



## PA 4800 DSC 19" Multichannel DSP Amplifier



### Description

The PA 4800 DSC is a sophisticated, class-D power amplifier with four output channels and integrated 8 x 4 DSP matrix. The power amplifier has an output rating of 4 x 800 watts at 2 - 8 ohms or 2 x 1600 watts at 4 - 16 ohms in bridge mode.

The amplifier is controlled over Ethernet using our LB CONTROL app or network commands.

By selecting the appropriate speaker presets in the outputs, all of our speakers can be powered with maximum audio performance. With the multiband limiters available in the speaker presets the maximum volume can easily be limited without sound impairment.

The PA 4800 DSC circuits are designed to ensure outstanding sound quality and reliability with minimum heat build-up. The generously proportioned, high-capacity power supply together with our processor-controlled class-D power amplifier modules guarantee outstanding efficiency levels and enormous power reserves. Equipped with a second input module, the amplifier can process both analog and digital signal sources. The input Sensitivity is switchable for each channel, as well as a ground lift for each channel pair. An automatic On/Off function (switchable for each channel) automatically switches inactive amplifier channels to an energy-saving Sleep mode.

In addition to the 8 x 4 mixer matrix and the speaker presets, the DSP also offers ten parametric filters, delay up to 100 ms plus Peak and RMS limiters for every input and output.

We prepare project-specific presets on request.

To enable remote control, the amplifiers are equipped with an On/Off contact and VCA inputs for each channel. For external volume control use our WP-V and RP-V volume controllers or the DV module with Up/Down contacts.

Any fault in the power amplifier channels is signaled via the isolated fault contact.

### Key Features

- Multichannel amplifier with 8 x 4 DSP-Matrix
- Three models:
  - **PA 4800 DSC** with 8 x line IN symmetrical
  - **PA 4800 DSC CINCH** with 8 x line IN cinch asymmetrical
  - **PA 4800 DSC DANTE** with Dante interface
- 4 x 800 watts at 2 – 8 ohms, 2 x 1600 watts at 4 – 16 ohms
- 8 x line IN, 4 x speaker OUT
- Second slot for additional input module
- Control via Ethernet
- Speaker presets for all LB Loudspeakers
- Multiband limiter for volume limitation
- VCA inputs per channel
- Switchable Automatic On/Off per channel
- On/Off- and Fault contact
- Switchable input Sensitivity +4/-6 dBu per channel
- Silent running regulated fans
- Switchable Ground Lift per input channel pair
- 2 U chassis, installation depth only 348 mm
- Optional:
  - **8xIN-SYM** input module 8 x line In symmetrical
  - **8xIN-CINCH** input module 8 x line In cinch asymmetrical
  - **DANTE 8x8** Dante interface
  - 100 V transformer
  - Volume control (wall-panel WP-V or rack-panel RP-V)
  - DV module for volume control via Up/Down contacts

### Fields of Application

- Home audio
- Media rooms
- Conference rooms
- Shops, sales rooms
- Gastronomy
- Clubs, discotheques
- Concert halls, theatres
- Churches

# PA 4800 DSC

## 19" Multichannel DSP Amplifier

### Technical Data

Inputs	8 x Line IN sym. / 8 x Line IN cinch asym. / Dante (depending on the model)
Nom. input/output level	+4/-6 dBu, switchable
Max. input/output level	+18 dBu
Input impedance	20 kohms
Load impedance	≥ 2 ohms, Bridge ≥ 4 ohms
Outputs	4 x Speaker OUT up to 2 x 4 mm <sup>2</sup> (screwtype terminals, pluggable)
Output power	
2 ohms	4 x 800 watts
4 ohms	4 x 800 watts
8 ohms	4 x 400 watts
Bridge	2 x 1600 watts (4 – 16 ohms)
Frequency range	15 Hz – 22 kHz
Dynamic range	> 100 dB
Displays	OLED display, LED for ON/STANDBY; LED for CLIP/LIMIT/DSP/SIGNAL; LEDs per channel for PROTECT, LIMIT, SIGNAL, SLEEP
Controls	Preset selector and power switch at front. Dip switches AUTO ON/STEADY ON and SENSITIVITY +4/-6 dBu per channel at back.
DSP	24 bit, 48 kHz
Latency	0.64 ms
Functions	8 x 4 routing matrix, 10 fully parametric filter, peak limiter, RMS limiter, delay up to 100 ms per input/output. 40 presets, speaker presets for all LB speakers
App	LB CONTROL download from our website: <a href="http://www.lb-lautsprecher.de/en/Download-Software">www.lb-lautsprecher.de/en/Download-Software</a>
Interfaces	Ethernet
Additional connectors	VCA inputs 0-10 V for each channel (also for DV modules), floating Fault contact (N/O), Standby contact (N/O or N/C)
Cooling	Silent running regulated fans, air flow from front to back
Protective circuits	Inrush current limiter, peak limiter, current limiter and power limiter for each speaker output, short circuit and multilevel overtemperature protection for all internal channels
Power supply	230 VAC
Mains connector	IEC connector
Power consumption	
Standby	< 0.5 watts
All channels SLEEP	19 watts
All channels active	95 watts
1/8 th power maximum	526 watts
Max. power consumption	740 watts
Peak power	4860 watts
Dimensions (B x H x T)	19", 1 U, 483 x 88 x 348 mm
Weight	10 kg
Warranty	5 years

### Model

### Order No. Versions

<b>PA 4800 DSC</b>	3106-0188	8 x line IN sym. with pluggable screwtype terminals
<b>PA 4800 DSC CINCH</b>	3106-0189	8 x line IN cinch asym. with pluggable screwtype terminals
<b>PA 4800 DSC DANTE</b>	3106-0190	Dante interface, 2 x RJ45 Ethernet (primary/secondary)

### Accessories – Additional Input Modules

<b>8xIN-SYM</b>	3108-0004	8-channel input module for the PA series/ PA DSC series with symmetrical line inputs. The module features GROUND LIFT dip switches for each channel pair, enabling the amplifiers to be operated with grounded signal sources (internal).
<b>8xIN-CINCH</b>	3108-0008	8-channel input module for the PA series/ PA DSC series with asymmetrical cinch inputs. The module features GROUND LIFT dip switches for each channel pair, enabling the amplifiers to be operated with grounded signal sources (internal).
<b>DANTE 8x8</b>	3108-0009	8-channel Dante input module for the PA series/ PA DSC series. The Dante interface features two RJ45 terminals for audio over Ethernet (primary/secondary). If the primary network connection fails, the module automatically switches to the secondary connection.

### Further Accessories

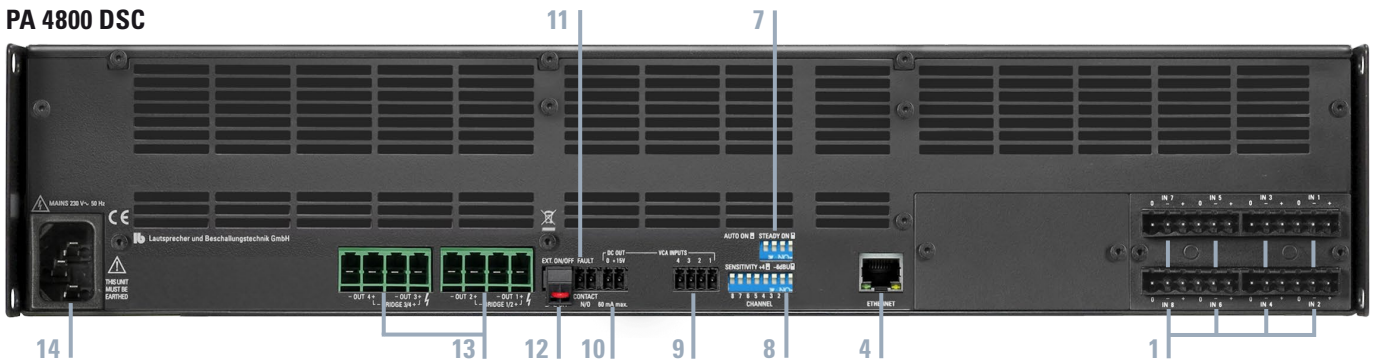
<b>WP-V</b>	3401-0002	Wall panel, volume control for amplifiers of the PA Series for surface boxes. Volume regulation and ON/MUTE via VCA inputs
<b>RP-V</b>	3402-0002	Rack panel, volume control for amplifiers of the PA Series to install in 19" rack mount RP-1U. Volume regulation and ON/MUTE via VCA inputs
<b>RP-1U</b>	3402-0016	19" Rack mount, 1U, for 6 x RP panels
<b>DV-Module</b>	3109-0006	Digital volume control for amplifiers of the PA Series. Volume regulation with dual push buttons (UP/DOWN contacts) via VCA inputs
<b>PA-T 800</b>	3109-0007	100 V transformer module, 800 watts, toroidal core
<b>PA-T 1U</b>	3109-0005	Rack cradle 19", 1U for 2 x PA-T 800

# PA 4800 DSC 19" Multichannel DSP Amplifier

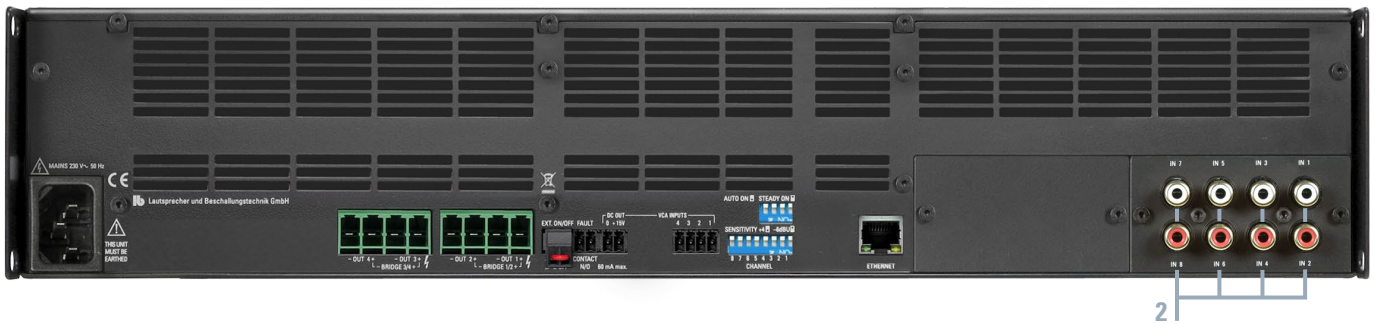
## Back View

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|---|---|
| <ul style="list-style-type: none"> <li>1 <b>8xIN-SYM</b> Input module 8 x line IN symmetrical</li> <li>2 <b>8xIN-CINCH</b> Input module 8 x line IN cinch asymmetrical</li> <li>3 <b>DANTE 8x8</b> Dante interface, 2 x RJ45 Ethernet</li> <li>4 <b>ETHERNET</b> RJ45 network connection</li> <li>7 <b>AUTO ON/STEADY ON</b> dip switch per channel</li> <li>8 <b>SENSITIVITY</b> dip switch +4/-6 dBU per channel</li> </ul> | <ul style="list-style-type: none"> <li>9 <b>VCA-INPUTS</b> (Voltage Controlled Amplifier) per channel</li> <li>10 <b>DC OUT 15 V</b> power supply for WP-/RP-V, 60mA max.</li> <li>11 <b>FAULT CONTACT N/O</b></li> <li>12 <b>EXT. ON/OFF N/C</b> (short circuit plug)</li> <li>13 Speaker outputs</li> <li>14 IEC mains connection (power cable enclosed)</li> </ul> |
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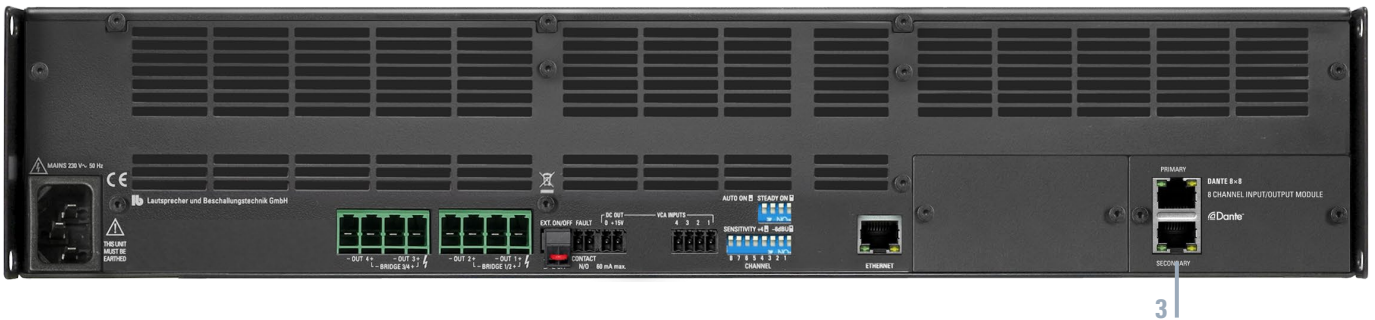
PA 4800 DSC



PA 4800 DSC CINCH



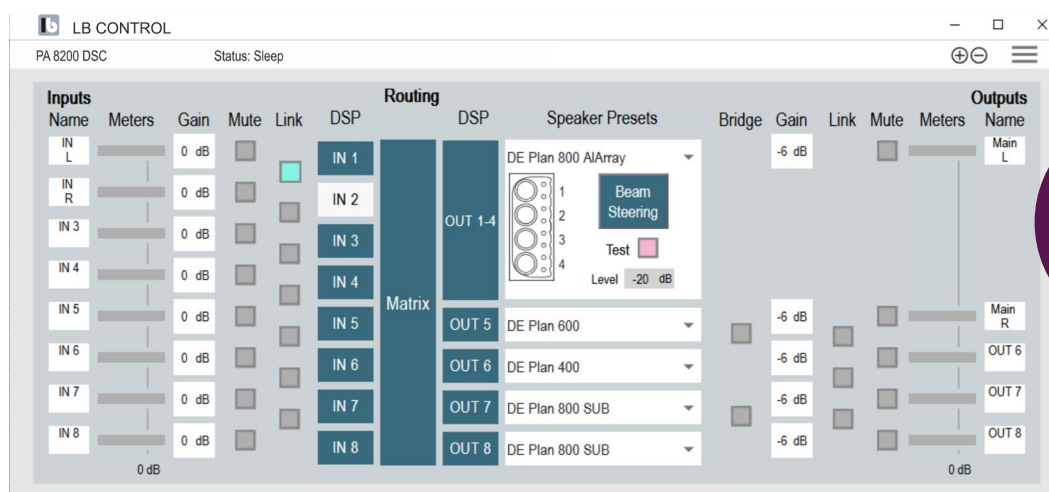
PA 4800 DSC DANTE



# PA 4800 DSC 19" Multichannel DSP Amplifier

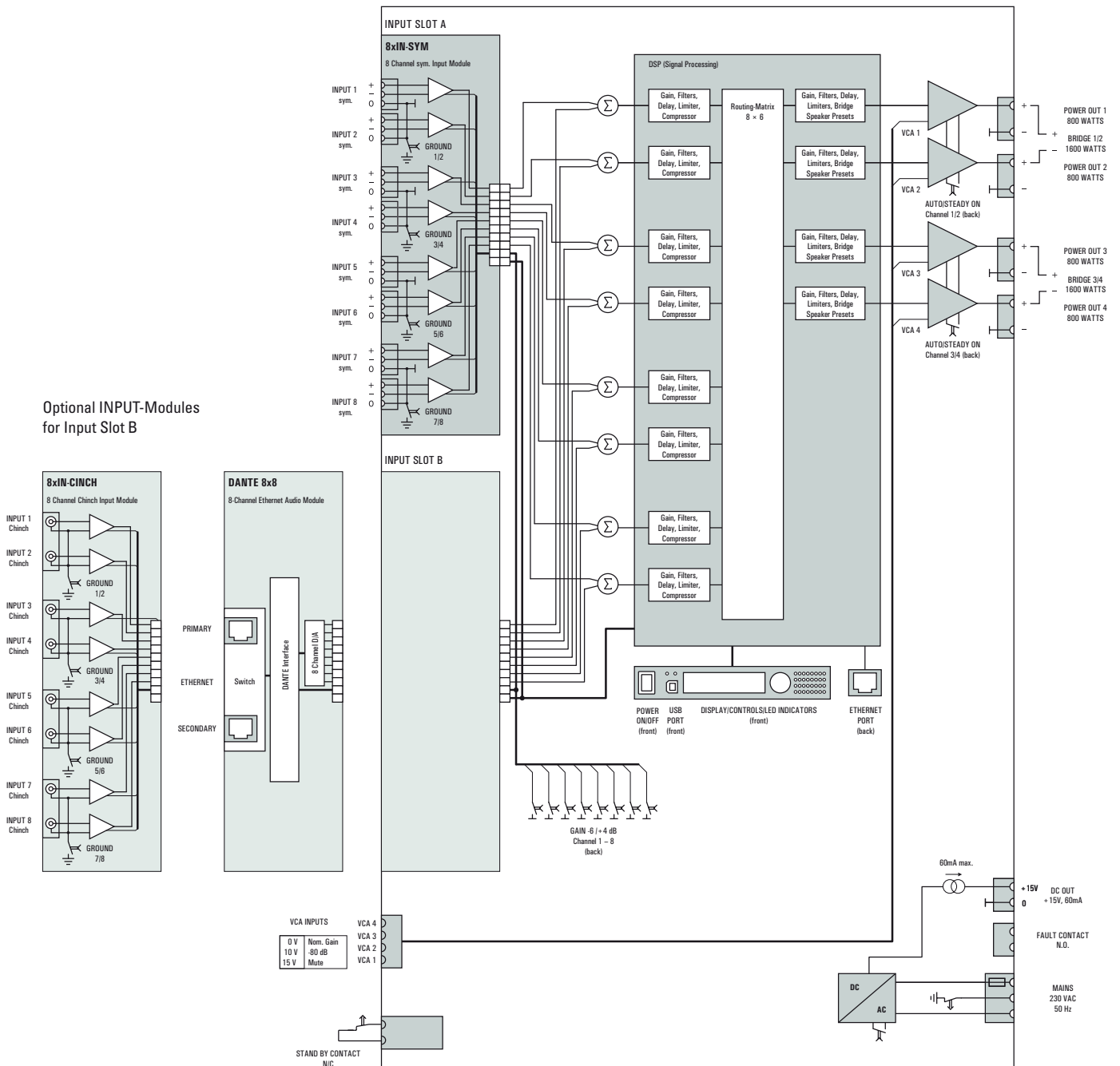
## LB CONTROL App

The amplifiers are configured via Ethernet using our LB CONTROL App and controlled and monitored using network commands. When equipped with a second input module, such as the 8-channel DANTE interface, analog and digital signals can be processed. VCA inputs, as well as contacts for remote activation and fault detection, allow integration into public address systems. The LB CONTROL App allows you to select speaker presets for all LB loudspeaker models in our DSP power amplifiers. These speaker presets ensure optimal audio performance and operational reliability.



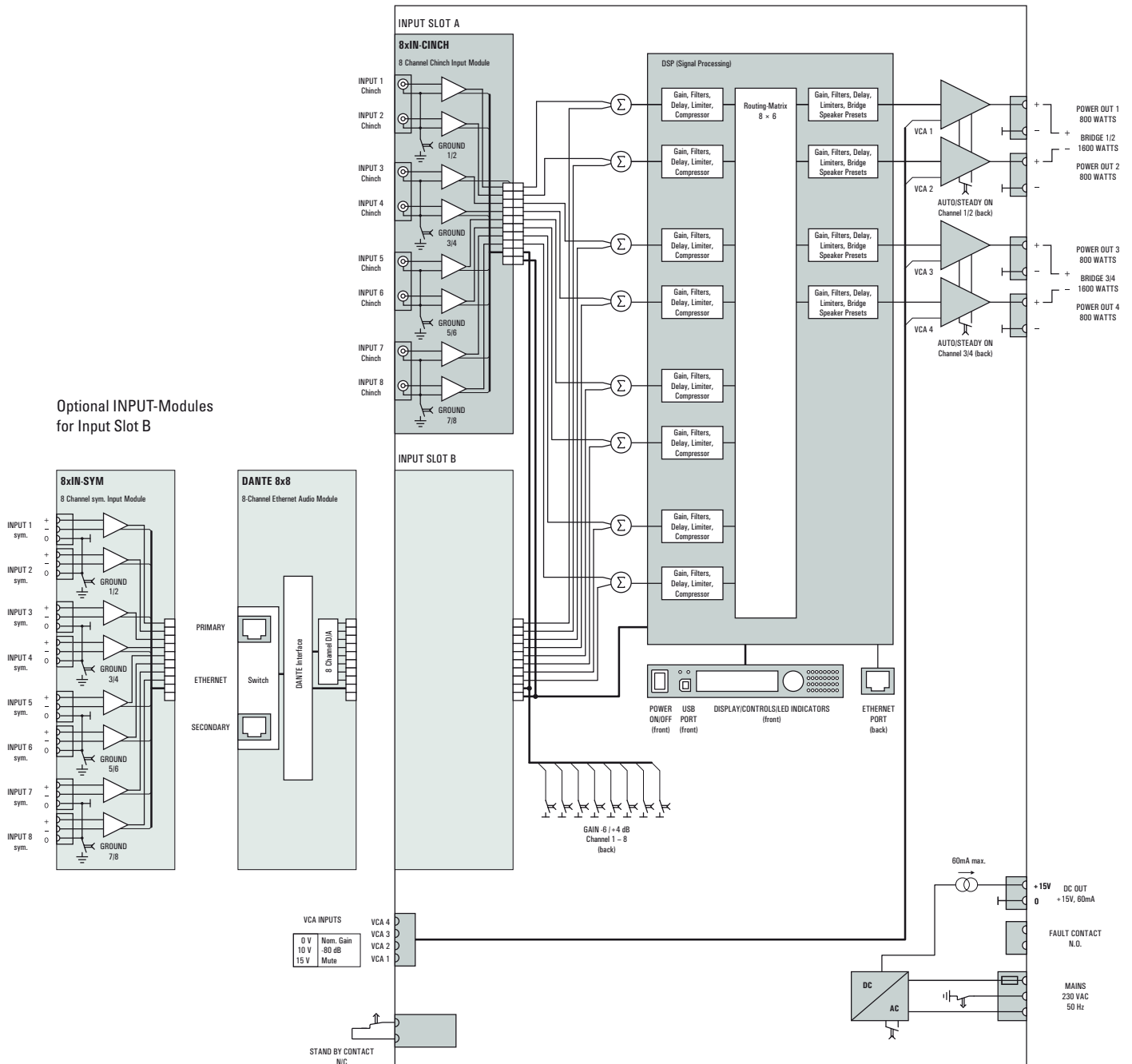
# PA 4800 DSC 19" Multichannel DSP Amplifier

## Block diagram PA 4800 DSC



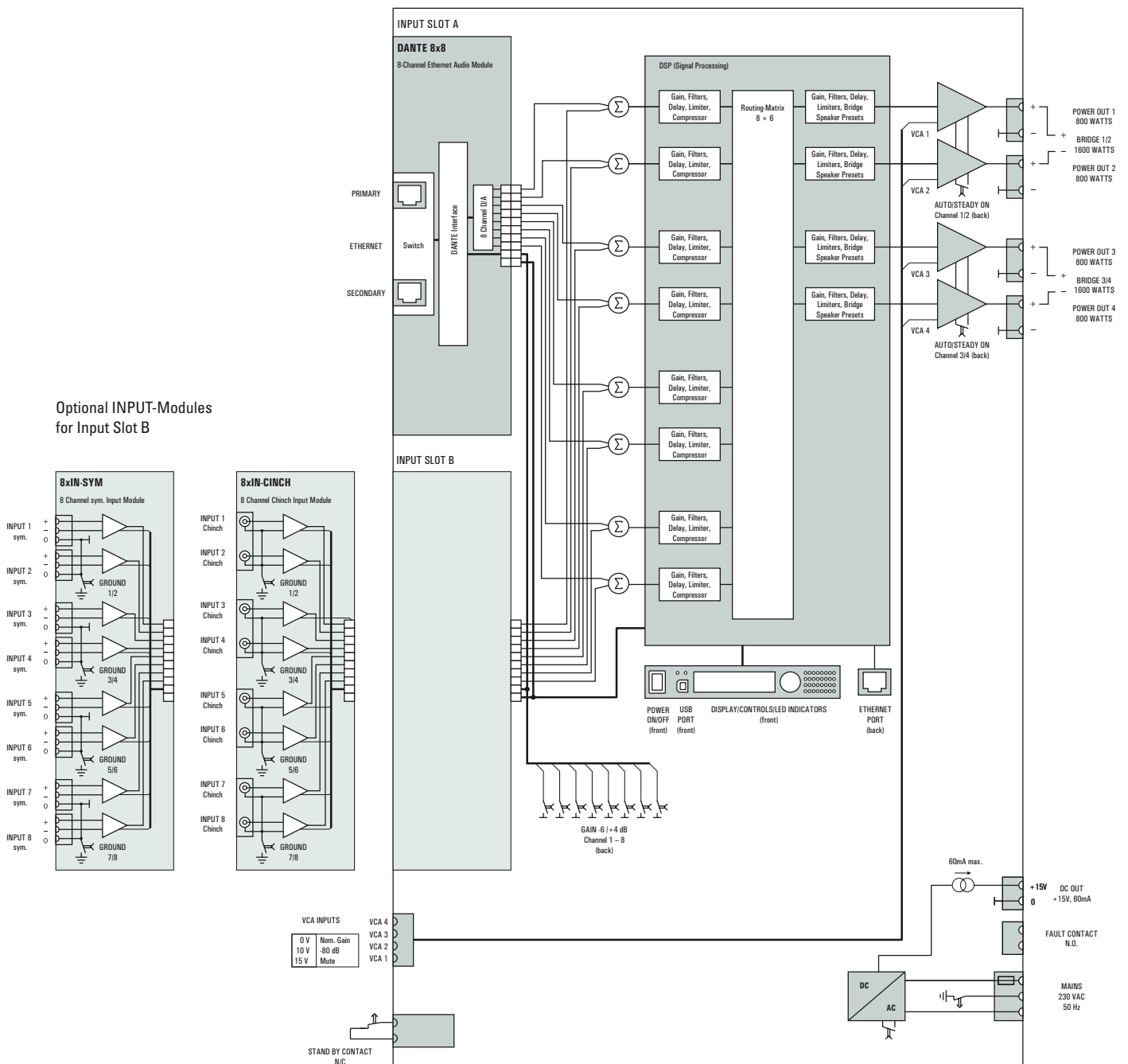
# PA 4800 DSC 19" Multichannel DSP Amplifier

## Block diagram PA 4800 DSC CINCH



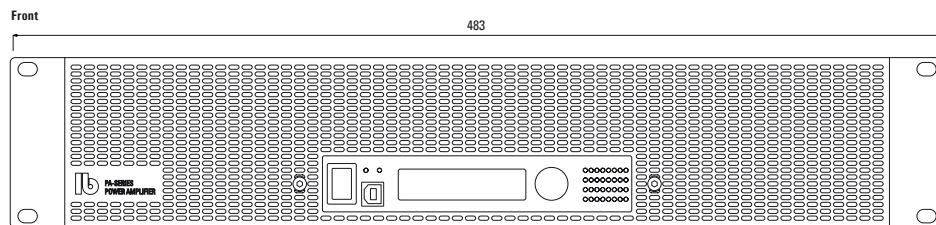
# PA 4800 DSC 19" Multichannel DSP Amplifier

## Block diagram PA 4800 DSC DANTE



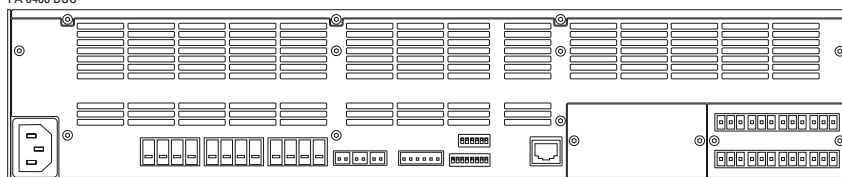
# PA 4800 DSC 19" Multichannel DSP Amplifier

## Dimensions

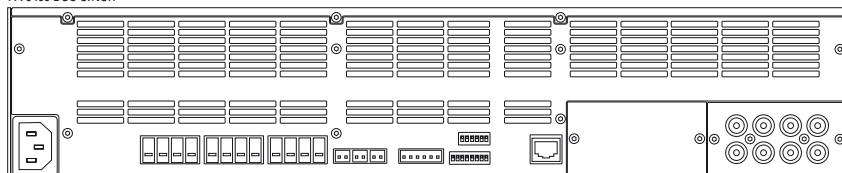


### Backsides (examples)

PA 6400 DSC



PA 6400 DSC CINCH



PA 8800 DSC DANTE

