Discovery-2 is a compact diagnostic spirometer with capabilities common to larger instruments. Over 30 years of experience in serving the needs of the medical community have resulted in Futuremed’s most complete spirometer, incorporating the latest technology, most current industry standards, and recommendations made by thousands of existing customers.

**Dependable**

Discovery-2 meets or exceeds current ATS, ERS, OSHA and Social Security Disability standards for spirometry, and has been independently tested and validated by the Pulmonary Lab at LDS Hospital for accuracy and precision. A unique sensor design that is unaffected by environmental changes, along with a built-in temperature sensor and the ability to make BTPS corrections, ensure that measurements are exact for a wide range of flows, with low resistance.

**Intuitive**

Pull-down menus and data input fields make operation familiar and easy. An alphanumeric keyboard lets you enter patient information and operator notes for personalized reports. Tests include FVC, SVC, MVV, Pre/Post Medication Comparison, and bronchodilator challenge testing.

The "best test" is identified; a different patient effort may be selected.

**Patient-friendly**

Adults and children alike will find the smooth and lightweight Discovery-2 handset easy to hold. The "Bubbles" pediatric incentive, available at the operator’s discretion, gives patients a visual goal and motivates them to perform better, yielding optimal results.

**Real-time Color Display**

Flow-volume and volume-time graphs are displayed in real time. This ability to study both graphs side-by-side lets the technician inspect the quality of each maneuver before proceeding to the next. Multiple efforts are displayed in different colors for easy identification. Quality control messages let the operator know if a test meets accepted testing criteria and are helpful in coaching patients. MVV and SVC maneuvers are also displayed in real time.

**Memory**

Over 400 tests can be stored on Discovery-2 for future reference. Patient files may also be permanently archived on a computer.

**Multiple Ways to Print**

Discovery-2 allows multiple printing options. Complete reports can be generated on the internal printer in less than 15 seconds. Alternatively, Discovery-2 can be connected to a standard printer for plain paper, full page reports. Reports can be stored on a flash drive as a pdf, or sent to Discovery software, then printed on your standard PC printer.

**Data Management Software**

Discovery-2's Software for Windows serves two functions. The first is to store patient files on your computer, with the ability to print color reports, interface with other programs, create trend graphs, and compare tests, for a more complete picture of the patient’s pulmonary function over time. The second, more unique, aspect of the software is to perform tests directly on the computer, with larger real time graphs, a colorful pediatric incentive and immediate archiving of patient records.

**Cost-effective**

Discovery-2 can be used with a choice of mouthpieces or bacterial filters, giving the operator control over the cost and quality of disposables.
**DISCOVERY-2™ DIAGNOSTIC SPIROMETER**

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow sensor</td>
<td>Bidirectional digital turbine</td>
</tr>
<tr>
<td>Range</td>
<td>0.03-20 l/s</td>
</tr>
<tr>
<td>Flow accuracy</td>
<td>+/- 3% or +/- 50 ml</td>
</tr>
<tr>
<td>Airflow resistance</td>
<td>Less than .7 cm H2O/1/s at 12 l/s</td>
</tr>
<tr>
<td>Volume range</td>
<td>0-12 liters</td>
</tr>
<tr>
<td>Temperature sensor</td>
<td>32-122°F (0-50°C)</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>41-104°F (5-40°C)</td>
</tr>
<tr>
<td>Size</td>
<td>7.8&quot; x 9.4&quot; x 3&quot; (19.8 x 23.8 x 7.6 cm)</td>
</tr>
<tr>
<td>Weight</td>
<td>2.6 lbs (1.2 kg)</td>
</tr>
<tr>
<td>Power</td>
<td>AC/DC power supply, 110/220 VAC 50/60Hz</td>
</tr>
<tr>
<td>Battery</td>
<td>Rechargeable Ni-Mh batteries</td>
</tr>
<tr>
<td>Memory</td>
<td>200 - 300 tests</td>
</tr>
<tr>
<td>Internal printer</td>
<td>Thermal, 4.5&quot; wide</td>
</tr>
<tr>
<td>External printer interface</td>
<td>Standard USB interface to commercial external printers</td>
</tr>
<tr>
<td>Graphic display</td>
<td>Graphic, color display with pediatric &quot;Bubbles&quot; incentive</td>
</tr>
<tr>
<td>PC interface</td>
<td>One USB and one RS 232 port</td>
</tr>
<tr>
<td>Calibration</td>
<td>Automatic, using a 3.0L syringe</td>
</tr>
<tr>
<td>Safety class</td>
<td>CE Conforms to existing guidelines EN60601-1 (safety) / EN60601-1-2 (EMC)</td>
</tr>
<tr>
<td>Languages available</td>
<td>English, Spanish, French, Italian, Portuguese, German, Turkish, Chinese, Korean</td>
</tr>
</tbody>
</table>

### PARAMETERS

- FVC, FEV1, PEF, FEV1/FVC, FEV6, FEV6/FVC, FEV1/FEV6, FEF25-75, FET100%, VEXT, FIVC, PIF, VC (SVC), IVC, MVV, FEV1/VC%, ERV, IRV, VE, Rf, ti, te, ti/tot, Vt/Ti, IC, MEF75, MEF50, MEF25, Best FVC, Best FEV1, Lung Age, SpO2*, HR*, R_occ*, P_occ*, Flow_occ*

### PREDICTED STANDARDS

- NHANESIII, Knudson83, ITS, ERS 1993 (ECCS 1983), ECCS 1971, Zapletal, LAM, Pneumobil, Gutierrez (Chile), Multicèntrico Barcelona, User defined predicted calculations.

### STANDARD ACCESSORIES

- D235000 Discovery-2 Spirometer
- Flowmeter sensor & reader
- AC\DC adapter
- Communication cable
- Pediatric mouthpiece adapter
- Bacterial filter adapter
- Bacterial filter starter kit
- Sample noseclips
- 40 mouthpieces
- Roll of paper
- Carrying case
- Operating manual
- Discovery-2 Software for Windows

### OPTIONAL ACCESSORIES

- 39250 3 liter calibration syringe
- 39NA-050 Viral/Bacterial filters - box of 50
- 39NA-250 Viral/Bacterial filters - box of 250
- 35075 One-way mouthpieces - box of 100
- 35070 Adult mouthpieces - box of 100
- 35080 Adult mouthpieces - box of 1000
- 35090 Pediatric mouthpieces - box of 100
- 35100 Pediatric mouthpieces - box of 1000
- 39290 Disposable noseclips - box of 100
- 036700138 Flash Drive w/PDF converter
- 323900105 Pulse Oximetry kit
- 326500111 Airway Resistance kit

Federal law (USA) restricts this device to sale by or on the order of a physician.
Discovery and Discovery-2 are registered trademarks of Futuremed America Inc.
Windows is a registered trademark of Microsoft Corporation. Specifications are subject to change without notice.

Phone: 1-800-222-6780 or 1-818-830-2500 · Fax 1-818-891-4755
e-mail: info@futuremed.com · www.futuremed.com
Futuremed America Inc., 15700 Devonshire St., Granada Hills, CA 91344 USA

17/07