

The Scorpion Liquid Handling Work Station is a high speed single channel pipettor. This extremely versatile work station can be used to perform anything that you can do with a hand-held pipettor with the speed, reliability and precision of an automated dispenser.

The first delta style robot designed specifically for laboratory automation, the Scorpion can access 6 deck positions in a minimal footprint. The unique lightweight and durable delta arm design allows for an open work space and high speed movements. The 6 positions can accommodate 15 mL tube racks, 50 mL tube racks, deep well blocks, standard 96, 384 and 1536 well plates, as well as tip racks and SBS sized accessories. Available pipette tips include 50 μ L, 200 μ L and 1 mL volumes.

The user friendly software makes it simple to setup complex grids and titrations. Liquid transfers can be defined as volumes, pH or concentrations, making a titration quick and easy to execute.

Features:

- Compatible with 50 μ L to 1000 μ L pipette tip allowing dispensing down to 1 μ L. Multiple tip sizes can be used in one protocol.
- Dispense units can be defined as volume, concentration or pH.
- Deck will accommodate 6 SBS sized plates or racks.
- Tip head design allows pipette tips to reach the bottom of tall tubes such as 15 mL and 50 mL tubes.
- Liquid level sensing allows the tip to follow liquid levels improving aspirate and dispense accuracies.
- Positive air displacement pipette head and optimized dispense modes make it easy to work with a wide range of fluid viscosities such as DMSO, 80% Glycerol, PEG and alcohols.
- Intelligent dispense sequencing combined with high speed motion minimizes experiment set up time.



Optimized Dispensing Modes

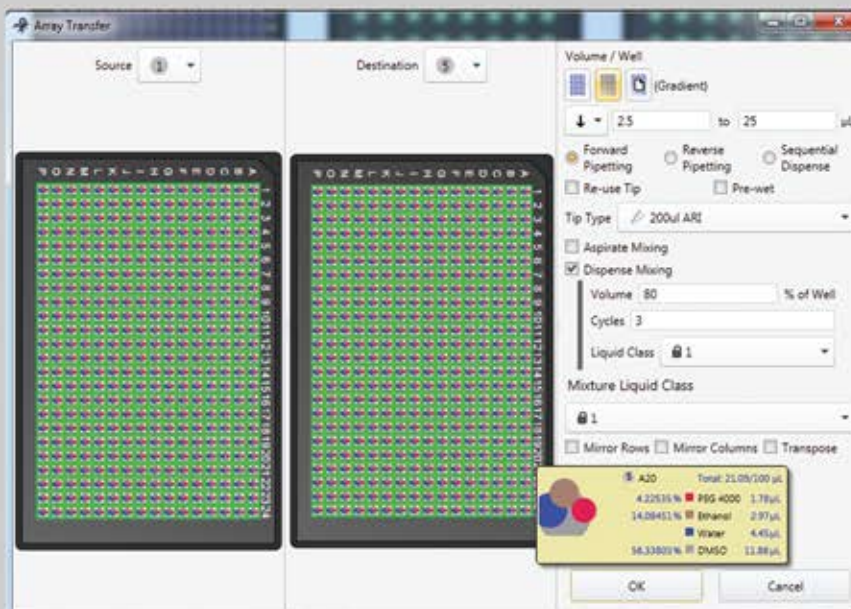
The Scorpion utilizes 3 dispense modes, each with unique advantages. Forward, Sequential, and Reverse modes, combined with tip usage criteria, create a powerful liquid handling tool set. In Forward mode, commonly used with hand-held pipettors, the requested volume is aspirated and dispensed. In Sequential mode, the tip is first filled with the complete volume to sequentially dispense into a series of wells. Reverse mode allows for a controlled amount of fluid to be kept in the tip while the desired volume is dispensed, thus increasing the accuracy of a variety of dispensed fluids by alleviating forces such as capillary action, fluid stiction, and surface tension. Each mode allows the dispense to be completed by using the same tip or by selecting a new tip for each cycle. These 3 modes allow for an appropriate liquid handling method to be selected to optimize the throughput, precision and accuracy of each dispense.

200 µL Tip Test Data

Reagent	Volume	CV
Water	1 µL	6.3%
DMSO	1 µL	3.8%
DMSO 80%	1 µL	3.9%
Methanol	10 µL	4.5%
Ethanol	10 µL	3.4%
Isopropanol	10 µL	2.9%
DMSO	10 µL	2.2%
Glycerol 50%	10 µL	2.3%

1 mL Tip Test Data

Reagent	Volume	CVs
Water	1 µL	4.4%
DMSO	1 µL	2.3%
DMSO 80%	1 µL	5.0%
Methanol	10 µL	3.9%
Ethanol	10 µL	2.0%
Isopropanol	10 µL	3.7%
DMSO	10 µL	2.5%
Glycerol 50%	10 µL	2.1%



Specifications:

Size: 19 (48.3) x 19 (48.3) x 27.5 (69.8) inches (cm)
 Weight: 90 lbs, 41 Kg
 Electrical: 100 to 240 V, 300 W
 Environment: 4° to 70° C, Non-condensing

Ordering Information: Catalog #: 640-1000-10
 includes desktop computer