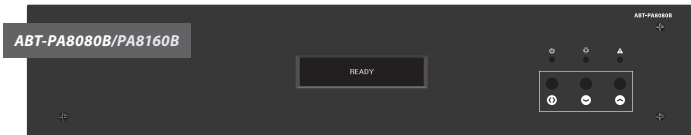


AUTROVOICE MULTIVES POWER AMPLIFIERS

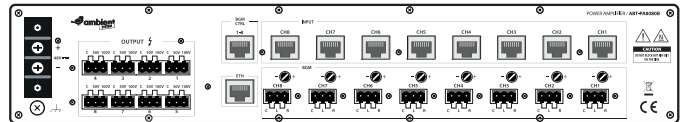
Voice alarm system
Product Datasheet

ABT-PA8080B / 8160B / 2650B

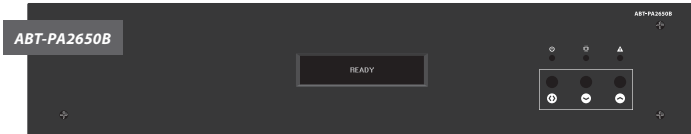
Front



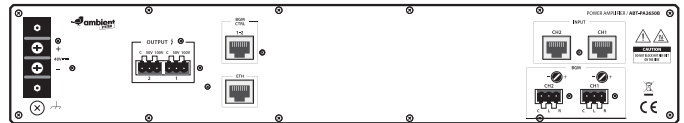
Back



Front



Back



The ABT-PAXXXXB is a family of 2U, rack mountable, 8-channel (ABT-PA8080B, ABT-PA8160B) and 2-channel (high power ABT-PA2650B) class-D transformer isolated power amplifiers for 50 V and 100 V distributed loudspeaker systems. Amplifier ABT-PA8080B can deliver up to 8x 80W, for ABT-PA8160B and ABT-2650B delivering power increases respectively to the 8x 160 W and 2x 650 W. In a bridged mode amplifier channels are combined and can deliver 4x 160 W for ABT-PA8080B, 4x320 W for ABT-PA8160B and 1x 1300 W for ABT-PA2650B.

These amplifiers have 48 VDC input which allows to connect with battery backup system for maximum availability and durability in an voice evacuation system,

and have been developed to meet the specific requirements of the EN 54-16 standard for safety installations.

The ABT-PAXXXXB amplifiers are powered from external power supply module ABT-PS48800 working in a block. The current from block is distributed to individual amplifiers through the „power manager“ ABT-PSM48 (device includes a battery charger and is in compliance with EN 54-4).

The ABT-PAXXXXB amplifiers are prepared to connect an external audio source by using up to the eight BGM inputs (1 per channel) with the sensitivity level regulation. In the alarm mode the BGM inputs have to be muted by shorting the lines from BGM CTRL to the ground.

Characteristics

- Front panel indicators include:
 - Supply
 - Active
 - Fault
- 100 / 50 Volt available via terminal blocks at the rear
- Output channels can be linked into:
 - ABT-PA8080B, ABT-PA8160B:
4 x 160 W or 4 x 320 W by daisy-chaining
50 V tapping (input on parallel)
 - ABT-PA2650B:
1 x 1300 W by daisy-chaining
50 V tapping (input on parallel)
- ABT-PAXXXXB series combines with the ABT-PSM48 Power Supply Manager (charger and back-up supply)
- At the rear of the ABT-PAXXXXB you will find:
 - Individual level adjusters
 - General fault contact (Dry contact)
 - BGM inputs

ABT-PA8080B

8 x 80 Watt class-D power amplifier.

Can be bridge into: 1 x 160 W + 6 x 80 W; 2 x 160 W + 4 x 80 W; 3 x 160 W + 2 x 80 W or 4 x 160 W

ABT-PA8160B

8 x 160 Watt class-D power amplifier.

Can be bridge into: 1 x 320 W + 6 x 160 W; 2 x 320 W + 4 x 160 W; 3 x 320 W + 2 x 160 W or 4 x 320 W

ABT-PA1650B

1 x 650 Watt class-D power amplifier

ABT-PA2650B

2 x 650 Watt class-D power amplifier

Can be bridge into: 1 x 1300 W

ABT-PAXXXXB casings: are 2U high, 19-inch rack mountable.



1488-CPR-0620/W



Technical specifications	ABT-PA8080B	ABT-PA8160B	ABT-PA2650B
Power supply			
Nominal DC input voltage		48 V	
DC input voltage range		42 – 57 V	
Idle current DC channels in standby	570 mA	570 mA	330 mA
DC fuse rating (internal)	2x 7.5 AF-H	2x 15 AF-H	2x 15 AF-H
Overall power efficiency nominal DC input max output power at 1 kHz		80%	
Power consumption			
Sleep	0.15 A	0.15 A	0.15 A
Active	0.57 A	0.57 A	0.33 A
Max. nominal current	20 A	38 A	38 A
Amplifier			
Continuous nominal output power per channel, all channels driven into nominal load at 1 kHz 30°C ambient	80 W 125 Ω / 100 nF	160 W 62 Ω / 200 nF	650 W 15,4 Ω / 200 nF
Continuous nominal output power per channel, all channels driven into nominal load at 1 kHz 55°C ambient	TBA	TBA	TBA
Nominal balanced input level for 100 V output at 1 kHz and nominal load		1 V	
Balanced input level trim range for 100 V output at 1 kHz and nominal load		0.95 – 3 V	
Max balanced input level		3 V	
Input impedance at 1 kHz		22 kΩ	
Input common mode rejection at <1 kHz		> 61 dB	
Frequency response (-6 dB)	75 Hz – 20 kHz 125 Ω / 100 nF	75 Hz – 20 kHz 62 Ω / 200 nF	75 Hz – 22 kHz 15,4 Ω / 200 nF
S/N ref nominal power at 1 kHz 22 Hz – 22 kHz	> 85 dB 125 Ω / 100 nF	> 85 dB 62 Ω / 200 nF	> 85 dB 15,4 Ω / 200 nF
THD power 1 kHz (42 V – 57 V)		< 10%	
Crosstalk between channel 50 Hz – 20 kHz nominal load dB	< -70 dB 125 Ω / 100 nF	< -70 dB 62 Ω / 200 nF	< -70 dB 15,4 Ω / 200 nF
Connectivity			
DC input socket		DG58C-A-2P13	
Audio output socket		3 pin PHOENIX 5.08 mm	
Nominal output voltage taps V		50 / 100	
Mechanical			
Front panel width		482 mm	
Back panel width		445 mm	
Height		88,5 mm	
Net Weight	15 kg	18.6 kg	15 kg
Gross weight (including packaging)	16.2 kg	19.8 kg	16.2 kg
Packaging dimensions		150 x 530 x 610 mm	

Product name	Part number	Description
ABT-PA8080B	116-ABT-PA8080B	Power amplifier D-Class 8x80 Watt
ABT-PA8160B (8CH)	116-ABT-PA8160B (8CH)	Power amplifier D-Class 8x160 Watt
ABT-PA8160B (4CH)	116-ABT-PA8160B (4CH)	Power amplifier D-Class 4x160 Watt
ABT-PA2650B (2CH)	116-ABT-PA2650B (2CH)	Power amplifier D-Class 2x650 Watt
ABT-PA1650B (1CH)	116-ABT-PA1650B (1CH)	Power amplifier D-Class 1x650 Watt