

During ventilation

Silences alarms **Resets alarms**

Spont - Patient-triggered breath
Timed - Ventilator-triggered breath
Exhale - Exhalation phase

P - Pressure waveform
V̇ - Flow waveform
V - Volume waveform

Pause button for freezing graphics

Waveform scaling buttons

Shows that an alarm is active. Touch to open or close **Alarms/ Messages** list.

Patient data

Alarms/ Messages list. Crossed-out messages indicate autoreset alarms.

Help button

Alarm Silence	Alarm Reset	Low Priority Alarm			
Exhale	Rate 16 BPM	V _T 550 mL	V̇ _E 8.8 L/min	PIP 20 cmH ₂ O	
Pt. Leak 12 L/min	Pt. Trig 95 %	T _I /T _{TOT} 38 %			

Alarms

- Low Rate
- Mask:1, Exh Port:DEP Use Menu to change
- Low Inspiratory Pressure

Active Mode: S/T

IPAP 12 cmH ₂ O	Rate 4 BPM	I-Time 1.00 sec	Rise 3 min	OFF
EPAP 4 cmH ₂ O	O ₂ 21 %			

S/T Settings Alarm Settings Modes Menu Standby

Alarm settings

Active Mode: S/T

Hi Rate 30 BPM	Hi V _T 200 mL	HIP 50 cmH ₂ O	Lo V̇ _E OFF L/min
Lo Rate 10 BPM	Lo V _T OFF mL	LIP OFF cmH ₂ O	LIP T 20 sec

S/T Settings Alarm Settings Modes Menu Standby

- On AC mains. Battery charging.
- On battery. Shows 2:00 hours remaining.
- On AC mains. No battery.

Modes

Choose New Mode or Batch Change S/T

CPAP Batch S/T PCV

AVAPS PPV

S/T Settings Alarm Settings Modes Menu Standby

PPV is optional and not available in all markets.

Menu

Menu

Brightness Loudness Mask/Port Vent Info

Screen Lock Auto-Trak+

PPV Settings Alarm Settings Modes Menu Standby

- Screen brightness
- Alarm loudness
- Screen lock
- Mask/exhalation port selection
- Ventilator information
- Auto-Trak+ is optional and not available in all markets.

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1053018 Rev C

Respironics V60 Ventilator



Refer to *Respironics V60 User Manual* for complete information

Navigation ring

Accept button

Proximal pressure port

Ventilator outlet (To patient)

ON/Shutdown key

Battery (charged) LED

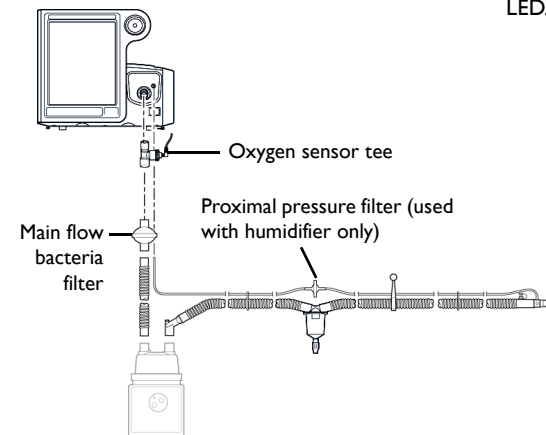
Alarm LED

Flashes when battery is charging
 On continuously when battery is charged
 Off when ventilator is running on battery, when ventilator is off and AC power is not connected, or when the battery generates an error or fails.

Flashes for a high-priority alarm
 On continuously for a Vent Inoperative alarm

Setting up the ventilator for use

1. Connect ventilator to oxygen supply.
2. Install oxygen analyzer
3. Connect ventilator to AC power.
4. Install patient circuit.
5. Connect remote alarm if applicable.
6. Connect external devices if applicable.
7. Check battery status by observing Battery LED.



Patient circuit configuration (invasive version shown)

Verifying ventilator operation

WARNING: Always verify ventilator operation before placing a patient on a ventilator. If the ventilator fails any verification steps, remove it from clinical use immediately. Do not use the ventilator until necessary repairs are completed and the ventilator passes verification.

WARNING: To reduce the risk of power failure to the ventilator, pay close attention to the battery's charge level. The battery's operation time is approximate and is affected by ventilator settings, discharge and recharge cycles, battery age, and ambient temperature. Battery charge is reduced at low ambient temperatures or in situations where the alarm is continuously sounding.

Note: If the ventilator has a backup battery, the battery must be adequately charged to verify operation. Recharge as necessary before verifying operation.

Note: The backup batteries are intended for short-term use only. They are not intended to be a primary power source.

Note: We recommend that the ventilator's batteries be fully charged before you ventilate a patient. If the batteries are not fully charged and AC power fails, always pay close attention to the level of battery charge.

Do or observe...

Verify...

- | | |
|---|---|
| 1. Power on the ventilator. The ventilator automatically runs a test of the backup audible alarm followed by the primary alarm. | You hear tones from both the backup alarm (high pitch) and the primary alarm (beep). |
| 2. Create a patient alarm, such as a disconnect alarm. | Proper alarm is annunciated (audio, visual, flashing, alarm LED, and, if applicable, remote alarm). Ensure the volume of the audible alarm is appropriate for the environment in which it will be used. |
| 3. Resolve the alarm condition and manually reset the alarm. | |
| 4. If the backup battery is installed, disconnect the ventilator from AC power while the ventilator is running.

If the backup battery is not installed, go to the next step. | <ul style="list-style-type: none"> The ventilator switches over to battery power (battery symbol in right-hand corner of screen is displayed). The audible alarm sounds intermittently. |
| 5. Reconnect the ventilator to AC power. | The alarm resets. |

Running alarm tests

WARNING: To prevent possible patient injury, always return alarm settings to hospital-standard values after verifying ventilator operation.

The ventilator performs a self-check during start-up and continuously during operation. Alarm functionality is verified by this self-check. You may also want to run alarm tests to demonstrate the alarms' operation..

Do or observe...

Verify...

- | | |
|--|--|
| 1. Set up the ventilator as for normal ventilation, complete with breathing circuit (PN 582073) and test lung assembly (PN 1021671) | |
| 2. Set the mode to S/T and make the following control settings: Rate: 4 BPM, IPAP: 10 cmH ₂ O
EPAP: 6 cmH ₂ O I-Time: 1 sec, Rise: 1, Ramp: OFF, O ₂ : 21% | |
| 3. Make the following alarm settings: Hi Rate: 90 BPM, Lo Rate: 1 BPM, Hi V _T : 2000 mL, Lo V _T : OFF, HIP: 50 cmH ₂ O, LIP: OFF, Lo V _E : OFF, LIP T: 5 secs. | |
| 4. Lower the HIP alarm limit to 8 cmH ₂ O. | <ul style="list-style-type: none"> The High Inspiratory Pressure alarm is activated. The ventilator cycles into exhalation. Pressure falls to 6 cmH₂O (the EPAP level). |
| 5. Raise the HIP alarm limit to 15 cmH ₂ O. | |
| 6. Raise the Lo V _T alarm setting above the displayed, measured V _T . | The Low Tidal Volume alarm is activated. |
| 7. Turn the Lo V _T alarm setting OFF. | The alarm resets. |
| 8. Disconnect the test lung. | The Patient Disconnect alarm is activated. |
| 9. Reconnect the test lung. | <ul style="list-style-type: none"> The alarm resets. The ventilator automatically resumes ventilation. |
| 10. Disconnect the patient circuit (including bacteria filter) from the ventilator outlet and block the ventilator outlet. | The Patient Circuit Occluded alarm is activated. |
| 11. Unblock the outlet, and reconnect the circuit. | The alarm resets. |