







Description

The PA-S 250 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 250 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 50 watts at 2-4 ohms or 2×30 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 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 × 50 watts at 2-4 ohms, 2 × 30 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
- Fanless
- 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



Technical Data		
Innuto	2 Line In own 2 Line In Cinch	
Inputs	2 × Line In sym. + 2 × Line In Cinch	
Nom. input level	+ 4/-6 dBU, switchable	
Max. input level	+ 16 dBU	
Input impedance	20 kohms	
Load impedance	≥ 2 ohms	
Outputs	$2 \times \text{Speaker Out up to } 2 \times 2,5 \text{ mm}^2$,	
	(screwtype terminals, pluggable)	
Output power		
2 ohms	2×50 watts	
4 ohms	2×50 watts	
8 ohms	2 × 30 watts	
Frequency range	15 Hz – 22 kHz	
THD	< 0,05 % (3 dB below full power)	
Dynamic range	> 100 dB	
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	Fanless	
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 All channels SLEEP	< 0,5 watts 2,7 watts	
All channels active	4.4 watts	
1/8 Nominal Power	20 watts	
Max. average consumption	42 watts	
Peak power	125 watts	
Dimensions (W × H × D)	1/4 19", 1 U, 110 × 42 × 233 mm	
Weight	1.2 kg	
Warranty	5 years	

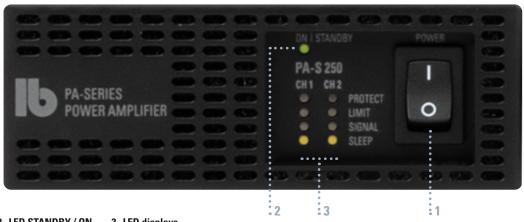
PA-S 250	3005-0001	2-Channel amplifier with sym. and Cinch input
Accessories	Order-No.	Version
MP-PA-S	3005-0030	Mounting plate for PA-S Series
WP-V	3401-0002	Wall Panel (Volume control and ON/MUTE)
RP-V • 2 : •	3402-0002	Rack Panel (Volume control and ON/MUTE)
DV-Module	3109-0006	Digital volume control (UP/DOWN contacts)
PA-T 2050	3109-0001	100 V transformer module, 2 × 50 watts, toroidal core
PA-T1U	3109-0005	Rack cradle 19", 1 U for up to 4 x PA-S 250 or PA-T 2050
RP-1 U	3402-0016	19" Rack mount, 1U, for 6 × RP panels

Order-No.

Version

Model





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.

3 LED displays

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).

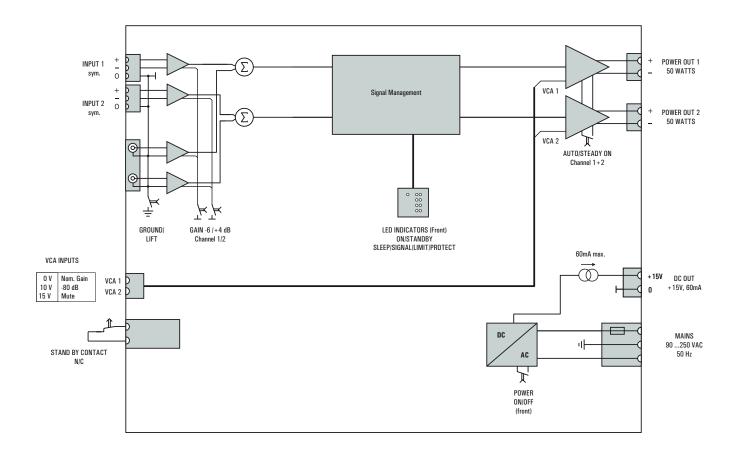
The EXT. ON/OFF-contact must be closed to activate the amplifier. It may either be closed by a shorting bridge (delivery condition) or by an external potential-free switch or contact.

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



Block Diagram





Dimensions

