•	•	•
Chemical Names	•	•	•
Chemical Costs	•		•
Formula Names	•	•	•
Formula Weight	•		•
Shift Times	•		•
Operating Zone	•		•
Calibrate pumps	•	•	•
Prime Pumps	•	•	•
Formula Programming	•	•	•
Computer Interface (Reporting)	•		•
Normal Signal Mode	•	•	•
Relay Mode	•	•	
Drain Mode	•	•	
Soil Mode	•		
Receive Setup From Another Dispenser	•	•	
Signal Mode: One to One	•	•	•
Signal Mode: Assigned Step	•		
Signal Mode: Assigned Signal	•		
Digital Display	•	•	•
Maintenance Information			•

Reporter – Data Management

The Multi-flow 2 now offers data management capability, which supplies you with critical information to be able to manage and monitor your chemical dispensing usage and costs. This will enable to maximize overall efficiency and save chemical, labor and energy costs.



- * Chemical cost per: shift, month, week, day, and load
- * Formula Chemical Volumes
- * Product Costs
- * Load Start/Stop time
- * Load count by formula
- * Average time between loads
- * Washroom operator errors
- * Automatic formula reset
- * Remote PC or laptop dispenser programming
- * Set-up/Cycle/Summary reports
- * Export to Excel

Connect Via the Internet

The Reporter hardware and software allows you to program your dispensers, print full detailed reports, or export reports into Excel from anywhere in the world, whether in your office or directly from the dispenser. You have the option to connect to the dispenser through an IP/TCP connection, phone modem connection, or directly connect to the dispenser with your laptop for “real time” graphic view of up to the minute activity on the wash aisle.

ORDERING INFORMATION

Multi-flow 2 Laundry Chemical Dispensers

WITHOUT PUMPS

Features Include: Stainless steel case and cover, 30 formula remote control w/ 25 ft.(8m) cable, signal input/pump output circuitry, volume/time pump calibration, L.C.D. formula display, flush mode, drain mode, multiple chemical levels, signal lockout, supply signal indicators, load counter, variable auto-formula select, external pump prime, auto-program function, personalized access code, choice of pumps.

How to order: Select the case size for the number of pumps required. Order any combination of 500/800/900 series pumps based on the required flow rate for each product. Signal cable, pickup tubes and poly tubing must also be specified to meet installation requirements.

Model	Part Number	Description
MF-4803RC	7677803	3 Pump Dispenser w/Remote Control, w/o pumps, (500/800)
MF-4804RC	7677804	4 Pump Dispenser w/Remote Control, w/o pumps, (500/800)
MF-4805RC	7677805	5 Pump Dispenser w/Remote Control, w/o pumps, (500/800)
MF-4806RC	7677806	6 Pump Dispenser w/Remote Control, w/o pumps, (500/800)
MF-4808RC *	7677808	8 Pump Dispenser w/Remote Control, w/o pumps, (500/800)
MF-4904RC	7677904	4 Pump Dispenser w/Remote Control, w/o pumps, (500/800/900)
MF-4905RC	7677905	5 Pump Dispenser w/Remote Control, w/o pumps, (500/800/900)
MF-4906RC	7677906	6 Pump Dispenser w/Remote Control, w/o pumps, (500/800/900)
MF-4908RC *	7677908	8 Pump Dispenser w/Remote Control, w/o pumps, (500/800/900)
MFRC	030060-02	Remote Extension Cable 100 ft.

* Indicates system includes 8 pump Input/Output Board in 6 pump cabinet.

Multi-flow 2 Add-on Pumps

Model	Part Number	Description
MF-4801	7677810	1 Pump Slave Case, w/o pump, (500/800)
MF-4901	7677910	1 Pump Slave Case, w/o pump, (500/800/900)

Multi-flow 2 Pump Options

Model	Part Number	Description
KP-5100X	7108262	500 Series Pump, 100 RPM (7.7 oz/min) (227 ml/min)
KP-5100XP	8600120	500 Series Pump, 100 RPM (7.7 oz/min) (227 ml/min) w/Quick Change Panel - 900 Case
KP-8120AX	8507752	800 Series Pump, 120 RPM (23 oz/min) (681 ml/min)
KP-8120AXP	8600110	800 Series Pump, 120 RPM, (23 oz/min.) (681 ml/min.) w/Quick Change Panel - 900 Case
KP-8120BX	8507754	800 Series Pump, 120 RPM, (40 oz/min.) (1,184 ml/min.)
KP-8120BXP	8600115	800 Series Pump, 120 RPM, (40 oz/min.) (1,184 ml/min.) w/Quick Change Panel - 900 Case
KP-9130XP	8600116	900 Series Pump, 130 RPM, (155 oz/min.) (4588 ml/min.) w/Quick Change Panel - 900 Case
KP-9270XP	8600126	900 Series Pump, 270 RPM, (226 oz/min.) (6690 ml/min.) w/Quick Change Panel - 900 Case

Note:

1. Add (-01) to Part Number for 115 VAC 60 Hz.
2. Add (-02) to Part Number for 230 VAC 60 Hz.
3. For 230 Volt 50 Hz, 800/500 Series, add (-03) to Part Number
4. For 230 Volt 50 Hz 900 Series, add (-03) to Part Number

Multi-flow 2 Electronic Upgrade Kit

Model	Part Number	Description
MF-4	7676004	4 Pump Multi-Flow Electronics Upgrade Kit w/Remote Control and 4 Pump Input/Output Board and Mounting Shield
MF-6	7676006	6 Pump Multi-Flow Electronics Upgrade Kit w/Remote Control and 6 Pump Input/Output Board and Mounting Shield
MF-8	7676008	8 Pump Multi-Flow Electronics Upgrade Kit w/Remote Control and 8 Pump Input/Output Board and Mounting Shield

Note:

1. Add (-01) to Part Number for 115 VAC 60 Hz.
2. Add (-02) to Part Number for 230 VAC 60 Hz.
3. For 230 Volt 50 Hz, 800/500 Series, add (-03) to Part Number
4. For 230 Volt 50 Hz 900 Series, add (-03) to Part Number

Flush Manifolds

Model	Part Number	Description
	7002940-01	8 Port High Flow Flush Manifold without Check Valves, 1/2" Asco Solenoid Valve (115 VAC), 1/2" Brass Watts Pressure Regulator and Connector Kit
	7002940-02	8 Port High Flow Flush Manifold without Check Valves, 1/2" Asco Solenoid Valve (230 VAC), 1/2" Brass Watts Pressure Regulator and Connector Kit
	7002941-07	8 Port Low Flow Flush Manifold without Check Valves, 1/4" Eaton Solenoid Valve (24 VAC), Step Down Transformer, 1/4" Brass Watts Pressure Regulator and Connector Kit
	0600423	Injection Kit, 9th Port
	7901238	Check Valve, 1/4" NPT x 3/8" Barb w/Hastelloy Spring, PTFE Ball and EPDM O-Ring, White Body
	7901237	Check Valve, 1/4" NPT x 3/8" Barb w/Hastelloy Spring, PTFE Ball and Viton O-Ring, Gray Body
	7912200	Poly Plug, 1/4" NPT

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.

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