ADS II™
ANESTHESIA DELIVERY SYSTEM
The ADSII is an advanced yet easy to use anesthesia workstation that provides accurate, pneumatically driven and electronically controlled ventilation.

The ADSII has an ergonomic design that incorporates new technology and provides safe and effective treatment options for the clinician. The ADSII includes Adult and Pediatric modes that provide patient-appropriate defaults and ranges.

The ADSII has VCV, PCV and SIMV+PS automatic ventilation modes providing flexibility in your choice of ventilation strategy. It is suitable for pediatric and adult operation.

The ADSII employs many features for outstanding usability including auxiliary oxygen flow control and multiple auxiliary power outlets.
The Infinium ADS II anesthesia systems offer pure simplicity in patient ventilation and anesthetic delivery.

The ADSII features:

- Highly accurate tidal volumes with 15 mL capability
- 12 inch Touch Screen TFT LCD
- Electronic Flowmeters (Air, N20, O2)
- Autoclavable and Heated Absorber
- Ventilation modes of VCV, PCV, SIMV+PS
- Highly mobile space saving design with retractable writing table
- Battery Backup
- AGSS
- Electronic PEEP
- Vital signs, EtCo2, and Agent Monitoring
Modern And User-Friendly Design
WITH EXTREMELY SIMPLIFIED USER INTERFACE.

**Ventilator/Gas Delivery**

The ADSII offers an integrated ventilator with 12 inch color touch screen. Ventilation modes of VCV, PCV, SIMV+VCV+PSV, SIMV+PCV+PS, Manual and Standby are standard. On screen monitoring of spirometry loops, Paw, Peak, Pmean, PEEP are also standard. Airway pressure, flow and optional agents and EtCO2 are shown in graphical waveforms.

The ADSII features simplified gas delivery with digital O2, N2O and AIR flowmeters. All ventilation and gas delivery controls are located within 10 cm from one and other to allow for an extremely simplified user interface.

**Absorber**

The ADSII features a 2 liter capacity absorber system with integrated bellows, APL valve and bag/ventilator selection switch. The entire absorber system is autoclavable.

**Vaporizers**

The ADSII provides Standard Selectatec™-compatible mounts and holds one or two vaporizers. Sevoflurane, Isoflurane, Desflurane, Enflurane, and Halothane are available.
**MODERN AND USER-FRIENDLY DESIGN**

---

**Pin Index Cylinder Yokes**

The **ADSII** offers optional cylinder yokes for: N2O, O2, and AIR.

---

**Wheel Lock**

The **ADSII** provides an ergonomic Footbrake System to lock the wheels. High-quality Anti-static Castors make the ADSII mobile and easily maneuverable.

---

**Power/Network Panel**

The **ADSII** features a universal 110v/220v power panel with 4 - 50/60Hz power outlets. Ethernet, USB, and RS-232 ports are also included to offer a multitude of connectivity options.

---

**Folding Writing Table**

The **ADSII** desktop incorporates an expandable writing table with several standard lighting options.
**ADS II - ANESTHESIA DELIVERY SYSTEM TECHNICAL SPECIFICATIONS:**

**SYSTEM**
- Size Approx. 1420mm(H) x 760mm(W) x 760mm(D) 56in(H) x 30in(W) x 30in(D)
- Weight Approx. 286lbs (130kg)
- Top shelf bearing limit: Maximum 55lbs (25kg)

**CASTER**
- 5in (125mm), one foot braking system

**DRAWER**
- Three drawers have the same size, and all are 5.12in(H) x 14.29in(W) x 13.90in(D) 130mm(H) x 363mm(W) x 353mm(D).

**ANESTHESIA WORKSTATION/ DISPLAY**
- 12-inch TFT LCD Touch Screen

**PIPEDLINE PRESSURE GAUGE**
- (air, oxygen, nitrous oxide)
- Range: 0-1MPa. Resolution: 0.05MPa
- Accuracy: full range ±2.5%

**AIRWAY PRESSURE GAUGE RANGE**
- Range: -100cmH2O. Resolution: 2cmH2O
- Accuracy: full range ±2.5%

**ENVIRONMENTAL REQUIREMENTS**
- Temperature Operating 50-104°F (10-40°C)
- Storage 14-140°F (-10-60°C)
- Transport -4-131°F (-20-55 )

**Relative Humidity**
- Operating 15-90%RH (non-condensing)
- Storage 15-90%RH (non-condensing)
- Transport Not more than 93%, non-condensing.

**Atmospheric Pressure**
- Operating 530-1060hPa (53-106kPa)
- Storage 500-1060hPa (50-106kPa)
- Transport 700-1060hPa (70-106kPa)

**Power Supply**
- AC/100-240V, 50Hz/60Hz

**TECHNICAL SPECIFICATIONS OF RESPIRATORY SYSTEM**
- Fresh gas compensation: Flow compensation range: 1-10L/min
- Gas composition: O2, N2O, air and anesthetic agent
- CO2 Absorbent: Single absorber canister volume: 1500mL
- Connection: Common gas outlet: ISO5356 connector (standard 22mm outer diameter or 15mm inner diameter, tapered friction connector)

**Breathing System Leakage Pressure:**
- Pressure: 3kPa, leakage flow ≤ 150mL/min.

**Respiratory System Resistance**
- Flow rate: 60L/min, expiratory resistance ≤ 5.5 cmH2O; inspiratory resistance ≤ 5.5 cmH2O
- APL valve resistance:
  - Flow rate: 3L/min, flow resistance: 0.05 3kPa
  - Flow rate: 30L/min, flow resistance: 0.1 0.5kPa

**Connector Leakage**
- Under 30cmH2O and APL valve fully closed: leakage rate ≤ 50mL/min

**One-way valve resistance**
- Under dry state: ≤ 0.15kPa

**Pressure produced by wet one-way valve**
- ≤ 0.14kPa

**System Compliance**
- Internal capacity:
  - (contains canister) about 7.6L

**Oxygen Flow (25-75) L/min**
- ≤ 29 psi (200kPa)

**O2 Concentration**
- Not less than 19%

**Safety Valve**
- Open pressure is 85 cmH2O, at a flow is 5L/min.

**ANESTHESIA WORKSTATION PERFORMANCE**
- Maximal inspiratory pressure: (85±10)cmH2O
- Complete machine noise: Normal work (excluding alarm), not greater than 60dB(A)
- Warm-up time: Less than 1 minute
- Minute volume: 0-30L/min
- Inspiratory O2 flow: Maximum 75L/min
- Pressure transmission range: 5-80cmH2O

**INFINIUM**
- 12151 62nd St N #5 • Largo FL 33773 • USA
- Phone: (1) 727-531-8434 • Fax: (1) 727-531-8436
- Web: www.infiniummedical.com • Email: sales@infiniummedical.com
### VENTILATION PARAMETER SETUP

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>RANGE</th>
<th>INCREMENT</th>
<th>FACTORY DEFAULT</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VT</td>
<td>15-300 mL (child) 15-1500 mL (adult)</td>
<td>5mL (below 100) 10mL (100-1000) 50mL (above 1000)</td>
<td>120mL (child) 500mL (adult)</td>
<td>15-100mL, error: ±10mL; 100-1500mL, error: ±10%.</td>
</tr>
<tr>
<td>Freq.</td>
<td>4-1000 bpm</td>
<td>1 bpm</td>
<td>20 bpm (child) 60 bpm (adult) 4 bpm (SIMV)</td>
<td>Error is ±1 bpm or ±3%, whichever is greater.</td>
</tr>
<tr>
<td>IE</td>
<td>4:1-1.8</td>
<td>0.5</td>
<td>2</td>
<td>Error: ±20%.</td>
</tr>
<tr>
<td>TINSPE</td>
<td>0.2-5.0 sec</td>
<td>0.1 sec</td>
<td>1 sec (child) 2 sec (adult)</td>
<td>This function is available for SIMV mode only. Err is ±10% or 0.1s, whichever is greater.</td>
</tr>
<tr>
<td>PEEP</td>
<td>OFF, 3-30cmH2O</td>
<td>1 cmH2O</td>
<td>OFF</td>
<td>For OFF, PEEP values is 1-3cmH2O, For 3-30cmH2O, err is ±2cmH2O or ±10%, whichever is greater.</td>
</tr>
<tr>
<td>FreqMIN</td>
<td>2-600 bpm</td>
<td>1 bpm</td>
<td>4 bpm (child) 2 bpm (adult)</td>
<td>This function is available for PS mode only. Error is ±1 bpm or ±3%, whichever is greater.</td>
</tr>
<tr>
<td>TP</td>
<td>OFF, 5%-60%</td>
<td>5%</td>
<td>10%</td>
<td>This function is available for VCV and SIMV mode only. Error is ±20% or ±0.05 secs of set value, whichever is greater.</td>
</tr>
<tr>
<td>Trigger</td>
<td>1-15 L/min</td>
<td>1 L/min</td>
<td>2 L/min (child) 3 L/min (adult)</td>
<td>This function is available for SIMV and PS mode only. Error is ±15% or ±1 L/min, whichever is greater.</td>
</tr>
<tr>
<td>PSTARGET</td>
<td>5-70 cmH2O</td>
<td>1 cmH2O</td>
<td>10 cmH2O (child) 20 cmH2O (adult)</td>
<td>This function is available for PCV mode only. Error is ±3 cmH2O or 10%, whichever is greater.</td>
</tr>
<tr>
<td>P</td>
<td>3-60 cmH2O</td>
<td>1 cmH2O</td>
<td>5 cmH2O</td>
<td>This function is available for SIMV and PS mode. Error is ±3 cmH2O or ±10%, whichever is greater.</td>
</tr>
<tr>
<td>TSLOPE</td>
<td>0-2 sec</td>
<td>0.1 sec</td>
<td>0.5 sec</td>
<td>Error: ±0.5 sec.</td>
</tr>
<tr>
<td>PMAX</td>
<td>10-70 cmH2O</td>
<td>1 cmH2O</td>
<td>40 cmH2O</td>
<td>Error is ±3 cmH2O or ±10%, whichever is greater.</td>
</tr>
</tbody>
</table>

### MONITORING PERFORMANCE

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>RANGE</th>
<th>STEPPING VALUE</th>
<th>ACCURACY</th>
</tr>
</thead>
<tbody>
<tr>
<td>VT</td>
<td>0-3000 mL</td>
<td>1 mL</td>
<td>20-100 mL, error: ±10 mL; 100-3000 mL, error: ±10%.</td>
</tr>
<tr>
<td>MV</td>
<td>0-30 mL</td>
<td>1 mL</td>
<td>Error is ±10% or ±1L, whichever is greater.</td>
</tr>
<tr>
<td>Freq.</td>
<td>0-110 bpm</td>
<td>1 bpm</td>
<td>±1 bpm</td>
</tr>
<tr>
<td>PEAK</td>
<td>-20-99 cmH2O</td>
<td>1 cmH2O</td>
<td>±(2 cmH2O + 4% of reading)</td>
</tr>
<tr>
<td>MEAN</td>
<td>-20-99 cmH2O</td>
<td>1 cmH2O</td>
<td>±(2 cmH2O + 4% of reading)</td>
</tr>
<tr>
<td>PLAT</td>
<td>-20-99 cmH2O</td>
<td>1 cmH2O</td>
<td>±(2 cmH2O + 4% of reading)</td>
</tr>
<tr>
<td>FIO2</td>
<td>18-100%</td>
<td>1%</td>
<td>Error: ±3% (Concentration)</td>
</tr>
<tr>
<td>Lung Compliance</td>
<td>0-250 mL/cmH2O</td>
<td>1 mL/cmH2O</td>
<td>Error is ±15% or ±5 mL/cmH2O, whichever is greater.</td>
</tr>
<tr>
<td>PEEP</td>
<td>-20-99 cmH2O</td>
<td>1 cmH2O</td>
<td>±(2 cmH2O + 4% of reading)</td>
</tr>
<tr>
<td>PAW</td>
<td>-20-99 cmH2O</td>
<td>1 cmH2O</td>
<td>±(2 cmH2O + 4% of reading)</td>
</tr>
</tbody>
</table>

Battery voltage status display: 100%, 75%, 50%, 25%, 0%. When battery is used to supply power, this sign displays remaining available electric voltage. When the Anesthesia Workstation is connected to AC power, this sign means charging.

**Paw-t waveform**

- Pressure monitor range: 0-80 cmH2O. According to different airway pressure. The increment of the waveform displayed is different according to the airway pressure range. 0-10 cmH2O, pressure axis increment: 5 cmH2O; 0-30 cmH2O, pressure axis increment: 10 cmH2O; 0-80 cmH2O, pressure axis increment: 20 cmH2O. Time axis is a fixed range (the axis of Flow-t, PAW is same). When gas module is opened, 0-15s; when gas module is closed, 0-20s.

**Flow-t Waveform**

- Display range of flow rate: 90-900 mL/min, gain: ±45 mL/min. On time axis, the positive axes represents inspiratory direction; under the time axis, the negative axes represents expiratory direction. Flow rate is 0 mL/min, which means there is no gas flow rate in airway.

**CO2 time waveform**

- Optional CO2 display range is 0-76 mmHg, increment is 38 mmHg. Time axis is a fixed range. When gas module is opened, 0-15s; when gas module is closed, 0-20s.

**P/V Loop**

X axes displays PAW: range is -20-120 cmH2O, increment is 60 cmH2O. Y axes displays tidal Volume: range is 0-1600 mL, increment is 800 mL.

**F/V Loop**

X axes displays tidal Volume: range is 0-1600 mL, increment is 800 mL. Y axes represents Flow: range is -120-120 L/min, increment is 60 L/min; The positive axes represents expiratory flow rate, the negative axes represents inspiratory flow rate.