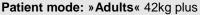
# -

#### **Ventilating Infants and Small Children**

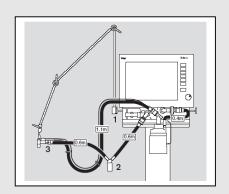
Patient mode »Pediatrics«

Using infant size patient circuit connectors 6-42kg

- 1 Clamp hinged circuit support arm to rail on the left-hand side and tighten screws.
- Connect ventilator circuit segments of appropriate lengths (lengths suggested are in meters).
- 2 Install water trap(s) in vertical position.



- **1** Attach circuit support arm to the rail on the left-hand side of the ventilator and tighten screws.
- Connect ventilator circuit segments of appropriate lengths (lengths suggested are in meters).
- 2 Install water trap(s) in vertical position if using circuit with them
- **3** Connect Y-piece, with the rubber sleeve of the Y-piece on the inspiratory side (reusable silicone circuit).



#### Operating Concept Control Panel

Its main elements are:

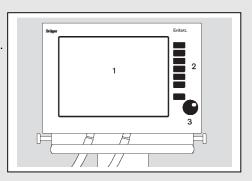
- 1 A large screen with all the information and controls needed for ventilation.
- 2 Fixed function keys ("hard" keys) major on-screen functions,
- » Alarm Silence « for silencing the audible alarm for two minutes.
- \*\* \*\* Alarm Limits « for adjusting alarm limits.
- **Ventilator Settings** « for setting ventilation mode and parameters. Unassigned key for future functions.
- Sensor Parameter« for calibrating sensors.activating/deactivating monitoring
- » System Setup« for configuringbsystem functions.
- Start/Standby « for selecting standby mode or normal operation.
- **3** Central rotary dial knob for selecting, confirming settings on-screen.

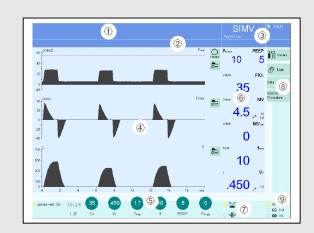
#### The Screen...

- 1 Alarm messages
- 2 Operator prompts
- Therapy status with ventilation mode,e.g. SIMV,
- Patient mode, e.g. " Adult" for adults.
- 4 Waveforms, loops, and trends visualizing ventilation,
- 5 Presentation of set ventilation parameters
- 6 Essential, measured values of ventilation
- **7** Humidification type and status.
- 8 Touch-sensitive screen keys for the specific screen pages
- **9** Power supply indicator.

### To select a screen page:

- Touch the respective screen key:
- Main« to select the main screen.
- Values « to select a different group of measured values in the field for numerical values.
- »Data...« to display all measured values, the logbook or trends on an additional screen
- »Special Procedure... nebulization, O2 for suction







To set the ventilation mode, ventilation parameters:

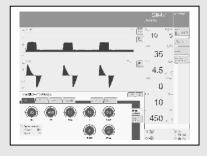
# 1 Press Ventilator Settings« or

• touch one of the virtual screen knobs at the bottom of the screen.



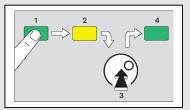
#### »Ventilator Settings« in the bottom part of the screen

- Screen knobs and screen keys are displayed in the form of horizontal and vertical tabs as on a file catalog card.
- Horizontal screen keys for the ventilation mode.
- Vertical screen keys for selecting supplemental settings.



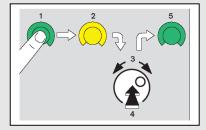
#### Screen keys:

- 1 Touch a screen key to select it.
- 2 The screen key turns yellow.
- 3 Press dial knob to confirm.
- 4 The screen key turns pale/dark green, respectively.



#### Screen knobs:

- 1 Touch a screen knob to select it.
- 2 The screen knob turns yellow.
- 3 Turn dial knob to set.
- 4 Press dial knob to confirm.
- 5 The screen knob turns pale/dark green, respectively.



#### To set ventilation parameters directly:

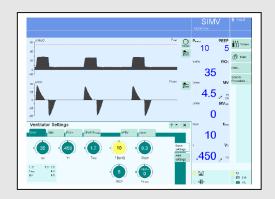
From the main screen

& Touch the desired screen knob

- displays the **»Ventilator Settings** « menu.
- The selected screen knob is already yellow and be adjusted
- Turn dial knob to adjust setting, press dial knob to confirm.
- The color of the screen knob changes dark green -
- the setting is now in effect.
- To call up additional information texts:

To quit the menu:

Press »X« screen key.



## QUICK GUIDE TO DEVICE CHECK/LEAK TEST EVITA XL

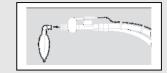


# **Checks of Readiness for Operation**

- To be performed **before using on a patient**, to confirm ventilator is working properly, ready for operation.
- If the patient circuit is modified, the patient circuit leak test must be repeated.

#### 1 Preparing the adult test lung 84 03 201

The test lung assembly consists elbow connector, a 7 mm diameter ET-tube connector for simulating airway resistance, 2 liter breathing bag to simulate compliance.



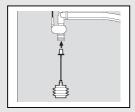
**NOTE:** Do not use permanently stretched breathing bags, these might cause artifacts

Insert the elbow connector into the Y-piece only when EvitaXL advises you to do so.

#### 2 Preparing the infant test lung 84 09 742

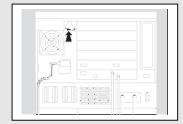
for use with the infant patient circuit:

The test lung consists of a tracheal tube CH 12 to simulate airway resistance and a small bellow to simulate compliance.



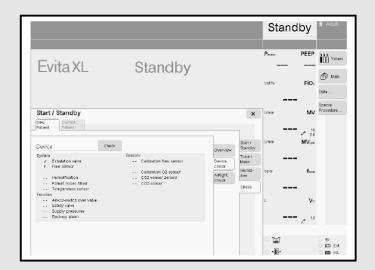
#### 3 To switch ventilator ON, flip protective cover\* up and press

- The self-test screen is now displayed on EvitaXL.
- The self-test is performed automatically.
- Wait for this test phase to be ompleted.



- Touch »Standby« and press dial knob to confirm.
- Standby activated !!! appears in the line for alarm messages.
- To reset this message: Touch »Alarm Reset « screen
- Touch dial knob and confirm
- Touch »Device Check« screen key:

**NOTE:** No device check is possible while the ventilator is performing a calibration of the flow or O2 sensor. In this case, wait until calibration has been completed and restart device check.





The following **tests** are performed during the device check:

- System
  - Expiratory valve fit and throughput
  - Fit of flow sensor
  - Fit of neonatal flow sensor (for "NeoFlow" option)
  - Type of humifier
  - Completeness of patient hoses
  - Fit of temperature sensor
- Function
  - Test of Air-O2-switch over valve
  - Test of safety relief valve
  - Check of gas supply pressure
  - Test of Back-up alarm
- Sensors
  - Flow sensor calibration
  - Calibration of neonatal flow sensor (for "NeoFlow" option)
  - O2 sensor calibration
  - CO2 sensor zeroed
  - CO2 sensor calibration
  - Patient circuit leak test
- Questions are displayed and must be answered by touching screen keys »Yes « and »No «.
- Instructions for performing tests may also be displayed.
- The ventilator indicates a correct result with a checkmark (✓).
  - Faulty results are marked **F**.Two dashes (– –) appear if a test is not performed.
- In the event of deficient results (F): Eliminate the cause, touch the »Repeat « screen key.

#### **Leak Test**

Perform this test:

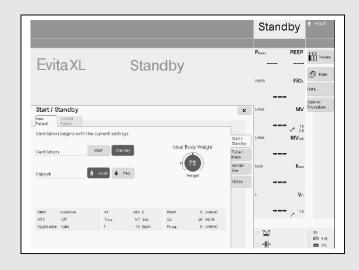
- after the tests of readiness for operation,
- after changing the patient circuit,
- after changing the humidifier.

In the checklist:

Touch »Airtight Check« screen key.

The result of the last leak test is following values:

- Leakage
- Compliance
- Insp. resistance
- Exp. resistance



#### 

- The actual leakage flow is displayed throughout the test.
- A leakage flow of 300 mL/min at pressure of 60 cmH2O is acceptable.
- After the leak test, the ventilator determines the compliance and the invariant are and a minute many factors of the pretinate results.

inspiratory and expiratory resistance of the patient circuit.

To return to the start screen:

☼ Touch »Start/Standby « screen key in

the »Start/Standby« menu.