

# CPS8.5

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- 8 x 500 W
- High Efficient Class-D Design
- Optimized for permanent installation
- EN 54-16: 2008
- Optional Remote Control Module (RCM-810)



The Electro-Voice CPS8.5 amplifier offers eight independent Class-D Variable Load Drive (VLD) amplifier blocks, each one capable of delivering up to 500 Watts into Low-Z or High-Z loads. Per default, each channel can be configured individually for max. power output into either 2  $\Omega$ , 4  $\Omega$ , 70V- or 100V-networks without involvement of any output transformers. Being designed for professional audio installation market, special care was taken for long term cost of ownership parameters: In addition to remarkably low current consumption and heat dissipation, the CPS8.5 provides remote standby switching with just 5 Watts consumption in standby mode. An optional remote control module RCM-810 provides control and supervision features via IRIS-Net, including monitoring of amplifier status and real time load supervision. In addition, via RCM-810 the Variable Load Drive characteristics can be set for max. power output into any load between 2  $\Omega$  and 10  $\Omega$ , in steps of 0.1  $\Omega$ .

## Technical specifications

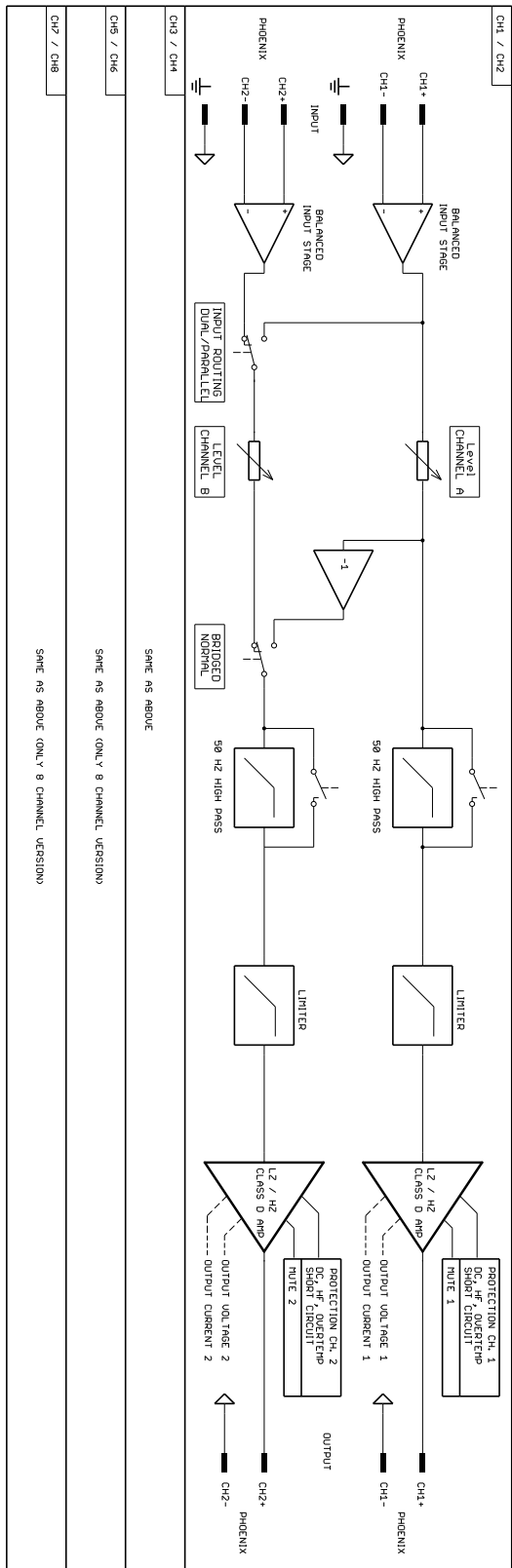
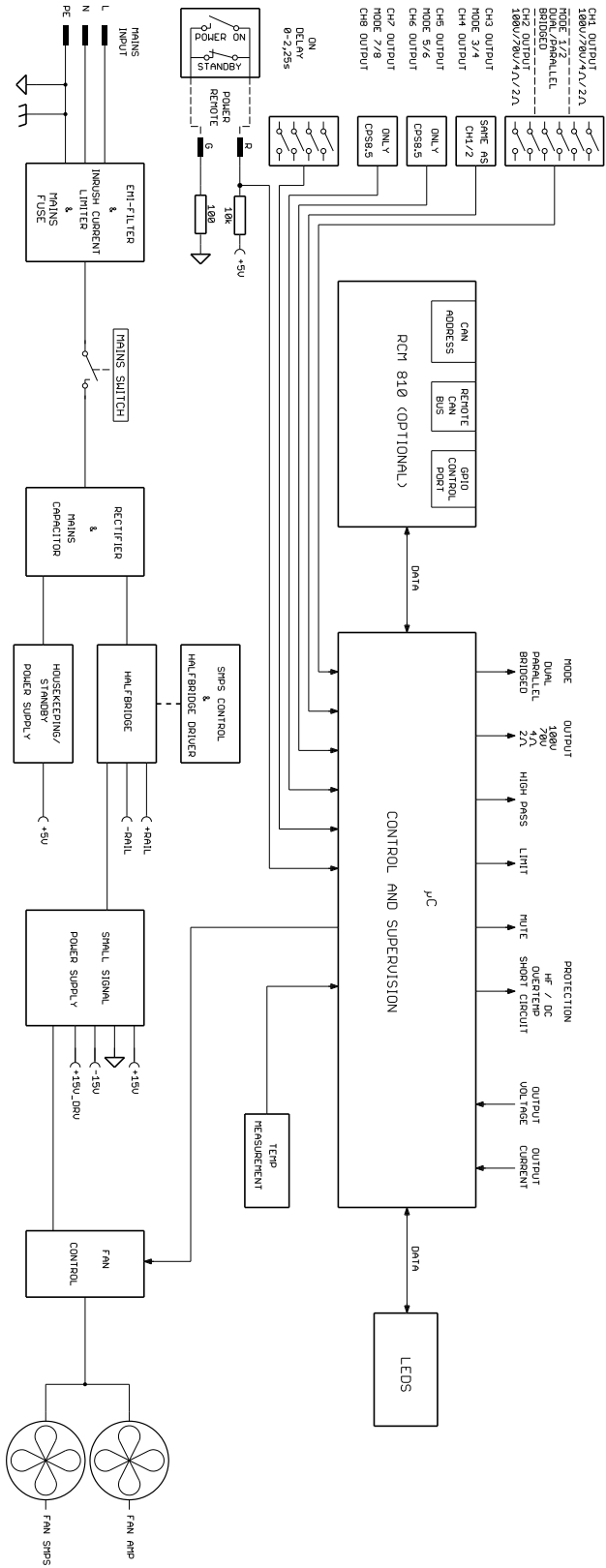
	Low impedance mode			High impedance mode	
	2 Ω	4 Ω	8 Ω	70 V/10 Ω	100 V/20 Ω
Maximum midband output power, THD = 1%, 1 kHz, 8 channels driven	500 W	500 W	250 W VLD: 500 W	500 W	500 W
Rated output power, THD < 0.3%, 20–20 000 Hz, 8 channels driven	450 W	450 W	225 W VLD: 450 W	450 W	450 W
Maximum bridged output power, THD = 1%, 1 kHz	-	1000 W	1000 W	1000 W/20 Ω	1000 W/40 Ω
Alarm power rating (according to EN 54-16)	-	325 W	250 W VLD: 325 W	325 W	325 W
Maximum RMS voltage swing, THD = 1%, 1 kHz	32 V	45 V	45 V VLD: 63 V	70 V	100 V
Power Bandwidth, THD = 1%, ref. 1 kHz, half power at rated load	10–25000 Hz			50–25000 Hz	
Voltage gain, ref. 1 kHz	32 dB	32 dB	32 dB	33 dB	36 dB
Input Sensitivity, rated power, 1 kHz	0.775 V (0.0 dBu)	1.1 V (+3.0 dBu)	1.1 V (+3.0 dBu)	1.55 V (+6.0 dBu)	1.55 V (+6.0 dBu)
THD at rated output power, MBW = 80 kHz, 1 kHz	< 0.05%				
IMD-SMPTE, 60 Hz, 7 kHz	< 0.05%				
DIM30, 3.15 kHz, 15 kHz	< 0.02%				
Maximum input level	+22 dBu (9.76 V <sub>rms</sub> )				
Crosstalk, ref. 1 kHz, at rated output power	< -80 dB				
Frequency response, ref. 1 kHz, 8 Ω load	15–30000 Hz (±1 dB)				
Input impedance, active balanced	20 kΩ				
Damping factor, 1 kHz, 8 Ω	> 240				
Slew rate	28 V/μs				
Signal-to-noise ratio (A-weighted)	98 dB	100 dB	100 dB	104 dB	106 dB
Output noise, A-weighted	< -66 dBu	< -65 dBu	< -65 dBu	< -65 dBu	< -64 dBu
Output stage topology	Class D				
Power requirements	220-240 V, 50-60 Hz or 120 V, 50-60 Hz or 100 V, 50-60 Hz				
In-rush current	27 A				
In-rush current, after five-second power cycle	14 A				
Power consumption, 1/8 maximum output power	930 W				
Protection	Audio Limiters, High Temperature, DC, HF, Short Circuit, Peak Current Limiters, Inrush Current Limiters, Turn-on Delay, Mains Circuit Breaker Protection, Mains Over/Undervoltage Protection				
Cooling	Front-to-Rear, temperature controlled fans				
Operating temperature	+5° to +40° C				

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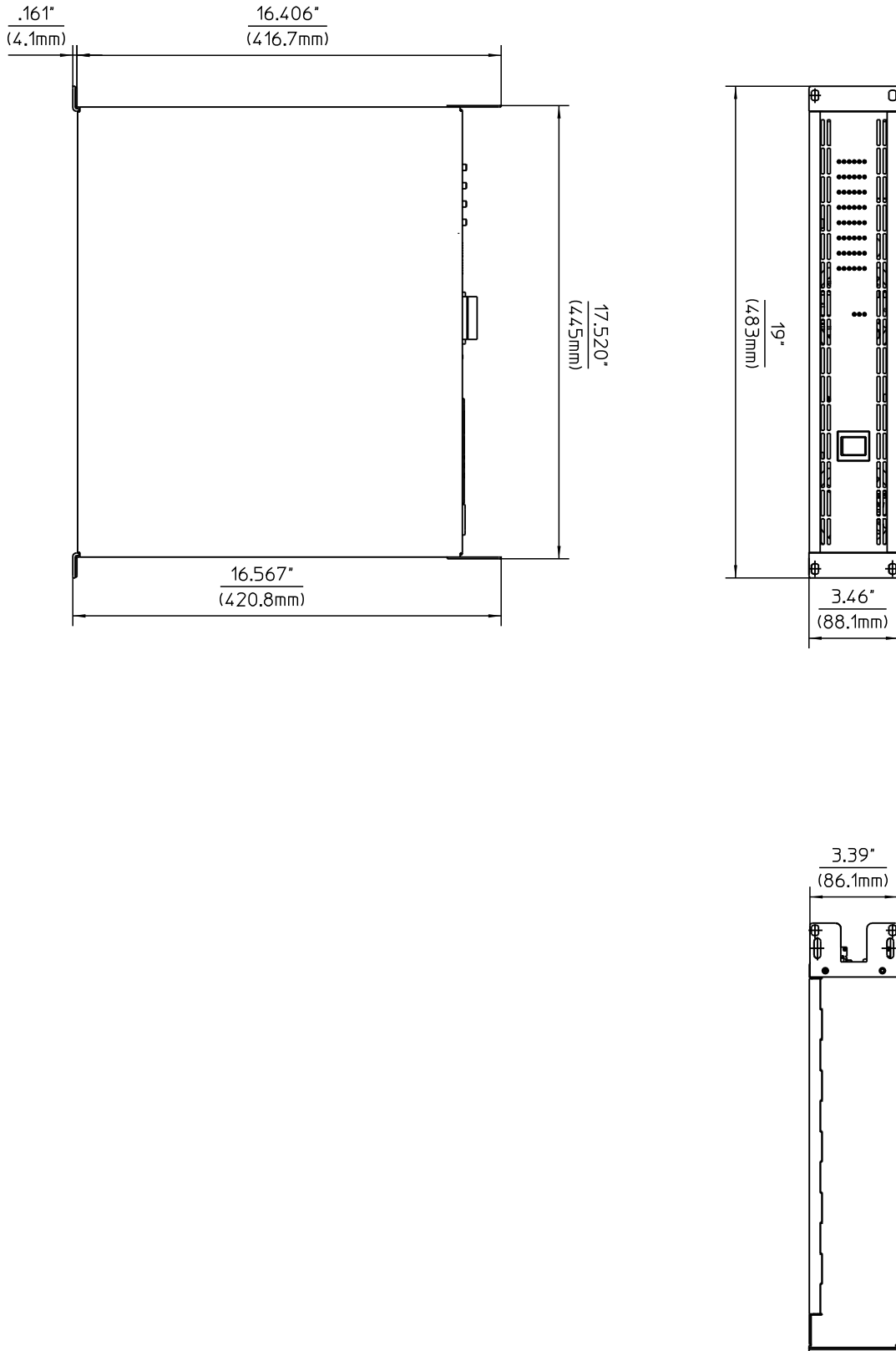
Safety class	I
Product dimensions (Width x Height x Depth)	483 x 88.1 x 420.8 mm
Net weight	13.9 kg

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\* Depending on the ambient temperature, the unit might not operate continuously at 2  $\Omega$  load in Dual Mode or 4  $\Omega$  load in Bridged Mode. In addition input power exceeds 1.1 times rated power consumption with at 2  $\Omega$  load in Dual Mode or 4  $\Omega$  load in Bridged Mode.



Circuit diagram



Dimensions

## System overview



Rear view

## Certifications and approvals

EN 54-16: 2008

## Parts included

Quantity	Component
1	Power amplifier
1	Power cord
2	Output Euroblock connector 8-pole (Phoenix, IC 2,5/8-STF-5,08, 1825378, F.01U.103.369) with Euroblock connector housing (Phoenix, KGS-MSTG 2.5/8, 1783779, F.01U.103.370)
4	Input Euroblock connector 6-pole (Phoenix, MC 1,5/6-STF-3,81, 1827745, F.01U.104.179)
1	Power remote Euroblock connector 2-pole (Phoenix, MC 1,5/2-STF-3,81, 1827703, F.01U.103.533)
1	User manual

## Ordering information

### CPS8.5 100V

8-channel Class-D amplifier, 2RU , per channel configurable 2/4Ohm/70V/100V, slot f. optional RCM810 remote module; 8 x 500 W  
Order number **F.01U.101.293**

### CPS8.5 120V

8-channel Class-D amplifier, 2RU , per channel configurable 2/4Ohm/70V/100V, slot f. optional RCM810 remote module; 8 x 500 W  
Order number **F.01U.101.291**

### CPS8.5 220-240V

8-channel Class-D amplifier, 2RU , per channel configurable 2/4Ohm/70V/100V, slot f. optional RCM810 remote module; 8 x 500 W  
Order number **F.01U.101.289**

## Accessories

### LML-1

Line measuring load  
Order number **F.01U.266.132**

### RCM-810

RCM-810 Remote Control Module for IRIS-Net  
Order number **F.01U.101.277**

### RMK-15

Rack Mount Kit for amplifiers, Length 15,5"; 1L/1R  
Order number **F.01U.135.402**

### Represented by:

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