

### SPA

### SINEWAVE POWER AMPLIFIERS



#### MAIN CHARACTERISTICS

- 2 audio outputs (100/70 / 8 Ohm outputs selectable)
- Fault reporting outputs
- Two audio inputs with gain-set
- Supervision of the amplifiers using DIVA8 or IDA8 controllers
- Advanced audio processing for each amplifier channel using DIVA8 or IDA8 systems
- Amplifier supervision and spare amplifier switching through DIVA8 or IDA8 systems
- Loudspeaker line and loudspeaker supervision through DIVA8 or IDA8 systems

There are two types of power amplifier units in the SPA-PAVA product range. The overall power rating is 2x120 or 2x240 watts. The power amplifiers can be set to 100 V, 70 V and 8 Ohm output tapplings. They have short-to-ground, short-circuit detection and line-impedance surveillance up to 5% deviation using the DIVA8 and IDA8 range of products for loudspeaker-line surveillance.

They support both single-spure and redundant loop cabling (A/B). The amplifiers have a changeover facility for spare power amplifier switching. Both features are facilitated by the DIVA8 and IDA8 controllers and slaves. The amplifiers have a 24 VDC back-up supply input.

#### FUNCTIONS

The power amplifiers receive line-level input signals from the DIVA8 and IDA8 controllers and slaves. The display shows the VU-meter reading, when the EN54-16 default switch is inhibited.

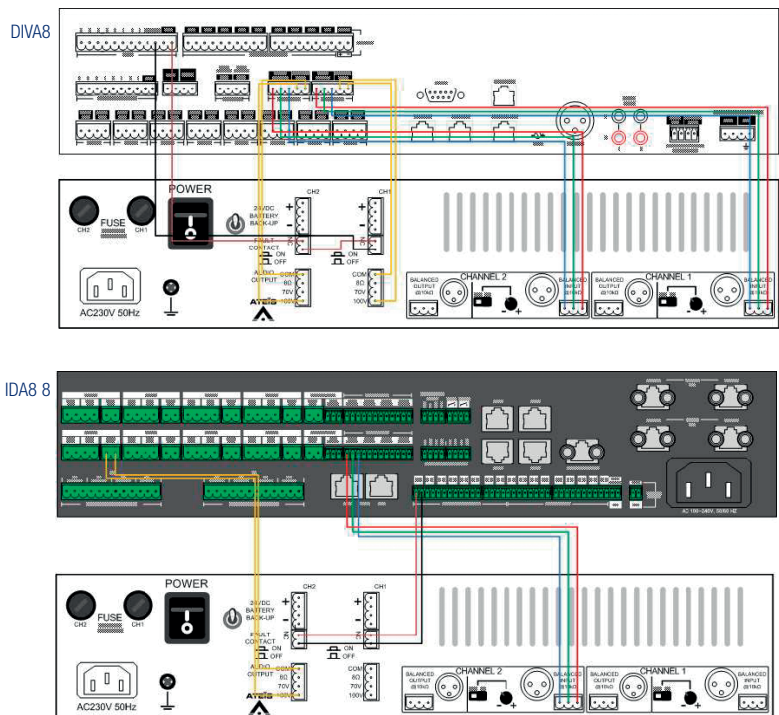
#### CONTROLS AND INDICATORS

- LED VU metering
- Status indicators for: Overload, Temperature control, Battery and Mains

#### INTERCONNECTIONS

##### Rear

- Rotary volume control
- Mains switch
- Mains input
- Battery backup input
- Two line inputs
- 100 V, 70 V, and 8 ohm outputs (for each amplifier channel)



#### CERTIFICATIONS AND APPROVALS

REGION	CERTIFICATIONS	
Europe	CE	CE – 0359 (Intertek)
	Immunity	according to EN50103-4
	PAVA	EN54-16 certified 2012

### SPA

#### SINEWAVE POWER AMPLIFIERS

#### PARTS INCLUDED

Quantities	Components
1	SPA 2xxx Sinewave Power Amplifier
1	Power cord
1	Set of mounting brackets for 19" rack
1	Set of connectors
1	Set of feet

#### TECHNICAL SPECIFICATIONS

##### Electrical

##### Mains power supply

Voltage	230 VAC ±10%, 50/60 Hz
Power consumption**	standby - idle* - Pmax
<b>SPA 2120</b>	28 W – 150 W – 322 W
<b>SPA 2240</b>	64 W – 287 W – 655 W

\* Idle: Measured with 10 Volt surveillance tone on the output.

\*\* (Total Mains-power consumption)

##### Battery power supply

Voltage	21-28 VDC
Power consumption**	standby - idle* - Imax
<b>SPA 2120</b>	0.25 A – 2.9 A – 6.4 A
<b>SPA 2240</b>	0.30 A – 5.47 A – 12.3 A

\*\* (Per ch. @ 28 VDC)

\* (Alarm cycle + 10 V pilot-tone @ 28 VDC)

##### Line inputs

Connector (electronically balanced)	2 x (One per channel) 3-pin XLR and 3-pin phoenix balanced
Frequency response	+/-3 dB @ 40 Hz and 20 kHz
S/N	> 90 dBA
THD	< 1% @ 1 kHz
Input range	-6 dBV to 6 dBV / 770mV
Input impedance	22 kOhm

Loudspeaker outputs	SPA2120
Rated load resistance	100 Ohm (100 V); 50 Ohm (70 V)
Rated load capacitance	60 nF (100 V); 125 nF (70 V)
Rated output power (per channel)	120 W (cont. at 40°C)

Loudspeaker outputs	SPA2240
Rated load resistance	40 Ohm (100 V); 20 Ohm (70 V)
Rated load capacitance	125 nF (100 V); 250 nF (70 V)
Rated output power (per channel)	240 W (cont. at 40°C)

Frequency response	40 Hz to 20 kHz (-3 dB)
S/N	> 90 dB (no pilot tone)
Crosstalk	< 80 dB at nominal load for 1 kHz
Distortion	< 1% (@ 1 kHz) @ -10dB of rated output

##### Mechanical

Dimensions (H x W x D)	
for tabletop use, with feet	92 x 440 x 305 mm
for 19" rack use, with brackets	88 x 483 x 305 mm
Weight	
<b>SPA 2120</b>	12,3 kg (27,1 lb)
<b>SPA 2240</b>	18,5 kg (40,8 lb)
Mounting	Standalone or 19"-rackmount
Colour	RAL7016

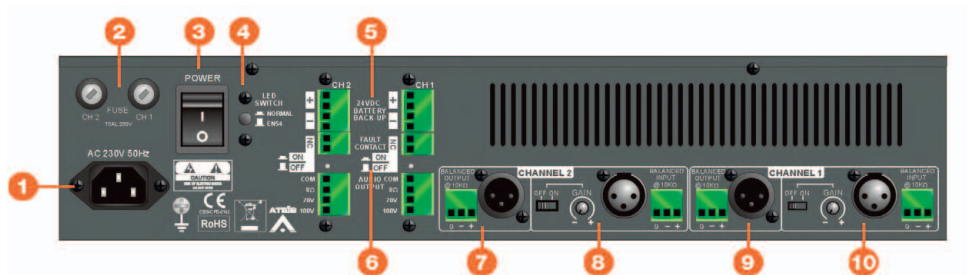
##### Environmental

Operating temperature	-5 °C to +55 °C (+23 °F to +131 °F)
Storage temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	15% to 90%
Air pressure	600 to 1100 h Pa

##### Ordering information

**SPA 2120**

**SPA 2240**



1.	AC Power inlet
2.	AC/DC Fuse
3.	Power switch
4.	Configuration switches for EN54-16 compliances
5.	Channel 1/2 24 VDC battery backup connector
6.	Fault contact
7.	Channel 1 output
8.	Channel 1 input
9.	Channel 2 output
10.	Channel 2 input