

Preparations

Record a regular blood pressure on both arms initially to identify which arm has the highest pressure. This is the arm you will use for the ABPI recording.

You are able to do this using the MESI by placing the **RED** cuff on each arm, one at a time and pressing the BP button (located at the bottom) this will change the display to measure brachial pressure only. To return to the home screen press the home button (located at the bottom).

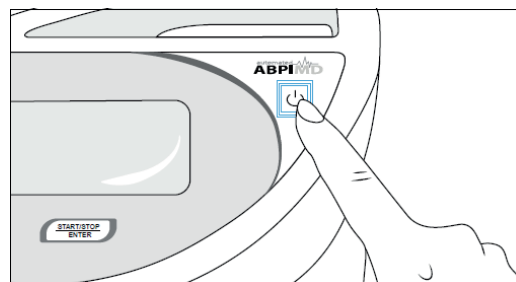
Ensure the patient is correctly positioned, laying down. The best position is Supine. If this is not possible – position as flat as they can tolerate and document the position for ABPI.

Once the patient is in the correct position, you can take the reading immediately – there is no need to wait with this device.

Warn the patient they must not move or talk during the measurement process and that the cuff will feel quite tight. The entire process takes less than 2 minutes.

Step 1

Turn on the device using the ON/OFF button. The display will show the home screen. It is not necessary to change any settings for the basic functioning of the device.



Step 2

Ensure the correct cuff size for each limb is selected.

Place the cuffs on the correct limbs;

Red = left or right upper arm **Yellow** = left ankle **Green** = right ankle

NB - Cuffs can go over a THIN layer of material eg. tights or shirt sleeve (not jumpers, trousers, or compression garments).

NB - DO NOT push tight fitting sleeves up the arm as they risk having a tourniquet effect and influencing readings.

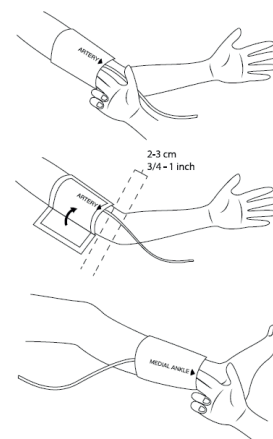
Step 3

Prompt the patient to place arm at 90-degree angle away from the body for cuff application (5cm above elbow flexure).

Place cuffs so that they are close fitting with a finger width of room between the limb and cuff.

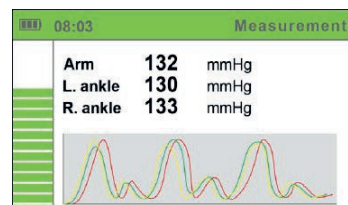
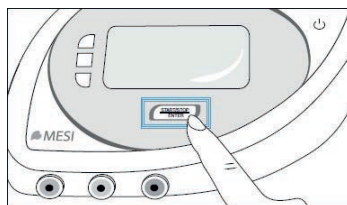
The cuff on the upper arm must be placed so that the artery label points towards the elbow. Please note that the cuff tube should point towards the fingers.

The ankle cuffs must be placed so that the “medial ankle” label points towards the inner side of the ankle.



Step 4

When the patient is in position with the cuffs in place, press the “START” button. The measurement process will begin. The patient must not move during the measurement process. The entire process takes less than 2 minutes.



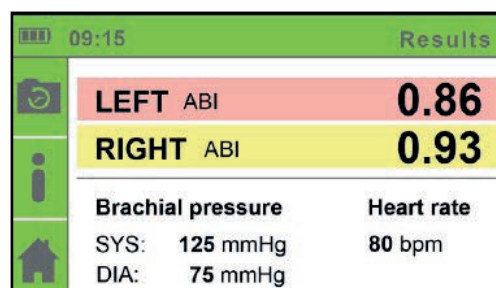
During the measurement process, the screen will display the current arterial pressures and the arterial pressures waveforms.

Step 5

When the measurement process is completed, the screen will display the results. The ankle brachial pressure index is displayed in green, yellow or red, depending on the value – **please refer to Oxford Health’s guidance when interpreting results to inform decisions on safe levels of compression.**

Listen to foot pulses with handheld doppler to identify mono/bi/tri-phasic pulse sounds.

NB - ABPI should be interpreted within the context of a full Lower Limb Assessment and not used in isolation.

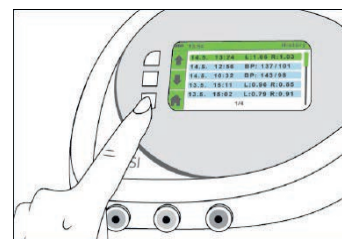


BELOW 0.89 = RED	FROM 0.90 - 0.99 = YELLOW
FROM 1.00 - 1.40 = GREEN	ABOVE 1.41 = RED

Step 6

Return to the home screen using the “HOME” button.

From here, you can view the measurement history.



Additional Tips & Troubleshooting

- ◆ Patient must try and stay still during measurement to gain accurate reading. If error code appears on machine, please re-measure making sure that the cuffs are tight enough to read pulse.
- ◆ If error codes appear, please refer to the instruction manual for guidance.
- ◆ Error 7 - cuffs deflating too quickly - ensure the weight of the limb is supported throughout (E.g. by placing a pillow under the length of the leg).
- ◆ If still unable to take a reading, you would need to complete a manual doppler assessment – it is possible this may be because the patient has arterial disease.
- ◆ There is an amputation mode for leg amputees available in the settings.
- ◆ When packing device to transport, please remove tubes from the machine to prevent damage.
- ◆ Do not wrap the tubing around the cuffs as this may cause damage. Coil loosely, flat against the front of the folded cuffs – use 3-fold cuff technique.
- ◆ Please note that it is important to use the correct charger which is supplied with the device.
- ◆ The MESI device must be calibrated annually – this will display on the machine when calibration is due, please contact MEDI UK to arrange this.

ANY QUESTIONS?

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