



Sierra is a multi-product chemical dispensing system for use in machine warewash applications. The advanced features include rack counting, pump and dishmachine runtime, audible alarms, multiple languages and water resistance. The optional patented Virtual Clean Probe™ (VCP) guarantees fewer service calls, better performance and eliminates wasted chemical due to erroneous conductivity measurements.

Sierra comes complete with an installation kit, rinse injector and mounting bracket. A universal power supply automatically switches to operate from 100-240 VAC and protects Sierra from damaging power fluctuations.

Installation requires less than 1 hour using an easily-accessible terminal strip, and Sierra is programmed in less than 1 minute using the plain-language menu system. The modular design makes Sierra very easy to configure to your specific warewashing application needs. Sierra is easily installed for use with or without a probe in any door or conveyor warewash system.

KEY BENEFITS



- Easy setup using text-based programming menus
- Increased hygiene control - includes alarms for Dirty Washwater, Low Product, Out of Product
- Reduce detergent overuse and probe maintenance with VCP (optional)
- Manage profitability and efficiency with datalogging of rack count, pump and dishwasher runtime
- Universal power supply eliminates wiring errors and simplifies installation
- Complete with probe, installation kit, mounting bracket
- Simplified maintenance with Patented Snap-Head™ pump

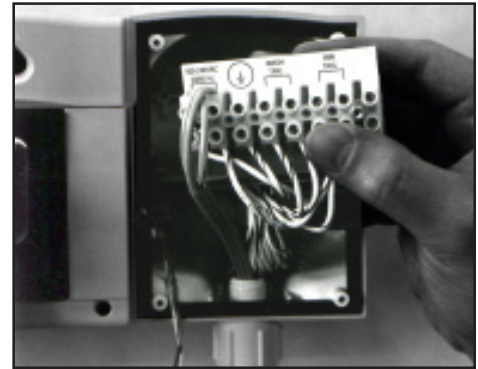
You wish your VCR was this easy...

Sierra is flexible, modular and easy to install for use with any door or conveyor dishmachine. Sierra has a simple menu system and SmartScreens™ that make installation simple and operation easy. Once the Sierra is configured, Smart Screens™ only display the information applicable to your setup. The operator can always access useful information while a passcode protects the configuration setup. For dishmachine cleaning, Sierra can be disabled at the touch of a button to ensure operator safety.



*Beta SnapHead™
Pump*

A probe can also be installed at any time by simply connecting the conductivity and/or temperature wires to the internal terminal strip. For maximum flexibility Sierra accepts AC and DC voltages to sense Wash and Rinse cycles. A contact closure pressure switch can also be used to signal the rinse cycle. An optional accessory kit allows use of an external alarm and a low product contact closure switch. Sierra uses the patented Snap-Head™ pump to make maintenance simple and provide the legendary Beta reliability.



*Snap-Out Terminal Block Eases Wiring
Connections*

Premium Performance...

Getting superior results means ensuring chemical is properly dispensed. Sierra ensures premium performance with visual and audible alarms. The sonic alarm alerts the operator that there is a problem, while the display gives troubleshooting information. For example, the Low Detergent Alarm tells the operator that there is not enough chemical in the wash tank. The most common



*VCP Enables Dirty Probes to
Perform as if Clean*

cause of this alarm is an out-of-detergent condition, so the display commands the operator to "Add Detergent".

Dirty wash water, calcium and food soil foul the probe and reduce the effectiveness of chemicals. To maximize chemical performance Sierra counts racks and can be programmed to alert the operator to "Drain Tank" after a set number of racks. VCP™ uses a patented pulse technology that eliminates conductivity reading errors due to fouling. If you ever have to clean probes then VCP™ is for you. The combination of Sierra and VCP™ delivers optimal results and ensures hygiene compliance while minimizing chemical costs, maintenance and service calls.



Not only can you count on Sierra, it will count for you...

Sierra logs account management information that can be used to analyze performance and costs. On-board datalogging of Total Racks, Racks Since Last Drain, Total Drains, Detergent Run Hours, and Wash On Hours is standard with Sierra. The data can then be used to calculate account information like chemical cost per rack and location efficiency.



*A water solenoid and a third pump for sanitizer are available on order
and can also be field installed.*

SPECIFICATIONS

SIZE

THREE-PRODUCT ENCLOSURE

HEIGHT	WIDTH	DEPTH	
5.75	15.25	5.5	Inches
14.61	40.96	13.97	Centimeters

TWO-PRODUCT ENCLOSURE

HEIGHT	WIDTH	DEPTH	
5.75	11.50	5.5	Inches
14.61	31.12	13.97	Centimeters

WEIGHT

4.38 lbs (2 kg) maximum

CABINET MATERIAL

ABS – Flame Retardant

IP54 Water-Resistant

MOUNTING

Wall mounted with stainless steel bracket, allowing easy installation in all locations.

AMBIENT OPERATING TEMPERATURE

36 to 120° Fahrenheit

(2 to 49° Celsius)

ELECTRICAL POWER CONFIGURATIONS

100-240VAC, 50-60 Hz, 0.3 Amp (max)

PUMPS

Peristaltic, dual roller, self-priming and self-checking.

PUMP TUBING MATERIAL (STANDARD)

Detergent: Norprene

Rinse: BiWall

Sanitizer: Norprene

PUMP FLOW RATES

Pump 1: Detergent 3/16" ID tube, adjustable 5% to 100%,
0.24-4.8 oz (7-140 ml) per minute

Pump 2: Rinse 1/16" ID tube, adjustable 5% to 100%,
0.025-0.5 oz (0.75-15 ml) per minute

Pump 3: Sanitizer 1/8" ID tube, adjustable 5% to 100%,
0.01-2 oz (3-60 ml) per minute

TRIGGERS

WASH AND RINSE VOLTAGE RANGE

24 VAC to 240 VAC

30 VDC to 100 VDC

SIGNAL CONNECTIONS

Wash signal is typically connected across either the motor contactor coil or the fill solenoid valve.

Rinse signal is typically connected across the rinse solenoid valve.

HYDRAULIC PERFORMANCE

PUMP 1: DETERGENT

Maximum Vacuum 8 in (200 mm) of mercury

Maximum Pressure 1.4 bar (20 psi)

PUMPS 2 AND 3, RINSE AND SANITIZER

Maximum Vacuum 8 in (200 mm) of mercury

Maximum Pressure 2.1 bar (30 psi)

SOLENOID

10 watts, 24 VDC

ALARMS

An adjustable, audible alarm. Set alarm with potentiometer under sliding door of controller. Emits 80db at 4 feet max.(1.22 meters). If required, you may connect a 24VDC, 500mA external alarm.

LOW LEVEL ALARM

Display reads "CHECK PRODUCTS"

OVERFEED STOP ALARM (PROBE OPERATION ONLY)

Display reads "DET FEED FAILURE"

DETERGENT ALARM TIMEOUT

Display reads "ADD DETERGNT"

DIRTY WASH WATER DUMP ALARM

Display reads "DRAIN TANK"

APPROVALS

CE approved



Rack Counter

Sierra records the cumulative total of racks since the last drain, and the total number of racks since installation.

Drain Counter

Sierra counts the total drains. This information ensures proper hygiene by keeping the chemical concentration at the correct level.



Pump Run Hours

Sierra records the total number of hours the detergent pump has run. This lets you calculate how much chemical is being used. Rinse pump time is also available.

Wash On Hours

Sierra records the hours the wash trigger (or rinse/pressure switch in probeless mode) has been on. With this information you can assess the efficiency of your operation.



Ordering Information

Item N°	Description	Install Kit Option #
069204	Sierra, 3 Pumps with VCP	1
069211	Sierra, 3 Pumps without VCP	1
069205	Sierra, 2 Pumps, 1 Plastic Solenoid, with VCP	2
069212	Sierra, 2 Pumps, 1 Plastic Solenoid, without VCP	2
069209	Sierra, 2 Pumps, 1 Brass Solenoid, with VCP	2
069216	Sierra, 2 Pumps, 1 Brass Solenoid, without VCP	2
069207	Sierra, 1 Pump, 1 Plastic Solenoid, with VCP	3
069214	Sierra, 1 Pump, 1 Plastic Solenoid, without VCP	3
069210	Sierra, 1 Pump, 1 Brass Solenoid, with VCP	3
069217	Sierra, 1 Pump, 1 Brass Solenoid, without VCP	3
069208	Sierra, 1 Pump, 1 External Solenoid, with VCP	3
069215	Sierra, 1 Pump, 1 External Solenoid, without VCP	3
069206	Sierra, 2 Pumps with VCP	4
069213	Sierra, 2 Pumps without VCP	4

NOTE: Mounting bracket included.

INSTALL KIT OPTION #1 (Select one of the following)

Complete Kit - with or without Probe (Temperature Compensating Probe available). This includes 15' of 1/4" red polyflow tubing, 35' of 1/4" white polyflow tubing, 25' of 1/8" polyflow tubing, 3 ea snap-on tube guides, 1 ea concentration probe (in probe configuration only), 1 ea bulkhead fitting, 15' of 7 conductor, 20 gauge hookup wire, assorted tubing clamps, mounting hardware

Basic Kit - with or without Probe. This includes 1 ea concentration probe, probe wire, and 1 ea bulkhead fitting only

No Kit

INSTALL KIT OPTION #2 (Select one of the following)

Complete Kit - with or without Probe (Temperature Compensating Probe available). This includes 10' of 1/4" polyflow tubing, 15' of 1/4" red polyflow tubing, 25' of 1/8" polyflow tubing, 2 ea snap-on tube guides, 1 ea concentration probe (in probe configuration only), 1 ea saddle clamp, 1 ea shut-off valve, 1 ea bulkhead fitting, 15' of 7 conductor, 20 gauge hookup wire, assorted tubing clamps, mounting hardware

Basic Kit - with or without Probe. This includes 1 ea concentration probe, probe wire, and 1 ea bulkhead fitting only

No Kit

INSTALL KIT OPTION #3 (Select one of the following)

Complete Kit - with or without Probe (Temperature Compensating Probe available). This includes 25' of 1/8" polyflow tubing, 1 ea snap-on tube guide, 1 ea concentration probe (in probe configuration only), 1 ea saddle clamp, 1 ea shut-off valve, 15' of 7 conductor, 20 gauge hookup wire, assorted tubing clamps, mounting hardware

Basic Kit - with or without Probe. This includes 1 ea concentration probe, probe wire, and 1 ea bulkhead fitting only

No Kit

INSTALL KIT OPTION #4 (Select one of the following)

Complete Kit - with or without Probe (Temperature Compensating Probe available). This includes 25' of 1/4" polyflow tubing, 25' of 1/8" polyflow, 2 ea snap-on tube guides, 1 ea concentration probe (in probe configuration only), 1 ea saddle clamp, 1 ea shut-off valve, 15' of 7 conductor, 20 gauge hookup wire, assorted tubing clamps, mounting hardware

Basic Kit - with or without Probe. This includes 1 ea concentration probe, probe wire, and 1 ea bulkhead fitting only

No Kit

RINSE INJECTOR

(CALL FOR INJECTOR OPTIONS)

Nylon and Stainless Steel rinse injectors available.

STANDARD PUMP TUBE OPTIONS

(CALL FOR OTHER TUBING OPTIONS)

Detergent: Norprene

Rinse: Nordel

Sanitizer: Norprene

ACCESSORIES

Item N°	Description
068521	Sierra Sanitizer Pump Add-on Accessory Kit
069496	Sierra Auxiliary Harness I/O Accessory Kit
069849	Main PCB Assembly
069488	Main PCB Assembly with VCP
087751	Power Supply, 100-240 VAC
051351	Motor/gearbox
069188	Mounting Bracket
039556	Pump cartridge, detergent, with Norprene tube
058772	Pump cartridge, rinse, with Nordel tube
057377	Pump cartridge, sanitizer, with Norprene tube
039553	Pump tube kit, detergent, Norprene with fittings
058549	Pump tube kit, rinse, Nordel with fittings
057203	Pump tube kit, sanitizer, Norprene with fittings

Specifications subject to change without notice



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