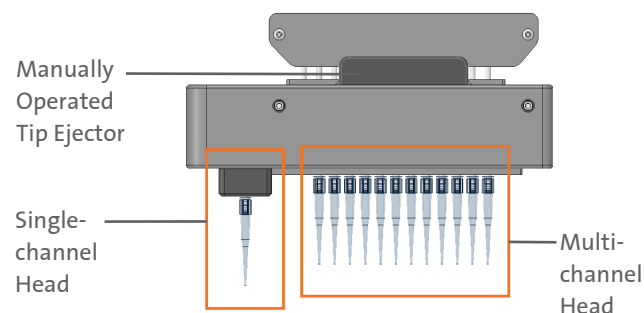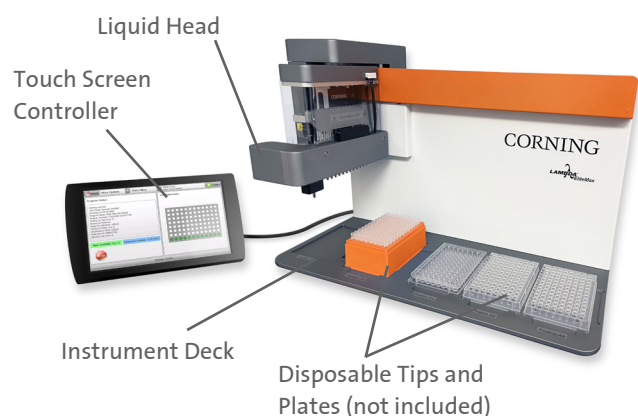# Corning® Lambda™ EliteMax Semi-automated Benchtop Pipettor

Quick Start Guide

For the complete Corning Lambda EliteMax Benchtop Pipettor Instruction Manual (CLS-AN-671DOC), visit **www.corning.com/lifesciences**.

Instrument Identification

Liquid Head

Touch Screen Controller

Instrument Deck

Disposable Tips and Plates (not included)

Manually Operated Tip Ejector

Single-channel Head

Multi-channel Head

Unboxing

**Tools needed:** Phillips and flat head screwdrivers, 2 mm Allen wrench (provided), hammer, and needle-nose pliers.

▶ Pry open top of box with the flat head screwdriver.

▶ Remove the screws holding down the deck plate with the Phillips head screwdriver.

▶ Remove the unit from the box, lifting from the bottom of the deck plate, and place on the benchtop.

▶ Be sure to remove the holding bracket prior to use. The holding bracket is located next to the yellow warning label and can be removed using the Allen wrench provided.

Installation

1. Connect the Touch Screen Controller cable into the rear panel of the Corning Lambda EliteMax Benchtop Pipettor.

2. Connect the round connector of the universal external power supply to the rear panel of the instrument. Push in firmly until you feel it click into position.

3. Connect the AC power cord to the universal external power supply and then to the AC wall power receptacle. The AC power receptacle should be able to supply approx. 300W and MUST be grounded to a true earth ground.

4. Power up the unit by rocking the Reset/Off switch located in the back of the Corning Lambda EliteMax Benchtop Pipettor to the Reset position. The instrument should boot up, and the home screen will appear in a few seconds.

Deck Positions

Position EE

Position DD

Position CC

Position BB
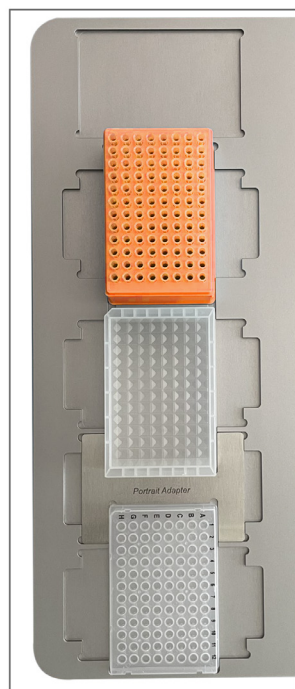
Position AA
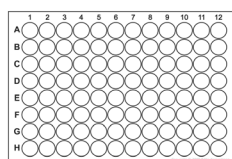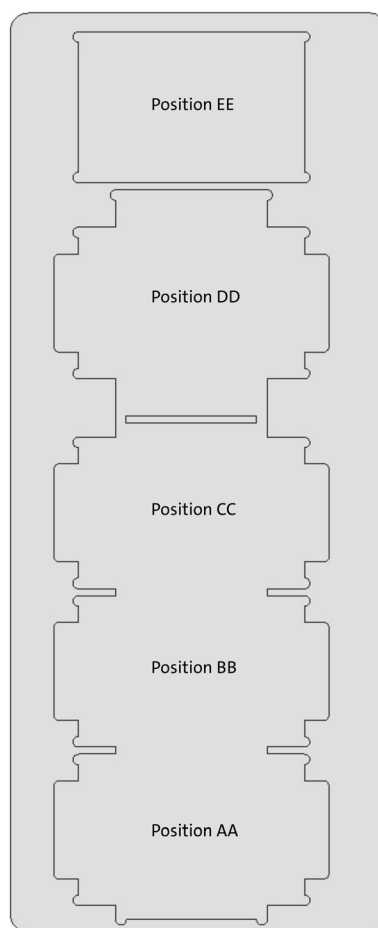
Landscape Orientation
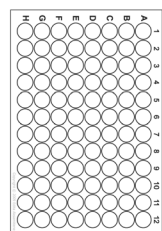
Portrait Orientation

Portrait Adapter Plate

Typical landscape layout orientation.

Typical portrait layout orientation. **NOTE:** Portrait adapter between plates.

Operating the Unit

Place the following in landscape position:

◗ Tip Rack in deck Position DD

◗ Reagent Reservoir in Position CC

◗ Plates in Position BB and Position AA

After powering up the Corning® Lambda™ EliteMax Benchtop Pipettor, you will be presented with the main screen or Home Screen.
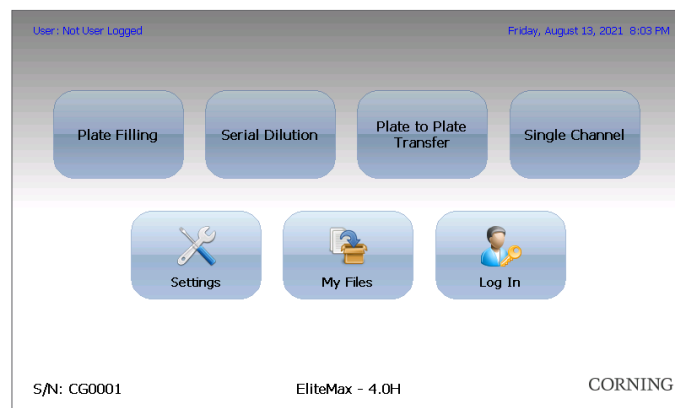

Simply touch the desired action to access the submenu.

◗ **Plate Filling:** Create, run, save, or edit a Plate Filling protocol.

◗ **Serial Dilution:** Create, run, save, or edit a Serial Dilution protocol.

◗ **Plate to Plate Transfer:** Create, run, save, or edit a Plate-to-Plate Transfer protocol.

◗ **Single Channel:** Create, run, save, or edit a Single-channel protocol (this is also known as cherry picking with the single-channel head only).

◗ **Settings:** Change instrument settings, access calibration data and other configuration tools.

◗ **My Files:** View user-created protocols and data logged information. From here, you are also able to delete unwanted protocols.

◗ **Log In:** Login under a specific user profile. To access this menu, a user profile must be created first in Settings.

Creating User Protocols

By pressing the Plate Filling, Serial Dilution, or Plate-to-Plate Transfer button in the main menu, the following screen will appear:

General Settings Tab
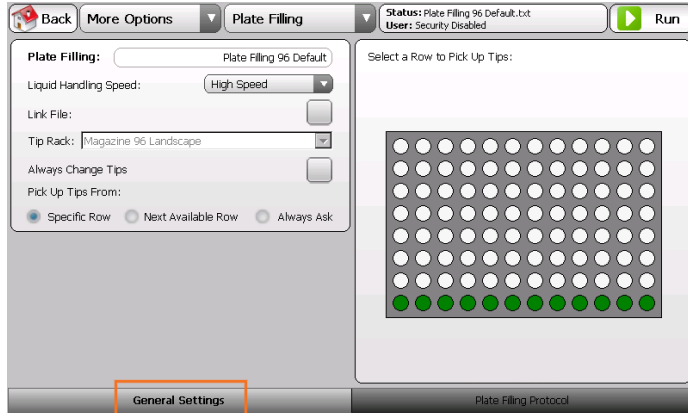
You can edit the following to customize your protocols:

◗ Protocol name

◗ Liquid handling speed

◗ Link file option: Allows you to select a protocol to be run after the current one is finished (link multiple protocols)

◗ Tip rack orientation

◗ Tip change frequency

◗ Which tips are used: The plate interface can be interacted with to determine which rows of tips are used (green = selected)

Protocol Settings Tab
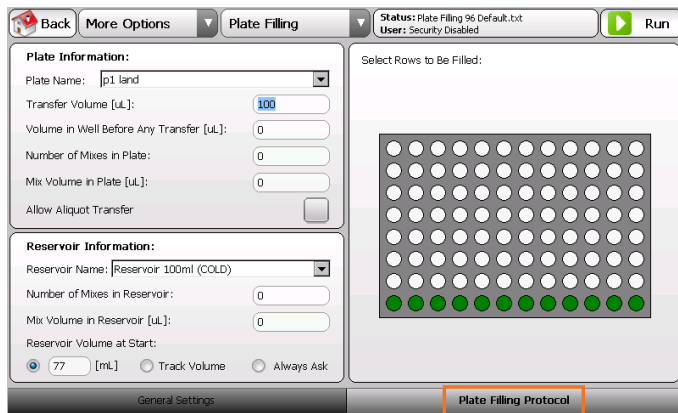
Depending on the protocol, you can edit the following:

◗ Source plate location

◗ Source plate volume

◗ Destination plate location

◗ Destination plate volume

◗ Transfer volume

◗ Blowout volume

◗ Number of mixes in plate

◗ Source and destination

◗ Plates (serial dilution)

◗ Mix volume (serial dilution)

You can also interact with the plate diagram on the right and modify the rows filled on the destination plate. When you are finished customizing your protocol, return to the General Settings tab and select Run in the upper right corner.

NOTE: Be sure to confirm the tip rack and plates/reservoirs are in the correct position before pressing Run.

Running User Protocols

After selecting Run, the instrument will begin performing the selected protocol (Plate Filling, Serial Dilution, or Plate-to-Plate Transfer).
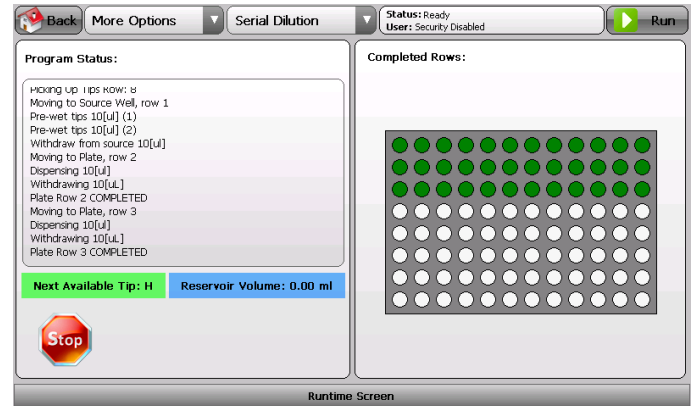

◗ During each protocol, the instrument will track the status of each operation performed. You can save your protocol by selecting More Options and then Save User Program.

◗ At any time the instrument is running, you can press the Stop button to pause the instrument. You will then have the option to either abort or continue the protocol.

Cherry Picking Protocols for Single channel

By pressing the Single channel button in the main menu, the following screen will appear:

General Settings Tab
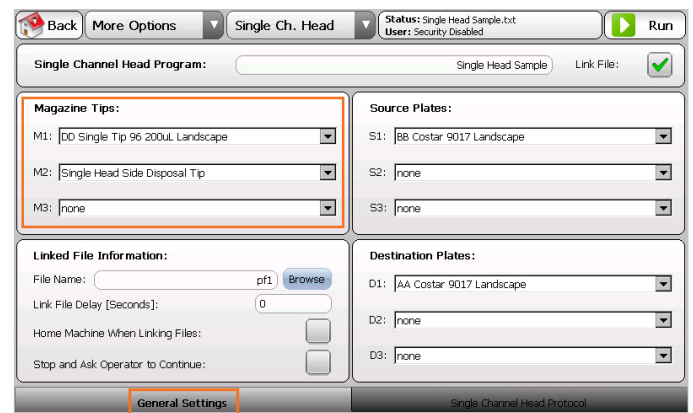
In the General Settings tab, you can edit the following:

◗ Magazine tips

◗ Source plates

◗ Destination plates

NOTE: You will need to assign at least one magazine tip, source plate, and destination plate to run a protocol. However, up to 3 different tip racks/plates can be assigned for more complex protocols.

Linked File Information

If you would like to save your protocol for future use, check the Link File box in the upper right corner. When selected, the Linked File Information box will appear in the bottom left.

Here you can modify:

◗ File name: Specify the name of the protocol to be executed when the current protocol is completed.

◗ Link file delay: Specify a time delay value in seconds between completion of the current protocol and the start of the next linked protocol.

◗ Home machine when linking files: When this box is checked, the instrument will perform a full Home axis routine.

◗ Stop and ask operator to continue: When this box is checked, the instrument will pause between protocols until the operator instructs the instrument to continue.

NOTE: It is recommended that you create all of your protocols first, and then add the links between them.

Single-channel Protocol Settings Tab

When the Single-channel Head Protocol tab is selected, a table showing the steps of each protocol is presented. Protocols are executed from Top to Bottom, and each protocol is interpreted from Left to Right.


Under the table are settings to edit the table controls:

◗ Auto-keypad: An alphanumeric keypad will automatically pop up when double tapping a table cell.

◗ Insert row: Insert an empty or copied row into the table.

◗ Delete row: Delete a selected row from the table.

◗ Copy row: Copy a selected row from the table.

◗ Clear row: Clear the contents of a selected row.

◗ New protocol: This button will erase all fields in the table.

Grid Reference Numbers

The image below shows the grid reference numbers (x,x) for the Landscape and Portrait Orientations.
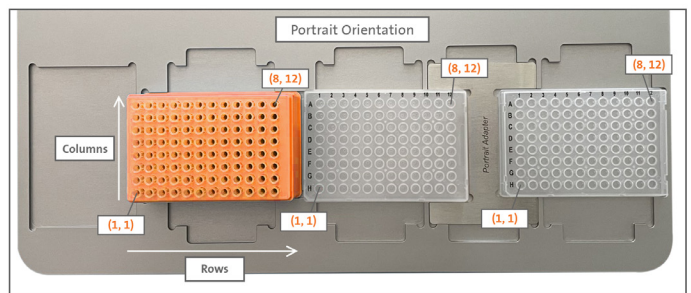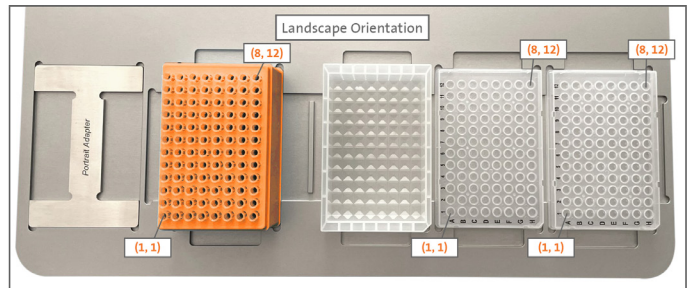
Once you have finished editing, press Run in the upper right corner and the instrument will begin performing the protocol.

Cleaning and Maintenance

The instrument requires minimal routine cleaning.

◗ The exterior of the instrument can be cleaned using a microfiber cloth.

◗ The deck plates can be cleaned with a microfiber cloth, soap, and water (soap and water or just isopropyl alcohol).

Tip Positions
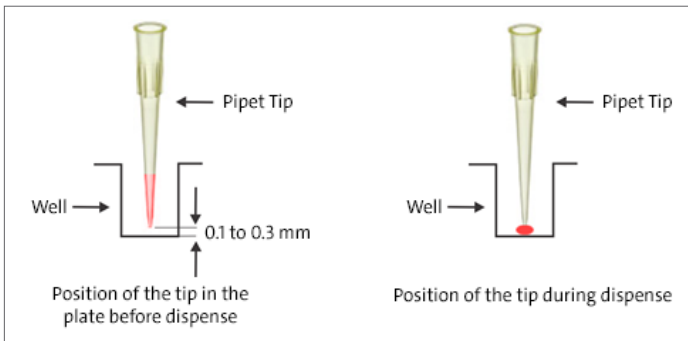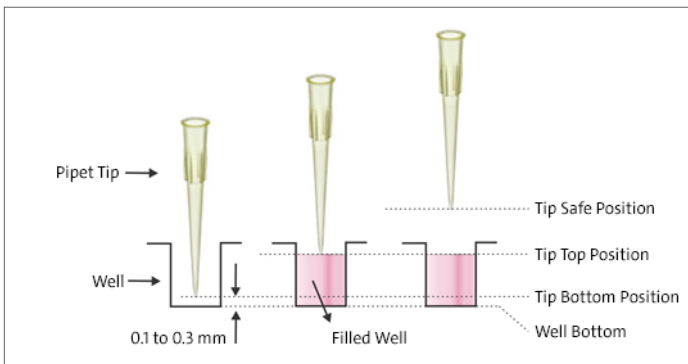
Warranty

Corning Incorporated (Corning) warrants that this product will be free from defects in material and workmanship for a period of one (1) year from date of purchase. CORNING DISCLAIMS ALL OTHER WARRANTIES WHETHER EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

CORNING

Corning Incorporated
Life Sciences

www.corning.com/lifesciences

NORTH AMERICA
t 800.492.1110
t 978.442.2200

ASIA/PACIFIC
Australia/New Zealand
t 61 427286832
Chinese Mainland
t 86 21 3338 4338

India
t 91 124 4604000
Japan
t 81 3-3586 1996
Korea
t 82 2-796-9500
Singapore
t 65 6572-9740
Taiwan
t 886 2-2716-0338

EUROPE
CSEurope@corning.com
France
t 0800 916 882
Germany
t 0800 101 1153
The Netherlands
t 020 655 79 28
United Kingdom
t 0800 376 8660

All Other European Countries
t +31 (0) 206 59 60 51

LATIN AMERICA
grupoLA@corning.com
Brazil
t 55 (11) 3089-7400
Mexico
t (52-81) 8158-8400