



Quick guide to initiate Invasive Ventilation with Tracheostoma in ST mode with Stellar

Covid19 epidemic period

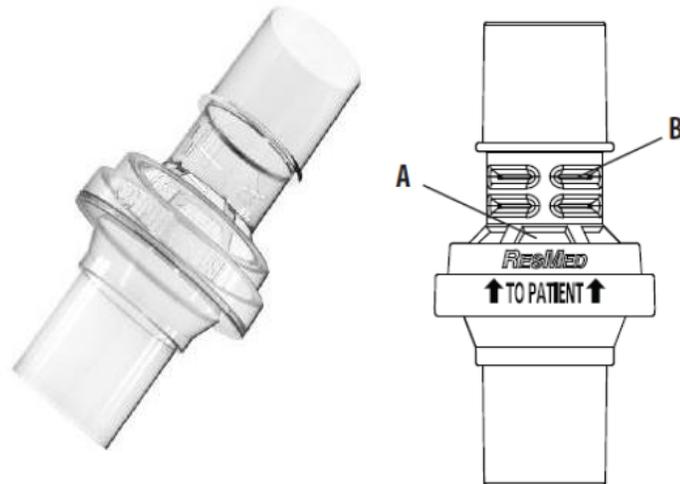
23/03/2020

Introduction

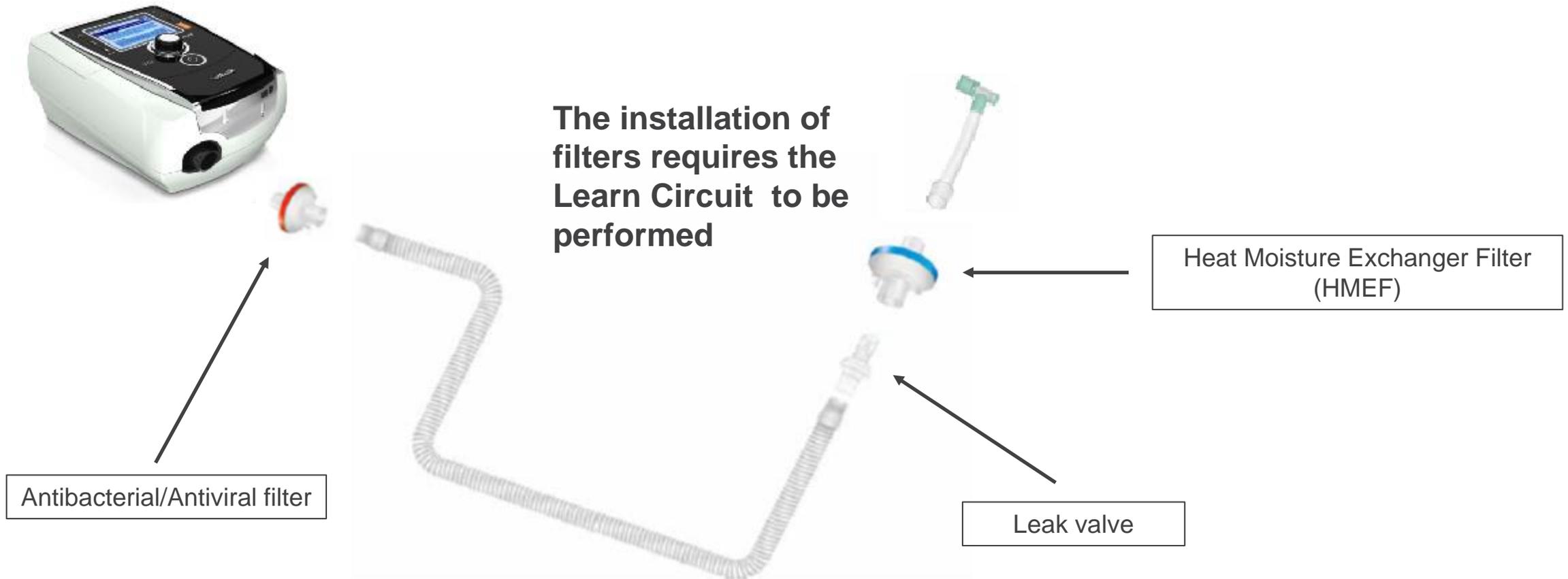
- ST mode with a single limb with leak circuit can be used to perform invasive ventilation with tracheostoma.
- The purpose of this guide is to describe the different steps to initiate ST in invasive ventilation mode with Stellar.
- You will find the procedure to ensure a correct Stellar configuration regarding circuit assembly, filters positioning, oxygen administration and monitoring.
- This guide is not conceived as a settings recommendation.
- For additional information, please refer to the Stellar user guide and the instructions for any other devices that are included in the circuit

Setting up for invasive ventilation use for tracheostoma

- The Stellar 150 can be used invasively only with the ResMed Leak Valve, or using an uncuffed or deflated cuff tracheostomy tube with the ResMed Leak Port (24976).
- The H4i humidifier is contraindicated for invasive use.
- For optimal accuracy and synchrony, perform a **Learn Circuit** when a **new circuit is used or with a change of the circuit configuration**, in particular when **adding or removing high impedance components** (eg, antibacterial filter, different type of air tubing).
- Do not connect patient interfaces prior to performing the Learn Circuit.



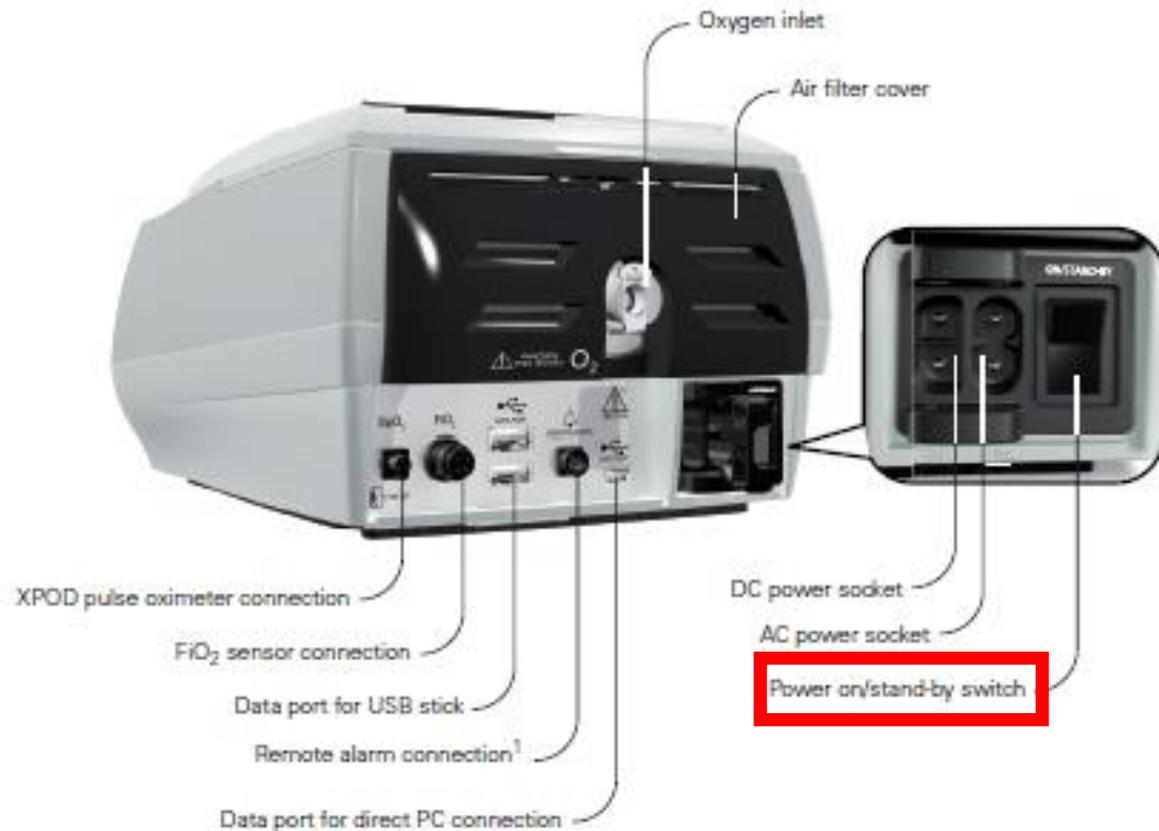
Example of Single limb with leak circuit assembly



Using a filter before the leak valve could cause :

1. More difficult inspiratory triggers for the patient (adjust)
2. Moisture accumulation in the filter (HME), which may require changing the filter several times a day

Start/Stop



To **turn on** the ventilator

- Press the power switch on the back of the device and wait until the Patient interface screen is displayed

To **turn off** the ventilator

- Press the power switch on the back of the device, then follow the instructions on the screen

About the control panel

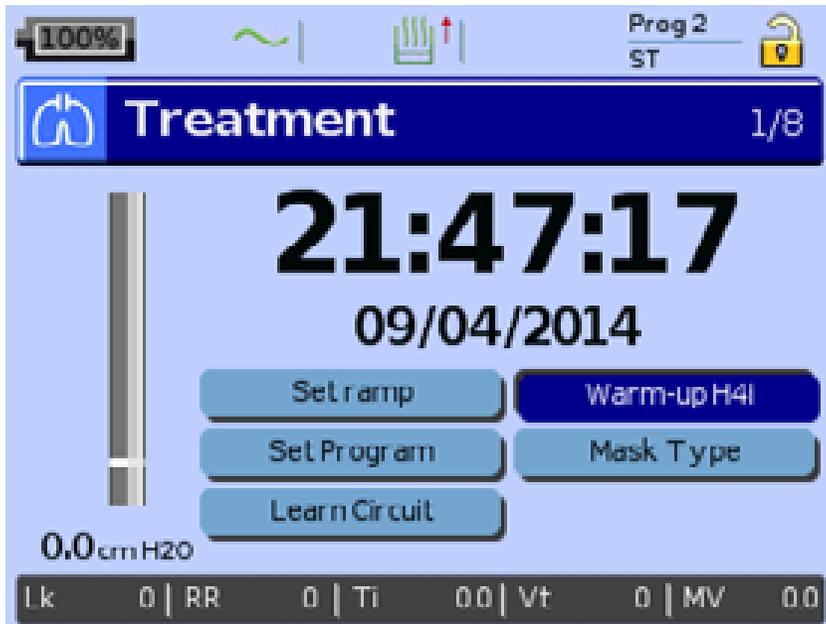


Accessing Clinical mode

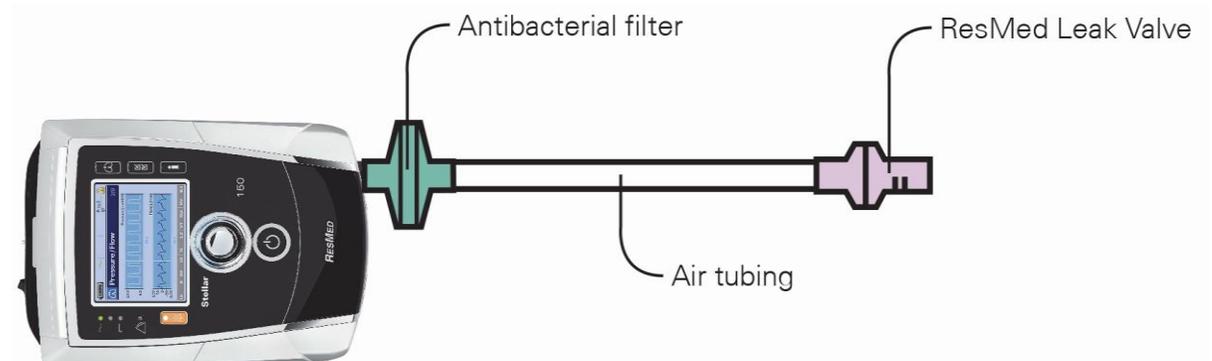


- To activate Clinical mode, press simultaneously for at least three seconds.
- You will be prompted for how long the device should stay in this mode.
- After the set period of inactivity or next power cycle (power on/off), the device automatically switches back to the patient mode and the device beeps.
- Proceed in the same way to lock the device (back to the patient mode).

Mask type and Learn Circuit



- The Learn Circuit procedure permits optimal therapy and monitoring accuracy, by measuring and storing the breathing system impedance up to and including the vent
- Select the mask type Trach (select *Setup* menu, then *Clinical Settings*, then *Advanced Settings*)



Perform the Learn Circuit

| Parameter | Default | Description |
|----------------------------|---------|---|
| Learn Circuit ¹ | - | <ol style="list-style-type: none">1. Ensure that the therapy is turned off before performing a Learn Circuit.2. If in use, turn off the oxygen flow.3. Select the mask type.4. Set up the air circuit including accessories and patient interface. Note: When performing a Learn Circuit for invasive use, do not connect a catheter mount, tracheostomy tube or HMEF).5. Leave the air circuit unobstructed and open to the air.6. Press  to start the Learn Circuit.7. Wait for the device to complete its automated tests (<30 sec). The results are displayed when complete. If the circuit configuration has been successfully learnt,  displays. If unsuccessful,  displays (see "Troubleshooting" on page 61). <p>If the Learn Circuit fails, the last Learn Circuit characteristics apply.</p> |

Select Ventilation Mode

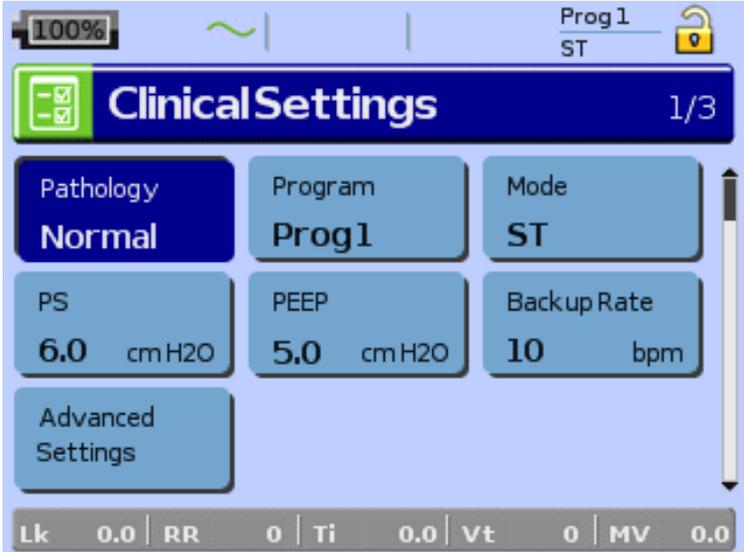
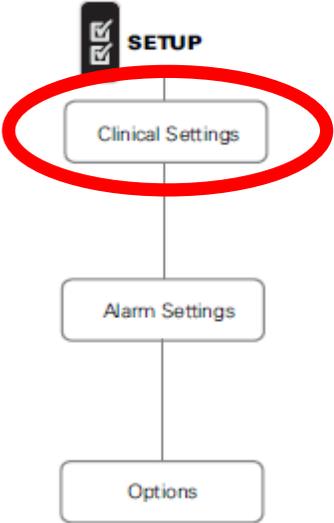
- Access the Setup menu



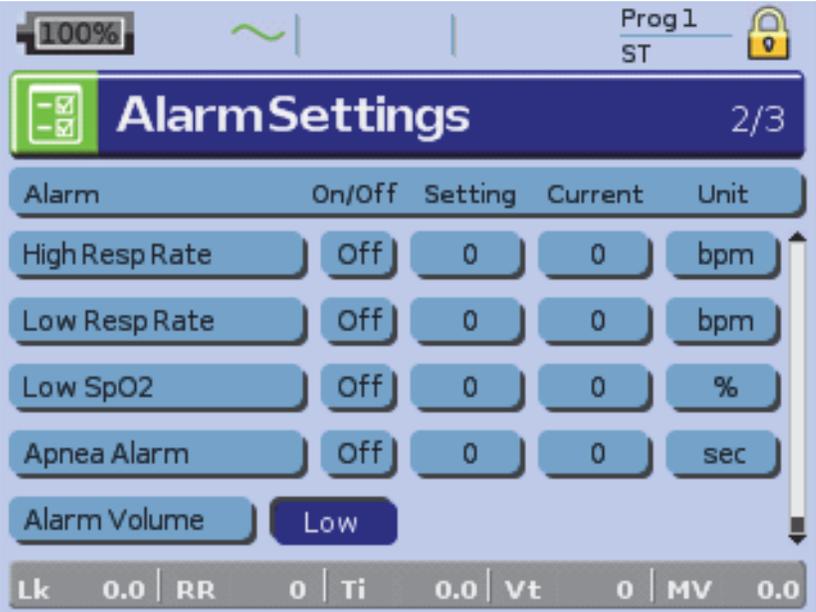
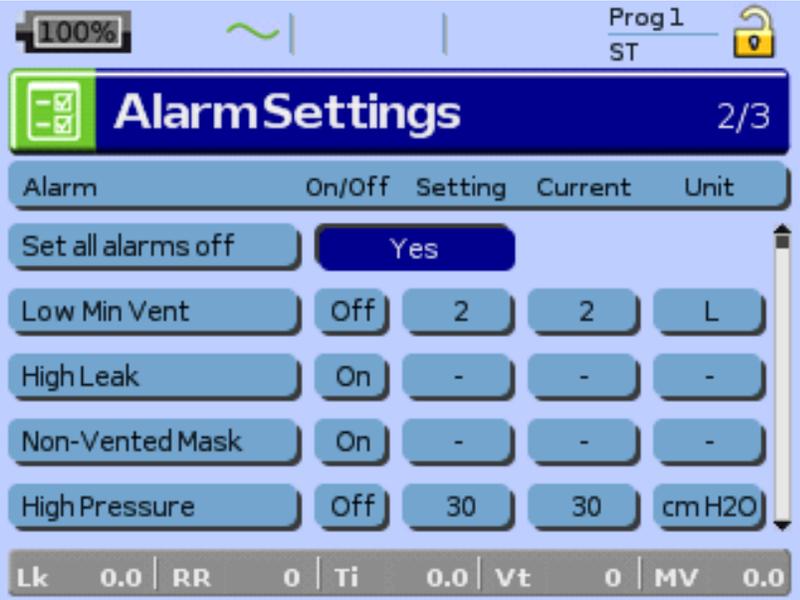
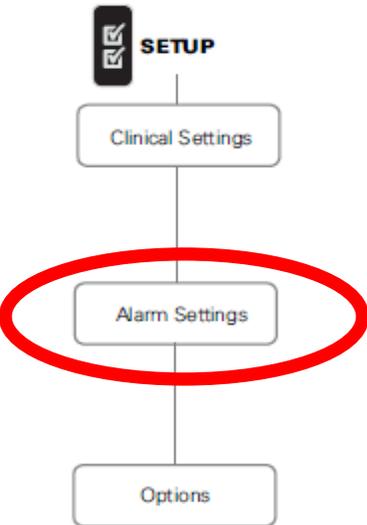
- Adjust the setting according to the patients needs

Then

- Press  to start ventilation



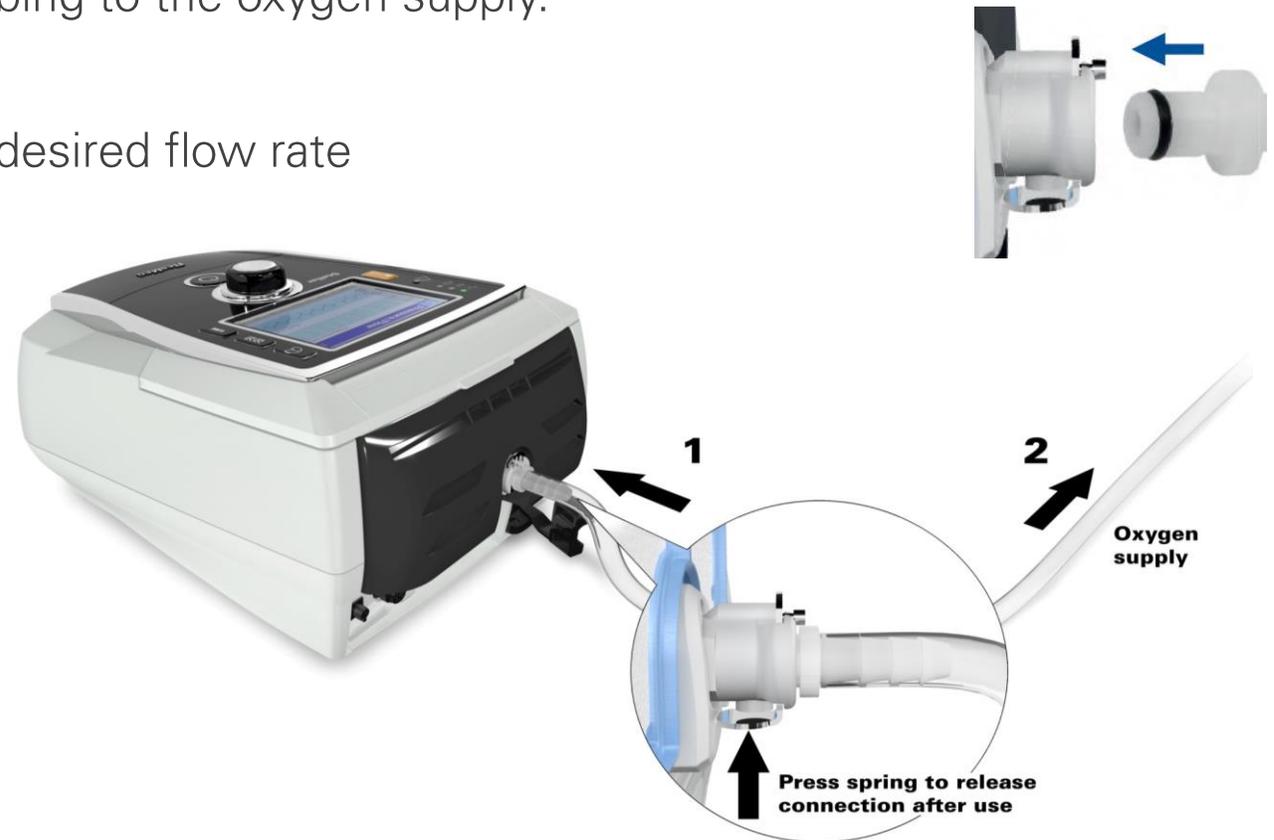
Access to Alarm settings



Adding supplemental oxygen

1. Unlock the low flow oxygen inlet on the back of the device by pushing up on the locking clip
2. Insert one end of the oxygen supply tubing into the oxygen connector port. The tubing automatically locks into place
3. Attach the other end of the oxygen supply tubing to the oxygen supply.
4. Start ventilation.
5. Turn on the oxygen source and adjust to the desired flow rate

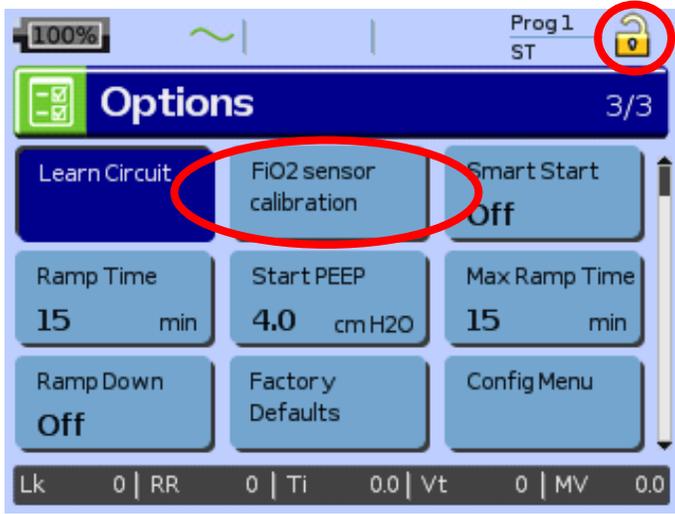
Up to **30 L/min** can be added



Using the FiO₂ monitoring sensor

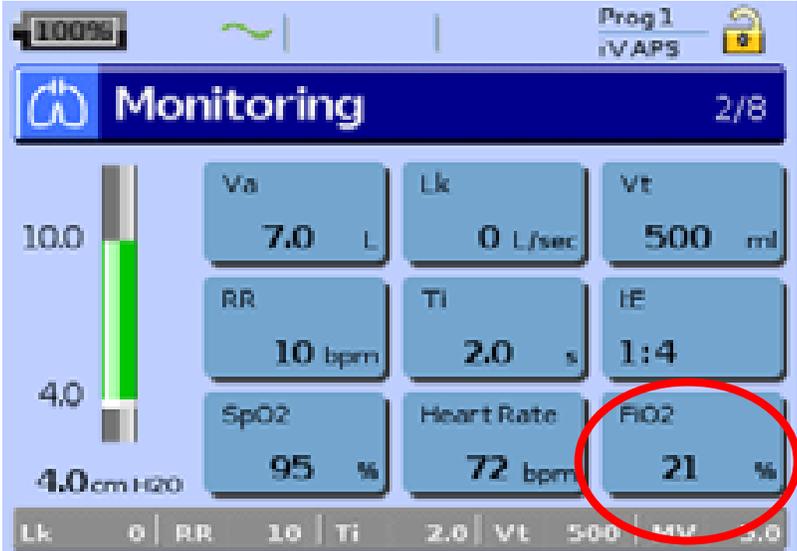
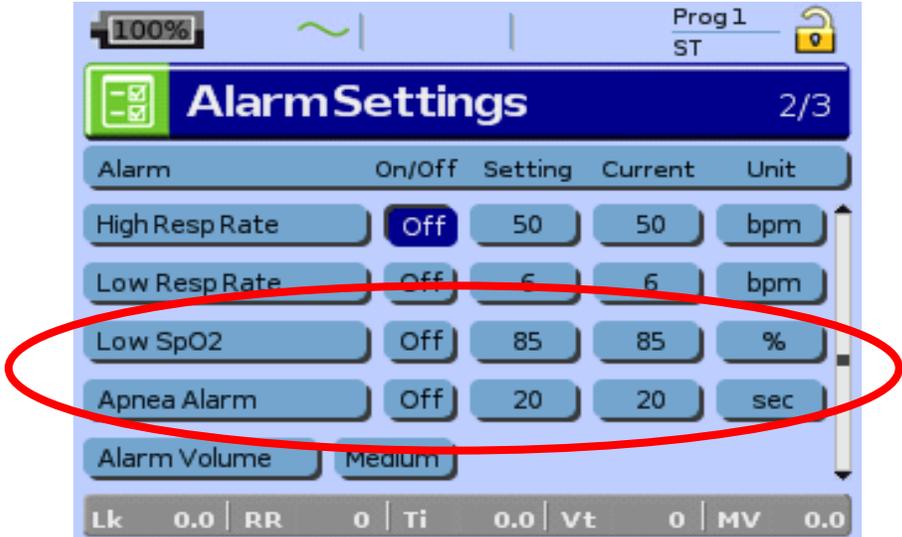
- 1. Before use, leave the FiO₂ monitoring sensor open to the air for 15 minutes.
- 1. Attach a new FiO₂ monitoring sensor (as shown below)
- 2. Perform the sensor calibration

Note: Turn off the oxygen



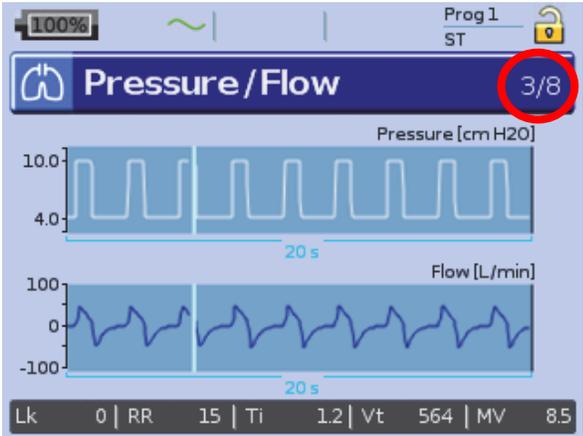
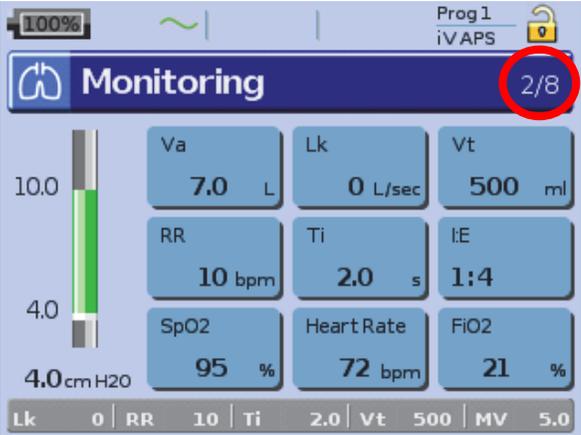
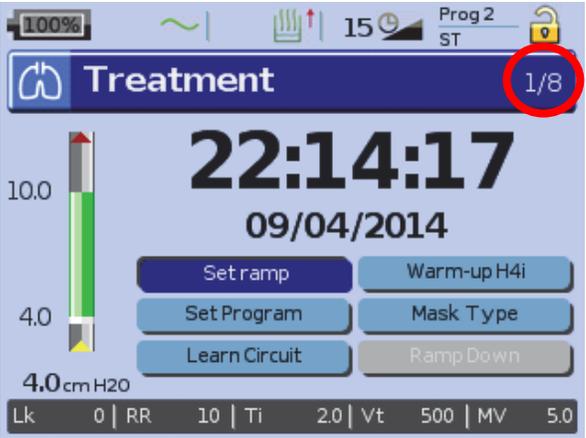
Monitoring the delivered FiO₂ with oxygen sensor

- Continuous monitoring of FiO₂, even without the ventilation
- Possibility to set a Low and High FiO₂ alarm during ventilation (default values Low 20%, High 100%, default setting off)



Monitoring menu (8 screens)

- Viewing ventilation data :



During ventilation the screens can be viewed by pressing and turning the **Push Dial**



Mentions & disclaimer

24/03/20

COVID-19

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This document is based on information available at the time of publication

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