

# **Air**Mini<sup>™</sup>





# Legal notices

## Important notice

This manual, as well as the computer programs described herein, are supplied on the condition that they may only be used in accordance with their stated purpose. The information in this manual is furnished for the purpose of instruction and guidance only, is subject to change without notice, and should not be construed as an alternative to qualified medical advice. ResMed Limited assumes no responsibility or liability for any errors or inaccuracies that may appear in this manual. Other than with the written permission of ResMed Limited, no part of this manual or the computer programs described herein may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, recording, or otherwise.

For patent and other intellectual property information, see www.resmed.com/ip.

© ResMed Ltd. All rights reserved.

# About AirMini app Patient eHelp

This easy-to-use app syncs up with your machine to let you start and stop therapy and change comfort features. It also lets you know how you slept the night before, and helps you stay on track throughout your sleep apnea treatment journey.

**Note:** Read your entire AirMini<sup>™</sup> user guide and this eHelp before using your machine with the AirMini app.

## Indications for use

The AirMini app is a mobile application for patients to remotely operate a prescribed compatible ResMed machine and transfer, analyze and display usage and therapeutic information. The AirMini app also allows healthcare professionals to remotely configure compatible OSA therapy devices.

## Contraindications

Positive airway pressure therapy may be contraindicated in some patients with the following preexisting conditions:

- severe bullous lung disease
- pneumothorax
- · pathologically low blood pressure
- dehydration
- cerebrospinal fluid leak, recent cranial surgery, or trauma.

## 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.

# Compatible machines

The AirMini app is compatible with the AirMini machine.

# Security

Built-in AirMini and AirMini app security features, steps you take to protect your smart device against malware, and keeping up with software and firmware updates all help to safeguard your privacy, protect your smart device and ensure optimal performance.

## Security features

The AirMini and the AirMini app use security features to help protect your privacy and prevent unauthorized access to your data. These include:

- Use of a quick response (QR) code to establish trust between the AirMini and the AirMini app
- Unique keys for each mobile device and AirMini pairing
- Application-level encryption for the transmission of data, in addition to Bluetooth® security
- Encryption of data stored within the AirMini app
- Server-side authentication for AirMini firmware upgrades

Protecting your smart device against malware helps keep your personal information and sleep data safe and secure. ResMed recommends the following:

- Enable personal identification number (PIN) or fingerprint security on your smart device. Refer to your smart device user instructions for information on enabling either feature.
- Avoid unsafe modification of the smart device's operating system.
- Consider enabling remote data wipe on your smart device. Remote data wipe is a function. available on your smart device for remotely erasing personal data in the event that your device is lost or stolen. Refer to your smart device user instructions for information on enabling this feature.
- Keep your operating system up to date with security patches.

## Software and firmware updates

To ensure optimal performance, ResMed recommends that you always install the latest software and firmware versions.

Once a firmware update becomes available for your AirMini, a message will appear on your smart device when you access the AirMini app to view sleep data or change comfort settings.

To install the firmware update:

- 1. Click **Update** to begin the installation process. To install the update, you must have an active internet connection. Otherwise, you will be prompted to establish one and begin the process
- 2. You can opt to install the update later by tapping Later, or to install the update immediately by tapping Upgrade.
  - If you choose to install the update later, you will not be able to view your sleep data or change comfort settings until the update is complete.
- 3. Once the update begins, keep the AirMini app open and your smart device nearby. When the firmware update is complete, a message indicates that your firmware is up to date.
- 4. Tap Continue.

If an AirMini app software update is also available, a message will indicate that you need to update the software.

Note: You must install software updates to continue using the AirMini app.

To install the software update:

1. Tap Update app.

You will be redirected to the App Store<sup>SM</sup> to download the iPhone<sup>™</sup> version of the AirMini app software update.

2. Follow any additional on-screen prompts to complete the update process.



# AirMini app system requirements

Refer to ResMed.com/AirMini app for a list of smart devices compatible with the AirMini app. In addition, iOS<sup>TM</sup> operating system version 9.3.5 (minimum) is required.

# Connecting your machine and smart device

- Ensure that your machine is set up correctly and plugged into a power source.
  Refer to your AirMini user guide for additional information on setup.
- 2. On your smart device, enable Bluetooth.
  - Refer to your smart device user guide for instructions on enabling Bluetooth.
- 3. Open the AirMini app and follow the on-screen prompts to pair with your AirMini machine.
- 4. On your machine, press the Bluetooth button \* when prompted by the AirMini app.
  - When the light starts to flash blue \*\*, Bluetooth is enabled on your AirMini machine and ready to connect.
- 5. On your smart device, tap Connect.
  - When your AirMini machine is discovered, the machine name appears in the accessory selection list.
- 6. Select the machine name from the list to connect.
- 7. The first time you open the AirMini app, you will be asked to consent to the use of cookies and to accept ResMed's Terms and Conditions and Privacy Policy.
  - Check the boxes on the Welcome screen and then tap Continue.
- 8. The first time you pair your AirMini machine with your smart device, you will need to perform the authentication procedure.
  - When prompted by the AirMini app, authenticate by entering the four-digit key located on the back of your machine.
  - Alternatively, you can tap **Scan code**, and the AirMini app will prompt you to allow the use of your device's camera and then to position the machine's QR code within the camera's viewing frame.
  - Note: The QR code is located on the back of your AirMini machine.
- 9. Tap Continue.

When successfully connected, the Bluetooth connection icon \* 1) is displayed in the top right corner of the AirMini app.

#### Notes:

- As long as your machine is plugged into a power source, it is turned on and in standby mode.
- If your AirMini is plugged into a power source, leaving Bluetooth enabled on your smart device ensures that each time the smart device is within the vicinity of your machine, connection will occur automatically.
- Data sent via Bluetooth is encrypted to protect your privacy.
- You should only pair your smart device with one machine at a time.

## Using guided equipment setup

The first time you attempt to use the AirMini app, the Equipment setup screen displays. You can use this interactive setup feature to complete the process of setting up your equipment.

To use the guided equipment setup feature:

1. Tap **Get started** to begin the process.

The mask type and model selection screen displays.

- 2. Select your mask type.
- 3. Select your mask model.
- 4. Tap Continue.
- 5. Connect the air tube to the AirMini.
- 6. Tap Next.
- 7. If you are using an N20 series or AirFit P10 for AirMini mask and want to use humidification, insert a HumidX or HumidX Plus.
- 8. Tap Next after inserting the HumidX or HumidX Plus.
- 9. Fit your mask.
- 10. Tap Next.
- 11. If you are using an N20 or F20 series mask, connect the tube assembly to the mask.
- 12. Tap Next.

The guided setup process is complete.

13. Tap Done.

The AirMini app Dashboard opens.

**Note**: Access additional assistance by clicking the support ? icon in any screen in which it appears.

# Mask Fit and Therapy sections

Functions in the Sleep screen are arranged in two sections, Mask Fit and Therapy.

Use the Mask Fit section to assess and identify possible air leaks around your mask.

Use the **Therapy** section to access therapy functions and comfort settings.

## Checking mask fit

- 1. Fit your mask as described in the mask user guide.
- 2. Tap Sleep in the Navigation tab.

The Sleep screen opens.

3. Tap Mask Fit Therapy Mask Fit

The Mask Fit screen opens.

4. In the Mask Fit screen, tap  ${\bf START\ Mask\ Fit}.$ 

The machine starts blowing air.

- 5. Adjust the mask, mask cushion and headgear until you get a Good mask seal result.
- To stop mask fit, tap STOP Mask Fit.If you are unable to get a good mask seal, talk to your provider.

## Starting therapy using the app

- 1. Make sure that your machine is set up correctly and powered on.
- Confirm that your Bluetooth connection is active.
  Refer to Connecting your machine and smart device for instructions.
- 3. Fit your mask.
- 4. Tap Sleep in the Navigation tab.

The Sleep screen opens.

5. Tap Therapy Therapy Mask Fit

The Therapy screen opens.

If SmartStart™ is turned on, fit your mask and begin to breathe normally to start therapy.
 Otherwise, tap START to start therapy.

## Stopping therapy using the app

If SmartStop is turned on, remove your mask and therapy will stop automatically. Otherwise, tap  $\mathsf{STOP}^{\textcircled{0}}$ .

## Changing comfort features

Your AirMini machine has been set up for your needs by your provider, but you may find that you want to make small adjustments to make your therapy more comfortable. The comfort features Ramp Time, Pressure Relief, SmartStart and SmartStop can be adjusted on the Sleep options screen.

Note: Pressure Relief must first be enabled by your provider.

To access comfort features:

1. Tap Sleep in the Navigation tab.

The Sleep screen opens.

- Therapy 2. Tap Therapy
- 3. Tap **Options** to open the Sleep options screen.

Your current comfort settings display in the Sleep options screen.

#### Ramp Time

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

You can set Ramp Time to Off, 5 to 45 minutes or Auto. When Ramp Time is set to Auto, the device will detect when you have fallen asleep and then automatically rise to the prescribed treatment pressure.

To adjust Ramp Time:

1. Tap Sleep in the Navigation tab.

The Sleep screen opens.

- Therapy 2. Tap Therapy
- 3. Tap Options to open the Sleep options screen.

Your current comfort settings display in the Sleep options screen.

- 4. Tap the current ramp setting.
- 5. Select your preferred setting.
- 6. Tap **OK**.

Your preferred setting is displayed.

Note: Once you have started your therapy session, the setting cannot be adjusted. To adjust the setting, you must stop therapy, adjust the setting, and then start therapy again.

#### Pressure Relief

When Pressure Relief is enabled and turned on, you may find it easier to breathe out. This can help you get used to therapy.

To switch Pressure Relief on or off:

1. Tap Sleep in the Navigation tab.

The Sleep screen opens.

- Therapy 2. Tap Therapy
- 3. Tap **Options** to open the Sleep options screen.

Your current comfort settings display in the Sleep options screen.

or off to suit your 4. If Pressure Relief has been enabled by your provider, switch it on needs.

#### SmartStart

When SmartStart is turned on, therapy starts automatically when you breathe into your mask.

To switch SmartStart on or off:

1. Tap Sleep in the Navigation tab.

The Sleep screen opens.

- 2. Tap Therapy Therapy Mask Fit
- 3. Tap Options to open the Sleep options screen.

Your current comfort settings display in the Sleep options screen.

4. Switch SmartStart on or off to suit your needs.

#### SmartStop

When SmartStop is turned on, therapy stops automatically after a few seconds when you remove your mask.

To switch SmartStop on or off:

1. Tap Sleep in the Navigation tab.

The Sleep screen opens.

- 2. Tap Therapy Therapy Mask Fit
- 3. Tap **Options** to open the Sleep options screen.

Your current comfort settings display in the Sleep options screen.

4. Switch SmartStop on or off to suit your needs.

## Dashboard

The Dashboard provides you with a snapshot of your therapy data.

Note: You must synchronize the AirMini to the AirMini app to view your most recent therapy data.

To access the Dashboard immediately after stopping therapy, tap **View my score**. Otherwise, tap the dashboard icon  $\bigcirc$  in the Navigation tab.

Note: View my score only displays if you used your machine for four or more hours during the previous night of sleep.

Sleep score (total of 100 points)



Provides you with a total sleep score for the previous night of sleep by analyzing four key categories: usage hours, mask seal, events per hour and mask on/off events. The higher your overall score, the better.

To access previous days of sleep score information:

- Select the date above the sleep score in the Dashboard.
  The sleep score summary displays 30 days of previous sleep scores.
- Tap on any date to view a sleep score breakdown for that date.



#### Usage hours (70 points)

Displays the number of hours of therapy you received during the previous night. The more hours of therapy you received, the more points you score. If you use your therapy for 1 hour you get 10 points, or for 6 hours you get 60 points. You can score up to 70 points.



#### Mask seal (20 points)

Helps you assess how well your mask seals and identify possible air leaks around your mask. You can get up to 20 points for minimal mask leak, 10 to 15 points for moderate leak, and 0 to 10 points for higher leak.

If your score is low, try to refit your mask.

If you are unable to get a good mask seal, talk to your provider.



#### Events per hour (5 points)

Displays the number of apneas and hypopneas (AHI) you experienced during your sleep. Your score will depend on the average of the total number of events experienced during your therapy period.



#### Mask on/off events (5 points)

Displays the number of times you removed your mask during the previous night of sleep. The fewer times you remove your mask during the night, the more points you get.



#### Pressure

Displays the pressure equal to or less than the highest pressure delivered by the AirMini during the majority of your therapy the previous night.

## About AirMini

The About AirMini screen provides the following information about your AirMini:

- Total usage hours—the total number of hours you have operated your AirMini
- Firmware version the current firmware version installed on your AirMini
- Last synced- the length of time since your smart device was last synchronized with your AirMini

To access the About AirMini screen, select About AirMini machine from the More menu.

# Traveling

You can take your AirMini machine with you wherever you go.

Ensure that you have the appropriate power adapter for the region of travel. For information on purchasing an adapter, contact your provider.

## Traveling by airplane

Some airlines do not classify medical equipment as carry-on luggage and therefore, the AirMini might not count toward carry-on luggage limits. Check with your airline to determine their policies.

You can use your AirMini machine on an airplane because it meets the Federal Aviation Administration (FAA) requirements.

Air travel compliance letters can be downloaded and printed from www.resmed.com.

When using the AirMini on an airplane:

- While connected to power, disable Bluetooth by pressing and holding the Bluetooth button 

   <sup>★</sup> for at least ten seconds until the indicator light is white.
- Do not use the AirMini app.
- Use the Start/Stop button Φ on your machine to start therapy.
- To reconnect Bluetooth (or exit airplane mode), press the Bluetooth button.

# Troubleshooting

If you experience any problems, try the following suggestions. Also check your AirMini machine user guide. If you are not able to fix the problem, contact your local ResMed dealer or ResMed office. If you experience problems with the AirMini machine, do not open it.

Problem/possible cause	Solution
I cannot establish a Bluetooth connection.	
Bluetooth may be disabled.	Check your smart device to determine whether Bluetooth is enabled $^{\$}.$
	Check your AirMini machine to determine whether Bluetooth is enabled. When the Bluetooth indicator light on your
	machine flashes blue $\widehat{f \$}$ , the machine is ready for pairing.
	Reconnect and pair your AirMini machine and smart device. Refer to Connecting your machine and smart device for more information.
	If these solutions do not resolve the issue, try restarting your smart device.
	If you cannot establish a Bluetooth connection between your AirMini machine and the AirMini app, you can still start therapy by pressing the Start button on your machine.
Your Bluetooth connection may be poor.	Ensure that your AirMini machine is placed away from potential sources of interference such as microwaves, wireless local area network (WLAN) routers or cordless phones.
	If you cannot establish a Bluetooth connection between your AirMini machine and the AirMini app, you can still start therapy by pressing the Start button on your machine.

Problem/possible cause	Solution
Your machine may be in airplane mode.	If a white light ★ shows on your AirMini machine, your machine is in airplane mode.
	To disable airplane mode, press the Bluetooth button on your machine for at least 3 seconds.
	Once airplane mode has been disabled and the Bluetooth indicator light on your AirMini machine begins to flash blue
	\$, Bluetooth is enabled on your machine and the machine is ready for pairing.
	If you cannot disable airplane mode, you can still start therapy by pressing the Start button on your AirMini machine.
The Bluetooth indicator light on my AirMini machine is o	constantly white. I cannot pair to my machine.
Bluetooth is disabled.	Press the Bluetooth button on your AirMini machine for at least 3 seconds. When the Bluetooth indicator light flashes
	blue *, , the machine is ready for pairing.
The AirMini machine appears in the device list, but I cannot establish a connection.	Tap the device name in the device list to confirm that you want to connect to that machine.
My therapy data has not been transmitted.	
Bluetooth may be disabled.	Ensure that Bluetooth is enabled on your smart device $^{\slash}$ .
	Ensure that Bluetooth is enabled on your AirMini machine by pressing the Bluetooth button on the machine. The Bluetooth
	light on the machine should then flash blue $\hat{f x}$ , .
	Reconnect and pair your AirMini machine and smart device. Refer to Connecting your machine and smart device for more information.
	If these solutions do not resolve the issue, try restarting your smart device.
Your smart device may be in airplane mode.	Turn off airplane mode on your smart device.
Air is leaking from around my mask or my mask is too no	isy.
Your mask may be fitted incorrectly.	Ensure that your mask is fitted correctly. Refer to your mask user guide for fitting instructions or perform the mask fit function using the AirMini app to check your mask fit and seal.
The AirMini system may be assembled incorrectly.	Make sure your AirMini system is assembled correctly. Refer to your AirMini user guide for information on setting up your AirMini machine.

Problem/possible cause	Solution			
Air pressure in my mask seems too low or it feels like I am not getting enough air.				
Ramp may be in progress.	Use the AirMini app to confirm that the Ramp Time comfort feature has been enabled. If so, wait for air pressure to build up or turn off the Ramp Time feature using the AirMini app.			
The HumidX or vent might be blocked.	Inspect the HumidX and vent for blockages or damage. Refer to your AirMini user guide for information on cleaning and maintenance.			
The HumidX may be wet.	The HumidX should be dry when starting therapy. Determine whether the HumidX is wet and replace it if necessary.			
I cannot start therapy.				
Power may not be connected.	Connect the power supply unit and ensure that the plug is fully inserted. The green indicator light on the power supply unit should be illuminated.			
	Ensure that the green indicator light above the Start/Stop button on the AirMini machine is also illuminated.			
My therapy has stopped.				
The air tubing may be disconnected.	Ensure that the air tubing is properly connected. Press the Start/Stop button on the AirMini machine to continue therapy.			
You may be experiencing high mask leak while the SmartStop feature is enabled.	Ensure that your mask is fitted correctly. Refer to your mask user guide for fitting instructions or perform the mask fit function using the AirMini app to check your mask fit and seal.			
	Alternatively, disable the SmartStop feature.			
I cannot scan the QR code to pair my AirMini machine.				
The camera is not focused or broken, or the QR code label is damaged.	Pair your AirMini machine manually by entering into your smart device the four-digit key found on the back of your machine.			
The QR code label is unreadable.	Contact your provider.			
The light above the Start/Stop button is flashing green.				
An error has occurred on the AirMini machine.	Unplug your AirMini machine. Wait a few seconds and then plug it back in.			
	If the problem persists, contact your provider. Do not open the $\operatorname{Air}\operatorname{Mini}$ machine.			

Problem/possible cause	Solution	
I am experiencing dryness or have a dry or blocked nose.		
Your mask may be fitted incorrectly.	Adjust and refit your mask to improve the seal. Ensure that no air is leaking from it. Refer to your mask user guide for fitting instructions or perform the mask fit function using the AirMini app to check your mask fit and seal. If your mask fit is good, try the HumidX Plus.	
Humidification may be required.	Try therapy using the HumidX.	
I am using the HumidX or HumidX Plus and am getti tubing.	ng uncomfortable droplets of water on my nose, mask or air	
The humidity level is too high.	If you are using the HumidX, remove it and try therapy without humidification.	
	If you are using the HumidX Plus, try the HumidX instead. This will help to reduce the water droplets.	
	If you still experience problems, contact your provider.	
Note: you may need to use the HumidX or HumidX Plus	when ambient humidity conditions change.	

## Displayed values

Value	Range	Display resolution	
Pressure sensor at air outlet:			
Mask pressure	4-20 cm H <sub>2</sub> 0 (4-20 hPa)	0.1 cm H <sub>2</sub> O (0.1 hPa)	

To see additional information about your machine or the AirMini app (for example, the software version of the app), go to the More menu in the Navigation tab.

# Further information

For information on cleaning your machine, maintenance, troubleshooting and other technical specifications, refer to your AirMini machine user guide.





#### ResMed Ltd

MANUFACTURER Bella Vista NSW 2153 Australia

Distributed by

1 Elizabeth Macarthur Drive ResMed Corp 9001 Spectrum Center Boulevard San Diego CA 92123 USA **EC** REP ResMed (UK) Ltd 96 Jubilee Ave Milton Park Abingdon Oxfordshire OX14 4RW UK

See ResMed.com for other ResMed locations worldwide. AirMini, HumidX and SmartStart are trademarks and/or registered trademarks of the ResMed family of companies. For patent and other intellectual property information, see ResMed.com/ip. "Made for iPhone" means that an electronic accessory has been designed to connect specifically to iPhone and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPhone may affect wireless performance. Apple, the Apple logo and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc. IOS is a trademark of Cisco, licensed to Apple Inc. Bluetooth is a registered trademark of the Bluetooth SIG, Inc. This product uses software developed by the ANTLR project (http://www.antlr2.org). © 2017 ResMed Ltd. 228951/1 2017-02

