Chirana
Medical & Dental Company

CHIRANA **AURA** *Basic*

Servoventilátor Chirana AURA basic concept is the solution kit modules. It is designed for long-term ventilation of small children to adults. It allows patients to ensure ventilation from minute ventilation 0.2l /min. Its ventilation parameters of controlled ventilation, through support to patients spontaneous respiration is one of the world's best. Built-in electronic ventilator works based on the use of 4-chamber membrane compressor.

It is completely adaptable to the patient. It offers a wide range of basic therapeutic options. It is more economical solution compared to a more sophisticated model of AURA.

AURA basic has an intuitive user interface that is the hallmark of most products CHIRANA company. Wide range of features allows the user to perform various configuration settings and device for monitoring of a patient`s ventilation.

The advantage is the quality (we use EU components only), price and minimum use of consumables.

Ventilation modes:
- pressure-controlled   assisted / SIMV-p / PCV, SPCV
- volume controlled   assisted / SIMV-in / CMV, SCMV
- support   PS, APRV (BIPAP), 2-Level + PS, CPAP, APMV (MVs)
- advanced features   SIGH, Leakage
- Spontaneous   CPAP
- apnoea ventilation   is automatically embedded in each mode
- NIV   Suitable for non-invasive pressure modes

TECHNICAL DATA
Dimensions and weight

Dimensions	440 x 390 x 450 mm, servoventilator on trolley 1350 mm
Model	mobile
	console - mounting ventilator unit to the console
Weight	35 kg servoventilator
	64 kg servoventilator + trolley

Power supply

O_2 supply pressure central	3 kPa x 100 up to 6 kPa x 100, 120l.min^{-1}
Safety class and apparatus type	class I, B
Mains voltage	TN-S110 - 240 V, 50/60 Hz
Built-in power supply	12V/10 Ah Pb
Operation time with built-in power supply - default param.	more than 2 hours
Max. input	300 VA apparatus + accessories
Mains sockets	2 x max. summary take-off 2 A
Ventilation settings	
Tidal volume Vt	in PCV from 10 ml, in CMV from 20 ml to 2000 ml
Minute ventilation MV	0.2 to 35 l.min^{-1}
Inspiration flow Qmax	3 to 90 l.min^{-1}
Max.inspiration pressure pmax	1 to 10 kPa
Inspiration pressure at PCV ppc	0.5 to 7 kPa adjusting over PEEP
Inspiration pressure at PS pps	0 to 6 kPa adjusting over PEEP
Frequency of breathing f	4 to 80 bpm
Frequency of breathing at SIMV/fSIMV	1 to 20 bpm
Inspiration time Ti %	20 % to 80 % from Tc
Pause on the end of inspirium Tp	0 to 50 % (recommended real value from 10 %)
I : E ratio	1:4 to 4:1
Assistor sensitivity, flow	1 to 20 l.min^{-1}, OFF
PEEP	0 to 25 Pa x 100
Concentration O_2 in insp.flow	21 to 100 %
SIGH	OFF, 10th to 100th (1.25 x Vt, 1.25 x ppc, 1.25 x pps)
Bias flow - base flow	0 to 30 l.min^{-1}
Leakage	OFF, 20 to 70 %
Inteligent expiree	reaction to extreme situation, e.g. patient cough
Automatic oxygenation and manual preoxygenation	oxygenation of the patient by 100 % O_2 before disconnecting from the ventilator or on reconnection to the ventilator
Tubus compensation	OFF, 50 and 100 % relation to diemension of ET cannula

Controlled and displayed parameters, alarm parameters

Alphanumerically evaluated parameters:

Pressure - paw , Volume Vt, minute ventilation MV, minimal pressure pmin= PEEP, medium pressure, concentration insp. O_2, frequency f, T/M effort of the patient

Graphically displayed data:		
	- pressure	pressure curve, P/V curve
	- flow	flow curve, Q/V curve
	- volume	volume curve, P/V curve, Q/V curve

Pulmonary mechanics parameters

Response time - inspirium, expirium, peak alveolar pressure, end-expiratory alveolar pressure, inadvertent PEEPi, static lung compliance, dynamic lung compliance, inspiratory airway and ventilation system resistance

Technical alarms		Supply O_2, Trouble in system, Mistakes during test
		supply pressure O_2, power supply,
Alarm parameters	- pressure	Pmax, Pmin
	- volume	MVmax, MVmin, Vtmin
	- O_2 inspir. concentration	FiO$_2$min, FiO$_2$max
	- frequency	fmin

Monitor	Display 12,1"TFT-LCD
Humidis	VADI 1500 - standard, or VADI 3000 with feedback and respiratory hoses heating

Nebulize	Supply pressure	400 kPa ± 50 kPa
	O_2 consumption	3 l.min^{-1}
	Volume of aerosol	20 ± 8 g.h^{-1}