

ez-gSEAL Pressure Controller



The ez-gSEAL 100B pressure controller is designed mainly for automated patch clamping, but it can also be used for many other applications. With the ez-gSEAL, patch clamping becomes as easy as a click of a button. You can use it with our automated clamp systems for fully automated experiments, or use it as a stand-alone product on a traditional rig. You can also use the controller for puffing drugs or studying stretch channels. The software-controlled pressure controller comes with pumps so air tanks are not required.

Key Features

The ez-gSEAL pressure controller makes patch clamping easy. Click the first button to set the positive pressure, the second button to set negative pressure for making seals, and the third button to set the holding pressure for long-lasting seals. By clicking a single button, you apply pulses to break into the cell.

The ez-gSEAL control software helps you measure the pressure you use for making seals and breaking in. In addition, many types of cells and tissues, such as HEK293 cells, brain slice and oocytes, have been tested and seal parameters are available for them. New users can usually use these parameters to make seals and break on the first attempt.

When used with the ezPATCH 100A manipulator, all you need to do is to aim the patch pipette at the cell you want to patch. After you click a button, it will touch the cell and make seal, or even go whole cell automatically.

Ordering Information

Part No.	ChannelMAX 100A & ez-gSEAL
Ne-ChannelMAX 100A Twin	ChannelMAX 100A Twin
Ne-ChannelMAX 100A Mini	ChannelMAX 100A Mini
Ne-ez-gSEAL	ez-gSEAL Pressure Controller
Complete NeoBiosystems product line available.	

U.S./Canada prices shown. International prices add 10%. Email or visit web store for latest prices.

Specifications

- Pressure range: -250 mmHg to 250 mmHg
- Pressure resolution: +/- 1.5 mmHg
- Minimal pulse duration: 7 ms
- Minimal pulse interval: 7 ms
- Computer interface: USB
- Line voltage: 110 to 240 VAC
- Dimensions: 17"x14"x3.5" rack mount or desktop
- Weight: 10 lbs

Computer Requirements

- 32-bit Windows 2000, XP, Vista, or Win 7 with 2.0 GHz CPU
- 1 USB port

Pressure control for stretch channel study

The ez-gSEAL pressure controller can be used for pressure clamping for stretch channel study. The pressure sensitivity is 1.5 mmHg and the pressure range is from -250 mmHg to 250 mmHg — good enough for most stretch channels.

Pressure control for drug application

The ez-gSEAL pressure controller can also be used for local drug application. A series of pressure pulses can be given at defined pressures for defined durations.

PatchXpress Testing

The auto-seal algorithm is similar to what is used in the PatchXpress® automated patch-clamp system. PatchXpress users can use it to test their seal parameters under a microscope for easier trouble shooting and lower costs.

