

## DECLARATION OF BLOOD PRESSURE MEASURING DEVICE EQUIVALENCE 2006

A SIGNED COPY WILL BE POSTED ON THE [www.dableducational.org](http://www.dableducational.org) WEBSITE

### SECTION A - Please complete all items online.

I Takefumi Nakanishi Director of Omron Healthcare Europe B.V.  
Name of a Company Director Company name

hereby state that there are no differences that will affect blood pressure measuring accuracy between the

Omron M4-I (HEM-752A-E)  
Blood pressure measuring device for which validation is claimed

blood pressure measuring device and the

Omron 705IT (HEM-759-E)  
Existing validated blood pressure measuring device

blood pressure measuring device, which has previously passed the International protocol, the results of which were published as follows

Mohamed A. El Assaad, Jirar A. Topouchian and Roland G. Asmar  
Authors(s)

Evaluation of two devices for self-measurement of blood pressure

according to the international protocol: the Omron M5-I and the Omron 705IT

Blood Pressure Monitoring 2003, 8:127-133  
Title Publication Year Volume Pages

The only differences between the devices involve the following components:

(When a component is not relevant, both Yes and No should be left blank. Please provide details on any differences below.)

Part I	1	Algorithm for Oscillometric Measurements	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	2	Algorithm for Auscultatory Measurements	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	3	Artefact/Error Detection	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	4	Microphone(s)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	5	Pressure Transducer	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	6	Cuff or Bladder	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	7	Inflation Mechanism	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	8	Deflation Mechanism	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Part II	9	Model Name or Number	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	10	Casing	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	11	Display	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	12	Carrying/Mounting Facilities	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	13	Software other than Algorithm	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	14	Memory Capacity/Number of stored measurements	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	15	Printing Facilities	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	16	Communication Facilities	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	17	Power Supply	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	18	Other Facilities	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Brief explanation of differences and further relevant details:

- 10) No SET and ADJUST buttons.
- 11) The symbols for Date and Time, single screen display instead of two screen display.
- 13) No Date and Time function.
- 14) Stores 14 memories instead of 28 memories.
- 15) No printer connection. (no printer port)
- 16) USB port is removed.
- 18) No USB cable and no CD-ROM for data download to PC.

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**SECTION B** - Complete all items, bar signatures and seal, online and print. Sign and seal it then send the original along with manuals for both devices to our address below.

Signature of Director	<u>T. Nakanishi</u>	Company Stamp/Seal
Name	<u>Takefumi Nakanishi</u>	OMRON HEALTHCARE EUROPE B.V.
Date	<u>7 May. 2008</u>	Kruisweg 577
Signature of Witness	<u>J. Meijer</u>	NL-2132 NA Hoofddorp
Name	<u>Janet Meijer</u>	P.O. Box 2150 NL- 2130 GL Hoofddorp
Address	<u>Omron Healthcare Europe B.V., Kruisweg 577, 2132NA Hoofddorp, The Netherlands</u>	Tel. +31 - 20 354 82 00
		Fax +31 - 20 354 82 01

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Existing validated blood pressure measuring device

blood pressure measuring device, which has previously passed the BHS protocol, the results of which were published as follows

Andrew Coleman, Paul Freeman, Stephen Steel and Andrew Shennan  
Authors(s)

Validation of the Omron 705IT (HEM-759-E) oscillometric blood pressure monitoring device according to the British Hypertension Society protocol  
Title

Blood Pressure Monitoring 2006;11:27-32  
Publication Year Volume Pages

The only differences between the devices involve the following components:

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### Comparison of the Omron M4-I with the Omron 705IT

Devices	<b>Omron M4-I (HEM-752-E)</b>	<b>Omron 705IT (HEM-759-E)</b>
Pictures		
Validation		ESH and BHS
Device 1 Criteria		
Same Criteria	Accuracy $\pm 3$ mmHg <span style="float: right;">1, 5</span> Pressure detection by “capacitive” pressure sensor <span style="float: right;">5</span> Cuff (140 mm $\times$ 480 mm – Arm Circ. 22 cm to 32 cm) <span style="float: right;">6</span> “Intellisense” technology (Fuzzy logic on inflation) <span style="float: right;">7</span> Memory button <span style="float: right;">10</span> On/Off (inc Stop) and Start buttons <span style="float: right;">10, 13</span> 4 $\times$ 1.5 V “LR6” Batteries (alkaline “AA”) (300 measurements) <span style="float: right;">17</span> AC adapter jack (Adapter available as accessory) <span style="float: right;">17</span>	Accuracy $\pm 3$ mmHg <span style="float: right;">1, 5</span> Pressure detection by “capacitive” pressure sensor <span style="float: right;">5</span> Cuff (140 mm $\times$ 480 mm – Arm Circ. 22 cm to 32 cm) <span style="float: right;">6</span> “Intellisense” technology (Fuzzy logic on inflation) <span style="float: right;">7</span> Memory button <span style="float: right;">10</span> On/Off (inc Stop) and Start buttons <span style="float: right;">10, 13</span> 4 $\times$ 1.5 V “LR6” Batteries (alkaline “AA”) (300 measurements) <span style="float: right;">17</span> AC adapter jack (Adapter available as accessory) <span style="float: right;">17</span>
Comparable Criteria	BP 0 mmHg to 280 mmHg, Pulse 40-180 bpm <span style="float: right;">1, 5, 7, 8</span> Single screen display <span style="float: right;">10</span> Memory: 14 measurements <span style="float: right;">14</span>	BP 0 mmHg to 299 mmHg, Pulse 40-180 bpm <span style="float: right;">1, 5, 7, 8</span> Two screen display <span style="float: right;">10</span> Memory: 28 measurements <span style="float: right;">14</span>
Device 2 Criteria		Date/Time Set and Adjust buttons <span style="float: right;">10, 13</span> 24-hour Clock, Date/Time display <span style="float: right;">11, 13</span> USB/Printer Port <span style="float: right;">15</span> USB Cable and PC Software <span style="float: right;">16, 18</span>
Web link	<a href="http://www.omron-healthcare.com/sitepreview.php?SiteID=596">http://www.omron-healthcare.com/sitepreview.php?SiteID=596</a>	<a href="http://www.omron-healthcare.com/sitepreview.php?SiteID=222">http://www.omron-healthcare.com/sitepreview.php?SiteID=222</a>

<b>Comments</b>	<p>The M4-I is, essentially, a trimmed down version of the 705IT. All of the blood pressure detection mechanisms appear to be identical. The main differences are</p> <ol style="list-style-type: none"> <li>1) There are no date or time facilities whatsoever available on the M4-I; these have a special button and screen on the 705-IT</li> <li>2) There is no facility for keeping a permanent record available on the M4-I; both printing and PC link facilities are available on the 705-IT</li> </ol> <p>Query from Advisory Board</p> <p>... there are 2 points I would like to make. First, I think (not entirely sure) that the M4-I is an older device than the 705-IT and is not on the market anymore. Second, having experience with both these devices it is easy to see that the pump function is different. The inflation function of the 705IT pump is better (a lot more quiet and smooth - probably technologically more advanced and possibly more expensive). So, my main question is whether the inflation mechanism (part 1, no 7) is unchanged. I think not.</p> <p>Response from Omron</p> <p>We hope the following explanation is sufficient for your Advisory Board members.</p> <p>First of all, M4-I is still available on the market, however based on our product range strategy in each country and are, M4-I might not be on the market for some of market. But generally speaking, M4-I is still on the market.</p> <p>As you said, M4-I has been sold a bit earlier than 705IT. However, in our clinically validation strategy, we forecast the product life time of 705IT will be longer than M4-I, then we have decided to use 705IT as the important base model.</p> <p>Regarding the pump, we always try to improve the products until the product will be discontinued. We can say that the inflation mechanism on M4-I has not been changed from the first production. What we improved is that the pump has been more silent without any changes of technical specifications (e.g. inflation speed, mechanism) and without any retail price increasing. We do believe the more silent pump can provide more comfort to the end user.</p>
<b>Recommendation</b>	Equivalence is Recommended
<b>Date</b>	27/08/2008