GUIDE FOR INITIAL SETTINGS FOR **VOLUME CONTROLLED**VENTILATION FOR DRAEGER OXYLOG 3000 PLUS

Assumes patient is apnoeic from sedation & nursed at 30° to minimise aspiration

	LUNG PROTECTIVE STRATEGY (all other patients >1yo if cuffed tube)	OBSTRUCTIVE STRATEGY (asthma/COPD if cuffed tube >1yo)				
Mode	SIMV (default)	SIMV (default)				
VT	6ml/kg ideal body weight- see chart	6ml/kg ideal body weight- see chart				
RR	16-18 breaths/min then titrate to normal pCO ₂ /pH	6-8 breaths/min then examine EXPIRATORY FLOW CURVES. If breath stacking, → RR (min: 4 breaths/min) -permissive hypercapnoea (pH> 7.1)				
Pmax(alarm)	≥40 (if alarms, follow instructions below)	≥40 (if alarms, follow instructions below)				
FiO ₂	titrate using FiO₂/PEEP scale → SpO₂ of 88-95% FiO₂ 40 40 50 50 60 70 70 70 80 90	minimal FiO ₂ for SpO₂ 88-95%				
PEEP	PEEP 5 8 8 10 10 10 12 14 14 14	0				
I:E	1:1.5 (default)	≥1:4				
AutoFlow: ON	Slope: √ (default)	Slope: J (ie: fast inspiratory flow rate)				
Other	if high PEEP results in	sedate ++++, avoid ongoing paralysis if ♥♥BP + difficult to ventilate, disconnect tube & allow to expire stacked breaths if P _{max} alarms, check for patient agitation/ tube obstruction. If not the cause, perform INSPIRATORY HOLD MANOEUVRE-if Pplat >30 ♥TV by 1ml/kg steps (min 4ml/kg)				

Further modifications depends on hourly ABGs and haemodynamics

	5′0″	5'2"	5'4"	5'6"	5'8"	5'10"	6'	6'2"	6'4"/
	153cm	156cm	163cm	168cm	173cm	178cm	183cm	188cm	193cm
VT women (6ml/kg IBW)	276	295	330	360	385	415	440	470	490
VT men (6ml/kg IBW)	305	320	360	385	415	440	470	490	520

Other patients (i.e. modifications from LUNG PROCTECTIVE STRATEGY)

- HEAD INJURY: too much PEEP can

 BP and thus

 cerebral perfusion pressure. PEEP=5(default) is OK.
 30° head up. Aim for low-normal CO₂
- METABOLIC ACIDOSIS: RR ≥ patient achieved, ETCO₂ ≤ patient achieved. Lighten sedation to allow patient to add additional breaths as required -add pressure support (Δsupp=10, Trigger=2) to these breaths as patient tired.
- HYPERTENSIVE APO: start PEEP=10 and rapidly titrate up while rapidly titrating IV GTN for SBP<140.
- CARDIOGENIC SHOCK: avoid high-level PEEP as can ♥BP.
- PREGNANCY: left lateral position. TV: 8ml/kg ideal body weight, RR 18-20bpm aim for low/normal pCO₂&normal pH.

If patient is crashing....

- Take the ventilator out of the equation-bag the patient to feel how they are to ventilate
- Check the tube- displaced/ dislodged/ obstructed
- Check the patient- pneumothorax -bedside US/CXR and needle/finger thoracostomy
- Check the ventilator