



ResMed **Air** Solutions



Troubleshooting guide

ResMed **Air** Solutions

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1 Optimization overview

When a patient calls with potential therapy issues, such as a leaky mask or rain-out, it's often tough to troubleshoot problems over the phone. This go-to guide walks you through the most common device issues, and shows you, step-by-step, how to solve them.

Open the patient's record in AirView™ and click the Remote Assist tab. Ensure that the mask and tube reported in Remote Assist are what is physically attached to the patient's device. Next, view the bar at the top of the screen to see if the patient's device is functioning correctly.

If the customer's device is functioning incorrectly, there are several things you can try first before contacting ResMed Tech Support.

If the customer's device is functioning correctly, but the customer is complaining about leaks, pressure and other issues, you can make numerous adjustments, many remotely, to instantly solve problems.

Device

Displays device type and serial number including the settings:

SmartStart [On, Off]

Total used hours [hrs]

Humidifier

Displays humidifier type and connection status including the settings:

Humidity level [Off, 1 to 8]

Climate control [Manual, Auto]

Ambient humidity [Dry, Medium, Humid]

Air tubing

Displays the air tubing type and connection status including:

Tube temperature

Recent usage and leak/mask

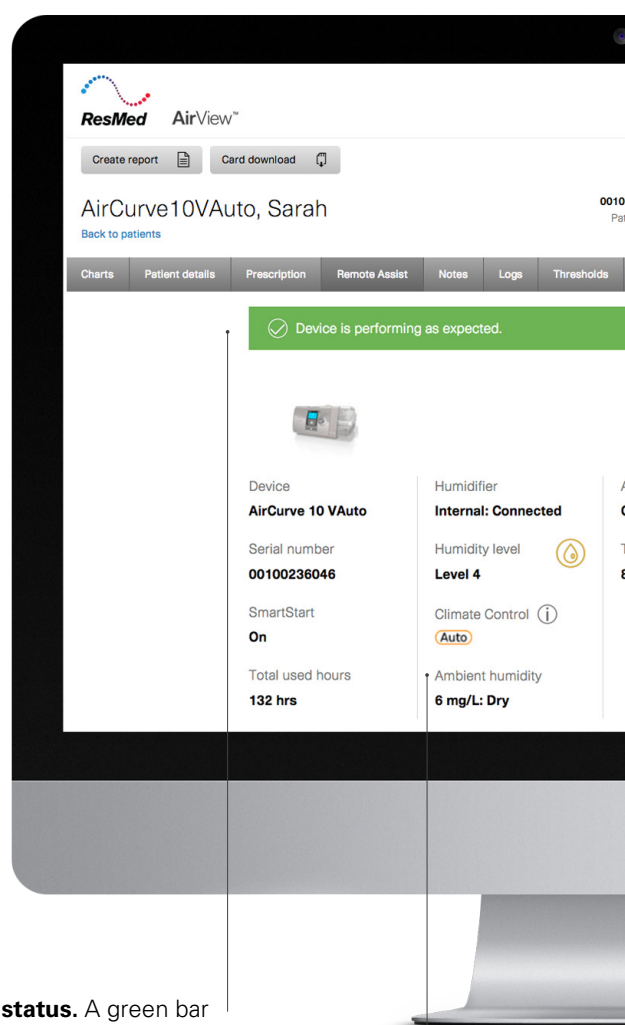
Displays the recent usage and leak (last five days) as shown in AirView's Wireless patients screen.

Displays the mask type as:

Mask (online) as set in AirView

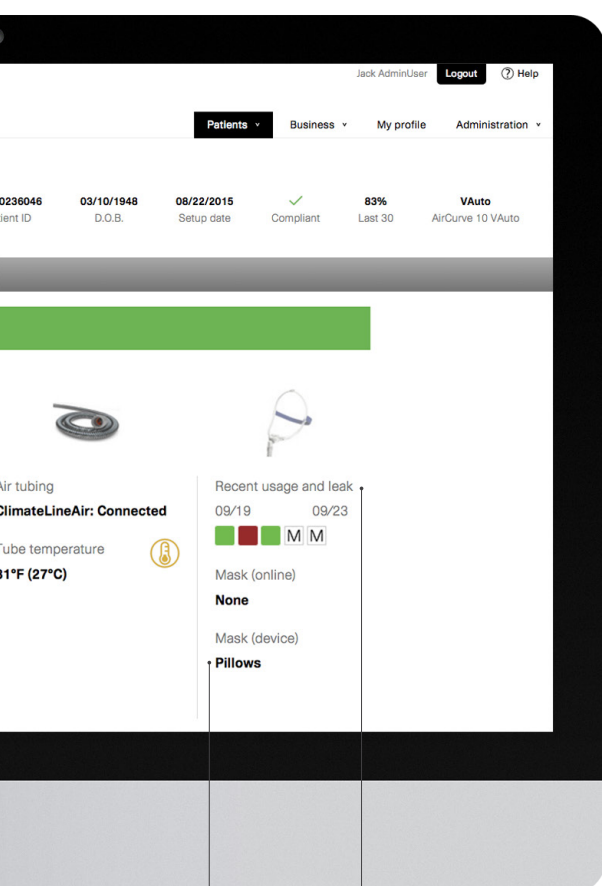
Mask (device) as reported in the device

FUNCTIONING CORRECTLY



Device status. A green bar indicates the device is functioning properly. A red bar indicates an issue and provides details on steps to take to resolve it.

Ambient humidity. Quickly view the patient's room humidity level and recommend changes to make therapy more comfortable.

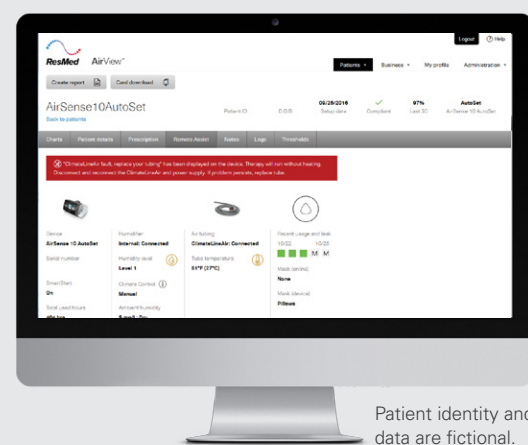


Patient identity and data are fictional.

Last 5 days of usage/leak data.
Get a snapshot of compliance, leak and AHI data for the previous 5 days.

Mask type. Troubleshoot comfort issues or recommend a different mask type based on patient feedback.

FUNCTIONING INCORRECTLY



Patient identity and data are fictional.

If a fault is displayed, try these steps to resolve:

- Restart the device
- If it is a ClimateLineAir™ Fault, detach and reattach the tube. Get a new tube if it still is an issue.
- Call ResMed Tech Support for assistance as the fault may be resolvable.

2 Mask optimization

Does your patient complain of...

...mask leaks?

1

Yes

Is it linked to body position?

Yes

No

- Check headgear, mask and cushion size
- Clean cushion with mild soap in lukewarm water
- Re-adjust mask as necessary

...skin irritation?

2

Yes

- Clean cushion with mild soap in lukewarm water
- Clean face before fitting mask every night
- Check headgear tension

...forehead redness or pain?

3

Yes

Check mask fit, headgear tension and headgear size

Redness or pain persists?

...claustrophobia?

4

Yes

Consider switching to AirFit™ P10 nasal pillows mask (limited contact with face)

...nasal bridge pain and/or redness?

5

Yes

Check mask fit, headgear tension and cushion and headgear size

Redness or pain persists?

Advise your patient to get a CPAP pillow

Leak persists?

Yes

No

Consider switching to an AirFit mask

Is mask over-tightened?

Intolerance persists?

Yes

Yes

Consider replacing cushion or mask as necessary

Yes

Consider switching to an AirFit mask
(no forehead support)



AirFit range

- Dual-wall technology
- No forehead support

Yes

Consider

- Adding a Gecko™ Nasal Pad
- Or switching to AirFit P10 nasal pillows mask



3 Optimal comfort

Does your patient complain of...

...noise?

1

Yes

Does the noise problem come from the device?

No

Yes

- Check that the filter is not clogged
- Check for cracks in the humidifier tub
- Re-insert the tub to make sure it is seated properly
- Check to see if the patient is using a ResMed tube

AirView Remote Assist – Air tubing column

Make sure the patient has optimized humidity, if mouth leak then consider switching to the AirFit F10 full face mask

Yes

...nose/mouth dryness?

2

Yes

Are there any leaks? If chamber is running dry then there is a leak.

No

AirView Remote Assist – Recent usage and leak column

AirView Remote Assist –
Recent usage and leak column

Are there high unintentional
leaks? (possible noise source)

Yes

Are there any mouth leaks?

Yes

Consider switching to
AirFit F10 full face mask

Get an order for a new mask from the
patient's physician if needed



No



Consider switching to
AirFit P10 nasal pillows
mask (QuietAir™ technology)

Noise complaint persists?

No

Re-adjust mask to remove
unintentional leaks
(See chapter 1 section 1)

Prescription tab in AirView –
Climate control mode

Consider increasing the
humidity settings

Yes

Is the humidity setting low?

AirView Remote Assist –
Humidifier column

No

Is ambient humidity dry?

AirView Remote Assist –
Humidifier column

Dryness persists?

Yes

- Turn off air conditioning
- Switch to ClimateLine™
tubing



Does your patient complain of...

...rain-out?

3

Yes

AirView Remote Assist – Air tubing column

Does the patient have ClimateLine tubing?

No

Yes

Turn on Climate Control Auto mode

Prescription tab in AirView – Climate control mode

...difficulty falling asleep?

4

Yes

- Consider using the AutoRamp™ feature for automatic sleep onset detection
- Try using your therapy for a bit each day while watching TV to get more comfortable with it
- Register for myAir™ at myAir.ResMed.com to receive tips on adjusting to therapy

Suggest switching to
ClimateLine tubing



AutoRamp

AutoRamp technology makes therapy comfortable right from the start by delivering a low pressure to help patients fall asleep more easily. Once the device detects your patient is asleep, it comfortably increases the pressure to ensure the prescribed level is delivered the moment they need it.

4 Tailored therapy

Does your patient complain of...

...difficulty
exhaling against
the pressure?

1

Yes

Go to Prescription tab in
AirView to adjust from full
time to ramp only

Assuming EPR is off,
consider activating expiratory
comfort feature on ramp only

Complaint persists?

Yes

Turn on EPR

Go to Prescription tab in
AirView to adjust EPR to
full time

Complaint
persists?

EPR™ (Expiratory Pressure Relief) – comfortable exhalation

With the Easy-Breathe waveform,
EPR decreases pressure at exhalation
to ensure soft and comfortable
breathing.

Contact the patient's physician to change their device type if switching to a bilevel is the right option for the patient.

Yes

Consider switching to AirCurve™ 10 VAuto

The VAuto algorithm provides innovative auto-adjusting bilevel pressure to challenging patients who require more respiratory comfort. Delivering pressure support in a natural waveform, it provides even more comfort by matching your patient's breathing.



Does your patient complain of...

...pressure
discomfort?

2

Yes

AirView Remote
Assist – Recent
usage and leak
column

Check for mask
leaks

Complaint
persists?

Yes

Turn on EPR

Complaint
persists?

Yes

Is the device on
AutoSet™ mode?

No

Receive permission from physician

Consider switching to
AirCurve 10 VAuto

The VAuto algorithm provides innovative auto-adjusting bilevel pressure to challenging patients who require more respiratory comfort. Delivering pressure support in a natural waveform, it provides even more comfort by matching your patient's breathing.



Yes

Yes

Complaint persists?

Turn on the AutoSet
algorithm

Prescription tab in AirView,
device mode. Receive
permission from patient's
physician.

Complaint
persists?

Yes

Turn on the Response
feature

Under the Prescription tab
in AirView

The AutoSet algorithm responds to flow limitations, snoring and obstructive sleep apneas to automatically adjust through the night and deliver ideal pressure and optimal therapy to the patient.



The AutoSet Response feature responds to the same events as the standard AutoSet mode, but with gentler pressure increases. This option is designed to help patients with high pressure intolerance.

Does your patient complain of...

...feeling
bloated?

3

Yes

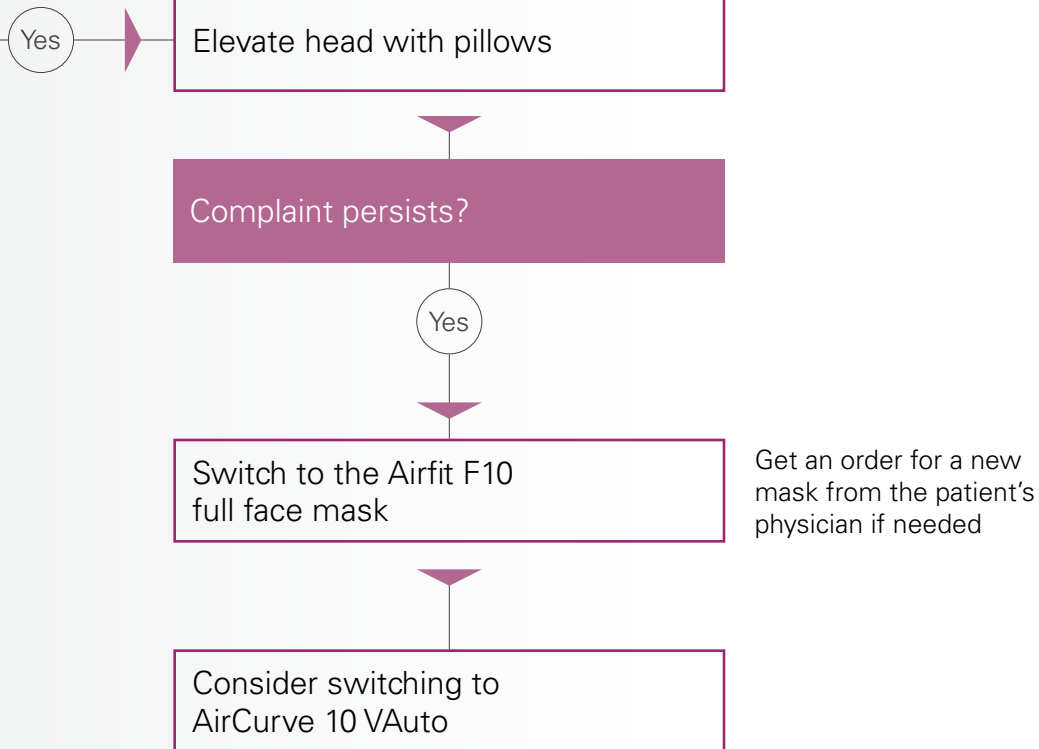
Turn on EPR

Go to Prescription tab in
AirView to adjust EPR

Complaint
persists?

**EPR (Expiratory Pressure Relief) –
comfortable exhalation**

With the Easy-Breathe waveform,
EPR decreases pressure at exhalation
to ensure soft and comfortable
breathing.



The VAuto algorithm provides innovative auto-adjusting bilevel pressure to challenging patients who require more respiratory comfort. Delivering pressure support in a natural waveform, it provides even more comfort by matching your patient's breathing.



Does your patient's device keep stopping?

Yes

Is mask leakage high or low?

AirView Remote Assist –
Recent usage and leak
column

High

High leak is anything
> a 95% pressure of
24 liters/min or more

Low

Is your patient
refusing/quitteing
PAP therapy?

Yes

Contact the patient's physician to change their device type
if switching to a bilevel is the right option for the patient.

Consider switching to AirCurve 10 VAuto

The VAuto algorithm provides innovative auto-adjusting bilevel pressure to challenging patients who require more respiratory comfort. Delivering pressure support in a natural waveform, it provides even more comfort by matching your patient's breathing.



Confirm that the mask is seated properly into the frame and that the patient's cushion, mask and tubing are not torn, cracked or discolored. Additionally, if there is a mouth leak, switch the patient to a full face mask.

Get an order for a new mask from the patient's physician if needed

Is SmartStart™ on or off?

On

Turn SmartStart off

Off

Call ResMed Tech Support. They will be able to help solve the problem.

Consider

- Referring your patient back to their treating physician for possible oral appliance therapy
- Prescribing Narval CC fitting



To ensure no obstructive sleep apnea (OSA) patient goes without therapy, ResMed also offers **Narval™ CC**, the next generation custom-made mandibular repositioning device for patients who refuse or abandon CPAP therapy.

5

Device-related FAQs

My device makes a whistling noise. How do I stop it?

First, instruct the patient to check to see if there is a crack in the humidifier tub. If there is, give them a new one. Next, ensure that the intentional leak holes are free of water drops, the tubing is dry and the mask is water-free on the inside. Lastly, find out if the patient's tubing is from ResMed. If it isn't, gently suggest that they purchase a ResMed tube as tubes from other companies make noise.

Why is my humidifier utilizing different quantities of water every night?

Have the patient check to make sure the tub lid seal is sitting properly in the upper lid of the HumidAir™ tub. Also, water evaporates more quickly if there is a leak, a lot of humidity in the room or plate settings are high.

It is difficult to pull out the humidifier tub to fill it with water. Am I opening it incorrectly?

Make sure the patient is holding onto the main part of the device with one hand and pushing down on the tab on the top of the chamber while pulling it horizontally with their other hand.

I want the top-of-the-line ResMed device, which one is it?

All of ResMed's devices are designed to offer the highest quality products. There are different devices and features offered based on patients' needs and MD prescriptions. Please visit **ResMed.com** to see all devices available.

Will my device work in other countries (power)?

Yes, patients can travel with ResMed devices to other countries. The universal power supplies in our devices allow use all over the world. The patient will only need to purchase a plug adapter for the country they are visiting. Visit **ResMed.com/Travel** for more information.

What altitude can the device be used at?

Air10™ devices will automatically compensate for altitudes below 8,600 feet. For higher altitudes, manual adjustment may be required.

Can the therapy system be used in-flight on a commercial airline?

Some airlines allow passengers and actively assist patients in using therapy devices in-flight, while others do not. Advise the patient to check with the airline before they book their flight. Advise the patient to visit **ResMed.com/Travel** for more detailed instructions.

Note: Do not use the humidifier on the flight; aircraft turbulence increases the risk of water spillage and damage to the device.

Reminder: Device should be switched to airplane mode while in the air.

Can Air10 devices run from the 400Hz power supply on the aircraft?

Yes. Even though the rating plate on the device specifies 50–60Hz, the switch mode power supply in the device is compatible with the 110V, 400Hz power supply on the aircraft. Remind the patient to book a seat close to a power outlet on the aircraft. The number and availability of these seats varies from one aircraft to another. Another option is to buy a battery to power the device.

Will the X-ray scanners at the airport security affect Air10 devices?

No, X-ray scanners will not harm Air10 devices. The patient will need to remove their device from its carrying case before placing it through the scanner.

Can the therapy system be used when camping?

Yes. A ResMed device can operate from a battery supply (in a truck or recreational vehicle) with the use of a suitable inverter or converter unit. The inverter should be capable of supplying voltage in the 100–300V range and should be of sufficient capacity. ResMed has a DC converter available as an accessory in addition to a RPS II external battery source. Visit **ResMed.com/Travel** for more tips on traveling with their therapy device and to view our battery guide.

What is an inverter? What do they do and where can they be purchased?

An inverter is a device that turns a low voltage (usually 12V) DC into a mains-level AC voltage – either 110 or 240V – so that domestic appliances can be run from a battery supply. It can be purchased at most consumer electronics stores. Inverters are either a “pure” sine wave or a “modified” sine wave. “Modified” sine wave is the least expensive type and will work with ResMed’s devices (S9™ and Air10).

What are the battery options for the Air10 device?

If a ResMed Air10 series therapy system is run from a battery, and the battery is intended to be used for a single night before recharging, the following equipment is required:

Option 1:

- A marine battery or deep-cycle battery rated at 50 amp-hours or higher
- A pure sine wave inverter with a continuous power rating of 300W, or higher or an inverter with a peak/surge rating of 500W or higher (available at electronic stores). Instead of an inverter, the patient can purchase the Air10 DC/DC converter that can be used with the Air10 series.

Option 2:

- Buy the ResMed Power Station (RPS) II with your Air10 device. This is an external battery source that does not require an inverter or converter.

How long will my device run on the RPS II external battery source?

Up to 13 hours. However, the device type, accessories and the patient's prescription can affect battery life. It is imperative that the patient does not deplete the battery to 0% as this will result in therapy being stopped and the device will shut down/turn off. Instead, advise them to charge it when the battery gets low.



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