

# Orion

Critical care ventilator: Saving life



# Orion: Critical care ventilator

**Orion** is a microprocessor controlled software driven ventilator. It meets the expectation in terms of versatility and reliability. The components and subassemblies are sourced from international suppliers.

**Orion** ventilator is calibrated with the latest computerised artificial test lung system. Standard modes as well as advanced modes of ventilation to treat challenging conditions. NIV – Non Invasive Ventilation is a standard feature in **Orion**.

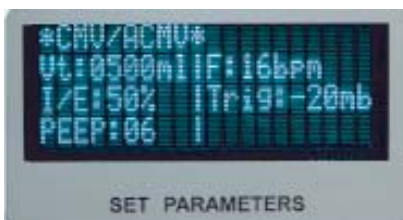
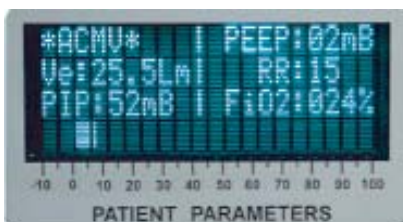
## Dual display

The two electroluminescent displays show the machine data and patient data.

All the parameters are set with one rotary knob and a touch button switch. Any change in value has to be validated for safety.

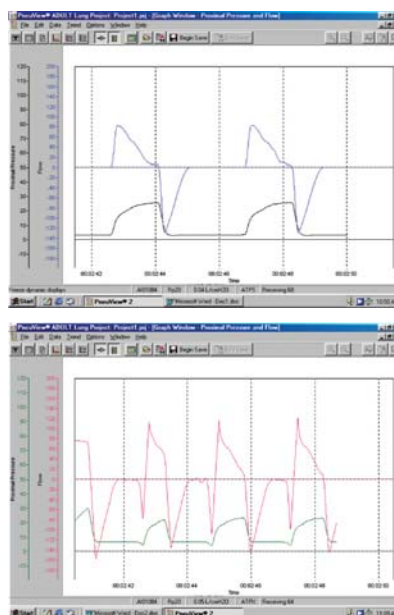
The Tidal Volume is variable to treat from paediatric patients to obese adults.

Strict quality control ensures flawless operation.



## Perfect pressure support

Perfect pressure support is possible because of fast acting proportional valve.



## Tracing of computerised test lung in simulated condition for a pressure control breath

The **Orion** is calibrated with imported computerised test lung system for accuracy.

The **Orion** is developed and conceived in close collaboration with leading Intensivists and Biomedical Engineers.

## Pipeline or...

The **Orion** is designed to work with hospital pipeline or with air supply unit mounted on wheels for easy mobility.

## Intelligent alarms

Intelligent memory alarms to handle any adverse condition give alarm only when necessary.



The Backup ventilation in all spontaneous modes ensures patient safety.

P-SIMV is a unique mode where PS and PCV are combined. Very useful in paediatric and ARDS condition.

Nebuliser is operational in controlled modes of ventilation without affecting the FiO<sub>2</sub>.

## Upgradable

**Orion** is easy to operate and maintain. There are no moving mechanical parts.

**Orion** being a well engineered product makes servicing and replacement of parts simple and easy.

Function and modes upgradation is possible without major changes.

**Orion** is designed to work in tough tropical condition of excess heat and humidity.

# Orion: Specification



## Applications

- Adult-Paediatric
- Intensive Care Units: Post Operative
- Emergency

## Other functions

- Nebulization
- Emergency ventilation
- “User Configuration” menu
- Optional

## Specifications

Tidal Volume	50 to 1500 mL
Peak Flow	180 Ltrs / min
Frequency	8 to 40 breaths / min
SIMV Frequency	1 to 40 breaths / min
PEEP	0 to 20 mb
Pressure Support	1 to 30 mb
FiO <sub>2</sub>	21% to 100%
Inspiratory pressure trigger	-1 to -10 mb
I / E Ratio	25% to 50%



## Technical specification

Electrical Supply	200 to 240 V AC
	50 to 60 Hz 65 VA
Medical gases	2.8 - 6 bar
Weight of ventilator	18 kgs
Dimension:	
Depth	350 mm
Height	230 mm
Width	420 mm

## Modes

Volume Controlled - CMV
Assisted Controlled - ACMV
SIMV - Volume controlled - VSIMV
Pressure Controlled - PCV
Assisted Pressure Controlled - APCV
SIMV - Pressure Controlled - PSIMV
Pressure Support Ventilation - PSV
CPAP
NIV

## Alarms

P max
VT min / max
FiO <sub>2</sub> min / max
Patient disconnection
F min / max
Apnea ventilation
Minute Volume Min / Max
Power supply failure