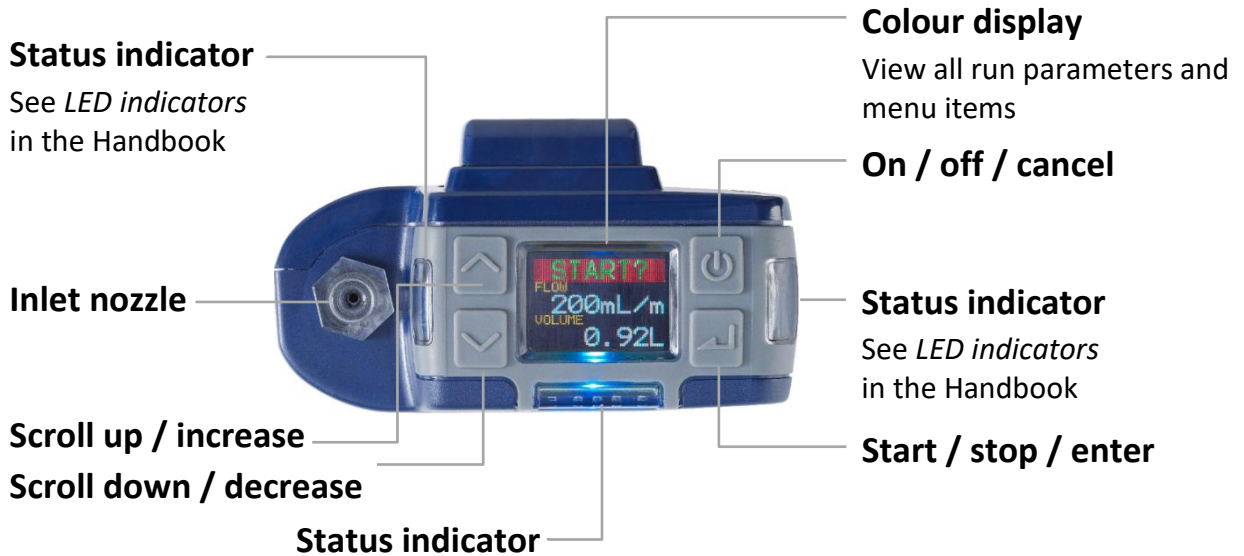


Safety

For important safety information relating to Intrinsic Safety, please refer to the VAPex User Manual (HB4089).

Controls



Turn the Pump on/off

To turn on the pump:

On the top of the pump, press .

The sequence on the right is displayed showing first the model variant and then the firmware version. However, the firmware version screen only comes up on VAPex Pro models.



This is followed by the three alternating dashboard screens, showing data from the last run. Notice that the screen header is prompting you to start a sampling run.



To turn off the pump:

On the top of the pump, press and hold until the countdown has finished and the screen goes blank.



Note: You can't turn off the pump during a sampling run or when a programme timer is set.

Setup before Starting a Run

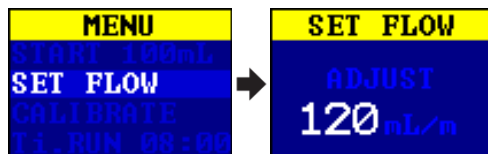
Depending on your sampling requirements you may want to perform one or more of the following setup procedures before starting a sampling run.

To access the menu items described below:

1. Ensure the pump is turned on and then press to display the menu.
2. Press or to highlight the menu item you want to alter, and then press .

Set the flow rate

1. Navigate to **SET FLOW**, and then press .



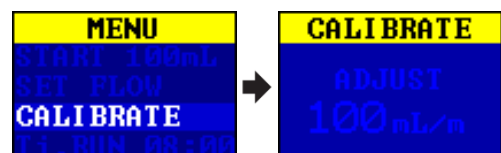
2. Press or to change the flow rate, and then press the enter key.

Calibrate the Pump

Always calibrate the pump at the sampling flow rate for greatest accuracy.

Note: when using a sorbent tube with a small pore size or if operating at a high flow rate, which results in a high back pressure, it may take the pump a little longer to stabilise when adjusting the calibrated value.

1. Attach the sorbent tube or other flow-measuring device to the pump's inlet nozzle.
2. Navigate to **CALIBRATE**.
3. Press to start the test.



4. Press or to change the pump speed until the meter flow rate and the pump flow rate match.
5. Press to stop and save the test.

Note: If you press during calibration it will cancel the process and will not save the calibrated value.

Start/stop a Sampling Run

Ensure your pump is calibrated and set to the correct flow rate.

To start a sampling run:

1. Turn on the pump.
2. Press and the screen on the right is displayed.
3. Press or to select **NEW RUN** or **RESUME**.

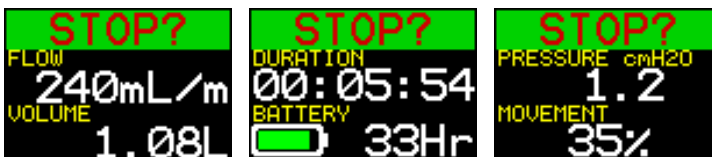


Note: When you select **NEW RUN** the accumulated run time, motion index and volume data are reset to zero. and the run is stored as a new measurement in the memory.

4. Press for 3 seconds.



The following screens should be visible.



To stop or pause a sampling run:

- Press for 3 seconds.



Lock and unlock the Pump



The pump has two locking modes as described below.

Partial Lock

Partial Lock mode is denoted by a half open padlock icon and can be set in **Run** or **Stop** modes. While partially locked, the wearer may stop and start the sampling pump but has no access to the menu or other functions.



To partially lock and unlock the pump:

- Press and hold , and then press  3 times in quick succession. The partial lock icon will be displayed.

Note: If you try to remove a partial lock when the pump is running you will need to apply the above procedure twice, which applies and then removes a full lock.

Full Lock

The full lock can only be set when the pump is running and is denoted by a closed padlock icon. While fully locked, the keypad is fully de-activated. The wearer cannot stop or disturb the pump by any key presses.



To fully lock the pump:

- Press and hold , and then press  6 times in quick succession. The full lock icon will be displayed.

To unlock the pump:

- Press and hold , and then press  3 times in quick succession.

Errors

If the pump cannot maintain the target flow rate within 5% for more than 20 seconds (due to a kinked tube or inlet blockage) then it will automatically stop sampling and show the Blocked Retry message.



After one minute the pump will attempt to re-start. If the pump has not been able to re-start after the specified number of retry attempts, the pump will terminate the current sampling run and display an error message.