

## ***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 EXPLANATION**

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.



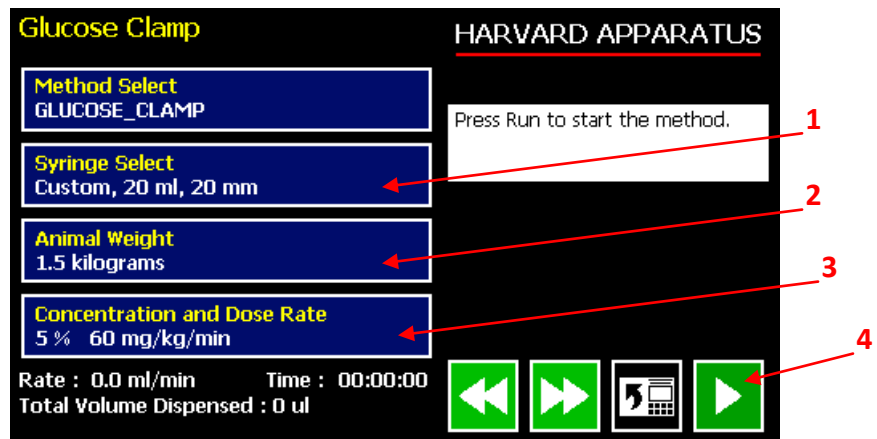
**NOTE:** The Glucose Clamp Method can be found on the CD. You should use the Method Manager Software to download the Method to the pump.

## 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.

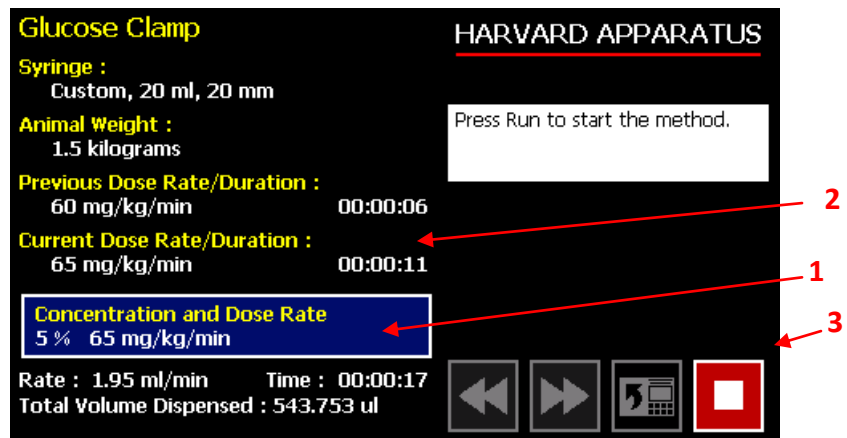
### Main Screen (Idle)

The main screen contains the buttons used to enter the syringe<sup>1</sup>, animal weight<sup>2</sup> in g or kg, dose rate, and concentration<sup>3</sup> in mg/ml or %. Once the desired settings have been entered, the run button<sup>4</sup> starts the motor.



### Main Screen (Running)

While running, the dose rate can be changed using the dose rate button<sup>1</sup>. The previous dose rate and its duration are also displayed here for convenience<sup>2</sup>. To stop execution, the user can press the stop button<sup>3</sup>.



### Main Screen (Stopped)

Immediately after stopping, the last rate that was running and its duration are displayed for the user<sup>1</sup>. From here, the run information can be cleared with the reset button<sup>2</sup> or the run can be resumed with the run button<sup>3</sup>.

