RESMED

VPAP™ ST-A
NONINVASIVE VENTILATOR

H5i™
HEATED HUMIDIFIER

ClimateLine™ / ClimateLine^{MAX}™ / SlimLine™ / Standard
AIR TUBING

Information Guide

English

Please read the entire Information and Welcome Guides before using your device.

⚠ CAUTION
In the US, Federal law restricts this device to sale by or on the order of a physician.

VPAP ST-A indications for use
The VPAP ST-A is indicated to provide noninvasive ventilation for patients weighing more than 30 lbs (13kg) or more than 66 lbs (30 kg) in iVAPS mode with respiratory insufficiency or obstructive sleep apnea (OSA). The VPAP ST-A is intended for home and hospital use.

VPAP ST-A contraindications
Positive airway pressure therapy may be contraindicated in some patients with the following pre-existing conditions:
- severe bullous lung disease
- pneumothorax or pneumomediastinum
- pathologically low blood pressure, particularly if associated with intravascular volume depletion
- dehydration
- cerebrospinal fluid leak, recent cranial surgery, or trauma.

VPAP ST-A adverse effects

Patients should report unusual chest pain, severe headache, or increased breathlessness to their prescribing physician. An acute upper respiratory tract infection may require temporary discontinuation of treatment.

The following side effects may arise during the course of therapy with the device:

- drying of the nose, mouth, or throat
- nosebleed
- bloating
- ear or sinus discomfort
- eye irritation
- skin rashes.

H5i indications for use

The H5i is indicated for the humidification of the air delivered from a CPAP or bilevel device. The H5i is for use only as recommended by a physician. The H5i is intended for single patient re-use in the home environment and re-use in a hospital/institutional environment.

H5i contraindications

The H5i is contraindicated for use with patients whose upper (supraglottic) airway has been bypassed.

Troubleshooting

If there is a problem, try the following suggestions. If the problem cannot be solved, contact your equipment supplier or ResMed. Do not attempt to open the device or the H5i enclosure.

Problem/Possible cause	Solution
No display	
Power is not connected.	Ensure the power cord is connected and the power outlet (if available) is on.
The DC plug is partially inserted into the back of the device or inserted too slowly.	Fully insert the DC plug.
The VPAP ST-A and H5i are not connected correctly.	Ensure that the VPAP ST-A and H5i are securely attached.

Problem/Possible cause	Solution
Insufficient air delivered from the device	
Ramp time is in use.	Wait for air pressure to build up or change ramp time.
Air filter is dirty.	Replace air filter.
Air tubing is not connected properly.	Check air tubing.
Air tubing is blocked, pinched or punctured.	Unblock or free the air tubing. Check the air tubing for punctures.
Mask and headgear are not positioned correctly.	Adjust position of mask and headgear.
Incorrect air tubing selected.	If you are using the SlimLine, Standard or 3 m air tubing ensure that you have the correct air tubing selected via the menu.
The H5i flip lid is not latched correctly.	Close the flip lid ensuring that it clicks into place.
The H5i flip lid seal is not fitted correctly.	Make sure the flip lid seal is facing the right way up and fitted securely.
Non-vented mask is used.	Only use a vented mask.
Mask vents might be blocked.	Check if you have sufficient venting. Unblock mask vents if necessary.
EPAP may be set too low.	Talk to your clinician about your settings.
Device does not start when you breathe into the mask	
Breath is not deep enough to trigger SmartStart/Stop.	Take a deep breath in and out through the mask.
SmartStart/Stop is disabled because the High Leak or Low Minute Ventilation alarm is enabled.	Press Start/Stop to start therapy.
SmartStart/Stop is disabled.	Talk to your clinician about enabling the SmartStart/Stop feature.

Problem/Possible cause	Solution
There is excessive leak.	Adjust position of mask and headgear. Connect the air tubing firmly at both ends.
Device does not stop when you remove your mask	
SmartStart/Stop is disabled because the High Leak or Low Minute Ventilation alarm is enabled.	Press Start/Stop to stop therapy.
SmartStart/Stop is disabled because Confirm Stop is enabled.	A message appears on the screen. To stop therapy, select Yes and press the Push Dial.
SmartStart/Stop is disabled.	Talk to your clinician about enabling the SmartStart/Stop feature.
SmartStart/Stop is enabled but the device does not stop automatically when you remove your mask	
Incompatible mask system being used.	Only use equipment recommended by ResMed.
Incorrect mask setting being used.	Check the selected mask type in the Setup menu. Change it if necessary.
The patient is using a nasal pillows mask with a set pressure less than 6 cm H_2O.	Disable SmartStart/Stop.
The patient is using a pediatric mask with a set pressure less than 8 cm H_2O.	Disable SmartStart/Stop.
Pressure rises inappropriately	
Talking, coughing or breathing in an unusual manner.	Avoid talking with a nasal mask on, and breathe as normally as possible.
Mask cushion is buzzing against the skin.	Adjust the headgear.

Problem/Possible cause	Solution
Cushion seated incorrectly causing excessive leak.	Adjust headgear or re-fit cushion.
Displays message: Heated tube fault, replace tube	
Device has been left in a hot environment.	Allow to cool before re-use. Disconnect the power cord and then reconnect it to restart the device.
There is a fault in your ClimateLine or ClimateLine^{MAX} heated air tubing.	Discontinue using your ClimateLine or ClimateLine^{MAX} heated air tubing and contact your clinician/service provider. Use SlimLine, Standard or 3 m air tubing in the interim.
Displays message: Humidifier fault, replace humidifier	
Device has been left in a hot environment.	Allow to cool before re-use. Disconnect the power cord and then reconnect it to restart the device.
There is a fault in your humidifier.	Discontinue using your humidifier and contact your clinician/service provider.
Refilling the humidifier with cold water while humidifier is still hot after therapy.	Allow to cool before re-use. Ensure the humidifier is filled with water before the start of therapy to avoid running out of water during therapy.
Filling the humidifier with ice cold water on a warm day or with hot water.	Use room temperature water.
Displays message: High temperature fault, refer to user manual	
Device has been left in a hot environment.	Allow to cool before re-use. Disconnect the power cord and then reconnect it to restart the device.
Air filter is blocked.	Replace your air filter. Disconnect the power cord and then reconnect it to restart the device.
Air tubing is blocked.	Check your air tubing and remove any blockages. Disconnect the power cord and then reconnect it to restart the device.
Humidity level setting is too high, resulting in accumulation of water in the air tubing.	Turn the humidity level setting down and empty the water from the air tubing.

Problem/Possible cause	Solution
Displays message: Check ResMed 30/90W Power Supply Unit and fully insert the connector	
The DC plug is partially inserted into the back of the device or inserted too slowly.	Fully insert the DC plug.
A non-ResMed power supply unit is connected to the device.	Remove the power supply unit and replace with a ResMed power supply unit.
The power supply unit is being covered by bedding.	Make sure that the power supply unit is free from bedding, clothes or other objects that could cover it.
The following message is displayed on the LCD after you try to update settings or copy data to the SD card: Card error, please remove SD card and contact service provider	
SD card is not inserted correctly.	Ensure that the SD card is inserted correctly.
You may have removed the SD card before settings were copied to the device.	Reinsert the SD card and wait for the Home screen or the "Settings updated successfully, press any key" message to appear on the LCD. ***Note:*** *This message only appears once. If you re-insert the SD card after you have updated your settings, the message will not be re-displayed.*
The following message is NOT displayed on the LCD after you try to update the settings using the SD card: Settings updated successfully, press any key	
The settings were not updated.	Contact your clinician/service provider immediately.
Water splashing on your face from the H5i	
The water tub is overfilled.	Check that the water level is below the maximum water level mark.
Condensation is forming in the air tubing and mask.	Turn the humidity level setting down via the menu.
Leaking water tub	
The water tub may be damaged or cracked.	Contact your service provider for a replacement.

Problem/Possible cause	Solution
The cleanable water tub is not assembled correctly.	Check for damage and reassemble the cleanable water tub correctly.
Air feels too warm/cold in the mask	
The temperature of the ClimateLine or ClimateLine^{MAX} heated air tubing is set too high/low.	Turn up/down the heated air tubing temperature via the menu.

Alarms

If the system has not been properly assembled, the device will trigger an alarm. Check that the air tubing has been properly attached to the device and mask (and humidifier if used).

Problem/Possible cause	Solution
Alarm is activated and the LCD screen display disappears	
Power failure.	Remove your mask until power is restored.
Power cord is disconnected or mains power switch is turned off during therapy.	Ensure the power cord is connected and the mains power switch (if available) is on.
Displays message: High leak, please check system setup and all connections	
There is excessive leak.	Adjust position of mask and headgear. Connect the air tubing firmly at both ends.
Displays message: No tube, please check your tube is connected	
Flow is high because air tubing is not connected properly. ***Note:*** *The tube disconnection check may not operate when an antibacterial filter is used.*	Connect the air tubing firmly at both ends.

Problem/Possible cause	Solution
Displays message: Tube blocked, please check your tube	
Air tubing is blocked.	Check your air tubing and remove any blockages. Disconnect the power cord and then reconnect it to restart the device.
Displays message: Please close H5i flip lid, attach tube and press any key.	
H5i flip lid is not closed.	Close the flip lid ensuring that it clicks into place.
Air tubing is not connected properly.	Connect firmly at both ends.
Displays message: No SpO2 data, check oxi sensor attachment to module/finger	
Oximeter sensor is not attached properly.	Ensure that the oximeter sensor is attached properly to the module and the patient's finger.
Oximeter sensor might be faulty.	If the message appears repeatedly but the oximeter is attached properly to the module and the patient's finger, the oximeter sensor might be faulty. Contact your service provider or exchange the oximeter.
Displays message: Non-vented mask, use vented mask or unblock mask vents	
Non-vented mask is used.	Only use a vented mask.
Mask vents might be blocked.	Check if you have sufficient venting. Unblock mask vents if necessary.
A low EPAP in conjunction with supplemental oxygen may result in false triggering of this alarm on a vented mask.	Talk to your clinician about your settings.
Displays message: No oximeter, check/connect oximeter adapter	
Oximeter adapter is not attached properly.	Ensure that the oximeter adapter is attached properly.

Problem/Possible cause	Solution
Oximeter adapter might be faulty.	If the message appears repeatedly but the oximeter adapter is attached properly, the oximeter adapter might be faulty. Contact your service provider.
Displays message: Check ResMed 30/90W Power Supply Unit	
The power supply unit is being covered by bedding.	Make sure that the power supply unit is free from bedding, clothes or other objects that could cover it.
The power supply unit is overheated.	Let the power supply unit cool down.
The DC plug is partially inserted into the back of the device or inserted too slowly.	Fully insert the DC plug.
Displays message: Alarm module fault, please contact service provider	
General failure of the device and/or the alarm module. Therapy cannot be started again.	Contact your service provider immediately.

General technical specifications

Power supply	**90W power supply unit** Input range: 100–240V, 50–60Hz, 115V, 400Hz nominal for aircraft use Typical power consumption: 70W (80VA) Maximum power consumption: 110W (120VA)
	30W power supply unit Input range: 100–240V, 50–60Hz, 115V, 400Hz nominal for aircraft use Typical power consumption: 20W (40VA) Maximum power consumption: 36W (75VA)
	90W DC/DC converter Nominal inputs: 12V, 24V Typical power consumption: 70W Maximum power consumption: 110W

Environmental conditions	Operating temperature: 41°F to 95°F (+5°C to +35°C) **Note:** The air flow for breathing produced by this therapy device can be higher than the temperature of the room. Under extreme ambient temperature conditions (104ºF / 40ºC) the device remains safe. Operating humidity: 10 to 95% non-condensing Operating altitude: Sea level to 8,500' (2,591 m); air pressure range 1013 hPa to 738 hPa Storage and transport temperature: -4°F to 140°F (-20°C to +60°C) Storage and transport humidity: 10 to 95% non-condensing
Aircraft use	ResMed confirms that the device/s meets the Federal Aviation Administration (FAA) requirements (RTCA/DO-160, section 21, category M) for all phases of air travel.
Electromagnetic compatibility	Product complies with all applicable electromagnetic compatibility requirements (EMC) according to IEC60601-1-2, for residential, commercial and light industry environments. It is recommended that mobile communication devices are kept at least 1 m away from the device. Information regarding the electromagnetic emissions and immunity of this ResMed device can be found on **www.resmed.com,** on the Products page under **Service and Support**. Click on the PDF file for your language.
IEC 60601-1 classification	Class II (double insulation), Type BF, Ingress protection IP21

VPAP ST-A technical specifications

Mode pressure ranges	**CPAP mode** Set Pressure: 4–20 cm H_2O **S, ST, T and PAC modes** IPAP: 4–30 cm H_2O; EPAP: 3–25 cm H_2O **iVAPS mode** PS: 0–27 cm H_2O; EPAP: 3–25 cm H_2O
Maximum single fault pressure	Maximum single fault steady state pressure: 30 cm H_2O—if pressure exceeded for > 6 sec; 40 cm H_2O—if pressure exceeded for >1 sec

Physical	Nominal dimensions (L x W x H): 6.0" x 6.8" x 3.4" (153 mm x 172 mm x 86 mm) Weight: 2.3 lbs (1.04 kg) Housing construction: Flame retardant engineering thermoplastic Air outlet: 22 mm conical air outlet (complies with ISO 5356-1:2004)	
Air filter	Hypoallergenic air filter: Acrylic and polypropylene fibers in a polypropylene carrier Standard air filter: Polyester non-woven fiber	
Sound DECLARED DUAL-NUMBER NOISE EMISSION VALUES in accordance with ISO 4871:1996	**Pressure level (CPAP mode)**	
	With SlimLine air tubing:	26 dBA with uncertainty of 2 dBA as measured according to ISO 17510 1:2007
	With Standard air tubing:	27 dBA with uncertainty of 2 dBA as measured according to ISO 17510 1:2007
	With either SlimLine or Standard air tubing and H5i:	28 dBA with uncertainty of 2 dBA as measured according to ISO 17510 1:2007
	Power level (CPAP mode)	
	With SlimLine air tubing:	34 dBA with uncertainty of 2 dBA as measured according to ISO 17510 1:2007
	With Standard air tubing:	35 dBA with uncertainty of 2 dBA as measured according to ISO 17510 1:2007
	With either SlimLine or Standard air tubing and H5i:	36 dBA with uncertainty of 2 dBA as measured according to ISO 17510 1:2007
Alarm volume settings	Low (nominal 56 dBA), Medium (nominal 68 dBA), High (nominal 80 dBA)	
Supplemental oxygen	Recommended maximum supplemental oxygen flow: 15 L/min (CPAP, S, ST, T, PAC); 4 L/min (iVAPS mode)	

H5i technical specifications

Temperature	Maximum heater plate temperature: 150°F (65°C) Temperature cut-out: 165°F (74°C) Maximum gas temperature: ≤ 106°F (≤ 41°C)
Physical	Dimensions (L x W x H): 6.0" x 5.7" x 3.4" (153 mm x 145 mm x 86 mm) Weight (water tub): Docking station and unfilled water tub 1.5 lb (0.67 kg) Weight (cleanable water tub): Docking station and unfilled water tub 1.7 lb (0.77 kg) Water capacity: To maximum fill line 380 mL
Materials	Docking station: Flame retardant engineering thermoplastic, aluminium Water tub: Injection molded plastic, aluminium and thermoplastic elastomer Cleanable water tub: Injection molded plastic, stainless steel and silicone seal

Air tubing technical specifications

Air tubing	Material	Length	Inner diameter
ClimateLine heated air tubing	Flexible plastic and electrical components	6'6" (2 m)	0.6" (15 mm)
ClimateLine^{MAX} heated air tubing	Flexible plastic and electrical components	6'3" (1.9 m)	0.75" (19 mm)
SlimLine air tubing	Flexible plastic	6' (1.8 m)	0.6" (15 mm)
Standard air tubing	Flexible plastic	6'6" (2.0 m)	0.75" (19 mm)
3 m air tubing	Flexible plastic	9'10" (3.0 m)	0.75" (19 mm)
Heated air tubing temperature cut-out: ≤ 106°F (≤ 41°C)			

Notes:

- *The manufacturer reserves the right to change these specifications without notice.*
- *The temperature and relative humidity settings displayed for Climate Control are not measured values.*
- *Check with your clinician/service provider before using the SlimLine air tubing with devices other than the S9 or H5i.*
- *The electrical connector end of the heated air tubing is only compatible with the H5i air outlet and should not be fitted to the device or mask.*

- *When using the SlimLine or ClimateLine above 20 cm H_2O, the device optimum performance may not be reached if used with an antibacterial filter. The device performance must be checked prior to prescribing the SlimLine for use with an antibacterial filter.*
- *The ClimateLine or ClimateLine^{MAX} is designed only for use with the H5i.*

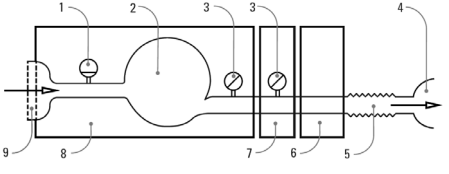
Humidifier performance

The following settings have been tested at 71.6°F (22°C) ambient temperature:

Mask pressure cm H_2O	RH output %		Nominal system output AH[a], BTPS[b]	
	Setting 3	Setting 6	Setting 3	Setting 6
3	90	100	10	18
10	95	100	11.5	21
20	95	100	11	18
25	100	100	12	13.5

a. AH - Absolute Humidity in mg/L.
b. BTPS - Body Temperature Pressure Saturated.

Pneumatic flow path



1. Flow sensor
2. Blower
3. Pressure sensor
4. Mask
5. Air tubing
6. H5i
7. Alarm module
8. Device
9. Inlet filter

Flow (maximum) at set pressures

The following are measured at the end of the specified air tubing:

Pressure, cm H_2O	VPAP ST-A and Standard, L/min	VPAP ST-A, H5i and Standard, L/min	VPAP ST-A and SlimLine, L/min	VPAP ST-A, H5i and ClimateLine, L/min
4	200	170	195	170
8	200	170	190	170
12	200	170	184	170
16	200	170	175	170
20	190	170	168	161
25	180	161	144	125

Displayed values

Value	Range	Display resolution
Pressure sensor at air outlet		
Mask pressure	3–30 cm H_2O	0.1 cm H_2O
Flow derived values		
Leak	0–200 L/min	1 L/min
Tidal volume	0–4000 mL	1 mL
Respiratory rate	0–50 BPM	1 BPM
Minute ventilation	0–30 L/min	0.1 L/min
Ti	0.1–4.0 sec	0.1 sec
I:E ratio	1:50–2:1	0.1

Value	Accuracy[a]
Pressure measurement[a]	
Mask pressure	±0.5 cm H_2O (+4% of measured value)
Flow measurements[a]	
Leak[b]	±12 L/min or 20% of reading, whichever is greater, at 0 to 60 L/min
Tidal volume[b,c]	±20%
Respiratory rate[b,c]	±1 BPM
Minute ventilation[b, c]	±20%

a. Results are expressed at ATPD (Ambient Temperature and Pressure, Dry).
b. Accuracy may be reduced by the presence of leaks, supplemental oxygen, tidal volumes <100 mL or minute ventilation <3 L/min.
c. Measurement accuracy verified as per ISO 10651-6:2004 for Home Care Ventilatory Support Devices (Figure 101 and Table 101).

Symbols

The following symbols may appear on your product or packaging.
Caution; Read instructions before use; **IP21** Protection against insertion of fingers and against vertically dripping water; Type BF equipment; Class II equipment; Start/Stop; Manufacturer; EC REP European Authorized Representative; European RoHS; LOT Batch code; REF Catalogue number; SN Serial number; Direct current; Lock/unlock; China pollution control logo 1; China pollution control logo 2; **IP20** Not drip proof; Keep dry; Alarm mute key; Not for use on more than one patient.; MAX Maximum water level; Disinfectable up to 200°F (93°C); Use distilled or deionized water only.; Remove tub to fill; Follow instructions for use; Rx Only Prescription only (In the US, Federal law restricts these devices to sale by or on the order of a physician.);

Environmental information

WEEE 2002/96/EC is a European Directive that requires the proper disposal of electrical and electronic equipment. This device should be disposed of separately, not as unsorted municipal waste. To dispose of your device, you should use appropriate collection, reuse and recycling systems available in your region. The use of these collection, reuse and recycling systems is designed to

reduce pressure on natural resources and prevent hazardous substances from damaging the environment.
If you need information on these disposal systems, please contact your local waste administration. The crossed-bin symbol invites you to use these disposal systems. If you require information on collection and disposal of your ResMed device please contact your ResMed office, local distributor or go to www.resmed.com/environment.

Servicing

The VPAP ST-A and H5i are intended to provide safe and reliable operation when operated in accordance with the instructions provided by ResMed. ResMed recommends that the VPAP ST-A and H5i be inspected and serviced by an authorized ResMed Service Center if there is any sign of wear or concern with device function. Otherwise, service and inspection of the devices generally should not be required during the five year design life of the device.

Limited warranty

ResMed Ltd (hereafter 'ResMed') warrants that your ResMed product shall be free from defects in material and workmanship from the date of purchase for the period specified below.

Product	Warranty period
• Mask systems (including mask frame, cushion, headgear and tubing)—excluding single-use devices • Accessories—excluding single-use devices • Flex-type finger pulse sensors • Humidifier water tubs	90 days
• Batteries for use in ResMed internal and external battery systems	6 months
• Clip-type finger pulse sensors • CPAP and bilevel device data modules • Oximeters and CPAP and bilevel device oximeter adapters • Humidifier cleanable water tubs • Titration control devices	1 year
• CPAP, bilevel and ventilation devices (including external power supply units) • Humidifiers • Battery accessories • Portable diagnostic/screening devices	2 years

This warranty is only available to the initial consumer. It is not transferable.

If the product fails under conditions of normal use, ResMed will repair or replace, at its option, the defective product or any of its components.

This Limited Warranty does not cover: a) any damage caused as a result of improper use, abuse, modification or alteration of the product; b) repairs carried out by any service organization that has not been expressly authorized by ResMed to perform such repairs; and c) any damage or contamination due to cigarette, pipe, cigar or other smoke.

Warranty is void on product sold, or resold, outside the region of original purchase.

Warranty claims on defective product must be made by the initial consumer at the point of purchase.

This warranty replaces all other expressed or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose. Some regions or states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

ResMed shall not be responsible for any incidental or consequential damages claimed to have resulted from the sale, installation or use of any ResMed product. Some regions or states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from region to region. For further information on your warranty rights, contact your local ResMed dealer or ResMed office.

⚠ WARNINGS

- Read the entire manual before using the device.
- Use the device only as directed by your physician or healthcare provider.
- Use the device only for the intended use as described in this manual. Advice contained in this manual should not supersede instructions given by the prescribing physician.
- If you notice any unexplained changes in the performance of the device, if it is making unusual or harsh sounds, if the device or the power supply are dropped or mishandled, if water is spilled into the enclosure, or if the enclosure is broken, discontinue use and contact your ResMed Service Center.
- Beware of electrocution. Do not immerse the device, humidifier, power supply or power cord in water. In the event of a spill, disconnect the device from the power supply and let the parts dry. Always unplug the device before cleaning and make sure that all parts are dry before plugging in the device.
- Explosion hazard—do not use in the vicinity of flammable anesthetics.
- Make sure the power cord and plug are in good condition and the equipment is not damaged.

- Keep the power cord away from hot surfaces.
- The device should only be used with masks (and connectors[1]) recommended by ResMed, or by a physician or respiratory therapist. A mask should not be used unless the device is turned on. Once the mask is fitted, ensure that the device is blowing air. The vent hole or holes associated with the mask should never be blocked.

  Explanation: The device is intended to be used with special masks (or connectors) which have vent holes to allow continuous flow of air out of the mask. When the device is turned on and functioning properly, new air from the device flushes the exhaled air out through the mask vent holes. However, when the device is not operating, insufficient fresh air will be provided through the mask, and the exhaled air may be rebreathed. Rebreathing of exhaled air for longer than several minutes can, in some circumstances, lead to suffocation. This applies to most models of CPAP or bilevel devices.
- Oxygen supports combustion. Oxygen must not be used while smoking or in the presence of an open flame.
- Always ensure that the device is turned on and airflow generated before the oxygen supply is turned on. Always turn the oxygen supply off before the device is turned off, so that unused oxygen does not accumulate within the device enclosure and create a risk of fire.
- Do not operate the H5i if it is not working properly or if any part of the bilevel device or H5i has been dropped or damaged.
- Do not leave long lengths of air tubing around the top of your bed. It could twist around your head or neck while you are sleeping.
- Do not use electrically conductive or antistatic air tubings.
- Do not use the air tubing if there are any visible signs of damage.
- Only ResMed air tubing and accessories should be used with the device. A different type of air tubing or accessory may alter the pressure you actually receive, reducing the effectiveness of the treatment.
- Only use the ResMed 90W or 30W power supply unit. Use the 90W power supply unit to power the system comprising the device, H5i, air tubing, DC/DC converter and battery pack. The 30W power supply unit is designed to power the device only and recommended for travelling.
- Only ResMed products are designed to be connected to the module connector port. Connecting other devices could damage the device.
- Blocking the air tubing and/or air inlet of the device while in operation could lead to overheating of the device.

[1] Ports may be incorporated into the mask or in connectors that are near the mask.

⚠ CAUTIONS

- Do not open the device enclosure. There are no user serviceable parts inside. Repairs and servicing should only be performed by an authorised ResMed service agent.
- Do not use bleach, chlorine, alcohol, or aromatic-based solutions, moisturizing or antibacterial soaps or scented oils to clean the device, humidifier or air tubing. These solutions may cause damage and reduce the life of these products.
- Incorrect system setup may result in incorrect mask pressure reading. Ensure the system is correctly set up.
- Be careful not to place the device where it can be bumped or where someone is likely to trip over the power cord.
- Make sure that the area around the device is dry and clean and clear of bedding, clothes or other objects that could block the air inlet or cover the power supply unit.
- Ensure that the device is protected against water if used outdoors. Enclose the device in the S9 travel bag for transport.
- Do not open the H5i enclosure. There are no user serviceable parts inside. Repairs and servicing should only be performed by an authorised ResMed service agent.
- The H5i should only be used with tubing or accessories recommended by ResMed. Connection of other delivery tubes or accessories could result in injury, or damage to the device.
- Do not overfill the water tub as water may enter the device and air tubing.
- Do not use any additives (eg, scented oils or perfumes). These may reduce the humidification output of the H5i and/or cause deterioration of the water tub materials.
- Take care when handling your H5i as the water/water tub may be hot. Allow 10 minutes for the heater plate and any excess water to cool.
- The H5i should only be connected or disconnected when the water tub is empty.
- Make sure that the water tub is empty before transporting the H5i.
- Do not operate the H5i on an aircraft as water may enter the bilevel device and air tubing during turbulence.
- Always place the H5i on a level surface below the level of the user to prevent the mask and tubing from filling with water.
- If liquids are inadvertently spilled into or on the H5i, unplug the device from the power outlet. Disconnect the H5i from the device and allow the H5i to drain and dry before re-using.

Manufacturer: ResMed Ltd 1 Elizabeth Macarthur Drive Bella Vista NSW 2153 Australia. **Distributed by:** ResMed Corp 9001 Spectrum Center Boulevard San Diego CA 92123 USA. EC REP ResMed (UK) Ltd 96 Milton Park Abingdon Oxfordshire OX14 4RY UK. See www.resmed.com for other ResMed locations worldwide.
For patent information, see www.resmed.com/ip.