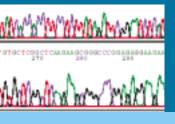
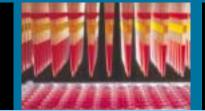
IT ADAPTS TO YOUR RESEARCH, NOT THE OTHER WAY AROUND.

QUID HANDLING SYSTEM SCICLONE ALH 3000 ADVANCED LIQUID HANDLING SYSTEM SCICLONE ALH 3000 ADVANCED LIQUID HANDLING SYS



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CICLONE ALH 3000 ADVANCED LIQUID HANDLING SYSTEM SCICLONE ALH 3000 ADVANCED LIQUID HANDLING SYSTEM SCICLONE ALH

DIFFERENT, FROM THE BENCH UP.



THE SCICLONE ALH 3000 ADVANCED LIQUID HANDLING SYSTEM FROM ZYMARK BRINGS TOGETHER OVER TWO DECADES OF LAB AUTOMATION EXPERTISE TO PROVIDE YOU A MORE PRODUCTIVE ANSWER FOR GENOMIC, PROTEOMIC AND DRUG SCREENING APPLICATIONS. THE SCICLONE SYSTEM GIVES ANY LAB A BROAD RANGE OF HIGHLY-ACCURATE AND PRECISE LIQUID HANDLING FUNCTIONS IN A VERSATILE, OPEN-DESIGN FORMAT THAT ADAPTS TO ALMOST ANY PROTOCOL. EACH SCICLONE SYSTEM IS CONFIGURED WITH YOUR CHOICE OF LIQUID DISPENSE FUNCTIONALITY AND ON-DECK ACCESSORIES, AND IS FIELD-RECONFIGURABLE TO ADAPT AS YOUR RESEARCH PROGRESSES.

CHOOSE FROM THREE INTERCHANGEABLE, MULTI-CHANNEL DISPENSE MODULES.

No other liquid handler can match the Sciclone for flexibility in aspirating and dispensing in 96, 384 and 1536 well format. Regardless of which multi-channel dispense module you choose, with our new EZ-Swap[™] design, you can exchange with any other module in as little as three minutes.

ALH-HV for High Volumes.

The 96 channel ALH-HV dispense module supports volumes from $1 - 200\mu$ L, and gives you the unique ability to run serial dilutions by either row or column. Switch at any time from a single disposable tip to sets of 2, 4, 8, 12 or 96 tips for maximum flexibility.

ALH-LV for Low Volumes.

The 384 channel ALH-LV dispense module handles dispense volumes from 0.5 – 25.0 μ L, and allows you to "hotswap" pipetting arrays without interrupting your protocol. Use with the 96, 384 and 384/1536 fixed cannula arrays, 96 or 384 mandrel arrays for disposable tips, or custom pin tools.

ALH-100nL for Nanoliter Volumes.

The 384 channel ALH-100nL dispense module supports precision dispensing of volumes from $100nL - 5.0\mu$ L with 96 and 384/1536 fixed cannula arrays.

CUSTOMIZE YOUR SYSTEM WITH OPTIONAL DISPENSE MODULES.

The Z-8th Dispense Module for Total Pick-and-place Control.

The new Z-8 dispense module gives you eight channels of independent Z-axis control for cherry picking, reformatting and normalization protocols and offers an optional liquid level sensing capability. Use with fixed cannula for volumes from $1.0 - 50\mu$ L, or disposable tips for volumes from $1.0 - 100\mu$ L. Other volumes can be supported by customizing your Z-8 module with alternate volume syringes.

Bulk Dispense Modules for Optimal Protocol Design.

Perform up to six distinct flow-through dispense activities within a single configuration by adding optional bulk dispense modules. Bulk dispense modules strap on either side of the multi-channel dispense head, and each 8-channel module can be programmed to dispense volumes of $10 - 1,500\mu$ L per well. Bulk dispense modules can be configured to work with either syringe-based or peristaltic pumps depending on your application requirements.

The bulk dispense module is ideally suited for reagent broadcasting and general dispense methods.





Z-8 MODULE

The Z-8[™] dispense module lets you independently control both the up-and-down and aspirate-anddispense action of each of the eight channels giving you the ability to access individual wells and reformat between tubes and plates.

BULK DISPENSE MODULE

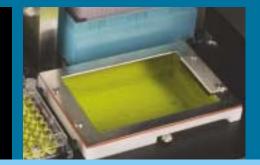
Bulk dispense modules enable flow-through dispense from bottles of bulk reagent. Add up to six independently programmable 8-channel arrays for uninterrupted automation of complex protocols. MULTI-CHANNEL DISPENSE MODULE With the EZ-Swap design, you can easily exchange multi-channel dispense modules to fit your specific needs.

THE MOST CUSTOM OFF-THE-SHELF LIQUID HANDLING SYSTEM YOU CAN BUY.

THE SCICLONE SYSTEM'S LARGE 20-POSITION DECK FORMAT LETS YOU INTEGRATE ALL THE ACCESSORIES YOU NEED TO MANAGE COMPLEX APPLICATIONS ON ONE SYSTEM WITHIN A SINGLE, UNINTERRUPTED PROTOCOL. EACH POSITION ON THE DECK CAN BE CONFIGURED FOR STATIC OPERATION, OR OUTFITTED WITH A NUMBER OF USEFUL SCICLONE DECK ACCESSORIES TO HANDLE FUNCTIONS THAT WOULD OTHERWISE REQUIRE SEPARATE DEVICES OR MANUAL PROCESSING. FOR MAXIMUM THROUGHPUT, THE DECK CAN BE OUTFITTED TO INTERFACE SEAMLESSLY WITH OUR PRESTO" AUTOSTACKERS FOR CONTINUOUS FEED OF MICROPLATES, TIPS AND OTHER CONSUMABLES IN TRAYS OF 9 OR 12. AND WITH OUR NEW SCICLONE SOFTWARE (VERSION 3.0), CREATING AND RUNNING NEW METHODS AND CONTROLLING ALL OF YOUR SCICLONE OPTIONS HAS NEVER BEEN EASIER.

ICLONE OPTIONAL DECK ACCESSORIES SCICLONE OPTIONAL DECK ACCESSORIES SCICLONE OPTIONAL DECK ACCESSORIES SCICLONE OPTIONAL





MICROPLATE SHAKER

The unique microplate shaker provides precise agitation of plates from 100 – 2,000 rpm with a self-centering motion that promotes a vortexing action to mix well contents and maintain suspensions. It allows you to complete operations that require a shaking step in a single on-deck protocol to improve protocol time and efficiency. With a compact footprint, multiple shakers can be used simultaneously on a single system with precision dampers to prevent transference of vibrations to other plates on the deck. The microplate shaker is ideal for use with liquid-to-liquid extractions

ULTRASONIC WASHER

The ultrasonic wash station offers a fast and effective way to clean and sterilize both 96 and 384 cannula arrays and custom pin tools. Separate plumbing lines allow automated filling and purging of the bath at any time.









TEMPERATURE CONTROLLED, LOW-VOLUME RESERVOIR

The temperature controlled, low-volume reservoir accurately maintains temperatures from 4°C – 45°C to safeguard sensitive reagents. The unique Teflon® coated liquid reservoir is designed to conserve small volumes of reagent. It gives you added flexibility to maintain reagents on the system that would otherwise have to be moved to an external refrigerator or incubator. Use our standard, low-volume reservoir or maintain reagents in both 96 or 384 well PCR plates or microplates using optional adapters.

PLATE PIERCING

The plate piercing array can be selected "on-the-fly" to provide an automated answer for accessing foil sealed plates. The plate-piercing option includes an elevated pressure base and special bi-phasic piercing cones in a 96-well configuration that mounts on the main liquid handling head for precise opening action.

PRESSURE FILTRATION

The positive pressure filtration system works with SBScompliant 96 and 384 well filter plates using controlled positive pressure up to 15 psi to drive separation and purification processes. It combines with the on-board liquid waste collector for filter-to-waste mode, and standard collection plates for filter-to-collect mode. The use of positive pressure reduces the risk of sample crosscontamination via micro-aerosols — a condition often associated with vacuum-based filtration systems. This system is readily adaptable to solid-phase extraction methods that utilize filter plates, including DNA, RNA and protein extraction and purification protocols.

THE SCICLONE ALH 3000, YOUR FIRST STEP TO FULLY INTEGRATED LAB AUTOMATION.

THE SCICLONE ALH'S OPEN DESIGN, TOGETHER WITH ZYMARK'S HIGHLY-ADAPTIVE AND FLEXIBLE CLARA[™] SCHEDULING SOFTWARE, MAKES IT EASY TO INTEGRATE WITH OTHER INSTRUMENTS TO MAXIMIZE YOUR LAB'S PRODUCTIVITY. WORKING WITH OUR ZYMARK APPLICATION PROGRAMMING SYSTEM (ZAP), YOUR ZYMARK REPRESENTATIVE CAN SHOW YOU ALL OF THE DIFFERENT WAYS TO AUTOMATE YOUR PROTOCOL BASED ON YOUR THROUGHPUT, BUDGET AND SPACE REQUIREMENTS.

Once you've selected the right system for your lab, our team of system integration specialists builds it to your specifications, and then subjects it to a battery of tests to ensure that it runs smoothly and meets all performance related specifications prior to shipment. A similar process takes place at your site where our field service and engineering group completes an exhaustive post-installation evaluation to make sure that your system performs as well in your lab as it does in our factory.

With the Sciclone ALH as your core instrument, and CLARA as your driver, there are virtually no genomic, proteomic or drug screening protocols that cannot be fully automated. The following are samples of applications for which we've installed fully-integrated systems:

DRUG SCREENING APPLICATIONS

- · Plate replication and reformatting
- Primary and secondary screening assays
- ADME & Toxicology Screening Assays
- · Cell-based assays
- · Immunoassays and serial dilutions
- · Automated hit picking

GENOMIC APPLICATIONS

- DNA/RNA extraction and purification
- PCR Set-up and clean-up
- SNP mapping

PROTEOMIC APPLICATIONS

- Protein digestion and MALDI spotting
- Protein crystallization
- · Yeast-two hybrid assays





ZYMARK: BECAUSE AUTOMATION IS SUPPOSED TO MAKE YOU MORE PRODUCTIVE.

SINCE 1981, ZYMARK HAS BEEN COMMITTED TO DEVELOPING LAB AUTOMATION SOLUTIONS THAT ACCELERATE SCIENTIFIC RESEARCH AND HELP BRING DRUGS TO MARKET FASTER. IN RECENT YEARS, OUR PRODUCTS HAVE BEEN RESPONSIBLE FOR RUNNING BILLIONS OF ASSAYS AND HAVE PLAYED A CENTRAL ROLE IN THE DEVELOPMENT OF DOZENS OF NEW CHEMICAL ENTITIES.

EVERY ZYMARK PRODUCT IS BACKED UP BY PROFESSIONAL WORLDWIDE SERVICE AND THE SUPPORT OF SPECIALISTS WHO UNDERSTAND YOUR BUSINESS AND CAN ENSURE YOUR SUCCESS AND SATISFACTION. WE INVITE YOU TO LEARN MORE ABOUT ZYMARK AND OUR OTHER LAB AUTOMATION PLATFORMS BY VISITING US AT WWW.ZYMARK.COM.

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