

### CONNECT AND SET UP DEVICE

#### 1 How do I connect the ventilator? (Image A)

- Attach oxygen from wall or cylinder via flowmeter to **1**. Turn on and run device before starting Oxygen flow and turn off when not in use.
- Connect power cable to **2**
- Connect patient breathing system to **4**
- If exhalation valve breathing circuit is used, connect pressure tube to **3**

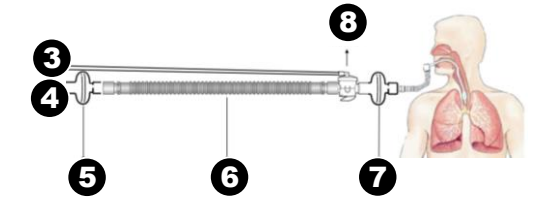


- 1** Oxygen inlet port
- 2** Mains / DC electrical inlet
- 3** Exhalation valve control pressure tube
- 4** Air outlet

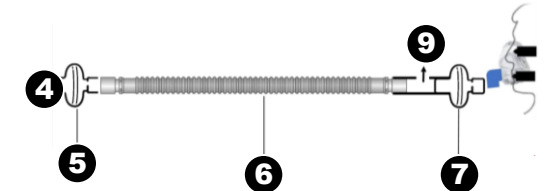
#### 2 How do I set up the breathing system and the HME filter? (Image B)

- Connect bacterial filter **5** to air outlet **4** and attach tube **6**
- For invasive VCV, connect exhalation valve **8** to exhalation valve control pressure tube **3**
- For non-invasive CPAP use leak circuit
- Connect HMEF / bacterial filter to patient **7**

#### B For invasive VCV - single limb exhalation valve circuit



#### For non-invasive CPAP - single limb leak circuit



- 4** Air outlet
- 5** Bacterial filter
- 6** Ventilation tube
- 7** HMEF / bacterial filter
- 8** Exhalation valve
- 9** Leak

### SET THE CONTROLS ON THE DEVICE

#### 3 Navigation system for setting controls (Image C) Please see default settings labelled on the device.

In VCV the following parameters can be controlled:

- Breath rate setting (BPM)
- Tidal volume
- EPAP setting (PEEP)
- Oxygen flow (via flowmeters) (FiO2)
- Select parameter using **11**
- Adjust and confirm using **13**

The following parameters can be monitored:

On screen **14** :  
Respiratory Rate; Vti/Vte; Circuit leak; MVi/Mve; Peak pressure; Peak flow



- 10** Mode
- 11** Treatment settings
- 12** Menu
- 13** Navigation buttons (+ / - / Set)
- 14** Monitoring screen

## OPERATE THE DEVICE

### 4 How do I select the mode? (Image C)

- Press and hold Plus and Minus **13** together for 3 seconds to unlock
- Press Mode **10**, use **13** to select and confirm **volume controlled ventilation**
- Other modes are available: VCV; PSV; SIMV CPAP
- The On/Off button and the Start/Stop button are the same:
  - Press once to switch ON
  - Press and Hold for 5 seconds to START
  - Press and Hold for 5 seconds, and press 'Set' to confirm to STOP

### 5 How do I change settings? (Image C)

- Press and hold Plus and Minus to unlock **13**
- Select clinical parameters **11** and use **13** to adjust and confirm changes
- **In VCV mode:** set tidal volume, EPAP (PEEP) and BPM **11**
- Set oxygen flow via flowmeter  
This must not exceed 15 L/min
- Use pulse oximeter to monitor patient oxygen requirements
- **In CPAP mode:** flow will be automatically be adjusted to maintain set CPAP level



- 10** Mode
- 11** Treatment settings
- 12** Menu
- 13** Navigation buttons (+ / - / Set)
- 14** Monitoring screen

### 6 How do I check the device?

- Press and hold Start/Stop until progress bar is filled
- Check alarm LEDs flash and are audible
- Disconnect power; check device switches to internal battery and “lost mains power alarm” activates
- Reconnect power; check device switches to mains and information message is shown
- In the Main Menu, select “Pre Use Test” > “Start Pre Use Test”
- Connect patient circuit and wait for device to check resistance
- Block end of patient circuit and wait for device to check compliance and leakage
- After mode and settings are selected, attach test lung to end of patient circuit and observe function prior to connecting patient

### 7 What do the alarms mean?

Default activated alarms:

- High flow: Check for leaks in patient circuit, coughing or airway resistance
- Low flow: Check for obstructions in patient circuit
- High pressure: Check for coughing or airway resistance
- Low pressure: Check for leakage or disconnection of patient circuit
- High Vti: Check pressure and leakage
- Low Vti: Check changes in in airway resistance and compliance
- High Vte: Check patient circuit is correct
- Low Vte: Check leakage and changes in in airway resistance and compliance
- Disconnection alarm
- Rebreathing alarm: Check if CO2 leak port is blocked

**RESTRICTED DEVICE ONLY** for use in COVID-19 pandemic  
**ONLY to be used for emergency ventilation.**

- ALL adverse incidents must be reported to MHRA on 0800 731 6789
- Manual back up ventilation must be available

Follow instructions for use



Latest training information can be found on:

<https://portal.e-lfh.org.uk/Component/Details/606835>

24-hour helpline number: **01455 849199**