

Set up for VIVO 50 for Invasive Ventilation using an Expiratory Valve Circuit

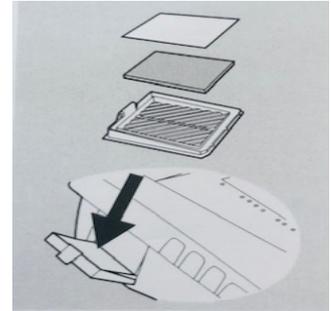
(+/- FiO₂ and EtCo₂ monitoring)

Standard Operating Procedure/Check List

1. Clean the VIVO 50 with a Clinell wipe

2. Ensure Air Inlet Filters are replaced between patient

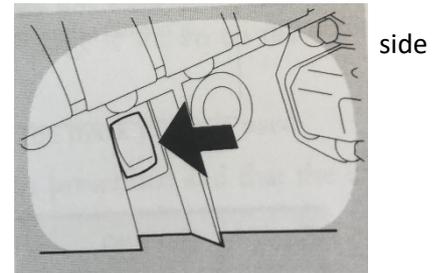
- a) Open the filter cassette on the right side of the VIVO 50
- b) Remove both the grey filter and the white filter
- c) Place a new grey filter on the filter cassette and the new white filter on top of the grey.
- d) Close the filter cassette



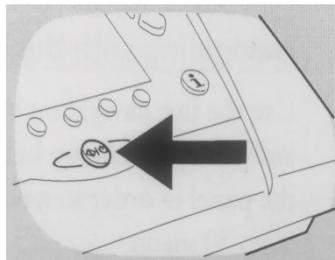
3. Inspection before use

- a) Connect the VIVO 50 to the mains supply and secure the lead by the restraining clip.

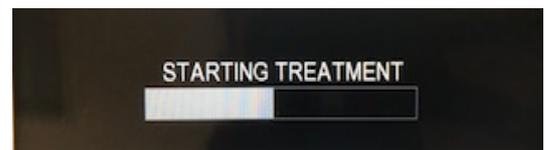
- b) Switch on the VIVO 50 main power using the on/off switch on the left panel



- c) Press the start/stop button



on the front panel until the progress bar is filled.



- d) Check that a short double sound signal is heard. If there is no double sound do not use the ventilator
- e) Disconnect the power cord for more than 5 seconds. Check that the device switches to the internal battery (or click on battery if connected) and that the information message is shown on the screen together with the audible warning.
- f) Press OK
- g) Reconnect the power cord. Check that the device switches to the mains supply and that information message is shown on the screen together with an audible warning.

4. Connect the oxygen

- a) Connect the green oxygen tubing to the oxygen connector.

- b) Connect the other end of the tubing to the oxygen nipple on the oxygen port.

Oxygen must be turned off when the VIVO 50 is not in operating mode

Oxygen flow must not exceed 15L/min



5. Patient Circuit

Equipment required: Bacterial Filter, (FiO2 sensor, t-piece and cable- if available), expiratory valve circuit, (etCO2 sensor probe, adapter and cable – if available), HME, t-piece for nebuliser, closed suction unit.

Set up of circuit with expiratory valve at patient end

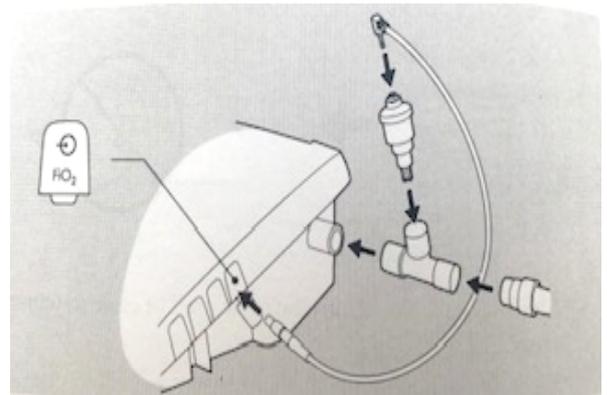


- a) Attach a bacterial/viral filter to patient air outlet

- b) If available: Connect the FiO2 sensor

- a. Connect the FiO2 sensor cable to the FiO2 connection port on the VIVO 50, inserting the cable with the marking pointing upwards.
- b. Connect the FiO2 t-piece to the bacterial/viral filter, with the t facing upwards.
- c. Fit the FiO2 sensor into the t-piece.
- d. Connect the FiO2 cable to the FiO2 sensor.

An FiO2 symbol should appear on the screen



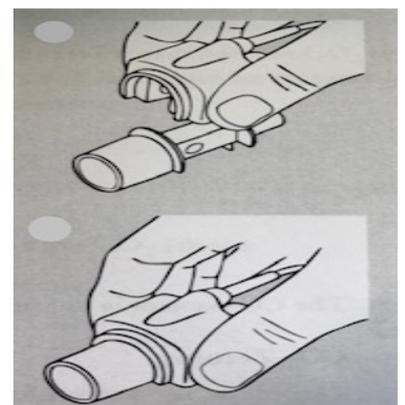
- c) Connect the expiratory valve circuit to end of the bacterial filter (or FiO2 t-piece – if available). The expiratory valve should be at the patient end of the circuit. Insert the exhalation valve feedback tube to the active exhalation valve control pressure outlet on the VIVO 50.

- d) If available : Connect the CO2 sensor

- a. Connect the CO2 sensor cable to the CO2 connection port on the VIVO 50, inserting the cable with the marking pointing upwards. A green LED on the CO2 sensor indicated when it is ready to use

A CO2 symbol should appear on the screen

- b. Snap the CO2 sensor probe on top the airway adaptor. It will click into place when properly sealed.
- c. Connect the airway adapter to the patient circuit
- d. Make sure the CO2 sensor is positioned with the LED pointing



upwards

- e) Connect an HME to the circuit (this will also act as a viral filter)
- f) Connect a self-sealing nebuliser t-piece
- g) Connect a closed suction unit.

IF FiO₂ and etCO₂ monitors are being used they will need to be calibrated.

6. FiO₂ calibration

- a) Navigate to the other menu
- b) Select FiO₂/CO₂ calibration
- c) Select Start FiO₂ calibration
- d) Press confirm once calibration is complete

7. CO₂ calibration/zeroing

- a. Navigate to the others menu
- b. Select FiO₂/CO₂ calibration
- c. Select Start CO₂ zeroing
- d. When the CO₂ valve is stable, select confirm.

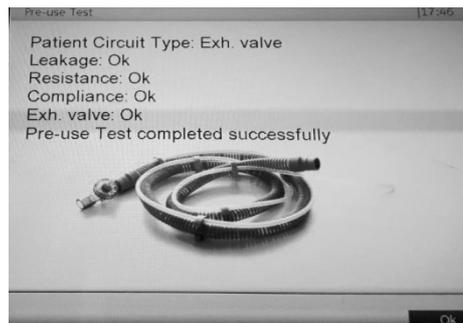
8. Pre-use test

The pre-use test is used for detecting the type of the patient circuit this connected to the VIVO 50. Resistance and compliance of the patient circuit are measured and calculated. This is important to ensure disconnection alarm works appropriately and that the trigger function is accurate.

- a) Connect the pre-use test ET Tube 7.0 to the patient circuit.
- b) Turn on the VIVO 50. A reminder message should appear for pre-use test. Press 'Yes'
(If a reminder message does not appear, a pre-use test can be performed directly from the 'Other' menu)

- c) Wait while the VIVO 50 is checking for the patient circuit type.
- d) Confirm if the circuit type is correct (exhalation)
- e) Make sure nothing is blocking the patient end of the circuit.
- f) Wait while the VIVO 50 is checking the patient circuit resistance
- g) Block the exhalation valve and the end of the ET Tube with an airtight object
- h) Wait while the VIVO 50 is checking for the patient circuit compliance and leakage
- i) Confirm the patient circuit type is correct i.e. exhalation valve circuit.

An exhalation valve circuit symbol will appear on the screen.



The VIVO 50 for ventilation using an Expiratory Valve Circuit with FiO₂ and EtCo₂ monitoring is now ready to use.