Oxygen 1000

Digital Broadcast Console

>> All the Oxygen power in a compact format

Oxygen 1000 is a Digital Broadcast Console designed for on-air and production studios.

Six faders, three microphone inputs with Automix, powerful internal audio routing, and a wide range of controls and I/O in a classy steel chassis.

Oxygen 1000 is as reliable and easy to use as an analog mixing console. It offers top-class features, including low latency, user presets, smart keys, EQ, compressors, a telephone hybrid, HDMI output, analog and digital I/O, USB, BT, DanteTM AoIP, telco, and a presenter talk box.

Oxygen 1000 can be remotely controlled through the Oxygen Remoter tool, which is always included in any Oxygen Console.

// Overview

Input & Output

- 3 microphone inputs with Automix
- 4 stereo analog inputs
- 4 stereo analog outputs
- 1 built-in telephone hybrid
- 1+4 telco interface with GPIO
- BT audio interface
- 1 digital Out (AES/EBU)
- 2 USB audio interfaces (disabled with DanteTM option installed)
- 8 stereo inputs + 8 stereo outputs via DanteTM (optional)

General

- Fully Digital Broadcast Console for Radio Broadcasting with 6 faders
- A/B Fast source switch buttons for each fader
- 4+1 busses (PGM, SUB, Aux1, Aux2, PFL)
- Near 0 latency (< 0,7 ms I/O)
- Complete Remote Control through the Oxygen Remoter application replicating the surface
- Remote configuration and maintenance via Web Interface
- User-definable Presets & Snapshot
- 5 bands fully parametric Equalizer on every input
- Dynamic Processor with expander and compressor section on each microphone inputs
- Advanced and configurable Monitor Facilities for the Control Room and Studio
- Customizable RGB-colored buttons
- High Resolution (120 LEDs) meter bars for outputs
- HDMI Out for console status display
- 2 Timers (Ctrl-Room and Studio microphones timers on HDMI Monitor)
- TalkBox for guest and presenter (optional)

Versions

- Oxygen 1000
- Oxygen 1000 DanteTM

Options

- Talk Box
- DanteTM I/O Board
- RJ45 adapters for:
- Mic with GPIO
- Line In
- Line Out with GPIO
- Telco with GPIO

Rear panel Oxygen 1000

Oxygen Remoter

Talk Box

For more information about Oxygen 1000, visit our website

// Specifications

Analog Balanced

Connector	RJ45 & XLR Balanced – EMI Suppressed
Input Impedance	2,4 KΩ
Nominal Input Level (sensitivity)	-9/-66 dBu
Max Input Level (clipping point)	+9 dBu
A/D conversion	24 bit / 48 Khz
Signal To Noise Ratio (referred to peak level)	>90 dB
THD+N	<0,01%
Analog Gain	Adjustable +0 ÷ +57 dB (3dB step)
Phantom Power	+48V

Analog Balanced Stereo Inputs

Connector	XLR & RJ45 Balanced – EMI Suppressed
Input Impedance	10 KΩ
Nominal Input Level (sensitivity)	0 dBu
Max Input Level (clipping point)	+18 dBu
A/D conversion	24 bit / 48 Khz
Frequency response	+/-0,5 dB from 20 Hz to 20 kHz
Signal To Noise Ratio (referred to peak level)	>100 dB
Stereo Separation (referred to peak level)	>90 dB
THD+N	<0,002 %

Analog Balanced Telco Input

Connector	RJ45 Balanced – EMI Suppressed
Input Impedance	10 KΩ
Nominal Input Level (sensitivity)	0 dBu
Max Input Level (clipping point)	+18 dBu
A/D conversion	24 bit / 48 Khz
Signal To Noise Ratio (referred to peak level)	>100 dB
THD+N	<0,002%

PSTN Interface

Connector	RJ11
Transhybrid loss	>20 dB

Analog Balanced Stereo Outputs

Connector	RJ45 Balanced – EMI Suppressed
Output Impedance	23 Ω, nominal 600 Ω
Nominal Output Level	0 dBu
Max Output Level (clipping point)	+18 dBu
D/A conversion	24 bit / 48 Khz
Signal To Noise Ratio (referred to peak level)	>100 dB
Stereo Separation (referred to peak level)	>90 dB
THD+N	<0,002 %

// Specifications

USB Audio Digital I/O

Connector	USB Type B – EMI Suppressed
Playback And Recording Sample Rate	SRC 44.1-48 KHz
Resolution	16 bit
Available Stereo Channels	1 Play & 1 Rec for each USB interface

Digital Output

Connector	Balanced on 1 XLR – EMI Suppressed
Input Impedance	110 Ω
Standard	AES3
Audio Sample Rate	48 KHz
Resolution	24 bit
Dynamic Range (Converter Values)	124 dB

Analog Balanced Telco Output

Connector	RJ45 Balanced – EMI Suppressed
Output Impedance	23 Ω, nominal 600 Ω
Nominal Output Level	0 dBu
Max Output Level (clipping point)	+18 dBu
D/A conversion	24 bit / 48 Khz
Signal To Noise Ratio (referred to peak level)	>100 dB
THD+N	<0,002 %

System

Audio Core	Analog Devices ADAU1452 32bit 294 MHz fixed point DSP
Audio CODECs	Cirrus CS42448 24 bit/192 kHz
System Core	Allwinner A20 dual core cortex-A7 at 800MHz, 1GB RAM
LAN Connection	RJ45 - 100Mbit
Nominal Delay (analog input to analog output)	0,7 ms
GPIO Inputs/Outputs	4 GPI/4 GPO on DB9; 4 GPI/2 GPO on Mic2 & Mic3 RJ45; 2 GPO on Out3 & Out4 RJ45; 1 GPI/1 GPO on Telco RJ45
Communication Port	2xUSB type-A, 2xUSB type-B , 1xLAN, 1xHDMI
Operating Temperature	0°C ÷ 40°C

PSU

Power Supply	90-260 VAC / 47-63 Hz / 30 W

Dimensions

Dimensions (W; H; D)	344mm; 80mm; 343mm
Weight	< 5Kg