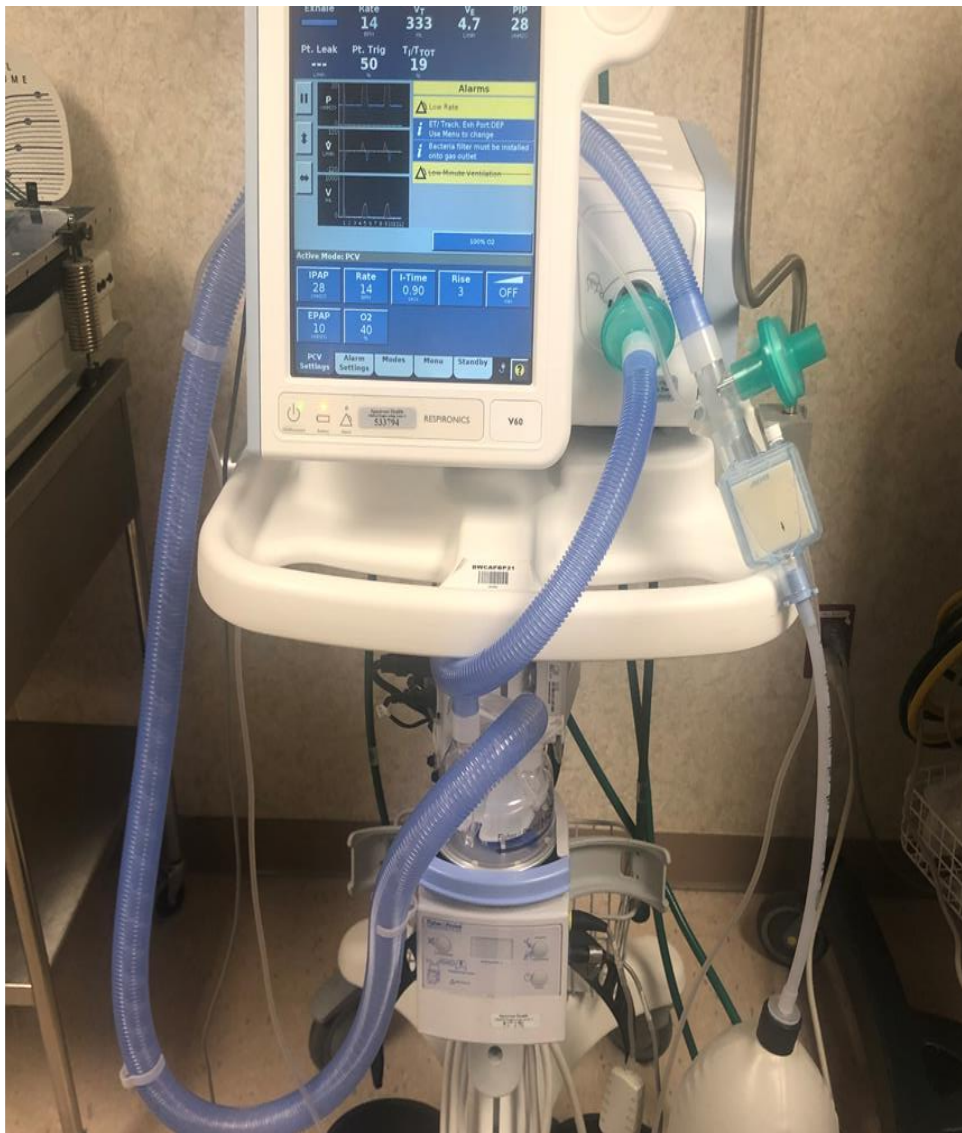


COVID-19 BiPAP to Vent Conversion – March 31, 2020 0817

Spectrum Health contact: Maria Mast

Document reviewed: December 1, 2020

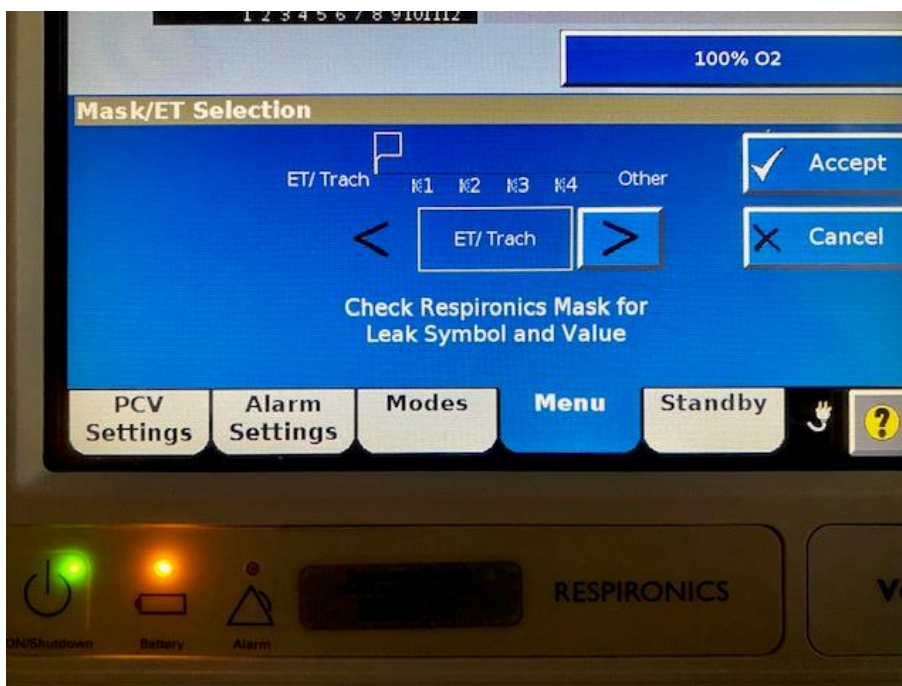
The purpose of this document is to demonstrate the proper way to set up invasive ventilation for an intubated patient with a Philips Respironics V60 BiPAP. We found that by utilizing our large fleet of BiPAP machines; we will be able to treat a larger number of acute patients.



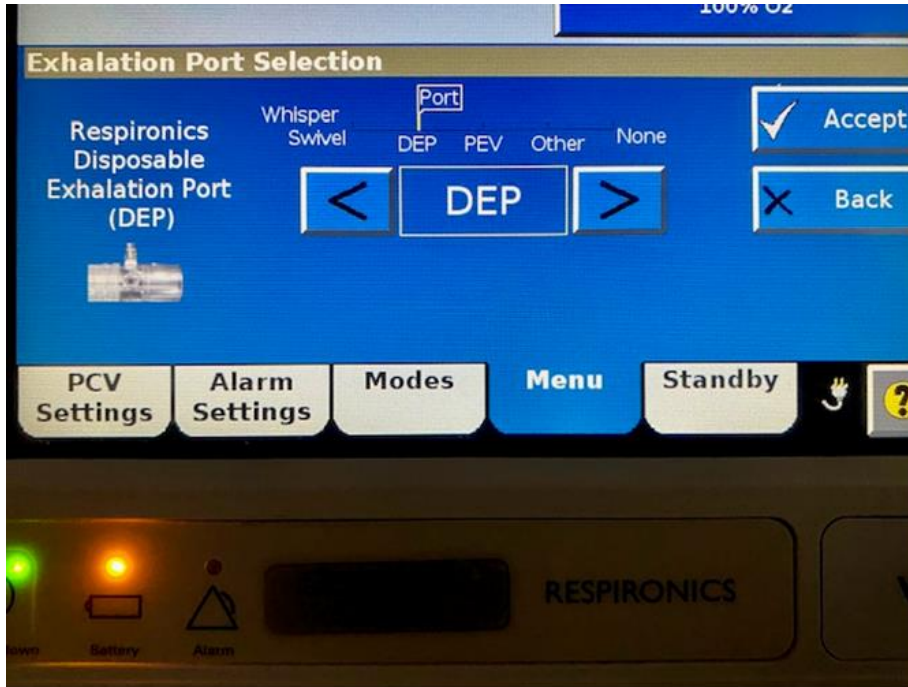
In the menu tab go to Mask/PORT



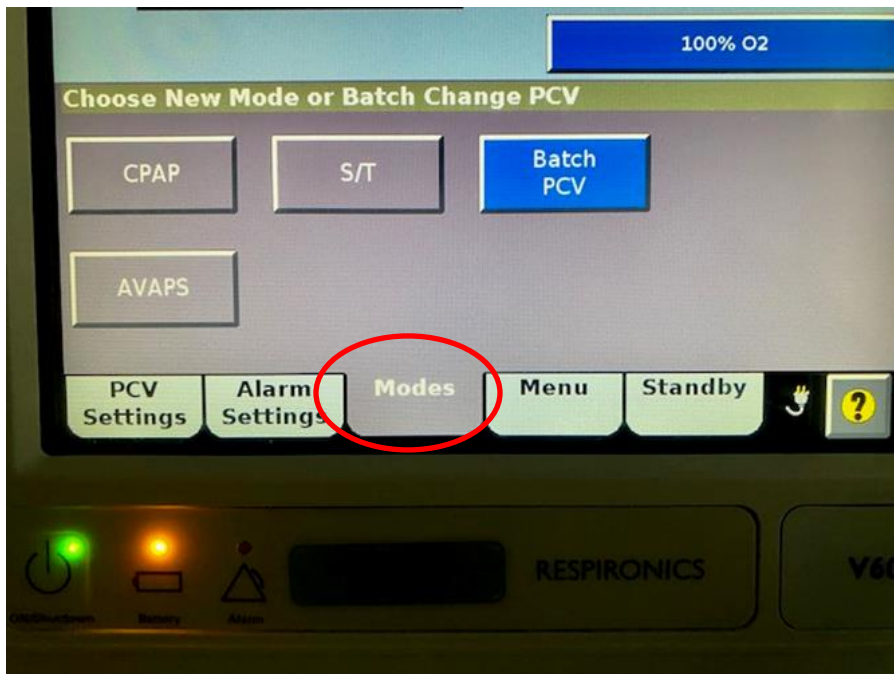
Select ET/Trach and press Accept



It will then go to Exhalation Port Selection and choose DEP and press Accept

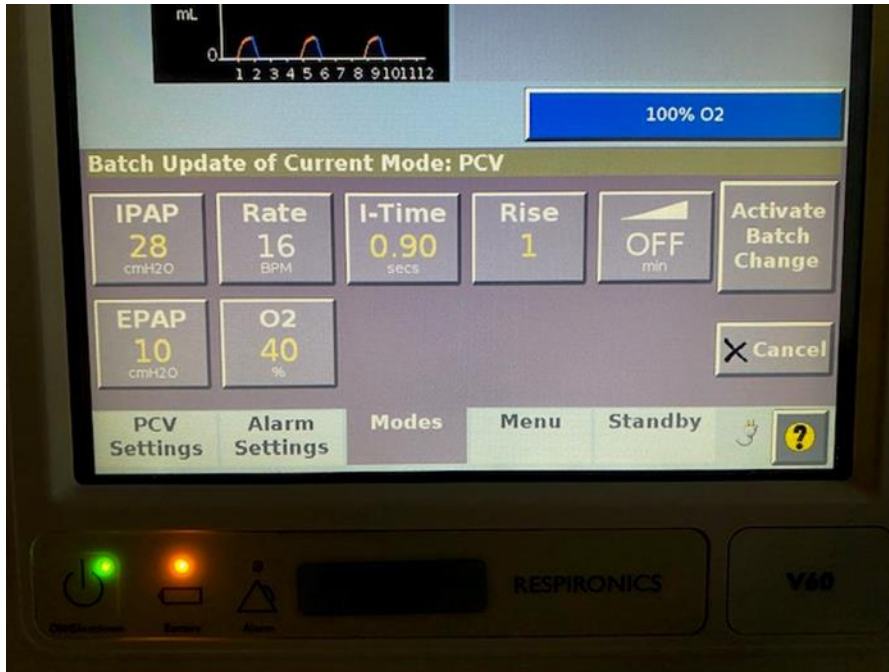


Then go to the Mode tab. **You can do PCV or AVAPS.**



Batch PCV means you can make all changes to the settings at once then press start. See next picture.

Batch changes highlighted in yellow. Press 'Activate Batch Change' to start ventilation.



Observe waveforms etc. to optimize settings.



**Ballard / and Treatment
placement**

- Utilize the heated BiPAP circuit. **DO NOT USE heated humidification** with intubated patients.
- Use an HMEF (make sure CO2 port is capped) as pictured and a Bacterial/Viral filter on the exhalation port of the whisper.
- Add Ballard between HMEF and ET Tube.

- HMEF with CO2 port = Lawson # 405210
- Bacterial/Viral Filter = Lawson #652001
- Heated BiPAP circuit = Lawson #401504

Things to Consider

Modes

- **PCV is preferred mode.**
 - **It is delta P** (example IPAP of 28 and EPAP of 10 is a delta P of 18)
- AVAPS responds slower than the typical PRVC algorithm. AVAPS is also not recommended in acute respiratory disease.
- CPAP/PSV can be obtained by PCV or S/T mode however there will need to be a minimum rate of 4 as that is the lowest it will go. REMEMBER there is no apnea alarms so set alarms appropriately.

Alarms

High RR / Low RR/ High Vt. / Low Vt./ High insp. Pressure/ Low insp. Pressure / Low MV/ Low Insp. Pressure delay time (s).

- There are no apnea alarms so set the alarms appropriately.
 - Low rate alarm is disabled if set at or below set rate.

Treatments

- MDI delivery device would need to be placed between the Ballard and the HMEF.
- SVN discourage with COVID 19 and influenza patients. You would need to place it in the same location as the MDI delivery device because with the HMEF in place the patient wouldn't receive meds is placed at the humidifier chamber.