



# ARI Scorpion Automated Liquid Handler

Optimize, re-array and normalize the versatile way with the Scorpion Automated Liquid Handler. This 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 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 2 ml, 15 ml and 50 ml tubes, deep well blocks, standard 24, 48 and 96 well plates, as well as tip racks and 585 sized accessories. Available pipette tips include 20  $\mu$ l, 50  $\mu$ l, 200  $\mu$ 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

- Use your existing labware. Tip head design allows pipette tips to reach the bottom of 2 ml blocks as wells as as 15 ml and 50 ml tubes.
- With 6 deck positions screen kits can be purchased in 15 ml tubes and rearray into 96 well plates.
- Compatible with 20  $\mu$ l to 1000  $\mu$ l pipette tip allowing dispensing down to 1  $\mu$ L. Multiple tip sizes can be used in one protocol.
- Dispense units can be defined as volume, concentration or pH.
- 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.

## SPECIFICATIONS

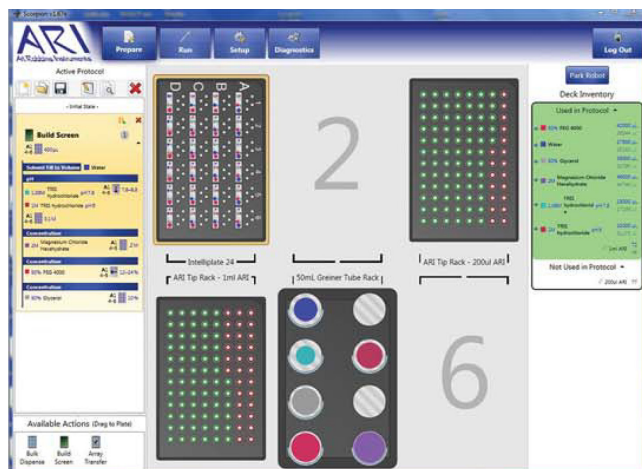
Size	19 × 91 × 27.5 in
	48.3 × 48.3 × 69.8 cm
Weight	90 lbs, 41 Kg
Electrical	100 to 240 V, 300 W

## Optimize

### 24 way optimization screen.

Simple 4 corner grids as well as complex n-dimensional grids with multiple reagents can easily be designed and set up using the Scorpion Screen Builder software.

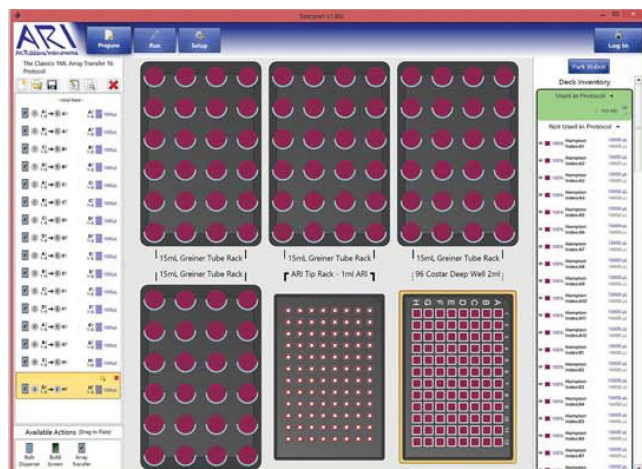
The Scorpion's unique open deck format allows users to quickly and efficiently set up protein crystallization optimization blocks. Although the machine is fast enough to set up simple 96 way grids in about 15 minutes, it serves the Crystallography community better by setting up complex 24 way optimization screens often with 6 or more reagents in under 9 minutes. The Scorpion can also be used to set the protein and reservoir drops together completing both the grid build step and the tray setup in one easy process.



## Re-array

### 15 ml tubes into 96-well block

The Scorpion's large database of screening reagents contains all of the commonly used commercial screens. Significant cost savings (roughly 50%) can be realized by purchasing screen kits in 15 ml tubes and putting the versatility of the Scorpion to work.



## Normalize

### 0.1M/0.4M, 25% PEG 300, pH 7.5

With powerful Scorpion Screen Builder Software, it is taken a standard variable concentration salt screen and normalize the salt screen. Easily set up multiple plates with varying pH, different additives and varying concentrations.

