VPAP II ST

Getting Started

When switching on machine if a locked symbol is displayed on the front you will be unable to change any parameters. To access the display for changes do the following:
- Turn VPAP II ST off
- Hold down the 3 right hand buttons (MENU↓ , ↑OPTION, OPTION ↓)
- While holding down buttons turn on machine

This will put you in clinical mode and allow you to make changes.

Available Modes

CPAP (Continuous Positive Airway Pressure)
On the VPAP II ST you set IPAP to deliver the set CPAP you require. A continuous flow runs through the circuit in which the patient can take spontaneous breaths.

SPONTANEOUS
This is a complete spontaneous mode with no back up if patient goes apneic. You set an IPAP and an EPAP level. Each time the patient triggers the machine it will deliver the set IPAP level. You must also set an IPAP max (seconds). This adjusts the maximum Inspiratory Time.

TIMED
An IPAP, EPAP, and BPM (breaths per minute) are set. The machine delivers the set BPM at timed interval regardless of patient effort. Inspiratory Time is set with IPAP max (seconds). If the patient wants to spontaneously breath they can draw from the continuous flow in the circuit.

SPONTANEOUS/TIMED
An IPAP, EPAP, and BPM (breaths per minute) are set. The set BPM will be delivered if the patient's own breath rate falls below the set back-up rate. In inspiration the time at the IPAP level is limited by the IPAP max (seconds).

Controls and Displays

On the VPAP II ST the screen is to small to list all the functions. The bottom of the screen will indicate what you are adjusting. If you are adjusting a parameter that is displayed on the screen above an arrow will also be along side the parameter that can be adjusted.

Set Mode- Allows you to adjust mode setting.

CPAP - **CP**
Spontaneous – **S**
Timed – **T**
Spontaneous/Timed – **ST**

Set IPAP- Adjustable between 2 – 25 cmH$_2$0
Set EPAP- Adjustable between 2 – set IPAP level in cmH$_2$0
Set IPAP max – Adjustable between 0.2 – 10.8 seconds
Set Rise Time – MIN (0 seconds – 900 msec) This setting determines how quickly the change over from EPAP to IPAP. Normally kept at MIN
Set BPM – Adjustable between 5 – 30 BPM (breaths per minute)
Set I:E – Will display % of breath cycle allowed to be in inspiration. Therefore determined by set BPM and set IPAP max.
Respiratory Rate – Will display patient's breath rate per minute
Tidal Volume – Displays patient's volume displacement (mLs)
Leak – Displays leak measured (L/min)
Delivered Pressure – Gives a digital display of actual pressure as it changes from EPAP to IPAP.
Set Start Pressure – Initial starting pressure. When patient is initially connected the pressure starts with this value. It is to help make it more comfortable for the patient rather than being blasted with the set pressures immediately. Adjustable between 2 cmH$_2$0 –

EPAP setting. Full pressures reached after selected delay time.

Set IPAP min – Adjustable between 0.1 seconds – IPAP max setting. The Minimum Inspiratory Time. Not available in TIMED mode

Smart Start/Stop – On/Off When enabled, the machine automatically will start when the patient starts breathing in circuit. Automatically switches off when patient is disconnected.

Mask Alarm – On/Off When enabled, an alarm will occur if machine detects an excessive leak. If enabled, the Smart Start function will not be available.

Humidifier – On/Off Humidifier function must be switched 'ON' if using Smart Start. It adjusts the Smart Start sensitivity due to resistance caused by the humidifier.

Overheat Default – Select IPAP or EPAP. If the generator overheats the machine switches to a constant pressure for approximately 15 minutes to allow the generator to cool. When cool the machine automatically returns to previous settings.

Backlight – On/Off When switched 'ON' the screen stays illuminated.

Delay Time – Allows you to add or remove the delay features. When starting VPAP the patient may find the pressure too high to start. They can choose to reach full pressures in 5, 10,or 15 minutes.

Set Time Hours, Set Time Minutes, Compliance Reset – All functions used to access the time patient used VPAP machine and checking patient's compliance with the machine. Not needed in our circumstances.

Calibrate – For testing the pressure calibration of the machine. Done by Ventilator Technicians.

Patient and Machine Hours – Displays running hours of VPAP.

Patient Mode – This allows the machine to lock menu and not allow for changes. If 'YES' is selected menu becomes locked, and to unlock refer to 'Getting Started'.