



Zephyr | Genomics Workstation

A robust and simple solution for molecular biology applications

The Zephyr Genomics Workstation is a powerful solution for automating numerous critical yet routine molecular biology processes such as nucleic acid purification, reaction setup, and normalization. This benchtop workstation is designed to remove many of the technical hurdles of automating these protocols, without sacrificing functionality and flexibility.

Introducing Caliper's Zephyr Genomics Workstation

A robust and easy-to-use solution for molecular biology applications

Advances in genomics have generated a clear need for higher sample volumes without sacrificing data quality. Automating many of the error prone and routine manual protocols is the logical path, but unfortunately automation often comes with its own challenges, such as learning to program methods for machine execution and planning assays for unattended operation.

The Zephyr Genomics Workstation is the perfect compliment for today's molecular biology laboratories. Whether isolating total RNA, purifying PCR fragments, setting up reactions, or normalizing DNA samples, the Zephyr Genomics Workstation provides a straight forward and simplified approach, which reduces errors and ensures reproducibility.

The Zephyr Genomics Workstation is a powerful liquid handling solution that eliminates the typical challenges associated with automating standard molecular biology processes via the inclusion of pre-packaged automation protocols that may be selected and run by lab technicians.

The Workstation hardware includes the compact Zephyr liquid handler equipped with a 96-well high volume head (HVH) with disposable tips, consumables gripper, a vacuum filtration station, and a unique ultrasonic, non-contact liquid level sensor.

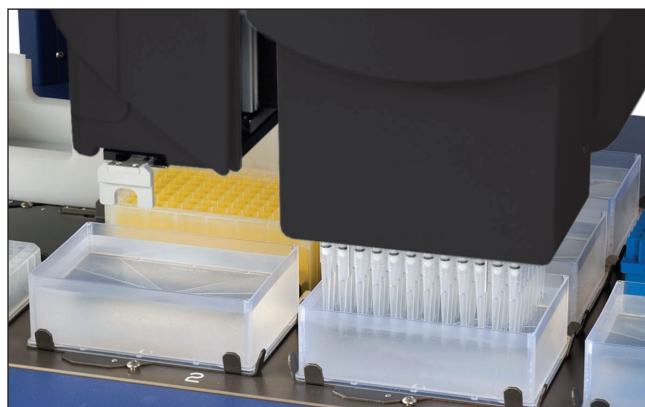
Additionally, the Zephyr Genomics Workstation software consists of a simple and robust graphical user interface (GUI), as well as a library of automated protocols for kits and common processes.

Processing samples is quick and easy. Users first select a method from the list of preinstalled applications, while the GUI guides them on how to setup the deck using detailed illustration specifically annotated for that method. To start the assay the user simply clicks the "start" button. The workstation will notify users when processing is complete.

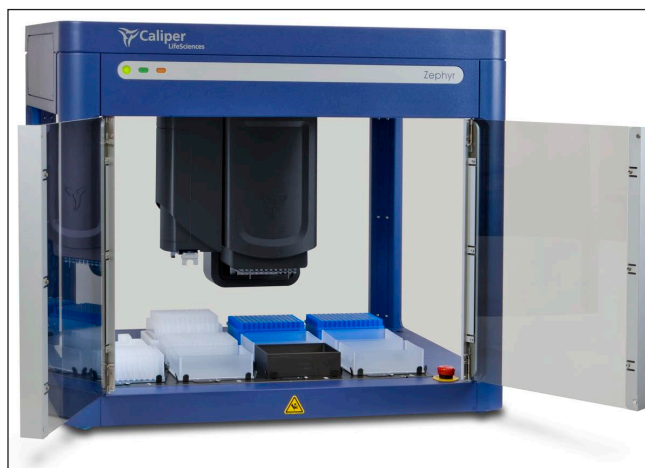
Reaction setup is even easier. Users simply input the number of reactions they want to setup and the GUI's built-in calculator provides them with the correct volumes for each component.



Zephyr Genomics Workstation



Automatically detect clogged wells and minimize re-runs



Optional environmental doors



Graphical User Interface

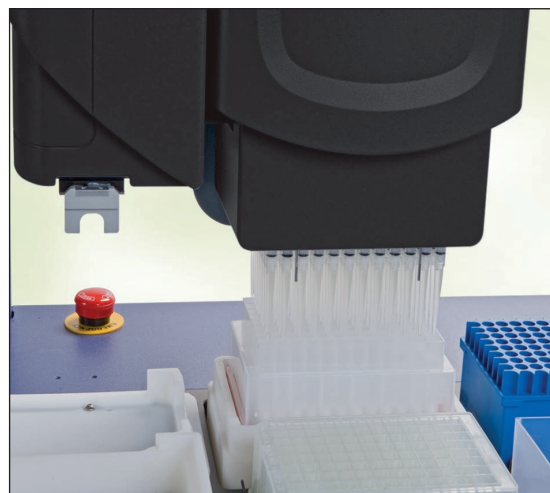
Simply intelligent

A closer look at the graphical user interface included with the Zephyr Genomics Workstation shows that it functions as an extension of Caliper's industry leading Maestro software.

This powerful "one-two punch" approach allows an operator to setup and run a selected method with only a few clicks – simply select the method, add samples and reagents, and click "start". Additionally, using Maestro, assay developers can create new automated protocols quickly and easily.

Ideal for:

- DNA extraction
- RNA extraction
- Plasmid isolation
- PCR purification
- Sequencing purification
- PCR setup
- Sequencing reaction setup
- Normalization



Process Control

Error proof

Unlike other liquid handling systems, the Zephyr Genomics Workstation incorporates several unique features and automatic safeguards that virtually eliminate processing errors.

Liquid Detection

The Zephyr Genomics Workstation is equipped with an ultrasonic sensor for the detection of liquid height. This non-contact feature is integrated into the method and eliminates the potential for overflow, which is a primary source of cross contamination during filtration.

Deck Setup

Correct deck setup is critical for proper sample processing. The Zephyr Genomics Workstation GUI provides the user with a deck map that indicates which consumables and reagents are needed where they belong.

Reagent Calculator

The built-in reagent calculators automatically determine appropriate quantities and volumes of reagents.



Zephyr Genomics Workstation powered by Maestro graphical user interface

