

Servo-I Ventilator



Servo-I

- Can be used on all sized patients
- Does not require a flow sensor
- Has some additional features that we can use, such as NAVA (coming in fall/winter)

Front of Machine

Main Screen

-Basic settings

Rotor Dial

-turn to adjust

Standby Button

-places ventilator in standby

-Resumes ventilation

Knobs

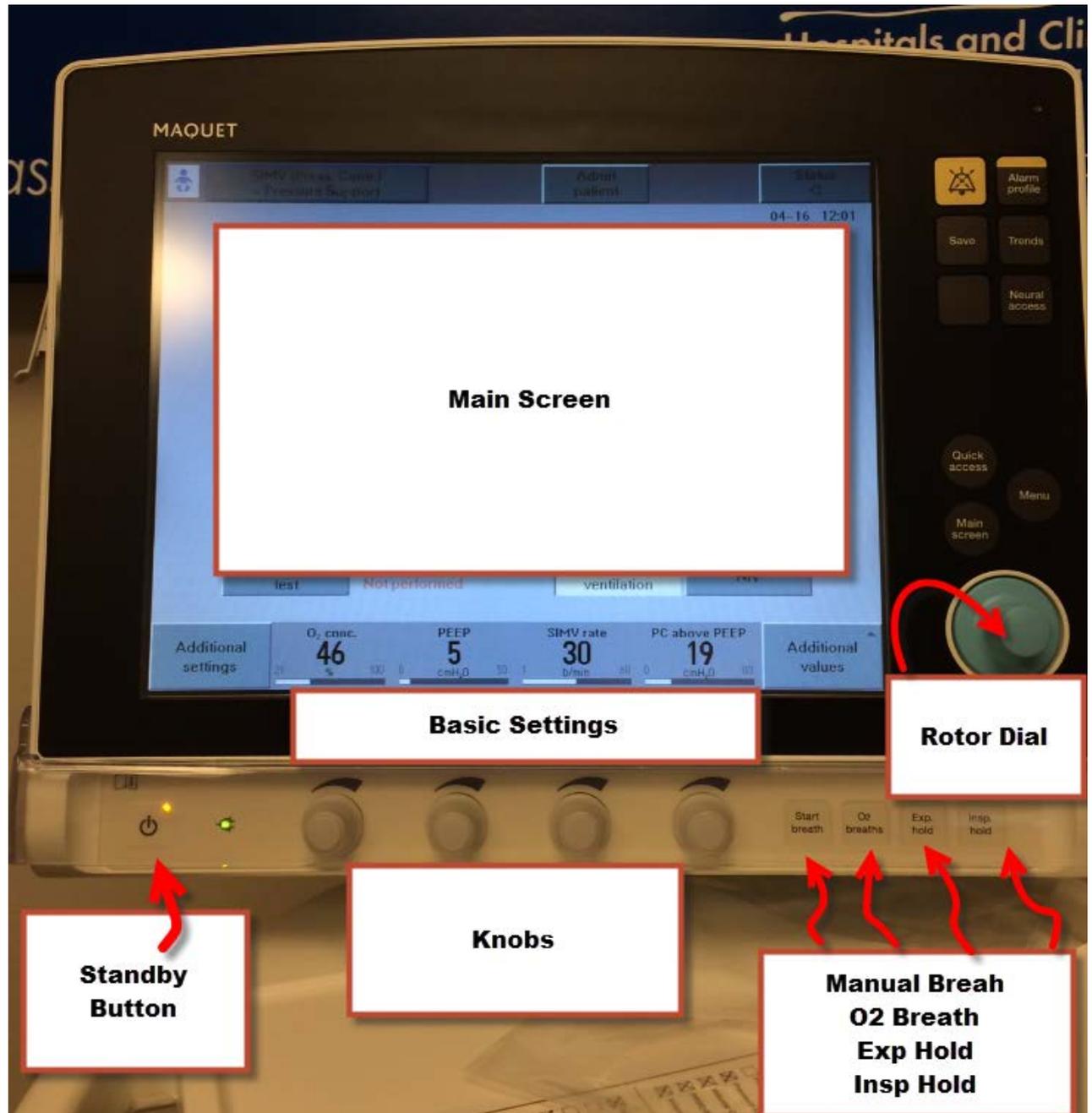
-instantly changes settings

-used to adjust FiO2

Buttons

-Manual breath

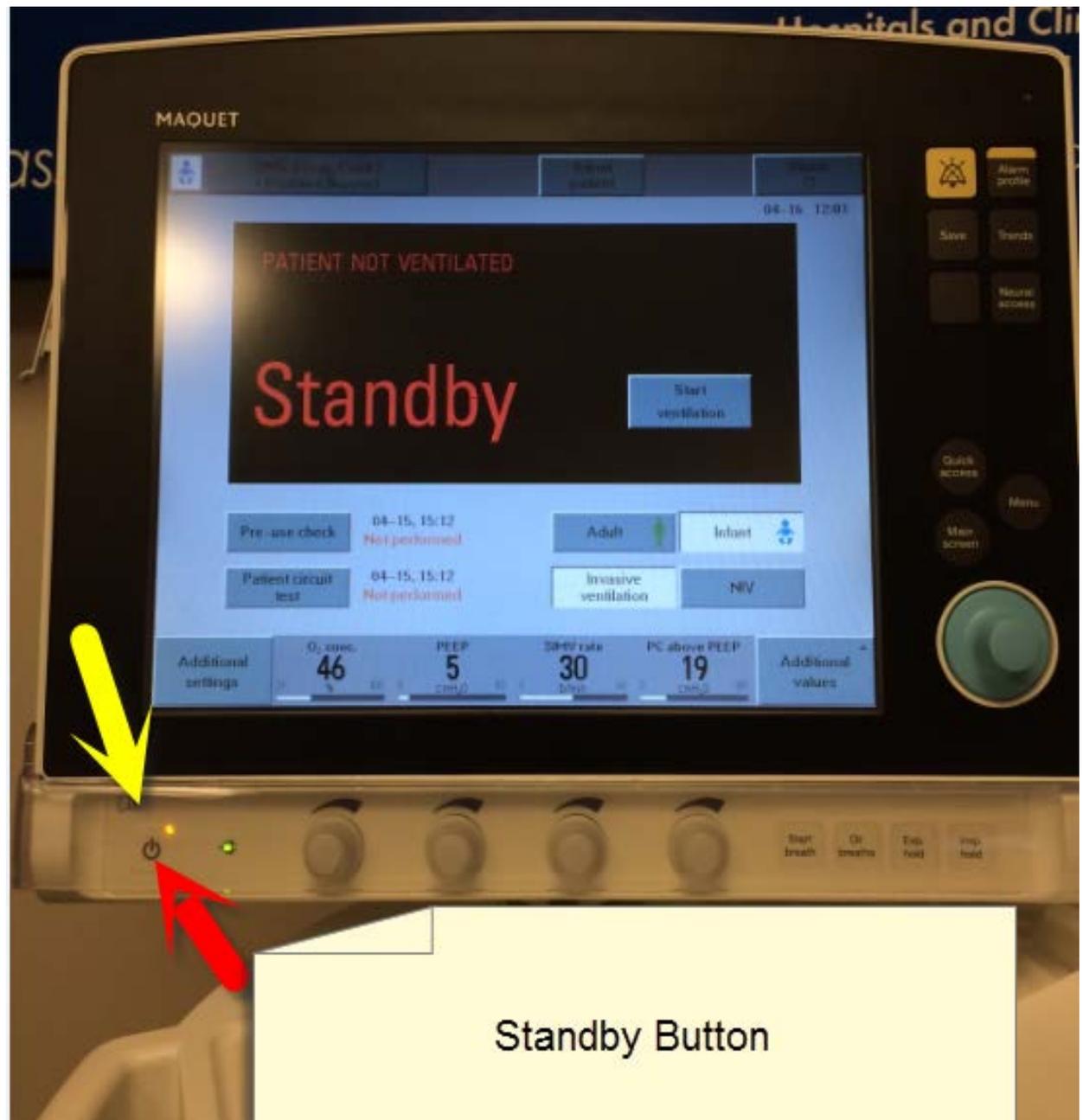
-O2 breath

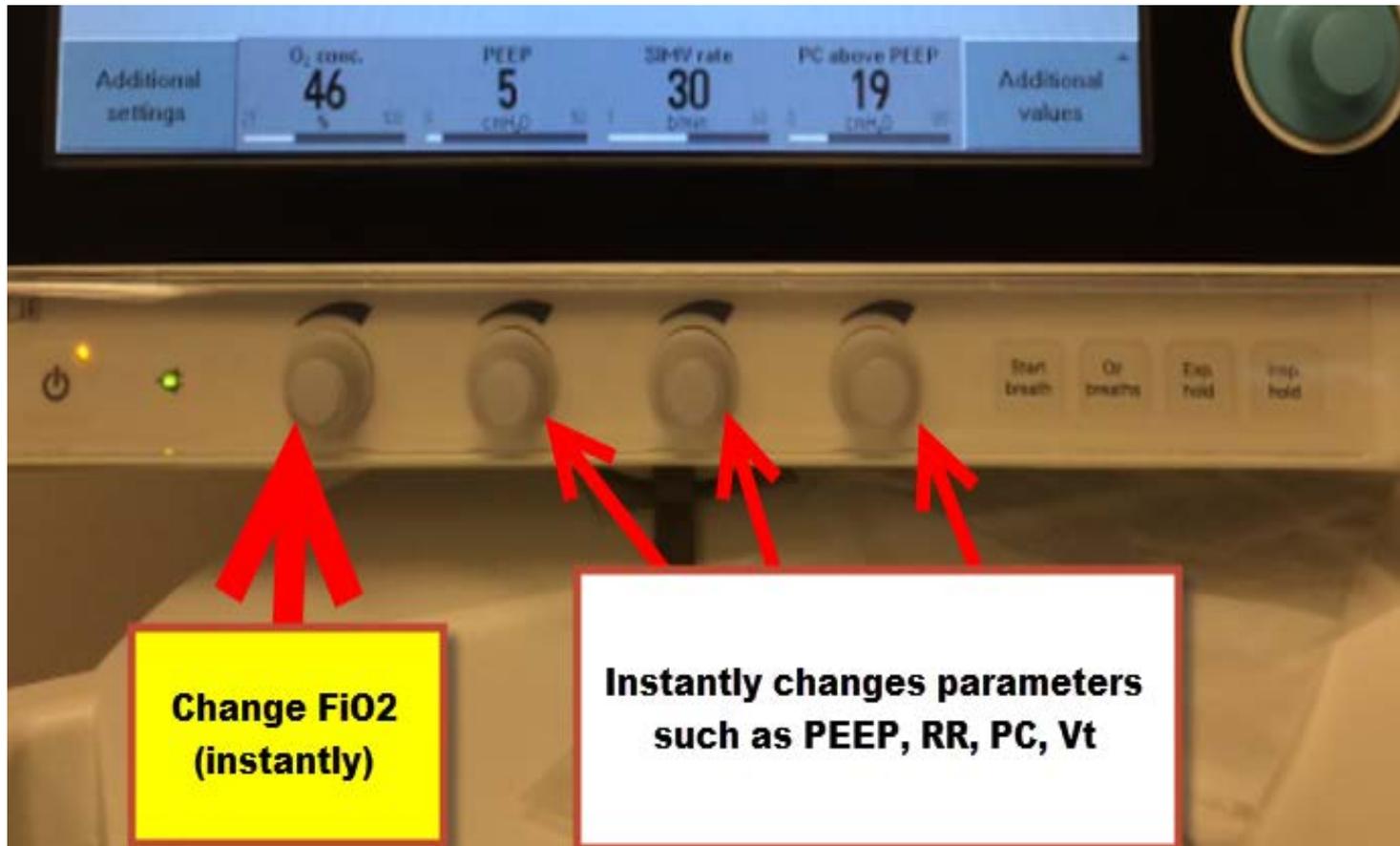


STANDBY Button

Places ventilator in Standby
-Black screen and Red writing

Also, will resume ventilation





4 Knobs, directly relate to the setting directly above it on screen - INSTANTLY changes settings

Farthest left is always FiO₂ *When adjusting +/- 60%, it will automatically stop as a safety pause, continue turning knob to continue going above or below 60% O₂

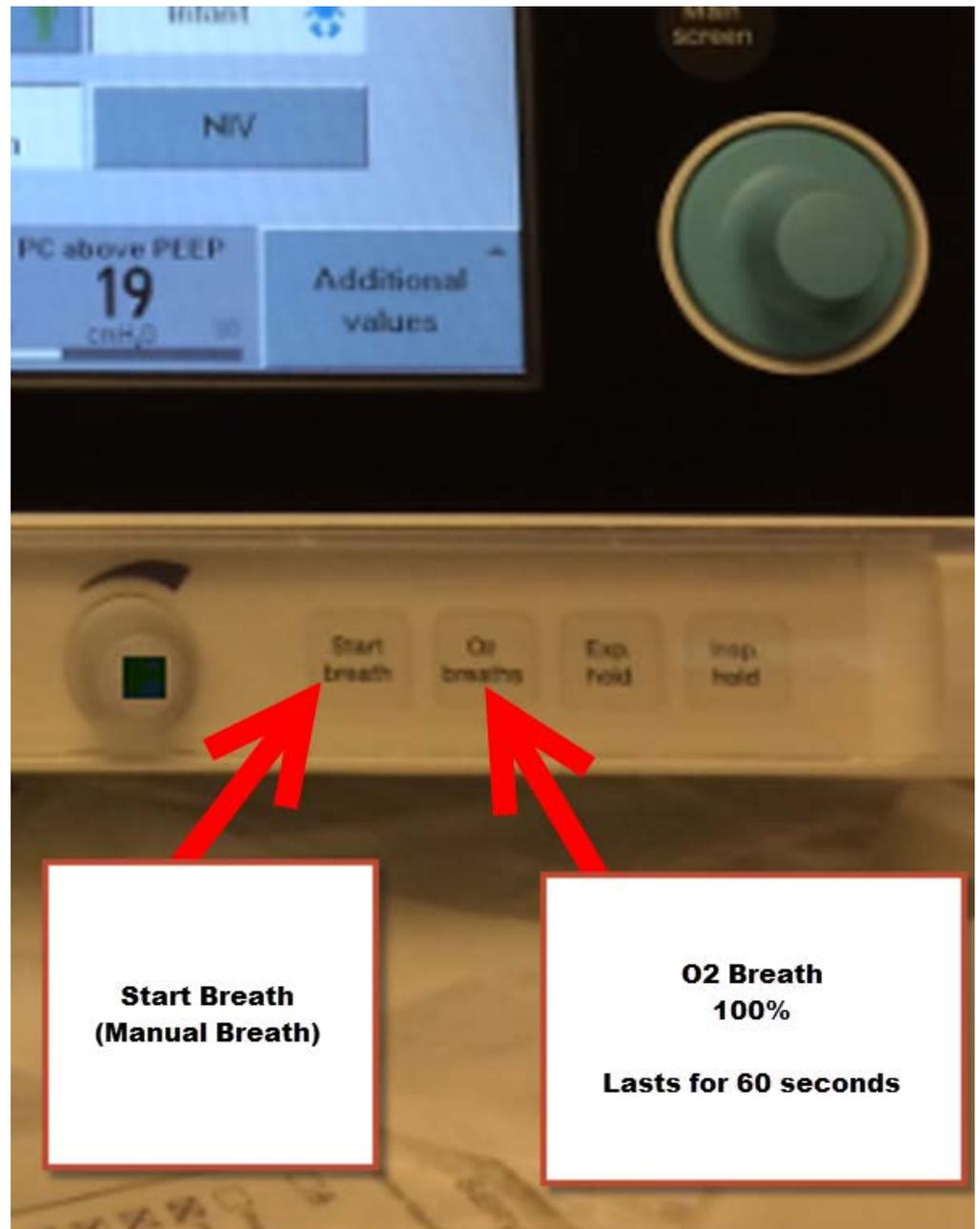
Start Breath

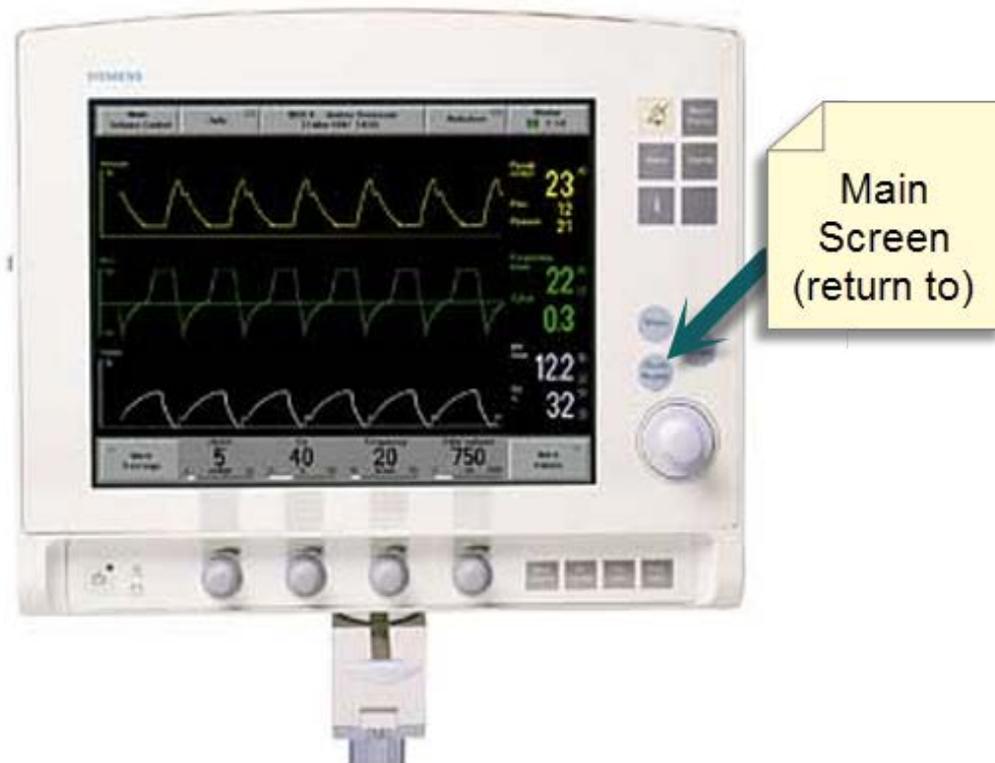
-“Manual Breath” it initiates an additional breath

O2 Breaths

-instantly changes fiO_2 to 100%

-Does not allow you to set a 10-20% increase as the AVEA does via this button



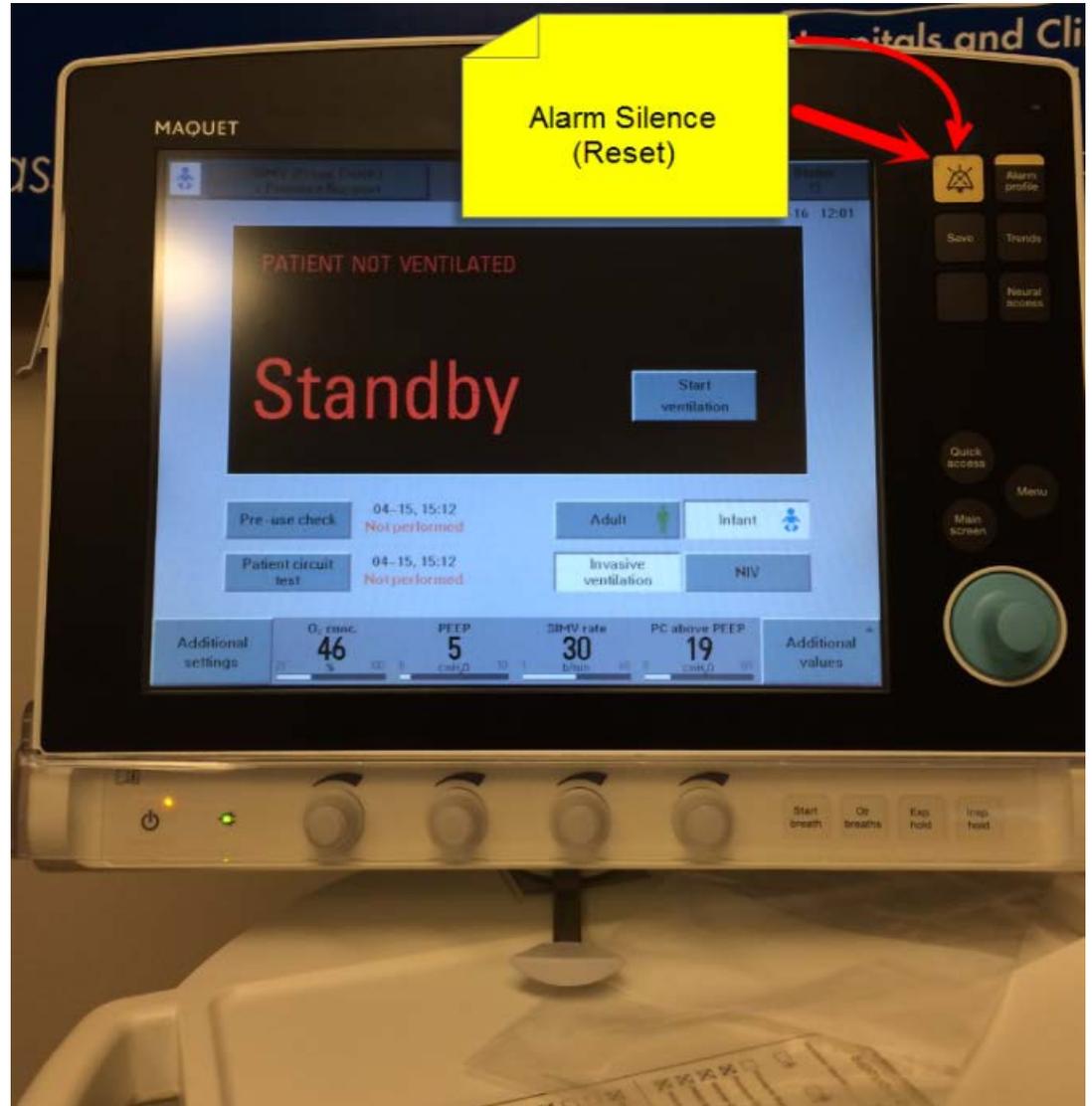


Main Screen Button

Will always bring you back to this "Main Screen" from whatever previous screen that was displayed

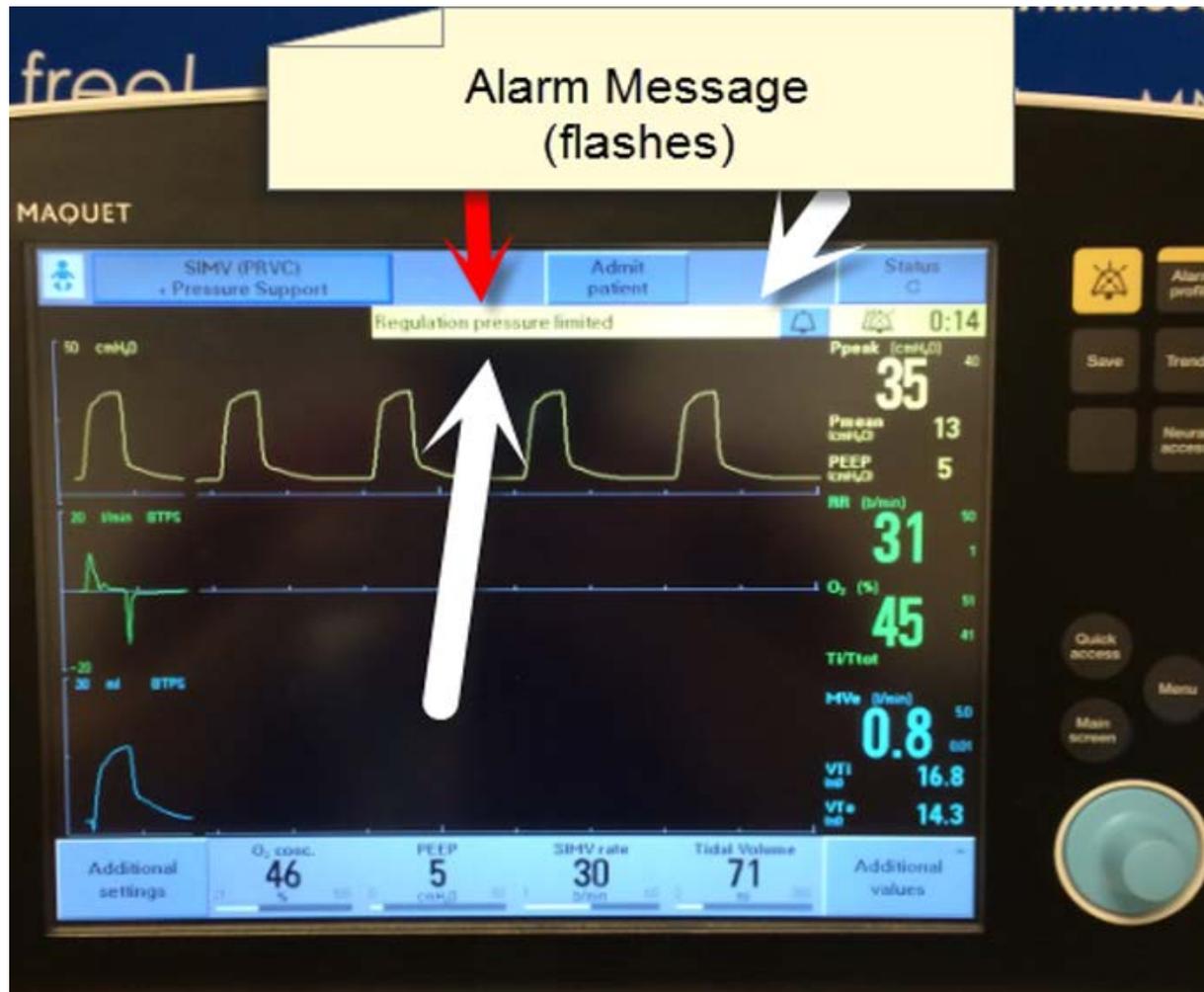
Alarm Silence/Reset

- Will silence any alarms
- Clears screen of old alarms



ALARMS

- Alarm silence is for 2 minutes, can not turn off alarm silence once activated
- While silenced, any “new” alarms will still alarm
- Silence ALL alarms by pressing and holding for 2 seconds the “Alarm Profile Key” which is next to the flashing alarm message
- Alarm silence button is also used to “clear” old alarm messages
- High Priority – RED ALARM
- Low/Medium Priority-YELLOW ALARM



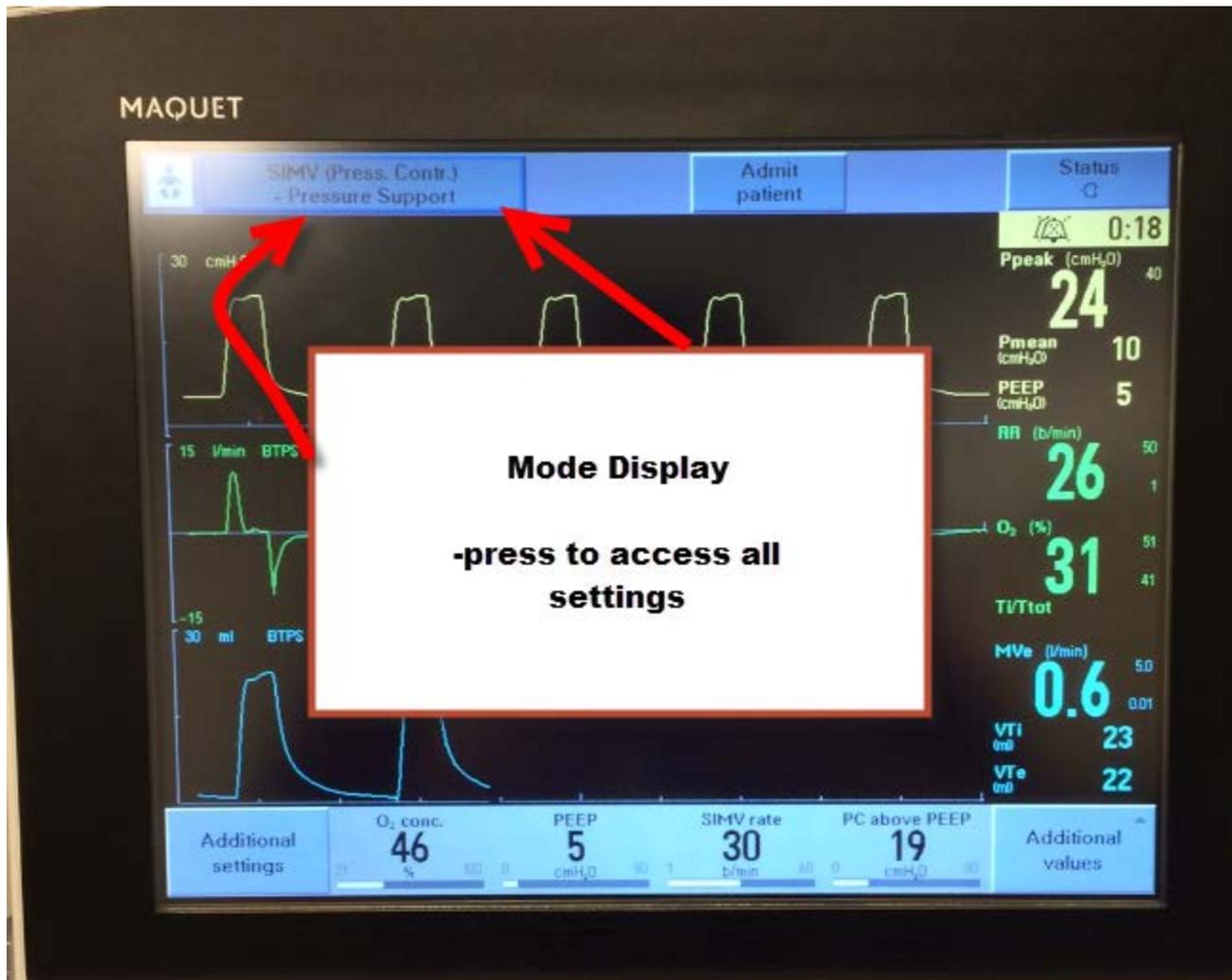
Top right corner of screen, alarm will flash, stating what the alarm is.

High Priority Alarms

- Apnea
- Check tubing- water in tubing, plugged tubing, excess leakage
- Paw High- patients Peak pressures are high

Medium/Low Priority Alarms

- CO2 sensor error
- Air supply pressure: high/low
- Respiratory Rate: high/low
- Leakage out of range- NIV circuit disconnect
- Leakage over range- pt spontaneously taking a breath faster than ventilator can give



Where do I find what Mode I am in??

-Top left corner

-*Pressing the mode section, this will bring you to your "current settings screen

MODES

AVEA	SERVO-I
SIMV PRVC	SIMV PRVC
Pressure SIMV + volume guarantee	**SIMV PRVC** this is mode that will be used
SIMV Pressure Control	SIMV Pressure Control
Pressure Control A/C	Pressure Control
CPAP/PS	CPAP/PS
APRV	**Bi-Vent
Nasal CPAP/IMV	**Nasal CPAP (just cpap)
Nasal CPAP/IMV	**NIV PS (cpap plus PS)
Nasal CPAP/IMV	**NIV PC (CPAP plus rate pressure (as used in RAM cannula patients)

How To Read My Settings

The screenshot shows the 'Set Ventilation Mode' interface for a ventilator. The mode is set to 'SIMV (Press. Contr.) + Pressure Support'. The screen is divided into several sections: 'Mandatory breath', 'Insp. times', 'Trigger', and 'Supported breath'. Each section contains a control knob for a specific parameter. Red arrows point from yellow callout boxes to these parameters. The 'O₂ cond.' parameter is highlighted with a blue border.

Parameter	Value	Unit
PC above PEEP	18	cmH ₂ O
TI	0.90	s
Trigg. Flow	5	l/min
PS above PEEP	15	cmH ₂ O
SIMV rate	20	b/min
T insp. rise	0.15	s
Insp. cycle off	30	%
PEEP	5	cmH ₂ O
O ₂ cond.	21	%

Callouts and their corresponding parameters:

- Pressure: PC above PEEP (18 cmH₂O)
- RR: SIMV rate (20 b/min)
- I-time: TI (0.90 s)
- PEEP: PEEP (5 cmH₂O)
- FiO₂: O₂ cond. (21 %)
- Pressure Support: PS above PEEP (15 cmH₂O)

Other settings: Cycle T 2.7 s, Previous Mode, Volume Control time: 17:55, Cancel, Accept.

What my ventilator settings are set at, this is what gets charted

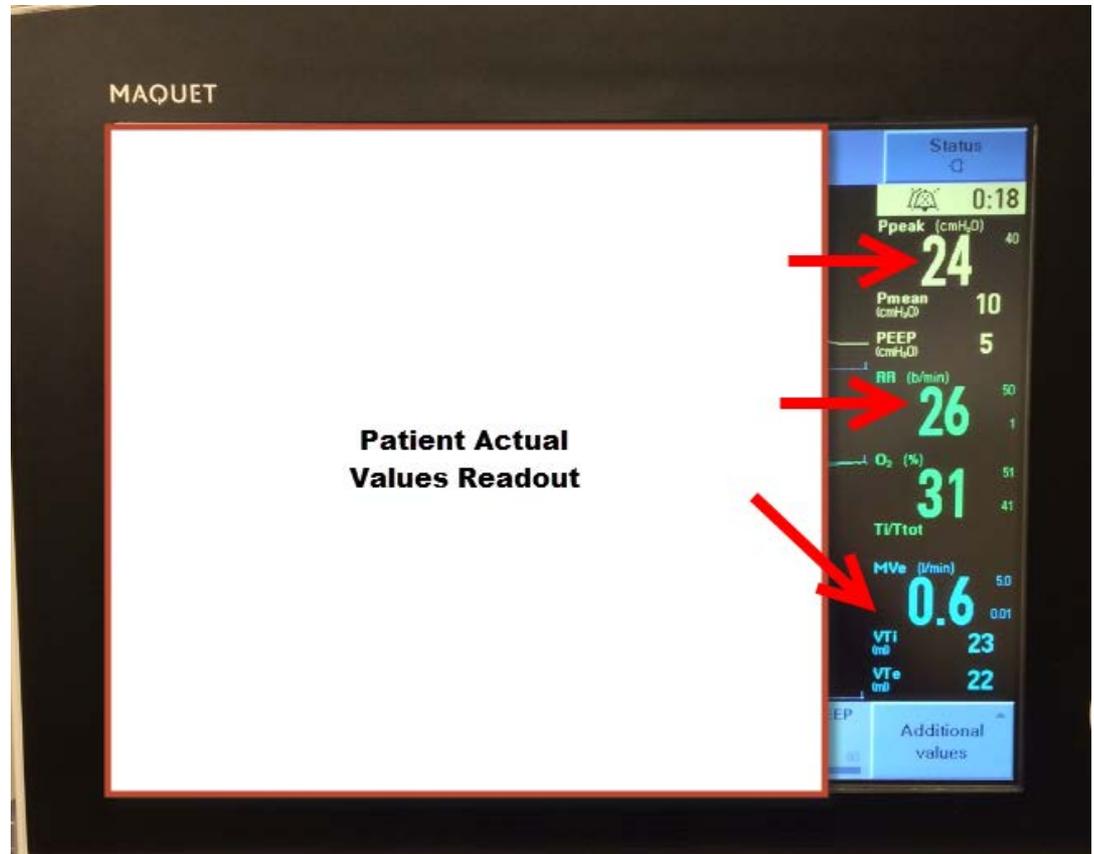
Lets go back to the Main Screen

What is My Patient Doing?

-All the values on the right side of the screen are values of what the patient is actually doing

-Patients actual pressures, total respiratory rate, minute ventilation, inspiratory and expiratory tidal volumes

-If you need to chart what the patient is actually doing vs. what is set, these are your parameters

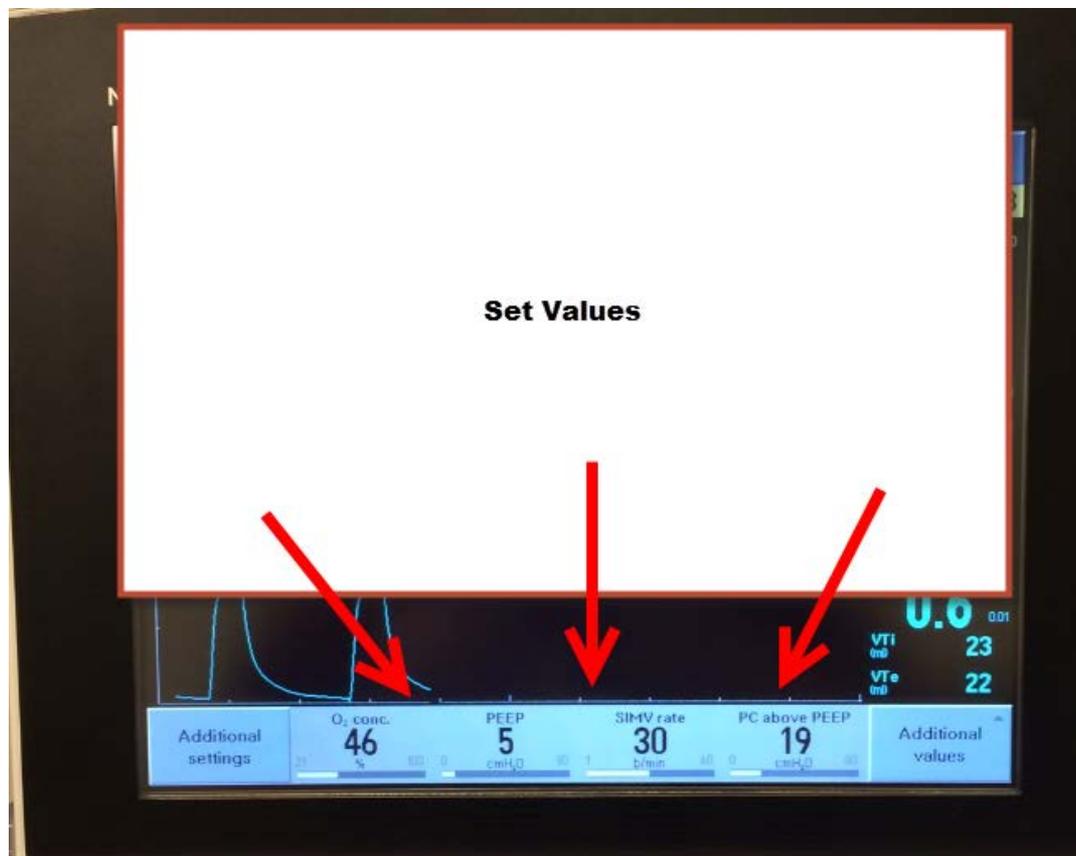


Bottom of the Main Screen

-Displays the 4 most common “want to know” settings.

-Always shows FiO₂ and PEEP

-Depending on your mode, it will also show Set RR, Pressure settings, Tidal Volume, etc...



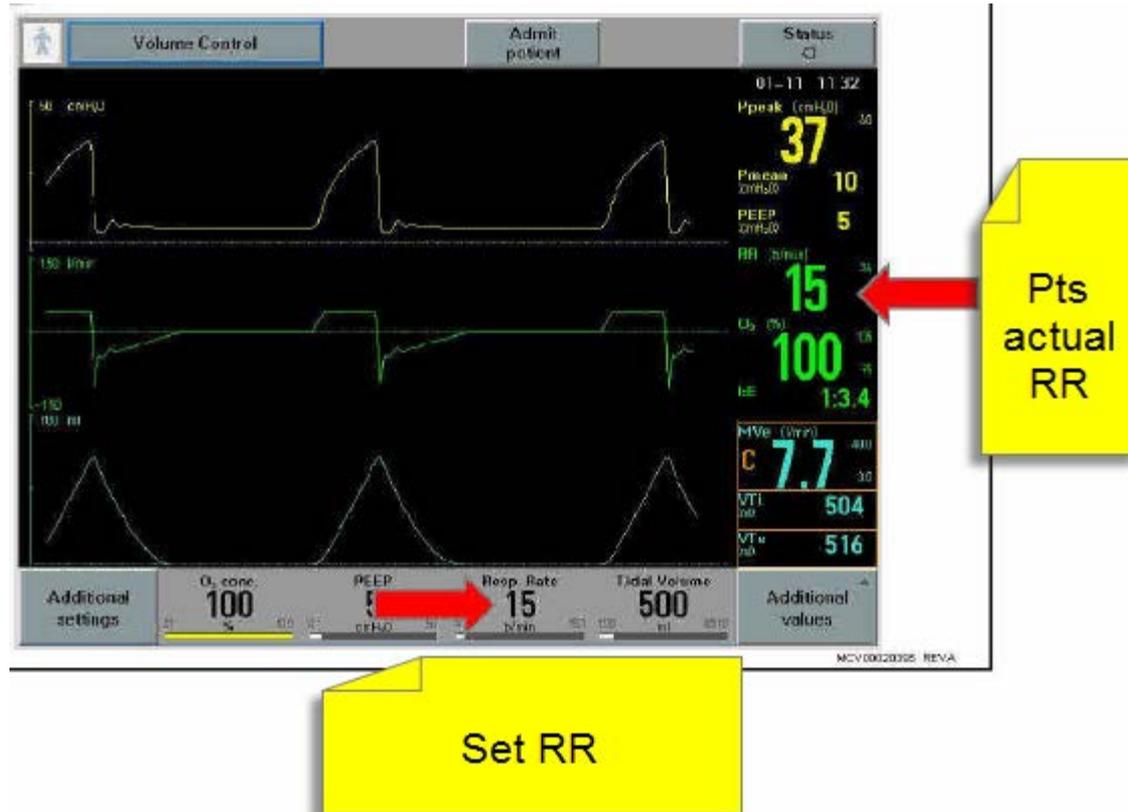
Where is my Fio2 again? PEEP?



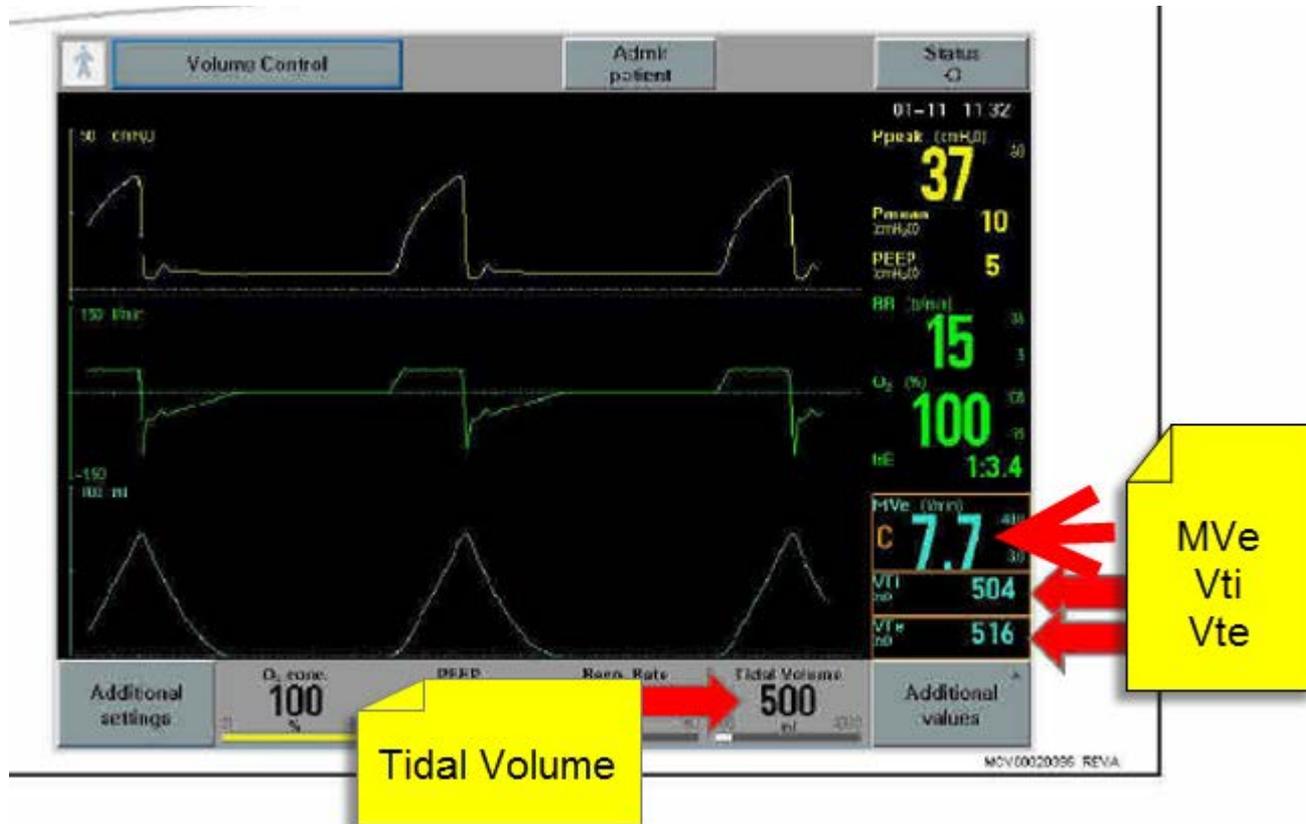
Set Fio2

PEEP

Where do I find my Respiratory Rate?



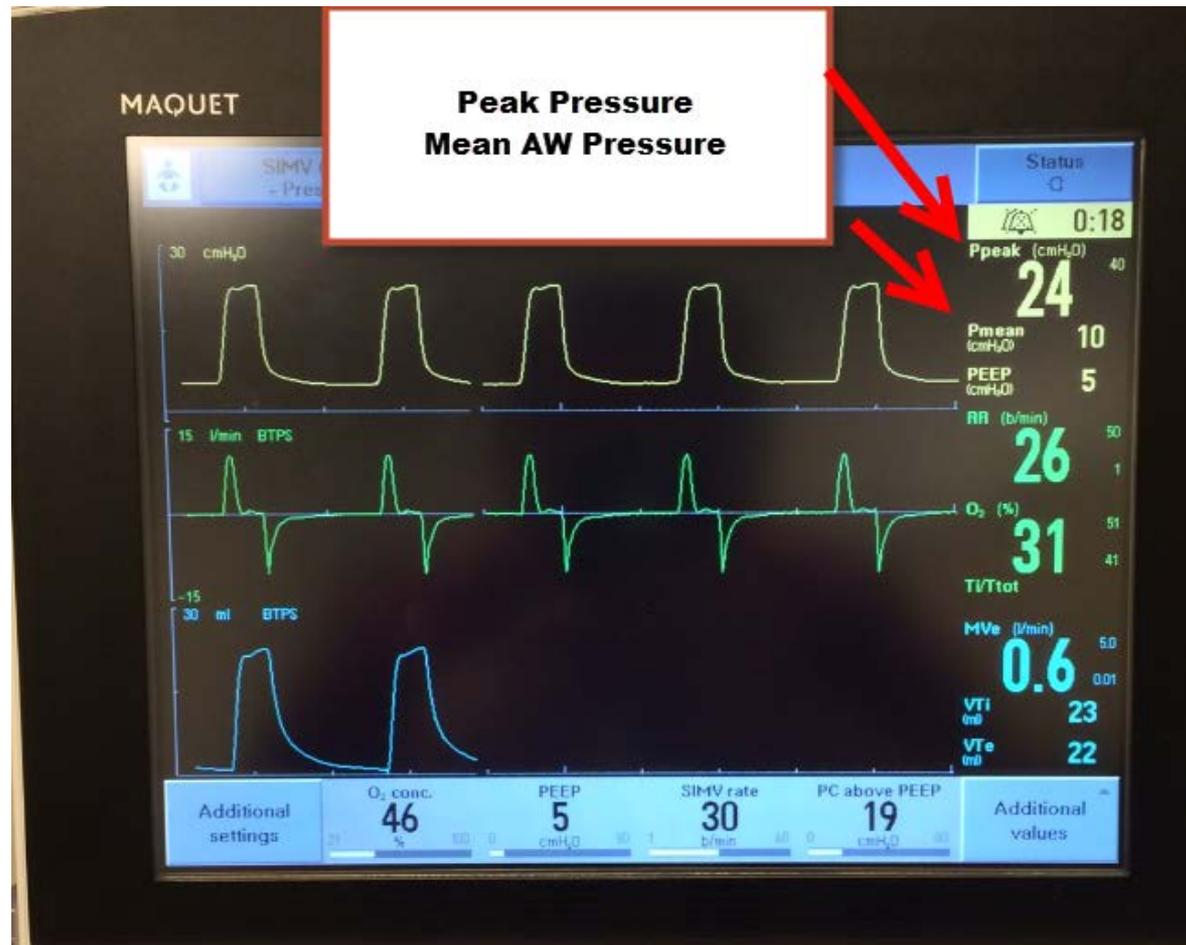
Tidal volume readout?



-V_{ti} (inspiratory tidal volume) and V_{te} (expiratory tidal volume) can be utilized to assess for leakage

*-remember, V_{ti} is of “current breath, while V_{te} is of the “previous breath”

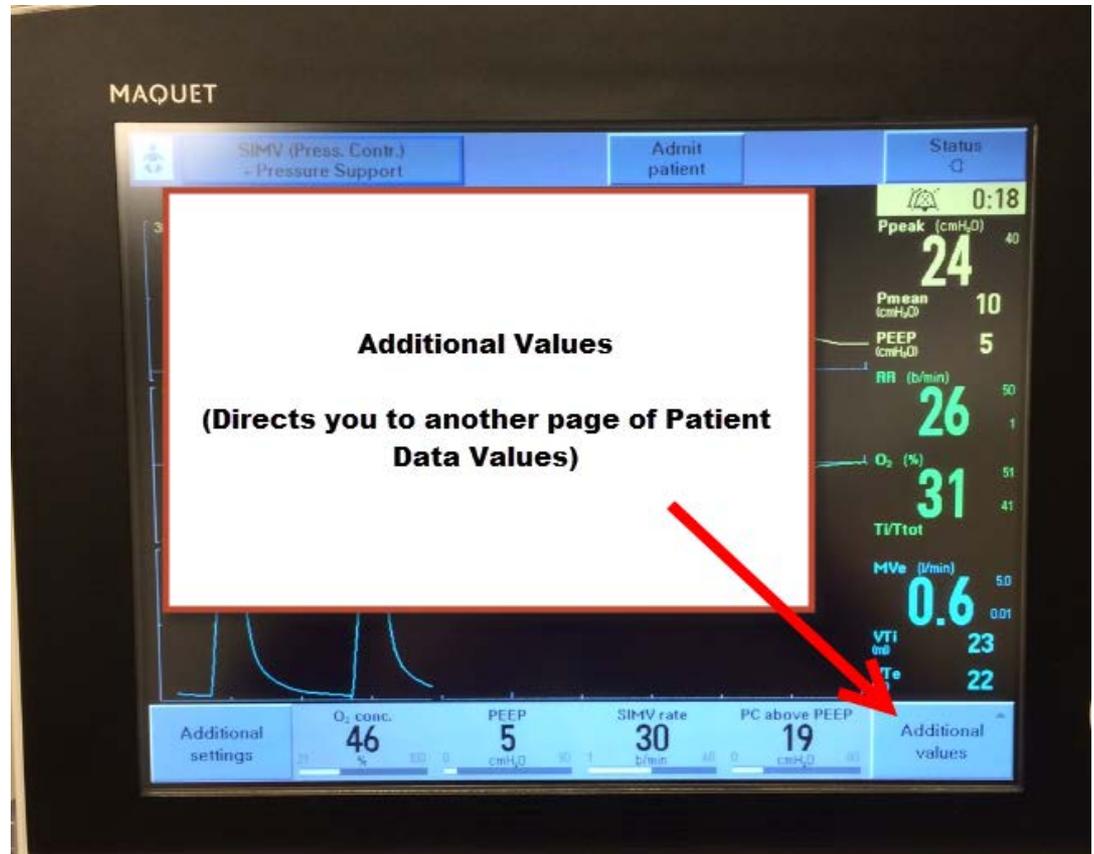
Where do I see what my Peak Pressures are?



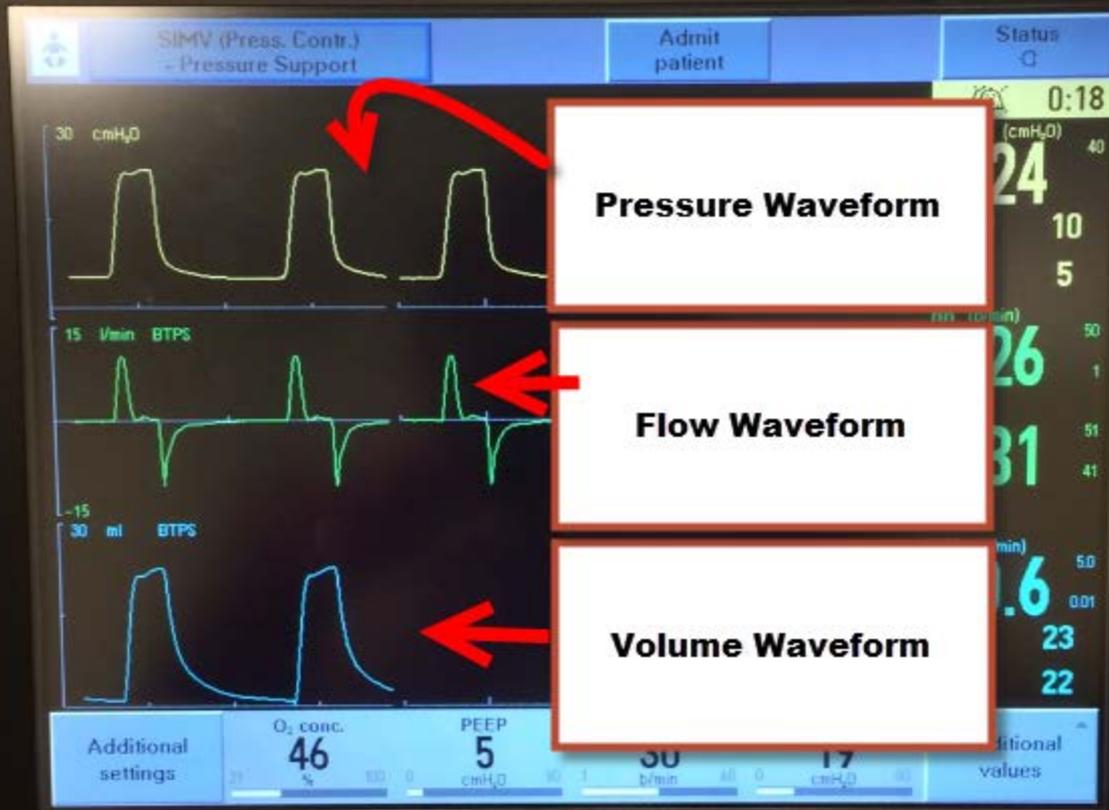
What if I want to see additional values?

Press the “Additional Values” icon. There are 3 pages of information

- lung compliance
- airway resistance
- end expiratory flow
- etc....



MAQUET



Are there waveforms?

Of course, the same traditional waveforms are present and visible.

You can even look at waveforms and loops on the same screen.

Simple?

- Right now, the Servo is being used the same way as the AVEA
- We just need to get used to the new nomenclature, buttons, sounds, etc....
- NAVA- coming soon.....(Fall/Winter)

Still need help?

- You will still always call your RT for any needs
- View servo-I learning video
- Attend an in-person servo-I training session
(see your educator)