





# PA-S 2100 Compact remote controllable 2-Channel Amplifier



### **Description**

The PA-S 2100 is a sophisticated 2-Channel amplifier for use in AV systems, multi-room systems and multi-channel PA systems.

The circuit design of the PA-S 2100 combines superior sound quality and operational reliability with minimal power consumption. The processor-controlled class-D amplifiers guarantee outstanding efficiency levels and high power reserves. The Auto On/Off function automatically switches the amplifier to energy-saving SLEEP mode if no input signal is detected. The amplifier has an output rating of 2 x 100 watts at 2-4 ohms or  $2 \times 60$  watts at 8 ohms. It is equipped with both cinch inputs and symmetrical inputs.

A ground lift switch and DIP switches for changing input sensitivity enable optimum adaption to different signal sources.

The front features LEDs for Standby/Power, Sleep, Signal, Limit and Protect. The inputs, volume controllers for each channel, ON/OFF contact and VCA inputs for volume control are all located on the back.

The external volume can be controlled via a control voltage of  $0-10\,\text{V}$ , via the WP-V and RP-V volume control panels, or via the DV module and Up/Down contacts.

# **Key Features**

- Remote controllable 2-Channel amplifier
- Output power 2 × 100 watts at 2-4 ohms, 2 × 60 watts at 8 ohms
- Symmetrical inputs, Cinch inputs
- VCA inputs per each channel
- Ext. ON/OFF contact
- Switchable input sensitivity +4/-6 dBU per channel
- Regulated fan
- Switchable Ground Lift
- Chassis ¼ 19", 1 U

#### Optional:

- 100 V transformers
- 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
- · Concert halls, theatres
- Churches



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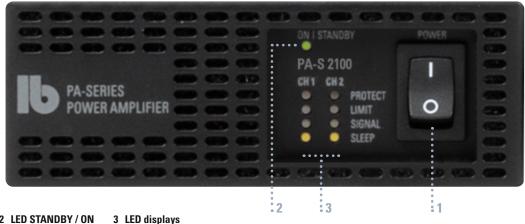
Technical Data			
Inputs	2 × Line In sym. + 2 × Line In Cinch		
Nom. input level	+ 4/-6 dBU, switchable		
	+ 16 dBU		
Max. input level			
Input impedance	20 kohms		
Load impedance	≥ 2 ohms		
Outputs	2 × Speaker Out up to 2 × 2,5 mm²,		
	(screwtype terminals, pluggable)		
Output power	2 100		
2 ohms 4 ohms	2 × 100 watts 2 × 100 watts		
8 ohms	2 × 60 watts		
Frequency range	15 Hz – 22 kHz		
THD	< 0,05 % (1 kHz, 3 dB below full power)		
	> 100 dB		
Dynamic range			
Display	LED for ON/STANDBY; LEDs per channel for PROTECT, LIMIT, SIGNAL, SLEEP		
Controls	Power switch at front. At back VOLUME control per channel, DIP switches for AUTO ON/STEADY ON, GROUND/LIFT and SENSITIVITY +4/-6 dBU		
Additional connectors	VCA inputs 0-10 V for each channel (also for DV modules), ON/OFF contact N/C		
Cooling	Regulated fan, Airflow from front to back		
Protective circuits	Peak limiter, current limiter and power limiter for each speaker output, short circuit and multilevel overtemperature protection		
Power supply	90 up to 260 VAC		
Main connector	IEC connector		
Power consumption Standby	< 0,5 watts		
All channels SLEEP	3,3 watts		
All channels active	7,4 watts		
1/8 Nominal Power	38 watts 80 watts		
Max. average consumption Peak power	240 watts		
Dimensions (W × H × D)	1/4 19", 1 U, 110 × 42 × 233 mm		
Weight	1.3 kg		
Warranty	5 years		
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Model	Order-No.	Version
PA-S 2100	3005-0002	2-Channel amplifier with sym. and Cinch inputs
Accessories	Order-No.	Version
MP-PA-S	3005-0030	Mounting plate for PA-S Series
WP-V	3401-0002	Wall Panel (Volume control and ON/MUTE)
RP-V • 2 : •	3402-0002	Rack Panel (Volume control and ON/MUTE)
DV-Module	3109-0006	Digital volume control (UP/DOWN contacts)
PA-T 100	3109-0002	100V transformer module, 100 watts, toroidal core
PA-T1U	3109-0005	Rack cradle 19", 1 U for up to PA-S 2100 or 4 x PA-T 100
RP-1 U	3402-0016	19" Rack mount, 1U, for 6 × RP panels



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#### 1 Power switch

The amplifier switches on with a delay of approx. 3 seconds.

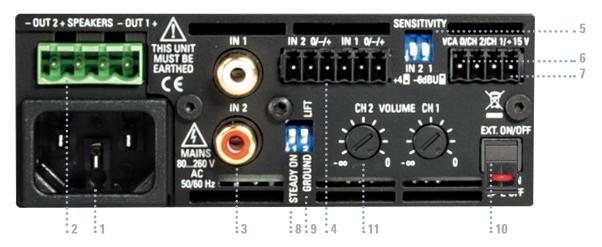
#### 2 LED STANDBY / ON

The LED lights up red in STANDBY and green when the amplifier is switched on.

SLEEP - the corresponding power amplifier channel is in power-saving mode and is automatically reactivated when there is a signal.

SIGNAL – there is a signal at the output of the corresponding power amplifier channel.

LIMIT - the corresponding output stage channel limits. (Peak Voltage, Peak Current, Peak Power or Average Power) PROTECT - the corresponding output stage channel switches off: short circuit at the output, overtemperature or defect. A flashing LED indicates that the power of the channel is reduced due to excessive operating temperature.



#### 1 IEC Connector (Power cord is included)

#### **Speaker outputs**

Fix the speaker cables to the screw-type terminals. The speaker impedance should not fall below 2 ohms.

- 3 Cinch Inputs
- **Symmetrical Inputs**
- 5 SENSITIVITY DIP switch +4/-6 dB per channel. In the lower switch position, the input sensitivity of the respective channel is switched from +4 dBU (pro level) to -6 dBU for home audio and PC applications.
- VCA-INPUTS (Voltage Controlled Amplifier) Inputs for external volume control via our WP-V and RP-V control panels, with the DV-Module (digital volume control) plus up/down contacts or with 0-10 V dimmer actuators (0 V = nom. Gain, 10 V = -80 dB) At 15 V the respective power amplifier channel is set to SLEEP.

### 7 DC OUT 15 V

Power supply for our volume controls WP-V and RP-V or the DV module (60 mA max.)

8 AUTO ON/STEADY ON - DIP switch

In the upper position the channel pair operates in AUTO-ON/ OFF mode and switch into an idle state (SLEEP) automatically if the input signal is absent for over 10 min. This reduces power consumption significantly. In the lower position the channel pair is active permanently (STEADY ON).

#### 9 GROUND LIFT-Switch

In the GROUND position (down) audio ground is directly connected to the mains ground. If the signal source is also grounded this may cause humming noise. In this case the Input connector can be separated from mains ground (LIFT position)

# 10 EXT. ON/OFF - N/C (short circuit plug).

The EXT. ON/OFF-contact must be closed to activate the amplifier. It may either be closed by a shorting bridge (delivery condition) or by an external potential-free switch or contact.

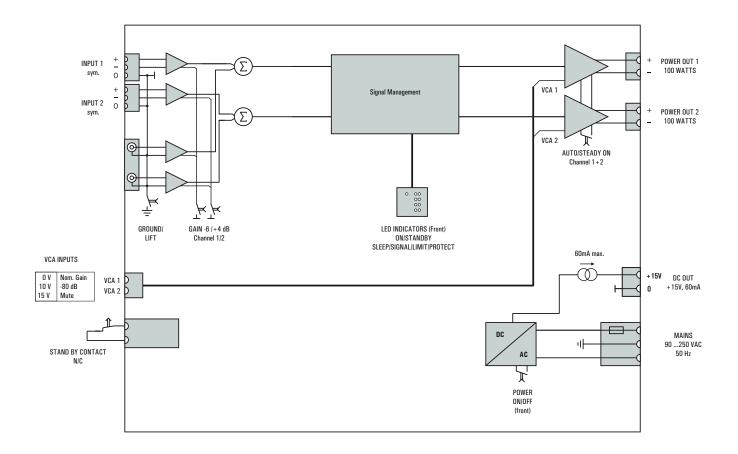
With this contact one or multiple amplifiers in parallel can be switched on and off via media control or voice alarm systems.

11 Volume control per channel



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# **Block Diagram**

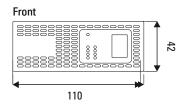


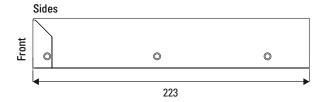


# PA-S 2100

# **Compact remote controllable 2-Channel Amplifier**

# **Dimensions**





# Backside





