AUDIOCONTROL12.8

MATRIX & PAGING SYSTEM

CONTROLS MUCH MORE THAN YOUR AUDIO!

AUDIOCONTROL12.8 is a DSP powered audio matrix for small and medium sized audio applications, featuring advanced control of audio processing and routing with control processing which is unique on the market. The unit has 12 inputs, 8 line outputs and a digital stereo SPDIF input and output. There are 3 serial ports (one on the front and two on the rear of the unit) to configure the unit and to control external devices. The AUDIOCONTROL12.8 uses a fixed architecture DSP platform meaning that the audio path has the same fixed flow for all inputs and outputs.

Audio inputs & outputs

The AUDIOCONTROL12.8 has 12 analogue inputs where 6 of them are on balanced euroblock and 6 on RCA. All inputs are configurable to be mono or stereo. Input 12 can either be used as a normal mic/line source input or as a paging microphone input via the RJ45 connector. You can easily adjust the gain, EQ and dynamics on the input via the pc based Graphical Installer Interface.
The 8 line RCA outputs can be configured via the GII to be mono, stereo, 2.1, mono crossover or stereo crossover.

Control & Paging

Via the RJ45 connector you can connect up to 120 paging stations. DIMIC12 is a fully programmable control and paging station for the AUDIOCONTROL12.8 where each button can be programmed individually. DIMIC12 allows you to page zones individually or page a group of zones but also allows macro recalls or control of some audio functions like source selection, zone muting or volume up/down. An expansion panel, DIMIC12S, provides you with 12 extra programmable buttons (a maximum of 7 DIMIC12S paging stations can be connected to one DIMIC1 or DIMIC12).
A maximum of 8 DIWAC's (Digital Wall Controller) can be connected via a 2 wire cable. The DIWAC can control audio and control functions and is very easy to program via the GII. Use the select UP/DOWN buttons to select functions and the +/- buttons to enable or disable functions or to bring the volume up or down.
The serial control port allows control via any touch panel control systems or when adding a NETKIT-RS, a very cost effective touch panel control with a tablet or smart phone is possible.

DIWAC
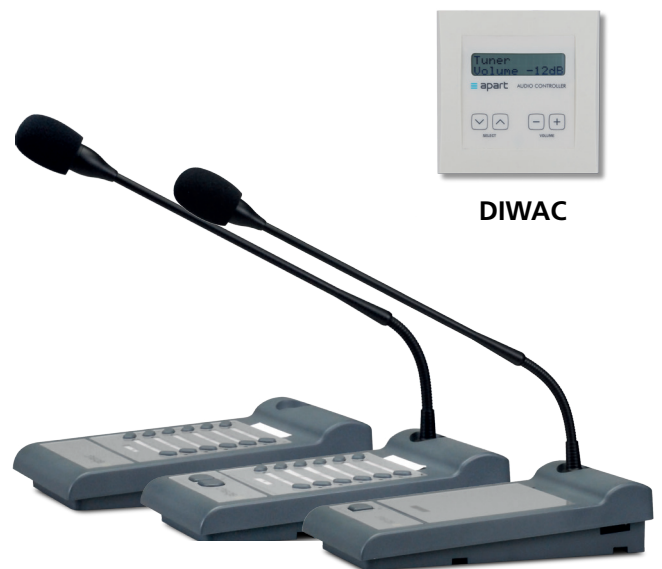
DIMIC12S - DIMIC12 - DIMIC1

AUDIOCONTROL12.8
MATRIX SYSTEM

Out of the box configuration

The AUDIOCONTROL12.8 functions straight from the box without connecting a laptop or the need of programming. When you start with the out of the box configuration you will have 5 stereo line inputs and 4 stereo output zones. Optionally you can connect a DIMIC1 for all call or a DIMIC12 to do selective paging to 4 zones. If you need local control of source select and volume, you can connect up to 2 DIWAC wall controls per output zone.

Graphical Installer Interface

Via the GII (Graphical Installer Interface) you can do the entire configuration of the AUDIOCONTROL12.8 and the programming of the functions of the other devices you want to control via the serial ports. The set-up is so easy that every integrator is able to program it. The audio monitor allows you to listen to the audio, no matter where you are in the signal path. Once your settings have been done, you can make a printout so that the installer exactly knows where to connect which sound source, zone amplifier or wall control. The configuration can also be saved on your computer as back-up and you can copy it easily to other devices.

For advanced programming of the AUDIOCONTROL12.8 you need to have an Expert Level access code. After succeeding the Expert Level Certification Program, you will receive this access code.

In Expert Level Mode, you have full access to the EQ settings and dynamics, you can program the functions of the paging station buttons and wall controls and you can program and recall macros.

Once your configuration is made in Expert mode, your installations are protected and can only be altered by other people that have an Expert Level Access code. It even allows you to lock the AudioControl so that only people from your organisation can make changes to the settings using your password.
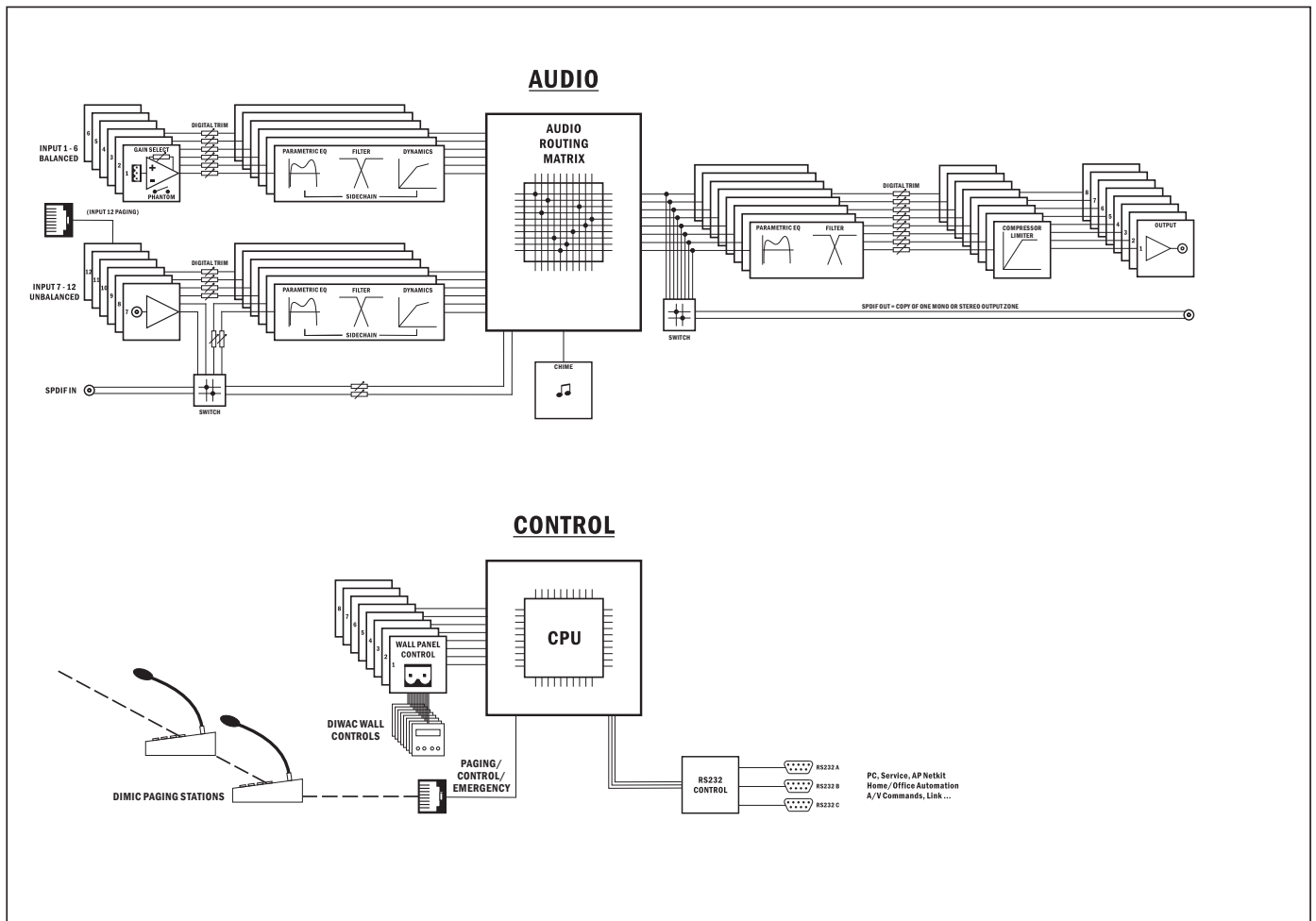

AUDIOCONTROL12.8 front panel
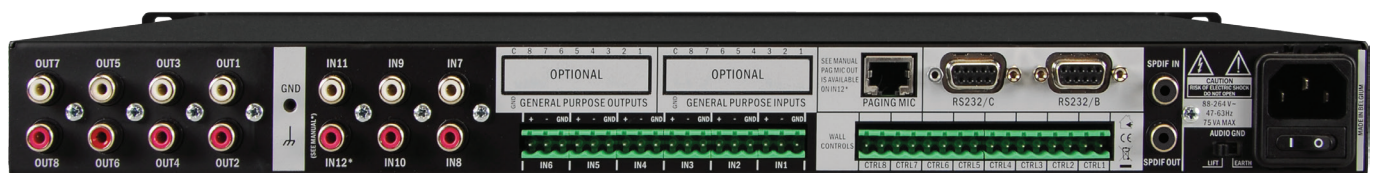
AUDIOCONTROL12.8 rear panel

AUDIOCONTROL12.8
MATRIX SYSTEM

AUDIO

CONTROL

AUDIOCONTROL12.8 block diagram

AUDIOCONTROL12.8
MATRIX SYSTEM

Analog input and output	
Balanced inputs 1 – 6 on euroblock	
phantom power	24 VDC, individually selectable
input gain settings	Digital gain trim: 0 - 20 dB
input impedance	attenuator enabled (+13dBV input sensitivity): 2 kΩ
	other gain settings: 6 kΩ
max input level inputs 1-6	Gain stage 1 (attenuator): +18 dBV
	Gain stage 2 (no gain): +9 dBV
	Gain stage 3 (low gain): -10 dBV
	Gain stage 4 (high gain): -26 dBV
SNR inputs 1-6	Gain stage 1 (attenuator) : 100dB un-weighted
	Gain stage 2 (no gain): 100dB un-weighted
	Gain stage 3 (low gain): 89dB un-weighted
	Gain stage 4 (high gain): 77dB un-weighted
Unbalanced inputs 7 – 12 on RCA	
input gain settings	Digital gain trim: 0 - 20 dB
input impedance	10 kΩ
max input level 7-12	Max input level: +18 dBV
SNR inputs 7-12	100dB un-weighted
SPDIF stereo digital input on RCA	
SPDIF 2 channel. 8 – 24 bit, 32 – 96 kHz sampling rate with sampling rate converter	
SPDIF stereo digital output on RCA	
SPDIF 2 channel. 24 bit, 48 kHz fixed sampling rate	
Unbalanced outputs 1 – 8	
output impedance	<100 Ω
output gain settings	Digital gain trim: -12dB to +6dB
THD outputs	0,005% un-weighted
	0,03% un-weighted with output boost
max output level	+5 dBV, with output boost possible to +20dBV

AUDIOCONTROL12.8
MATRIX SYSTEM

Remote interfaces	
up to 120 DIMIC1/DIMIC12/DIMIC12S paging stations	RJ45 cable
up to 8 x DIWAC wall control panels	on 2-pin euroblock connector
1 x serial port for PC configuration using the GII (Graphical Installer Interface)	RS232 port A settings: 19200 baud rate, 8 databits, no parity and 1 stop bit
2 x serial ports to control external equipment or AudioControl with limited subset	RS232 ports B and C settings: baud rate selectable via GII: 600, 1200, 2400, 4800, 9600, 19200, 38400
General specifications	
Dynamic range	93dB
	97.5dB with output boost
Crosstalk	SPDIF in to analog output: 97 dB @ 1 kHz
	Unbalanced inputs to analog output: 92 dB @ 1 kHz
	Balanced inputs to analog output: 95 dB @ 1 kHz
Frequency response	20Hz to 20 kHz +- 1dB
Front panel indicators	24 multi colour audio signal leds
	22 control indicator leds
	Power indicator led
DSP type	Fixed point DSP with fixed audio path
A/D, D/A convertor type	24 bit / 48 KHz
Sampling rate DSP	48 KHz
Latency	1.2ms
Weight	Net weight: 3.8 kgs
Dimensions	W x D x H: 484 x 316 x 44 mm
Mains input voltage	88 – 264 VAC / 50-60 Hz
Power consumption	Max 75 VA
Mounting and ventilation requirements	Freestanding or 19" rackmountable

Designed in Belgium and built in Europe.