

Glucose Clamp Features

OVERVIEW

The following document aims to provide an overview of the features available in the Glucose Clamp custom method.

Additional features include:

- Program in terms of animal weight, concentration, and dose rate
- Previous dose rates are displayed for easy recording
- Ability to change dose rate while running

Platform Support:

The Glucose Clamp software is available for use on both the Harvard Elite and PHD Ultra syringe pump series, with the exception of the high force PHD Ultra models.

FEATURE EXPLAINATION

This section gives a more detailed overview of the key additional features mentioned above.

Animal Weight, Concentration, and Dose Rate Programming

Unlike its predecessor methods, Glucose clamp allows for the user to enter in a desired concentration, animal weight, and dose rate and uses that information to set the motor rate internally. This allows the user to think only in terms of values relevant to their application.

Previous Dose Rate Display

The previous dose rate setting is displayed while the pump is running, which allows for easy data recording. When the unit is stopped, a popup message is also displayed with the last dose rate set and its duration.

Change Dose Rate While Running

In the Glucose Clamp mode, the user has the ability to change the dose rate while the motor is running. This allows for adjustments mid run and for the execution of complex infusion procedures without the need to start and stop the process.

NOTE: The Glucose Clamp Method can be found on the CD. You should use the Method Manager Software to download the Method to the pump.

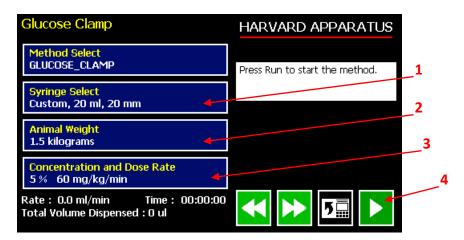


PUMP INTERFACE

The main screen for the Glucose Clamp method is depicted below in three separate states. Key features are indicated and explained in each figure.

Main Screen (Idle)

The main screen contains the buttons used to enter the syringe₁, animal weight₂ in g or kg, dose rate, and concentration₃ in mg/ml or %. Once the desired settings have been entered, the run button₄ starts the motor.



Main Screen (Running)

While running, the dose rate can be changed using the dose rate button₁. The previous dose rate and its duration are also displayed here for convenience₂. To stop execution, the user can press the stop button₃.

Glucose Clamp HARVARD APPARATUS Custom, 20 ml, 20 mm Press Run to start the method. nimal Weight: 1.5 kilograms ous Dose Rate/Duration: 00:00:06 60 mg/kg/min Current Dose Rate/Duration: 65 mg/kg/min 00:00:11 Concentration and Dose Rate 5 % 65 mg/kg/min Rate: 1.95 ml/min Time: 00:00:17 Total Volume Dispensed: 543.753 ul-

Main Screen (Stopped)

Immediately after stopping, the last rate that was running and its duration are displayed for the user₁. From here, the run information can be cleared with the reset button₂ or the run can be resumed with the run button₃.

