



Highlights:

- · 24 Volts emergency power operation
- Terminal block output connections (4Ω , 25V, 70V & 100V)
- · XLR input & linkthrough connections with gain control
- · Class A/B amplifier technology
- · Advanced protection circuit
- · Ground lift switch
- · High-pass filter switch

The CPA24 is a professional single channel 100V power amplifier with a power of 240 Watt, especially designed for most common 100V PA systems, and perfect to be used in combination with the CPR12 pre-amplifier. It is designed as a no-nonsense amplifier with only the necessary controls and connections. This creates great simplicity in use and installation. There are several power output taps available for use in 100V, 70V and even 4 Ohm Low impedance installations and they are fitted with an advanced multipurpose protection circuit. The protection circuit detects DC malfunction, short circuit, overheating, overload and limits the signal when necessary. Another present feature is the 24 V DC connection for powering the amplifier with emergency power when the main power is shut down. At the back of the amplifier, there are trim potentiometers to set the input level, a high pass filter switch and a ground lift switch provided. The input connection is made with balanced XLR connectors, and there's a signal output for linking with other amplifiers. The steel 19" housing has a height of 2 HE.

Applications:

- · Public facilities
- Retail
- · Corporate spaces
- · Bars, restaurants





System specifications:

RMS Power		240 W
Frequency	Response (± 3 dB)	70 Hz - 18 kHz
Signal / Noise		> 90 dB
THD+N (@ 1 kHz)		< 1%
Technology		Class A/B
Power	Supply	Conventional (Transformer)
	Source	230 \sim 240 V AC / 50 \sim 60 Hz (110 \sim 115 V AC / 50 \sim 60 Hz after connection change)
Inputs	Sensitivity (1W/1m)	-12 dB ~ 0 dB
	Impedance	10 kΩ balanced
	Connector	XLR female with Male Linkthrough
Outputs	Voltage / Impedance	100 V / 42 Ω
		70 V / 21 Ω
		31 V / 4 Ω
	Connector	4-pin Euro Terminal block (Pitch - 7.62 mm with locking)
Protection		DC Short circuit
		Over heating
		Over load
		Signal limiting
Cooling		Dual speed controlled FAN
Operating temperature		0° ~ 40° @ 95% Humidity

Product Features:

Dimensions		482 x 88 x 330 mm (W x H x D)
Weight		13 kg
Mounting		19"
Unit height		2 HE
Construction		Steel
Colours		Black
Accessories	Included	4-pin Euro Terminal Block outputs connector
		2-pin Euro Terminal Block 24V Power connector
	Optional	CPE100 Rack mount handles

Architects' and Engineers' Specifications:

The Amplifier shall be a constant voltage 100 Volt type with an output power of 240 Watt. The construction shall be made using Class-AB Amplifier technology with an 100 V output transformer. It shall contain integrated circuitry to protect against short-circuits or mismatched loads and over-heating. The operating temperature shall be continuously monitored and controlled using a dual speed fan driver. Additionally, the load shall be protected against DC faults and a clip limiter shall automatically reduce the input gain at onset of distortion.

The front panel shall contain an AC power switch accompanied by a blue power indicator LED and operation indicator LED's. Two green signal LED's indicating the presence of an input signal and it's level exceeding the -20 dB level, a yellow clip LED indicating the operation at maximum level and a red protection LED indicating any fault detected shall be provided.

All connections shall be made on the rear panel of the unit. The signal input connection shall be balanced and performed using a female XLR connector with male XLR connector allowing signal link through to other amplifiers. A gain control potentiometer shall be provided to adjust the input sensitivity within a range of -12 dB to 0 dB, and a switch shall allow the enabling / disabling of a high-pass filter with a roll off frequency of 400 Hz.

The output connections shall be performed using a 4-pin Terminal block connector with three different power taps for use with 100 Volt, 70 Volt constant voltage and 4 Ohm low impedance applications.

The power supply shall be a conventional type operating on a $230\sim240 \text{ V}$ AC / $50\sim60 \text{ Hz}$ mains network, which is adaptable to $110\sim115 \text{ V}$ AC / $50\sim60 \text{ Hz}$ operation by making some minor internal adjustments on the power transformer connections. Additionally, an emergency power inlet shall be provided to keep the system running on 24 Volt emergency power when the mains power is shut down.

It shall be equipped with a removable power cord having a standard shuko (CEE 7/7) AC plug. The connector on the amplifier chassis shall be a fused IEC C14 type and the emergency power inlet shall be performed using a 2-pin terminal block connector.

The amplifier chassis shall be a two rackspace steel constructed 19" housing. Depth from mounting surface to rear supports shall be 330 mm and the weight shall not exceed 13 Kg.

