



The 4-Channel Amplified System Controllers of the S-Series combine state-of-the-art power electronics with an advanced DSP that can be conveniently operated via the touch display. With output powers from 600 W to 4800 W per channel, they cover a wide range of applications, from permanent installations to rental operations, from small configurations to large-scale sound reinforcement. Its intelligent power sharing ensures that the available power is used very effectively when driving asymmetrical loads.

PRODUCT SPECIFICATIONS

Model	S 3	S 5	S 10	S 20	
Description	4-Channel Amplified System Controllers				
Total Power Supply Output	2,5 kW	5 kW	10 kW	20 kW	
Output Power IEC*	8 Ω	4 x 600 / 1 x 1200	4 x 1200 / 1 x 1200	4 x 1200 / 1 x 1300	4 x 2400 / 1 x 3000
all channels driven/single channel (Watt)	4 Ω	4 x 600 / 1 x 600	4 x 1200 / 1 x 2400	4 x 2400 / 1 x 2500	4 x 4800 / 1 x 6000
	2,7 Ω	4 x 400 / 1 x 400	4 x 1200 / 1 x 1700	4 x 2400 / 1 x 3300	4 x 4800 / 1 x 6700
* 40 Hz - 5 kHz, 12 dB crest factor	2 Ω	4 x 300 / 1 x 300	4 x 1200 / 1 x 1200	4 x 2400 / 1 x 2500	4 x 4800 / 1 x 5000
	100 V	4 x 600 / 1 x 1200	4 x 1200 / 1 x 2400	4 x 2400 / 1 x 2500	4 x 4800 / 1 x 5000
	70 V	4 x 600 / 1 x 900	4 x 1200 / 1 x 1800	4 x 2400 / 1 x 2500	4 x 3500 / 1 x 3500
Peak Output Voltage	150 V	150 V	150 V	235 V	
Peak Output Current	18 A	36 A	50 A	71 A	
Total Harmonic Distortions	< 0,05 %				
SMTPE	< 0,05 %				
Damping Factor (20 - 500 Hz @ 8 Ω)	> 500				
Crosstalk (20 - 1000 Hz)	> 70 dB (A)				
Signal to Noise Ratio (20 Hz - 20 kHz)	111 dB (A)	111 dB (A)	111 dB (A)	115 dB (A)	
Max DSP Input Level (balanced)	+ 20 dBu				
Voltage Gain	26 . . . 44 dB in 1 dB increments				
Cooling	front to rear airflow, temperature controlled fans				
User Interface	4.3" touch display + push-encoder				
Inputs	4 x XLR analogue - 2 x switchable AES 3				
Outputs	4 x Speakon NL4 1+/-, 2+/-, 4 x XLR loop thru				
Connectivity	1 x USB-B, 2 x RJ45 w / ethernet switch				
Mains Connector	PowerCON®	PowerCON®	PowerCON®	PowerCON® 32	
Operating Mains Voltage	90 - 265 V AC				
Current Draw (@1/8 output power)	2,1 A	3,7 A	7,3 A	14 A	
Power Consumption (idle/sleep/standby)	< 100 W (S 20: < 140 W) / < 40 W / < 5 W				
Protections	soft start, turn-on / turn-off transients, turn-on mute, over-temp, DC, RF, short circuit, open / mismatched load, overload, clip limiter, mains breaker protection				
Weight	6,7 kg	6,8 kg	7 kg	9,5 kg	
Size (height x width x depth)	88 (2 HU) x 483 (19") x 330 (S 20: 360)				
Order No.	01823 01821/AES 67 (AES 67 Board), 01821/GPIO (GPIO Karte)	01825	01827	01829	

4,3" touch display
for quick access
and intuitive navigation

Push encoder
for navigation and
precise data entry

Push button
blacklit operate /
standby



USB interface
for programming and
firmware updates

Fan
quiet, temperature
controlled fan

Ethernet ports
for remote control and
monitoring with switch
for daisy chaining

Analog audio inputs
switchable to digital
AES3 inputs



PowerCON™ mains
inlet, 32 A-type on S20

SpeakON™ outputs
to loudspeakers

Signal link outputs

FEATURES

Power Supply

- Wide-range switched-mode power supplies for worldwide use from 90 to 265 VAC
- Power factor correction (PFC) to relieve the mains power supply

Amplifier

- Highly efficient Class D topology of the latest generation
- Intelligent power sharing when driving asymmetrical loads
- High voltage outputs for the best possible dynamics
- Suitable for driving 70 V / 100 V lines
- Quiet, temperature-controlled fans

DSP

- Extensive phase corrected SEEBURG loudspeaker library (> 270 Presets)
- Selectable operating modes for each loudspeaker
- IIR / FIR filter, RMS und peak-limiter per output
- Comfortable user interface with 4,3" IPS touch display und push-encoder
- Flexible input routing / input summing
- Free assignment of speaker presets per output
- Gain, mute, phase, input delay up to 114 meters (333 ms) per channel
- Input und Group EQ: up to 38 filters (PEQ, LP, HP, BP, SB, AP) in total
- 0,8 ms minimum latency from A/D to D/A

PC-Software

- Remote monitoring of
 - Temperatures
 - Impedances
 - Voltages
 - Currents
 - Clipping
 - Error messages
- Remote control of
 - On/standby
 - Preset change
 - Gains, user-EQs, delays, mutes
 - Groups for levels, EQs, delays, presets
- Smart® integration

Interfaces

- 4 x XLR analog / AES3 (switchable)
- 4 x SpeakON™N4
- PowerCON™16A, PowerCON™32 A (S20)
- Two RJ45 Ethernet control ports with switch (loop-through)
- USB 2.0 type B port

Optional

- 4-channel AES 67-interface with two Ethernet ports
- Phoenix® GPIO socket (fault monitoring, remote switch-on, global mute)

