KNIGHT® CFS TECHNOLOGIES

INSTRUCTION MANUAL	MANUAL # 0901222	VERSION: C
	DATE: 2024-0819	

UMP Digital Plus

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Equipment Ratings

This includes equipment supply, description of I/O connections, duty cycle and operating environmental conditions.

- Pollution degree 2
- Installation category 2
- Altitude 2000 m
- Humidity 50% to 80%
- Power supply Input: 100 - 240 VAC, 1.52A,50/60 Hz
- Power supply Output: 24 VDC, 3.2A
- Indoor use only
- Temperature 5°C to 40°C
- Mains supply voltage fluctuations are not to exceed 10 percent of the nominal supply voltage

CAUTION: Wear protective clothing and eyewear when dispensing chemicals or other materials. Observe safety handling instructions (SDS) of chemical mfrs.

CAUTION: To avoid severe or fatal shock, always disconnect main power when servicing the unit.

CAUTION: When installing any equipment, ensure that all national and local safety, electrical, and plumbing codes are met.

SETTINGS GUIDE

	PROBE MODE		PROBELESS MODE	
	DOOR	CONVEYOR	DOOR	CONVEYOR
RINSE SPEED	0 -100%	0 -100%	0 -100%	0 -100%
SANITIZER SPEED	0 -100%	0 -100%	0 -100%	0 -100%
RINSE LIMIT	0 - 30s	NO	0 - 30s	NO
RINSE DELAY	0 - 20s	NO	0 - 20s	NO
INITIAL CHARGE	NO	NO	0 - 150s	0 - 128s
RECHARGE	NO	NO	0 - 30s	0 - 20s
RECHARGE AFTER N RACKS	NO	NO	1 - 20	1 - 20
CONCENTRATION	0 - 199K	0 - 199K	NO	NO
ALARM DELAY	0 - 512s	0 - 512s	NO	NO
PASSWORD	YES	YES	YES	YES
LANGUAGE	YES	YES	YES	YES
RESET RACK COUNT	YES	YES	YES	YES
LOW LEVEL ALARM	YES	YES	YES	YES
CONCENTRATION ALARM	YES	YES	NO	NO
RACK TIME	NO	0 - 30s	NO	0 - 30s
INITIAL CHARGE REPEAT	NO	NO	YES	YES
WATER CHANGE COUNT	0 - 999	0 - 999	0 - 999	0 - 999
DETERGENT PULSE %	10 - 90%	10 - 90%	NO	NO
DETERGENT PULSE RATE	3 - 15s	3 - 15s	NO	NO

Default Settings

- System is in Probe Mode
- System is set for Door Machines
- Detergent Pulse Rate is 5 Seconds (dry) or 3 Seconds (liquid)
- Default Password is 0000
- Sanitizer Pump Speed is 50%
- Sanitizer Runs with Rinse Pump
- Rinse Pump Speed is 50%
- Detergent Concentration Setpoint is 25
- Detergent Alarm Delay is set to 64 Seconds
- Rinse Limit is 30 Seconds
- Detergent Percentage Pulse is 50% (dry) or 85% (liquid)
- Rinse Delay is 0 Seconds
- Initial Charge is 30 Seconds
- Initial Charge Repeat is On
- Recharge is 5 Seconds
- Change Water Count is 0 Racks
- Number of Racks between Recharge is 1
- Rack Time is 12 Seconds

INSTALLATION

Mount the unit (using suitable hardware) with the provided bracket in the accessory kit. Try to keep the unit within three feet from the final rinse line to avoid long tubing runs.

CAUTION: Do not mount the unit in the direct path of steam. This can short circuit and permanently damage the unit. Mounting the unit on the side, on the back, or on the vents of the dishwasher may cause thermal overload and damage or hinder the performance of the unit.

Check all applicable plumbing and electrical codes before proceeding with the installation. This will help to ensure that the system is installed in safe and suitable manner. A wiring schematic of the dishwasher should be used as reference for making electrical connections — this is typically provided by the dishwasher manufacturer if one cannot be located on the machine itself.

Rinse / Sani Plumbing

(1) Install the provided 1/4" tube x 1/8" NPT injection fitting into the side or bottom of the dishwasher rinse line between the rinse solenoid valves and the rinse jets. If necessary, drill a 11/32" hole and tap to 1/8" NPT. Use of a saddle clamp may be desired on copper rinse line for better support.

(2) Cut a suitable length of 1/4" OD poly tubing and connect between the discharge (right) side of the rinse pump's squeeze tube and the injection fitting.

(3) Cut a suitable length of 1/4" OD poly tubing and connect between the suction (left) side of the rinse pump's squeeze tube and the pickup tube provided. Be sure to draw tubing through the end of the pickup tube.

(4) Hand-tighten the compression nuts on both the rinse fitting and pickup tube. Plastic ties can be used to cinch around the connections where the poly tubing is inserted into the pump's squeeze tube.

(5) Repeat the above steps for the sanitizer pump.

Liquid Detergent Plumbing

(1) Install the provided bulkhead fitting through a wall of the wash tank (above water level). If an existing mounting hole cannot be located, use of a 7/8" hole saw or punch may be desired.

(2) Cut a suitable length of 1/4" OD poly tubing and connect between the discharge (right) side of the detergent pump's squeeze tube and the bulkhead fitting.

(3) Cut a suitable length of 1/4" OD poly tubing and connect between the suction (left) side of the detergent pump's squeeze tube and the pickup tube provided. Be sure to draw tubing through the end of the pickup tube.

(4) Hand-tighten the compression nuts on both the bulkhead fitting and pickup tube. Plastic ties can be used to cinch around the connections where the poly tubing is inserted into the pump's squeeze tube.

Dry Detergent Plumbing

(1) A powder or solid type feeder (not provided) should be used for dispensing dry detergent products. Follow the instructions included with the detergent feeder for installation, and recommended water temperature/pressure.

(2) Cut a suitable length of 1/4" OD copper tubing (not provided) and connect between the input side of the water solenoid and the water source. Maximum recommended water temperature is 140°F (60°C).

(3) Cut a suitable length of 1/4" OD copper tubing (not provided) and connect between the output of water solenoid to a powder or solid detergent feeder.

(4) Carefully tighten the compression nuts on the water solenoid — over tightening may cause solenoid to leak. Tighten connections to the water source and detergent feeder as needed.

ELECTRICAL

Turn off all power before wiring the control. Check with a voltmeter to ensure power is off. The system has a 7-conductor cable for power and signals that will need to be routed through conduit per local codes.

Main Power Connection

One switching power supply is provided with the UMP control. Connect the high voltage side, through a switch or circuit breaker in close proximity to the equipment and marked UMP, to any 115—230 VAC power source that is “on” when the dishmachine is “on” (i.e. mains switch on dishmachine).

NOTE: The power supply provides power to both the detergent and rinse circuits. The UMP will only operate detergent or rinse when electrically signaled.

To wire main power connection:

(1) Check the voltage of the main power source and make sure that it matches the available input voltages of the switching power supply.

(2) Remove all power from the dishwasher.

(3) Connect leads from the main power source to the appropriate wires on the external cable.

* CAUTION: The UMP unit has high voltage connected to the power supply. Always disconnect main power when servicing the unit.

Remote Alarm

A remote 3 - 28 VDC alarm may be wired to the “alarm” terminals on the circuit board. See wiring diagram on page 15.

Pressure Switch Kit

For applications that do not have a dedicated rinse signal from the dishwasher, the pressure switch can be used to create a rinse signal.

(1) Remove power from the dishmachine. Ensure that power is removed from the dispenser.

(2) Locate the rinse injection fitting presently installed on the dishmachine (if applicable). Near the injection point, drill a hole for the pressure switch. Drill the hole using a 11/32" bit and tap to 1/8" NPT.

(3) Remove duckbill from checkvalve.

(4) Wrap the threads of the pressure switch with 3 - 4 turns of plumbing tape, then install the pressure switch into the drilled/tapped hole.

(5) Wire the pressure switch per the wiring diagram on page 14. Mount switch in close proximity to unit.

(6) Connect wires from pressure switch to the terminals on the UMP circuit board.

Detergent Power Signal

A detergent power signal is required to activate the detergent probe sensing or probeless initial charge. The detergent signal can be jumpered from main power for applications where the main power is controlled by the on/off state of the dishmachine.

(1) Check the dishwasher for a power source that is active during the washcycle only (example: the magnetic contactor that controls the washpump motor) and verify voltage. The Ultra Micro-Pro circuit board will accept a detergent power signal of 14 - 480 VAC.

(2) Remove all power from the dishwasher.

(3) Connect leads from the detergent signal power source to the detergent signal wires on the external cable.

Rinse Power Signal

In addition to running the rinse pump, the rinse power signal also triggers the detergent “recharge” injection if probeless mode is selected

(1) Check the dishwasher for a power source that is active during the rinse cycle only (example: the rinse solenoid or rinse cycle light) and verify voltage. The Ultra Micro-Pro circuit board will accept a signal of 14 - 480 VAC.

(2) Remove all power from the dishwasher.

(3) Connect leads from rinse signal source to the rinse signal wires on the external cable.

Conductive Probe Installation (if used)

(1) Install the probe in the wash tank below the water level. It should be away from incoming water supplies, near the recirculating pump intake, and 3 to 4 inches from corners, heating elements, or the bottom of the tank. If an existing mounting hole cannot be located, use of a 7/8" hole saw or punch may be desired.

(2) Connect leads from the terminals on the probe to the wires on the probe cable.

(3) For best results, use 18 AWG multi-stranded copper wire for the probe connection. Avoid running the wire near high voltage AC lines.

Inductive Probe Installation (if used)

Installation of an inductive probe requires the same mounting hole size in the wash tank. See the instruction sheet that comes with the inductive probe for more details on how to install the probe in the tank. Note that there are specific terminals on the circuit board (color coded) for an inductive probe.

OPERATION

Detergent — Probe / Inductive Mode

The system has the option of using a conductive or inductive probe. With the detergent signal “on”, the probe senses detergent concentration. When concentration drops below the setpoint, the control automatically turns on detergent feed. As detergent feeds, the control senses the rate at which the concentration is approaching the setpoint. The control then begins to pulse feeds to prevent overuse of chemical. The pulse feed rate depends on how fast the setpoint is approaching.

The detergent alarm will sound if the setpoint is not reached within the alarm delay time period. The alarm can be temporarily silenced.

Detergent — Probeless Mode

Controls detergent concentration without a probe, based on timed detergent feed modes. Initial charge time feeds detergent to bring the dishmachine to working concentration when initially filled with water. The initial charge can be activated by a detergent signal, or by the rinse signal (of 30 seconds duration, or longer) when using door mode. The initial charge counter will increment for each activation.

Recharge time feeds detergent to maintain detergent concentration as rinse water dilutes the dishmachine. The recharge is triggered after a specified number of racks passes through the machine.

Rinse Pump

The rinse pump will operate whenever the rinse signal is energized. The rinse delay feature will postpone the activation of the rinse pump until the delay time has expired. The rinse limit shuts down the rinse pump after the signal has been present for a selected time. Rinse delay and rinse limit are functional with door machines only.

Sanitizer Pump

A menu selection sets the sanitizer pump to operate with detergent feed, or with rinse feed. The sanitizer pump will run simultaneously with detergent or rinse, whether using probe or probeless mode, rinse delay or rinse limit.

Alarm Volume

The alarm volume can be lowered by changing a setting in the programming menus. The volume can be set low, medium, high or off.

BUTTON FUNCTIONS

- ENTER: Holding the enter button for 2 seconds (approx.) switches between run and program modes. Enter also advances through programming menus.
- SCROLL: The scroll button moves the position of the cursor where number changes are done. The scroll button toggles between choices in menus that have selectable settings.
- UP (⇧): Increases numeric values during programming The UP button also acts as rinse prime during operation. To prime the rinse pump, hold down SCROLL and UP at the same time. The UP button also shows the rack count if pressed during operation.
- DOWN (⇩): Decreases numeric values during programming. The DOWN button also acts as sanitizer prime during normal operation. To prime the sanitizer pump, hold down SCROLL and DOWN at the same time. The DOWN button also shows the initial charge count if pressed during operation (only when using probeless mode).
- NOTE: To prime detergent (pump or solenoid) hold down the UP and DOWN buttons at the same time.

Alarm Mute

During normal operation, the alarm can be silenced by pressing the ENTER button. The audio alarm will turn off for the alarm delay (if using probe mode) period of time to allow the chemical container to be checked and changed if necessary.

De-Lime Mode

Press ENTER and SCROLL until de-lime mode shows on the display. Chemical injection will be halted while de -lime mode is on but will resume normal operation when turned off. The unit will automatically exit de-lime mode after 10 minutes, or pressing ENTER and SCROLL.

PROGRAMMING

- If you wish to exit the programming mode, or **save new settings,** and return to normal operation at any time, hold down the ENTER button until you see the UMP DIGITAL display return (about 3 seconds).
- While programming, if no buttons are pressed for approximately 5 minutes, the UMP Digital will automatically return to normal operating mode.
- To change the value of any numeric setting, press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number. The digit will flash to show you which one is selected.

When you’re ready to get started, hold down the ENTER button until you see ENTER PASS CODE (about 2 seconds) then continue on the following page...

PROGRAMMING MENUS

PRESS SCROLL TO ENTER PASS CODE 0000	All new systems are shipped from the factory with the pass code set at 0000. If the system is new, press ENTER to continue. If the pass code has been changed from the default of 0000 (explained below) press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number, then press ENTER to continue.
PRESS SCROLL TO CHANGE PASS CODE 0000	This menu item allows you to change the pass code. Press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number. When finished, press ENTER to continue.
PRESS SCROLL TO SELECT WHICH LANGUAGE TO USE: ENGLISH	If you wish to change the menu language, press SCROLL to advance through the available choices until your desired language name is shown on the display. Press ENTER to continue.
SCROLL TO ENABLE DISABLE USER PRIME PRIMING ENABLED	This setting is to enable or disable the user prime function. The enable mode allows a an end user in the field to prime the pumps when chemical containers are changed. Disable prevents the end user from running the pumps for security reasons. Press SCROLL to choose setting then ENTER.
TUBE LIFE HOURS: SANITIZER: 050 HOURS RINSE AID: 050 HOURS DETERGENT: 050 HOURS	This setting tells the system the expected squeeze tube life for each chemical. Press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number. Press ENTER to continue.
RESET LIFE HOURS: SANITIZER: 050 HOURS RINSE AID: 050 HOURS DETERGENT: 050 HOURS	This setting shows the current wear on each tube in hours. After the maximum hours for each tube has been reached, the system will display a red screen to show when to replace each tube. To reset the counter for each tube, press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number (to zero). Press ENTER to continue.
PRESS SCROLL TO SELECT OPTION: ALARM SOUND IS: OFF	This setting adjusts the audible volume of the built-in alarm. Use SCROLL to select LOW, MED, HIGH, or OFF. Press ENTER to continue.
* PRESS SCROLL TO * * ENTER YOUR CUSTOM * * MESSAGE HERE *	You can set a custom message that will appear on the display screen while the system is idle. Press SCROLL to select the character you wish to change, then use ⇧/⇩ to change that character. Press ENTER to continue.
PRESS SCROLL TO SELECT OPERATING MODE PROBE-DOOR	Use the SCROLL button to choose between probe/probeless, and door/conveyor combinations, then press ENTER to continue. NOTE: If using probe mode, ensure that values are set for probeless mode, as the dispenser will automatically switch to probeless operation if a problem causes the detergent pump to exceed 4 minutes of run time with a probe.

Continue on next page

- If you chose to use PROBE mode (door or conveyor) you will see the following menu layout...

PRESS SCROLL TO ENTER DET. CONCENTRATION 025	Detergent concentration is set in Knight Units. Press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number (the range is from 0 to 199 Knight Units). Press ENTER to continue.
PRESS SCROLL TO ENTER DET. PULSE PERCENT 85%	This setting tells the system when to begin pulse feeding; specifically at what percent of the detergent concentration you have just set (in the previous display). Press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number (the range is 10% to 90%). Press ENTER to continue.
PRESS SCROLL TO ENTER DET. PULSE RATE 05 S	Detergent pulse rate sets the “off” time in between pulses (during pulse feed). This feature can be helpful with dry chemicals that need time to dissolve in the washtank. Press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number (the range is 3 - 15 seconds). Press ENTER to continue.
PRESS SCROLL TO ENTER RACK TIME 12 S	This setting will only appear if conveyor is chosen. Enter the time for 1 rack to pass through machine. Press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number (the range is from 0 to 30). Press ENTER to continue.
PRESS SCROLL TO ENTER ALARM DELAY 064 S	Alarm delay is a time frame that the detergent setpoint is expected to be reached within. If the detergent setpoint is not achieved within the set time, the alarm will sound intermittently until the problem is resolved or power is cycled. For door machines, this setting should be calibrated to 5 – 10 seconds shorter than the washcycle. For conveyor machines, should be slightly longer than the time it takes for the unit to achieve the setpoint with a fresh tank of water. Press SCROLL to select the digit you wish to change, then use ⇧/⇩ (range is 0 to 512 seconds). Press ENTER to continue.

Continue on next page

- If you chose to use PROBELESS mode (door or conveyor) you will see the following menu layout...

PRESS SCROLL TO ENTER
RACK TIME
12 S

This setting will only appear if conveyor is chosen. Enter the time for 1 rack to pass through the machine's rinse arm.

Press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number (the range is from 0 to 30). Press ENTER to continue.

PRESS SCROLL TO ENTER
INITIAL DET CHARGE
030 S

The initial charge feeds detergent to achieve working concentration when the dishmachine is initially filled with a fresh tank of water. The available timing ranges are...

DOOR: 0 to 150 seconds
CONVEYOR: 0 to 128 seconds

Press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number. Press ENTER to continue.

PRESS SCROLL TO
SELECT OPTION:

INIT CHRG REPEAT ON

This setting is used to prevent unwanted multiple repeating of the initial charge on certain types of dishwashers. ON is the default setting and initial charge will not be limited. OFF requires that the main power must be cycled before the system will allow another initial charge feed.

Press SCROLL to select on/off, then press ENTER to continue.

PRESS SCROLL TO ENTER
DET RECHARG TIME
05 S

The recharge feeds detergent to maintain the working concentration as rinse water dilutes the dishmachine. The available timing ranges are...

DOOR: 0 to 30 seconds
CONVEYOR: 0 to 20 seconds

Press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number. Press ENTER to continue.

PRESS SCROLL TO ENTER
RECH AFTER RACKS
01

This setting allows you to choose how many racks will be counted before triggering the recharge feed. The range is 0 to 20 racks.

Press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number. Press ENTER to continue.

Continue on next page

PROGRAMMING MENUS CONTINUED

PRESS SCROLL TO ENTER RINSE SPEED 050%	This setting changes the speed of the rinse pump. The pump will run when you press SCROLL to select the digit you wish to change. Use ⇧/⇩ to change the number, the speed of the pump will change as the number is changed. When finished, press ENTER to continue.
PRESS SCROLL TO ENTER RINSE DELAY 00 S	This setting will only appear if using door mode. This feature delays the operation of the rinse pump for a selectable time once the rinse signal is received. The delay time helps to conserve rinse agent on door-type dishwashers. The range is from 0 to 20 seconds. Press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number. Press ENTER to continue.
PRESS SCROLL TO ENTER RINSE LIMIT 30 S	This setting will only appear if using door mode. This feature will stop the rinse pump after XX seconds of continuous rinse signal, conserving rinse agent on door-type dishmachines that fill through the rinse valve. The range is from 0 to 30 seconds. Press SCROLL to select the digit you wish to change, then use ⇧/⇩ to change the number. Press ENTER to continue.
PRESS SCROLL TO ENTER SANITIZER SPEED 050%	This setting changes the speed of the sanitizer pump. The pump will run when you press SCROLL to select the digit you wish to change. Use ⇧/⇩ to change the number, the speed of the pump will change as the number is changed. When finished, press ENTER to continue.
PRESS SCROLL TO SELECT OPTION: SANI RUNS WITH RINSE	Use SCROLL to choose if the sanitizer pump will run (simultaneously) with the rinse pump, or the detergent pump, then press ENTER to continue.
PRESS SCROLL TO ENTER WATER CHANGE COUNT 000	This setting specifies how many racks to count before showing a message on the display to change water (refill with a fresh tank). Press SCROLL, then choose a number between 0 and 999 (zero turns the feature off). When the message to change water appears on the screen, it can be reset by pressing the ENTER button, or cycling power off/on. Press ENTER to continue.
PRESS 'UP' TO RESET RACK COUNT 0000	If you wish to clear the rack counter, press the UP button. The display will briefly flash to the rack counter to verify that it was set back to zero, and will then return to the display at left. Press ENTER to continue.
PRESS 'UP' TO RESET INIT. CHARGE COUNT 0000	This setting will only appear if using probeless mode. To clear the initial charge count, press the UP button and the display will flash to indicate the counter was cleared. When finished, press ENTER to continue.

Wrap around to first menu item

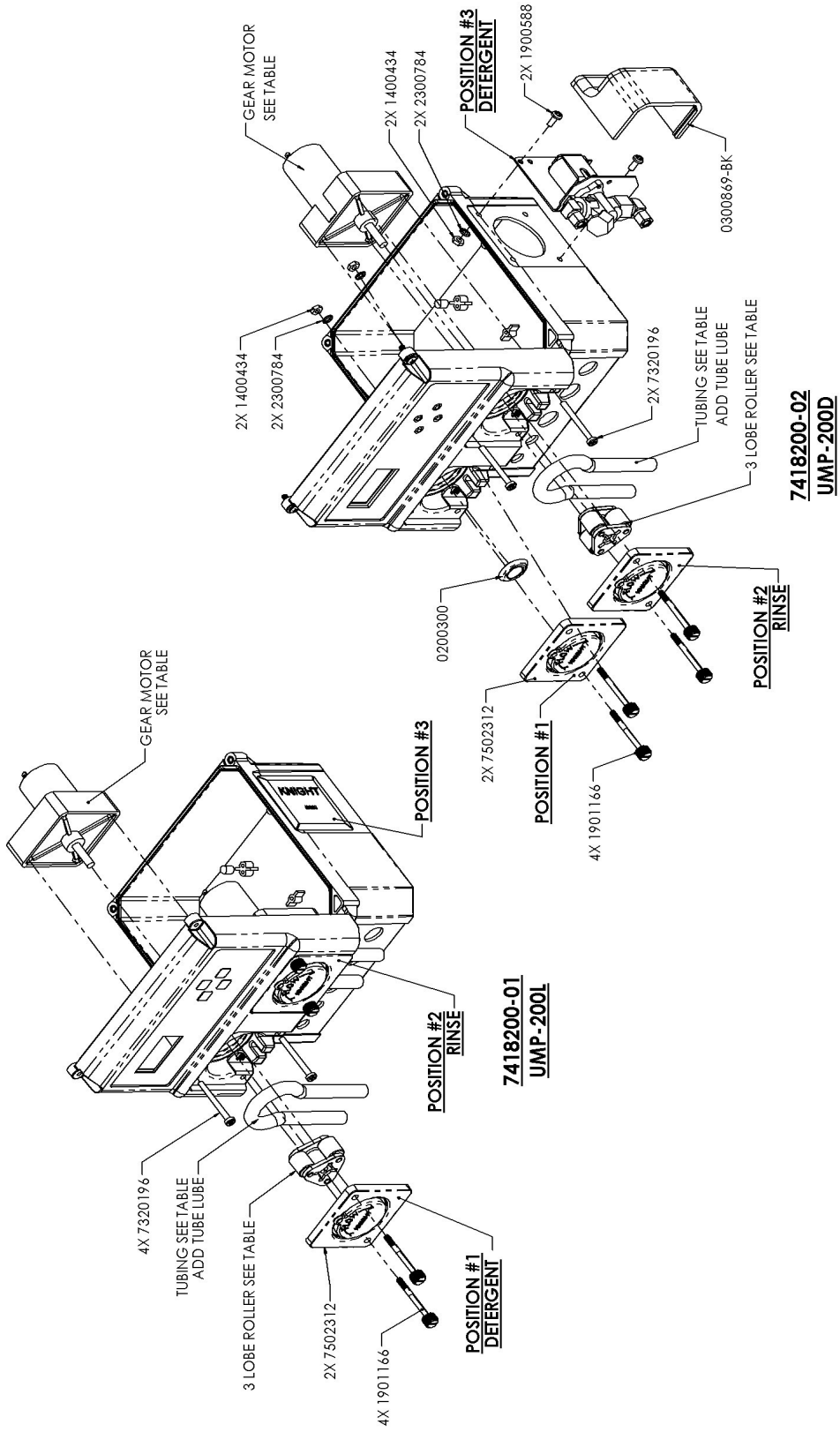
OTHER SCREENS

IINDUCTIVE PROBE FOUND	This message will appear on power up when an inductive probe is recognized and communicating with the dispenser. If an inductive probe is used and this message does not appear, check the wiring of the inductive probe for possible loose connections.
RACK COUNT 0	This message will appear when the rack count is viewed by pressing the UP button when the system is in normal operating mode (not being programmed).
INIT CHARGE CNT 0	This message will appear when the initial charge count is viewed (probeless mode only) by pressing the DOWN button when the system is in normal operating mode (not being programmed).
DE-LIME MODE 02:33	This message will appear when the dispenser is in de-lime mode. Press ENTER and SCROLL until de-lime mode shows on the display. Chemical injection will be halted while de-lime mode is on but will resume normal operation when turned off. The unit will automatically exit de-lime mode after 10 minutes, or pressing ENTER and SCROLL to exit.

SYSTEM ALARMS

CHECK DET. SUPPLY 15	This alarm indicates that detergent concentration was not reached within the alarm delay period. The number on the bottom of the display shows the last concentration reading before the alarm activated. Check the chemical supply container and replenish as needed. Other factors that can affect detergent feed include worn squeeze tube for liquid detergent and low water pressure for dry detergent.
SANITIZER LOW LEVEL DETECTED	This alarm indicates that the displayed pump was low on chemical supply as detected by the optional low level feature that uses a float switch to sense the chemical level in the container (liquid chemical only). This is an alarm display only and will not halt operation.
CHANGE DET. TUBE !	This alarm indicates that the displayed pump needs to have squeeze tube changed as it has reached the usable period that has been programmed in the tube life hours setting.
CHANGE WATER!	This alarm indicates that the dishwasher needs to be drained and refilled with a fresh tank of water. The alarm is activated after a specific number of racks have passed through the machine as programmed in the setting for “water change count”. This is only a reminder and will not halt operation.

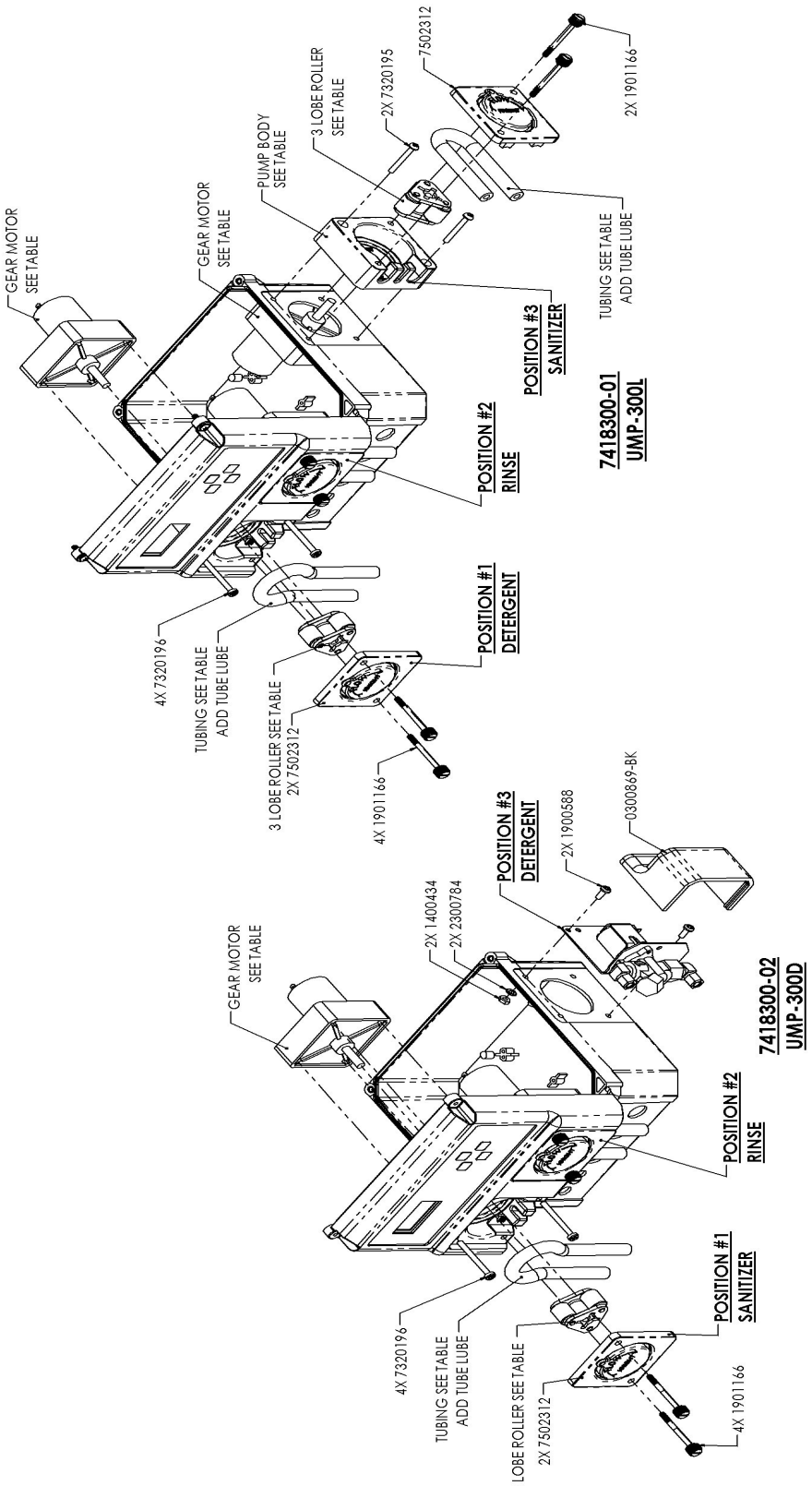
PARTS DIAGRAM - 200 SERIES



UMP-200L & 200D

Assembly Part Number	Model Number	Position #1			Position #2			Position #3					
		Tubing	3 Lobe Roller	Gear Motor	Tubing	3 Lobe Roller	Gear Motor	Tubing	3 Lobe Roller	Gear Motor	Pump Body	Face Plate	Solenoid
7418200-01	UMP-200L	7018051	7503450	7010211-LC	7018063	7503453	7010216-LC	N/A	N/A	N/A	N/A	1600245-BK	N/A
7418200-02	UMP-200D	N/A	N/A	N/A	7018063	7503453	7010216-LC	N/A	N/A	N/A	N/A	N/A	P7121055-D4

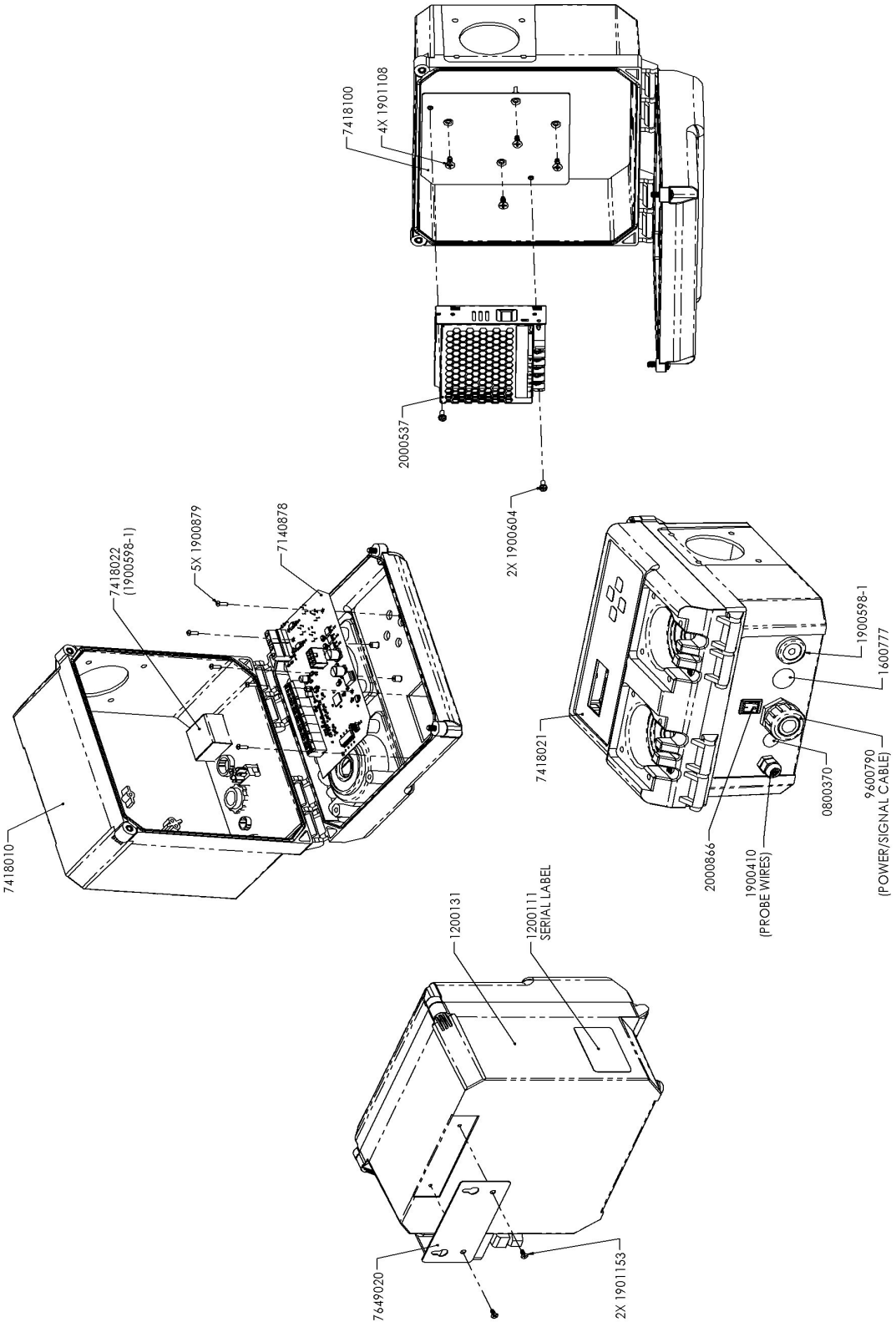
PARTS DIAGRAM - 300 SERIES



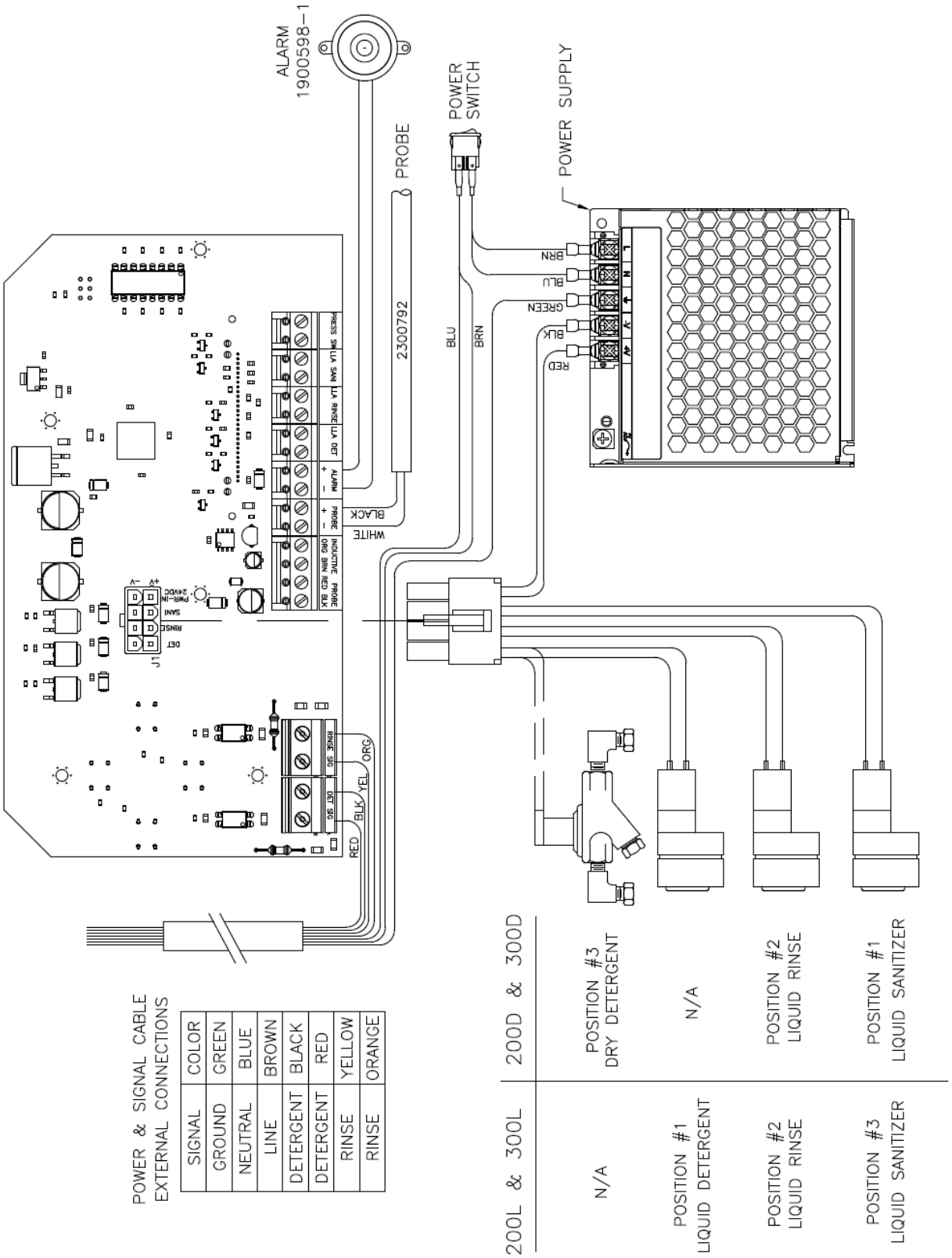
UMP-300L & 300D

Assembly Part Number	Model Number	Position #1			Position #2			Position #3				
		Tubing	3 Lobe Roller	Gear Motor	Tubing	3 Lobe Roller	Gear Motor	Tubing	3 Lobe Roller	Gear Motor	Pump Body	Face Plate	Solenoid
7418300-01	UMP-300L	7018051	7503450	7010211-LC	7018063	7503453	7010216-LC	7018051	7503450	7010216-LC	7501311-BK	7502312	N/A
7418300-02	UMP-300D	7018051	7503450	7010216-LC	7018063	7503453	7010216-LC	N/A	N/A	N/A	N/A	N/A	P7121055-D4

PARTS DIAGRAM - ALL MODELS



WIRING DIAGRAM



DISCLAIMER

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WARRANTY

For complete product terms and conditions scan the QR code below or enter the following URL into your browser:
http://cfstech.info/t-and-c

SCAN

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