

# Amplifier

# DA12

DA12 is a 4 channels amplifier used with all APG loudspeakers ranges depending on the desired application.

DA12 includes signal processing, analog, AES3, Dante/AES67 inputs and outputs, and a bright 4.3" IPS display with capacitive touch.

The 4 channels offers high power and voltage, allowing for high SPL even with 8 or 16  $\Omega$  loads, and is capable of delivering a massive 4 x 3000 W output on 4  $\Omega$  loads.

The amplifier's power supply has been designed to operate anywhere in the world. An internal energy storage system allows the amplifier keep a consistent performance in the event of a drop in the quality of the electrical network to which the amplifier is connected.

The amplifier can be controlled with touch screen. Available functions includes preset recall, gain, delay, and muting functions.

DA12 can also be controlled remotely with ArmoniaPlus software.



DA12 Amplifier

Number of channels : 4

Output power @8 $\Omega$  : 1800W per channel

Output power @4 $\Omega$  : 3000W per channel

Output power @2 $\Omega$  : 2500W per channel

Output power @8 $\Omega$  bridged : 6000W

Output power @4 $\Omega$  bridged : 5000W

Inputs : Analog, Digital (AES3, Dante/AES67)

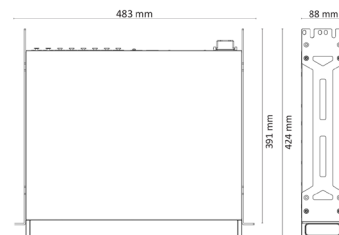
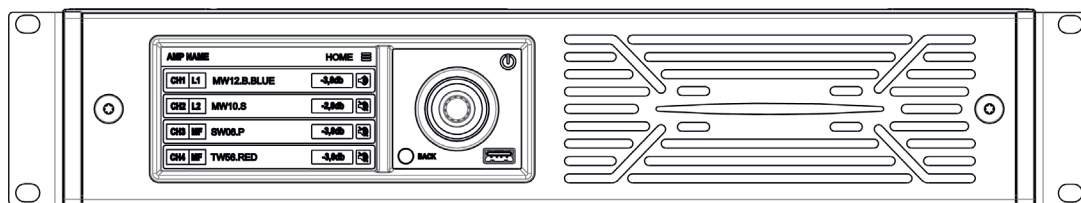
Remote : GPI or Ethernet

5 years warranty

The APG logo is displayed in a large, bold, black font. Below the letters, there is a horizontal blue line that tapers at both ends, resembling a stylized underline or a signal pulse.

# DA12

## Technical Specifications



### Channel Handling

Outputs	4 x Speakon NL4
	4 Dante/AES67 TX (from local input or DSP)
Inputs	
Analog	4 XLR female
	4 XLR male (LINK)
Digital AES3	2 XLR female (4 x audio channels)
	2 XLR male (LINK)
Digital Dante/AES67	2 XLR Ethercon (4 x audio channels)

### Audio

	Gain	DA12
Input sensitivity @ 8Ω	32dB	3.22 Vrms
S/N (20 Hz - 20 kHz @ 8Ω)		109 Typ dB(A)
Max input level		24 dBu
Frequency response @ 8Ω load		20 Hz - 20 kHz +/- 1.0 dB
Crosstalk (1 kHz)		-75 dB typ.
Input impedance		20 kΩ Balanced
CMRR		65 dB typ.
THD+N (from 0.1W to Half Power)		<0.1% (typical <0.05%)
SMPTE IMD (from 0.1W to Half Power)		<0.1% (typical <0.05%)
Output impedance at 100 Hz		30mΩ

### DSP

AD converters	24 Bit Tandem™ @ 48 kHz
	125 dB-A Dynamic Range - 0.005 % THD+N
DA converters	24 Bit Tandem™ @ 48 kHz
	117 dB-A Dynamic Range - 0.003 % THD+N
Sample rate converter	24 Bit @ 96 kHz
	140 dB Dynamic Range - 0.0001 % THD+N
Internal precision	32 bit floating point
Latency	2.5 ms fixed latency architecture
Memory/Presets	50 amplifier snapshots, virtually unlimited speaker presets
Delay	2 s (input) + 100 ms (output) for time alignment
Equalizer	Raised-cosine, custom FIR, parametric IIR: peaking, hi/lo-shelving, all-pass, band-pass, band-stop, hi/lo-pass
Crossover	linear phase (FIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR)
Limiters	TruePower™, RMS voltage, RMS current, Peak limiter
Damping control	Active DampingControl™ and LiveImpedance™ measurement

### Display Specs

Resolution	480x272, 4,3" diagonal
Brightness	600 nit
Control	Multitouch capacitive, Rotary encoder 20 steps/turn with pushbutton

### Output Stage

per channel @ 8Ω (symmetrical) *	1800W
per channel @ 4Ω (symmetrical) *	3000W
per channel @ 2Ω (symmetrical) *	2500W
per channel @ 8Ω (asymmetrical) **	1900W
per channel @ 4Ω (asymmetrical) **	3600W
per channel @ 2Ω (asymmetrical) **	2500W
@ 8Ω bridged	6000W
@ 4Ω bridged	5000W
Maximum unclipped output voltage	180V <sub>peak</sub>
Maximum output current	>55A <sub>peak</sub>
* All channels driven and loaded symmetrically	
** All channels driven, but channels 2 and 4 at -6dB	

### Power & Thermal

		DA12
@ 100 V	Standby	Power 15.8 W
	Idle	Power 33.7 W
	1/8 Power @4Ω	Power 1429 W
		Current Draw 14.7 A <sub>rms</sub>
@ 240 V	Standby	Power 17.2 W
	Idle	Power 33.5 W
	1/8 Power @4Ω	Power 1327 W
		Current Draw 6.0 A <sub>rms</sub>
		Thermal Loss 1458 BTU/h
		Thermal Loss 1111 BTU/h
Power supply	Universal regulated switch mode with PFC	
Nominal voltage (+/-10%)	100-240 VAC @ 50-60Hz	
Operating Voltage	90-264 VAC @ 50/60 Hz	
AC Mains connector	IEC C20 inlet (20 A max)	

### Constructions

Dimensions	483 x 381 x 88.9 mm (19 x 15 x 3.5 in)
Weight	11.3 kg