ResMed

AirCurve™ 11

VAUTO

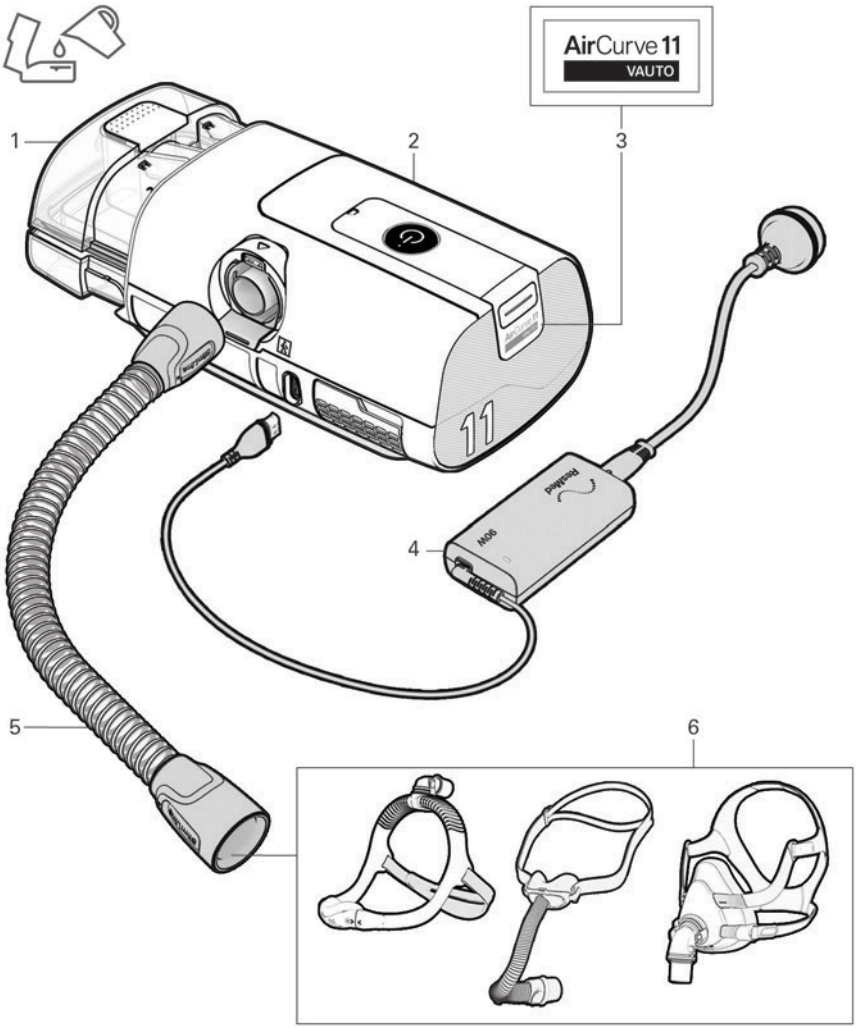
ASV

Clinical guide

English

Contents

Quick setup view



Components

1. HumidAir™ 11 humidifier tub
2. AirCurve™ 11 device
3. Device identification plaque (eg, AirCurve 11 VAuto and AirCurve 11 ASV)
4. Power supply unit
5. SlimLine™ 11 tubing
6. Mask

Welcome

The AirCurve 11 VAuto is a bilevel positive airway pressure device. The AirCurve 11 ASV is a positive airway pressure device that belongs to the adaptive servo-ventilator category.

Note: Not all devices are available in all regions. Check with your local ResMed representative for availability.

⚠ WARNING

- Read this entire guide before using the device.
- This device is not suitable for ventilator-dependent patients.
- Before putting patients on ASV, each patient should be assessed for heart failure. In case of signs and symptoms of heart failure an objective assessment of Left Ventricular Ejection Fraction (LVEF) should be performed.

Indications for use

AirCurve 11 VAuto

The AirCurve 11 VAuto device is indicated for the treatment of Obstructive Sleep Apnoea (OSA) in patients weighing more than 66 lbs / 30 kg and more than 30 lbs / 13 kg in CPAP and S modes. The AirCurve 11 VAuto device is intended for use in the hospital and home.

AirCurve 11 ASV

The AirCurve 11 ASV device is indicated for the treatment of Obstructive Sleep Apnoea (OSA) in patients weighing more than 66 lbs (30 kg). ASV and ASVAuto modes are also indicated for the treatment of central and/or mixed apnoeas, or periodic breathing. The AirCurve 11 ASV device is intended for use in the hospital and home.

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.

ASV therapy is contraindicated in patients with chronic, symptomatic heart failure (NYHA 2-4) with reduced left ventricular ejection fraction (LVEF ≤ 45%) and moderate to severe predominant central sleep apnoea.

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.

Software functionality and device data

This ResMed device is a smart device and includes software functionalities which allow it to be connected to the cloud so that users and their care providers can access data about therapy remotely, receive regular upgrades to the device and much more. Check out https://myair.resmed.com/ to learn about ResMed's patient coaching application, myAir™.

Software License

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Over-the-Air Download of Software Updates. If the device is connected to the cloud, then the ResMed Software on the device will automatically and periodically download updates and upgrades to the ResMed Software on the device. Such downloads may be done by various means including, but not limited to, using **Bluetooth**® wireless technology, WiFi and/or cellular networks and combinations of various wireless technologies and services. Such updates to the ResMed Software might include, without limitation, bug fixes, error corrections, security patches, and new versions and releases of the ResMed Software that may include changes to existing features or functions and/or the addition of new features and functions.

Use of Device Data

When this device is used it gathers and records data about use and, if the device connectivity is enabled, the device sends certain data to ResMed via the cloud to enable ResMed to deliver various benefits to the user and the user's care provider(s). Additionally, some of that data may be used by ResMed (1) to comply with its legal obligations; these legal obligations include collection and analysis of device data for medical device post market surveillance and vigilance, and compliance with these legal obligations includes assessing if ResMed is required to implement actions to improve device safety, usability and performance, and (2) to perform health-related research, study and/or evaluation for specific scientific and medico-economic purposes. ResMed will only use device data in compliance with applicable laws and regulations in the user's country or region (for example the GDPR (Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data), the MDR (Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on Medical Devices)) in the European Union, and, as applicable, HIPAA (the Health Insurance Portability and Accountability Act of 1996) in the USA). Depending on the data protection or privacy laws of the user's country or region device data may constitute personal data. If so, ResMed has the obligation to inform the user about their rights and freedoms for our use of their personal data. You can find more details related to our use of data, rights to access, rectify, erase, restrict or object at https://www.resmed.com/myprivacy/.

At a glance

⚠ WARNING

Use only recommended ResMed masks and accessories or other vented masks as recommended by an appropriate care professional with this device. Using these components allows normal breathing and prevents potential asphyxiation.

The AirCurve 11 system includes the following:

- Device
- Side cover (if supplied)
- HumidAir™ 11 Cleanable tub
- ClimateLineAir™ 11 heated tubing or SlimLine™ tubing
- Air11™ Power supply unit: 90W AC adaptor
- Air11 air filters
- Travel bag
- SD card (not available in all devices).

Refer to the ResMed website (ResMed.com/productsupport) for a range of spares and compatible accessories available for use with the device including:

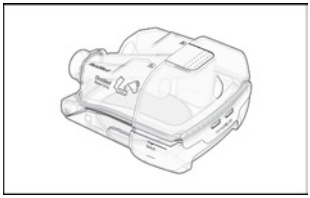
- Air tubing (ClimateLineAir 11, SlimLine, Standard 2m and Standard 3m)
- HumidAir 11 Standard tub (Single patient re-use - cannot be reprocessed)
- HumidAir 11 Cleanable tub (Multi patient re-use - can be reprocessed)
- Side cover which allows use without the humidifier tub
- Air11 Filter - standard
- Air11 Filter - hypoallergenic
- Air11 DC/DC converter
- SD card
- SD card cover
- Bluetooth oximeter

Notes:

- Recommended masks are available on ResMed.com/downloads/devices.
- The HumidAir 11 Standard tub and the HumidAir 11 Cleanable tub are the only water tubs used with the AirCurve 11 device.
- The ClimateLineAir 11 is the only heated tubing that is compatible with the AirCurve 11 device.
- Ensure the patient has an approved ResMed power supply for the region they are using the device.
- This device is suitable for use with the Air11 90W AC power supply unit and 90W DC-DC converter. The Air11 65W AC Adaptor can be used with the AirCurve 11 device but there may be some degradation of the humidifier performance when mouth or mask leak is present.
- To reduce the likelihood of disconnection and to prevent adverse ventilator performance use only accessories compatible with the ventilator. Compatibility is determined by reviewing the instructions for use of either the ventilator or the accessories.

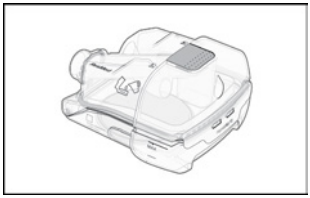
Humidifier tubs

HumidAir 11 Standard tub



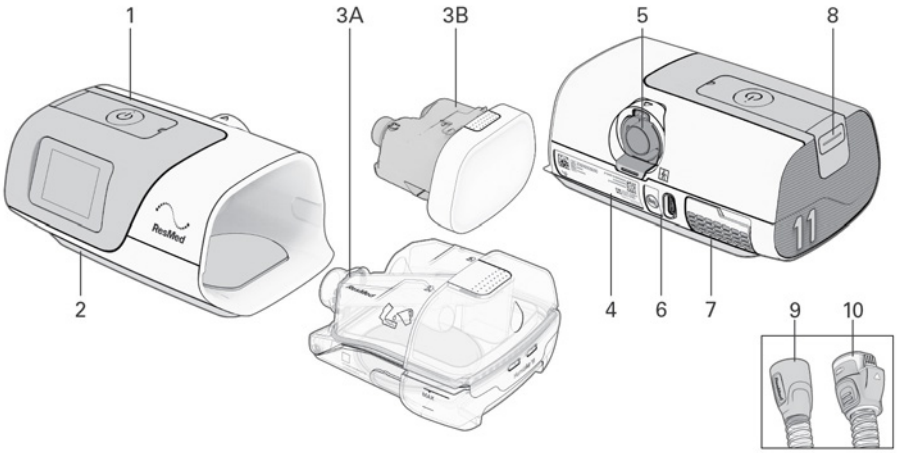
- single-patient use only
- cannot be reprocessed
- has a white thumb grip
- fill with distilled water only

HumidAir 11 Cleanable tub



- multi-patient use
- can be reprocessed
- has a grey thumb grip
- fill with drinking quality water (potable)

About your device



	Description	Purpose
1	Start Therapy/ Standby button	Press to start/stop therapy. The LED indicator is green during standby mode, and white during therapy, **Test Drive,** and **Mask Fit** functions.
2	Display touch screen	Navigates between functions and displays information on the operating status of the device.
3	3A - HumidAir 11 tub 3B - Side cover	Enables heated humidification. For use without humidification.
4	Device label	Contains information relevant to the device.
5	Outlet connector	Connects the air tubing.
6	Power inlet	Connects the power cord.
7	Air inlet filter cover	Contains the air filter.
8	SD card cover	Removable cover that protects the SD card slot. The LED indicator is blue when data is written to the SD card.
9	SlimLine tubing	Non-heated air tubing.
10	ClimateLineAir 11 tubing	Heated air tubing.

Notes:

- If the Start Therapy/ Standby button has a flashing white light, a system error has occurred. Refer to the Troubleshooting section for more information.
- Use this device only as directed by an appropriate care professional.
- Prior to use the responsible organisation needs to ensure the compatibility of the device and all of the parts and accessories with which the device is intended to be used.

About the VAuto device

Therapy information

The following modes are available on this device:

Device	Mode		
	VAuto	S	CPAP
AirCurve 11 VAuto	✓	✓	✓

Bi-level pressures

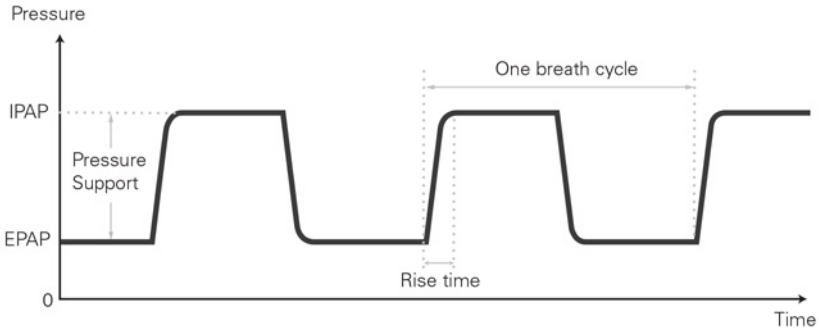
Available in: All modes on **AirCurve 11 VAuto** device.

The device assists spontaneous breathing by cycling between two pressures in response to the patient flow or a preset fixed time.

The inspiratory positive airway pressure (IPAP, or the sum of EPAP and the pressure support level) assists inspiration.

The lower expiratory positive airway pressure (EPAP) facilitates exhalation comfort while providing a splint to maintain an open upper airway.

The difference of the two pressures—pressure support (PS) level—contributes to patient comfort.



VAuto mode

In VAuto mode, the AutoSet algorithm automatically adjusts pressure in response to flow limitation, snore and obstructive apnoeas.

Min EPAP, Max IPAP and pressure support in VAuto mode

Pressure support allows you to set the difference between inspiratory and expiratory pressure and is fixed throughout the night. Min EPAP and Max IPAP settings allow you to restrict the delivered pressure ranges in which the AutoSet algorithm can operate.

The EPAP and IPAP will vary across the session according to the patient's needs. It responds to snoring, apnoeas and flow limitation of the patient's flow curve.

Min EPAP and Max IPAP can be adjusted to limit the upper and lower delivered pressure limits.

S mode

In S mode, you may set two treatment pressures—one for inspiration (IPAP) and one for expiration (EPAP). The device senses when the patient is inhaling and exhaling and supplies the pressures accordingly. The difference between IPAP and EPAP levels helps determine the tidal volume.

CPAP mode

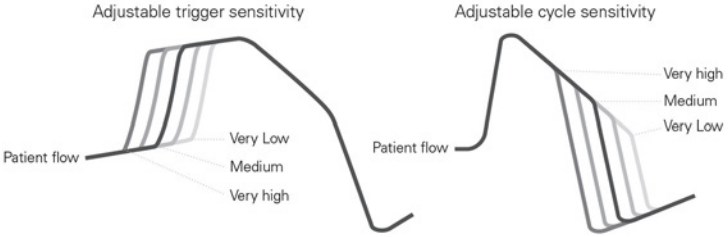
In CPAP mode, a fixed pressure is delivered.

Triggering and cycling

Available in: VAuto and **S** modes only

The device has adjustable trigger/cycle sensitivity to optimise the sensing level according to patient conditions.

Under normal conditions, the device triggers (initiates IPAP) and cycles (terminates IPAP and changes to EPAP) as it senses the change in patient flow. Patient breath detection is enhanced by ResMed's VSync automatic leak management.



Rise time adjustment

Available in: S mode only

Rise Time sets the time taken for the device to reach IPAP. The greater the rise time value, the longer it takes for pressure to increase from EPAP to IPAP.

Patients with a high ventilatory demand may prefer a shorter rise time, while patients who are slow breathers may prefer a longer rise time.

Note: A prolonged rise time inhibits fast pressurisation, therefore, rise time should not be set longer than Ti Min or the patient's normal inspiratory time.

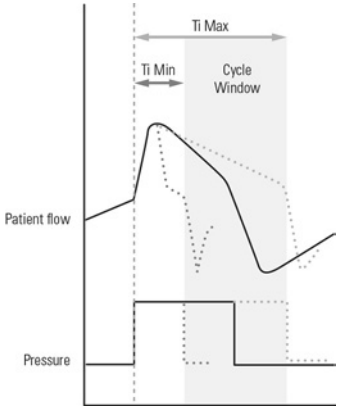
TiControl - Inspiratory time control

Available in: VAuto and S modes

Unique to ResMed bilevel devices, TiControl™ allows the clinician to set minimum and maximum limits on the time the device spends in IPAP. The minimum and maximum time limits are set at either side of the patient's ideal spontaneous inspiratory time, providing a 'window of opportunity' for the patient to spontaneously cycle to EPAP.

The minimum time limit is set via the Ti Min parameter and the maximum time limit is set via the Ti Max parameter.

TiControl's Ti Max and Ti Min parameters play a significant role in maximising synchronisation by effectively intervening to limit or prolong the inspiratory time when required. This ensures synchronisation, even in the presence of significant mouth and/or mask leak.



The following table is a guide to selecting the Ti Max and Ti Min values that best correspond to the patient's respiratory rate and inspiration and expiration ratio, depending on the respiratory conditions.

Examples:

- I:E = 1:1 – Ti Min prevents the premature cycling to EPAP for patients whose inspiratory effort is extremely weak.
- I:E = 1:3 – Ti Max limits the inspiration time for patients who require a longer expiration time.

Patient breath (BPM)	Ttot = 60/BPM (sec)	I:E = 1:2 (Reference)	Sufficient inhalation time I:E = 1:1		Secure exhalation time I:E = 1:3
			Ti Min	Ti Max	Ti Max
10	6	2	1.0	2.0	1.5
15	4	1.3	1.0	2.0	1.3
20	3	1.0	0.8	1.5	1.0
25	2.4	0.8	0.7	1.2	0.8
30	2	0.7	0.6	1.0	0.7
35	1.7	0.6	0.5	0.8	0.7
40	1.5	0.5	0.5	0.7	0.7

Central sleep apnoea detection

Available in: AirCurve 11 VAuto device in VAuto, CPAP and S mode when Easy-Breathe is enabled.

The AirCurve 11 has central sleep apnoea (CSA) detection. The Summary and Detailed Data of these parameters are available to view on ResMed's patient compliance software (data availability depends on device mode and parameter measured).

The device detects both obstructive and central sleep apnoeas (CSA). CSA detection uses the Forced Oscillation Technique (FOT) to determine the state of the patient's airway during an apnoea. When an apnoea has been detected, small oscillations in pressure [1 cmH_2O (1 hPa) peak-to-peak at 4 Hz] are added to the current device pressure. The CSA detection algorithm uses the resulting flow and pressure (determined at the mask) to measure the airway patency.

Leak management with VSync

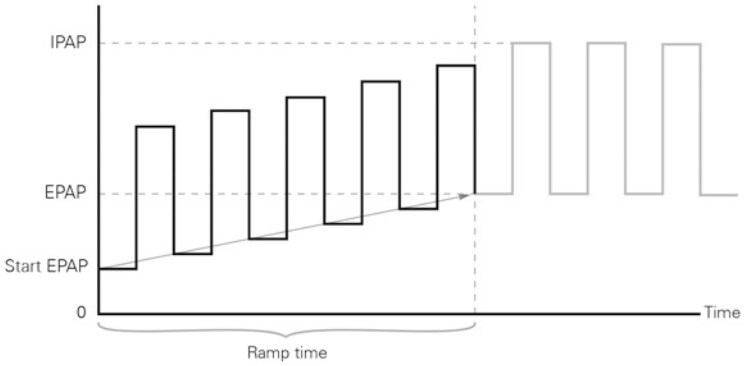
Using ResMed's VSync algorithm, the AirCurve 11 device monitors and compensates for leak by continuously and automatically adjusting the baseline flow. This enables reliable delivery of therapy pressure while maintaining patient-device synchrony.

Comfort features - VAuto and S modes

Ramp

Designed to make the beginning of treatment more comfortable, ramp is available in all modes.

In VAuto and S modes, the EPAP gradually increases from the Start EPAP to the prescribed treatment pressure. Throughout Ramp, Pressure Support is maintained at the same level as that set for treatment.



In CPAP mode, the pressure increases from a low pressure (Start Pressure) to the prescribed treatment pressure.

Expiratory Pressure Relief

Available in: AirCurve 11 VAuto device in **CPAP** mode.

Designed to make therapy more comfortable, Expiratory Pressure Relief (EPR) maintains optimal treatment for the patient during inhalation and reduces the delivered mask pressure during exhalation.

EPR On—EPR is enabled.
Off—EPR is disabled.

The following settings are only available if EPR is On:

EPR Type Full Time—If set to Full Time, EPR is enabled for the whole therapy session.
Ramp Only—If set to Ramp Only, EPR is only enabled during ramp time.

EPR Level 1, 2, 3 cmH_2O (1, 2, 3 hPa)

When EPR is enabled, the delivered pressure will not drop below a minimum pressure of 4 cmH_2O (4 hPa), regardless of the settings.

Easy-Breathe™

Available in: AirCurve 11 VAuto device in **S** mode.

The Easy-Breathe waveform intelligently recreates a patient's individual breathing pattern, so breathing feels more natural and therapy is more comfortable.

About the ASV device

Therapy information

The following modes are available on the AirCurve 11 ASV device:

Device	Mode		
	ASV	ASVAuto	CPAP
AirCurve 11 ASV	✓	✓	✓

ASV therapy

Available in: AirCurve 11 ASV device in ASV and ASVAuto modes

ResMed's ASV therapy targets the patient's own recent Minute Ventilation (MV). It treats central sleep apnoea and/or mixed apnoea and periodic breathing by automatically adjusting the pressure support (PS) in a defined pressure range to maintain Minute Ventilation at the target.

ASV mode

In ASV mode, the expiratory positive airway pressure (EPAP) is fixed and can be manually adjusted to eliminate obstructive events. The Pressure Support (PS) varies between the Min PS and the Max PS to answer to the patient's need. Mandatory breaths are delivered at the patient's recent spontaneous breath rate, ie, the timed backup rate is automatically calculated to match the patient's needs and is applied appropriately in the case of an event.

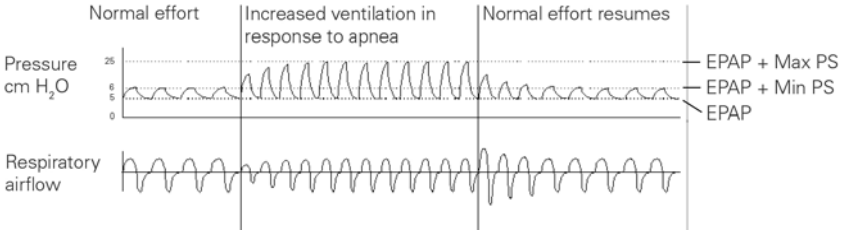
ASVAuto mode

In addition to the functionality of the ASV mode, the device in ASVAuto mode automatically adjusts the expiratory pressure in order to provide only the amount of pressure (EPAP) required to maintain upper airway patency. The device analyses the state of the patient's upper airway on a breath-by-breath basis and delivers expiratory pressure within the allowed range (Min EPAP and Max EPAP) according to the degree of obstruction. EPAP is automatically adjusted depending on three parameters: inspiratory flow limitation, snore, and obstructive apnoea.

Pressure Support

Pressure Support (PS) is defined as the difference between the peak pressure at the end of inspiration, and the minimum pressure at the end of expiration (ie, the amplitude of the pressure waveform delivered).

The AirCurve 11 pressure support (Inspiration:Expiration and Expiration:Inspiration) trigger points are set automatically based on measurement of the patient respiratory flow. The AirCurve 11 ASV algorithm will automatically adjust pressure delivery to keep the patient's respiratory flow even.



ResMed recommends that the Max PS should be set to ≥15 cmH_2O (≥15 hPa).

Backup rate

The AirCurve 11 device uses breath phase mapping to provide a timed backup rate that is synchronised with the patient's own breathing. When the patient deviates from the ventilatory target, the AirCurve 11 device aims to stabilise the patient by adjusting Pressure Support. If necessary, it will adjust the timed backup rate from one that matches the patient's own recent rate towards the built-in default 15 BPM backup rate.

CPAP mode

In CPAP mode, a fixed pressure is delivered.

Leak management with VSync

Using ResMed's VSync algorithm, the AirCurve 11 device monitors and compensates for leak by continuously and automatically adjusting the baseline flow. This enables reliable delivery of therapy pressure while maintaining patient-device synchrony.

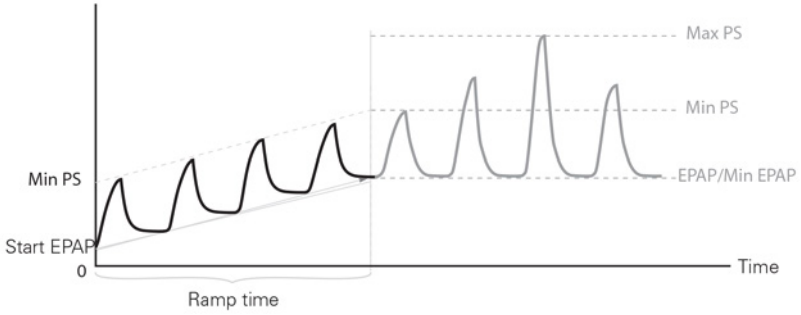
Comfort features - ASV and ASVAuto modes

Ramp

Designed to make the beginning of treatment more comfortable, ramp is available in all modes.

In ASV and ASVAuto mode, the ramp time defines the period during which the expiratory pressure increases linearly from a lower more comfortable start pressure (Start EPAP) to the minimum treatment pressure (EPAP for ASV mode and Min EPAP for ASVAuto mode) before the auto-adjusting algorithm commences.

During ramp, the pressure support is always at Min PS. After ramp, the pressure support modulates within the PS range (Min PS and Max PS). In ASVAuto mode, the EPAP also modulates within the EPAP range (Min EPAP and Max EPAP).



Note: If ramp is on (set between 5 min and 45 min), Start EPAP has to be set.

In CPAP mode, the pressure increases from a low pressure (Start Pressure) to the prescribed treatment pressure.

About the heated tubing

Note: This is an optional accessory. Not all types of air tubing are available in all regions.

The ClimateLineAir 11 is a heated breathing tube that delivers air to a compatible mask. When used with the humidifier tub, ClimateLineAir 11 heated air tubing allows the patient to use Climate Control.

Climate Control

Climate Control is an intelligent system that controls the humidifier and the ClimateLineAir heated air tubing. Climate Control is designed to make therapy more comfortable by enabling constant temperature and maintaining humidity. This feature:

- delivers comfortable humidity level and temperature during therapy
- maintains the set temperature and relative humidity during sleep to prevent dryness in the nose and mouth
- can be set to either **Auto** or **Manual**
- is only available when both the ClimateLineAir 11 and HumidAir 11 tub are attached.

Climate Control - Auto setting

Auto is the recommended and default setting. It is designed to make therapy as easy as possible so there is no need to change the temperature or humidity settings.

- Sets the tube temperature to Auto (80ºF/27ºC). If the air in the mask is too warm or too cold, you can adjust the tube temperature to anywhere from 60 to 86ºF (16 to 30ºC) or turn it off completely
- Adjusts the humidifier output to maintain a constant, comfortable humidity level of 85% relative humidity
- Protects against rainout (water droplets in the heated air tubing and mask).

Climate Control - Manual setting

Manual is designed to offer more flexibility and control over settings and offers the following:

- Temperature and humidity can be adjusted to find the most comfortable setting
- Temperature and humidity level can be set independently
- Rainout protection is not guaranteed. If rainout does occur, first try increasing the tube temperature
- If the air temperature becomes too warm and rainout continues, try decreasing the humidity.

Notes:

- If Climate Control is set to **Manual**, the **Auto** Tube Temperature setting is not available.
- The temperature and humidity settings are not measured values.

Tube Temperature

The temperature sensor located at the mask end of the ClimateLineAir 11 heated air tubing enables the system to automatically control the temperature of the air delivered to the patient. This ensures the temperature of the air delivered to the patient does not fall below the set minimum temperature, therefore maximising breathing comfort for the patient.

Humidity Level

The humidifier moistens the air and is designed to make therapy more comfortable.

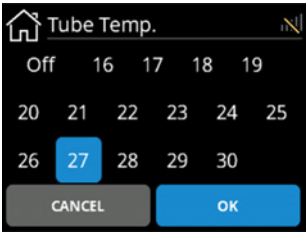
- If the patient is getting a dry nose or mouth, turn up the humidity
- If the patient is getting any moisture in the mask turn down the humidity.
- The **Humidity Level** can be set to: Off or between 1 and 8, where 1 is the lowest humidity setting and 8 is the highest humidity setting.

For each humidifier setting, the Climate Control system delivers a constant amount of water vapour, or absolute humidity (AH), to the patient's upper airway.

To update the setting for **Tube Temperature**, **Climate Control,** or **Humidity Level**, tap **MY OPTIONS** from the **Home** screen, go down the list of options, and select the setting.

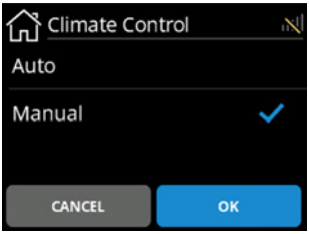
Note: Tube Temp **Auto** setting is only relevant when using the **Climate Control Auto** setting. If **Climate Control** is set to **Manual**, **Auto** set temperature is not a valid selection.

Tube Temperature



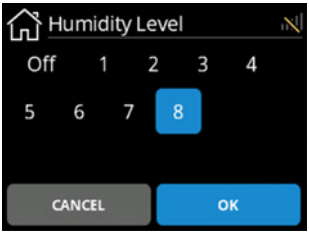
1. Tap **Tube Temp**.
2. Tap the preferred setting.
3. Tap **OK** to save the change.

Climate Control



1. Tap **Climate Control.**
2. Tap **Manual**.
3. Tap **OK** to save the change.

Humidity Level



1. Tap **Humidity Level.**
2. Tap the preferred setting.
3. Tap **OK** to save the change.

Note: The temperature and humidity settings are not measured values.

Automatic Adjustment

The humidifier and ClimateLineAir 11 heated air tubing are controlled by the Climate Control algorithm to deliver constant humidity and temperature outputs. The system adjusts automatically to changes in:

- ambient room temperature and humidity values
- flow due to pressure changes
- flow due to mask or mouth leak.

Setting up your device

⚠ WARNING

- Do not use any additives in the humidifier tub (eg, scented oils or perfumes). These may reduce humidification output and/or cause deterioration of the tub materials.
- To prevent disconnection of the tubing or tubing system during use, only compatible tubing should be used.

⚠ CAUTION

Use only compatible ResMed parts (eg, air inlet filter, power supplies), masks and accessories with the machine. Non ResMed parts may reduce the effectiveness of the treatment, may result in excess carbon dioxide rebreathing and/or damage the machine. For compatibility information, refer to ResMed.com for more information.

When using the humidifier tub:

- Always place the device on a level surface, lower than your head, to prevent the mask and air tubing from filling with water.
- Do not overfill the humidifier tub as water may enter the device and air tubing.
- Do not fill the humidifier tub with hot water as this could lead to excessive air temperature at the mask. Ensure the water is cooled to room temperature before filling the humidifier tub.
- Do not place the device on its side while the humidifier tub is attached as water might get into the device and reduce motor life.

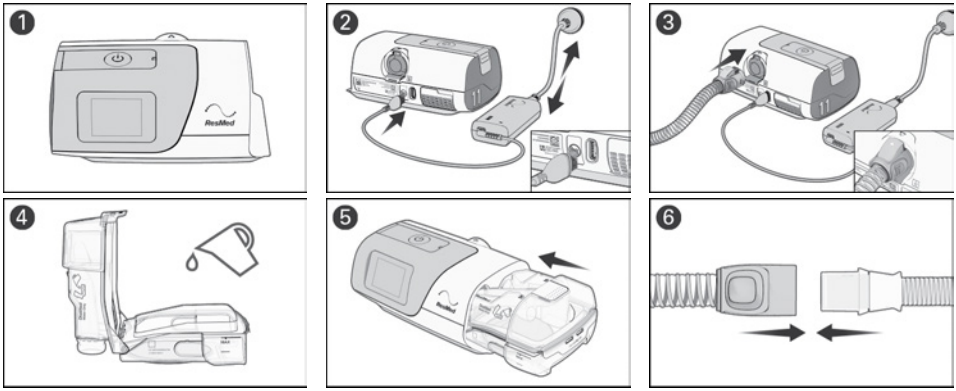
When setting up the AirCurve 11 system:

- Do not place the power supply where it can be bumped, stepped on, or where someone is likely to trip over the power cord.
- Do not block the air tubing and/or air inlet of the device while in operation as this 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.
- Ensure the system is correctly set up. Incorrect system setup may result in incorrect mask pressure reading.

When using a mask:

- Use only vented masks with this device as recommended by ResMed or by an appropriate care professional.
- 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 fresh air into the mask.

To set up the device:



1. Place the device on a stable level surface.
2. Connect the power cord into the power inlet at the rear of the device. Connect one end of the power cord into the AC adaptor and the other end into the power outlet. Ensure the device is set up and connected to power to enable settings to be applied wirelessly to the device if required.
3. Connect the air tubing firmly to the outlet connector at the rear of the device.
4. Open the humidifier tub and fill it with water.
   Note: The humidifier tub must be removed from the device before adding water.
   - If using the HumidAir 11 Standard water tub, use distilled water only
   - If using the HumidAir 11 Cleanable water tub, use drinking quality water (potable).

   Fill the water tub up to the maximum water level mark. The humidifier tub has a maximum capacity of 380 mL.
5. Close the humidifier tub 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 for use with this device are listed on ResMed.com.

Notes:

- Do not insert any USB cable into the AirCurve 11 device or attempt to plug the AC adaptor into a USB device. This may cause damage to the AirCurve 11 device or USB device.
- 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 anti-static air tubing.

Pre-use check

Prior to use, the following steps shall be performed to determine if the device is operating correctly and ready for use. If any problems occur, see the Troubleshooting section of this guide. Also refer to other provided user instructions for troubleshooting information.

With the device powered off:

1. Check the condition of the device and accessories.

   Inspect the device and all the provided accessories (eg. HumidAir 11 tub, air tubing, mask). If there are any visible defects the component should not be used.

2. Check the air tubing set up.

   Check the integrity of the air tubing. Connect the air tubing firmly to the outlet connector and other accessories if in use.

With the device powered on:

When using the humidifier tub:

1. Fill the humidifier tub and check the water level does not exceed the maximum water level mark. Insert the humidifier tub into the device.
2. From the Home screen tap **MORE.**
3. Tap **Warmup**. The screen should display the  symbol if the humidifier is in use and the humidity level has been set.
4. Check air is flowing through the air tubing. Press the Start Therapy/ Standby button or if SmartStart has been enabled, breathe into the mask and therapy will start automatically.

When using the side cover:

1. Check the side cover is inserted correctly. It should click in place.
2. Check the display screen for any error messages.
3. Check air is flowing through the air tubing. Press the Start Therapy/ Standby button or if SmartStart has been enabled, breathe into the mask and therapy will start automatically.

When using the pulse oximeter:

Pair the device and oximeter. A Bluetooth icon will appear next to the Oximeter option on the **MORE** menu.

When using supplemental oxygen:

1. Connect the oxygen connector to the air outlet of the flow generator
2. Connect the non-heated air tubing to the end of the oxygen connector port.

Ensure oxygen is flowing from its source, and that there are no kinks or blockages in the connections or tubing.

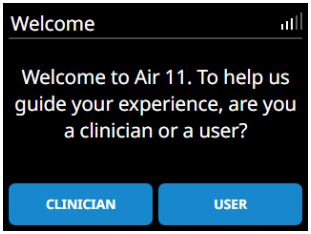
Navigating the touch screen

The AirCurve 11 device operates via a display touch screen. This allows you to access, view and change therapy and device settings and to track the sleep health progress of your patient.

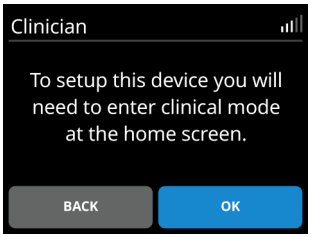
The status bar at the top of the screen may display icons at different times and may include:

Icon	Description	Purpose
	Clinical Home	Return to the Clinical Home screen at any time.
	Humidifier fault	Detects fault in the humidifier. Therapy will run without heating.
	Humidifier warming	Water in the humidifier tub is pre-heating.
	Humidifier cooling	Water in the humidifier tub is cooling.
	Device cooling	Side cover is connected and device is cooling.
	Bluetooth connected	Device is successfully connected via Bluetooth wireless technology.
	Cellular signal strength	Indicates the strength of cellular connectivity.
	No cellular connection	Cellular coverage is not available.
	Airplane mode	Device is in airplane mode.
	Silent mode	Cellular mode is not enabled. Device will function normally but no data will be sent to the cloud.

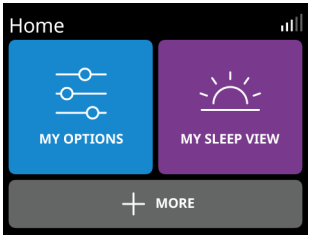
Accessing the Clinical menu



From the Welcome screen, tap **CLINICIAN**



The **Clinician** handover screen will appear.
Tap **OK** to continue or **BACK** to return to previous screen.



The **Home** screen will appear. This is also the Patient **Home** screen. The menu options are:

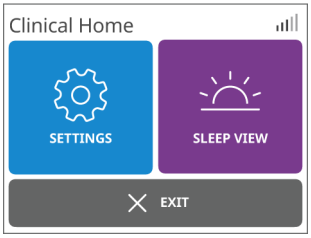
MY OPTIONS: for the patient to view and adjust therapy settings (eg, Adjust Ramp time)

MY SLEEP VIEW: for the patient to track their sleep health (eg, check the number of hours used last night or mask status)

MORE: Additional features such as **Mask Fit** or switch to **Airplane Mode.**

From the **Home** screen, press two fingers anywhere on the screen for 3 seconds to access the **Clinical Home** screen.

Accessing Clinical functions:



From this screen, you can access:

SETTINGS: Set up or adjust therapy settings for the patient.

SLEEP VIEW: Track the patients sleep health

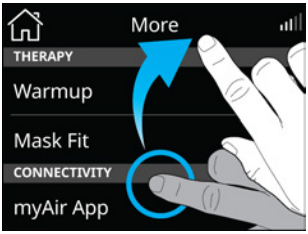
EXIT: Return to the **Home** screen (Patient View)

Notes:

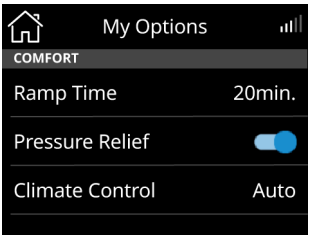
- Patient screens have a black background. Clinical screens have a white background.
- Menu options will also vary by treatment mode. Refer to the Settings menu to view the settings for each therapy mode.

Using the touch screen:

There are two actions to navigate through the touch screen:

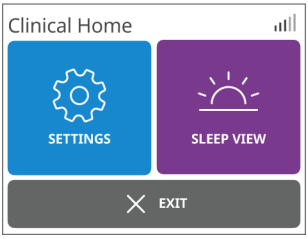


Swipe: Swipe up or down the screen to view menu options.

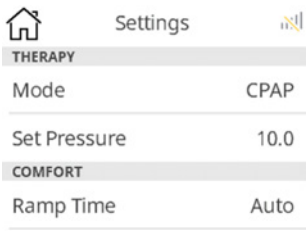


Tap: Select a parameter setting to update. For other parameters (eg Pressure Relief, Airplane mode), tap the parameter to turn it on  or tap to turn it off  .

To update settings:



Tap **SETTINGS**. The **Settings** list will display.



To update a setting:

1. Tap the preferred setting (eg, Ramp Time). The available options for this setting will be displayed.
2. Tap on the desired setting.
3. Tap **OK** to confirm the change or **CANCEL** to go back to the previous screen.

To exit the Clinical menu:

1. Tap  at any time to return to the **Clinical Home** screen.
2. Tap **EXIT** to leave the Clinical menu.

Adjusting Clinical settings

The AirCurve 11 settings and equipment (including accessories) must be configured for each patient. The settings and equipment used should be periodically reassessed to ensure optimal therapy.

All parameters relating to a patient's therapy and device configuration are managed through the **Settings** menu.

Personalizing settings

After the initial set-up, patients have the ability to personalise settings to make therapy more comfortable. These settings are updated through the **MY OPTIONS** menu.

1. Tap **MY OPTIONS** from the **Home** screen.
2. Tap the parameter to update.
3. Tap the preferred setting.
4. Tap **OK** to confirm the change or **CANCEL** to go back to the previous screen.

Additional features

There are some other features on your device which you can personalise.

Note: Not all functions are available in all regions. Functions vary based on therapy mode.

Menu	Function	Description
MY OPTIONS	Ramp Time	Period during which the pressure increases from a low start pressure to the prescribed treatment pressure. Ramp Time can be set to Off, 5 to 45 minutes (in 5-minute increments), or Auto.
	Pressure Relief*	When EPR (Expiratory Pressure Relief) is enabled, you may find it easier to breathe out. This setting can help you get used to therapy.
	Mask	Allows you to select the type of mask used with the device.
	Tube	Allows you to select the type of tubing used with the device.
	SmartStart™*	When SmartStart is enabled, therapy starts automatically when you breathe into your mask.
	SmartStop*	When SmartStop is enabled, therapy stops automatically after a few seconds when you remove your mask.
MORE	Warmup	This function will heat the water in the humidifier tub
	Mask Fit	This function helps you assess and identify possible air leaks around your mask.  Indicates good mask seal. Leak is less than 24L/min.  Adjust the mask. Leak is more than 24L/min.
	Device Diagnostic	When enabled, Device Diagnostics will analyse the functionality of the device. See ResMed.com for further details. Device Diagnostic can be set to run Daily, Weekly, every 2 weeks, or it can be switched off.

*Features enabled by an appropriate care professional.

Connecting the AirCurve 11 device and smart device

Note: Not all features are available in all regions.

myAir™ is a smartphone app that guides the patient through the setup process. This includes device setup videos, mask fitting videos, trying therapy using the Test Drive feature, and tracking their sleep health progress.

The app is not required to operate the AirCurve 11 device.

Before pairing the AirCurve 11 device to a smartphone, ensure the app's latest version is installed on the smartphone. If not, download the app from the App Store® or on Google Play®. Pair the AirCurve 11 device to the patient's phone. To set up the app, go to the MORE menu.

1. Ensure the AirCurve 11 device is set up correctly and plugged into a power source.
2. Launch the myAir app. Tap Continue.
3. Follow the prompts on the myAir app to complete the Bluetooth connection. AirCurve 11 is now connected to the app. The Bluetooth connection symbol appears on the status bar to confirm the connection between the AirCurve 11 device and the smartphone.
4. Tap Save.

Connecting the AirCurve 11 device and oximeter

Before connecting the AirCurve 11 device to the oximeter, ensure the oximeter is powered on and in pairing mode. Refer to the manufacturer's guide for more information.

1. On the AirCurve 11 device, go to the MORE menu and tap Oximeter.
2. Tap SEARCH to locate the oximeter.
3. If the oximeter is found, a list will appear on screen. Locate the matching oximeter by scrolling through the list.
4. Tap the oximeter model and then tap CONNECT to pair the oximeter and device.

If the connection fails, check the following:

- Connection failed. Tap OK and try the search again.
- Device not supported. Check the oximeter model. Only the Nonin WristOx$_2$® Model 3150 with BLE is validated with the AirCurve 11 device.

For further issues with the oximeter or finger sensor, refer to the manufacturer's guide for assistance.

Disconnecting the oximeter

1. From the MORE menu, tap Oximeter.
2. Tap DISCONNECT.
3. Tap YES to confirm disconnect request.

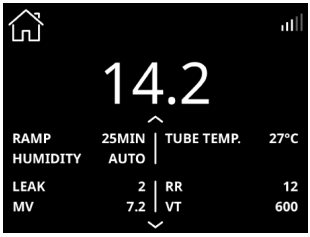
Starting/stopping therapy

⚠ WARNING

The machine 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.

To start therapy:

1. Direct the patient to fit their mask.
2. Direct the patient to press the Start therapy/ Standby button or if the SmartStart feature is enabled, direct them to breathe into their mask.



Therapy will begin and the treatment screen is displayed. A dynamic pulse wave will appear during therapy. To review the patient's sleep progress, swipe up or down the screen to view more details.

Notes:

- The screen will fade and then go black automatically after a short period of time. Tap the screen to turn it back on.
- If power is interrupted during therapy, the device will automatically restart therapy when power is restored.
- The device has a light sensor that adjusts the screen brightness based on the light in the room.

To stop therapy

1. Direct the patient to remove the mask.
2. Direct the patient to press the Start therapy/ Standby button or if SmartStop is enabled, therapy will stop automatically after a few seconds.

Treatment screen - VAuto device

Parameter	Mode			Description
	VAuto	S	CPAP	
Treatment pressure	✓	✓	✓	Treatment pressure per breath phase (inspiratory and expiratory) (cmH_2O / hPa)
Pressure			✓	Set Pressure setting (cmH_2O / hPa)
Mode	✓	✓		Therapy Mode setting
IPAP		✓		Inspiratory Positive Airway Pressure setting (cmH_2O / hPa)
Max IPAP	✓			Maximum IPAP setting (cmH_2O / hPa)
EPAP		✓		Expiratory Positive Airway Pressure setting (cmH_2O / hPa)
Min EPAP	✓			Minimum EPAP setting (cmH_2O / hPa)
PS	✓	✓1		Set Pressure Support setting (cmH_2O / hPa)
Ramp	✓	✓	✓	Ramp setting (min)

Parameter	Mode			Description
	VAuto	S	CPAP	
Humidity	✓	✓	✓	Humidifier setting
Tube temperature	✓	✓	✓	Heated tube setting (°C / °F)
Leak	✓	✓		Leak measurement (L/min)
MV	✓	✓		Minute Ventilation measurement, averaged over 5 breaths (L/min)
RR	✓	✓		Respiratory Rate measurement, averaged over 5 breaths (BPM)
Vt	✓	✓		Tidal Volume measurement, averaged over 5 breaths (mL)
Ti range	✓	✓		Minimum and Maximum Inspiratory Time setting (sec)
I:E	✓	✓		Ratio of inspiratory period to the expiratory period, averaged over 5 breaths
Ti	✓	✓		Inspiratory duration measurement, averaged over 5 breaths (sec)
Spont Cyc	✓	✓		Percentage of breaths that are spontaneously cycled over the last 20 breaths since therapy has started
Spont Trig		✓[2]		Percentage of breaths that are spontaneously triggered over the last 20 breaths since therapy has started
Machine Cycled Breath indicators 	✓	✓		 Arrow on the right hand side pointing right. This indicator identifies there has been a spontaneous effort from the patient to cycle to EPAP before the set TiMin has been reached. The machine cycles when TiMin has been reached.
	✓	✓		 Arrow on the right hand side pointing left. This indicator identifies that there has been no spontaneous effort from the patient to cycle to EPAP. The machine cycles when TiMax has been reached.
Machine Triggered Breath indicator 		✓[2]		 Arrow on the left hand side and pointing right. This indicator identifies that that there has been no spontaneous effort from the patient to initiate the transition to IPAP and the machine has triggered IPAP.

[1] PS for S mode is derived from the EPAP and IPAP settings.

[2] In S mode only with Backup rate On.

Note: The data displayed is instantaneous unless specified.

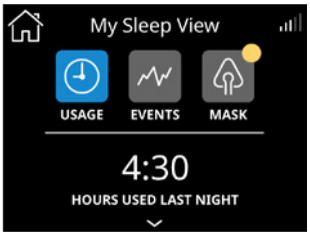
Treatment screen - ASV device

Parameter	Mode			Description
	ASVAuto	ASV	CPAP	
Treatment pressure	✓	✓	✓	Treatment pressure per breath phase (inspiratory and expiratory) (cmH_2O / hPa)
Pressure			✓	Set Pressure setting (cmH_2O / hPa)
Mode	✓	✓		Therapy Mode setting
EPAP	✓	✓		Target Expiratory Positive Airway Pressure setting (cmH_2O / hPa)
PS	✓	✓		Minimum and Maximum Pressure Support setting (cmH_2O / hPa)
Ramp	✓	✓	✓	Ramp setting (min)
Humidity	✓	✓	✓	Humidifier setting
Tube temperature	✓	✓	✓	Heated tube setting (°C / °F)
Leak	✓	✓		Leak measurement (L/min)
MV	✓	✓		Minute Ventilation measurement, averaged over 5 breaths (L/min)
RR	✓	✓		Respiratory Rate measurement, averaged over 5 breaths (BPM)
Vt	✓	✓		Tidal Volume measurement, averaged over 5 breaths (mL)
TgMV	✓	✓		Target Minute Ventilation measurement (L/min). Displayed as 90 (±10)% of the patient's minute ventilation for the last 3 minutes.

Note: The data displayed is instantaneous unless specified.

My Sleep View

Last night's sleep data can be found under **MY SLEEP VIEW**.



USAGE: displays HOURS USED LAST NIGHT

EVENTS: displays the number of apnoea and hypopnoea events per hour of sleep.

Note: This is only available in **Patient View - Advanced.**

MASK: displays information on the mask seal. A yellow mark on this icon indicates there is information to view on the mask seal. Tap **MASK** to see more.

More detailed data can be found in myAir (if available). If enabled by your care professional, additional data may be found by swiping up or down the screen.

Viewing sleep data and option controls

The Sleep View screen shows sleep quality and mask seal status for the most recent therapy session. The parameters displayed will depend on the therapy mode.

In the **Patient view**, there are two types of access levels: Simple and Advanced.

The **Simple** view is designed to:

- Make the device interaction and menu navigation easier for patients
- Provide access to the most important comfort features such as **Ramp Time**, **Mask Fit, Humidity level and Warmup** (if humidifier is available)

The **Advanced** view provides highly engaged patients access to additional features to monitor their sleep health. These include:

- **EPR** (if available)
- **SmartStart** and/or **SmartStop**

The **Advanced** view option also enables more data to be shown on the Sleep View screen and can be enabled via the **Settings** screen. For more information on the Patient view, see the User Guide.

Sleep View parameters are shown below. By tapping on **Extended Period**, the 12 month average data will be displayed.

Parameter	Device		Description
	VAuto	ASV	
Used Hours	✓	✓	Number of hours the device has been used since last session
Insp. Pressure	✓	✓	Inspiratory pressure during the last session (presented as the 95th percentile) or over the last year.[1]
Exp. Pressure	✓	✓	Expiratory pressure during the last session (presented as the 95th percentile) or over the last year.[1]
Leak	✓	✓	Leak during the last session (presented as the 95th percentile) or over the last year.[1]
Vt	✓	✓	Tidal volume during the last session (presented as the 50th percentile) or over the last year.[2]
RR	✓	✓	Respiratory rate during the last session (presented as the 50th percentile) or over the last year.[2]
MV	✓	✓	Minute ventilation during the last session (presented as 50th percentile) or over the last year.[2]
TgMv		✓	Target minute ventilations during the last session (presented as 50th percentile) or over the last year.[2]
Ti	✓		Duration of inspiration during the last session (presented as 50th percentile) or over the last year.[2]
I:E	✓		Ratio of inspiratory period to the expiratory period during the last session (presented as 50th percentile) or over the last year.[2]
Spont Trigger	✓		Percentage of breaths that are spontaneously triggered during the last session or average of the last year in the extended period view
Spont Cycle	✓		Percentage of breaths that are spontaneously cycled during the last session, or averaged over the last year in the extended period view.
AHI [3]	✓	✓	Apnoea-Hypopnoea Index is calculated by dividing the total number of events that occurred during the last session by the Used hours.[4]

Parameter	Device		Description
	VAuto	ASV	
Obstructive AI [3]	✓		Obstructive Apnoea Index is calculated by dividing the total number of Obstructive Apnoea events that occurred during the last session by the 'Used hours".[4]
Total AI [3]	✓	✓	Total Apnoea Index is calculated by dividing the total number of ALL Apnoea events that occurred during the last session by the 'Used Hours".[4] Total AI Calculation may be affected in the presence of high leak.
Central AI [3]	✓		Central Apnoea Index is calculated by dividing the total number of Central Apnoea events that occurred during the last session by the 'Used hours'.[4] Central AI calculation may be affected in the presence of high leak
Days used	✓	✓	Number of days the device has been used during the selected period or since the last compliance data was reset.[5]
Days 4 hours+	✓	✓	Number of days used in the last year where the 'Used hours' is greater than or equal to 4 hours.[5]

[1] Average of 95th percentile in the extended period view.

[2] Average of 50th percentiles in the extended period view.

[3] Reported apnoeas and hypopnoeas are based on respiratory flow estimates by the device and are not based on diagnostics criteria. A respiratory event is scored when a short term ventilation measure falls below a long-term ventilation measure (both derived from respiratory flow) and is accompanied by obstructive breaths when relevant.

[4] The extended period view provides the average over the last year.

[5] Only visible in the extended period view.

Settings

Therapy settings – VAuto device

Parameter	Description	Mode			Range
		VAuto	S	CPAP	
Mode	Sets the therapy mode available on the device.	✓	✓	✓	
IPAP	Sets the pressure to be delivered to the patient when the device is triggered into inspiration.		✓		4-25 cm H_2O (4-25 hPa), 0.2 cm H_2O (0.2 hPa) increments.
EPAP	Sets the pressure to be delivered to the patient when the device is cycled into expiration.		✓		2–[IPAP] cm H_2O (2–[IPAP] hPa), 0.2 cm H_2O (0.2 hPa) increments
Set Pressure	Sets the fixed treatment pressure.			✓	4-20 cm H_2O (4-20 hPa), 0.2 cm H_2O (0.2 hPa) increments.
Backup Rate			✓		Off / 10 BPM
Easy-Breathe	Enable / disable the Easy-Breathe feature.		✓		On / Off
Ti Range	Set the minimum/maximum limit on the time the device spends in IPAP	✓	✓		Min: 0.1–[Ti Max] sec, 0.1 sec increments Max: 0.3–0.4 sec, 0.1 sec increments
I:E	Ratio of inspiratory duration to the expiratory duration		✓		
Rise Time	Set the time taken for pressure to increase from EPAP to IPAP. The Rise Time scale can be approximately read as 'milliseconds' (eg, 200 is approximately 200 ms).		✓		Min / 150–900 ms, 50 ms increments
Trigger	Set the level of inspiratory flow above which the device changes from EPAP to IPAP.	✓	✓		Very Low / Low / Med / High / Very High
Cycle	Set the level of inspiratory flow below which the device changes from IPAP to EPAP.	✓	✓		Very Low / Low / Med / High / Very High
Max IPAP	Sets the maximum inspiratory pressure delivered by the device.	✓			4–25 cm H_2O (4–25 hPa), 0.2 cm H_2O (0.2 hPa) increments
Min EPAP	Sets the minimum EPAP (minimum expiratory pressure) delivered by the device.	✓			4–25 cm H_2O (4–25 hPa), 0.2 cm H_2O (0.2 hPa) increments
Pressure Support (PS)	Difference between IPAP and EPAP. Adjust for patient comfort.	✓			0–10 cm H_2O (0–10 hPa), 0.2 cm H_2O (0.2 hPa) increments

Comfort settings – VAuto device

Parameter	Description	Mode			Range
		VAuto	S	CPAP	
Ramp Time	If Auto is selected, the device will detect sleep onset and automatically rise to the prescribed treatment pressure.	✓	✓	✓	Off / 5–45 mins
Start Pressure	Set the pressure at the start of ramp, up to treatment pressure.			✓	4–Set pressure, 0.2 cm H_2O (0.2 hPa) increments
Start EPAP	Set the pressure at the start of ramp, up to minimum treatment pressure.	✓	✓		Min*–EPAP, 0.2 cm H_2O (0.2 hPa) increments *Dependent on minimum device pressure for the therapy mode.
Climate Control	Available when water tub is used and ClimateLineAir heated air tubing is connected.	✓	✓	✓	Manual / Auto
Tube Temp.	Set the minimum temperature of air delivered by heated air tubing such as ClimateLineAir.	✓	✓	✓	Off / 60–86°F (16–30°C), 2°F (1°C) increments / Auto (only available when Climate Control is set to Auto)
Humidity Level	Set the humidity level.	✓	✓	✓	Off / 1–8
EPR	Enable / disable EPR.			✓	On / Off
EPR Type	Available when EPR is enabled.			✓	Full Time / Ramp Only
EPR Level	Set the EPR value.			✓	1 / 2 / 3 cm H_2O (1 / 2 / 3 hPa)

Therapy settings – ASV device

Parameter	Description	Mode			Range
		ASV	ASVAuto	CPAP	
Mode	Sets the therapy mode	✓	✓	✓	ASV, ASVAuto, CPAP
EPAP	Sets the pressure to be delivered to the patient when the device is cycled into expiration.	✓			4–15 cm H_2O (4–15 hPa) 0.2 cm H_2O (0.2 hPa) increments Dependent on the Maximum device pressure.

Parameter	Description	Mode			Range
		ASV	ASVAuto	CPAP	
PS (Pressure Support) Range	Sets the pressure support range to be delivered by the device	✓	✓		Min PS Range 0–6 cm H_2O (0–6 hPa) Dependent on Maximum device pressure and EPAP level (in ASVAuto mode, dependent on Min EPAP) Max PS Range 5–20 cm H_2O (5–20 hPa) Dependent on Min PS Range. Upper limit dependent on Maximum device pressure and EPAP level.
Set pressure	Sets the fixed treatment pressure			✓	4-20 cm H_2O (4-20 hPa) 0.2 cm H_2O increments.
EPAP Range	Sets the minimum EPAP (minimum expiratory pressure) and maximum EPAP delivered by the device.		✓		Min/Max EPAP range 4–15 cm H_2O (4–15 hPa) Max EPAP is dependent on Min EPAP level.

Note: Starting pressure is dependent upon the EPAP level. In ASVAuto mode, starting pressure is dependent on the Minimum EPAP. In ASVAuto mode, PS (pressure support range) is also dependent on the Min EPAP.

Comfort settings – ASV device

Parameter	Description	Mode			Range
		ASV	ASVAuto	CPAP	
Ramp Time	Set the ramp time.	✓	✓	✓	Off / 5–45 mins
Start Pressure	Set the pressure at the start of ramp, up to treatment pressure.			✓	4–Set pressure, 0.2 cm H_2O (0.2 hPa) increments
Start EPAP	Set the pressure at the start of ramp, up to minimum treatment pressure.	✓	✓		4–EPAP, 0.2 cm H_2O (0.2 hPa) increments
Climate Control	Available when humidifier is used and ClimateLineAir heated air tubing is connected.	✓	✓	✓	Manual / Auto
Tube Temp.	Set the minimum temperature of air delivered by heated air tubing such as ClimateLineAir.	✓	✓	✓	Off / 60–86°F (16–30°C), 2°F (1°C) increments / Auto (only available when Climate Control is set to Auto)
Humidity Level	Set the humidity level.	✓	✓	✓	Off / 1–8

Options

Parameter	Description	Range
Patient View	Set the level of access available to the patient.	Simple/ Advanced
SmartStart™	Enable/disable the SmartStart feature. If you enable the SmartStart feature, the device will start automatically when the patient breathes into the mask.	On/ Off
SmartStop	Enable/disable the SmartStop feature. If you enable the SmartStop feature, the device will stop automatically when the patient removes the mask.	On/ Off
Care Check-In	Enable Care Check-in. A series of simple questions presented to the patient to gain insight on their progress with sleep therapy and enables them to enroll in the myAir application.	On/ Off
Reminders		
Mask	Set a recurring reminder to the patient to replace the mask.	Off/ 1/ 3/ 6/ 9/ Yearly
Tube	Set a recurring reminder to the patient to replace the air tubing	Off/ 1/ 3/ 6/ 9/ Yearly
Filter	Set a recurring reminder to the patient to replace the air filter	Off/ 1/ 3/ 6/ 9/ Yearly
Humidifier	Set a recurring reminder to the patient to replace the humidifier tub	Off/ 1/ 3/ 6/ 9/ Yearly

Configuration

Parameter	Description	Selection
Language	Set the display language (Not all languages available in all regions)	English / Français / Español / Português / Deutsch / Italiano / Nederlands / Svenska / Norsk / Dansk / Suomi / Polski / Türkçe / Русский / Ελληνικά/ Eesti / Česky / 简体中文 / 繁體中文/ 日本語
TimeZone	Set up the correct time zone for the patient	GMT time zone
Temperature Units	Set the temperature units	°F / °C
Restore Defaults	Reset to default settings (except for language, date and time)	OK to restore defaults. Cancel to return to previous menu.
Erase data	Erase all data stored on the device and SD card. Settings, date, time and device run hours are not affected.	OK to erase data Cancel to return to previous menu.
About	View Run Hours, SW version, CF version, network provider, network type and signal strength (dBm) of the device.	

Accessories

Parameter	Description	Range
Mask Setting	Select the type of mask used by the patient. Refer to Mask Device Compatibility List on www.resmed.com.	Full Face / Nasal / Pillows / Pediatric
Tube	Select the type of air tubing used by the patient. ClimateLineAir air tubing is automatically detected when connected to the device.	SlimLine / Standard / 3m
BV filter	Select On if you attach a bacterial/viral filter.	On/Off
View oximeter	Displayed at all times when an oximeter is connected.	18-300 BPM* 0-100% SpO_2

* Values from the finger pulse oximeter are averaged over 4 heartbeats. Disconnection or insufficient signal from the finger pulse oximeter would result in displayed value of "--" for SpO_2 and Pulse rate.

Setting the time zone

Before the patient is set up, ensure the correct time zone has been set. The time zone cannot be changed once patient data has been stored on the device. The patient data will need to be erased before changing the time zone.

The AirCurve 11 device is set up with GMT (Greenwich Mean Time) time zone settings.

To change Time Zone:

1. From the **Clinical Home** screen, tap **SETTINGS**
2. Move down the menu to find **CONFIGURATION** options
3. Tap **Time Zone**
4. Select the relevant GMT setting and tap **OK**.

Restoring settings and erasing data

When using the device in a multi-patient environment, the device settings should be reset between patient use.

To restore default settings:

1. From the **Clinical Home** screen, tap **SETTINGS**
2. Move down the menu to find **CONFIGURATION** options
3. Tap **Restore Defaults**
4. Tap **OK** to confirm or **CANCEL** to return to the previous screen.

To erase data from the device:

1. From the **Clinical Home** screen, tap **SETTINGS**
2. Move down the menu to find **CONFIGURATION** options
3. Tap **Erase data**
4. Tap **OK** to confirm or **CANCEL** to return to the previous screen.

Supplemental oxygen

Before adding oxygen, familiarise yourself and your patient with the following warnings relating to the use of supplemental oxygen.

⚠ WARNING

- Supplemental oxygen must not be used while smoking or in the presence of an open flame.
- When using the device with an oxygen supply, check the following:
  - Starting therapy – ensure the device is on and blowing air before the oxygen supply is turned on.
  - Stopping therapy – ensure the oxygen supply is turned off first, then the device.

  This will ensure oxygen does not accumulate within the device and create a risk of fire.

The device is designed to be compatible with up to 15 L/min of supplemental oxygen in all modes.

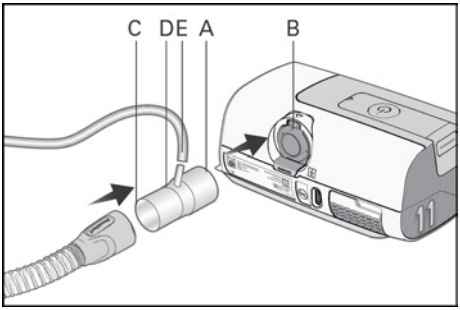
At a fixed rate of supplemental oxygen flow, the inhaled oxygen concentration will vary depending on the pressure settings, patient breathing pattern, mask selection and the leak rate.

An oxygen connector port is required to connect supplemental oxygen to the device. Oxygen concentration should be measured at the point of delivery to the patient.

Notes:

- Adding oxygen may affect the delivered pressure and the accuracy of the displayed and reported values
- Oxygen concentration can be affected by a partial obstruction downstream of the AirCurve 11 system.

Fitting an oxygen port



1. Firmly connect the Oxygen Connector Port (A) directly to the air outlet (B) of the flow generator.
2. Connect the non-heated air tubing to the end of the Oxygen Connector Port (C) as shown. Ensure that the non-heated tube is connected up to the indicated line (D).
3. Connect the oxygen supply tubing to the oxygen inlet port (E) as shown.

Cleaning and caring for the device

⚠ WARNING

- Beware of electrocution:
  - Do not immerse the device, AC Adaptor or power cord in water.
  - Do not connect to power while the device is wet. Make sure that all parts are dry before plugging it in.
  - If liquids are spilled into or onto the device, unplug the device and let the parts dry.
- Always unplug the device before cleaning and ensure that all parts are dry before plugging it back in.
- Do not perform any maintenance tasks (eg, cleaning, changing the air filter) while the device is in operation.
- Clean the device and its components according to the schedules shown in this guide, to maintain the quality of the device and to prevent the growth of germs that can adversely affect your health.
- Regularly inspect power cords, cables, and power supply for damage or signs of wear. Discontinue use and replace if damaged.
- 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.

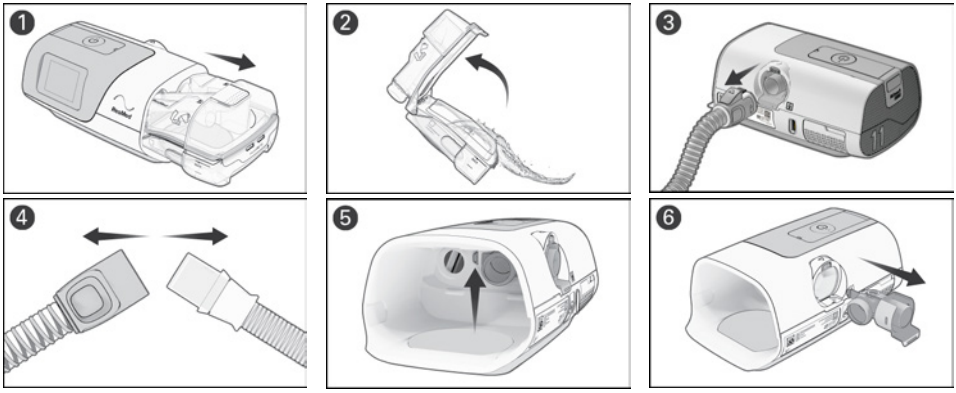
⚠ CAUTION

- Do not use bleach, chlorine, or aromatic-based solutions, moisturising or antibacterial soaps or scented oils to clean the device, the humidifier tub 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.
- Leave the humidifier tub to cool for at least ten minutes after turning off the humidifier or until the cool down mode is complete before handling the humidifier tub.
- Only clean, maintain and/or reprocess the device and components according to the instructions shown in this guide.

The following sections will help you with:

- Disassembling
- Cleaning
- Checking
- Reassembling.

Disassembling



1. Hold the humidifier tub at the top and bottom, press it gently and pull it away from the device.
   Note: take care when handling the humidifier tub as the humidifier tub may be hot. Allow 10 minutes for the heater plate and any excess water to cool.
2. Open the humidifier tub and discard any remaining water.
3. Pinch 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.
5. Locate the outlet connector on the inside of the device and release it by pressing the clip firmly.
6. Remove the outlet connector by pulling it out through the outlet connector socket at the rear of the device.

Cleaning

The following instructions are for home cleaning.

You should clean the device, humidifier tub, air tubing, and outlet connector as described. For cleaning your mask, refer to the mask user guide for detailed instructions.

Daily:

1. Empty the humidifier tub and wipe it thoroughly with a clean disposable cloth. Allow it to dry out of direct sunlight.
2. Refill the humidifier tub.
   - If using the HumidAir 11 Standard water tub, use distilled water only
   - If using the HumidAir 11 Cleanable water tub, use drinking quality water (potable).

Weekly:

1. Wash the components as described:
   - Air tubing - in warm water using a mild dishwashing liquid.
   - Humidifier tub - in warm water using a mild dishwashing liquid OR in a solution with a ratio of 1 part vinegar and 9 parts water at room temperature.
   - Outlet connector - in warm water using a mild dishwashing liquid OR in a solution with a ratio of 1 part vinegar and 9 parts water at room temperature.
   - Components should not be washed in temperatures higher than 131°F (55°C).
2. Rinse each component thoroughly in water.
3. Allow to dry out of direct sunlight or heat
4. Wipe the exterior of the device with a dry cloth.

Notes:

- The humidifier tub and outlet connector may be washed in a dishwasher. It should not be washed at temperatures higher than 65°C.

- Do not wash the air tubing in a dishwasher or washing machine.
- The air filter is not washable.

Checking

⚠ WARNING

- Discontinue use and contact an appropriate care professional if any of the following occur:
  - device does not perform as usual
  - device is making unusual sounds
  - device is damaged
- If using a bacterial/viral filter, regularly check it for signs of moisture or other contaminants, particularly during nebulization or humidification. Failure to do so could result in increased breathing resistance or affect the delivery of the therapeutic pressure.

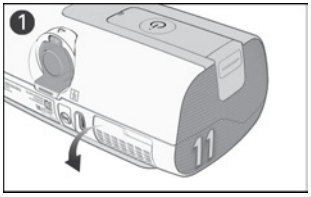
⚠ CAUTION

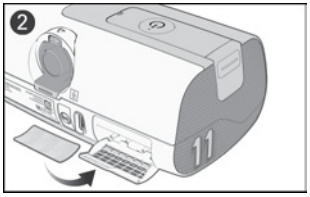
If any visible deterioration of a system component is apparent (cracking, discoloration, tears etc.), the component should be discarded and replaced.

Regularly check the humidifier tub, air tubing, and air filter for any damage.

1. Check the humidifier tub:
   - 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 1 part household vinegar to 9 parts water. Rinse with clean 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 every six months. Replace it more often if there are any holes or blockages by dirt or dust.

Replacing the air filter





1. Open the air filter cover and remove the old air filter.
2. Place a new air filter onto the air filter cover and then close the cover. Make sure the air filter and air filter cover are fitted at all times to prevent water and dust from entering the device.

Note: The air filter is not washable.

Reassembling

When the components are dry, you can reassemble the parts.

To reassemble the AirCurve 11 system:

1. Hold the outlet connector with the seal pointing to the left and the clip pointing forward.
2. Make sure the outlet connector is correctly aligned and insert the outlet connector into the socket.
3. Check the outlet connector is inserted correctly.
4. Connect the air tubing firmly to the air outlet located on the rear of the device.
5. Open the humidifier tub and fill it with water up to the maximum water level mark.
   - If using the HumidAir 11 Standard water tub, use distilled water only
   - If using the HumidAir 11 Cleanable water tub, use drinking quality water (potable)

6. Close the humidifier tub and insert it into the side of the device.
7. Connect the free end of the air tubing firmly onto the assembled mask.

For further assistance, refer to Setting up your device.

Preparing the device for use between patients

When the device is used for multiple patients, for example, in a sleep lab, clinic, hospital or at a health care provider, the outlet connector, air tubing , cleanable humidifier tub and device enclosure should be reprocessed between each patient.

Described here are ResMed's recommended and validated procedures for cleaning and disinfecting the outlet connector, air tubing, cleanable humidifier tub and device enclosure. The person executing reprocessing activities is responsible for ensuring that reprocessing is completed in line with ResMed's validated procedures. Components not identified in the reprocessing instructions do not require reprocessing or are intended for single patient use.

⚠ WARNING

- Always follow cleaning and disinfection instructions. Some cleaning products may damage the components and their function or leave harmful residual vapours.
- Any deviations from the procedures or claimed maximum number of cycles in this guide can have an adverse effect on the components and consequently the safety or the quality of therapy.
- When using detergents, disinfectants or equipment, always follow the instructions provided by the manufacturer of those products. In the event of conflict, this guide takes precedence.
- Always follow safe operating practices, including the use of appropriate Personal Protective Equipment (PPE), as required. Refer to the instructions provided by the manufacturer of those products for more details.
- Beware of electrocution:
  - Do not immerse the device, AC Adaptor or power cord in water.
  - Do not connect to power while the device is wet. Make sure that all parts are dry before plugging it in.

General summary

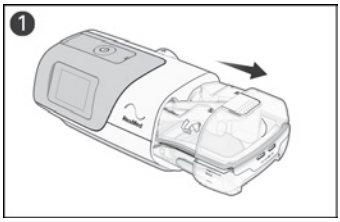
ResMed has validated the following number of cycles for cleaning and disinfection using the following methods:

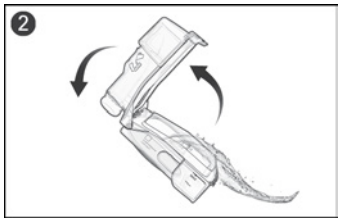
	Cleaning		
	Alconox® (Mild alkaline, anionic detergent)	Anios Clean Excel D™ (Neutral, non-ionic detergent)	Neodisher® Mediclean Forte (Alkaline, enzymatic detergent)
	CIDEX OPA® (Ortho-phthalaldehyde High level disinfection) or Thermal high level disinfection	Anioxyde™ 1000LD (Peracetic acid)	Thermal high level disinfection A_0= 600 A_0= 3000
	Manual	Manual	Automated washer disinfector
Outlet connector	50	-	50
HumidAir 11 Cleanable humidifier tub	50	50	50
ClimateLineAir 11	30	-	-
Standard tubing	30	-	-
SlimLine	30	-	-
	Cleaning and low level disinfection		
Device Enclosure	CaviWipes1™	Mikrozid AF™	

Disassembling

Before disassembly, turn off the device and ensure the AC adaptor has been removed.

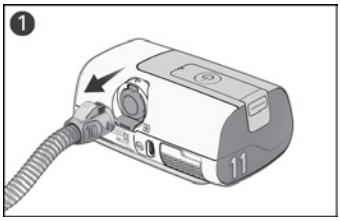
Cleanable Humidifier tub

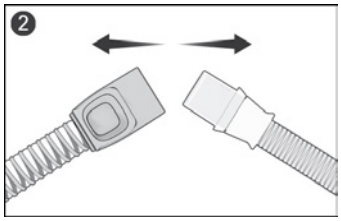




1. Hold the humidifier tub at the top and bottom, press it gently and pull it away from the device.
   Note: take care when handling the humidifier tub as the humidifier tub may be hot. Allow 10 minutes for the heater plate and any excess water to cool.
2. Hold the base of the humidifier tub and fully open the humidifier tub lid and pull it away so that it easily detaches from the base.

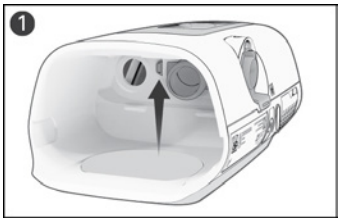
Air tubing

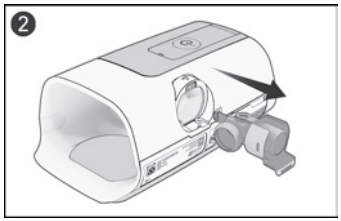




1. Pinch the cuff of the air tubing, and gently pull it away from the device.
2. Hold both the cuff of the air tubing and the swivel of the mask, then gently pull apart.

Outlet connector





1. Locate the outlet connector on the inside of the device and release it by pressing the clip firmly.
2. Remove the outlet connector by pulling it out through the outlet connector socket at the rear of the device.

Device enclosure

Cleaning

Clean the device enclosure using an alcohol based cleaning and disinfection wipe. ResMed has validated:

- CaviWipes1
- Mikrozid AF

1. Wipe the exterior of the device using a wipe until visually clean following the manufacturer's instruction for cleaning. Use a minimum of two wipes.

   If visual debris is still present, perform the following:
2. Clean the exterior of the device with a dry, soft bristle brush and wipe the exterior of the device using a new cleaning and disinfection wipe following the manufacturer's instruction for cleaning.

Disinfection

Repeat the first step with a new wipe and follow the manufacturer's instructions for low level disinfection.

Note: Failure to clean the component as indicated may result in inadequate disinfection.

Drying

Allow sufficient time for the device to air dry completely.

Note: Drying is not required after cleaning if disinfection is continued immediately.

Inspection

Perform a visual inspection of the device casing. If any visible deterioration is apparent (cracking, crazing etc) discontinue use and contact an appropriate care professional.

Alconox cleaning and disinfection options

Valid for: Outlet connector, HumidAir 11 Cleanable humidifier tub and air tubing.

Cleaning

1. Make a solution of a mild alkaline anionic detergent and water[1] as directed by the manufacturer's instructions. ResMed has validated:
   - Alconox™ at 1% (10 g/L) in water[1] at 21ºC to 55ºC
2. Soak all components for 5-10 minutes. Agitate the component in the cleaning solution to ensure there are no air bubbles.
3. Clean the inside and outside of all components with a soft bristle brush while soaking in a detergent solution. Pay particular attention to all crevices and cavities.
   - Tubing (Standard, SlimLine and ClimateLineAir 11): 3 minutes of brushing

     Note: A soft bristle tube/bottle brush is required to clean the inside of the tubing. Remove tubes from the detergent solution to assist brushing.
   - Outlet connector: 1 minute of brushing
   - HumidAir 11 Cleanable humidifier tub: 2 minutes of brushing
4. Thoroughly rinse each component as follows: in 5 litres of water[1] at ≤ 60ºC for each component by immersing it. Rinse tubing for 30-60 seconds. Agitate the component in the rinsing water to ensure there are no air bubbles.
5. Repeat the rinse procedure two additional times using fresh water[1] for a total of three rinses.
   Note: Failure to clean the component as indicated may result in inadequate disinfection.

[1] Potable water with a hardness ≤150 mg/L is recommended for all cleaning, disinfection and rinsing steps.

Inspection

Inspect and if required, repeat the cleaning steps until visually clean. Shake air tubing to remove excess water.

Drying

Allow the components to dry at room temperature out of direct sunlight.

Note: Drying is not required after cleaning if thermal disinfection is continued immediately.

High Level disinfection

In the following procedures, only one disinfection process needs to be performed: thermal disinfection OR chemical disinfection.

High level thermal disinfection

1. Immerse the components in a water[1] bath. Agitate the components in the water bath to ensure no air bubbles are trapped.
2. Soak the components in a hot water bath. ResMed has validated:
   - Water bath:
     - 70ºC for 100 minutes
     - 75ºC for 30 minutes

   Note: Higher temperatures may damage the components.
3. Allow the components to dry at room temperature out of direct sunlight.

OR

High level chemical disinfection

1. Make a solution of CIDEX OPA (Ortho-phthalaldehyde 0.55%) as directed by the disinfectant manufacturer. ResMed has validated:
   - CIDEX® OPA at 21ºC to 25ºC
2. Soak the components in the solution at room temperature (approximately 21ºC to 25ºC) for 12 minutes. Agitate the components in the disinfectant solution to ensure no air bubbles are trapped and wipe over all accessible surfaces of the components with a gloved finger to confirm there are no air bubbles.
3. Rinse and agitate the components in water[1] 5 litres per component at ≤60ºC for 1 minute. Shake air tubing to remove excess water.
4. Repeat the rinse procedure two additional times using fresh water[1] for a total of three rinses.
5. Allow the components to dry at room temperature out of direct sunlight.

[1] Potable water with a hardness ≤150 mg/L is recommended for all cleaning, disinfection and rinsing steps.

Inspection

Perform a visual inspection of each component. If any visible deterioration is apparent (holes, tears or cracks etc) replace the component.

Anios cleaning and disinfection

Valid for: HumidAir 11 Cleanable humidifier tub only

Cleaning

1. Prepare a solution of Anios Clean Excel D (neutral pH, non-ionic detergent) and water[1] as directed by the manufacturer's instructions. ResMed has validated:
   - Anios Clean Excel D: at 0.5% (5 mL/L) in water[1] at room temperature (approximately 21ºC to 25ºC)
2. Soak all components for 5 minutes. Agitate the component in the cleaning solution to ensure there are no air bubbles.
3. Clean the inside and outside of all components with a soft bristle brush while soaking in a detergent solution. Pay particular attention to all crevices and cavities.
   - HumidAir 11 Cleanable humidifier tub: 2 minutes of brushing
4. Thoroughly rinse each component as follows: in 5 litres of water[1] at ≤ 60ºC for each component by immersing it. Rinse tubing for 30-60 seconds. Agitate the component in the rinsing water to ensure there are no air bubbles..
5. Repeat the rinse procedure two additional times using fresh water[1] for a total of three rinses.
   Note: Failure to clean the component as indicated may result in inadequate disinfection.

Inspection

Inspect and if required, repeat the cleaning steps until visually clean. Shake air tubing to remove excess water.

Drying

Allow the components to dry at room temperature out of direct sunlight.

Note: Drying is not required after cleaning if thermal disinfection is continued immediately.

High level chemical disinfection

1. Prepare a solution of Anioxyde 1000LD (peracetic acid 1000ppm to 2000ppm) as directed by the disinfectant manufacturer. ResMed has validated:
   - Anioxyde 1000LD at room temperature (approximately 21°C to 25°C)
2. Soak the components in the solution at room temperature (approximately 21°C to 25°C) for 5 minutes. Agitate the components in the disinfectant solution to ensure no air bubbles are trapped and wipe over all accessible surfaces of the components with a gloved finger to confirm there are no air bubbles.
3. Rinse and agitate the components in a water[1] 5 litres per component at ≤60°C for 1 minute. Shake air tubing to remove excess water.
4. Repeat the rinse procedure two additional times using fresh water[1] for a total of three rinses.
5. Allow the components to dry at room temperature out of direct sunlight.

[1] Potable water with a hardness ≤150 mg/L is recommended for all cleaning, disinfection and rinsing steps.

Automated Washer disinfector

Valid for: Outlet connector and HumidAir 11 Cleanable humidifier tub

1. Soak the components in a 5 litre rinse bath of cold tap water[1] for 1 minute. Ensure there are no air bubbles on the components.
2. Rinse each component under cold running tap water[1]. Ensure internal surfaces and lumens are flushed.
   - HumidAir 11 cleanable tub: 1 minute of flushing
   - Outlet connector: 30 seconds of flushing
3. Transfer the components into a ISO15883 series compliant washer-disinfector, with reference to the cleaning chemical manufacturer's instructions for use, and the following conditions:

Load configuration/Position	All items should be oriented to ensure effective drainage
Connections/Accessories	Outlet connector: Place items in a wire mesh basket or similar to prevent movement during operation. HumidAir 11 cleanable tub: No specific connections or accessories required.
Process chemicals	Cleaner: 2-10 ml/L(0.2-1%) Neodisher Mediclean Forte Neutraliser: 1-2 ml/L (0.1-0.2%) Neodisher Z
Cleaning/Rinse temperature limits	43°C to 60°C
Thermal disinfection temperature limits[2] (HumidAir 11 cleanable tub, Outlet connector)	85°C / 190 seconds to achieve an A_0 of 600 or 85°C / 16 minutes to achieve an A_0 of 3000

4. Inspect and if required, repeat all steps in Step 3 until visually clean[3]
5. Allow the components to dry at room temperature out of direct sunlight.

Notes:

[1] Potable water with a hardness ≤150 mg/L is recommended for all cleaning, disinfection and rinsing steps.

[2] Depending on regional requirements. Higher temperatures may damage the components.

[3] Failure to clean the component as indicated may result in inadequate disinfection

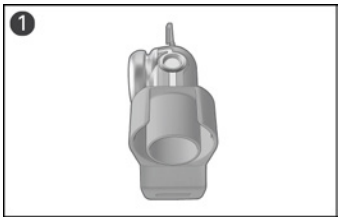
Inspection

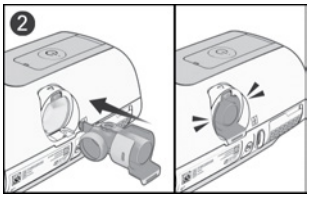
Perform a visual inspection of each component. If any visible deterioration is apparent (holes, tears or cracks etc) replace the component.

Reassembling

Once the components are dry, reassemble the device.

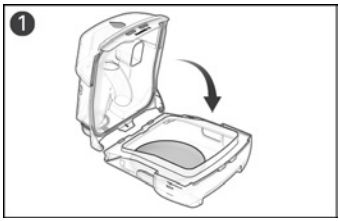
Outlet connector

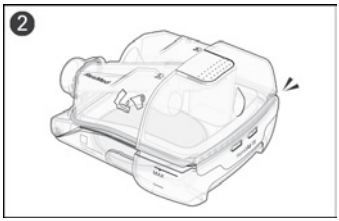




1. Hold the outlet connector with the seal pointing to the left and the clip pointing forward.
2. Make sure the outlet connector is correctly aligned and insert the outlet connector into the socket. It will click in place.

Cleanable HumidAir 11 humidifier tub





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

Air tubing

1. Connect the air tubing firmly to the air outlet located on the rear of the device.
2. Connect the free end of the air tubing firmly onto the assembled mask.

Packing and storing

Store in a dry dust-free environment away from direct sunlight.

Storage and transport temperature: -13°F to +158°F (-25°C to +70°C)

Storage and transport humidity: 5 to 95% relative humidity, non-condensing

Data management and therapy compliance

For therapy management, the AirCurve 11 device stores patient therapy data on the device and may have the ability to transfer it remotely to an appropriate care provider. Data can then be accessed via ResMed's AirView™ therapy management solution.

Remote monitoring

Wireless

The device is equipped with cellular communication that allows the patients sleep therapy data to be wirelessly transmitted. It also allows for prescribed settings to be applied or updated.

Transfer of data will occur after therapy has stopped. The device should be connected to the power outlet at all times and must not be in Airplane Mode. Data will only be transferred if a wireless connection is available.

The Wireless signal strength icon displayed at the top right of the screen indicates the signal strength.

The device supports an optional feature called Care Check-In for capturing and transmitting answers to questions about the progression of therapy. Care Check-In data can be transmitted via the device cellular communication or the myAir App (if available).

Data will only be transferred if these features have been enabled and a wireless connection is available.

Within the wireless network, the availability and quality of the network may be affected by terrain, buildings, and the weather. Wireless communication depends on network availability. Coverage is not available everywhere and varies by service.

Notes:

- Cellular feature may not work/ therapy data might not be transmitted if you use it outside of the country or region of purchase.
- Devices with cellular communication might not be available in all regions.

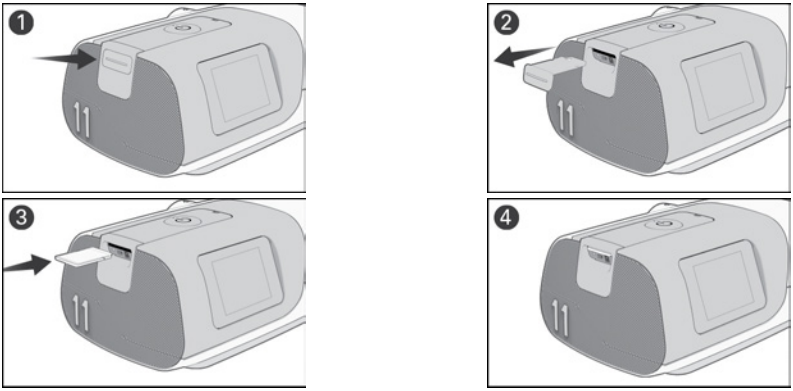
SD card

For AirCurve 11 devices that are bundled with an SD card, they will already be inserted and ready to use. The device stores data on the SD card which can be transferred via an SD Card Reader to ResMed's ResScan™ therapy management system. The SD card should not be used for any other purpose as it may corrupt therapy data stored on the card. Do not remove the SD card from the device when the SD light is flashing, because data is being written to the card.

For more information on therapy management with AirView or ResScan, refer to the manuals supplied with the software.

Once the data is loaded into ResScan or AirView via the SD Card Reader, you can review and analyse data, as well as update therapy settings and transfer them to the patient’s device via the SD card.

To remove the SD card cover and insert SD card:



1. Push the SD card cover.
2. Remove the SD card cover and keep the SD card cover in a safe place.
3. Insert the SD card.
4. Push in the SD card until it clicks in place.

To remove the SD card:

1. Push in the SD card to release it.
2. Place the SD card in the protective folder and follow the instructions provided by an appropriate care professional.

Data storage

The AirCurve 11 device stores summary data such as AHI, Total Hours Used and Leak. Detailed data is stored on the SD card and can be viewed with AirView and ResScan. High resolution flow and pressure data are stored on the SD card.

Data can be transmitted to therapy management software either remotely via cellular communication, or via SD card. The different ways of transmitting data are detailed in the table below.

For more information on therapy management with AirView or ResScan, refer to the manuals supplied with the software.

Type of data	Transmission method			Sessions stored
	Cellular communication to AirView	SD card to ResScan	SD Card to AirView (card-to-cloud)	
Summary data (compliance data)	✓	✓	✓	365
Detailed data	✓	✓	✓	Limited by usage and SD card storage capacity
High resolution flow and pressure data (25 Hz - every 40 ms)		✓		

Detailed data is stored on the SD card and can be viewed via ResScan or AirView. Examples of detailed data available is shown below.

Detailed data

Parameter	Sampling rate	
	ResScan	AirView
Apnoea or hypopnoea events	aperiodic	aperiodic
Flow limitation (flat to round)	1/2 Hz (2 sec)	N/A
Leak (L/sec)	1/2 Hz (2 sec)	1 min
Minute ventilation (L/min)	1/2 Hz (2 sec)	1 min
Pressure (cm H_2O)/hPa)	1/2 Hz (2 sec)	1 min
Snore (quiet to loud)	1/2 Hz (2 sec)	N/A
Pulse rate (beats/min) – if an oximeter is attached	1 Hz (1 sec)	1 min
Oxygen saturation (SpO_2) – if an oximeter is attached	1 Hz (1 sec)	1 min

Travelling

Patients can take their device wherever they go. Advise patients of the following:

- Use the travel bag provided to prevent damage to the device.
- Empty the humidifier tub and pack it separately in the travel bag.
- Make sure the patient has the appropriate power cord for the region of travel. For information on purchasing, contact an appropriate care professional.

Travelling by plane

⚠ WARNING

- Do not use the device with water in the humidifier tub while in transit (eg, on a plane or vehicle) due to the risk of:
  - water spilling into the device
  - the inhalation of water during turbulence.
- Make sure that the humidifier tub is empty before transporting the device.

The AirCurve 11 device may be taken on board as carry-on luggage. Medical devices do not count toward your carry-on luggage limit.

The AirCurve 11 device can be used 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 tub is empty and inserted into the device. The device will not work without the humidifier tub inserted.
- Make sure the device is in Airplane mode.

To turn on Airplane mode:

1. From the Home screen, tap **MORE**.
2. Swipe through the menu to locate **Airplane Mode**.
3. Tap **Airplane Mode** to switch it on.

Troubleshooting

If there is a problem, try the following suggestions. If you are not able to fix the problem, contact your local ResMed dealer or ResMed office. Do not open the device.

General troubleshooting

Problem/possible cause	Solution
Air is leaking from around the mask	
Mask may be fitted incorrectly.	Make sure the mask is fitted correctly. See the mask user guide for fitting instructions or run the **Mask Fit** function.
The patient is getting a dry or blocked nose	
Humidity level may be set too low.	Increase the **Humidity Level**.
There are droplets of water in the mask and air tubing	
Humidity level may be set too high.	Decrease the **Humidity Level.**
Tube temperature may be too low	Increase the **Tube temp**
The patient is getting a very dry mouth	
Air may be escaping through the patient's mouth.	Increase the **Humidity Level**. The patient may need a chin strap to keep the mouth closed or a full face mask.
The patient feels that too much air is being delivered from the device	
Ramp may be turned off	Use the **Ramp Time** option.
The patient feels that not enough air is being delivered from the device	
Ramp may be in progress	Wait for air pressure to build up or turn **Ramp Time** off
Ramp start pressure may be too low	Increase Ramp start pressure.
No display	
Backlight on the screen may have turned off. It turns off automatically after a short period of time	Press the Start therapy /standby button located at the top of the device or touch the screen.
Power may not be connected.	Connect the AC adaptor and make sure the plug is fully inserted.
Therapy has stopped 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.
Humidifier tub is leaking	
Humidifier tub may not be assembled correctly.	Check for damage and reassemble the humidifier tub correctly.
Humidifier tub may be damaged or cracked.	Replace the humidifier tub.
The patient is not getting enough air/oxygen flow is disrupted	
Tubing or humidifier tub may be blocked	Check for blockages. Reconnect the tubing and reassemble the humidifier tub correctly.
The patient's therapy data has not been transmitted	
Wireless coverage may be poor.	Advise the patient to place the device where there is coverage (ie, on their 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.

Problem/possible cause	Solution
The No wireless connection icon is  displayed on the top right of the screen. No wireless network available.	Advise the patient that therapy data can be sent via SD Card.
Device may be in Airplane Mode.	Turn off **Airplane Mode.** For instructions refer to the **Travelling** section.
SmartStart is enabled, but the device does not automatically start when the patient breathes into their mask	
Breath is not deep enough to trigger SmartStart	To start therapy, take a deep breath in and out through the mask, before breathing normally. Press the Start therapy/Standby button located on the top of the device
There is excessive leak	Adjust the mask and headgear Air Tubing may not be connected properly. Connect firmly at both ends.
SmartStop is enabled but does not automatically stop when the patient removes their mask	
Incompatible mask being used	Only use equipment recommended by ResMed. Contact ResMed or see ResMed.com for more information If the patient is using a conduit mask, SmartStop will not work.

Device error messages

Device message/possible cause	Solution
High leak detected. Check your humidifier or side cover	
Humidifier tub may not be inserted properly.	Make sure the humidifier tub 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 the mask is fitted correctly. See the mask user guide for fitting instructions or use the Mask Fit function to check the mask fit and seal.
Tubing blocked. Check your tubing	
Air tubing may be blocked.	Check the air tubing and remove any blockages. Press the Start therapy/Standby button to restart the device.
Read only card. 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.
The oximeter will not pair with the device	
Connection failed	Tap Ok and try the search again.
Device not supported	Check the Oximeter model. Only NONIN WristOx$_2$® Model 3150 with BLE is compatible with the Air11 device.

Device message/possible cause	Solution
System fault, refer to user guide, Error 4	
Device may have been left in a hot environment.	Allow to cool before re-use. Disconnect the AC adaptor 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 AC adaptor and then reconnect it to restart the device.
There may be water in the air tubing.	Empty the water from the air tubing. Disconnect the AC adaptor and then reconnect it to restart the device.
All other error messages, for example, System Fault, refer to user guide, Error X	
An error has occurred on the device.	Remove power and restart device. If error persists, contact your local ResMed dealer or ResMed office. Do not open the device.

General warnings

⚠ WARNING

- The device has not been tested or certified for use in the vicinity of X-ray, CT or MRI equipment. Do not bring the device within 13 ft (4 m) of X-ray or CT equipment. Never bring the device into an MR (Magnetic Resonance) environment.
- This medical device uses a small bore connector design that is different to those specified in ISO80369-2. It may be possible to connect this device with other medical devices (eg, devices that deliver fluid or medicine) which may result in a hazardous situation and cause harm to the patient. Extra care should be taken by the user to mitigate any risks that may result.
- The use of accessories other than those specified for the device is not recommended. These may increase radio frequency energy or be influenced by the interference and result in improper 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 reported values from the finger pulse oximeter are not appropriate to be used for diagnostic purposes and it shall not be used for vital sign monitoring.
- Do not add any attachments or accessories to the device that are not intended for use in combination with the device, as stated in the instructions for use of the device or accessory, as the device might not function correctly leading to the risk of degradation or loss of ventilatory support.
- Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 3.9" (10 cm) to any part of the device. Otherwise, degradation of the performance of this equipment could result.
- Do not use the device outside its approved operating conditions. Using the device above an altitude of 2,591m and/or outside the temperature range of 5°C to 35°C, may reduce the effectiveness of treatment and/or damage the device.

Note: For any serious incidents that occur in relation to this device, these should be reported to ResMed and the competent authority in your country.

Technical specifications

Intended delivered volume range (for ASV modes)

200-2500 mL

Maximum single fault steady state pressure

Device will shut down in the presence of a single fault if the steady state pressure exceeds:
40 cm H_2O (40 hPa) for more than 1 second.

Pressure measurement tolerance

± 0.5 cm H_2O (0.5 hPa) ±4% of measured reading

Flow measurement tolerance

± 6 L/min or 10% of reading, whichever is greater, at 0 to 150 L/min positive flow

Operating pressure range

CPAP	4-20 cm H_2O (4-20 hPa) (measured at the mask)
CPAP with EPR	4-20 cm H_2O (4-20 hPa) CPAP, With EPR settings: EPR off, Level 1 = 1.0 cm H_2O (1 hPa), Level 2 = 2.0 cm H_2O (2 hPa), Level 3 = 3.0 cm H_2O (3 hPa) EPR reduces the pressure during expiration by the amount dependent on the level set above, but the pressure delivered will not drop below 4.0 cm H_2O (4 hPa).
S	IPAP: 4-25 cm H_2O (4-25 hPa), EPAP: 2-25 cm H_2O (2-25 hPa), Maximum pressure = 25 cm H_2O (25 hPa)
VAuto	IPAP: 4-25 cm H_2O (4-25 hPa), EPAP: 4-25 cm H_2O (4-25 hPa), Pressure support: 0-10 cm H_2O (0-10 hPa), Maximum pressure = 25 cm H_2O (25 hPa)
ASV and ASVAuto	EPAP: 4-15 cm H_2O (4-15 hPa), Min PS: 0-6 cm H_2O (0-6 hPa), Max PS: 5-20 cm H_2O (5-20 hPa), Maximum pressure = 25 cm H_2O (25 hPa)

Flow (maximum) at set pressures

The following are measured according to ISO 80601-2-70:2015 and ISO 80601-2-70:2020

With HumidAir 11 tub

Pressure	AirCurve 11 and Standard air tubing	AirCurve 11 and SlimLine	AirCurve 11 and ClimateLineAir 11
cm H_2O (hPa)	L/min	L/min	L/min
4	161	161	158
8	162	162	159
12	163	162	160
16	164	163	160
20	164	165	158
25	163	155	149

With Side cover

Pressure	AirCurve 11 and Standard air tubing	AirCurve 11 and SlimLine	AirCurve 11 and ClimateLineAir 11
cm H_2O (hPa)	L/min	L/min	L/min
4	161	161	158
8	162	162	158
12	163	163	159
16	164	163	159
20	164	166	160
25	164	157	152

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

Sound	
Declared dual-number noise emission values in accordance with ISO 4871:1996	
Device with standard air tubing and side cover as measured according to ISO 80601-2-70:2020 and ISO 80601-2-79:2018	
Sound pressure level	26 dBA with uncertainty of 2 dBA
Sound power level	34 dBA with uncertainty of 2 dBA
Device with standard air tubing and HumidAir 11 tub (HumidAir 11 tub half-filled) as measured according to ISO 80601-2-70:2020, ISO 80601-2-74:2021 and ISO 80601-2-79:2018	
Sound pressure level	27 dBA with uncertainty of 2 dBA
Sound power level	35 dBA with uncertainty of 2 dBA

Physical Dimensions	
Dimensions (H x W x D) with HumidAir 11 tub:	3.72" x 10.21" x 5.45" (94.5 mm x 259.4 mm x 138.5 mm)
Dimensions (H x W x D) with side cover:	3.72" x 9.32" x 5.45" (94.5 mm x 236.8 mm x 138.5 mm)
Air outlet:	The 22 mm conical outlet connector complies with EN ISO 5356-1:2015
Weight - device and HumidAir 11 tub:	43 oz (1229 g)
Weight - device with side cover:	44 oz (1236 g)
Housing construction:	Flame retardant engineering thermoplastic
Hot plate - Material:	Stainless steel
Water capacity:	380 mL
Time between each refill of the humidifier tub:	> 8 hours ±0.5 hours (tested at 23 ±2°C / 73.4 ± 3.6 °F)
Recommended water type to use in the humidifier tub (Standard tub):	Distilled water
Recommended water type to use in the humidifier tub (Cleanable tub):	Drinking quality water (potable)
Humidifier tub - Material:	Injection moulded plastic, stainless steel and silicone seal

90W power supply unit	
Input range	100-240 V, 50-60 Hz, 1.0-1.5 A 115 V, 400Hz, 1.5 A for aircraft use
DC output:	24 V ⎓ 3.75 A
Typical power consumption:	65.3 W (72.5 VA)
Peak power consumption:	103.4 W (109.9 VA)
Class of equipment	Class II

Environmental conditions	
Operating temperature	+41°F to +95°F (+5°C to +35°C) Note: The airflow for breathing produced by this therapy device can be higher than the room temperature. Under extreme ambient temperature conditions (104°F/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 Note: Using the device at high altitude in combination with high pressure and high flow may affect the delivered pressure and the accuracy of the displayed and reported values.
Storage pressure/Storage altitude	1060 to 700 hPa
Storage and transport temperature	-13°F to +158°F (-25°C to +70°C)
Storage and transport humidity	5 to 95% relative humidity, non-condensing

Air Filter

Standard:	Material: Polyester non woven fibre Average arrestance: >75%, when tested to EN779.
Hypoallergenic:	Material: Blended synthetic fibres in a polypropylene carrier Efficiency: >80% (average) when tested to EN13274-7.
	Note: The use of a ResMed approved hypoallergenic filter will result in a small reduction in the accuracy of the delivered pressure at high leaks.

Electromagnetic compatibility

The AirCurve 11 complies with all applicable electromagnetic compatibility requirements (EMC) according to IEC 60601-1-2:2020, for residential, commercial and light industry environments.

Portable and mobile RF communications equipment should be used no closer to any part of the machine, including cables, than the recommended 3.94" (10 cm) separation distance.

The AirCurve 11 has been designed to meet EMC standards. However, should you suspect that the device performance (eg. pressure or flow) is affected by other equipment, move the device away from the possible cause of interference.

Information regarding the electromagnetic emissions and immunity of this ResMed device can be found in ResMed.com/downloads/devices.

IEC 60601-1 classification

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

Supplemental oxygen maximum flow

15 L/min

Aircraft use

ResMed confirms that the machine meets the Federal Aviation Administration (FAA) requirements (RTCA/DO-160, section 21, category M; RTCA-DO-160, section 20, category T) for all phases of air travel.

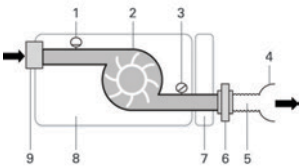
Design life

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

General

The patient is an intended operator.

Pneumatic flow path



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

Displayed values

Value	Range	Display resolution
Pressure at mask[1]:		
Mask pressure	Minimum EPAP to maximum pressure (See section above Operating pressure range)	0.1 cm H_2O (0.1 hPa)
Flow derived values[1]:		
Leak	0-120 L/min	0.1 L/min

Value	Range	Display resolution
Tidal volume	0-4000 mL	1 mL
Respiratory rate	0-90 BPM	1 BPM
Minute ventilation	0-30 L/min	0.1 L/min
Ti	0-10 sec	0.1 sec
I:E ratio	1:10-4:1	0.1

Value	Accuracy
Pressure at mask[1]:	
Mask pressure	±0.5 cm H_2O (0.5 hPa) + 4% of set 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	±6 L/min, at 0 to 60 L/min[2]
Tidal volume	±30 mL or 20% of reading, whichever is greater[2]
Respiratory rate	±1.0 BPM[2]
Minute ventilation	±20%[2]

[1] Results are expressed as STPD (Standard Temperature and Pressure, Dry). Use the following table to convert the STPD flow setting to BTPS (Body Temperature and Pressure, Saturated) flow.

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

STPD to BTPS conversion

Altitude (m)	Ambient pressure (hPa)	STPD to BTPS conversion factor
0	1013.25	1.12
500	956.53	1.19
1000	902.41	1.27
1500	850.80	1.36
2000	801.60	1.45
2500	754.73	1.54
3000	710.11	1.65

Pressure accuracy as tested according to ISO 80601-2-79:2018

± (0.5 cm H_2O (hPa) + 4% of the set pressure) cm H_2O (hPa)

Pressure accuracy - CPAP mode

Maximum static pressure variation at 10 cm H_2O (10 hPa) according to ISO 80601-2-70:2015 and ISO 80601-2-70:2020

Device with HumidAir 11 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 HumidAir 11 tub / side cover and air tubing:

Breath rate	10 BPM	15 BPM	20 BPM
Dynamic pressure variation (cm H_2O [hPa])	0.5	0.5	0.8

Maximum dynamic pressure variation according to ISO 80601-2-70:2020

Device with HumidAir 11 tub / side cover and air tubing:

Maximum error from set pressure (cm H_2O [hPa]): ±1

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

Pressure accuracy - Bi-level modes

Maximum dynamic pressure variation according to ISO 80601-2-70:2015 and ISO 80601-2-70:2020

Device with HumidAir 11 tub / side cover and air tubing:

Inspiration/Expiration mean error ± standard deviation (cm H_2O [hPa]): 1±0.1

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

% of Inspiratory Phase for calculation: > 60

% of Expiratory Phase for calculation: > 66

Note: For each inspiratory and expiratory breath phase, the data time slot starts immediately after the initial transient overshoot/undershoot period and ends at the point when flow diminishes to an absolute value equivalent to its starting point, towards the end of the breath phase.

Measurement system uncertainties

In accordance with ISO 80601-2-70:2020 and ISO 80601-2-79:2018 the measurement uncertainty of the manufacturer's test equipment is:

For measures of flow:	± 3.9 L/min
For measures of volume:	± 6 mL or 5% (whichever is greater)
For measures of static/dynamic pressure:	± 0.15 cm H_2O (± 0.15 hPa)
For measures of time:	± 6 ms

In accordance with ISO 80601-2-74:2021 the measurement uncertainty of the manufacturer's test equipment is

For measures of humidification output:	± 0.5 mg/L BTPS

Bluetooth

Technology used:	Bluetooth Low Energy (BLE)
Connection types:	GATT
Frequency:	2400 to 2483.5 MHz
Max RF power output:	+4 dBm
Operation range:	10 m (Class 2)

Cellular technology and regulatory compliance

Refer to the Cellular information guide in ResMed.com/downloads/devices.

The device should be installed and operated with minimum distance 15 mm (0.59") between the equipment and the user's body.

Humidifier

Maximum heater plate temperature:	154ºF (68ºC)
Temperature cut-out (heater):	165ºF (74ºC)
Maximum gas temperature (at mask)[1]:	≤ 106ºF (41ºC)

[1] 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.

Humidifier performance

SlimLine/Standard tubing

Mask Pressure cm H_2O (hPa)	Nominal RH output % at 72ºF (22ºC) ambient temperature		Nominal system output mg/L AH[1], BTPS[2]	
	Setting 4 (default setting)	Setting 8 (maximum setting)	Setting 4 (default setting)	Setting 8[3] (maximum setting)
3	80%	100%	≥6	≥12
4	80%	100%	≥6	≥12
10	80%	100%	≥6	≥12
20	80%	100%	≥6	≥12
25	80%	100%	≥6	≥12

Climate Control Auto - ClimateLineAir 11

Mask Pressure cm H_2O (hPa)	Nominal RH output % at 72ºF (22ºC) ambient temperature	Nominal system output mg/L AH[1], BTPS[2]
3	85%	≥ 12
4	85%	≥ 12
10	85%	≥ 12
20	85%	≥ 12
25	85%	≥ 12

[1] AH - Absolute Humidity in mg/L

[2] BTPS - Body Temperature Pressure Saturated

[3] Humidifier performance meets ISO 80601-2-74:2021 performance > 10 mg/L BTPS tested at 59°F to 95°F (15°C to 35°C)

Air tubing

	ClimateLineAir 11	SlimLine / Standard 2m / Standard 3m
ClimateLineAir 11 temperature range	60 to 86ºF (16 to 30ºC)	-
ClimateLineAir 11 temperature cut out	≤106ºF (≤41ºC)	-
Maximum recommended pressure	30 cm H_2O (30 hPa)	30 cm H_2O (30 hPa)
Maximum working temperature, when used with a humidifier	-	≤106ºF (≤41ºC)
Material	Flexible plastic and electrical components	Flexible plastic
Inner diameter	0.6" (15 mm)	SlimLine: 0.6" (15 mm) Standard 2m: 0.74" (19 mm) Standard 3m: 0.74" (19 mm)
Length	6'6" (2.0 m)	SlimLine: 6' (1.8 m) Standard 2m: 6'6" (2.0 m) Standard 3m: 9'10" (3.0m)

Note: The manufacturer reserves the right to change these specifications without notice.

Air tubing resistance to flow and compliance information

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

Characteristics of compatible Bacterial/ Viral (B/V) filters

Resistance over the flow range:	Recommend a B/V filter with resistance of < 2.5cmH_2O (2.5hPa) at 60 L/min
Dead space (volume):	< 90 mL
Connectors:	ISO 5356-1:2015 compliant connectors
Bacterial Filtration Efficiency (ie BFE):	>99.9%
Viral Filtration Efficiency (ie VFE):	>99.7%
Maximum duration of use:	Refer to manufacturer's datasheet
Replacing B/V filter:	Refer to manufacturer's datasheet
Compliance:	< 0.103mL/ cmH_2O (<0.103mL/hPa)

Note: B/V filters are high in impedance and show variability in their pneumatic characteristics that may affect delivered pressure and the accuracy of displayed and reported values

Using the ClimateLineAir 11 or SlimLine above 20 cm H_2O with a bacterial/viral filter may result in pressure drop during peak inspiratory flow.

Applied parts

Patient interface (mask) and air tubing

AirCurve 11 mode names

Mode	System Code as per ISO 19223:2019
CPAP	CPAP
S Mode	CSV-PS
S Mode with backup rate (Ger)	S/T-PS/PC (q)
VAuto	CSV-PS (superordinate mode)
ASV	S/T-vtPS/vtPC (superordinate mode)
ASVAuto	S/T-vtPS/vtPC (superordinate mode)

Symbols

Follow instructions before use. Indicates a warning or caution. Temperature limitation. Humidity limitation. Operating altitude. Atmospheric pressure limitation. Manufacturer.

Direct current. Class II equipment. IP22 Protected against finger sized objects and against dripping water when tilted up to 15 degrees from specified orientation. Non-ionising radiation. MR unsafe (do not use in the vicinity of an MRI device). RTCA/DO-160 Section 21, Category M Compliant & FAA Compliant. Type BF applied part. Date of Manufacture MD Medical device. REF Catalogue number. DN Device number. SN Serial number. LOT Batch code. EC REP European Authorised Representative. Bluetooth Start therapy/Standby. . MAX Maximum water level. Open tub to fill. Importer. CH REP Swiss authorised representative

See symbols glossary at ResMed.com/symbols.

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.

Hazardous Materials information

Refer to the booklet packed with the device or refer to the Hazardous materials guide in ResMed.com.

Servicing

The AirCurve 11 device is intended to provide safe and reliable operation when operated in accordance with the instructions provided by ResMed. ResMed recommends that the AirCurve 11 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

Our goods come with guarantees that cannot be excluded under the Australian and New Zealand Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

In addition to your rights and remedies under the Australian and New Zealand Consumer Law (and any other applicable law), ResMed Pty Ltd ABN 30 003 765 142 of 1 Elizabeth Macarthur Drive, Bella Vista NSW 2153, (ResMed) warrants that your ResMed product will be free from defects in material and workmanship from the date of purchase for the period specified below:

Product	Warranty Period
Consumables: • AirTouch™, Ultra Soft memory foam cushion • Acucare™ series	7 days

Product	Warranty Period
• Mask systems (including mask frame, cushion, headgear and tubing) - excluding Consumables • Accessories - excluding Consumables • Flex-type finger pulse sensors • Humidifier water tubs (non-reusable)	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 • DC/DC Converters • Oximeters and CPAP and bilevel device oximeter adapters • Humidifiers and humidifier water tubs (reusable) • Titration control devices	1 year
• CPAP, bilevel and ventilation devices (including external power supply units and excluding humidifier tubs) • Battery accessories (including but not limited to DC cable, PSU adapter and coupler kit) • 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; 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 require additional information on how to setup, use or maintain the Air11™ system (including ClimateLineAir 11 heated tubing), or to report unexpected operation or events, please contact an appropriate care professional.

ResMed

myAir™

Download on the App Store

GET IT ON Google Play

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ResMed.com