# ClearOne.

## **CONVERGE® PA 460**

## Professional Audio Power Amplifier



CONVERGE PA 460 amplifier is a 4 Channel x 60 Watts, high-efficiency Class-D power audio amplifier for reliable amplification with professional sound quality for conferencing, sound reinforcement, and distribution applications.

CONVERGE PA 460 amplifier is optimized to work with ClearOne's DSP mixers, and it also works with any third-party mixers.



- +  $4/8\Omega$  speaker output
- + 70V/100V Constant Voltage output\*
- + 4 x 60W output in Normal mode
- + 2 x 120W output in Bridged Mode
- + Compact form-factor, half-rack size, fan-less unit
- + Efficient power consumption with auto-standby mode
- + Ease of installation with software-free, plug-and-play configuration
- + Control and protection options with LED indicators
- + Works with ClearOne and 3rd party DSP mixers
- + Supports conferencing, sound reinforcement and audio distribution applications

**VENUES** Boardrooms Conference Rooms Training Rooms Lecture Halls Courtrooms Auditoriums Telemedicine Facilities

<sup>\*</sup> Amplifier should be in Bridged Mode.

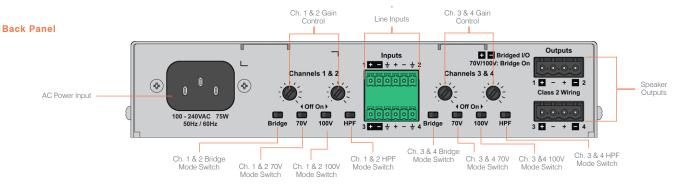


Standby Limit LE Front Panel Protect I

Signal LED Indicator Signal LED Indicator Standby LED Indicator Limit LED Indicator Protect LED Indicator



Clip LED Indicator



### PRODUCT SPECIFICATIONS

#### **Inputs & Outputs**

#### Inputs:

4 Channel, Balanced audio input, 3.81mm Green Phoenix/Euroblock type male header, Push-on mini-terminal block

#### **Outputs:**

4 Channel, Balanced audio output, 5.08mm Black Phoenix/Euroblock type male header, Push-on mini-terminal block

#### Input Sensitivity:

20Hz - 22kHz @ 0dBu

## **Output Modes:**

 $4/8\Omega$  and 70.7V/100V

## **Max Rated Output:**

 $4\,x$  60W @ sensitivity, in 4/8Q & 70.7V/100V modes

## Max Rated Output, Bridged:

 $2 \times 120 \text{W}$  @ sensitivity, in  $4/8 \Omega$  mode

## Max Rated Output, Bridged:

2 x 120W @ sensitivity, in 70.7V/100V mode

#### Frequency Response:

20Hz - 22KHz (+/- 1dB)

## THD+N:

20Hz - 22kHz @ rated power,  $4/8\Omega$ , <0.08%

#### **Dynamic Range:**

20Hz – 20kHz @ 0dB, >100dB,  $8\Omega$ , unweighted

Output Mode	Max # of Channels	Bridged I/O	Output Power
4 / 8Ω	4	OFF	60W
4 / 8Ω	2	OFF	60W
4 / 8Ω	2	ON	120W
70V / 100V	4	OFF	N/A
70V / 100V	2	OFF	N/A
70V / 100V	2	ON	60W
70V / 100V	2	ON	120W

### Control

#### Slide Switches

Single End, Bridged mode 70.7V mode 100V mode HPF mode @ 80Hz

#### Potentiometer

Adjustable: 0 to max @ rated power

#### **Front Panel LED Indicators**

#### **POWER**

Power status indicator

Blue light indicates power on

#### **CLIP**

Clip status indicator

Red light indicates clip status due to:

- Input is too high, signal clip
- Output peak detected

#### SIGNAL PRESENT

Signal indicator

Blue light indicates signal is present or passing out

#### **STANDBY**

Standby mode status indicator

Yellow light indicates Standby mode

Standby mode enables when no audio is present. The amplifier first enters Mute mode at 2 minutes, then into Standby mode at 10 minutes.

#### LIMIT

Limit indicator

Red light indicates gain reduction activation

#### PROTECT/DISABLE

Protection or Disable status indicators

Red light indicates Disabled/Mute/Protection mode

Mute mode enables when no audio is present for 2 minutes Protection mode enables when temperature exceeds 185°F (85°C)

Function	LED Color	Indicates	Per Channel?	Per Pair of Channels?
Clip	Red	Signal clip, peak detected	Yes	-
Signal	Blue	Audio signal present	Yes	-
Standby	Yellow	No audio signal for 10 minutes	-	Yes
Limit	Red	Gain reduction activated	-	Yes
Protect	Red	Mute – No audio signal for 2 minutes ~85°C high temperature	-	Yes
Power	Blue	Powered on	-	-



## PRODUCT SPECIFICATIONS

#### **Potentiometer Position**

Potentiometer Position	Maximum Input Level	Output power with 0 dBU input (60W output mode)	Output power with 0 dBU input (120W output mode)	
10	0 dBu	60W	120W	
9	+1 dBu	49W	98W	
8	+5 dBu	22W	44W	
7	+8 dBu	10W	20W	
6	+12 dBu	4W	8W	
5	+16 dBu	2W	4W	
4	+18 dBu	1W	2W	
3	+21 dBu	550mW	1.1W	
2	+26 dBu	218mW	436mW	
1	+35 dBu	27mW	54mW	
0	mute	mute	mute	

#### **Power & Thermal**

#### **Power Consumption:**

42W Typical, Pink Noise @ 0 dBu, 8Ω

#### **Power Supply:**

AC input 100-240VAC, 50Hz/60Hz

#### Thermal:

143 BTU/Hr Typical

#### Temperature:

14°F to 104°F\* (-10°C to 40°C\*) (Ambient temperature)

#### **Dimensions & Weight**

#### **Dimensions**

8.38" (213mm) W x 11.06" (281mm) D x 1.72" (44mm) H

#### Weight

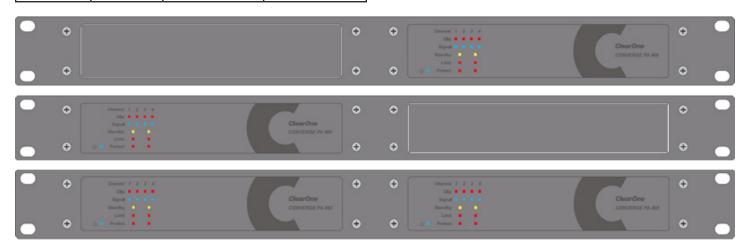
2.8 lbs (1.27 kg)

### Mounting

#### Size

1 RU for up to two units

See below configurations in Rack Mounting Kit (910-3200-402)



## SKUs

Part Number	Product Name		
910-3200-401	CONVERGE PA 460		
910-3200-402	Mounting Kit for CONVERGE PA 460		
930-3200-401-1	Bundle: Qty 1 CONVERGE PA 460 Amplifier unit with Qty 1 Rack Mounting Kit		
930-3200-401-2	Bundle: Qty 2 CONVERGE PA 460 Amplifier units with Qty 1 Rack Mounting Kit		

## **SALES AND INQUIRIES**

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<sup>\*</sup> Operating this product at its maximum rated output power and its maximum rated ambient operating temperature for extended periods of time may cause reduced output power until the temperature or output power is reduced.