



Azeer Intensive Care Ventilators Elisa Family

elisa 600 / elisa 800

Quick Guide

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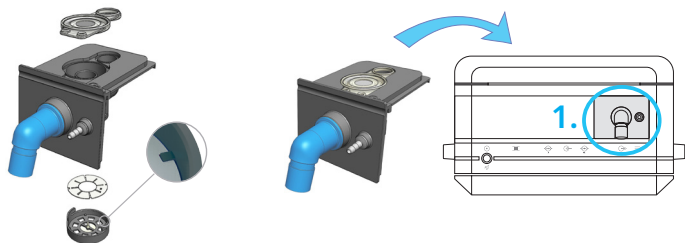
CE 0123

Before putting the device
elisa 600 / 800 into service,
please read the full manual
consisting of
Basic Instructions for Use
and Supplement A.

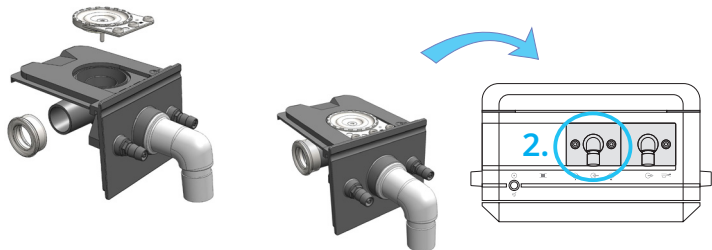


1.) Ventilator set-up

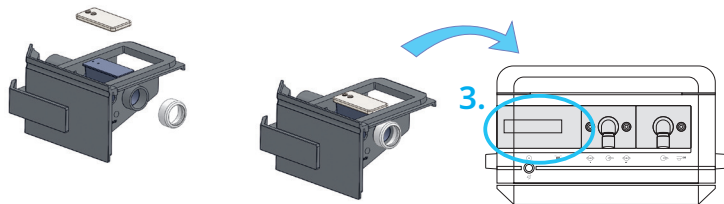
1. Check inspiratory valve for correct assembly and install.



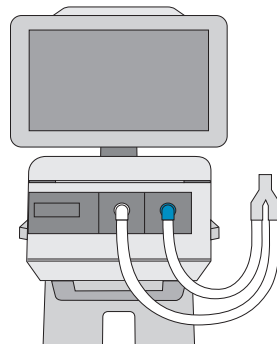
2. Check expiratory valve for correct assembly and install.



3. Check expiratory flow sensor for correct assembly and install.

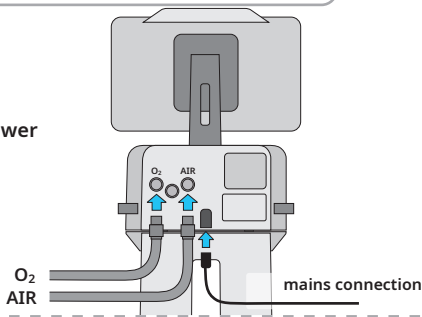


4. Connect **breathing circuit**.

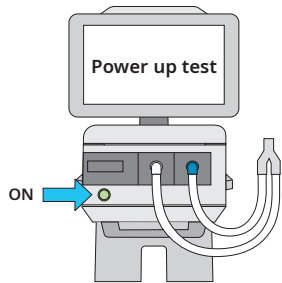


2.) Preparing the system for use

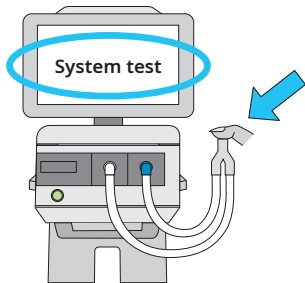
1. Check that O_2 , Air and power are properly connected.



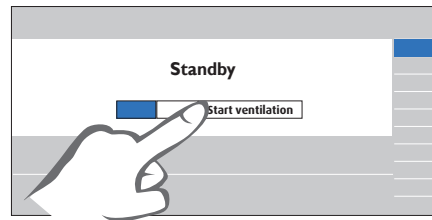
2. Switch the device on, the power-up test will be performed.



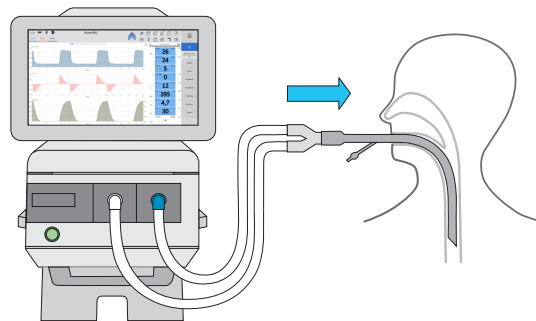
3. Perform system test with Y-piece closed.



4. Press "Start ventilation" and confirm. Ventilation will be started.

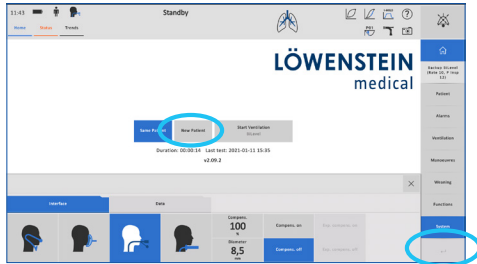


5. Connect the patient. Patient will be ventilated.

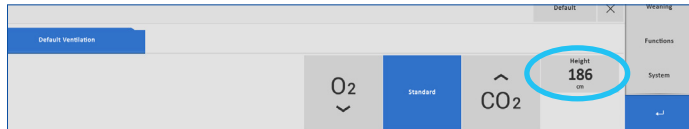


3.) Initial parameter settings based on Default ventilation

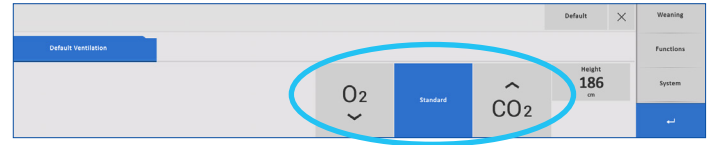
1. Select and confirm “New patient” to use the Default ventilation function.



2. Enter and confirm the patient's height.

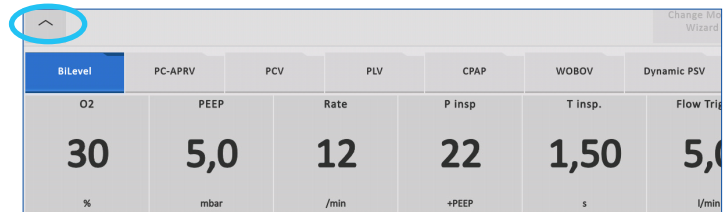


3. Main cause of ventilation therapy:
 - select severe **hypoxia** ($O_2 \downarrow$),
 - severe **hypercapnia** ($CO_2 \uparrow$) or
 - extrapulmonary cause (**default**).



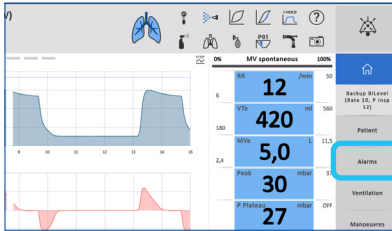
4. Default ventilation activates the ventilation mode that was assigned to the **first tab** in the configuration level.

The default factory settings will be the parameter settings used. Further parameters can be accessed via the arrow button.

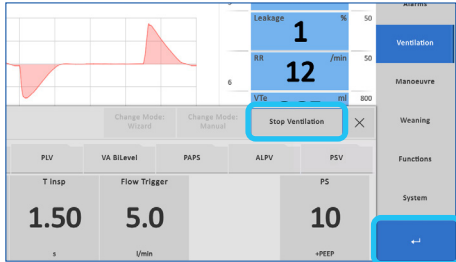


4.) Switching between nasal applications (NC), invasive and non-invasive ventilation

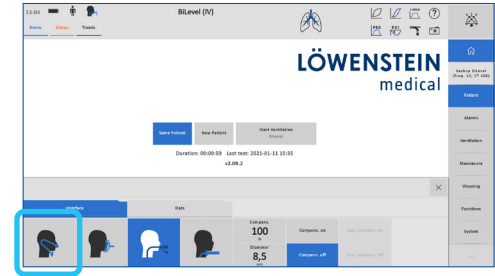
1. Switching between invasive and non-invasive ventilation or the nasal applications (such as HFOT) is only possible in the standby mode. If applicable, stop the current ventilation by tapping the “Ventilation” button ...



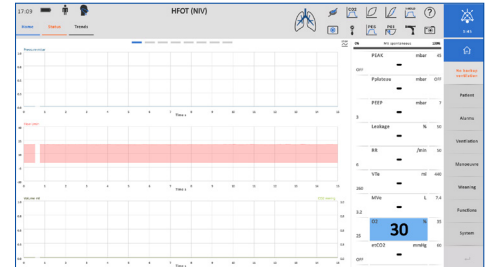
2. ... and confirm “Stop ventilation”. Then acknowledge the confirmation prompt.



3. Tap the “Nasal CPAP” icon, confirm with “Enter”.

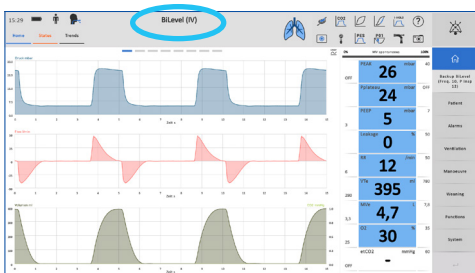


4. Now you can perform Nasal CPAP (e.g., HFOT).



5.) Switching ventilation modes and parameters

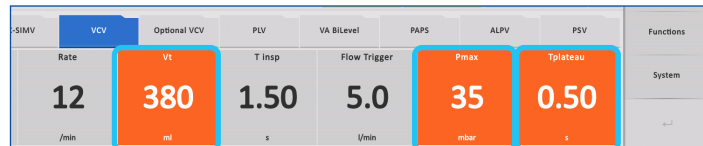
1. If you start ventilation with “**New patient**”, the device will automatically switch to the ventilation mode that was assigned to the first tab in the configuration level.



2. Tap the “Ventilation” field to display the modes pre-set in the configuration level. Tap the **new mode**.



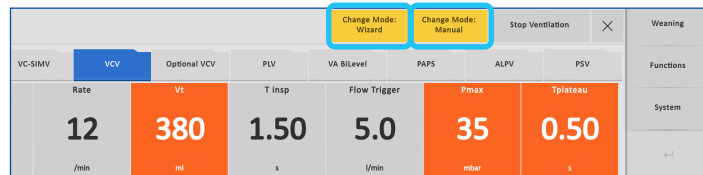
3. If the new mode includes **additional setting parameters**, these will be highlighted.



4. Activate the new mode by selecting the “**Change mode: manual**” and “**Enter**” buttons.

Check the default settings and adjust them to the clinical situation.

When switching from pressure-controlled to volume-controlled modes, you can also use the **Wizard**, which recommends a pressure or volume setting on the basis of the measured values.



6.) PEEPfinder

1. Observe requirements for device

- Successfully performed system test to measure the breathing circuit
- Uninterrupted ventilation in the last 60 seconds
- Exclusively mandatory ventilation without phases of spontaneous respiration
- No PEEPfinder manoeuvre performed in the last 60 seconds
- No non-invasive ventilation
- No significant leakage of the overall system

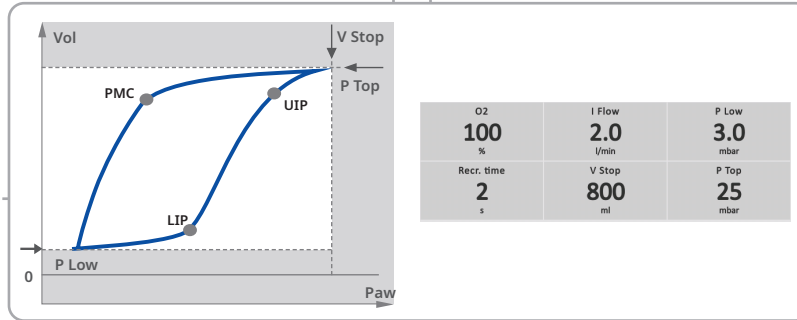
2. Observe requirements for patient

- Mandatory ventilation
- Adequate haemodynamic conditions
- Sufficient sedation depth
- No contraindications

3. Open the PEEPfinder menu via the "Manoeuvre" button

4. Set safe window for manoeuvre:

- Start range: P Low
- Maximum measuring range: P Top
- Maximum volume (safety criterion): V Stop
- Flow: I Flow
- If a pre-oxygenation phase is necessary: O₂ concentration
- If recruitment is desired: Recr. time



5. Start PEEPfinder

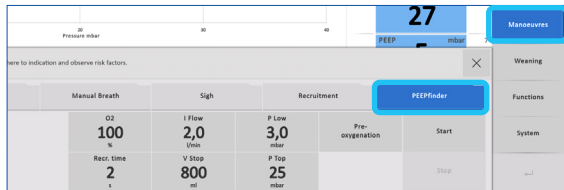
Start measuring manoeuvre directly ("Start") or with pre-oxygenation

6. Interpretation and clinical assessment of measured values and curves, e.g.,

- **LIP** = necessary PEEP + 2 to 4 cmH₂O
- **UIP** = maximum plateau pressure or maximum inspiration pressure
- **PMC** = necessary PEEP
- **C20/C** below 0.8 indicative of an overdistended lung

7.) Recruitment with PEEPfinder

1. Open the **PEEPfinder** menu via the “Manoeuvre” button



2. Set a recruitment time of max. 45 seconds.

O2 100 %	I Flow 2.0 l/min	P Low 3.0 mbar
Recr. time 2 s	V Stop 800 ml	P Top 25 mbar



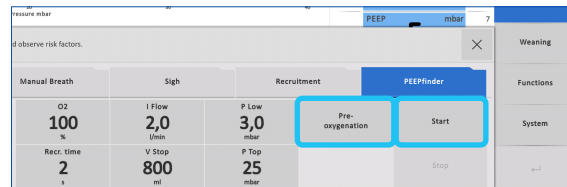
Note:

Recruitment can cause significant side effects such as pneumothorax, blood pressure instability, hypoxia and others and therefore requires a medical benefit-risk analysis.

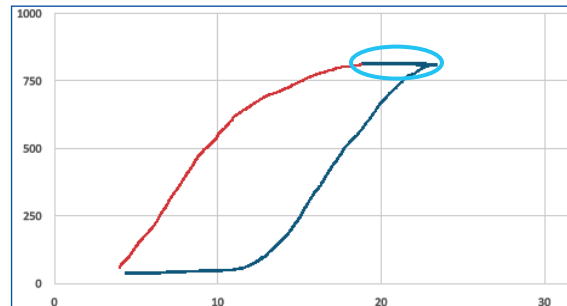
Depending on the setting in the configuration level, the measurement comprises only the inspiration phase, only the expiration phase, or both phases.

3. Start PEEPfinder

Directly with “Start” or with pre-oxygenation.

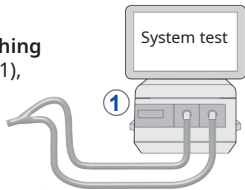


4. Recruitment will start after the end of inspiration. In the graphic display, the recruitment phase will be shown in the same colour as the inspiration phase.



8.) Setup with Sedaconda system

1. Connect breathing circuit to device (1), perform system test.



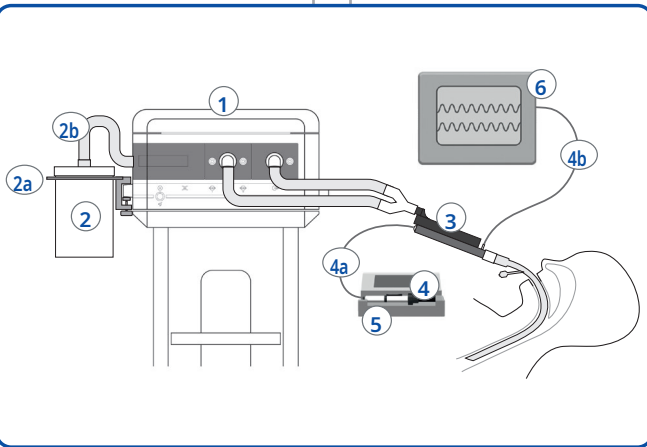
2. Attach holder (2a) for FlurAbsorb anaesthetic gas filter (2) to the intensive care ventilator and use **tube** and **adapter** from the accessory kit (2b) for connection to the ventilator.

3. Use fill adapter to fill the Sedaconda syringe (4).

4. Insert Sedaconda syringe (4) into syringe pump (5).

5. Connect Sedaconda syringe (4) to Sedaconda (3) via anaesthetic gas line (4a).

6. Connect Sedaconda (3) to anaesthetic gas monitor (6) via gas sampling line (4b).



Ensure proper **position** of the Sedaconda device:

- black side up
- patient side lower than device side



Check all connections for **leaks**!

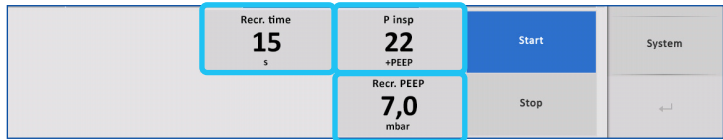
7. Via the “**Functions**” button, select the “**Sedaconda**” tab, then select “Sedaconda” or “Sedaconda S” and activate with “On” and “Enter”.

9.) Recruitment via recruitment manoeuvre

1. Open the recruitment menu via the “Manoeuvre” button.



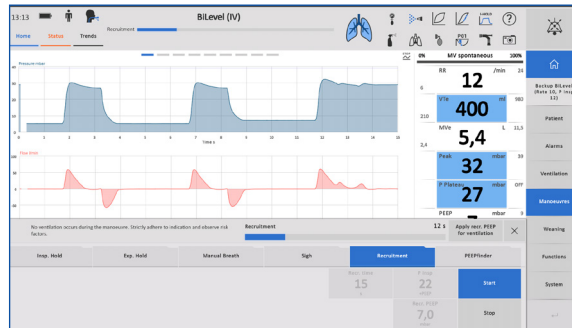
2. Set the recruitment parameters: Recr. time, P insp and Recr. PEEP.



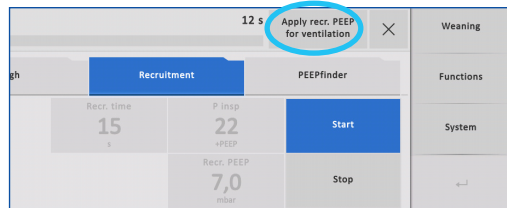
Note:

Recruitment can cause significant side effects such as pneumothorax, blood pressure instability, hypoxia and others and therefore requires a medical benefit-risk analysis.

3. Start the manoeuvre with “Start” and “Enter”. You can interrupt the manoeuvre at any time with “Stop” and “Enter”.



4. You can “Apply the recruitment PEEP for ventilation”.



10.) FAQ – Troubleshooting

ERROR CONDITION	ERROR MESSAGE IN SYSTEM TEST	SYMPTOMS DURING VENTILATION	CAUSE
Inspiratory valve: silicone membrane missing	1014 Fault Internal Expiratory Flow Measurement	Disconnection alarm, maximum flow, no pressure build-up	Safety valve will not close, no expiratory flow detected
Inspiratory valve: metal disc in silicone membrane missing	1031 Deviating expiratory pressure	High leakage or disconnection alarm	Safety valve will not close, no adequate pressure build-up possible
Expiratory valve: silicone membrane missing	1031 Deviating expiratory pressure	No pressure build-up	No pressure build-up at expiratory valve
Expiratory valve: pressure disc and silicone disc missing	1031 Deviating expiratory pressure	No pressure build-up	No pressure build-up at expiratory valve
Expiratory valve: only pressure disc missing	1031 Deviating expiratory pressure	No pressure build-up	No pressure build-up at expiratory valve
Expiratory valve: only silicone disc missing	No error or 1063 Major leakage in breathing circuit	Normal ventilation possible, leakage compensated by bias flow	Expiratory valve is not tight
Expiratory valve or flow sensor: sealing ring missing	1014 Fault Internal Expiratory Flow Measurement	High leakage or disconnection alarm	High leakage, expiratory flow is inadequate
Expiratory valve or flow sensor: incorrect sealing ring position (too far down)	Depending on leakage volume 1014 Fault Internal Expiratory Flow Measurement or no error	High leakage or disconnection alarm	High leakage, expiratory flow is inadequate
Flow sensor: rectangular silicone sealing plate missing	1014 Fault Internal Expiratory Flow Measurement	Increased leakage, normal ventilation possible if leakage can be compensated	High leakage, expiratory flow is inadequate

ERROR CONDITION	ERROR MESSAGE IN SYSTEM TEST	SYMPTOMS DURING VENTILATION	CAUSE
Flow sensor: rectangular silicone sealing plate of heating system turned 180°	1014 Fault Internal Expiratory Flow Measurement	Expiratory flow sensor error, no volume and rate measurement possible, behaviour as if expiratory sensor were missing	Expiratory flow measurement impossible
Inspiratory and expiratory modules swapped	1014 Fault Internal Expiratory Flow Measurement	Disconnection alarm, maximum flow, no pressure build-up	Pressure build-up and inspiratory flow impossible

ERROR CONDITION	POSSIBLE CAUSES	CORRECTIVE MEASURE
Required reading, ventilation mode, function, parameter or curve is not displayed.	The desired function or display has not been configured for the user on the configuration level.	Please contact the responsible person in your ward or your service technician.
Measured PEEP value is different from set value.	Valve bar or breathing circuit were exchanged but no system test was carried out	Carry out a system test.
Measured PEEP value is different from set value.	The PEEP membrane is contaminated with medication residue after a drug nebulization procedure (the expiratory filter is missing or unsuitable, or the selected replacement interval is too long considering the nebulization intensity or osmolarity of the applied medication).	Replace expiratory valve, use suitable expiratory filter for drug nebulization or replace valve more frequently.
Ventilation pressure implausibly high	Accessories or combination with accessories increases the flow resistance	Exchange breathing circuit, exchange filter, remove / prevent condensate in breathing circuit.