

# Expression MR400 Patient Monitor

## ACCESSORY GUIDE



US Customers - Experience the web store at: <http://www.philips.com/healthcarestore>

# Contents

Accessory Type	Page
Documentation	3
Miscellaneous	3
Respiration (Pneumatic)	3
Power	4
Gating <i>(includes application table)</i>	6
ECG <i>(includes application table)</i>	7
SpO <sub>2</sub> <i>(includes application table)</i>	9
NiBP <i>(includes application table)</i>	11
CO <sub>2</sub>	15
Anesthetic Agents/O <sub>2</sub> /CO <sub>2</sub>	17
Temperature	19
Invasive Blood Pressure	19

## Legend



**MR UNSAFE:** This category is reserved for objects that are significantly ferromagnetic and pose a clear and direct threat to person and equipment within the magnet room.



**MR CONDITIONAL:** A device that may contain magnetic, electrically conductive or RF-reactive components that is safe for operations in proximity to the MRI provided the conditions for safe operation are defined and observed.




**MR SAFE:** The device is completely non-magnetic, non-electrically conductive, and non-RF reactive, eliminating all of the primary potential threats during an MRI procedure.

## Documentation



Part Number	Description	Image	MRI
989803193211	<b>Manual, Operator, MR400, English</b>	Photo Not Available	N/A

*Manuals in additional languages are available electronically upon request. Contact your sales representative or sales support.*

## Miscellaneous









Part Number	Description	Image	MRI
453564488931	<b>Accessory Storage Tray</b> <i>Replacement or additional.</i>	Photo Not Available	

## Respiration (Pneumatic)

Part Number	Description	Image	MRI
989803152791	<b>Chest Bellows</b> <i>Connects to port on the Wireless SpO<sub>2</sub> Module for measurement of pneumatic respiration.</i>		

## Power









Part Number	Description	Image	MRI
453564177511	<b>Universal Line Cord</b> <i>250V cord with unterminated end</i>		
989803168211	<b>North American Line Cord</b> <i>Hospital grade 125V cord with US plug type</i>		
453564177501	<b>European Line Cord</b> <i>Hospital grade 250V cord with European (2-prong) plug type</i>		
989803173901	<b>Brazilian Line Cord</b> <i>Hospital grade cord with Brazilian (3-prong) plug type</i>		
989803174171	<b>United Kingdom Line Cord</b> <i>Hospital grade cord with UK plug type</i>	Photo Not Available	
989803181291	<b>Australian/New Zealand Line Cord</b> <i>Hospital grade cord with Australian plug type</i>	Photo Not Available	
989803181321	<b>South African Line Cord</b> <i>Hospital grade cord with South African plug type</i>	Photo Not Available	
989803181331	<b>Danish Line Cord</b> <i>Hospital grade cord with Danish plug type</i>	Photo Not Available	
989803181341	<b>Israeli Line Cord</b> <i>Hospital grade cord with Israeli plug type</i>	Photo Not Available	
989803181351	<b>Argentina Line Cord</b> <i>Hospital grade cord with Argentina plug type</i>	Photo Not Available	
989803181361	<b>Swiss Line Cord</b> <i>Hospital grade cord with Swiss plug type</i>	Photo Not Available	

Part Number	Description	Image	MRI
989803168221	<b>Extension Cord, 25 ft (7.62 m)</b> <i>Optional cord to extend the connection between the Expression MR400 and the Line Cord</i>		
989803191341	<b>Wireless Module Battery (Gen-3)</b> <i>3.7V battery for use with the Expression MR Gen-3 wireless ECG and SPO2 modules</i>		
989803152891	<b>Wireless Module Battery Charger</b> <i>For charging the 989803191341 wireless module batteries</i>		
989803169491	<b>Monitor Battery</b> <i>14.8V batteries for Expression MR400 patient monitor (Main and Reserve)</i>		

# Gating

## Application















	Siemens Gating Interface	GE Gating Interface	Hitachi/Toshiba Gating Interface	Universal/Vector Gating Interface
<b>Scanners</b>	<ul style="list-style-type: none"> <li>Aera</li> <li>Avanto</li> <li>Espree</li> <li>Essenza</li> <li>Prisma</li> <li>Skyra</li> <li>Spectra</li> <li>Symphony</li> <li>Trio</li> <li>Verio</li> </ul>	<ul style="list-style-type: none"> <li>Brivo (MR355)</li> <li>Discovery (MR750/MR750w)</li> <li>Excite</li> <li>Optima (MR360/MR360 Advance/(MR430s /MR450/MR450w)</li> <li>Signa</li> </ul>	<ul style="list-style-type: none"> <li>Hitachi               <ul style="list-style-type: none"> <li>Oasis</li> <li>Echelon</li> <li>Oval</li> <li>Airis</li> <li>Altaire</li> <li>MRP7000</li> </ul> </li> <li>Toshiba               <ul style="list-style-type: none"> <li>Vantage</li> <li>Titan</li> <li>Excelart</li> <li>Opart</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Philips               <ul style="list-style-type: none"> <li>Achieva</li> <li>Intera</li> <li>Ingenia</li> </ul> </li> <li>Universal gating cable. Can be used with any MRI system that has its own gating cable or wireless interface feature as part of the system.</li> </ul>








Part Number	Description	Image	MRI
989803152831	<b>Siemens Gating Interface</b> <i>Connects Expression MR400 cardiac and peripheral gating output to Siemens MRI systems</i>		
989803152821	<b>GE Excite Gating Interface</b> <i>Connects Expression MR400 cardiac and peripheral gating output to GE MRI systems</i>		
989803152851	<b>Hitachi/Toshiba Gating Interface</b> <i>Connects Expression MR400 cardiac and peripheral gating output to Hitachi and Toshiba MRI systems</i>		
989803152841	<b>Universal/Vector Gating Interface</b> <i>Connects Expression MR400 cardiac and peripheral gating output to MRI system's wireless or wired gating connections, and systems with vector gating</i>		

# ECG

## Application

	<b>Neonatal ECG Cable</b> < 10 kg (<22 lbs)	<b>Standard ECG Cable</b> >10 kg (>22 lbs)	<b>CV ECG Cable</b> >10 kg (>22 lbs)
<b>Purpose</b>	<ul style="list-style-type: none"> <li>Designed specifically for infants</li> <li>Quick Application</li> </ul>	<ul style="list-style-type: none"> <li>For all patient types</li> <li>Quick Application</li> </ul>	<ul style="list-style-type: none"> <li>For all patient types</li> <li>Use during cardiovascular procedures</li> <li>Provides the most flexible application sites for special procedures or patients of larger size</li> </ul>
<b>Electrode</b>	Neonatal Quadtrode	Standard Quadtrode	CV Quadtrode

<b>Part Number</b>	<b>Description</b>	<b>Image</b>	<b>MRI</b>
989803192761	<b>Expression MR Wireless ECG Patient Module (Gen-3) Networks 1-5</b> <i>Wireless ECG module for use with the Expression MR400 patient monitor on networks 1-5.</i>		
989803194341	<b>Expression MR Wireless ECG Patient Module (Gen-3) Networks 6-10</b> <i>Wireless ECG module for use with the Expression MR400 patient monitor on networks 6-10.</i>		
989803152291	<b>ECG Prep Gel (Pack of 3)</b> <i>Package of 3 tubes. Must be used when applying MRI electrodes to patient skin for best MRI ECG performance.</i>		
989803179041	<b>Quadtrode, CV (Box of 25)</b> <i>For use with the 989803193721 or 989803193751 ECG Cable.</i>		
989803179031	<b>Quadtrode, Standard (Box of 25)</b> <i>For use with the 989803193731 or 989803193761 ECG Cable.</i>		
989803179051	<b>Quadtrode, Neonatal (Box of 25)</b> <i>For use with the 989803193741 or 989803193771 ECG Cable.</i>		
989803193721	<b>Expression MR CV ECG Leads, AAMI</b> <i>AAMI Compliant</i>		

Part Number	Description	Image	MRI
989803193731	<b>Expression MR Standard ECG Leads, AAMI</b> <i>AAMI Compliant</i>		
989803193741	<b>Expression MR Neonatal ECG Cable, AAMI</b> <i>AAMI Compliant</i>		
989803193751	<b>Expression MR CV ECG Leads, IEC</b> <i>IEC Compliant</i>	Photo Not Available	
989803193761	<b>Expression MR Standard ECG Leads, IEC</b> <i>IEC Compliant</i>	Photo Not Available	
989803193771	<b>Expression MR Neonatal ECG Cable, IEC</b> <i>IEC Compliant</i>	Photo Not Available	

















# SpO<sub>2</sub>







## Application

Quick Connect SpO <sub>2</sub> Attachment	Neonate 1-5 kg (2.2 – 11 lbs)	Infant 5-15 kg (11 – 33 lbs)	Pediatric 10-50 kg (22 – 110 lbs)	Adult >40 kg (>88 lbs)
Clip, Adult	-	-	-	Finger
Clip, Pediatric	-	-	Finger	-
Disposable Applicator, Adult	-	-	-	Finger (toe) <sup>2</sup>
Disposable Applicator, Pediatric	-	-	Finger (toe) <sup>2</sup>	-
Disposable Applicator, Infant	-	Finger (toe) <sup>2</sup>	-	-
Disposable Applicator, Neonatal	Foot (hand/wrist) <sup>1</sup>	-	-	-

<sup>1</sup> Preferred application site: foot; alternative site: hand or wrist

<sup>2</sup> Preferred application site: any single finger onto which the attachment fits well; alternative: any toe onto which the attachment fits well







Part Number	Description	Image	MRI
989803192771	<b>Expression MR Wireless SpO<sub>2</sub> Patient Module (Gen-3) Networks 1-5</b> <i>Wireless SpO<sub>2</sub> module for use with the Expression MR400 patient monitor on networks 1-5.</i>		
989803194331	<b>Expression MR Wireless SpO<sub>2</sub> Patient Module (Gen-3) Networks 6-10</b> <i>Wireless SpO<sub>2</sub> module for use with the Expression MR400 patient monitor on networks 6-10.</i>		
989803161991	<b>Quick Connect SpO<sub>2</sub> Sensor</b> <i>For use with Wireless SpO<sub>2</sub> Module and Quick Connect SpO<sub>2</sub> accessories</i>		
989803166551	<b>Quick Connect Disposable SpO<sub>2</sub> Applicator, Adult (Box of 20)</b> <i>For use with 989803161991 Quick Connect SpO<sub>2</sub> sensor</i>		
989803166561	<b>Quick Connect Disposable SpO<sub>2</sub> Applicator, Pediatric (Box of 20)</b> <i>For use with 989803161991 Quick Connect SpO<sub>2</sub> sensor</i>		
989803166571	<b>Quick Connect Disposable SpO<sub>2</sub> Applicator, Infant (Box of 20)</b> <i>For use with 989803161991 Quick Connect SpO<sub>2</sub> sensor</i>		
989803166581	<b>Quick Connect Disposable SpO<sub>2</sub> Applicator, Neonatal (Box of 20)</b> <i>For use with 989803161991 Quick Connect SpO<sub>2</sub></i>		

Part Number	Description	Image	MRI
	<i>sensor</i>		
<b>989803167111</b>	<b>Quick Connect Disposable SpO<sub>2</sub> Applicator Starter Kit</b> <i>For use with 989803161991 Quick Connect SpO<sub>2</sub> sensor. Includes 5 each of Quick Connect Disposable Grips: Adult, Pediatric, Infant and Neonatal</i>		
<b>989803166531</b>	<b>Quick Connect SpO<sub>2</sub> Clip, Adult (Box of 2)</b> <i>For use with 989803161991 Quick Connect SpO<sub>2</sub> sensor</i>		
<b>989803166541</b>	<b>Quick Connect SpO<sub>2</sub> Clip, Pediatric (Box of 2)</b> <i>For use with 989803161991 Quick Connect SpO<sub>2</sub> sensor</i>		

















# NiBP









## Application

Expression MR Cuff	Size	Hose
Thigh	44.0-56.0 cm	Standard
Large Adult - Long	35.0-45.0 cm	Standard
Large Adult	35.0-45.0 cm	Standard
Adult - Long	27.5-36.0 cm	Standard
Adult	27.5-36.0 cm	Standard
Small Adult	20.5-28.5 cm	Standard
Pediatric	14.0-21.5 cm	Standard
Infant	10.0-15.0 cm	Standard
Infant #5	10.0-15.0 cm	Neonatal
Neonatal #4	7.1-13.1 cm	Neonatal
Neonatal #3	5.8-10.9 cm	Neonatal
Neonatal #2	4.3-8.0 cm	Neonatal
Neonatal #1	3.1-5.7 cm	Neonatal

Part Number	Description	Image	MRI
989803183221	<b>Expression MR Standard NiBP Hose, Single Lumen</b> <i>For use with Adult, Pediatric, and Infant Expression MR NiBP Cuffs (excluding Infant #5)</i>		
989803183231	<b>Expression MR Neonatal NiBP Hose, Single-Lumen</b> <i>For use with Neonatal and Infant #5 Expression MR NiBP Cuffs</i>		
989803182681	<b>Expression MR NiBP Cuff, Thigh</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>		

Part Number	Description	Image	MRI
989803182671	<b>Expression MR NiBP Cuff, Large Adult-Long</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>	 The image shows a dark red cuff with white text: "Expression MR", "Large Adult Long", "REF: 989803182671", and "35.0 - 45.0 cm". There are also two circular diagrams with arrows.	
989803182661	<b>Expression MR NiBP Cuff, Large Adult</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>	 The image shows a dark red cuff with white text: "Expression MR", "Large Adult", "REF: 989803182661", and "35.0 - 45.0 cm". There are also two circular diagrams with arrows.	
989803182651	<b>Expression MR NiBP Cuff, Adult-Long</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>	 The image shows a dark blue cuff with white text: "Expression MR", "Adult Long", "REF: 989803182651", and "27.5 - 36.0 cm". There are also two circular diagrams with arrows.	
989803182641	<b>Expression MR NiBP Cuff, Adult</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>	 The image shows a dark blue cuff with white text: "Expression MR", "Adult", "REF: 989803182641", and "27.5 - 36.0 cm". There are also two circular diagrams with arrows.	
989803182631	<b>Expression MR NiBP Cuff, Small Adult</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>	 The image shows a blue cuff with white text: "Expression MR", "Small Adult", "REF: 989803182631", and "20.5 - 28.5 cm". There are also two circular diagrams with arrows.	
989803182621	<b>Expression MR NiBP Cuff, Pediatric</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>	 The image shows a green cuff with white text: "Expression MR", "Pediatric", "REF: 989803182621", and "14.0 - 21.0 cm". There are also two circular diagrams with arrows.	
989803182611	<b>Expression MR NiBP Cuff, Infant</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>	 The image shows a red cuff with white text: "Expression MR", "Infant", "REF: 989803182611", and "14.0 - 19.0 cm". There are also two circular diagrams with arrows.	
989803182581	<b>Expression MR Disposable NiBP Cuff, Thigh (Box of 10)</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>	 The image shows a white disposable cuff with black text: "Expression MR", "Disposable Thigh", "REF: 989803182581", "44.0 - 56.0 cm", and "http://www.ExpressionMR.com". There are also two circular diagrams with arrows and CE and ISO symbols.	
989803182571	<b>Expression MR Disposable NiBP Cuff, Large Adult-Long (Box of 10)</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>	 The image shows a white disposable cuff with black text: "Expression MR", "Disposable Large Adult Long", "REF: 989803182571", and "35.0 - 45.0 cm". There are also two circular diagrams with arrows.	

Part Number	Description	Image	MRI
989803182561	<b>Expression MR Disposable NiBP Cuff, Large Adult (Box of 10)</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>		
989803182551	<b>Expression MR Disposable NiBP Cuff, Adult-Long (Box of 10)</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>		
989803182541	<b>Expression MR Disposable NiBP Cuff, Adult (Box of 10)</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>		
989803182531	<b>Expression MR Disposable NiBP Cuff, Small Adult (Box of 10)</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>		
989803182521	<b>Expression MR Disposable NiBP Cuff, Pediatric (Box of 10)</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>		
989803182511	<b>Expression MR Disposable NiBP Cuff, Infant (Box of 10)</b> <i>For use with 989803183221 Expression MR Standard NiBP hose.</i>		
989803182591	<b>Expression MR Disposable NiBP Cuff Sample Kit</b> <i>For use with 989803183221 Expression MR Standard NiBP hose. Contains 1 each of the Disposable NiBP Cuffs: Thigh, Large Adult-Long, Large Adult, Adult-Long, Adult, Small Adult, Pediatric and Infant</i>		
989803183211	<b>Expression MR Disposable NiBP Cuff, Infant #5 (Box of 10)</b> <i>For use with 989803183231 Expression MR Neonatal NiBP hose.</i>		









Part Number	Description	Image	MRI
989803183201	<b>Expression MR Disposable NiBP Cuff, Neonatal #4 (Box of 10)</b> <i>For use with 989803183231 Expression MR Neonatal NiBP hose.</i>		
989803183191	<b>Expression MR Disposable NiBP Cuff, Neonatal #3 (Box of 10)</b> <i>For use with 989803183231 Expression MR Neonatal NiBP hose.</i>		
989803183181	<b>Expression MR Disposable NiBP Cuff, Neonatal #2 (Box of 10)</b> <i>For use with 989803183231 Expression MR Neonatal NiBP hose.</i>		
989803183171	<b>Expression MR Disposable NiBP Cuff, Neonatal #1 (Box of 10)</b> <i>For use with 989803183231 Expression MR Neonatal NiBP hose.</i>		



# C02

For monitors configured without Anesthetic Agents option


Part Number	Description	Image	MRI
989803183241	Expression MR Disposable LoFlo Sample Line with Adult Cannula (Box of 20)		
989803185331	Expression MR Disposable LoFlo Sample Line with Adult Cannula (Box of 100)		
989803183251	Expression MR Disposable LoFlo Sample Line with Pediatric Cannula (Box of 20)		
989803185341	Expression MR Disposable LoFlo Sample Line with Pediatric Cannula (Box of 100)		
989803183261	Expression MR Disposable LoFlo Sample Line with Neonatal Cannula (Box of 20)		
989803185351	Expression MR Disposable LoFlo Sample Line with Neonatal Cannula (Box of 100)		
989803183291	Expression MR Disposable LoFlo Sample Line with Airway Adapter (Box of 20)		
989803185381	Expression MR Disposable LoFlo Sample Line with Airway Adapter (Box of 100)		







Part Number	Description	Image	MRI
989803183271	<b>Expression MR Disposable LoFlo Sample Line with Adult Cannula, Divided (Box of 20)</b> <i>Provides inlet for O<sub>2</sub> delivery</i>		
989803185361	<b>Expression MR Disposable LoFlo Sample Line with Adult Cannula, Divided (Box of 100)</b> <i>Provides inlet for O<sub>2</sub> delivery</i>		
989803183281	<b>Expression MR Disposable LoFlo Sample Line with Pediatric Cannula, Divided (Box of 20)</b> <i>Provides inlet for O<sub>2</sub> delivery</i>		
989803185371	<b>Expression MR Disposable LoFlo Sample Line with Pediatric Cannula, Divided (Box of 100)</b> <i>Provides inlet for O<sub>2</sub> delivery</i>		








## Anesthetic Agents/O2/CO2

For monitors configured with Anesthetic Agents option




Part Number	Description	Image	MRI
989803162961	Oxygen (O2) Sensor Installation Tool		
989803162051	Oxygen (O2) Sensor		
989803152651	Anesthetic Agents/O2/CO2 Starter Kit <i>Includes 1 Water Trap and 2 Sample Lines</i>		
989803152661	Anesthetic Agents/O2/CO2 Sample Line		
989803152671	Anesthetic Agents/O2/CO2 Water Trap		
989803152561	Adult Disposable Cannula <i>For use with 989803152661 Anesthetic Agents/O2/CO2 Sample Line.</i>		
989803152571	Pediatric Disposable Cannula <i>For use with 989803152661 Anesthetic Agents/O2/CO2 Sample Line.</i>		
989803152591	Infant Disposable Cannula <i>For use with 989803152661 Anesthetic Agents/O2/CO2 Sample Line.</i>		
989803152581	Small Infant Disposable Cannula <i>For use with 989803152661 Anesthetic Agents/O2/CO2 Sample Line.</i>		
989803152601	Divided Adult Disposable Cannula <i>Provides inlet for O2 delivery. For use with 989803152661 Anesthetic Agents/O2/CO2 Sample Line..</i>		

Part Number	Description	Image	MRI
989803152631	<b>Divided Pediatric Disposable Cannula</b> <i>Provides inlet for O2 delivery. For use with 989803152661 Anesthetic Agents/O2/CO2 Sample Line.</i>		
989803152621	<b>Divided Infant Disposable Cannula</b> <i>Provides inlet for O2 delivery. For use with 989803152661 Anesthetic Agents/O2/CO2 Sample Line.</i>		
989803152611	<b>Divided Small Infant Disposable Cannula</b> <i>Provides inlet for O2 delivery. For use with 989803152661 Anesthetic Agents/O2/CO2 Sample Line.</i>		

## Temperature

Part Number	Description	Image	MRI
989803194511	<b>FlexTEMP II Temperature Sensor</b> <i>Direct mode axillary, esophageal, or rectal measurement. For esophageal/rectal measurement, or whenever risk of cross-contamination is a concern, use with 989803178181 FlexTEMP Sensor Jacket.</i>		
989803168891	<b>Temp Sensor Lubricant, 4.25 Oz, (Box of 12)</b> <i>For use during internal applications such as esophageal or rectal measurements.</i>		
989803178181	<b>FlexTEMP Sensor Jacket (Box of 10)</b> <i>For use with 989803162531 FlexTEMP Temperature Sensor or 989803194511 FlexTEMP II Temperature Sensor.</i>	Photo Not Available	

## Invasive Blood Pressure

Part Number	Description	Image	MRI
989803194601	<b>Expression IBP Transducer Cable, 5ft</b>	Photo Not Available	
989803194631	<b>Expression MR IBP Disposable Pressure Transducer Kit, Adult/Pediatric (Box of 20)</b> <i>For use with 989803194601 Expression MR Transducer Cable.</i>	Photo Not Available	
989803194641	<b>Expression MR IBP Disposable Pressure Transducer Kit, Infant/Neonatal (Box of 20)</b> <i>For use with 989803194601 Expression MR Transducer Cable.</i>	Photo Not Available	

*Note that while Philips recommends using the Expression MR line of IBP accessories with Expression MR400 for optimal performance in the MR environment, Hospira [Transpac models], and Edwards Lifesciences [Transducer, Model PX260 and adapter cables], have also been qualified for use. Please contact Hospira or Edwards Lifesciences for information about Invivo-compatible devices, and contact your sales representative with any questions.*

## How to reach us

Websites:

[www.philips.com/healthcare](http://www.philips.com/healthcare)  
[healthcare@philips.com](mailto:healthcare@philips.com)

[www.ExpressionMR.com](http://www.ExpressionMR.com)  
[www.invivocorp.com](http://www.invivocorp.com)

Phone number:

U.S.: (877) 468-4861

E-mail:

Worldwide: [Expression.info@philips.com](mailto:Expression.info@philips.com)



© 2015 Koninklijke Philips N.V. All rights reserved. Specifications are subject to change without notice. Philips Healthcare reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.

Philips Healthcare is part of Royal Philips Electronics