



## Highlights:

- · Lightweight class-D amplifier
- · Advanced protection circuit
- XLR input & linkthrough connections with gain control & HPF switch
- Terminal block output connections
- · High-pass filter switch

The CAP412 is a professional four channel 100V power amplifier which is capable of providing 120 Watt to each of the four separate output channels. This creates a great flexibility and new possibilities for installed multi-zone audio distribution systems. It is designed as a no-nonsense amplifier with only the necessary controls and connections which creates great simplicity in use and installation. Every output channel contains different power taps to be used in 100 Volt, 70 Volt and even 4 Ohm low impedance applications and the input signal connections are performed using balanced XLR connectors, allowing link through to other amplifiers. Besides all the desired connection possibilities, the CAP412 also offers a gain control potentiometer and a high-pass filter switch (400Hz) on the back of the unit. A built-in multipurpose protection circuit protects against DC malfunction, short circuit, overheating, overload, and limits the signal when necessary. This all is built into a double rack space, steel 19" housing.



- Retail
- · Public facilities
- Corporate spaces
- · Clubs, bars, restaurants





## 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         100 - 240 V AC / 50 - 60 Hz           Inputs         Sensitivity (1W/1m)         -0.5 dB ~ 10.5 dB           Impedance         10 kQ balanced           Connector         XLR female with Male Linkthrough           Outputs         Voltage / Impedance         100 V / 83 Ω           70 V / 42 Ω         4 Ω           Common mode rejection ratio         4-pin Euro Terminal Block (Pitch - 5.08 mm)           Common mode rejection ratio         DC Short circuit           Over heating         Over load           Signal limiting         Over load           Cooling         Temperature controlled FAN           Operating temperature         0° ~ 40° @ 95% Humidity	RMS Power		4 x 120 W
THD+N (@ 1 kHz)	Frequency	Response (± 3 dB)	50 Hz - 22 kHz
Crosstalk (@ 1 kHz)         < 80 dB	Signal / Noise		> 100 dB
Technology       Class-D         Power       Supply       Switching mode         100 ~ 240 V AC / 50 ~ 60 Hz       100 ~ 240 V AC / 50 ~ 60 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 / 83 Ω         70 V / 42 Ω       4 Ω         Common mode rejection ratio       4-pin Euro Terminal Block (Pitch - 5.08 mm)         Common mode rejection ratio       DC Short circuit         Protection       DC Short circuit         Over heating       Over load         Signal limiting       Signal limiting         Cooling       Temperature controlled FAN	THD+N (@ 1 kHz)		< 0.3% (1/2 Rated Power)
Power       Supply       Switching mode         Source       100 ~ 240 V AC / 50 ~ 60 Hz         Inputs       Sensitivity (1W/Im)       -0.5 dB ~ 10.5 dB         Impedance       10 kΩ balanced         Connector       XLR female with Male Linkthrough         Outputs       Voltage / Impedance       100 V / 83 Ω         70 V / 42 Ω       4 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       Temperature controlled FAN	Crosstalk (@ 1 kHz)		< 80 dB
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Technology		Class-D
Inputs       Sensitivity (1W/1m)       -0.5 dB ~ 10.5 dB         Impedance $10 \text{ k}\Omega$ balanced         Connector       XLR female with Male Linkthrough         Outputs       Voltage / Impedance $100 \text{ V} / 83 \Omega$ $70 \text{ V} / 42 \Omega$ $4\Omega$ Connector $4$ -pin Euro Terminal Block (Pitch - 5.08 mm)         Common mode rejection ratio $70 \text{ dB}$ Protection       DC Short circuit         Over heating       Over load         Signal limiting         Cooling       Temperature controlled FAN	Power	Supply	Switching mode
Impedance     10 kΩ balanced       Connector     XLR female with Male Linkthrough       Outputs     Voltage / Impedance     100 V / 83 Ω       70 V / 42 Ω     4 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	100 ~ 240 V AC / 50 ~ 60 Hz
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Inputs	Sensitivity (1W/1m)	-0.5 dB ~ 10.5 dB
Outputs Voltage / Impedance $100\text{V} / 83\Omega$ $70\text{V} / 42\Omega$ $4\Omega$ $4\Omega$ Connector 4-pin Euro Terminal Block (Pitch - 5.08 mm) Common mode rejection ratio 70 dB Protection DC Short circuit Over heating Over heating Coeling Cooling Temperature controlled FAN		Impedance	10 kΩ balanced
$70\text{V}/42\Omega$ $4\Omega$ $4\text{Connector} \qquad 4\text{-pin Euro Terminal Block (Pitch - 5.08 mm)}$ $70\text{dB}$ $Protection \qquad DC Short circuit$ $Over heating$ $Over load$ $Signal limiting$ $Cooling \qquad Temperature controlled FAN$		Connector	XLR female with Male Linkthrough
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			
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	Outputs	Voltage / Impedance	100 V / 83 Ω
Common mode rejection ratio  Protection  DC Short circuit  Over heating  Over load  Signal limiting  Cooling  Temperature controlled FAN	Outputs	Voltage / Impedance	
Protection DC Short circuit Over heating Over load Signal limiting Cooling Temperature controlled FAN	Outputs	Voltage / Impedance	70 V / 42 Ω
Over heating Over load Signal limiting  Cooling Temperature controlled FAN	Outputs		70 V / 42 Ω 4 Ω
Over load Signal limiting  Cooling Temperature controlled FAN			70 V / 42 $\Omega$ 4 $\Omega$ 4-pin Euro Terminal Block (Pitch - 5.08 mm)
Cooling Signal limiting Temperature controlled FAN	Common mode rejection ratio		$70$ V / $42$ $\Omega$ $4$ $\Omega$ $4$ -pin Euro Terminal Block (Pitch - 5.08 mm) $70$ dB
Cooling Temperature controlled FAN	Common mode rejection ratio		$70\text{V}/42\Omega$ $4\Omega$ $4\text{-pin}$ Euro Terminal Block (Pitch - 5.08 mm) $70\text{dB}$ DC Short circuit
	Common mode rejection ratio		$70\text{V}/42\Omega$ $4\Omega$ $4\text{-pin}$ Euro Terminal Block (Pitch - 5.08 mm) $70\text{dB}$ DC Short circuit Over heating
Operating temperature 0° ~ 40° @ 95% Humidity	Common mode rejection ratio		70 V / 42 Ω  4 · pin Euro Terminal Block (Pitch - 5.08 mm)  70 dB  DC Short circuit  Over heating  Over load
	Common mode rejection ratio  Protection		70 V / 42 Ω  4-pin Euro Terminal Block (Pitch - 5.08 mm)  70 dB  DC Short circuit  Over heating  Over load  Signal limiting

## **Product Features:**

Dimensions		482 x 88 x 420 mm (W x H x D)
Weight		14.800 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 independant controllable amplifier channels with an output power of 4 x 120 Watt. The amplifier shall be constructed 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 highpass 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 and 70 Volt constant voltage and 4 Ohm low impedance applications.

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 14.8 Kg.

