ResMed

AirCurve™10
VAUTO
PLUS C

User guide

English | 简体中文

Welcome

The AirCurve™ 10 VAuto Plus C is a bilevel positive airway pressure device.

⚠ WARNING

- Read this entire guide before using the device.
- Use the device according to the intended use provided in this guide.
- The advice provided by your prescribing doctor should be followed ahead of the information provided in this guide.

Indications for use

AirCurve 10 VAuto Plus C

The AirCurve 10 VAuto Plus C device is indicated for the treatment of obstructive sleep apnoea (OSA) in patients weighing more than 30 kg. It is intended for home and hospital use.

The humidifier is intended for single patient use in the home environment and re-use in a hospital/institutional environment.

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.

Adverse effects

You should report unusual chest pain, severe headache, or increased breathlessness to your 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.

At a glance

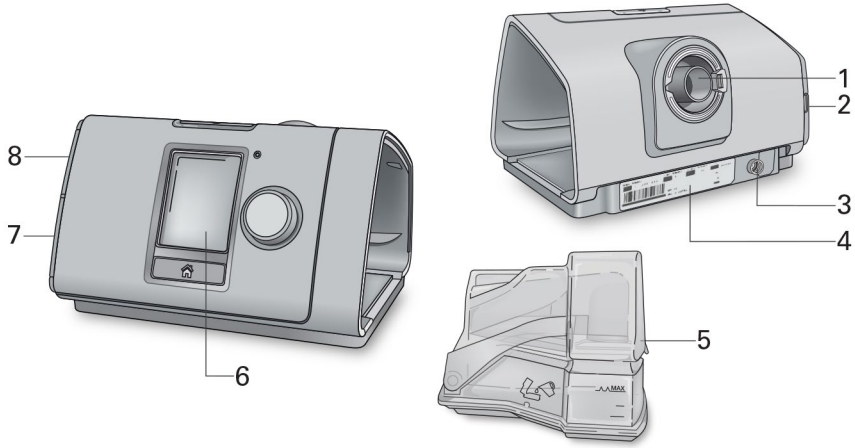
The AirCurve 10 VAuto Plus C includes the following:

- Device
- HumidAir™ humidifier
- Air tubing
- Power supply unit
- Travel bag
- SD card (already inserted).

Contact your care provider for a range of accessories available for use with the device including:

- Air tubing (heated and non-heated): ClimateLineAir™, SlimLine™, ClimateLineAir Oxy, Standard
- Side cover for use without the humidifier
- Filter: Standard filter
- Air10™ DC/DC converter (12V/24V)
- SD card reader
- Air10 oximeter adapter
- Air10 USB adapter
- Power Station II
- Air10 tubing elbow.

About your device



1 Air outlet
2 Air filter cover
3 Power inlet
4 Serial number and device number
5 HumidAir humidifier
6 Screen
7 Adapter cover
8 SD card cover

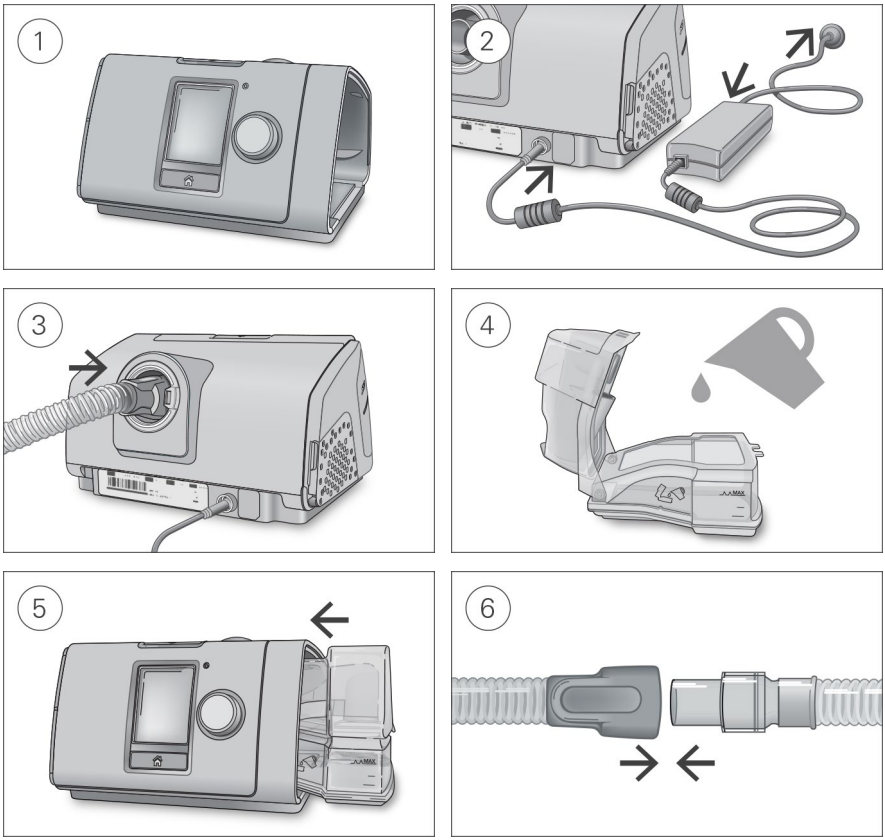
About the control panel

Start/Stop button	Press to start/stop therapy. Press and hold for three seconds to enter power save mode.
Dial	Turn to navigate the menu and press to select an option. Turn to adjust a selected option and press to save your change.
Home button	Press to return to the Home screen.

Different icons may be displayed on the screen at different times including:

Ramp Time	Wireless signal strength (green)
Humidity	Wireless transfer not enabled (grey)
Humidifier warming	No wireless connection
Humidifier cooling	Airplane Mode

Setup



⚠ CAUTION

Do not overfill the humidifier as water may enter the device and air tubing.

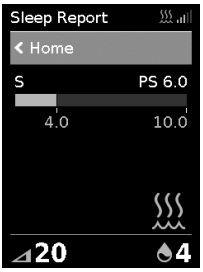
1. Place the device on a stable level surface.
2. Plug the power connector into the rear of the device. Connect one end of the power cord into the power supply unit and the other end into the power outlet.
3. Connect the air tubing firmly to the air outlet located on the rear of the device.
4. Open the humidifier and fill it with water up to the maximum water level mark. Do not fill the humidifier with hot water.
5. Close the humidifier and insert it into the side of the device.
6. Connect the free end of the air tubing firmly onto the assembled mask. See the mask user guide for detailed information.

Recommended masks are available on www.resmed.com.

Starting therapy

1. Fit your mask.
2. Press Start/Stop or breathe normally if SmartStart™ is enabled.

You will know that therapy is on when the **Sleep Report** screen is displayed.



The pressure bar shows the inspiratory and expiratory pressures in green. The green bar will expand and contract as you breathe in and out.

The screen will go black automatically after a short period of time. You can press Home or the dial to turn it back on. If power is interrupted during therapy, the device will automatically restart therapy when power is restored.

The AirCurve 10 VAuto Plus C device has a light sensor that adjusts the screen brightness based on the light in the room.

Stopping therapy

1. Remove your mask.
2. Press Start/Stop or if SmartStart is enabled, therapy will stop automatically after a few seconds.

The **Sleep Report** now gives you a summary of your therapy session.

Usage hours–Indicates the number of hours of therapy you received last session.

Mask Seal–Indicates how well your mask sealed:

Good mask seal.

Needs adjusting, see Mask Fit.

Humidifier–Indicates if your humidifier is working properly:

Humidifier working.

Humidifier might be faulty, contact your care provider.

If set by your care provider, you will also see:

Events per hour–Indicates the number of apnoeas and hypopnoeas experienced per hour.

More Info–Turn the dial to scroll down to view more detailed usage data.

Power save mode

Your AirCurve 10 VAuto Plus C device records your therapy data. In order to allow it to transmit the data to your care provider, you should not unplug the device. However, you can put it into power save mode to save electricity.

To enter power save mode:

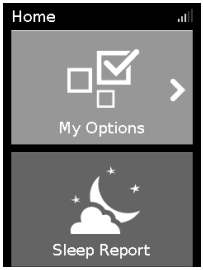
- Press and hold Start/Stop for three seconds.
  The screen goes black.

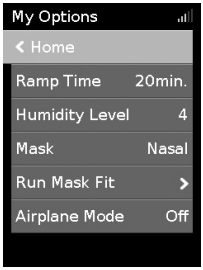
To exit power save mode:

- Press Start/Stop once.
  The **Home** screen is displayed.

My Options

Your AirCurve 10 VAuto Plus C device has been set up for your needs by your care provider, but you may find you want to make small adjustments to make your therapy more comfortable.



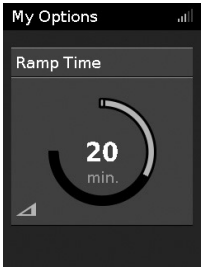


Highlight **My Options** and press the dial to see your current settings. From here, you can personalise your options.

Ramp Time

Designed to make the beginning of therapy more comfortable, Ramp Time is the period during which the pressure increases from a low start pressure to the prescribed treatment pressure.

You can set your Ramp Time to Off or between 5 to 45 minutes.



To adjust Ramp Time:

1. In **My Options**, turn the dial to highlight **Ramp Time** and then press the dial.
2. Turn the dial to adjust the ramp time to your preferred setting and press the dial to save the change.

Humidity Level

The humidifier moistens the air and is designed to make therapy more comfortable. If you are getting a dry nose or mouth, turn up the humidity. If you are getting any moisture in your mask, turn down the humidity.

You can set the Humidity Level to Off or between 1 and 8, where 1 is the lowest humidity setting and 8 is the highest humidity setting.

To adjust the Humidity Level:

1. In **My Options**, turn the dial to highlight **Humidity Level** and then press the dial.
2. Turn the dial to adjust the humidity level and press the dial to save the change.

If you continue to get a dry nose or mouth, or moisture in your mask, consider using ClimateLineAir heated air tubing. ClimateLineAir together with Climate Control delivers more comfortable therapy.

Mask Fit

Mask Fit is designed to help you assess and identify possible air leaks around your mask.

To check Mask Fit:

1. Fit the mask as described in the mask user guide.
2. In **My Options**, turn the dial to highlight **Run Mask Fit** and then press the dial.
   The device starts blowing air.
3. Adjust the mask, mask cushion and headgear until you get a **Good** result.

To stop Mask Fit, press the dial or Start/Stop. If you are unable to get a good mask seal, talk to your care provider.

More options

There are some more options on your device which you can personalise.

Leak Alert*	When Leak Alert is enabled, the device beeps if the mask leaks too much air or if you remove the mask during therapy.
SmartStart*	When SmartStart is enabled, therapy starts automatically when you breathe into your mask. When you remove your mask, it stops automatically after a few seconds.

*When enabled by your care provider.

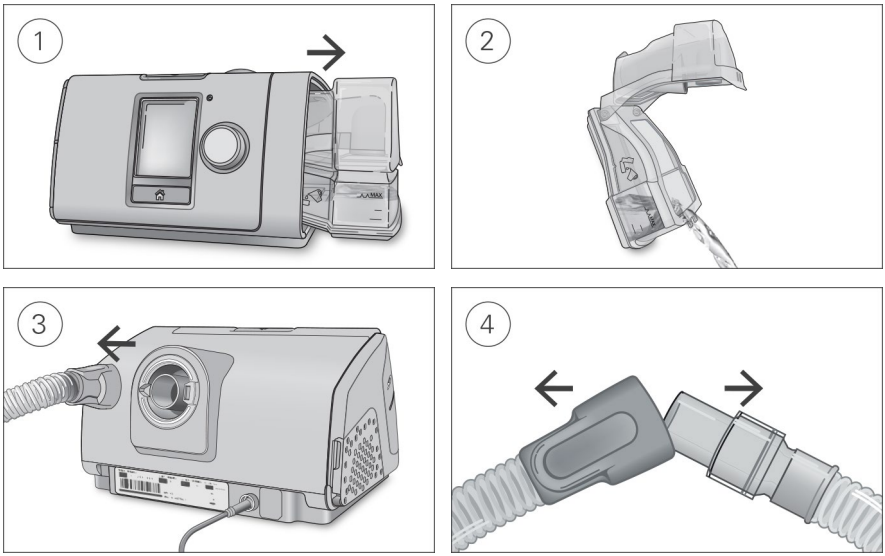
Caring for your device

It is important that you regularly clean your AirCurve 10 VAuto Plus C device to make sure you receive optimal therapy. The following sections will help you with disassembling, cleaning, checking and reassembling your device.

⚠ WARNING

Regularly clean your tubing assembly, humidifier and mask to receive optimal therapy and to prevent the growth of germs that can adversely affect your health.

Disassembling



1. Hold the humidifier at the top and bottom, press it gently and pull it away from the device.
2. Open the humidifier and discard any remaining water.
3. Hold the cuff of the air tubing and gently pull it away from the device.
4. Hold both the cuff of the air tubing and the swivel of the mask, then gently pull apart.

Cleaning

You should clean the device weekly as described. Refer to the mask user guide for detailed instructions on cleaning your mask.

1. Wash the humidifier and air tubing in warm water using mild detergent.
2. Rinse the humidifier and air tubing thoroughly and allow to dry out of direct sunlight and/or heat.
3. Wipe the exterior of the device with a dry cloth.

Notes:

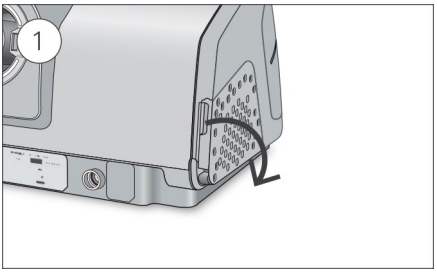
- The humidifier may be washed in a dishwasher on the delicate or glassware cycle (top shelf only). It should not be washed at temperatures higher than 65°C.
- Do not wash the air tubing in a dishwasher or washing machine.
- Empty the humidifier daily and wipe it thoroughly with a clean, disposable cloth. Allow to dry out of direct sunlight and/or heat.

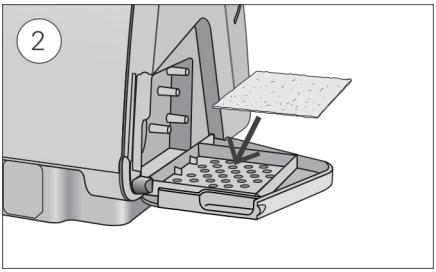
Checking

You should regularly check the humidifier, air tubing and the air filter for any damage.

1. Check the humidifier:
   - Replace it if it is leaking or has become cracked, cloudy or pitted.
   - Replace it if the seal is cracked or torn.
   - Remove any white powder deposits using a solution of one part household vinegar to 10 parts water.
2. Check the air tubing and replace it if there are any holes, tears or cracks.
3. Check the air filter and replace it at least every six months. Replace more often if there are any holes or blockages by dirt or dust.

To replace the air filter:





1. Open the air filter cover and remove the old air filter.
   The air filter is not washable or reusable.
2. Place a new air filter onto the air filter cover and then close it.
   Make sure the air filter is fitted at all times to prevent water and dust from entering the device.

Reassembling

When the humidifier and air tubing are dry, you can reassemble the parts.

1. Connect the air tubing firmly to the air outlet located on the rear of the device.
2. Open the humidifier and fill it with room temperature water up to the maximum water level mark.
3. Close the humidifier and insert it into the side of the device.
4. Connect the free end of the air tubing firmly onto the assembled mask.

Therapy data

Your AirCurve 10 VAuto Plus C device records your therapy data for you and your care provider so they can view and make changes to your therapy if required. The data is recorded and then transferred to your care provider wirelessly, if a wireless network is available, or via an SD card.

Data transmission

Your AirCurve 10 VAuto Plus C device has the capability of wireless communication so that your therapy data can be transmitted to your care provider to improve the quality of your treatment. This is an optional feature that will only be available if you choose to benefit from it and if a wireless network is available. It also allows your care provider to update your therapy settings in a more timely manner or upgrade your device software to ensure you receive the best therapy possible.

The data is usually transmitted after therapy has stopped. In order to make sure that your data is transferred, leave your device connected to the mains power at all times and make sure that it is not in Airplane Mode.

Notes:

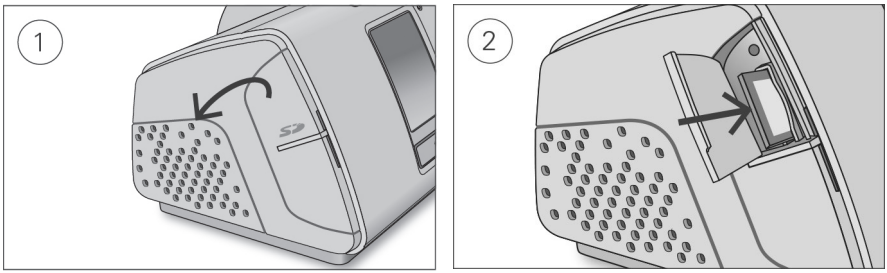
- Therapy data might not be transmitted if you use it outside of the country or region of purchase.
- Wireless communication depends on network availability.
- Devices with wireless communication might not be available in all regions.

SD card

An alternative way for your therapy data to be transferred to your care provider is via the SD card. Your care provider may ask you to send the SD card by mail or to bring it in. When instructed by your care provider, remove the SD card.

Do not remove the SD card from the device when the SD light is flashing, because data is being written to the card.

To remove the SD card:



1. Open the SD card cover.
2. Push in the SD card to release it. Remove the SD card from the device.
   Place the SD card in the protective folder and send it back to your care provider.

For more information on the SD card refer to the SD card protective folder provided with your device.

Note: The SD card should not be used for any other purpose.

Travelling

You can take your AirCurve 10 VAuto Plus C device with you wherever you go. Just keep the following in mind:

- Use the travel bag provided to prevent damage to the device.
- Empty the humidifier and pack it separately in the travel bag.
- Make sure you have the appropriate power cord for the region you are travelling to. For information on purchasing, contact your care provider.
- If you are using an external battery, you should turn off the humidifier in order to maximise the life of your battery. Do this by turning the **Humidity Level** to Off.

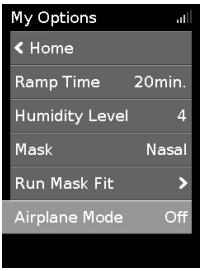
Travelling by plane

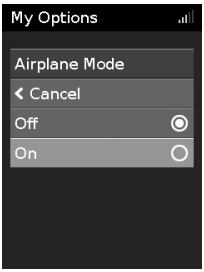
Your AirCurve 10 VAuto Plus C device may be taken on board as carry-on luggage. Medical devices do not count toward your carry-on luggage limit.

You can use your AirCurve 10 VAuto Plus C device on a plane as it meets the Federal Aviation Administration (FAA) requirements. Air travel compliance letters can be downloaded and printed from www.resmed.com.

When using the device on a plane:

- Make sure the humidifier is completely empty and inserted into your device. The device will not work without the humidifier inserted.
- Turn on **Airplane Mode.**





To turn on Airplane Mode:

1. In **My Options**, turn the dial to highlight **Airplane Mode** and then press the dial.
2. Turn the dial to select **On** and then press the dial to save the change.
   The Airplane Mode icon ✈ is displayed at the top right of the screen.

⚠ CAUTION

Do not use the device with water in the humidifier on a plane due to the risk of inhalation of water during turbulence.

Troubleshooting

If you have any problems, have a look at the following troubleshooting topics. If you are not able to fix the problem, contact your care provider or ResMed. Do not try to open the device.

General troubleshooting

Problem/possible cause	Solution
Air is leaking from around my mask	
Mask may be fitted incorrectly.	Make sure your mask is fitted correctly. See your mask user guide for fitting instructions or use the Mask Fit function to check your mask fit and seal.
I am getting a dry or blocked nose	
Humidity level may be set too low.	Adjust the Humidity Level. If you have ClimateLineAir heated air tubing, see the ClimateLineAir user guide.
I am getting droplets of water on my nose, in the mask and air tubing	
Humidity level may be set too high.	Adjust the Humidity Level. If you have ClimateLineAir heated air tubing, see the ClimateLineAir user guide.
My mouth is very dry and uncomfortable	
Air may be escaping through your mouth.	Increase the Humidity Level. You may need a chin strap to keep your mouth closed or a full face mask.
Air pressure in my mask seems too high (it feels like I am getting too much air)	
Ramp may be turned off.	Use the Ramp Time option.
Air pressure in my mask seems too low (it feels like I am not getting enough air)	
Ramp may be in progress.	Wait for air pressure to build up or turn Ramp Time off.
My screen is black	
Backlight on the screen may have turned off. It turns off automatically after a short period of time.	Press Home or the dial to turn it back on.
Power may not be connected.	Connect the power supply and make sure the plug is fully inserted.
I have stopped therapy, but the device is still blowing air	
Device is cooling down.	Device blows a small amount of air in order to avoid condensation in the air tubing. It will stop automatically after 30 minutes.

Problem/possible cause	Solution
My humidifier is leaking	
Humidifier may not be assembled correctly.	Check for damage and reassemble the humidifier correctly.
Humidifier may be damaged or cracked.	Contact your care provider for a replacement.
My therapy data has not been sent to my care provider	
Wireless coverage may be poor.	Make sure that the device is placed where there is coverage (ie, on your bedside table, not in a drawer or on the floor). The Wireless signal strength icon indicates good coverage when all bars are displayed, and poor coverage when fewer bars are displayed.
The No wireless connection icon is displayed on the top right of the screen. no wireless network available.	Make sure that the device is placed where there is coverage (ie, on your bedside table, not in a drawer or on the floor). If instructed to do so, send the SD card to your care provider. The SD card also contains your therapy data.
Device may be in Airplane Mode.	Turn off Airplane Mode, see Travelling by plane.
Data transfer is not enabled for your device.	Talk to your care provider about your settings.
My screen and buttons are flashing	
Software upgrade is in progress.	Software upgrade takes approximately 10 minutes to complete.

Device messages

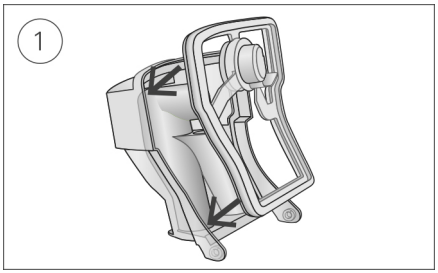
Device message/possible cause	Solution
High leak detected, check your water tub, tub seal or side cover	
Humidifier may not be inserted properly.	Make sure the humidifier is correctly inserted.
Humidifier seal may not be inserted properly.	Open the humidifier and make sure that the seal is correctly inserted.
High leak detected, connect your tubing	
Air tubing may not be connected properly.	Make sure the air tubing is firmly connected at both ends.
Mask may be fitted incorrectly.	Make sure your mask is fitted correctly. See your mask user guide for fitting instructions or use the Mask Fit function to check your mask fit and seal.
Tubing blocked, check your tubing	
Air tubing may be blocked.	Check the air tubing and remove any blockages. Press the dial to clear the message and then press Start/Stop to restart the device.
SD card error, remove your card and press Start to begin therapy	
SD card may not be inserted correctly.	Remove and reinsert the SD card.

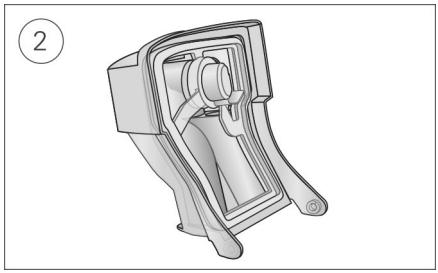
Device message/possible cause	Solution
Read only card, please remove, unlock and re-insert SD card	
SD card switch may be in the lock (read-only) position.	Move the switch on the SD Card from the lock position to the unlock position and then re-insert it.
System fault, refer to user guide, Error 004	
Device may have been left in a hot environment.	Allow to cool before re-use. Disconnect the power supply and then reconnect it to restart the device.
Air filter may be blocked.	Check the air filter and replace it if there are any blockages. Disconnect the power supply and then reconnect it to restart the device.
Air tubing may be blocked.	Check the air tubing and remove any blockages. Press the dial to clear the message and then press Start/Stop to restart the device.
There may be water in the air tubing.	Empty the water from the air tubing. Disconnect the power supply and then reconnect it to restart the device.
All other error messages, for example, System fault, refer to user guide, Error 0XX	
An unrecoverable error has occurred on the device.	Contact your care provider. Do not open the device.

Reassembling parts

Some parts of your device are designed to easily come off in order to avoid damage to the parts or the device. You can easily reassemble them as described below.

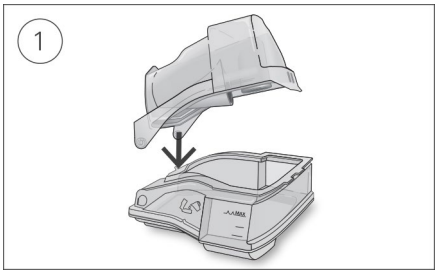
To insert the humidifier seal:

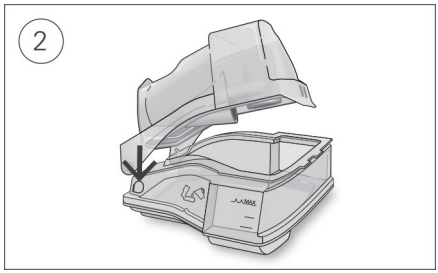




1. Place the seal into the lid.
2. Press down along all edges of the seal until it is firmly in place.

To reassemble the humidifier lid:





1. Insert one side of the lid into the pivot hole of the base.
2. Slide the other side down the ridge until it clicks into place.

General warnings and cautions

⚠ WARNING

- Make sure that you arrange the air tubing so that it will not twist around the head or neck.
- Regularly inspect power cords, cables, and power supply for damage or signs of wear. Discontinue use and replace if damaged.
- Keep the power cord away from hot surfaces.
- If you notice any unexplained changes in the performance of the device, if it is making unusual sounds, if the device or the power supply are dropped or mishandled, or if the enclosure is broken, discontinue use and contact your care provider or your ResMed Service Centre.
- Do not open or modify the device. There are no user serviceable parts inside. Repairs and servicing should only be performed by an authorised ResMed service agent.
- Beware of electrocution. Do not immerse the device, power supply or power cord in water. If liquids are spilled into or onto the device, unplug the device and let the parts dry. Always unplug the device before cleaning and make sure that all parts are dry before plugging it back in.
- Supplemental oxygen must not be used while smoking or in the presence of an open flame.
- Always make sure 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 perform any maintenance tasks while the device is in operation.
- The device should not be used adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, the device should be observed to verify normal operation in the configuration in which it will be used.
- The use of accessories other than those specified for the device is not recommended. They may result in increased emissions or decreased immunity of the device.
- Regularly check the bacterial/viral filter for signs of moisture or other contaminants, particularly during nebulization or humidification. Failure to do so could result in increased breathing system resistance.

⚠ CAUTION

- Use only ResMed parts and accessories with the device. Non-ResMed parts may reduce the effectiveness of the treatment and/or damage the device.
- Use only vented masks recommended by ResMed or by the prescribing doctor with this device. Fitting the mask without the device blowing air can result in rebreathing of exhaled air. Make sure that the mask vent holes are kept clear and unblocked to maintain the flow of the fresh air into the mask.
- Be careful not to place the device where it can be bumped or where someone is likely to trip over the power cord.
- Blocking the air tubing and/or air inlet of the device while in operation could lead to overheating of the device.
- Keep the area around the device dry, clean and clear of anything (eg, clothes or bedding) that could block the air inlet or cover the power supply unit.
- Do not place the device on its side as water might get into the device.
- Incorrect system setup may result in incorrect mask pressure reading. Ensure the system is correctly set up.

- Do not use bleach, chlorine, alcohol, or aromatic-based solutions, moisturising or antibacterial soaps or scented oils to clean the device, the humidifier or air tubing. These solutions may cause damage or affect the humidifier performance and reduce the life of the products. Exposure to smoke, including cigarette, cigar or pipe smoke, as well as ozone or other gases, may damage the device. Damage caused by any of the foregoing will not be covered by ResMed's limited warranty.
- If you use the humidifier, always place the device on a level surface lower than your head to prevent the mask and air tubing from filling with water.
- Leave the humidifier to cool for ten minutes before handling to allow the water to cool and to make sure that the humidifier is not too hot to touch.
- Make sure that the humidifier is empty before transporting the device.

Note: The device is not intended to be operated by persons (including children) with reduced physical, sensory or mental capabilities without adequate supervision by a person responsible for the patient's safety.

Technical specifications

Units are expressed in cmH_2O and hPa. 1 cmH_2O is equal to 0.98 hPa.

90W power supply unit	
AC input range:	100–240V, 50–60Hz 1.0–1.5A, Class II 115V, 400Hz 1.5A, Class II (nominal for aircraft use)
DC output:	24V ⎓ 3.75A
Typical power consumption:	53W (57VA)
Peak power consumption:	104W (108VA)
Environmental conditions	
Operating temperature:	+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 (40°C) the device remains safe.
Operating humidity:	10 to 95% relative humidity, non-condensing
Operating altitude:	Sea level to 2,591 m; air pressure range 1013 hPa to 738 hPa
Storage and transport temperature:	-20°C to +60°C
Storage and transport humidity:	5 to 95% relative humidity, non-condensing

Electromagnetic compatibility

The AirCurve 10 VAuto Plus C complies with all applicable electromagnetic compatibility requirements (EMC) according to IEC 60601-1-2:2014, 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/downloads/devices

Classification: IEC 60601-1:2005/A1:2012

Class II (double insulation), Type BF, Ingress protection IP22.

Sensors	
Pressure sensor:	Internally located at device outlet, analogue gauge pressure type, -5 to +45 cmH_2O (-5 to +45 hPa)
Flow sensor:	Internally located at device inlet, digital mass flow type, -70 to +180 L/min

Maximum single fault steady pressure

Device will shut down in the presence of a single fault if the steady state pressure exceeds:
30 cmH_2O (30 hPa) for more than 6 sec or 40 cmH_2O (40 hPa) for more than 1 sec.

Sound

Pressure level measured according to ISO 80601-2-70:2015 (CPAP mode):

SlimLine:	25 dBA with uncertainty of 2 dBA
Standard:	25 dBA with uncertainty of 2 dBA
SlimLine or Standard and humidification:	27 dBA with uncertainty of 2 dBA

Power level measured according to ISO 80601-2-70:2015 (CPAP mode):

SlimLine:	33 dBA with uncertainty of 2 dBA
Standard:	33 dBA with uncertainty of 2 dBA
SlimLine or Standard and humidification:	35 dBA with uncertainty of 2 dBA

Declared dual-number noise emission values in accordance with ISO 4871:1996.

Physical - device and humidifier

Dimensions (H x W x D):	116 mm x 255 mm x 150 mm
Air outlet (complies with ISO 5356-1:2015):	22 mm
Weight (device and cleanable humidifier):	1248 g
Housing construction:	Flame retardant engineering thermoplastic
Water capacity:	To maximum fill line 380 mL
Cleanable humidifier - material:	Injection moulded plastic, stainless steel and silicone seal

Temperature

Maximum heater plate:	68°C
Cut-out:	74°C
Maximum gas temperature:	≤ 41°C

Air filter

Standard:	Material: Polyester non woven fibre Average arrestance: >75% for ~7 micron dust

Aircraft use

ResMed confirms that device meets the Federal Aviation Administration (FAA) requirements (RTCA/DO-160, section 21, category M) for all phases of air travel.

Wireless module

Technology used*:	4G (TD-LTE) 4G (LTE FDD) 2G (GSM)
Max RF power output	4G 23 dBm ±2.7 dB 2G 33/30 dBm ±2 dB

*Applicable to only specific frequencies/frequency bands certified for use in China.

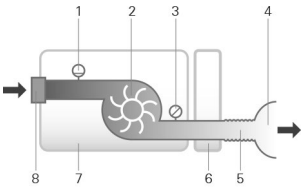
Operating pressure range

S:	2 to 25 cmH_2O (2 to 25 hPa)
CPAP:	4 to 20 cmH_2O (4 to 20 hPa)
VAuto	4 to 25 cmH_2O (4 to 25 hPa)

Supplemental oxygen

Maximum flow:	For VAuto device: 4 L/min (all modes)

Pneumatic flow path



1. Flow sensor
2. Blower
3. Pressure sensor
4. Mask
5. Air tubing
6. Humidifier
7. Device
8. Inlet filter

Design life

Device, power supply unit:	5 years
Cleanable humidifier:	2.5 years
Air tubing:	6 months

General

The patient is an intended operator.

Humidifier performance

Mask Pressure cmH_2O (hPa)	RH output % at 17°C ambient temperature	RH output % at 22°C ambient temperature	Nominal system output AH[1], BTPS[2]	
	Setting 4	Setting 8	Setting 4	Setting 8
3	85	100	6	>10
4	85	100	6	>10
10	85	100	6	>10
20	85	90	6	>10
25	85	90	6	>10

[1] AH - Absolute Humidity in mg/L

[2] BTPS - Body Temperature Pressure Saturated

Air tubing

Air tubing	Material	Length	Inner diameter
ClimateLineAir	Flexible plastic and electrical components	2 m	15 mm
ClimateLineAir Oxy	Flexible plastic and electrical components	1.9 m	19 mm
SlimLine	Flexible plastic	1.8 m	15 mm
Standard	Flexible plastic	2 m	19 mm

Heated air tubing temperature cut-out: ≤ 41°C

Notes:

- The manufacturer reserves the right to change these specifications without notice.
- The electrical connector end of the heated air tubing is only compatible with the air outlet at the device end and should not be fitted to the mask.
- Do not use electrically conductive or antistatic air tubing.
- The temperature and relative humidity settings displayed are not measured values.

Air tubing resistance to flow and compliance information

Refer to the Air tubing compliance guide in ResMed.com.

Displayed values

Value	Range	Display resolution
Pressure sensor at air outlet:		
Mask pressure	2–25 cmH_2O (2–25 hPa)	0.1 cmH_2O
Flow derived values:		
Leak	0–120 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	1:100 – 2:1	0.1

Value	Accuracy[1]
Pressure measurement[1]:	
Mask pressure[2]	±[0.5 cmH_2O (0.5 hPa) + 4% of measured value]
Flow and flow derived values[1]:	
Flow	±6 L/min or 10% of reading, whichever is greater, at 0 to 150 L/min positive flow
Leak[2]	±12 L/min or 20% of reading, whichever is greater, 0 to 60 L/min
Tidal volume[2,3]	±20%
Respiratory rate[2,3]	±1.0 BPM
Minute ventilation[2,3]	±20%

[1] Results are expressed as STPD (Standard Temperature and Pressure, Dry).

[2] Accuracy may be reduced by the presence of leaks, supplemental oxygen, tidal volumes <100 mL or minute ventilation <3 L/min.

[3] Measurement accuracy verified as per EN ISO 10651-6:2009 for Home Care Ventilatory Support Devices (Figure 101 and Table 101) using nominal ResMed mask vent flows.

Measurement system uncertainties

In accordance with ISO 80601-2-70:2015 the measurement uncertainty of the manufacturer's test equipment is:

For measures of flow	± 1.5 L/min or ± 2.7% of reading (whichever is greater)
For measures of volume (< 100 mL)	± 5 mL or 6% of reading (whichever is greater)
For measures of volume (≥ 100 mL)	± 20 mL or 3% of reading (whichever is greater)
For measures of pressure	± 0.15 cmH_2O (0.15 hPa)
For measures of time	± 10 ms

Note: ISO 80601-2-70:2015 stated accuracies and test results provided in this manual for these items already include the relevant measurement uncertainty from the table above.

Pressure accuracy

Maximum static pressure variation at 10 cmH_2O (10 hPa) according to ISO 80601-2-70:2015

Device with humidifier tub/side cover and air tubing: ±0.5 cmH_2O (±0.5 hPa)

Maximum dynamic pressure variation according to ISO 80601-2-70:2015

Device with humidifier tub/side cover and SlimLine/Standard air tubing:

Breath rate	10 BPM	15 BPM	20 BPM
Dynamic pressure variation (cmH_2O [hPa])	0.5	0.5	0.8

Pressure accuracy - bilevel

Maximum dynamic pressure variation according to ISO 80601-2-70:2015

Device with humidifier tub/side cover and air tubing:

Inspiration/Expiration mean error ± standard deviation (cmH_2O [hPa]): 1±0.3

Note: Refer to the relevant measurement uncertainty from the Measurement system uncertainties table.

% of Inspiratory Phase for calculation: > 66

% of Expiratory Phase for calculation: > 66

Note: The data time slots start at 34% of the inspiratory /expiratory pressure phase and stop at the end of the inspiratory/expiratory pressure phase.

Flow (maximum) at set pressures

The following are measured accordingly to ISO 80601-2-70:2015 at the end of the specified air tubing:

Pressure cmH_2O (hPa)	AirCurve 10 VAuto Plus C and Standard L/min	AirCurve 10 VAuto Plus C, humidification and Standard L/min	AirCurve 10 VAuto Plus C and SlimLine L/min	AirCurve 10 VAuto Plus C, humidification and ClimateLineAir L/min
4	180	143	162	151
8	168	135	151	142
12	157	136	140	135
16	144	134	128	121
20	131	123	117	109
25	120	115	96	84

Symbols

The following symbols may appear on the product or packaging.

Read instructions before use. Indicates a warning or caution. Follow instructions before use. Manufacturer. EC REP European Authorised Representative. LOT Batch code. REF Catalogue number. SN Serial number. DN Device number. On / Off. Device weight. IP22 Protected against finger sized objects and against dripping water when tilted up to 15 degrees from specified orientation. Direct current. Type BF applied part. Class II equipment. Humidity limitation. Temperature limitation. Non-ionising radiation. Contains no China environmental hazardous substances. 10/20 years of China environmental protection use period. **Rx Only** Prescription only (In the US, Federal law restricts these devices to sale by or on the order of a physician). MAX Maximum water level. DISTILLED WATER ONLY Use distilled water only. Operating altitude. 70 106 kPa Atmospheric pressure limitation. Complies with RTCA DO-160 section 21, category M.

Hazardous substances

Part name	Hazardous Substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr6)	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Power Supply Unit 90W	X	O	O	O	O	O

O: Indicates that the content of toxic and hazardous substances in all homogeneous materials of the part is below the contraction limit required as described in GB/T 26572-2011.

X: Indicates that the content of toxic and hazardous substances in at least one homogeneous material of part exceeds the concentration limit requirement as described in GB/T 26572-2011.

The Environmentally Friendly User Period (EFUP) for the 90W AC Adapter is per the symbol shown here. Certain parts may have a different EFUP and will be marked as such. The EFUP is valid only when the product is operated under the conditions defined in the user guide.

The Environmentally Friendly User Period (EFUP) for the AirCurve 10 VAuto Plus C device is per the symbol shown here, unless otherwise marked. Certain parts may have a different EFUP and will be marked as such. The EFUP is valid only when the product is operated under the conditions defined in the user guide.

Environmental information

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 ResMed.com/environment.

Servicing

The AirCurve 10 VAuto Plus C device is intended to provide safe and reliable operation when operated in accordance with the instructions provided by ResMed. ResMed recommends that the AirCurve 10 VAuto Plus C device be inspected and serviced by an authorised ResMed Service Centre if there is any sign of wear or concern with device function. Otherwise, service and inspection of the products generally should not be required during their design life.

Limited warranty

ResMed Pty 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 • Humidifiers and humidifier cleanable water tubs • Titration control devices	1 year
• CPAP, bilevel and ventilation devices (including external power supply units) • Battery accessories • Portable diagnostic/screening devices	2 years

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

During the warranty period, 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 organisation that has not been expressly authorised by ResMed to perform such repairs; c) any damage or contamination due to cigarette, pipe, cigar or other smoke; and d) any damage caused by exposure to ozone, activated oxygen or other gases; and e) any damage caused by water being spilled on or into an electronic device.

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.

Visit ResMed.com for the latest information on ResMed's Limited Warranty.

Further information

If you have any questions or require additional information on how to use the device, contact your care provider.

欢迎

AirCurve™ 10 VAuto Plus C 是一种双水平气道正压通气装置

⚠ 警告

- 请在使用设备前阅读手册全部内容。
- 根据本指南中提供的预期用途使用装置。
- 相比本指南中提供信息，由主治医生提供的建议应该优先服从。

使用指示

AirCurve 10 VAuto Plus C

AirCurve 10 VAuto Plus C 用于治疗阻塞性睡眠呼吸暂停 (OSA)，用于体重30 kg 以上的患者，可在家庭和医疗机构使用。

湿化器用于在家中供一名患者使用，在医院/机构中可重复使用。

禁忌症

患有以下已有病症的患者，可能要禁用气道正压通气疗法:

- 严重肺大泡性疾病
- 气胸或纵隔气肿
- 病理性低血压，尤其是如果伴有血管内血容量耗竭
- 脱水
- 脑脊液外漏、近期开颅手术或外伤。

不良反应

若出现异常胸痛、严重头痛或呼吸困难程度增加，须告知您的经治医生。 出现急性上呼吸道感染时，可能需要暂时中止治疗。

以此装置实施治疗时，可能会出现以下副作用:

- 口鼻或喉咙干燥
- 鼻衄
- 腹胀
- 耳部或额窦不适
- 眼部刺激
- 皮疹。

简介

AirCurve 10 VAuto Plus C 包括下列：

- 装置
- HumidAir™ 湿化器
- 呼吸管路
- 电源装置
- 旅行包
- SD 插卡（已经插入）。

联系您的保健服务提供商以了解一系列可用于装置的附件，包括：

- 呼吸管路（加热和未加热的）：ClimateLineAir™、SlimLine™、ClimateLineAir Oxy、标准
- 不与湿化器配套使用的侧盖
- 过滤器：标准过滤器
- Air10™ DC/DC 转换器 (12V/24V)
- SD 卡读卡器
- Air10 血氧仪适配器
- Air10 USB 适配器
- Power Station II
- Air10 管路弯头。

关于您的装置

1 空气输出口
2 空气过滤器盖
3 电源线插口
4 序列号和装置号
5 HumidAir 湿化器
6 屏幕
7 适配器盖
8 SD 插卡盖

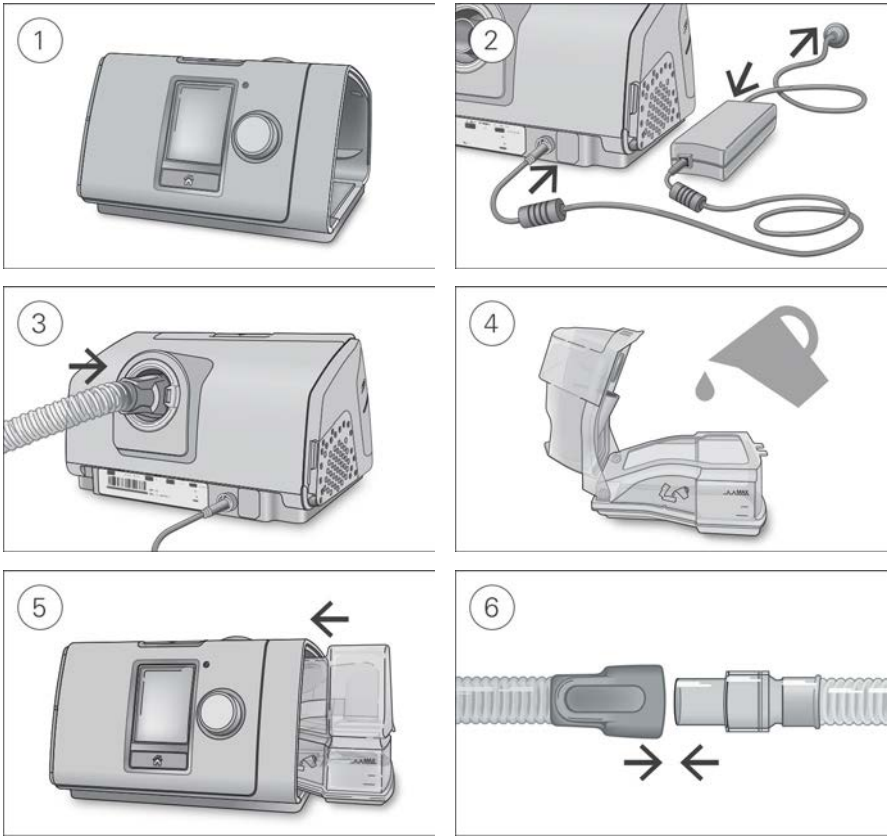
关于控制面板

 开始/停止按钮	按下以开始/停止治疗。 按下并按住 3 秒以进入省电模式。
 微调器	找到导航菜单，按下以选择一个选项。 旋转以调节已选定的选项，然后按下以保存更改。
 首页按钮	按下以返回到首页屏幕。

不同时间里屏幕上可能会显示不同的图标，包括：

 升压时间	 无线信号强度（绿色）
 湿度	 无线传输未启用（灰色）
 湿化器加温	 没有无线连接
 湿化器冷却	 飞行模式

设置



⚠ 注意事项

不得在湿化器中添加过多的水，以免水进入装置和呼吸管路。

1. 把装置放在稳定的水平面上。
2. 将电源接头插入装置后面。 连接电源线的一头到电源装置，另一头至电源插座。
3. 将呼吸管路牢固地连接至位于装置后面的空气输出口。
4. 打开湿化器并将水添加到最大水位线标志处。
   不得将热水装入湿化器。
5. 关闭湿化器并将其插入到装置的一侧。
6. 将呼吸管路的自由端牢固地连接到组装好的面罩系统。
   参阅面罩用户指南中的详细信息。

推荐的面罩可在 www.resmed.com 网站上找到。

开始治疗

1. 佩戴您的面罩。
2. 如果已启用智能启动，按下开始/停止按钮或正常呼吸。

当睡眠报告屏幕显示时，您就会知道治疗正在进行。

压力栏用绿色显示吸气和呼气压力。 绿条会随着您吸气和呼气而扩大和缩小。

很短一段时间后会自动黑屏。 您可以按下首页或微调器将屏幕重新打开。 如果治疗期间电源中断，恢复供电时，装置将自动重新启动治疗。

AirCurve 10 VAuto Plus C 装置有一个光线传感器，它会根据室内光线调节屏幕亮度。

停止治疗

1. 取下您的面罩。
2. 按下开始/停止按钮，或者如果已启用智能启动，治疗会在几秒钟后自动停止。

睡眠报告总结您的治疗会话。

使用时间–指示上一次接受治疗的小时数。

面罩密封–显示面罩的密封程度：

面罩密封良好。

需要调整，请参阅面罩试戴。

湿化器–指示您的湿化器正常工作。

湿化器正常工作。

湿化器可能会出现故障，联系您的保健服务提供商。

如果由您的保健服务提供商设置，您将也会看到：

每小时事件–指示每小时呼吸暂停和呼吸浅慢经历的次数。

更多信息–旋转微调器向下滚动来查看更多的使用时间数据细节。

省电模式

AirCurve 10 VAuto Plus C 装置记录您的治疗数据。 为了使装置能够向您的保健服务提供商传输数据，切勿拔下装置的电源插头。 但您可以将装置置于省电模式以省电。

要进入省电模式：

- 按下开始/停止按钮并按住三秒钟。
  屏幕变黑。

要退出省电模式：

- 按下开始/停止按钮一次。
  首页屏幕显示。

我的选项

您的 AirCurve 10 VAuto Plus C 装置应该已由您的保健服务提供商按您的需要设置完毕，但是您可能会发现您需要稍作调整以使您的治疗更加舒适。

加亮 我的选项并且按下微调器查看当前设定。 从这里，您可以对您的选项进行个性化设置。

延迟升压时间

延迟升压时间功能是为了治疗开始时感到更舒适而设计的，这期间是压力从低的开始压力至指定的治疗压力。

您可以将升压时间设定为关闭或 5 至 45 分钟之间。

调整延迟升压时间：

1. 在 我的选项界面，旋转微调器至升压时间变亮，然后按下微调器。
2. 旋转微调器将延迟升压时间调至您想要设定的值，然后按下微调器保存更改。

湿度水平

湿化器将空气湿化从而设计使治疗更加舒适。 如果您感到口鼻干燥，开大湿度。 如果您感到面罩内有任何湿气，关小湿度。

您可以将湿度水平设定为关闭或 1 和 8 之间，其中 1 为最低湿度设置，8 是最高湿度设置。

调节湿度水平：

1. 在 我的选项界面，旋转微调器至湿度水平变亮，然后按下微调器。
2. 旋转微调器调节湿度水平，然后按下微调器保存更改。

如果仍然感觉到您的面罩干燥或潮湿，考虑使用 ClimateLineAir 加热呼吸管路。ClimateLineAir 连同温度控制会给予更舒适的治疗。

面罩试戴

面罩试戴旨在帮助您评估并确定面罩周围是否可能漏气。

检查面罩试戴：

1. 按照面罩用户指南戴上面罩。
2. 在 我的选项界面，旋转微调器至运行面罩试戴变亮，然后按下微调器。装置开始输送气体。
3. 调整面罩、面罩护垫和头带，直到显示良好结果为止。

要停止面罩试戴，按下微调器或开始/停止按钮。如果无法获得良好的面罩密封，请致电保健服务提供商。

更多选项

您的设备上还有更多可以个性化设定的选项。

漏气警报*	启用漏气警报后，治疗期间如果面罩漏气过多或者如果您取下面罩，设备会发出蜂鸣声。
SmartStart（智能启动）*	智能启动启动后，当您在面罩内呼气时，治疗会自动开始。当您取下面罩后，它会在几秒钟后自动停止。

*在您的保健服务提供商启用了的情况下。

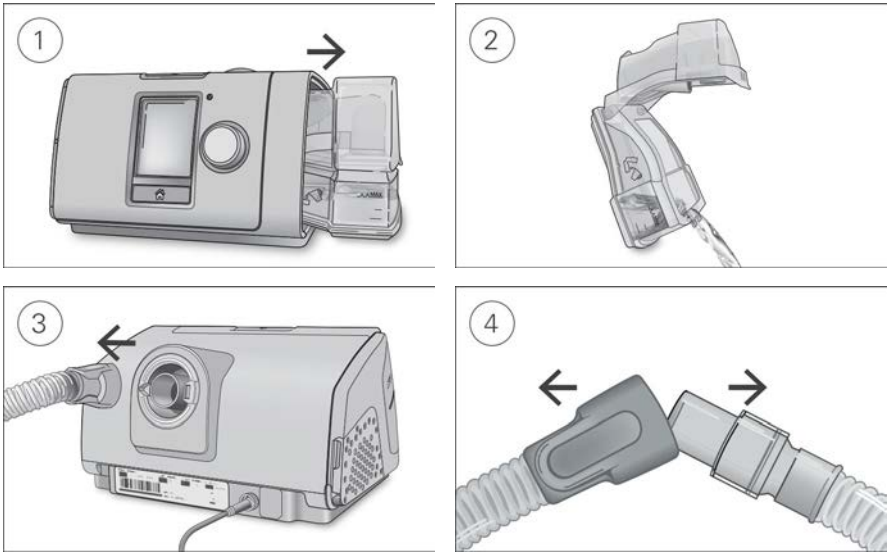
维护您的装置

定期清洁您的 AirCurve 10 VAuto Plus C 装置对确保您获得优化的治疗是十分重要的。 以下的部分将会帮助您拆卸、清洁、检查和重新组装您的装置。

⚠ 警告

定期清洁管路套组、湿化器和面罩，以获得最佳治疗，并防止细菌滋生，细菌滋生可能会对您的健康造成不良影响。

拆卸



1. 抓住湿化器的上部和底部，轻轻地按压并从装置上拉出。
2. 打开湿化器并倒掉任何残余的水。
3. 抓住呼吸管路的接口并轻轻地将其从装置上拉开。
4. 同时抓住呼吸管路的接口和面罩的转环，然后轻轻地拉开。

清洁

如前所述您应该每周都清洁装置。 参阅面罩用户指南关于清洁您面罩的细节信息。

1. 用含有柔和洗涤剂的温水清洗湿化器和呼吸管路。
2. 彻底冲洗湿化器和呼吸管路，自然晾干，避免阳光直射/或高温。
3. 用干布擦拭装置外部。

备注：

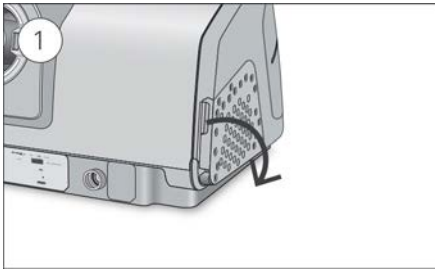
- 湿化器可以在洗碗机中以轻柔或用于玻璃器皿的周期清洗（仅可放在顶架）。清洗温度不应高于 65°C。
- 不得在洗碗机或洗衣机中清洗呼吸管路。
- 每天排空湿化器，并用一次性使用的洁净的布彻底擦试。 自然晾干，避免阳光直射和/或高温。

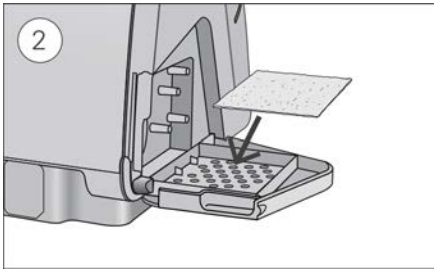
检查

您需要定期检查湿化器、呼吸管路和空气过滤器是否有任何损坏。

1. 检查湿化器：
   - 若出现漏水或裂纹、混浊或凹痕，请更换。
   - 如果密封条出现裂纹或撕裂，请更换。
   - 用一份食醋兑 10 份水的溶液去除任何白色水垢。
2. 检查呼吸管路，若有任何破洞、撕裂或裂纹，请更换。
3. 至少每 6 个月检查并更换一次空气过滤器。 如果有破洞或因污垢、灰尘造成的堵塞，请更经常更换。

更换空气过滤器：





1. 打开空气过滤器盖并取下旧的空气过滤器。
   空气过滤器不可清洗，也不可重复使用。
2. 将新的空气过滤器放在空气过滤器盖上，然后关上它。
   确保空气过滤器一直安装以防止水和灰尘进入装置。

重新组装

湿化器和呼吸管路干燥后，就可以重新组装部件。

1. 将呼吸管路牢固地连接至位于装置后面的空气输出口。
2. 打开湿化器，将室温下的蒸馏水装至最高水位线标志处。
3. 关闭湿化器并将其插入到装置的一侧。
4. 将呼吸管路的自由端牢固地连接到组装好的面罩系统。

治疗数据

AirCurve 10 VAuto Plus C 装置为您和您的保健服务提供商记录您的治疗数据，以便他们需要时查看并且对您的治疗做出变动。数据被记录，然后通过无线或者是 SD 插卡传输给您的保健服务提供商。

数据传输

AirCurve 10 VAuto Plus C 装置有无线通信能力，使您的治疗数据可以传输给您的医疗服务提供方，以提高您的治疗质量。这是一个选配功能，只有在您选择使用它并且有无线网络时才会提供。

数据通常在治疗结束后被传输。为了确保您的数据被传输，使您的装置始终连接到主干电源并且确保装置不是处在飞行模式下。

备注：

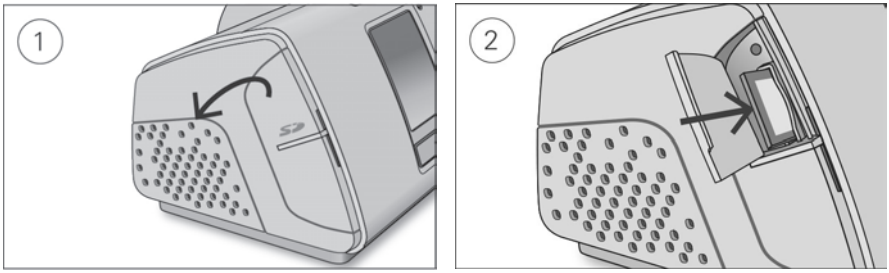
- 若您是在购买国家或地区境外使用本装置，可能无法传输治疗数据。
- 无线通信取决于网络的可用性。
- 具备无线通信功能的装置可能并非在所有国家或地区均有销售。

SD 插卡

另一种传输您的治疗数据的方式就是通过 SD 插卡。 您的保健服务提供商可能会要求您将 SD 插卡寄过去或者带过去。 当得到保健服务提供商的指示后，取下 SD 插卡。

SD 指示灯闪烁时不得从装置中取出 SD 插卡，因为此时正在向卡内写入数据。

取下 SD 插卡：



1. 打开 SD 插卡盖。
2. 推入 SD 插卡将其释放。 从装置上取出 SD 插卡。
   将 SD 插卡放在保护套中，然后将它寄回给您的保健服务提供商。

欲了解更多关于 SD 插卡的信息，请参阅装置附带 SD 插卡保护套信息。

备注： SD 插卡不应用于任何其他目的。

旅行

无论去哪您可以随身携带您的 AirCurve 10 VAuto Plus C 装置。 只需牢记以下几点：

- 使用提供的旅行包防止装置损坏。
- 排空湿化器并将其单独装入旅行包。
- 确保您有适合您所要旅行区域的电源线。 有关购买信息，请联系您的保健服务提供商。
- 如果您使用的是外接电池，您应该关闭湿化器以使电池的寿命最大化。 通过关闭湿度水平来关闭湿化器。

乘飞机旅行

您的 AirCurve 10 VAuto Plus C 装置可以作为随身行李带上飞机。医疗装置不计入您的随身行李限额。

您可以在飞机上使用您的 AirCurve 10 VAuto Plus C 装置，因为他符合联邦航空管理局（FAA）的要求。飞机旅行依从性的信件可以从 www.resmed.com 网站上下载打印。

在飞机上使用本装置时：

- 确保湿化器已完全排空，并插入到您的装置中。 未插入湿化器的情况下该装置将不会工作。
- 打开飞行模式。

要打开飞行模式：

1. 在我的选项界面，旋转微调器以亮显飞行模式，然后按下微调器。
2. 旋转微调器以选择开启，然后按下微调器保存更改。飞行模式图标✈显示在屏幕右上角。

⚠ 注意事项

湿化器中有水时，不得在飞机上使用该装置，因为在晃动中有吸入水的危险。

故障排除

如果您有任何问题，可以查阅下列故障排除专题。如果您不能解决问题，请联系您的医疗服务提供方或是 ResMed。不得试图打开装置。

常见故障排除

问题/可能的原因	解决方案
空气从我的面罩周围泄漏出来。	
面罩可能未佩戴好。	请确认面罩已佩戴好。 请参阅面罩的用户指南了解佩戴的说明，或使用面罩试戴功能来检查面罩适配和密封是否良好。
我的鼻子干燥或不通。	
湿度水平可能设置的太低。	调节湿度水平。 如果您有 ClimateLineAir 加温管路，参阅 ClimateLineAir 用户指南。
我的鼻子、面罩和呼吸管路内有水滴。	
湿度水平可能设置的太高了。	调节湿度水平。 如果您有 ClimateLineAir 加温管路，参阅 ClimateLineAir 用户指南。
我的口腔干燥不适。	
空气可能从您的口中溢出。	增加湿度水平。 您或许需要一个下颌托带来保持您的嘴巴关闭或者是一个全脸面罩。
我面罩内的空气压力似乎太高了（感觉我吸入了太多的空气）	
延迟升压可能关闭了。	使用延迟升压时间选项。
我面罩内的空气压力似乎太低了（感觉我没有吸入足够的空气）	
延迟升压可能正在进行。	请等候空气压力积聚或关闭延迟升压时间。
黑屏了。	
屏幕上的背景灯可能关闭了。 一个短暂的时间之后，它会自动关闭。	按下首页或者微调器将它重新打开。
电源可能没有连接。	连接电源并且确保插头插入完全。
我已经停止治疗，但是装置仍然在输送气体。	
装置正在冷却。	为了避免呼吸管路里的凝结，装置会吹少量的空气。30 分钟之后它会自动停止工作。

问题/可能的原因	解决方案
我的湿化器漏气	
湿化器可能未组装好。	检查湿化器是否有损坏，然后重新组装好。
湿化器可能有损坏或裂纹。	与您的保健服务提供商联系更换事宜。
我的治疗数据还没有传送给保健服务提供商。	
无线覆盖范围可能不佳。	确保装置放在有无线覆盖的地方（即放在您的床头桌上，而不是放在抽屉里或地面上）。 无线信号强度图标 显示所有竖条时，表示无线覆盖范围良好；未显示所有竖条时，表示无线覆盖范围不佳。
屏幕右上角显示没有无线连接图标 没有可用的无线网络。	确保装置放在有无线覆盖的地方（即放在您的床头桌上，而不是放在抽屉里或地面上）。 如果系统提示您这样做，将 SD 插卡寄给您的保健服务提供商。 SD 插卡也包含您的治疗数据。
装置可能在飞行模式下。	关闭飞行模式，请参阅乘飞机旅行。
您的装置未启用数据传输。	将您的设定告诉保健服务提供商。
屏幕和按钮闪烁	
正在进行软件升级	软件升级大约需要 10 分钟时间完成。

装置信息

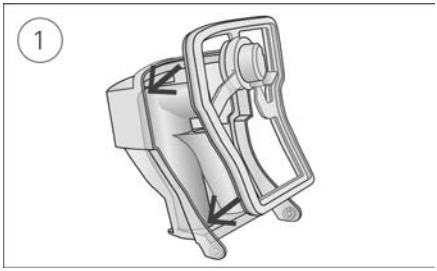
装置消息/可能的原因	解决方案
检测到大量漏液，请检查储水盒、储水盒密封垫或侧盖	
湿化器可能未插好。	确保湿化器已插好。
湿化器密封条可能未插好。	打开湿化器，确保密封条已插好。
发现大量漏气，请连接管路。	
呼吸管路可能连接不当。	确认呼吸管路两端都已牢固连接。
面罩可能未佩戴好。	请确认面罩已佩戴好。 请参阅面罩的用户指南了解佩戴的说明，或使用面罩试戴功能来检查面罩适配和密封是否良好。
管路阻塞，请检查管路	
呼吸管路可能阻塞。	检查呼吸管路，去除所有的阻塞。 按下微调器清除该消息，然后按下开始/停止按钮以重新启动装置。
SD 插卡错误，取出您的卡然后按下开始以开始治疗	
SD 插卡可能未正确插入。	移除然后重新插入 SD 卡。

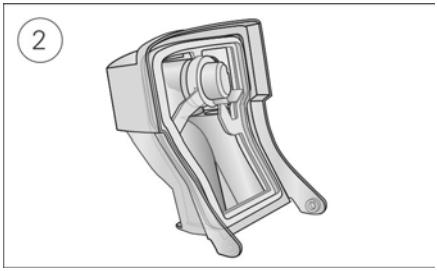
装置消息/可能的原因	解决方案
只读卡，请移除，解锁并重新插入 SD 插卡	
SD 插卡开关可能在锁定（只读）位置。	将 SD 插卡上的开关从锁定位置 移动到解锁位置，然后重新插入。
系统故障，请参阅用户指南中的错误项 004	
设备可能被置于过热环境。	待其冷却后再使用。 断开电源，然后重新连接以便重启设备。
空气过滤器可能阻塞。	检查空气过滤器，如有阻塞则将其更换。 断开电源，然后重新连接以便重启设备。
呼吸管路可能阻塞。	检查呼吸管路，去除所有的阻塞。 按下微调器清除该消息，然后按下开始/停止按钮以重新启动装置。
呼吸管路中可能有水。	将水从呼吸管路中去除。 断开电源，然后重新连接以便重启设备。
所有其他错误消息（例如系统故障），请参阅用户指南中的错误项 0XX	
装置上出现了一个无法恢复的错误。	请联系您的保健服务提供商。 不得打开装置。

重新组装部件

为了避免部件或装置的损坏，装置的一些部件被设计为容易脱离。 您可以根据以下描述很容易的重新组装他们。

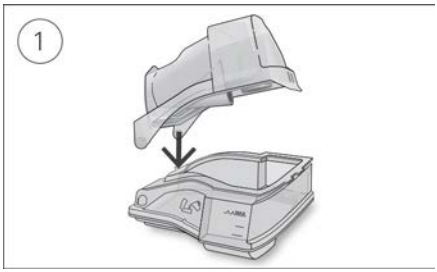
要插入湿化器密封条：





1. 将密封条放入盖内。
2. 向下按压密封条的各边缘，直至其牢固到位。

要重新组装湿化器盖：



1. 将水罐盖的一边插入到底座的轴心孔内。
2. 沿边缘向下滑动另一边直至卡入到位。

一般性警告和注意事项

⚠ 警告

- 确保已整理好呼吸管路，使其不会缠绕在头或颈部周围。
- 定期检查电源线、电缆和电源是否有损坏或磨损迹象。如有损坏，请停止使用并更换。
- 确保电源线远离过热表面。
- 如果您发现本装置的性能发生任何无法解释的变化、装置发出异常的声音、装置或电源坠落或操作不当、或者外壳损坏，请停止使用并与您的保健服务提供商或者ResMed服务中心联系。
- 不得打开或修改装置。 装置内没有用户可维修的部件。 仅应由ResMed授权的维修商实施修理和维修。
- 小心触电。 不得将此装置、电源或电源线浸泡在水中。 如果有液体流到装置里边或者表面，拔出电源插头，使该部件晾干。 在清洗前务必拔出电源插头，并在插回电源插头前确保所有部件是干燥的。
- 吸烟或者存在明火时，切勿使用补充性供氧。
- 在开启供氧之前务必确保本装置已开启并已产生气流。 在关闭装置之前务必关闭供氧，使未使用的氧气不在装置外壳内积累，造成火灾危险。
- 不得在装置工作期间执行任何保养任务。
- 在与其他设备毗邻或堆叠时，不应使用本装置。 如果必须毗邻或堆叠使用，应观察装置运行情况，确保其在当前配置中运行正常。
- 除了指定用于装置的附件以外，不推荐使用其他附件。 这些附件可能会增加辐射或降低本装置的抗干扰性。
- 定期检查细菌/病毒过滤器是否有湿气或其他污染物的迹象，特别是在雾化或湿化期间。否则，可能导致呼吸系统阻力增加。

⚠ 注意事项

- 仅使用与装置一起的ResMed部件与附件。 非ResMed部件将会减少治疗的有效性和/或损坏装置。
- 仅使用由ResMed或者主治医生推荐的排气孔面罩与该装置。装置没有鼓气时面罩试戴会导致呼出的空气被再次吸入。 确保面罩排气孔洞畅通无阻以便维持进入面罩的新鲜空气流量。
- 放置装置时要小心，不要放置在会使其受到碰撞或使人跸到电源线的地方。
- 装置正在运行时，如果阻塞呼吸管路和/或空气输入口，会导致装置过热。
- 确保装置周围区域的干燥清洁，无可能阻塞空气输入口或覆盖电源装置的任何物体（例如衣服或被褥）。
- 切勿把装置放置在旁，因为水可能会进入装置。
- 系统设定不正确可能会导致面罩压力读数不正确。 确保系统设定正确。
- 不得使用漂白剂、氯、酒精或芳香类溶液、湿润或抗菌肥皂或香味精油来清洁设备、湿化器或呼吸管路。这些溶液可能会损坏或影响湿化器的性能，缩短产品的使用寿命。接触烟雾，包括香烟、雪茄或烟斗烟雾，以及臭氧或其他气体，可能会损坏设备。上述任一项造成的损坏将超出 ResMed 的有限保修范围。
- 使用湿化器时，始终将装置放在低于头部的平面上，以免水进入面罩和呼吸管路。
- 在处理前，让湿化器冷却十分钟，使水冷却，以确保湿化器不会因为过热而难以触摸。
- 运输装置之前，确保湿化器已排空。

备注： 该装置并非意在由身体、感官或心智能力下降的人员（包括儿童）在没有负责患者安全的人员的充分监督下进行操作。

技术规格

单位均为 cmH_2O 和 hPa。 1 cmH_2O 等于 0.98 hPa。

90W电源装置	
交流电输入范围：	100-240V, 50-60Hz 1.0-1.5A，II类 115V，400Hz 1.5A，II类（在飞机上使用时的标称值）
直流电输出：	24V ⎓ 3.75A
典型功耗：	53W（57VA）
最大耗能：	104W（108VA）
环境条件	
工作温度：	+5°C至+35°C 备注： 该治疗装置所产生供患者呼吸的气流温度可能会比室温高。 在极端的环境温度条件下（40°C），装置仍可保持安全。
工作湿度：	10%至95%相对湿度，非冷凝
工作海拔高度:	海平面至 2,591 公尺，空气压力范围为1013 hPa至738 hPa。
存放和运输温度：	-20°C至+60°C
存放和运输湿度：	5%至95%相对湿度，非冷凝
电磁兼容性	
AirCurve 10 VAuto Plus C 符合IEC 60601-1-2:2014标准的所有适用电磁兼容性(EMC)要求，适用于民用、商用和轻工业环境。建议将移动通信装置与本装置保持至少1m的距离。 有关该ResMed装置电磁辐射和抗干扰性方面的信息，请参阅www.resmed.com/downloads/devices。	
分类：**IEC 60601-1:2005+A1:2012**	
II级（双重绝缘），BF型，IP22防护等级。	
传感器	
压力传感器：	位于装置出口内，模拟压力型，-5至+45 cmH_2O (-5至+45 hPa)
流量传感器：	位于装置出口内，数字质量流量型，-70 至 +180 升/分
最大单一故障稳定状态压力	
如果超过稳定状态压力，装置会在存在一个单一故障时关机。 30 cmH_2O (30 hPa)持续超过6秒或40 cmH_2O (40 hPa)持续超过1秒。	
声音	
压力水平根据ISO 80601-2-70:2015 (CPAP 模式)测量：	
Slimline:	25 dBA，正负2 dBA
标准：	25 dBA，正负2 dBA
SlimLine或标准和湿化：	27 dBA，正负2 dBA
功率级根据ISO 80601-2-70:2015 (CPAP 模式)测量：	
Slimline:	33 dBA，正负2 dBA
标准：	33 dBA，正负2 dBA
SlimLine或标准和湿化：	35 dBA，正负2 dBA
声明的双数字噪音发声值符合ISO 4871:1996标准。	

物理特征 - 装置和湿化器	
尺寸（高x宽x深）：	116 毫米x 255 毫米 ×150 毫米
空气输出口（符合 ISO 5356-1:2015 标准)：	22毫米
重量（装置和可清洁湿化器）：	1248 克
机壳材料：	阻燃性工程热塑塑料
水罐容量：	至最高水位时为380毫升
可清洁湿化器 - 材料：	注塑成型塑料、不锈钢和硅胶密封条

温度	
加热板最高温度：	68°C
断开：	74°C
气体最高温度：	≤ 41°C

空气过滤器	
标准：	材料： 聚酯非织物纤维 平均计重效率 >对约7微米的尘埃为75%

在飞机上使用

ResMed确认装置在空中旅行的所有阶段均满足美国联邦航空管理局(FAA)的要求（RTCA/DO-160，第 21节，M类）。

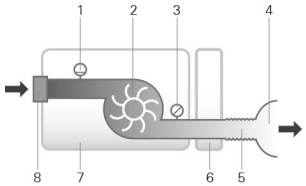
无线模块	
应用的技术*：	4G (TD-LTE) 4G (LTE FDD) 2G (GSM)
最大射频功率输出	4G 23 dBm ±2.7 dB 2G 33/30 dBm ±2 dB

*仅适用于经认证可在中国使用的特定频率/频段。

工作压力范围	
S：	2 至 25 cmH_2O（2 至 25 hPa）
CPAP：	4 至 20 cmH_2O（4 至 20 hPa）
VAuto	4 至 25 cmH_2O（4 至 25 hPa）

补充性供氧	
最大流量：	4 升/分（CPAP、S、VAuto）

气流量通道



1. 流量传感器
2. 通风机
3. 压力传感器
4. 面罩
5. 呼吸管路
6. 湿化器
7. 装置
8. 进气口过滤器

设计寿命	
装置，电源装置：	5年
可清洁湿化器：	2.5年
呼吸管路：	6个月

一般信息

患者将为操作员。

湿化器性能

面罩压力 cmH_2O	17°C 环境温度下 RH 输出 %	22°C 环境温度下 RH 输出 %	系统标称输出 AH[1], BTPS[2]	
	设置4	设置8	设置4	设置8
3	85	100	6	>10
4	85	100	6	>10
10	85	100	6	>10
20	85	90	6	>10
25	85	90	6	>10

[1] AH—绝对湿度，以毫克/升为单位

[2] BTPS —饱和压力体温

呼吸管路

呼吸管路	材料	长度	内径
ClimateLineAir	柔软塑料和电子元件	2 米	15 毫米
ClimateLineAir Oxy	柔软塑料和电子元件	1.9 米	19 毫米
SlimLine	柔软塑料	1.8 米	15 毫米
标准	柔软塑料	2 米	19 毫米
加热呼吸管路断开温度：≤ 41°C			

备注：

- 制造商保留修改这些规格的权利，恕不另行通知。
- 加热呼吸管路的电气接头端仅可以与装置端的空气输出口兼容并用，不得连接到面罩上。
- 不得使用导电或防静电的呼吸管路。
- 显示的温度和相对湿度设置非测量数值。

呼吸管路气流阻力和顺应性信息

请参阅 ResMed.com 上的呼吸管路顺应性指南。

显示的值

值	范围	显示分辨率
空气输出口处的压力传感器：		
面罩压力	2–25 cmH_2O (2-25 hPa)	0.1 cmH_2O (0.1 hPa)
流量派生值：		
漏气	0 - 120 升/分	1 升/分
潮气量	0–4000 毫升	1 毫升
呼吸频率	0–50 BPM	1 BPM
分钟通气量	0 - 30 升/分	0.1 升/分
吸气时间	0.1 - 4.0 秒	0.1秒
I:E 比	1:100 – 2:1	0.1

值	准确性[1]
压力测量[1]：	
面罩压力[2]	±[0.5 cmH_2O + 测量值的 4%]
流量和流量派生值[1]:	
流量	在 0 至 150 升/分正压流量时为 ±6 升/分或读数的 10%，取较大者
漏气[2]	在 0 至 60 升/分时为 ±12 升/分或读数的 20%，取较大者
潮气量[2,3]	±20%
呼吸频率[2,3]	±1.0 BPM
分钟通气量[2,3]	±20%

[1] 结果在 STPD（干燥标准气温和气压）的情况下表示。

[2] 准确性可能因为存在漏气、补充性供氧、潮气量 < 100 mL 或分钟通气量 < 3 升/分而降低。

[3] 测量准确度根据针对居家护理通气支持装置的 EN ISO 10651-6:2009（图 101 和表 101），使用标称 ResMed 面罩排气口流量确认。

测量系统不确定性

依照 ISO 80601-2-70:2015，制造商的测试设备的测量不确定性为：

对于流量测量值	± 1.5升/分或读数的 2.7%(取较大者)
对于容积测量值（< 100 毫升）	± 5 毫升或读数的 6%（取较大者）
对于容积测量值（≥ 100 毫升）	± 20 毫升或读数的 3%（取较大者）
对于压力测量值	± 0.15 cmH_2O (0.15 hPa)
对于时间测量值	± 10 毫秒

注：本手册中为这些项目提供的符合 ISO 80601-2-70:2015 规定的精度和测试结果已包括上表中的相关测量不确定度。

压力准确性

根据 ISO 80601-2-70:2015 标准，在 10 cmH_2O (10 hPa) 条件下的最大静态压力变化

设备带有湿化器水罐/侧盖与呼吸管路：	±0.5 cmH_2O (±0.5 hPa)

根据 ISO 80601-2-70:2015 标准的最大动态压力变化
设备带湿化器水罐/侧盖及 SlimLine/标准呼吸管路：

呼吸频率	10 BPM	15 BPM	20 BPM
动态压力变化 (cmH_2O[hPa])	0.5	0.5	0.8

压力准确性——两级

根据 ISO 80601-2-70:2015 标准的最大动态压力变化
设备带有湿化器水罐/侧盖与呼吸管路：
吸气/呼气平均值偏差 ± 标准差 (cmH_2O [hPa])：1±0.3
注：请从测量系统不确定度表格中参考相关的测量不确定度。
用于计算的吸气阶段的百分比：> 66
用于计算的呼气阶段的百分比：> 66

注：数据时隙从吸气/呼气压力阶段的 34% 开始，在吸气/呼气压力阶段结束时停止。

设定压力下的流量（最大）

在指定呼吸管路的末端，按照 ISO 80601-2-70:2015 标准测量以下各项：

压力 cmH_2O	AirCurve 10 VAuto Plus C和标准 升/分	AirCurve 10 VAuto Plus C、湿化和标准 升/分	AirCurve 10 VAuto Plus C和 SlimLine 升/分	AirCurve 10 VAuto Plus C、湿化和 ClimateLineAir 升/分
4	180	143	162	151
8	168	135	151	142
12	157	136	140	135
16	144	134	128	121
20	131	123	117	109
25	120	115	96	84

符号

以下符号可能出现在产品上或包装上。

遵循操作说明书。 警告。 操作说明。 制造商。 EC REP 欧盟授权代表。 LOT 批次代码。 REF 产品编号。 SN 序列编号。 DN 设备编号。 待机。 设备重量。 IP22 防止 Φ12.5mm（相当于一个成人手指）物体进入的防护, ME 设备外壳倾斜 15°时能防止垂直滴水进入设备。 直流电。 BF 型应用部分。 II 类设备。 湿度极限。 温度极限。 非电离辐射。 中国标志，产品不含有害物质。 中国标志，产品环保使用期限 10/20 年。 **Rx Only** 仅限处方购买(美国联邦法律规定：此设备只能由医生出售或遵照医嘱销售。) MAX 最高水位。 仅使用蒸馏水。 操作海拔高度。 大气压力极限。 符合 RTCA DO-160 第 21 部分，类别 M。

有害物质

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6)	多溴联苯 (PBB)	多溴联苯醚 (PBDE)
90W 电源装置	X	O	O	O	O	O

O：表示该部件所有均质材料中的有毒及有害物质含量低于 GB/T 26572-2011 中规定的浓度限值要求。

X：表示部件的至少一种均质材料中的有毒及有害物质含量超过 GB/T 26572-2011 中规定的浓度限值要求。

90W AC 适配器的环保用户期限 (EFUP) 按此处标志所示。某些部件可能有不同的 EFUP，会另有标识。只有当产品在用户指南规定的条件下运行时，EFUP 才有效。

除非另有说明，AirCurve 10 VAuto Plus C 设备的环保用户期限 (EFUP) 按此处标志所示。某些部件可能有不同的 EFUP，会另有标识。只有当产品在用户指南规定的条件下运行时，EFUP 才有效。

环保信息

此装置需单独处置，不得作为不分类的市政废物处置。处置该装置时应该使用所在地区的适当收集、再利用和回收系统。按其设计，这些收集、再利用和回收系统可以减少对自然资源的危害，防止危险物质破坏环境。

如果需要了解有关这些处置系统的详细信息，请与所在地的废物管理部门联系。标有十字的垃圾筒标志表示您可使用这些处置系统。要了解有关 ResMed 装置的回收和处置信息，请与 ResMed 办事处或当地的经销商联系，或浏览以下网站：www.resmed.com/environment。

维修

按照 ResMed 提供的说明操作时，AirCurve 10 VAuto Plus C 装置将会提供安全可靠的运行。 如果 AirCurve 10 VAuto Plus C 装置有磨损现象或者您对装置的功能有任何顾虑，ResMed 建议应由授权的 ResMed 服务中心进行检查和维修。 否则，在设计使用寿命期间，产品通常不需要进行保养和检查。

有限保修

按照 ResMed Pty Ltd 提供的说明操作时（以下简称“ResMed”）保证，自购买日算起，在以下规定的期间内，您购买的 ResMed 产品没有材料和制造工艺方面的缺陷。

产品	保修期
• 面罩系统(包括面罩框架、护垫、头带和管路)- 不包括一次性使用仪器 • 配件 - 不包括一次性使用仪器 • 柔性手指脉搏传感器 • 增湿器水箱	90天
• ResMed 内外电池系统使用的电池	6个月
• 夹式手指脉搏传感器 • CPAP 和双水平装置装置数据模块 • 血氧仪和 CPAP 及双水平装置血氧仪适配器 • 增湿器及增湿器可清洗水槽 • 滴定控制装置	1年
• CPAP、双水平装置和通气装置(包括外接电源组) • 电池配件 • 便携式诊断/筛检显示装置	2年

该保修只适用于最初购买者。不得转让。

如果本产品在正常使用下出现故障，ResMed将依其选择对有缺陷的产品或任何组件予以修理或更换。

此有限保证不包括：a)使用不当、滥用、改装或修改产品所造成的任何损坏；b)由未获得ResMed明确维修授权的维修机构实施的维修工作；c)香烟、烟斗、雪茄或其它烟雾造成的任何损坏或污染；d)暴露于臭氧、活性氧或其他气体所造成的任何损害；e) 由于水溢在电子装置上或电子装置内所造成的任何损坏。

产品若于原购买地区以外销售或再销售，则此保证无效。

针对有缺陷产品所提的保证索赔必须由最初消费者在购买处提出。

此保证代替所有其它明示或暗喻的保证，其中包括对产品适销性或某特定用途适用性的任何暗喻保证。某些地区或州省不允许限制暗喻保证的时间期限，因此以上限制也许不适用于你。

对于那些声称由于销售、安装或使用任何ResMed产品所造成的任何偶然性或因果性损失，ResMed概不负责。不允许排除或限制偶发性或因果性损失的地区或州省，则不适用以上限制。

本保证授予你某些特定法律权利，你可能还有因地区而异的其它权利。欲详细了解你的保证权利，请与当地的ResMed分销商或ResMed办事处联络。

请访问ResMed.com获取有关ResMed有限质保的最新信息。

补充信息

如果您有任何问题或需要关于如何使用本装置的更多信息，请联系您的保健服务提供商。

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