BLUEPRINT FOR BREATHING

Introducing the A.D.S. 1000...
An Unprecedented Breakthrough in Anesthesia Delivery

Features:
- Microprocessor Controlled
- Automatic Safety Self Diagnostic Test
- The Liquid Crystal Display Shows the Following:
  - Minute Volume
  - Tidal Volume
  - Breathing Cycle
  - Inspiratory Time
  - Breaths per Minute
  - Flow Rate
  - P.I.P.
  - Assist Setting
  - P.E.E.P.
  - Patient Weight
  - Patient / Machine Initiated Breath

A.D.S. 1000 Specifications

<table>
<thead>
<tr>
<th></th>
<th>Input Pressure</th>
<th>Patient Weight</th>
<th>Flow Rates</th>
<th>Breaths Per Minute</th>
<th>P.I.P. (cm. / H2O)</th>
<th>P.E.E.P. (cm. / H2O)</th>
<th>Assist (cm. / H2O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORMAL MODE</td>
<td>50psi</td>
<td>1.0 to 68 Kg.</td>
<td>2.0 to 60 LPM</td>
<td>1 to 95</td>
<td>5.0 to 35</td>
<td>0.0 to 9.0</td>
<td>-0.3 to 6.0</td>
</tr>
<tr>
<td>LAB MODE</td>
<td>Switch (5 psi)</td>
<td>Under 1.0 Kg.</td>
<td>0.2 to 6.0</td>
<td>1 to 95</td>
<td>5.0 to 35</td>
<td>0.0 to 9.0</td>
<td>-0.3 to -6.0</td>
</tr>
</tbody>
</table>

- Internal, 12 hour emergency battery backup
- Mask mode to maintain patient on mask
- Breathe function, for a manually assisted breath at any time
- Fill and hold mode for Thoracotomy
- Mechanical “pop off” valve, incorporated for additional safety
- “On the fly” adjustments of ALL parameters
- Instructional DVD and operation manuals
- Rear panel switch alternating between normal and lab mode

Technical Data:

Switching
Power Supply: 110 VAC 60 Hz or 100-240 VAC 47-63 Hz
Dimensions: Width 10" x Length 10" x Height 4"
            (254mm x 254mm x 102mm)
Net Weight: 10 lbs. (4.5 kg.)
Shipping Weight: 18 lbs. (8.1 kg.)
A.D.S. 1000 DESCRIPTION

Presenting the A.D.S. 1000, a microprocessor controlled anesthesia delivery system / positive pressure ventilator.

The A.D.S. 1000 represents an advanced way of delivering anesthesia which enhances safety while in surgery. We believe this machine will completely change the way anesthesia and ventilation therapy is administered to veterinary patients. With the knowledge that the patient is always breathing, the veterinary practitioner can completely focus on the procedure at hand without distraction.

The A.D.S. 1000 is not an accessory, it is a stand alone anesthesia / ventilator delivery system. The A.D.S. 1000 can be easily attached with the provided hoses and tubing to a precision vaporizer and regulated oxygen source. The A.D.S. 1000 can also be used without a vaporizer strictly as a ventilator unit. With two built in modes available the A.D.S. 1000 can ventilate and deliver anesthesia to a wide range of animals. In NORMAL MODE the patient weight ranges from between 1 and 68 kilograms. In the LAB MODE patient ranges from below 1 kilogram to as small as a 100 gram patient. This Lab mode feature is ideal for exotic animal surgery.

The A.D.S. 1000 contains an internal battery backup with the capability of operating as a portable unit for a period of up to 12 hours. This backup system also supplies protection against power surges and blackouts.

The A.D.S. 1000 is controlled by an electronic microprocessor. This microprocessor is preprogrammed with the necessary breathing parameters which controls a combination of electronic valves and electronic sensors. The electronic valves are open only on the inspiratory thus reducing waste gases and risk of gases escaping into the operating room.

The A.D.S. 1000 preset parameters are fully programmed. The Veterinarian enters the patient weight and the A.D.S. will automatically display the breathing parameters for that patient. However, if the operator determines that the patient requires other values, the preset breathing parameters can be altered at any time. This feature gives the operator complete control of administering anesthesia to the patient.

Comparing the A.D.S. 1000 to Conventional negative pressure systems: With negative pressure systems the patient may take a shallow breath and other times a deeper breath causing an UP AND DOWN cycle of depth of anesthesia. With positive pressure (A.D.S. 1000) the patient will always receive a consistent breath based on the set breathing parameters, allowing the patient to achieve a LINEAR DEPTH of anesthesia which is considered safer. Also since the patient will always receive a consistent breath, to the same inspiratory pressure, it is easier to maintain a patient on lower vaporizer settings.

**VOLUME**
This feature controls the volume of the alarm sound level.

**POWER**
ON/OFF Switch for the A.D.S. 1000

**MASK**
This switch activates and deactivates the mask mode

**SET / RUN**
In the set position: This is a stand by mode that allows the operator to enter the patient's weight. In the RUN Position the A.D.S. 1000 ventilates the patient.

**FILL / HOLD BUTTONS**
By depressing this button the A.D.S. 1000 fills the patient's lungs to the set peak inspiratory Pressure and holds at that pressure until the button is released.

**TOGGLE SWITCH**
(50 psi / 0 psi)
Located on back panel this switch allows user to alternate between normal and lab mode.

**LCD DISPLAY**
LCD Screen, Displays the Minute number, Inspiratory time, Flow rate, Breaths per minute, Peak inspiratory pressure and Assist vacuum number.

**FLOW RATE BUTTONS**
These buttons will increase or decrease the flow rate of gases to the patient.

**WEIGHT BUTTONS**
With the A.D.S. 1000 in set mode: These buttons allow the operator to enter the weight of the patient in kilograms.

**BREATHE BUTTON**
Depressing this button initiates a breath outside of the preset cycle.

**BREATHE / MIN. BUTTONS**
These buttons control the number of breaths per minute delivered to the patient.

**ASSIST BUTTONS**
These buttons establish the level of inspiratory effort (vacuum) measured in centimeters of water. Depending on the sensitivity set, this feature will register a patient's breath (DEMAND MODE) and the A.D.S. 1000 will follow through with a complete breath based on the preset parameters.

**EXTERNAL GAS SAMPLING SYSTEM**
This circuit allows the sensing of gas pressure

**INSPIRATORY EXPIRATORY PORTS**
The breathing circuit is connected to these ports.

**PEAK INSPIRATORY PRESSURE (P.I.P) BUTTONS**
These buttons control the peak inspiratory pressure measured in centimeters of water which the A.D.S. 1000 will administer to the patient (based on pressure not volume).