



**Armonía-Plus**  
System Manager

## OVERVIEW

- › Small to medium-scale venues
- › Main systems, central or distributed, subwoofers, hi-Z/lo-Z
- › Mission critical applications
- › Shops, stores
- › Theatres, restaurant, and bars
- › Houses of worship
- › Convention centres
- › Business centres
- › Cruise ships

The ISA 4D32 is specifically designed for installation applications.

In just 1 RU, it offers smaller dimensions, lighter weight and the traditionally amazing sound quality and reliability of all Outline products.

ISA 4D32 amplifiers implement a high efficiency microprocessor controlled power supply with built in PFC (Power Factor Correction) that allows flawless worldwide operation with any AC mains voltage in the range 90-264 VAC tolerant to peak up to 400 VAC.

The patented SRM (Smart Rails Management) technology allows to maximize the efficiency of the system and drastically reduce power consumption at any load and usage condition.

A secondary high efficient power supply is present to keep the system responsive at any operating condition, so that system check and monitoring can be performed even in stand-by and deep-sleep modes.

This amplifier is designed to work with lo-Z (from 2 Ω) and with 70V/100V distributed lines: any mixed configuration of low and high impedance output loads can be realized, making the ISA 4D32 suitable to applications in installed audio systems.

## CHANNEL HANDLING

Number of output channels	4 Hi-Z or Lo-Z (bridgeable per ch.pair)	Phoenix PC 5/8-STF1-7,62
Number of input channels	Analog	4 Phoenix MC 1,5/12-ST-3,81
	Dante™	4 1 x RJ45

## AUDIO

Input sensitivity @ 8 Ω with 26 dB Gain	3.54	Vrms
Input sensitivity @ 8 Ω with 29 dB Gain	2.51	Vrms
Input sensitivity @ 8 Ω with 32 dB Gain	1.78	Vrms
Input sensitivity @ 8 Ω with 35 dB Gain	1.26	Vrms
SNR (20 Hz - 20 kHz @ 8 Ω)	>108	dB (A)
Max Input Level	20 dBu	
Frequency Response	20 Hz - 20 kHz ±1.0 dB, 1 W @ 8 Ω	
Crosstalk (1 kHz)	typical -70 dB	
Input Impedance	20 kΩ balanced	
THD+N (from 0.1 W to Half Power)	< 0.1% (typical < 0.05%)	
SMPTE IMD (from 0.1 W to Half Power)	< 0.1% (typical < 0.05%)	
Slew Rate	> 50 V/μs @ 8 Ω, input filter bypassed	
Output impedance at 100 Hz	26 mΩ	

## 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 @ 44.1 kHz to 192 kHz 140 dB Dynamic Range - 0.0001% THD+N	
Internal precision	32 bit floating	
Latency	2.5 ms fixed latency architecture	
Memory/Presets	49 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 LivImpedance™ measurement	

## OUTPUT STAGE

MAXIMUM OUTPUT POWER	per channel @ 8 Ω (symmetrical)*	600	W
	per channel @ 4 Ω (symmetrical)*	600	W
	per channel @ 2 Ω (symmetrical)*	800	W
	@ 4 Ω Bridged (symmetrical)*	1600	W
	@ 8 Ω Bridged (symmetrical)*	1200	W
	@ Hi-Z distributed line 100 V (symmetrical)*	600	W
	@ Hi-Z distributed line 70 V (symmetrical)*	600	W
	per channel @ 8 Ω (asymmetrical)**	1300	W
	per channel @ 4 Ω (asymmetrical)**	1700	W
	per channel @ 2 Ω (asymmetrical)**	1600	W
	@ Hi-Z distributed line 100 V (asymmetrical)**	1500	W
	@ Hi-Z distributed line 70 V (asymmetrical)**	1700	W
Maximum unclipped output voltage @ 8 Ω	100	V <sub>peak</sub>	
Maximum output current	45	A <sub>peak</sub>	

\* All channels driven with the same burst power  
\*\* Maximum power-sharing capacity per channel

## POWER & THERMAL

@ 115 V	Idle	Power	31.1	W
		Current Draw	0.45	A <sub>rms</sub>
		Thermal Loss	106	BTU/h
	1/8 Power @ 4 Ω	Power	405	W
		Current Draw	3.7	A <sub>rms</sub>
		Thermal Loss	360	BTU/h
@ 230 V	Idle	Power	31.5	W
		Current Draw	0.25	A <sub>rms</sub>
		Thermal Loss	107	BTU/h
	1/8 Power @ 4 Ω	Power	405	W
		Current Draw	2.1	A <sub>rms</sub>
		Thermal Loss	360	BTU/h

**Power Supply** Universal regulated switch mode with PFC, SRM

**Nominal Voltage (±10%)** 100-240 VAC @ 50-60 Hz

**Operating Voltage** 90-264 VAC

**AC Mains connector** IEC C20 inlet (20 A max)  
region-specific power cord provided

Typical use case power consumption is expected to be at least 20% lower (likely more than 50% lower)

## NETWORKING

**Standards compliance** auto-sensing Fast Ethernet (IEEE 802.3u, 100 Mbit/s)

**Supported topologies** Star

**Remote Interface** ArmoníaPlus™

## CONSTRUCTION

**Dimensions** 483 mm (19") x 44.5 mm (1.75") x 358 mm (14.1")

**Weight** 7 kg (15 lb)