



## **LEGENDAIR®**

Mixed ventilator integrating pressure and volume modes for the treatment of most chronic respiratory pathologies.

# LEGENDAIR® ... a user friendly device



## Ventilation comfort

- Quick and reactive Flow trigger that permits a fast adaptation of the patient with the device (average reaction time of 75 ms once a trigger is detected; as tested with the active test lung IngMar Medical model ASL 5000 ).
- Quiet device (less than 30 dBA at 10 mbar).
- Adaptability of ventilation (small inertia of the turbine) for an optimal synchronisation of the patient during ventilation.
- Possibility of setting a Target Vt and a Maximum pressure to attain it.
- Precise flow and pressure sensors with adjustable I and E triggers in pressure modes.

## Autonomy

The LEGENDAIR integrates a Li-ion internal battery (no memory effect) to provide a better portability of the device during ventilation; with an autonomy that can reach up to 11 hours. It is also equipped with a 24V DC input (OPEN Pack® connection) connexion for an eventual external.

## Oxygen enrichment and monitoring

The LEGENDAIR® is equipped with an oxygen connexion at the back such as the enrichment of Oxygen is taken into consideration in the total flow delivered to the patient. The FiO<sub>2</sub> concentration can reach up to 50% of oxygen.

As an option, the LEGENDAIR® offers the possibility to connect an oxygen cell on the outlet of air to measure and monitor directly on the display of the unit the FiO<sub>2</sub> concentration delivered and eventually set minimum and maximum alarms levels.



## Simplified maintenance

- Quick and easy access to all technical components.
- Micro turbine with an expected 15000 hrs life time.
- RS 232 communication port for eventual software upgrade, online monitoring, memory retrieval (patient compliance, ventilation parameters and events) with the Airox communication Package software.
- Maintenance menu allowing several diagnosis and sensor calibration.
- Technical event memorization and reading with direct display on the LCD screen.
- Display of patient and device hour meter on the screen.

The **LEGENDAIR®** has been conceived to be user friendly:

- Large LCD screen
- Display of all the parameters on one single page
- Dedicated menu for alarms and patient monitoring
- Possibility of changing the ventilation mode during ventilation
- Tutorial messages for the user
- Possibility of locking the parameters



### Target Vt

As pressure and flow are closely linked, we are looking at increasing the flow by progressively increasing the inspiration pressure without going above the maximum pressure limit settings.

To attain the target volume, the inspiration pressure increases or decreases by increments between the respiratory cycles. The modifications of the inspiration pressure are automatically done through a specific algorithm to obtain the target volume.

This method permits a quick reaction upon the detection of a disequilibrium with an optimum comfort for the patient due to the relatively small increments of increase and decrease in pressure.

*Li-ion internal battery with  
6 to 11 hours of autonomy.*



### Exhalation Vt Monitoring

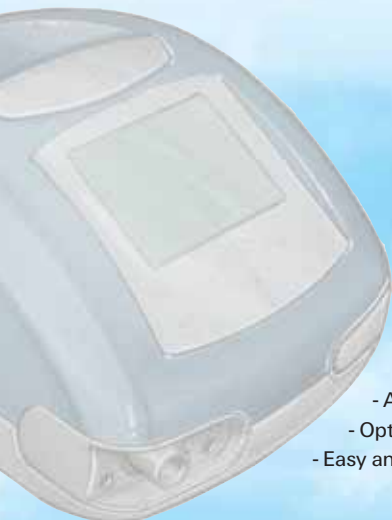
As an option, the **LEGENDAIR®** can integrate a monitoring function of the exhaled tidal volume of the patient:

- With the adaptation of exhalation valves of different brands with different set ups.
- The exhalation kit is presented as a mono-block for an easy installation and disinfection
- With the reading of the exhaled tidal volume on the display and the settings of alarms

### Ergonomics

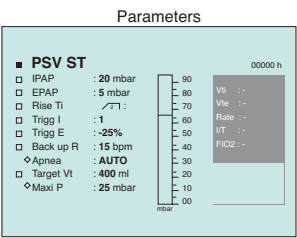
Developed in parallel with a specialized Designer, the **LEGENDAIR®** is conceived to answer the requirements and needs of the patients and users.

- Large integrated handle.
- Small size.
- A light weight of 4,5 Kg including the internal battery
- Optimization of the Display features.
- Easy and quick installation of the patient circuits.



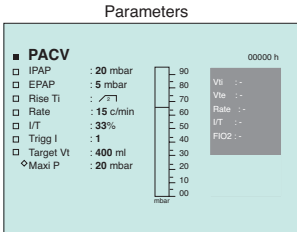
## SETTINGS IN PSV / PSV ST MODE

IPAP (inspiratory pressure)	5 - 40
EPAP (expiratory pressure)	0 - 20
Inspiratory ramp (Rise time)	4 Levels
Inspiratory trigger	5 Levels
Exhalation trigger	- 15 to - 75% of decrease from peak flow
Minimum rate	4 - 40
Apnea Time	3 - 30 s
Target VT	50 - 1400 ml
Maximum pressure (to reach Target Vt)	8 to 55 mbar (limited to + 3 to +15 of IPAP)
Monitoring	Vti, Vte, Rate, I/T Ratio, FiO <sub>2</sub> , IPAP, EPAP and patient triggering



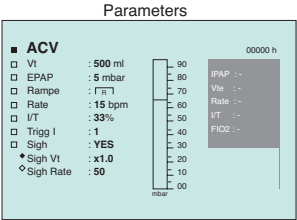
## SETTINGS IN PCV/PACV MODE

IPAP (inspiratory pressure)	5 - 40
EPAP (expiratory pressure)	0 - 20
Inspiratory ramp (Rise time)	4 Levels
Minimum rate	5 - 60
I/T Ratio	50 to 25%
Inspiratory trigger	5 Levels
Target VT	50 - 1400 ml
Maximum pressure (to reach Target Vt)	8 to 55 mbar (limited to + 3 to +15 of IPAP)
Monitoring	Vti, Vte, Rate, I/T Ratio, FIO <sub>2</sub> , IPAP, EPAP and patient triggering



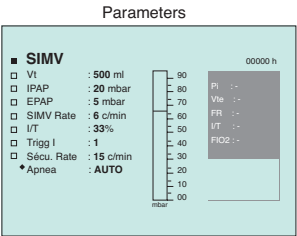
## SETTINGS IN CV/ACV MODE

Tidal Volume	50 - 1400 ml
EPAP (expiratory pressure)	0 - 20
Flow ramp	Rectangular, Decelerated, sinusoidal
Minimum rate	5 - 60
I/T ratio	50 to 25%
Inspiratory trigger	5 Levels
Sigh	Yes / No Vt : from 1,0 to 2,0 of set Vt Rate : 50 to 250
Monitoring	IPAP,EPAP,Vti, Vte, I/T, FiO <sub>2</sub> and patient triggering



## SETTINGS IN SIMV MODE

Tidal Volume	50 - 1400 ml
IPAP (inspiratory pressure)	5 - 40
EPAP (expiratory pressure)	0 - 20
SIMV Rate	2 - 20
I/T Ratio	50 to 25%
Inspiratory trigger	5 Levels
Security rate	4 - 40
Apnea Time	3 - 30 s
Monitoring	IPAP,EPAP,Vti, Vte, I/T, FiO <sub>2</sub> and patient triggering



## Alarms and monitoring menu

The **LEGENDAIR®** offers complete and comprehensive alarm screens

- Settings of minimum and maximum alarm values
- Display of the real measured ventilation values in the active cycles
- Display of the active alarm in a specific window
- Reading of the last 9 stored alarm messages with date and hour stamp
- All alarms are stored in the memory for an eventual retrieval with the Airox communication software package

## ALARMS AND MONITORING SCREEN

**■ PSV ST**

00000 h

	Mini	Patient	Maxi
<input type="checkbox"/> Vti ml	25	-	2500
<input type="checkbox"/> Vte ml	50	-	X
<input type="checkbox"/> Rate bpm	X	-	10
<input type="checkbox"/> FIO <sub>2</sub> %	20	-	100

Pi :-  
 Pe :-  
 I/T :-

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0    10    20    30    40    50    60    70    80    90

mbar

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☐ Alarms Memory

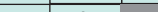
## ALARMS AND MONITORING SCREEN

■ **ACV**

00000 h

	Mini	Patient	Maxi
<input type="checkbox"/> Pi mbar	2	-	40
<input type="checkbox"/> Vte ml	50	-	X
<input type="checkbox"/> Rate bmp	X	-	10
<input type="checkbox"/> FIO2 %	20	-	100

Vti :-  
Pe :-  
I/T :-

0 10 20 30 40 50 60 70 80 90  
  
mbar

☐ Alarms Memory

**LEGENDAIR®** intended use :

- . Home care
- . Adults and infants
- . Pressure and volume ventilation

## Airox communication software

The Airox communication software package is a complete and comprehensive PC software for the **LEGENDAIR®** and all **SMARTAIR®** ventilators (S, ST and Plus). The main functions of this software are :

- Memory download reading: Once downloaded, the memory can be treated to obtain patient compliance and usage data along with listings and statistics on all saved events. Useful medical and technical reports and summaries can be printed from this menu.
- Patient and machine database
- Monitoring: this enables online monitoring of pressure and flow curves with online reading of ventilation parameters (inspiratory, expiratory and total time, tidal volume, I/T ratio, rate, pressure...) you can also save this monitoring to obtain statistics of ventilation over a given selected time.



## Technical Specifications :

Medical device class : II B

Weight : 4,5 Kg

Dimensions : H 154 x L 235 x W 315 mm

Power supply : 115/230 V  $\pm$  10% - 50/60 Hz

Isolation class : II

Consumption : 80 VA nominal and 90 VA Maxi

External battery : 24 V DC

Internal battery : Lithium Ion quick charge.

6 to 11 hours autonomy.

## Accessories and products references

References	Description
4095700 (Global)	<b>LEGENDAIR® single branch</b>
4095701 (UK, Norway)	Equipped with : power supply cable, user's manual, carrying bag, single use patient circuit with exhalation valve
4095705 (CND)	
4095706 (Japan)	
4095709 (Danemark)	
4095900 (Global)	<b>LEGENDAIR® double branch</b>
4095901 (UK, Norway)	Equipped with : power supply cable, user's manual, carrying bag, single use patient circuit with exhalation valve
4095905 (CND)	
4095906 (Japan)	
4095909 (Danemark)	
<b>Accessories</b>	
4096000	External remote alarm (5 meter cable)
3814100	FiO <sub>2</sub> kit (oxygen cell, T adaptator, connexion cable, deflector)
3809999	Exhalation block
3809000	Carrying bag
2962799	Oxygen inlet connector (pack of 5)
4095600	Airox communication software package
3810800	24VDC external cable
<b>Disposables</b>	
5092200	Double branch patient circuit with exhalation valve
5092100	Single branch patient circuit with exhalation valve
3804800	Air inlet filters (pack of 5)
2964200	Oxygen cell (for FiO <sub>2</sub> measurement kit)
2963300	Air inlet combi filter (pack of 6)



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