This chamber has been designed for automatic atmosphere control when working with Oxygen sensitive materials, product containment needs, and/or general isolation control. The chamber features an internal “PLC” control system with multifunctional operator interface.

This glove box is perfect for working in anaerobic conditions.

Features included are:
- Internal “PLC” control system.
- Three (3) drying train canisters filled with Molecular Sieve™ and quick dis-connects.
- White ambidextrous Hypalon™ gloves.
- Two (2) 1/4” hose barb (tubing) gas connections.
- “Bright Light” system (40,000 hour lamp guarantee).
- Programmable Catalyst Heater unit with two (2) Palladium (Pd) filled canisters.
- Multiple electric outlet (socket) strip. UL, CSA, and CE approved.
- Two (2) ground key cock valves for purging the main chamber.
- Standard 24 month warranty (Not gloves or consumables).

The operator can program these features:
- The number of purging cycles.
- Gas selection (inert or anaerobic blend).
- Drying train reaction time frame.
- Pressure “hold” function.
- Anaerobic gas reaction time frame.
- Selection of chamber to be purged (Main or transfer).

The operator interface continually displays the “PLC” functions and working pressures within the main chamber or transfer chamber. It can also support an additional 4-20 mAmp analog input. These inputs are used to create your own unique atmosphere chamber. Examples are percentage of O₂ analyzer, humidity information, etc.

The programmable Catalyst Heater has two basic functions. It reduces trace amounts of Oxygen that enter the main chamber and it maintains incubation temperatures from ambient up to 42 degrees C.

*Includes transfer chamber.

*Refer to Accessories Section for more details about this device.
#855-AC (Anaerobic Chamber) GLOVE BOX

The #855-AC (Anaerobic Chamber) has been designed for manually controlling your atmosphere when working with Oxygen sensitive materials. It is perfect for working in situations requiring low levels of Oxygen during critical isolation of the operator or your research materials. Any inert gas may be used.

Its main advantage is minimizing the risk of Oxygen entry into the main working chamber. If trace amounts of Oxygen happen to enter the main chamber, the Catalyst Heater reduces it to water vapor. The drying train can then be activated to remove any excess water vapor.

The #855-AC is offered as a complete system ready to use. There are no other components required. All you need to add are your work samples and gas of choice.

This glove box has a capacity of 348 culture plates when using our suspended shelf accessory. Please refer to the Accessories Section (#800-SHELF-1).

Some typical applications include:
Microbiology, Biochemistry, Plasma environment work, animal science studies, and electronic sub-assembly work.

The Basic Chemical Reaction.
The internal atmosphere is drawn off the floor of the glove box and is pushed up through the heating elements and the warm Palladium (Pd) pellets. The Hydrogen in the special gas mixture then reacts with trace amounts of Oxygen to create water vapor. The excess water vapor is then absorbed by the Molecular Sieve™ in the three drying train canisters. The canisters are re-chargeable.

The Catalyst Heater Function.
The catalyst heater has two main functions. It reduces trace amounts of Oxygen and it maintains the correct incubation temperature level for cultivating anaerobes (35 to 39 degrees C).

Did you Know?
Molecular Sieve™ can absorb 20-25% of its own weight in water (H₂O).

Features included are:
• Standard 24 month warranty (Not gloves or consumables).
• Formed one-piece clear plastic top section with “Easy Clean” corners.
• Matched die molded white thermoset bottom with “Easy Clean” corners.
• Two vacuum diaphragm pumps, one each for the drying train and the transfer chamber (purging).
• Drying train includes three (3) clear plastic canisters filled with Molecular Sieve™.
• All controls are illuminated.
• “Bright Light” system (40,000 hour lamp guarantee).
• White ambidextrous Hypalon™ gloves.
• All clamps are adjustable to compensate for wear.
• Adjustable vacuum gauge on transfer chamber.
• Four (4) ground key cock valves for purging.
• Transfer chamber is 12” (305 mm) long x 11” (280 mm) I.D.
• Electrical outlet (socket) strip (UL, CSA, & CE).
• Self sealing quick disconnects allow changing of the drying train without disturbing the internal atmosphere.

Electrical requirements.
North American 115-120 Volts, 60 Hz. 10 Amps.
Export Models 220-240 Volts, 50 Hz. 5 Amps.
#855-ACB for Multiple Operators
#855-ACB/EXP for Export Use

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<thead>
<tr>
<th>Product Data</th>
<th>#855-AC</th>
<th>#855-ACB</th>
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<tr>
<td>I.D.</td>
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<tr>
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<td>Includes Transfer Chamber</td>
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#800-ONEG Oxygen reducing accessory w/pump not included

This accessory further reduces the trace amounts of Oxygen remaining in the glove box after initial purging. Part #1 is the Oxygen trap. Part #2 is the Oxygen indicator (sensor). The accessory is attached only after the initial purge cycles have been completed. It will reduce trace amounts of Oxygen down to about ten (10) ppb.

Refer also to Page #41.