

# LUISA

The Next Generation of Home Ventilation

---



# Defining Features

2  
positions:  
vertical  
and  
horizontal



100 ml VT  
without  
additional  
flow  
sensor



Second  
alarm  
language



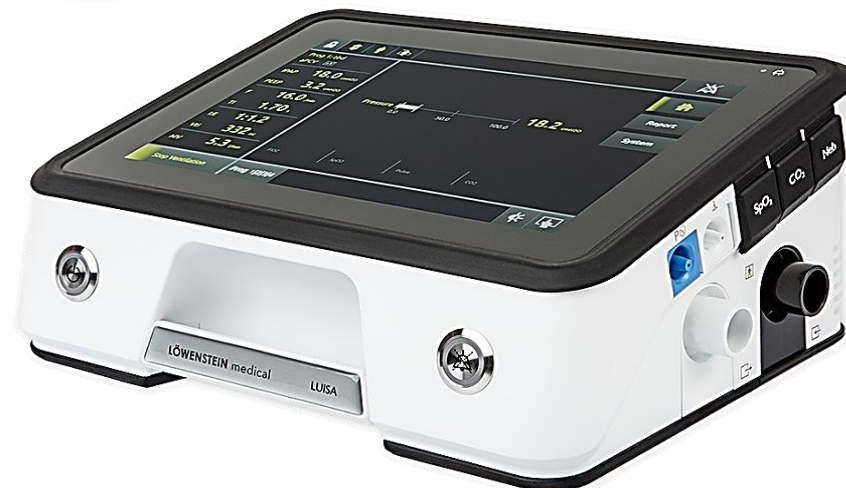
10 inch  
display  
(rotatable)



HFT in all  
circuit  
systems



No  
additional  
adapters  
needed



# Patient-Focused Design

- Ability to pre-program up to 4 easy to access prescriptions, allowing for seamless transition from nighttime to daytime use.
- Easy, intuitive transitions between modes and circuits, **with no additional adaptors needed.**
- Up to 18 hours of battery life (6-hour internal battery and two optional, 6-hour external batteries)
- Weighs ~ 8 lbs.



# Clinician-Focused Design

When discussing non-invasive ventilation, most manufacturers offer some of the same basic components: targeted tidal volume, auto-EPAP (expiratory positive airway pressure,) and auto-rate. These features of LUISA's TTV-VAPS-AE mode are unique in the following ways:

- **Three Target Volume Speeds:** Adjustable target speeds to respond gradually to patients who are sensitive to pressure changes, or quickly to patients whose clinical condition warrants more rapid response.
  - Speed 1: 0.5 cmH<sub>2</sub>O for every 8 breaths. Good for patients who are newer to NIV and can not tolerate rapid pressure changes
  - Speed 2: 1.0 cmH<sub>2</sub>O for every 5 breaths. This a good mid-ground area.
  - Speed 3: 1.5 cmH<sub>2</sub>O for every breath. Great for patients who must get back to targeted tidal volume.



# Clinician-Focused Design

- **Pressure Rise/Pressure Drop:** Pressure drop allows you to set the rate of decline from IPAP (inspiratory pressure) to EPAP (expiratory pressure). When prolonged, this setting increases mean airway pressure, which could improve oxygenation benefits for some respiratory patients.
  - While many available ventilators allow the setting of “Pressure Rise” or “Rise Time,” Pressure Drop is unique to LUISA
- **Flow-Based Algorithm:** Flow-based auto-EPAP algorithm allows effective treatment of upper airway obstruction without repeated oscillations, which prioritizes patient comfort



# Clinician-Focused Design

- **Sensitive Inspiratory and Expiratory Triggers:** Triggers can be set very sensitively due to Inspiratory Lockout Time, which the clinician sets to allow the patient sufficient time to exhale completely
  - **Inspiratory Lockout Time:** Allows the patient sufficient time to exhale completely and minimizes false triggers
  - Sensitive triggers can decrease patient work of breathing and increase patient-ventilator synchrony



# Clinician-Focused Design

- **Auto-Rate Algorithm:** Provides support only when necessary, rather than breathing for the patient and causing decreased patient-ventilator synchrony
  - Auto-Rate factors in both the patient's actual respiratory rate and their minute ventilation averages over the course of the night
  - Auto-Rate algorithm works like a smart algorithm that learns how your patients breathe at night by taking not just respiratory rate into consideration, but also minute ventilation. This works in the background to ensure that your patients breathe spontaneously throughout the night which promotes better vent synchrony.



# High Flow Oxygen Therapy

- High Flow Oxygen Therapy (HFT) can deliver a high flow blend of air and oxygen, through a high flow nasal cannula, which can improve oxygenation and decrease the work of breathing.
- HFT has been used in critical care, emergency departments, and is **now available to ventilator patients at home.**
- High Flow Oxygen Therapy offers many benefits for patients, including the generation of positive airway pressure, the washout of CO<sub>2</sub> in the conducting airways and a less intrusive interface when compared to typical NIV masks.<sup>1</sup>





# Is High Flow Oxygen Therapy at Home Useful?



- High Flow Therapy has shown patient care benefits at home following hospitalization for acute COPD exacerbation<sup>1</sup>
  - Improvements in disease-specific quality of life, respiratory symptoms and 6-minute walking distance
  - 89% of patients noted improvement in feelings of breathlessness
  - Reduction in wheezing/cough and sputum volume, color and consistency
- High Flow Therapy can help the chronic hypoxemic respiratory failure patient on home oxygen as well<sup>2</sup>
  - Reduced exacerbation frequency and hospitalization
  - Improves breathlessness, exercise tolerance and quality of life

<sup>1</sup> Criner, GJ. et al. Feasibility of Using Daily Home High Flow Nasal Therapy in COPD Patients Following Recent COPD Hospitalization. Chronic Obstructive Pulmonary Diseases. November 4, 2021.

<sup>2</sup> D'Cruz, R. et al. High Flow Therapy: Physiological Effects and Clinical Applications. Breathe. 2020; 16(4) 1-9.

# LUISA and High Flow Oxygen Therapy



## How can LUISA with High Flow Oxygen Therapy help?

- Potential to better manage patients during the day
  - Less obtrusive interface can help patient comfort during the day via
- Increased activities of daily living
  - High Flow nasal cannula allows for ability to eat and drink while getting therapy<sup>1</sup>

## Why is High Flow Oxygen Therapy important?

- Potential to improve oxygenation and decrease patient's work of breathing when compared to conventional oxygen therapy<sup>1,2</sup>

# LUISA's Differentiating Features

## *Patient Comfort Settings*

- Three Target Volume Speeds
- Flow-Based Auto-EPAP Algorithm
- Sensitive Inspiratory and Expiratory Triggers with Inspiratory Lockout Time
- Pressure Rise and Pressure Drop
- Auto-Rate Algorithm

**and**

- **HIGH FLOW OXYGEN THERAPY**

# LUISA

The Next Generation of Home Ventilation



2101 E. St. Elmo Road, Ste 275  
Austin, TX 78744  
Info@movair.com