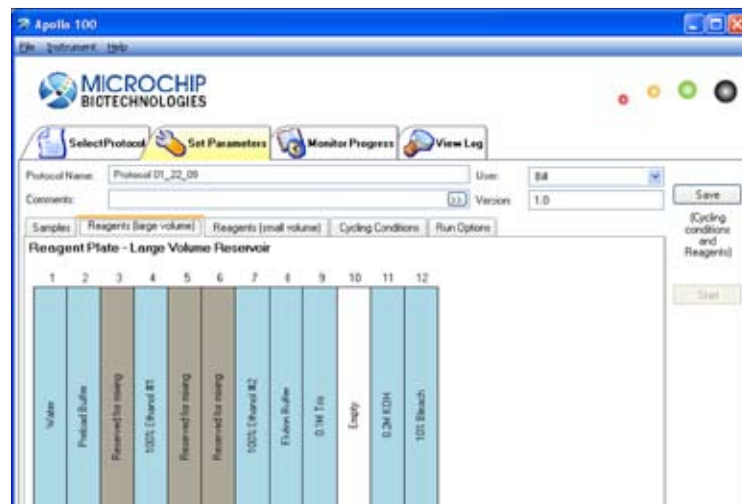


The Apollo 100 System Simplifies Automation

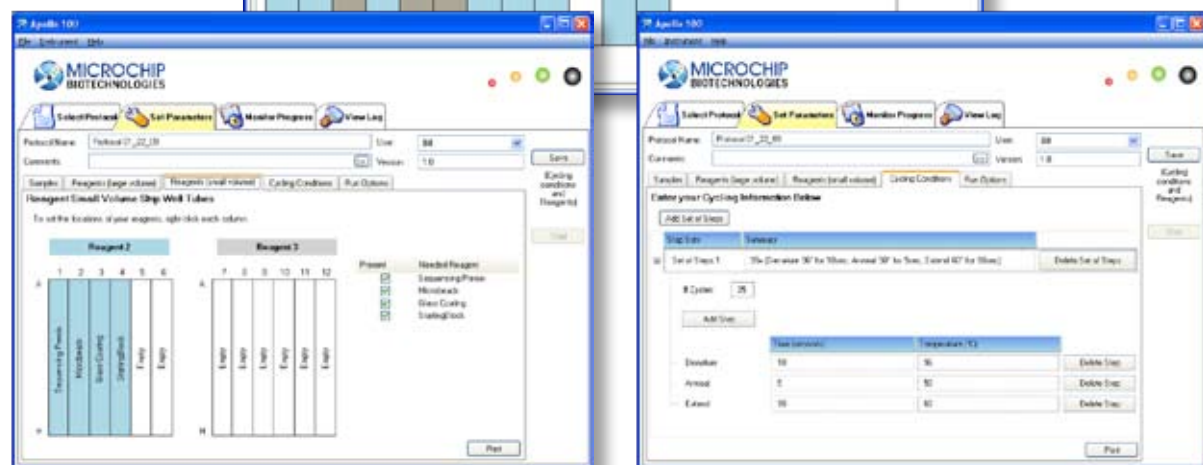
Apollo 100 System

Color-coded diagrams in Apollo 100 System software indicate the correct placement of samples and reagents. Setup for a full 96-well microplate takes about 20 minutes.



No programming, no scripting. Tab through setup menus to get started.

Revise your thermal cycling parameters.



Performance Specifications

Run time	Less than four hours per run
Throughput	2 x 96 samples per 8 hour period
Microchip reaction volume	1.0 μ L
Number of runs per microchip	50 runs
Sample input	PCR Product: 20-100 ng (dependent on PCR product length) Plasmid: 250-1000 ng
Sample output	Cycle sequence product ready for injection into Applied Biosystems 3730XL Genetic Analyzer

Installation Specifications

Dimensions	Bench-top unit: width 558.8 mm (22"), depth 635.0 mm (25"), height 939.8 mm (37")
Weight	Bench-top unit: 42.5 Kg (85 lbs)
Electrical	120 V, 60 Hz, 950 Watts

Microscale Sanger Cycle Sequencing and Bead-Based Cleanup

Reduced Labor

Creates time for new core technologies and services

Reduced Reagent Costs

Reaction volumes have been downscaled to under 1 μ L, reducing the amount of costly reagents and sample required

Time Savings

A 96-well microplate of sequencing samples is Ready-to-Inject in less than four hours

Small Footprint

The Apollo 100 System requires a limited amount of bench space

Better Efficiency

Process automation allows laboratories to be more productive without increasing staffing levels



Automated Microscale Sample Preparation Improves Productivity and Reduces Reagent Costs

Hands-Off Automation Creates Time for New Core Lab Services

Microscale processing dramatically reduces reagent consumption and costs. The Apollo 100 System can use as little as 160 nL of dye terminator reagent solution and 2.5 μ L of cleanup beads per reaction.

Long sequencing read lengths can be obtained with small volumes of dye terminator reagent when thermocycling reactions are handled by the Apollo 100 System.

Bivariate fit (polynomial fit degree = 2) of read length vs. BigDye® reagent reaction volume. Samples run on 36 cm capillaries.

The Apollo 100 System handles a wide range of plasmid product and PCR product input DNA sample concentrations. The System solves many of the problems core facility labs experience with incoming sample variability and cuts down on the number of workflow complications caused by sample returns, re-submissions, and re-evaluations.

Bivariate fit (polynomial fit degree = 2) of read length vs. sample DNA concentration. Samples run on 36 cm capillaries.

Read lengths are equivalent to those obtained by major sequencing labs in day-to-day production. Ready-to-Inject preparations produced by the Apollo 100 System are compatible with core facility capillary sequencing instrumentation.

1029 bp read of pUC plasmid DNA. Samples run on 50 cm capillaries.



Microplate processing time is less than four hours. In an eight-hour work day, the Apollo 100 System can do automated, microscale Sanger Sequencing reactions and bead-based cleanup on two 96-well sample microplates.

Real time savings and walk-away automation.

The compact deck of the Apollo 100 System holds plasmid product or PCR product DNA samples, sequencing reaction reagents, a thermocycling station, bead-based reaction cleanup reagents, microchips, automated system cleaning and regeneration reservoirs, and Ready-to-Inject reaction product outputs. Once the sample preparation program has started, there's no need to move things around on the deck or swap plates.

Re-usable microchips make automated microscale sequencing highly economical.

Automatic microchip regeneration after each run holds down core facility operational costs. Microchips can be used 50 times prior to replacement.



With a benchtop footprint of just 22 x 25 inches, the Apollo 100 System packs a lot of productivity into a small space. The Apollo 100 System automates and miniaturizes cycle sequencing and bead-based cleanup, creating both time and space for new core lab technologies and services.

