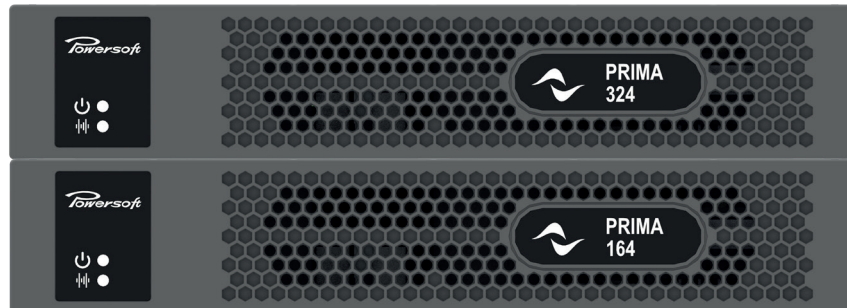


PRIMA Series

4 Channel Fixed Installation Power Amplifier



- ☐ TOURING
- ☒ INSTALLATION



This 4-channel power amplifier is developed primarily for installed applications in systems where upstream processing electronics are already present and require a high-quality power amplifier in line with Powersoft solutions. Its compact form factor (1/2 rack unit width) makes it particularly suitable for a variety of installation options, from rack cabinets to desktop mounting.

This amplifier is offered in two models with 4 channels each, delivering 160 W and 320 W total output power, with power sharing capabilities. Both models offer 4 analog input channels and 4 output channels, with a fixed one-to-one routing matrix in which each input

is routed to the corresponding output (IN1->OUT1, IN2->OUT2, IN3->OUT3, IN4->OUT4).

The 4 output channels can be independently configured for Lo-Z or Hi-Z operation via the autoseup procedure, which sets gain, HPF, and limiters according to the load measured on each output. If speakers of the same type are connected to the amplifier, all outputs can be configured to operate in the same output mode without running the autoseup procedure, simply by setting the entire amplifier to Lo-Z, 100 V, 70 V, or 25 V mode.

Moreover, PRIMA features low-power modes which, when enabled, are activated automatically, placing

the amplifier into Eco or Auto-Standby mode after a predefined period of inactivity.

These modes reduce amplifier power consumption in the absence of signal, without requiring the unit to be turned off at the end of operations. The amplifier is then able to wake up automatically when a signal is detected on any channel.

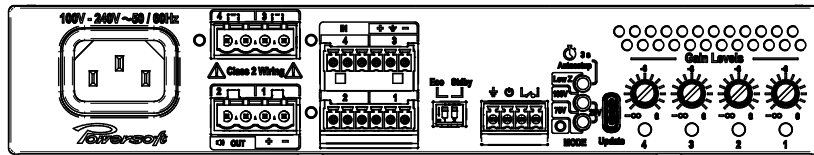
The front and rear panel LEDs allow local monitoring of the device's overall operating status and channel status.

- ▶ Autoseup
- ▶ Power Sharing
- ▶ Lower consumption modes



PRIMA Series

4 Channel Fixed Installation Power Amplifier



Specifications

Channel Handling		
Number of output channels	4 Hi-Z or Lo-Z	Phoenix MSTB 2,5/ 4-ST-5,08
Balanced inputs channels	4	Phoenix BCP-381- 6 GN

Audio	
Input sensitivity @ 8 Ω	2,2V _{rms} 9,1 dBu
Output noise floor	-68 dBV(A)
SNR	108 dB(A)
Max input level	18 dBu
Frequency Response	20 Hz - 20 kHz +/- 0.5 dB, @ 8 Ω
Crosstalk	-66dB @100Hz to 1kHz
Input impedance	20 k Ω balanced
THD	< 0.1% @1kHz
CMRR	60dB

DSP	
AD converters	32 Bit @ 48 kHz 111 dB(A) Dynamic Range - 0.0007 % THD+N
DA converters	32 Bit @ 48 kHz 116 dB(A) Dynamic Range - 0.0003 % THD+N
Latency	2.5 ms fixed latency architecture
High pass filter*	A 18 dB/oct Butterworth high pass filter
Limiters*	Peak limiter
Startup time	< 3 s
Wakeup time	<1 s for Standby mode <0.1 s for Eco mode

*Automatically set based on the impedance response in the autoseup.

Environmental	
Operating temperature range	0°C to +55°C (derating above 35°C)
Storage relative humidity range	10% to 90% humidity (non condensing)
IP class	IP 20 (indoor use only)

Construction	
Dimensions	216 x 270 x 40 (WxDxH) mm 8.5 x 10.6 x 1.6 (WxDxH) in
Weight	2 kg (4.4 lb)

	Output Stage	PRIMA 164	PRIMA 324
Maximum output power	Commercial total rated power	160 W	320 W
	per channel @ 100 V (symmetrical)*	40 W	70 W
	per channel @ 70 V (symmetrical)*	40 W	80 W
	per channel @ 25 V (symmetrical)*	40 W	80 W
	per channel @ 16 Ω (symmetrical)*	40 W	80 W
	per channel @ 8 Ω (symmetrical)*	40 W	80 W
	per channel @ 4 Ω (symmetrical)*	40 W	80 W
	per channel @ 2 Ω (symmetrical)*	40 W	80 W
	Maximum power sharing capacity per channel		
	per channel @ 100 V (asymmetrical)**	80 W	145 W
	per channel @ 70 V (asymmetrical)**	110 W	220 W
	per channel @ 25 V (asymmetrical)**	110 W	220 W
	per channel @ 16 Ω (asymmetrical)**	110 W	220 W
	per channel @ 8 Ω (asymmetrical)**	110 W	220 W
	per channel @ 4 Ω (asymmetrical)**	110 W	220 W
	per channel @ 2 Ω (asymmetrical)**	80 W	120 W
	Maximum unclipped output voltage	142 V _{peak}	
	Maximum output current	11 A _{peak}	

*Available by driving and loading all the channels symmetrically.

**Maximum assignable per channel and the result of the auto setup

Power & Thermal		PRIMA 164	PRIMA 324	
@ 115 V	Input Power	13	13	W
	Idle			
	Current Draw	0.167	0.167	A _{rms}
	Thermal Loss	43	43	BTU/h
	1/8			
	Input Power	48	91	W
@ 230 V	Max Power @ 4 Ω			
	Current Draw	0.427	0.75	A _{rms}
	Thermal Loss	96	174	BTU/h
	Idle			
	Input Power	15	15	W
	Current Draw	0.127	0.127	A _{rms}
	Thermal Loss	49	49	BTU/h
	1/8			
	Input Power	51	90	W
	Current Draw	0.263	0.432	A _{rms}
	Thermal Loss	105	170	BTU/h
Power supply		Universal regulated switch mode with PFC and SRM		
Nominal Voltage		100-240 VAC @ 50/60 Hz		
Nominal Voltage Tolerance		±10%		
Operating Voltage		90-264 VAC @ 50/60 Hz		
AC Mains connector		IEC C13 10A		
Eco Mode consumption		7 W (typical)		
Standby consumption		2 W		

Data subject to change without notice



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