

# CAP448 Quad-channel power amplifier 4 x 480W 100V

The CAP series are professional 100V Multi-Channel Power Amplifiers, containing various models with different channels and different output power configuration. CAP448 is a four channel version with an output power 480 Watt. This way, a flexible solution is created for Multi-Zone audio distribution systems with four zones. They are designed as no-nonsense amplifiers with only the necessary controls and connections, which creates great simplicity in use and installation. A high efficiency and reliability of the devices is achieved by using switching power supplies in combination with Class-D amplifier technology. A temperature controlled FAN constantly keeps all parts within the right operation range, while avoiding excessive buzz. A built-in multipurpose protection circuit protects against DC malfunction, Short circuit, overheating, overload and limits the signal when necessary. The input connections are performed using balanced XLR connectors and Link output connectors are provided for link through to other amplifiers. Besides, a high-pass filter switch (400 Hz) and a Gain adjustment potentiometer are provided for each channel. The output connections are performed using reliable terminal block connectors and this all is housed into a solid constructed, double rack space (2 HE) 19" rack mounting housing.





### **Applications:**

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

## System specifications:

Frequency         Response (± 3 dB)         50 Hz - 22 kHz           Signal / Noise         > 100 dB           THD+N (@ 1 kHz)         < 0.3% (1/2 Rated Power)           Crosstalk (@ 1 kHz)         < 80 dB           Technology         Class-D           Power         Supply         Switching mode           Inputs         Source         230 - 240 V AC / 50 Hz           Inputs         Sensitivity (1W/1m)         -0.5 dB ~ 10.5 dB           Impedance         10 kΩ balanced           Connector         XLR female with Male Linkthrough           Outputs         Voltage / Impedance         100 V / 21 Ω           Conmon mode rejection ratio         4-pin Euro Terminal Block (Pitch - 5.08 mm)           Common mode rejection ratio         DC Short circuit           Over load         Signal limiting           Cooling         Temperature controlled FAN           Operating temperature         0° ~ 40° @ 95% Humidity	RMS Power		4 x 480 W
THD+N (@ 1 kHz) < 0.3% (1/2 Rated Power)  Crosstalk (@ 1 kHz) < 80 dB  Technology Class-D  Power Supply Switching mode  Source 230 ~ 240 V AC / 50 Hz  Inputs Sensitivity (1W/1m)	Frequency	Response (± 3 dB)	50 Hz - 22 kHz
Crosstalk (@ 1 kHz)       < 80 dB	Signal / Noise		> 100 dB
Technology  Power  Supply Switching mode  Source 230 ~ 240 V AC / 50 Hz  Inputs Sensitivity (1W/1m) -0.5 dB ~ 10.5 dB  Impedance Impedance Connector XLR female with Male Linkthrough  Outputs Voltage / Impedance 100 V / 21 Ω  Connector 4-pin Euro Terminal Block (Pitch - 5.08 mm)  Common mode rejection ratio Protection  Protection  DC Short circuit Over heating Over load  Cooling  Cooling  Temperature controlled FAN	THD+N (@ 1 kHz)		< 0.3% (1/2 Rated Power)
Power       Supply       Switching mode         Source       230 ~ 240 V AC / 50 Hz         Inputs       Sensitivity (1W/1m)       -0.5 dB ~ 10.5 dB         Impedance       10 kΩ balanced         Connector       XLR female with Male Linkthrough         Outputs       Voltage / Impedance       100 V / 21 Ω         Common mode rejection ratio       70 dB         Protection       DC Short circuit         Over heating       Over load         Signal limiting         Cooling       Temperature controlled FAN	Crosstalk (@ 1 kHz)		< 80 dB
Inputs     Source     230 ~ 240 V AC / 50 Hz       Inputs     Sensitivity (1W/1m)     -0.5 dB ~ 10.5 dB       Impedance     10 kΩ balanced       Connector     XLR female with Male Linkthrough       Outputs     Voltage / Impedance     100 V / 21 Ω       Connector     4-pin Euro Terminal Block (Pitch - 5.08 mm)       Common mode rejection ratio     70 dB       Protection     DC Short circuit       Over heating       Over load       Signal limiting       Cooling     Temperature controlled FAN	Technology		Class-D
Inputs       Sensitivity (1W/1m)       -0.5 dB ~ 10.5 dB         Impedance       10 kΩ balanced         Connector       XLR female with Male Linkthrough         Outputs       Voltage / Impedance       100 V / 21 Ω         Connector       4-pin Euro Terminal Block (Pitch - 5.08 mm)         Common mode rejection ratio       70 dB         Protection       DC Short circuit         Over heating       Over load         Signal limiting         Cooling       Temperature controlled FAN	Power	Supply	Switching mode
Impedance       10 kΩ balanced         XLR female with Male Linkthrough         Outputs       Voltage / Impedance       100 V / 21 Ω         Connector       4-pin Euro Terminal Block (Pitch - 5.08 mm)         Common mode rejection ratio       70 dB         Protection       DC Short circuit         Over heating       Over load         Signal limiting         Cooling       Temperature controlled FAN		Source	230 ~ 240 V AC / 50 Hz
Connector XLR female with Male Linkthrough  Outputs Voltage / Impedance 100 V / 21 Ω  Connector 4-pin Euro Terminal Block (Pitch - 5.08 mm)  Common mode rejection ratio 70 dB  Protection DC Short circuit  Over heating  Over load  Signal limiting  Cooling  Temperature controlled FAN	Inputs	Sensitivity (1W/1m)	-0.5 dB ~ 10.5 dB
Outputs     Voltage / Impedance     100 V / 21 Ω       Connector     4-pin Euro Terminal Block (Pitch - 5.08 mm)       Common mode rejection ratio     70 dB       Protection     DC Short circuit       Over heating     Over load       Signal limiting       Cooling     Temperature controlled FAN		Impedance	10 kΩ balanced
Common mode rejection ratio 70 dB  Protection DC Short circuit Over heating Over load Signal limiting  Cooling Temperature controlled FAN		Connector	XLR female with Male Linkthrough
Common mode rejection ratio  Protection  DC Short circuit  Over heating  Over load  Signal limiting  Cooling  Temperature controlled FAN	Outputs	Voltage / Impedance	100 V / 21 Ω
Protection DC Short circuit  Over heating Over load Signal limiting  Cooling Temperature controlled FAN		Connector	4-pin Euro Terminal Block (Pitch - 5.08 mm)
Over heating Over load Signal limiting Cooling Temperature controlled FAN	Common mode rejection ratio		70 dB
Over load Signal limiting  Cooling Temperature controlled FAN	Protection		DC Short circuit
Cooling Signal limiting  Temperature controlled FAN			Over heating
Cooling Temperature controlled FAN			Over load
			Signal limiting
Operating temperature 0° ~ 40° @ 95% Humidity	Cooling		Temperature controlled FAN
	Operating temperature		0° ~ 40° @ 95% Humidity

## **Product Features:**

Dimensions		482 x 88 x 420 mm (W x H x D)
Weight		8.850 kg
Mounting		19"
Unit height		2 HE
Construction		Steel
Colours		Black
Accessories	Included	4 x 4-pin Euro Terminal Block outputs connector
	Optional	CPE100 Rack mount handles

### Architects' and Engineers' Specifications:

The Amplifier shall be a constant voltage 100 Volt type, containing four independent controllable amplifier channels with an output power of 4 x 480 Watt. The construction shall be transformerless, using Class-D Amplifier technology and powered by a switching power supply.

Each channel shall have integrated circuitry to protect against short-circuits or mismatched loads and over-heating. The operating temperature for each channel shall be continuously monitored and a speed-controlled fan will keep it within the operating range while minimising the acoustic noise. 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 channel 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 clip LED indicating the channel operation at maximum level and a protection LED indicating any fault detected shall be provided for each channel.

All connections shall be made on the rear panel of the unit. The signal input connections shall be balanced and performed using female XLR connectors with male XLR connectors allowing signal link through to other channels or amplifiers. A gain control potentiometer shall be provided to adjust the input sensitivity within a range of -0.5 dB to 10.5 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 4-pin Terminal block connectors, allowing connectivity of multiple loudspeaker lines on one amplifier channel.

The amplifier shall operate on a 230~240 V AC / 50 Hz mains network and 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.

The amplifier chassis shall be a two rackspace steel constructed 19" housing. Depth from mounting surface to rear supports shall be 420 mm and the weight shall not exceed 8.85 Kg.

