



Operation of the GENIUS

The mixing system is guaranteed for life . Electronics, electrical parts, valves are guaranteed for 2 years. O2 Cell 1 year warranty.

The case is made of stainless steel 316.

European components .

BEST MIX integrated program, which lets you choose the NITOX adapted to the depth of the dive , and PO2 is selected . PO2 and depth independently adjustable.

Auto calibration and verification of the cell before inflation. Once validated the OXYGEN cell the screen displays 20.9%. If the cell does not function normally, GENIUS will not allow inflation, avoiding errors and / or incident.

Maximum percentage of the gas mixture is set at the factory. The standard is 40 % of O2 . For some countries, according to the law we can set up to 50 %, this upon written request. For operation at over 40% , we give recommendations on specific oil use and maintenance of the compressor. If accidentally % O2 exceeded 42% , the safety valve will close automatically , the alarm will sound , a flashing will appear on the screen. Oxygen no longer arriving in the blender and the compressor continues to operate, the% O2 read by the cell and entering the compressor will drop under 40% , the solenoid valve will open again letting

OXYGEN , then closing when the % will pass the 42% , and this as the flow of OXYGEN has not been set correctly , or that the problem cause of the alarm has not been resolved. The alarm will be active during this time and will be stopped manually via the RESET button.

Relative alarm activated on request by the operator is implemented in the program. It is factory set to + or - 1.5% of reading. Once the percentage of NITROX set via the metering needle valve on the alarm can be activated, if the selected % exceeds the + or - 1 , 5%, the alarm will be activated and operate by opening and closing solenoid security valve, audible and visual alarm when exceeding values with manual RESET to stop .

In both alarm cases, the mixture in the bottle will never be far from what was requested. This alarm operation allows inflation incident to easily correct the NITROX % in the bottle while ensuring optimum safety avoiding exceeding the maximum OXYGEN % to be absorbed by the compressor.

When an unexpected stop of the compressor that is due to a power failure (closing of the solenoid safety interruption by supplying the compressor) , or slow compressor rotation or jammed compressor(closing of the safety valve due to the increase in% O₂) the safety is assured.

For air inflation, just do not put the GENIUS mixer running, it is designed to be completely transparent and not reduces the airflow in any way.

The NITROX % in the bottle will be the same as that read on the screen of GENIUS , unless there is an air leak between the mixer output and the first compressor stage .

GENIUS operates at 24V and must be connected to the same power supply as the compressor so in the case of power supply current switch off and stop of the compressor, the safety valve automatically closes . It is possible to supply the electronic board separately (24 V) , it allows to use the BEST MIX program without the compressor is running. If the compressor does not supply 24 V AC output stable enough , we have a dual 24 v transformer adapted the GENIUS that will separate the supplies of solenoid security valves and electronic /display board.

In case in the futur you want to do TRIMIX blending, It will be possible later on to upgrade your GENIUS as a KING.

We also produce accessories as oxygen analyzers, Oxygen/helium, fittings etc.....