



**ResMed**

**Astral™** series



# Mouthpiece ventilation

## Quick setup guide

English

# Mouthpiece ventilation

The settings below are suggested for 'open' or 'sip' mouthpiece ventilation where the patient exhales to atmosphere frequently or continuously, eg, for on-demand daytime ventilation via a 15 mm non-vented mouthpiece. Other modes and settings are also available if required.

## Mouthpiece circuit settings:

| Ventilation Setting | Selection                      | Detail/explanation  |
|---------------------|--------------------------------|---|
| Patient type        | Adult                          |   |
| Circuit             | Mouthpiece circuit (tube only) | 15 mm or 22 mm circuit without intentional leak or expiratory valve.<br>Note: Not designed to support continuous exhalation into the circuit.   |
| Ventilation mode    | (A)CV                          | (A)CV mode allows the patient to stack breaths as a set volume is delivered with each breath.   |
| Tidal volume        | As appropriate                 | Set based on patient comfort and preference.  |
| Resp. rate          | As appropriate                 | Resp. Rate shall be set appropriately for patients who may rely on the backup rate. Otherwise, it can be turned Off.  |
| PEEP                | Off                            | Not available in this configuration.  |
| Trigger             | Touch, High, Medium, Low, Off  | The Touch trigger setting will allow a breath to be delivered upon engagement of the mouthpiece or inspiratory effort is detected. High, Medium and Low settings only deliver a breath when inspiratory effort is detected. If the patient experiences false triggering then the trigger sensitivity should be reduced. |



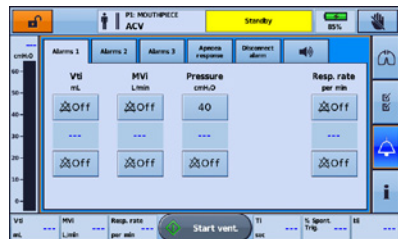
Select Mouthpiece circuit.



Select ACV.



Set therapy settings as appropriate.



Set alarm settings as appropriate.

## Single limb/Double limb circuit settings:

| Ventilation Setting | Selection                                     | Detail/explanation   |
|---------------------|---|--|
| Patient type        | Adult   |  |
| Circuit             | Single limb circuit with valve or Double limb |  |
| Interface           | Mouthpiece                                    |  |
| Ventilation mode    | (A)CV   | (A)CV mode allows the patient to stack breaths as a set volume is delivered with each breath.                        |
| Tidal volume        | As appropriate                                | Set based on patient comfort and preference.   |
| Resp. rate          | As appropriate                                | Resp. Rate shall be set appropriately for patients who may rely on the backup rate. Otherwise, it can be turned Off. |
| PEEP                | Off   |  |
| Trigger             | Very High, High, Medium, Low, Very Low        | If the patient experiences false triggering then the trigger sensitivity should be reduced.                          |

**Note:** Vented (intentional leak) modes are not recommended for highly discontinuous ventilation such as 'sip' mouthpiece ventilation.

## Safety considerations for mouthpiece ventilation

The Disconnect Alarm allows detection of circuit disconnection (for example, when the mouthpiece has fallen out of reach of the patient), and whether the patient is able to reliably trigger ventilation or not.

Regardless of whether the Disconnection Alarm is active or not, other mitigations may need to be put in place to ensure that patient safety is not compromised, such as the Apnea alarm, external monitoring, an SpO<sub>2</sub> alarm, or full-time supervision.

| Alarm setting               | Selection      | Detail/explanation   |
|-----------------------------|----------------|--|
| Disconnection Alarm         | On             | Enables Disconnection Alarm.   |
| Disconnection Tolerance (%) | As appropriate | Sets a higher or lower tolerance to the degree of circuit disconnection required to activate the Disconnection Alarm.  |
| Alarm Activation Time       | As appropriate | The time it takes for the alarm to activate once the disconnection threshold is satisfied. It can be adjusted from 5 seconds to 15 minutes for mouthpiece interface, as appropriate for the patient's ventilator dependency. |
| Apnoea Response             | Off            | It may be appropriate to configure Apnoea Response to OFF if the Disconnection Alarm is appropriately configured.  |

Low pressure alarms are sometimes used to imply circuit disconnection and are quick to activate. Should this be an annoyance, for example when the patient is receiving a partial breath or missing a breath, or if a false triggered breath occurs, it is at the discretion of the Clinician to turn OFF. Other mitigations may need to be put in place to ensure that patient safety is not compromised. This may include external monitoring, SpO<sub>2</sub> alarm, or full-time supervision.

Mouthpiece Ventilation with Astral 100/150 mouthpiece circuit is not intended to support continuous exhalation into the circuit. The non-user adjustable NV Mask/Rebreathing alarm will activate if the device detects continuous exhalation into the circuit. For patients that may prefer continuous exhalation into the circuit, a circuit with an expiratory valve should be considered.

**Note:** All alarms except for High pressure and Disconnection alarms are defaulted to Off when the Mouthpiece circuit or Mouthpiece interface are selected via Setup Assistant in Adult configuration.



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## Because quality of life matters

ResMed's mouthpiece ventilation solution has been thoughtfully designed to reflect the needs of patients and their carers and support good quality of life.

The **EasySpeak mouthpiece** is the ideal daytime solution for patients using Astral. It helps to make eating, breathing and talking more natural and can also help to reduce the risk of infections and complications<sup>1</sup>.

The **circuit support arm** holds the mouthpiece in a comfortable, accessible position. Quick to install, set up and clean, it readily adapts to any care environment, making it a practical choice in hospital, at home and on the move.



### Ordering information

|   | Product name   | Code  |
|---|--|-------|
| 1 | EasySpeak mouthpiece angled with 17cm flexi-tube 22F | 21353 |
| 2 | EasySpeak mouthpiece angled for 15M connection       | 21351 |
| 3 | EasySpeak mouthpiece angled for 22M/15F connection   | 21354 |
| 4 | MPV Circuit Support Arm                              | 27955 |

<sup>1</sup> Boitano LJ, Benditt JO. An evaluation of home volume ventilators that support open-circuit mouthpiece ventilation. *Respir Care*. 2005 Nov ; 50(11):1457-61.



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