

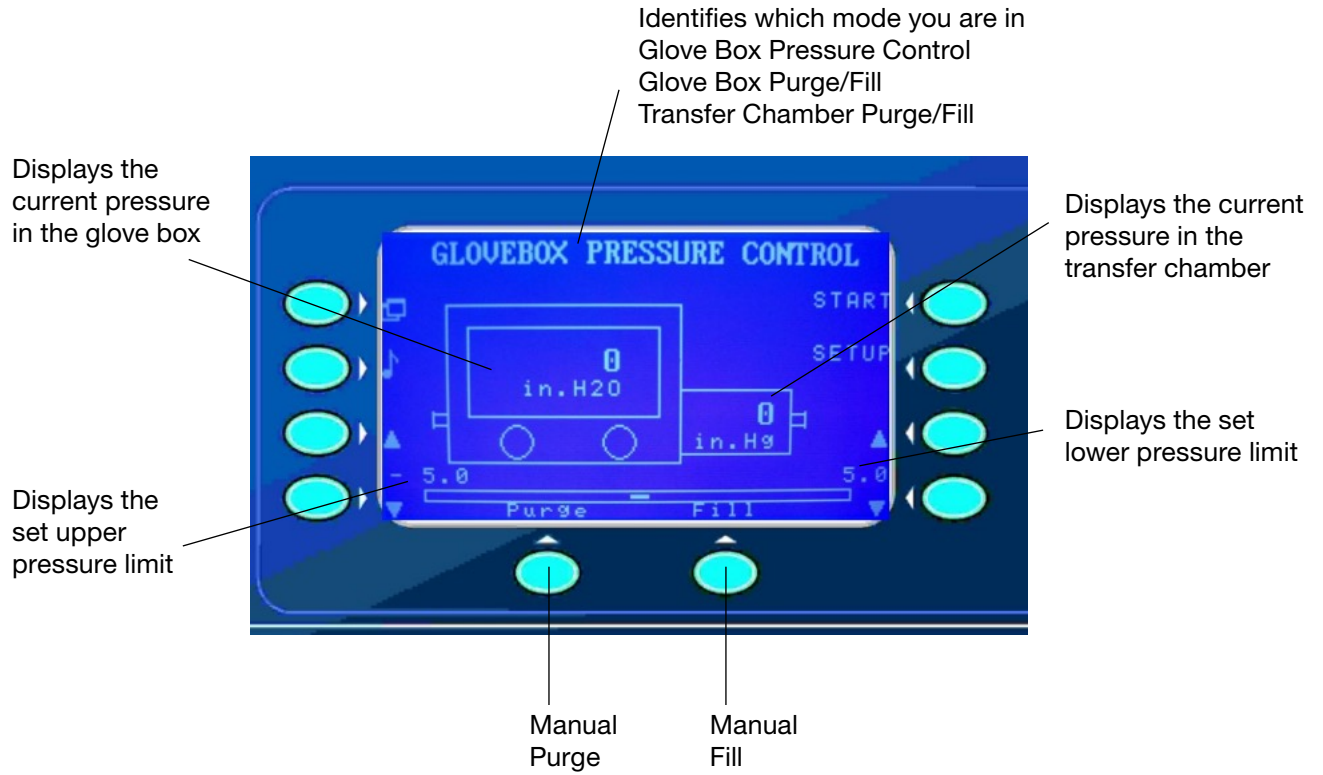
Glove Box Automatic Pressure Control Quick Start Guide

For Precise™ and Protector® Glove Boxes

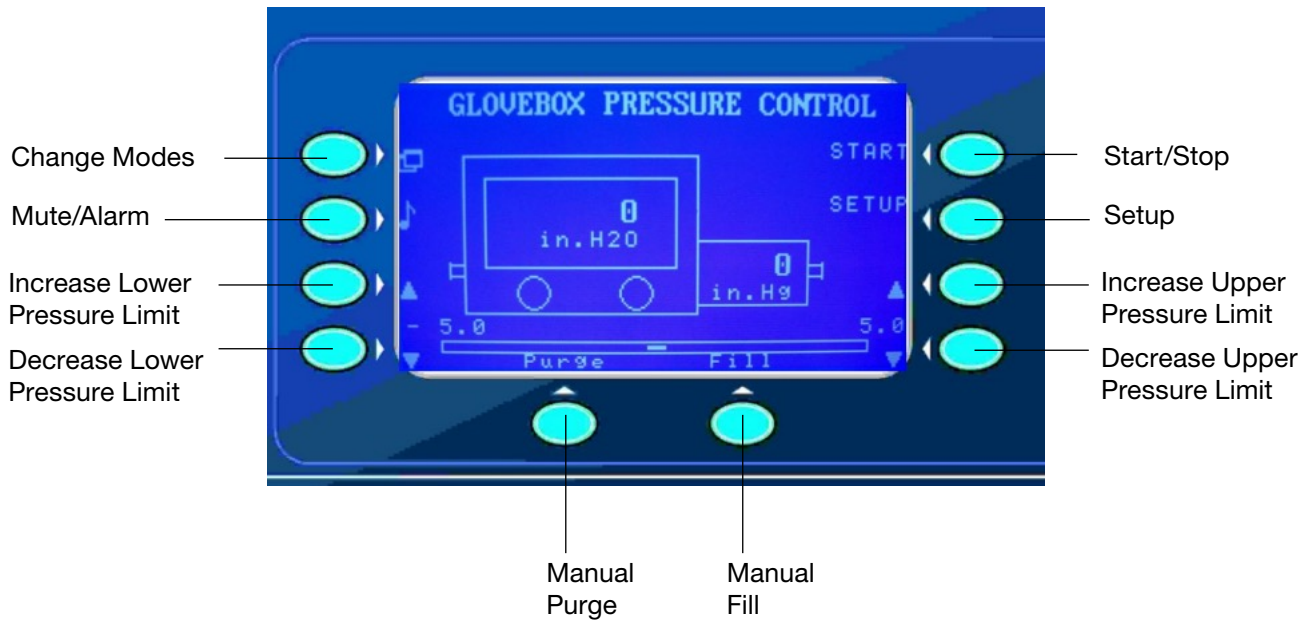


For complete instructions on setting up and using your glove box, please refer to the user guide. This guide is only intended as a quick introduction to the automatic pressure control module.

Screen Features



Selection Buttons



Mode I – Glovebox Pressure Control

This mode will set the pressure that the glove box will continuously maintain. Sometimes, inert atmosphere glove boxes are kept under slight positive pressure when not in use to help fight permeation of atmospheric oxygen and moisture. Hazardous applications are often kept under negative pressure for safety reasons. Your safety officer can help determine which is best for your application.

Expert Tip – Use glove port covers to help fight permeation through the gloves when the glove box is not in use. They will also help protect the gloves and keep them inside the glove box when not in use.

How to set your pressure limits:

1. Use the mode key to select the correct mode screen. The top of the screen should read *GLOVEBOX PRESSURE CONTROL*.
2. Use the lower left two buttons to set the lower pressure limit (max -5.0" w.g.).
3. Use the lower right two buttons to set the upper pressure limit (max 5.0" w.g.).
4. Press start and the glove box will fill with inert gas (or vacuum out gas) to maintain the glove box pressure between the set limits.



Positive Pressure Example – Try setting the lower pressure limit to 0.5" w.g. and the upper limit to 1.5" w.g. Press start. The glove box should fill to 1.5" w.g. and then stop filling (if it goes over by too much, the vacuum may come on). The glove box will not fill again until the lower pressure limit of 0.5" is reached.

Negative Pressure Example – Try setting the lower pressure limit to -1.5" w.g. and the upper pressure limit to -0.5" w.g. Press Start. The glove box will purge to -1.5" w.g. and stop. The glove box will not purge again until the pressure exceeds -0.5" w.g.

Where these values are set depends on your application.

Expert Tip – When trying to work in the glove box, stop running the pressure control mode and use the foot pedal to adjust the pressure on your arms.

Mode II – Glovebox Purge/Fill

This mode is used to lower the oxygen and moisture by removing air from the glove box main chamber with the vacuum pump and backfilling with inert gas. With the Protector, 220 purge fill cycles should lower the oxygen levels to ~650 ppm and the moisture level to ~170 ppm. At this point, a scavenging system should be used to remove the remaining levels of oxygen and moisture. Please note, a scavenging system will need to run for about a week to remove the remaining moisture down 1-2 ppm. See the diagrams below to determine about how many purge fill cycles you need to obtain the oxygen and moisture levels you need.

Expert Tip – When running purge/fill cycles, use glove port covers to decrease the amount of inert gas required per fill and decrease the amount of time each cycle requires.

How to set up your automated purge/fill cycles:

1. Use the mode key to select the correct mode screen. The top of the screen should read *GLOVEBOX PURGE/FILL*.
2. Use the lower left two buttons to set the lowest allowed pressure limit (max -5.0" w.g.).
3. Use the lower right two buttons to set the upper allowed pressure limit (max 5.0" w.g.).
4. Select how many purge/fill cycles you would like to run. Hold the button down to speed up the counting.
5. Press start and the glove box will fill with inert gas to the upper set pressure and then purge using the vacuum to the set lower pressure. This will repeat continuously until the number of set cycles is reached.



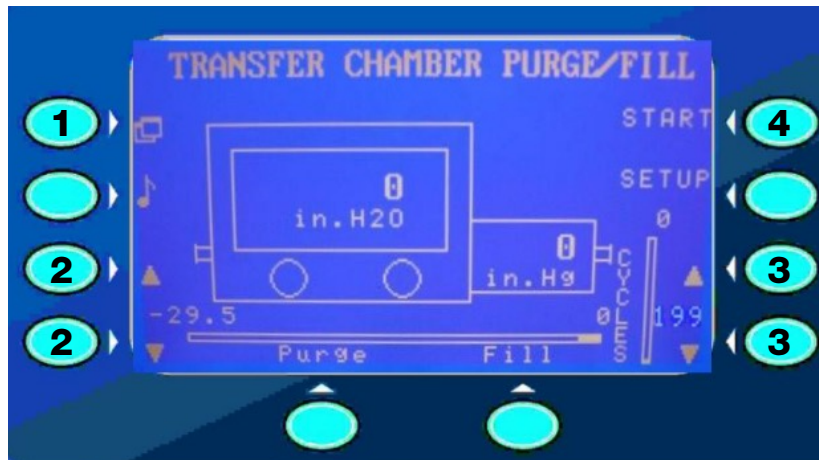
Mode III – Transfer Chamber Purge/Fill

This mode is used to lower the oxygen and moisture levels in the transfer chamber by removing air from the transfer chamber with the vacuum pump and filling with inert gas.

Expert Tip – When running purge/fill cycles, use glove port covers to decrease the amount of inert gas required per fill and decrease the amount of time each cycle requires.

How to set up your automated purge/fill cycles:

1. Use the mode key to select the correct mode screen. The top of the screen should read *TRANSFER CHAMBER PURGE/FILL*
2. Use the lower left two buttons to set the vacuum level (max -29.5 mm Hg).
3. Use the lower right two buttons to set the number of purge/fill cycles to run.
4. Press start and the glove box will fill with inert gas to the upper set pressure and then purge using the vacuum to the set lower pressure. This will repeat continuously until the number of set cycles is reached.



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