Taking NIV further

The **Respironics V60** Ventilator specifications

PHILIPS

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The Respironics V60 Ventilator combines Respironics' ventilation expertise with Philips' focus on simplifying advanced health care. The result is the noninvasive ventilation gold standard with an invasive ventilation safety net and an interactive display that helps simplify patient management.

1. Patient types

Adult
Pediatric (≥20 kg)

2. Modes

Continuous positive airway pressure (CPAP)
Spontaneous with timed backup (S/T)
Pressure control ventilation (PCV)
Average volume assured pressure support (AVAPS)—optional

3. Settings

Setting	Range
C-Flex	OFF, 1 to 3
CPAP	4 to 25 cmH$_2$O
EPAP	4 to 25 cmH$_2$O
IPAP	4 to 40 cmH$_2$O
I-time (inspiratory time)	0.30 to 3.00 s
Max P (AVAPS maximum IPAP)	6 to 40 cmH$_2$O
Min P (AVAPS minimum IPAP)	5 to 30 cmH$_2$O
FiO$_2$	21 to 100%
Ramp time	OFF, 5 to 45 min
Rate (respiratory rate)	4 to 60 BPM
Rise (rise time)	1 to 5
Triggering and cycling	Auto-adaptive (Auto-Trak)
AVAPS target tidal volume	200 to 2000 ml

4. Modes and their active settings

	CPAP	S/T	PCV	AVAPS
Timing				
Spontaneous rate		●	●	●
I-time		●	●	●
Baseline pressure				
CPAP	●			
EPAP		●	●	●
Inspiratory pressure				
IPAP		●	●	
MinP				●
MaxP				●
Rise time				
Rise		●	●	●
Oxygen				
$O_2\%$	●	●	●	●
Tidal volume				
V_T				●
Ramp feature				
Ramp time	●	●	●	
Comfort feature				
C-Flex	●			

5. Patient data (monitored parameters)

5.1 Patient data window	
Breath phase/trigger indicator	Spont, Timed, Exhale
PIP	0 to 50 cmH_2O
Patient/total leak	0 to 200 l/min BTPS
Patient trigger	0 to 100%
Respiratory rate	0 to 90 BPM
Ti/Ttot	0 to 91%
Minute volume	0 to 99.0 l/min BTPS
Tidal volume	0 to 3000 ml BTPS
5.2 Waveform window	
P waveform	0 to 50 cmH_2O
V̇ waveform	-240 to 240 l/min BTPS
V waveform	0 to 3000 ml BTPS

6. Alarms

Alarm	Adjustable range
Hi Rate (high respiratory rate alarm)	5 to 90 BPM
Lo Rate (low respiratory rate alarm)	1 to 89 BPM
Hi V_T (high tidal volume alarm)	200 to 2500 ml
Lo V_T (low tidal volume alarm)	OFF to 1500 ml
HIP (high inspiratory pressure alarm)	5 to 50 cmH_2O
LIP (low inspiratory pressure alarm)	OFF, 1 to 40 cmH_2O
Lo V_E (low minute ventilation alarm)	OFF, 0.1 to 99 l/min
LIP T (low inspiratory pressure delay time)	5 to 60 s

7. Other settings

Alarm volume	1 to 10 (relative scale)
Brightness	1 to 5 (relative scale)
Exhalation port selection	DEP
	Whisper Swivel
	PEV
	Other
	None
Interface selection	ET/Trach, 1, 2, 3, Other
Screen lock	Off, On

8. Environmental

8.1 Temperature	
Operating conditions	+5 to +40 °C
Storage conditions	-20 to +50 °C
8.2 Relative humidity	
Operating conditions	15 to 95% (non-condensing)
Storage conditions	10 to 95% (non-condensing)
8.3 Barometric pressure	
Operation and storage	79.9 to 101.1 kPa
	(600 to 765 mmHg)
8.4 Altitude	
Operation and storage	-51 to 1951 m (-167 to 6400 ft)
	relative to sea level

9. Electrical

9.1 External	
AC voltage	100 to 240 VAC
AC frequency	50 to 60 Hz
AC power	300 VA
9.2 Battery (optional)	
Rating	14.4 V
Capacity	11.5 Ah
Charge voltage	+16.9 V maximum
Operating time	6 hours in normal conditions

10. General

Demand flow range	-240 to 240 l/min BTPS
Oxygen inlet pressure range	276 to 600 kPa
Oxygen inlet connectors	DISS (male or female)
	NIST (male)
	SIS (male)
Dynamic pressure regulation	± (2 cmH$_2$O + 4% of target)
Start-up	Ready to ventilate 9 seconds
	after power on
Acoustic noise	<45 dBA at 1 m

11. Physical

Weight	10.9 kg (24 lb)
	with optional battery
	10.0 kg (22 lb)
	without optional battery
Dimensions	Height 33.7 cm (13.3 in)
	Width 39.4 cm (15.5 in)
	Depth 42.9 cm (16.5 in)

Package	Description
Basic	V60 ventilator with CPAP, S/T and PCV modes *Internal battery as option*
Advanced NIV	V60 Basic model with C-Flex algorithm
Long Term ventilation	V60 Basic model with AVAPS mode
Acute Care ventilation	V60 Basic model with all ventilatory modes