# MANDAUS® II Manual Sphygmomanometer

The MANDAUS<sup>®</sup> II manual sphygmomanometer is a direct, environmentally friendly, replacement for mercury and aneroid sphygmomanometers with all of the accuracy and reliability but none of the disadvantages. The MANDAUS<sup>®</sup> II sphygmomanometer uses a liquid crystal display and is capable of displaying blood pressure in 1mmHg increments which helps eliminate digit bias and rounding up/down.

- One touch zeroing.
- No digit bias/rounding up or down.
- Manual sphygmomanometer with an easy to read liquid crystal display with backlight.
- Very robust AAMI SP9 shock resistant and splash resistant.
- User adjustable deflation using thumb wheel. Deflation speed is indicated during measurement to help you obtain optimum bleed rate of 2-3mmHg.
- "The PMS MANDAUS" II can be recommended for clinical use in an adult population as well as being suitable for use on children, to determine pre – eclampsia in pregnant women and on patients that may suffer from Dysrhythmias" Professor Andrew Shennan, St Thomas' Hospital, Maternal and Fetal Research Department, London.



- Long battery life, approximately 3000 measurements on one set of batteries.
- Supplied complete with adult cuff, bulb, alkaline batteries, user instructions, two-year warranty and a free stethoscope.

Comparison Table	MANDAUS® II	Mercury Column	Aneroid Sphygmomanometer
Requires Routine Maintenance and Cleaning	No	Yes	Yes
Environmentally Friendly	Yes	No	Yes
Allows use of Auscultatory Technique by Trained Observer	Yes	Yes	Yes
AAMI SP9 Shock Resistant	Yes	No	No
Uses Electronic Semi Conductor Pressure Transducer	Yes	No	No
Has Backlight Illumination	Yes	No	No
Lightweight, Compact and Portable	Yes	No	Yes
Displays Pulse Rate after Measurement	Yes	No	No
Two Year Service Interval	Yes	No	No
Independently Clinically Validated	Yes	Rarely	Rarely
Display Resolution 1mmHg	Yes	No	No



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# Using the MANDAUS® II to Obtain Accurate Blood Pressure Measurements

# **Applying the Cuff**

- 1. Plug the connector into the gauge and twist clockwise to secure.
- 2. Place the cuff over the patient's bare upper arm and wrap it around the arm with the tube pointing down the arm towards the elbow.
- 3. Use the correct size cuff. When wrapping the cuff around the patient's arm please check that the index line falls within the range specified, if the index line is outside of the specified range you will need to use an alternative size cuff.
- 4. The gauge can be clipped on to the cuff, held in your hand or placed on a suitable surface so that you can clearly see the LCD screen.

PLEASE NOTE: If you wish to obtain an accurate reading you must ensure that the correct size cuff is being used, the bladder must encircle at least 80% of the arm but not more than 100%.

#### **Measurement Procedure**

- 1. Place the stethoscope head over the brachial artery, adjacent to or just underneath the edge of the cuff.
- 2. Press the "  $\oplus$ " On button, the MANDAUS® II will automatically reset and display zero following which the MANDAUS® II is ready for use.
- 3. With the thumb wheel valve closed, repeatedly squeeze the bulb and continue pumping to a pressure of approximately 30-40 mmHg above the patient's normal systolic blood pressure or until the pulse disappears
- **4.** Slowly open the thumb wheel valve to deflate the cuff at a rate of 2-3 mmHg per second, the deflation rate is displayed on the LCD screen.
- 5. Whilst viewing the LCD screen, mentally note and record the value displayed at the onset of the Korotkoff sound as the systolic pressure and the disappearance of these sounds as diastolic pressure, to the nearest digit.
- 6. After the measurement has been completed, fully open the valve to release any remaining air in the cuff. The pulse rate will be displayed on the LCD screen.

## **Backlight**

When the MANDAUS<sup>®</sup> II is turned on the backlight will also come on, to switch this off simply press the " $\sqrt[-]{2}$ " button.

## **Technical Specifications**

- Manual inflation/deflation using bulb and thumb wheel valve.
- Complies with the European regulations and CE 0366 approved.
- Powered by 2 AAA batteries (supplied).
- Measurement range: 0 300mmHg.
- Accuracy: Pressure +/- 3mmHg
  Pulse Rate +/- 5%

- Large, easy to read liquid crystal display with Low Battery Indicator, also displays the heart rate when the measurement has been completed.
- Auto shut off 1 minute.
- Pressure Sensor: Semi Conductor.
- Dimensions: 78.5(L) x 63(W) x 47.5(H), Weight: 89g (excluding batteries).
- Automatic calibration reminder.



Specifications are subject to change without notice

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