

SPECIFICATIONS

Size: 94 mm x 154 x 135, Weight 1.7 kg (no chamber fitted), 2.0 kg (chamber fitted and filled with water).

Electrical ratings

Supply frequency: 50 or 60 Hz, Voltage: 230 V~, Current: 0.8 A max at 230 V~

Heater plate: 150 W.

Heater wire: 22 V~, 1.36 A, 30 W, 50 or 60 Hz

Heater plate over-temperature cutout $93 \pm 6^\circ\text{C}$

IEC 60601-1 Classification Class I, Type BF, IPX1

Performance (at 23°C Ambient Temperature)

	Setting	Constant flow range (L/min)	Patient interface temperature ($^\circ\text{C}$)
Heater wire mode 900MR810 900MR810E	Low	5 to 60	28 to 29
	High	5 to 30	30 to 32
Non-heater wire mode RT307	Low	5 to 60	23 to 25
	Medium	5 to 40	25 to 27
	High	5 to 30	28 to 32

CAUTION: MR810 does not deliver body temperature saturated gases.

Humidity Performance: $> 10 \text{ mg/L}$, $5 \text{ L/min} < \text{flow} < 60 \text{ L/min}$.

DO NOT use for flow $< 5 \text{ L/min}$.

Warm-up Time: < 60 minutes.

Symbol Definitions



Caution – Hot Surface



Resistant to vertical falling drips



Equipotential Stud



Serial Port



Regulatory Compliance Mark



Alternating Current



Type BF Applied Part



ATTENTION
Consult accompanying documents



Fragile, handle with care



Date of Manufacture

WARNING:

- Caution is required when delivering gases that are not body temperature saturated, to patients with bypassed airways.
- The use of breathing circuits, chambers, or other accessories which are NOT approved by Fisher & Paykel Healthcare, may impair performance or compromise safety.
- Refer to operating instructions for each accessory.
- Ensure maintenance of grounding integrity by connecting to an appropriately grounded receptacle.
- Ensure that the humidifier is always positioned lower than the patient's airway.
- Ensure the humidifier is securely mounted.
- The operation of high frequency surgical apparatus, short wave or microwave equipment in the vicinity of the humidifier may adversely affect its function. If this occurs the humidifier should be removed from the vicinity of such devices.
- Visually inspect equipment for damage before use.
- Hot surfaces may exceed 75°C .
- The serial port must not be used when the humidifier is in patient use. Equipment connected to the serial port must comply with the safety standard IEC60950.
- This device is designed for the delivery of air, oxygen and/or nitrous oxide. It is not suitable for the delivery of flammable anaesthetic gas mixes.
- Remove any sources of ignition: such as cigarettes, an open flame, or materials which burn or ignite easily at high oxygen concentrations.

The Following Accessories are required:

Humidifier Chamber (e.g.: MR290)
Breathing Circuit: (e.g.: 'Evatherm' 900MR810(E), RT308 / RT307)
Mounting Bracket (to suit ventilator)

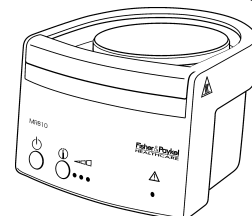
Choice will depend on application. Please contact your local F&P Healthcare representative for recommendations.

185042576 Rev G © 2016 05 Fisher & Paykel Healthcare Limited



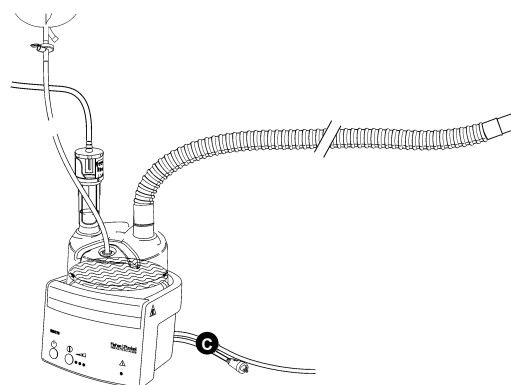
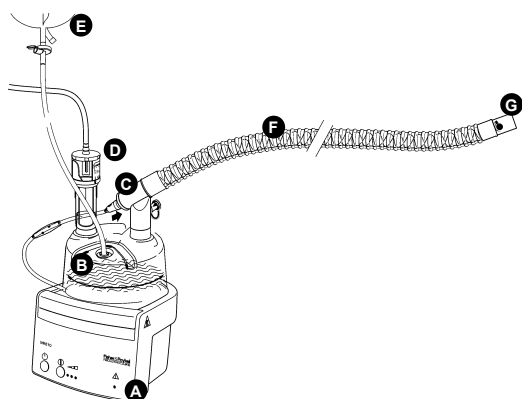
RESPIRATORY HUMIDIFIER

(en)



PLEASE READ OPERATING INSTRUCTION WARNINGS BEFORE SETTING UP THE MR810 SET UP

1. Slide humidification chamber (B) onto humidifier base (A) and connect breathing circuit (F) (refer to humidification chamber and breathing circuit operating instructions for further details). Hang the waterbag from a waterbag pole (E).
2. Connect oxygen tubing to the O_2 flow meter (not included in the 900MR810(E) / RT308 / RT307 kits) to the air entrainer (D). Connect to patient interface (G).
- 3a. **HEATER WIRE MODE** (i.e. 900MR810 / 900MR810E / RT308 CIRCUIT)
Insert heater wire adaptor to circuit (C). See "Heater Wire Mode Indicator".
- 3b. **NON-HEATER WIRE MODE RT307 CIRCUIT**
Secure heater wire adaptor to the power cable (C).



4. The humidification system is now set up and ready for use. For maximum humidity delivery use the high setting. Note: Remove scrolls from scrolled chambers.
For other applications contact your local Fisher & Paykel Healthcare representative

The MR810 respiratory humidifier warms and humidifies gases delivered to patients requiring noninvasive and/or constant flow applications.

INSTRUCTION SHEET DO NOT DISCARD

WARNING: When using RT series circuits, ensure that probe port caps are inserted into the circuit.

TRANSPORT & STORAGE

Temperature: -10 to 50 °C (14 to 122 °F)

OPERATING CONDITIONS

Recommended ambient temperature

18 to 28 °C (64 to 82 °F)

Humidity

10 to 95% RH

Mode of operation

Continuous

CLEANING

The humidifier base and heater wire adaptor can be cleaned when required with a damp cloth using a mild non-abrasive cleaning solution. (Refer to the MR810 technical manual for a list of approved cleaning agents).

ROUTINE MAINTENANCE AND SERVICING

Refer maintenance and servicing to qualified service personnel. A full technical description including annual maintenance and service data is contained in the Technical Manual which is available from your supplier or Fisher & Paykel Healthcare (REF 185042601).

DEVICE AND CONSUMABLE DISPOSAL

MR810 Disposal Instructions

This device contains electronics. Please do not discard as regular rubbish. Dispose of electronics according to local guidelines.

Consumable Disposal Instructions

Place the breathing tube and water chamber in a rubbish bag at the end of use and discard according to hospital protocol.

DIAGNOSTIC PORT

The diagnostic port is not intended for use during operation - Factory use only.

ELECTROMAGNETIC COMPATIBILITY

The device complies with the electromagnetic compatibility requirements of IEC60601-1-2. A full technical report is contained in the Technical Manual available from your supplier or Fisher & Paykel Healthcare (REF 185042601). In certain circumstances the device may affect or be affected by nearby portable mobile radio frequency communication equipment, due to the effects of electromagnetic interference. If this should happen, try moving your device or the location of the equipment causing interference, or alternatively consult your healthcare provider.

Fisher & Paykel
HEALTHCARE

MANUFACTURER Fisher & Paykel Healthcare Ltd, 15 Maurice Paykel Place, East Tamaki, Auckland 2013, PO Box 14 348 Panmure, Auckland 1741, New Zealand Tel: +64 9 574 0100 Fax: +64 9 574 0158 Email: info@fphcare.co.nz Web: www.fphcare.com **AUSTRALIA** Fisher & Paykel Healthcare Pty Limited, 36-40 New Street, PO Box 167, Ringwood, Melbourne, Victoria 3134, Australia Tel: +61 3 9879 5022 Fax: +61 3 9879 5232 **AUSTRIA** Tel: 0800 29 31 23 Fax: 0800 29 31 22 **BENELUX** Tel: +31 40 216 3555 Fax: +31 40 216 3554 **BRAZIL** Fisher & Paykel do Brasil, Rua Sampaio Viana, 277 cj 21, Paraiso, 04004-000, São Paulo - SP, Brazil Tel: +55 11 2548 8002 **CHINA** 代理人/售后服务机构: 费雪派克医疗保健 (广州) 有限公司, 广州高新技术产业开发区科学城科丰路31号G12栋301号 电话: +86 20 32053486 传真: +86 20 32052132 **FINLAND** Tel: +358 (0)405 406618 Fax: +46 (0)8 36 6310 **FRANCE** Tel: +33 1 6446 5201 Fax: +33 1 6446 5221 **GERMANY** Tel: +49 7181 98599 0 Fax: +49 7181 98599 66 **INDIA** Tel: +91 80 4284 4000 Fax: +91 80 4123 6044 **IRISH REPUBLIC** Tel: 1800 409 011 **ITALY** Tel: +39 06 7839 2939 Fax: +39 06 7814 7709 **JAPAN** Tel: +81 3 5117 7110 Fax: +81 3 5117 7115 **KOREA** Tel: +82 2 6205 6900 Fax: +82 2 6309 6901 **NORTHERN IRELAND** Tel: 0800 132 189 **RUSSIA** Tel and Fax: +7 495 782 21 50 **SPAIN** Tel: +34 902 013 346 Fax: +34 902 013 379 **SWEDEN** Tel: +46 8 564 76 680 Fax: +46 8 36 63 10 **SWITZERLAND** Tel: 0800 83 47 63 Fax: 0800 83 47 54 **TAIWAN** Tel: +886 2 8751 1739 Fax: +886 2 8751 5625 **TURKEY** Fisher Paykel Sağlık Ürünleri Ticaret Limited Şirketi, Alinteri Bulvarı 1161/1 Sokak No. 12-14, P.O. Box 06371 Ostim, Ankara, Turkey Tel: +90 312 354 34 12 Fax: +90 312 354 31 01 **UK**   Fisher & Paykel Healthcare Ltd, Unit 16, Cordwallis Park, Clivemont Road, Maidenhead, Berkshire SL6 7BU, UK Tel: +44 1628 626 136 Fax: +44 1628 626 146 **USA/CANADA** Tel: 1800 446 3908 or +1 949 453 4000 Fax: +1 949 453 4001

OPERATION



Power Button

Pressing this button turns the humidifier on or off (stand-by).

Note: The MR810 defaults to HIGH when turned on.

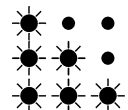


Temperature & Humidity Control Button & Indicator

Pressing this button cycles the humidifier setting between high, medium and low



Temperature & Humidity Settings



Low

Medium

High

Note: For maximum humidity delivery use the high setting.

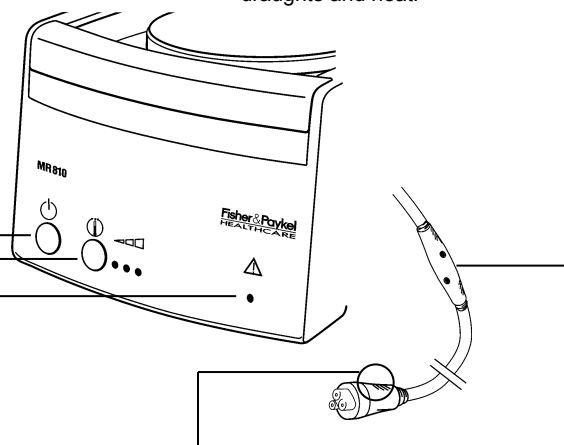


See Manual Indicator Humidifier Faulty

If the red light is illuminated, the humidifier and all accessories should be immediately removed and sent for servicing.

Ambient Temperature Sensor

Monitors air temperature and adjusts the heater wire power to minimise breathing circuit condensate. Keep away from draughts and heat.



Heater Wire Mode Indicator

If the green light is illuminated, the heater wire is correctly connected to the heater wire circuit.

If the green light is off while connected to the heater wire circuit, there may be a fault with the heater wire circuit or heater base.

If not connected to a heater wire circuit, non-heater wire mode is initiated.