CV-2+ Quick Reference

First: If you are not going to be operating the vent on Constant Flow, decide whether you prefer to have tidal volume or inspiratory time to be a fixed value controlled by the arrow keys. The other parameter will vary depending on the flow level. Note: It is usually preferable to use Inspiratory Time as the fixed parameter. To change: choose the SETUP menu after vent is first turned on, select INSP/TV, then choose which parameter you desire to be fixed, then back out to the MAIN MENU.

1. Connect gas source, patient circuit, test lung and turn vent on. **Note**: If you plan to use flow triggering or measure the exhaled tidal volume, install the appropriate size pneumotach and place between the circuit and test lung. Use the infant pneumotach (#4409C) for tidal volumes from 5-100 ml and the peds/adult pneumotach (#4410) for volumes of 50-and greater.

For Pressure Limited Ventilation (Note: Since the vent can either be set up so that tidal volume is controlled by the arrow keys and inspiratory time varies with flow…or, so that inspiratory time is controlled by the arrow keys and tidal volume varies with flow…For the consistency of this reference inspiratory time is controlled by the arrows in the following procedures.)

2. Turn on power and make sure circuit is either occluded or a test lung is installed.
3. Adjust FLOW knob to desired flow level (Flow rate is displayed in the lower left area of the screen)..
4. Set desired Peak Inspiratory Pressure by adjusting MAX PRESS knob until desired pressure is displayed in the upper left corner of the screen. **Note: Since the Peak Pressure is being limited by the MAX PRESSURE knob, the displayed TV (tidal volume) on the MAIN screen should be disregarded. The actual exhaled tidal volume can be displayed on the ALARM 1 screen if a pneumotach is installed and in line.**
5. Set desired PEEP level by adjusting PEEP knob and observing value in the lower left corner of the screen.
6. Set patient rate by highlighting RATE and adjusting with the arrow keys.
7. Set desired Patient Trigger Sensitivity by adjusting Flow Trigger (1 is the easiest and 20 is the most difficult) or Pressure Triggering (0.2 is the easiest and 10 is the most difficult). It is generally best to set the setting as low as possible, yet not so low that the vent Auto-cycles. In the event of a leak around the ET tube a higher setting may be required to stop the vent from auto-cycling.
8. Set desired Inspiratory Time by pressing INSP on the MAIN screen and adjusting with the arrow keys.(Note: if Tidal Volume is set to be the fixed parameter then Inspiratory Time is set by adjusting the flow knob and observing set Insp. Time).
9. Select desired mode (Assist Control or SIMV) by selecting on MAIN screen. (Note: If SIMV is selected, decide whether Pressure Support is desired, and choose correct setting by highlighting PRES SUPPORT on the SEC screen and adjusting to correct level with the arrow keys (Note: all the way down past 1 is OFF)..
10. Set desired alarms by setting them manually on the ALARM 1 & ALARM 2 screens. The low limit alarm will act as the patient disconnect alarm and must be set to some a desired level below the set Peak Insp. Pressure. The high limit alarm will act as the safety Pop-Off and must be set to the desired level above the set Peak Inspiratory Pressure.
11. Set any other alarms you may desire. If an alarm parameter is OFF, to turn it on, select the low limit and then the UP arrow key.
12. AUTO set may be used to quickly set the alarms. It is best used when the patient is on the ventilator, so the RATE alarms are set more appropriately. To use Auto Set, press Auto twice within 5 seconds. Peak Pressure values will be set 30% above and below measured Peak Pressure, Rate will be set 30% above and below observed patient rate, and the Oxygen percentage will be set 5% above and below observed value (If this alarm parameter is on). The other alarms are not set. Any alarm parameter may be adjusted at any time manually.

For Volume Ventilation

2. Follow instructions above for setting most parameters.
3. Turn up MAX PRESS knob to ensure that breath is not being pressure limited.
4. Adjust SET TIDAL VOLUME setting by adjusting flow until desired level is obtained (NOTE: Set tidal volume will not be the same as exhaled tidal volume due to circuit and lung compliance. Observe actual exhaled tidal volume by observing the tidal volume in the middle column on the ALARM 1 screen).
5. Be sure that appropriate High Peak Pressure alarm is set in ALARM 1 screen to ensure that appropriate high pressure pop-off is set.

For Constant Flow IMV Ventilation (flow trigger and pressure triggering are not available in this mode)

2. Turn on constant flow by pressing CONSTANT FLOW on the MAIN screen
3. Set desired respiratory rate by pressing RATE and adjusting with arrow keys.
4. Set desired inspiratory time by pressing INSP and adjusting with arrow keys.
5. Set desired flow rate by turning FLOW knob and observing value.
6. Set Peak pressure by turning MAX PRESS knob and observing Peak pressure (upper left corner).
7. Set desired PEEP level by turning PEEP knob and observing PEEP level (lower left corner).
8. Set alarms by pressing AUTO SET twice within 5 seconds, or by manually setting each alarm in the ALARM menus.

For Infant Nasal Prong CPAP it is probably best to use the vent with Constant Flow On (the CPAP available when Flow or Pressure Triggering is used is designed for CPAP with a trach or an ET tube as it provides backup ventilation in the even of apnea. (Also: If nasal prongs are used that require the patient wye to be removed you may want to order circuit # 20011N)

Note: These guidelines are only meant as a guide and do not take the place of a thorough understanding of the operators manual and/or interactive CD-ROM training.