



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                |                     |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------|---------------------|---------------------|
| <b>Description</b>                            | 4-Channel Amplified System Controllers                                                                                                                              |                    |                     |                     |                     |
| <b>Total Power Supply Output</b>              | 2,5 kW                                                                                                                                                              | 5 kW               | 10 kW               | 20 kW               |                     |
| <b>Output Power IEC*</b>                      | 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 1200 | 4 x 1200 / 1 x 2400 | 4 x 2400 / 1 x 2500 | 4 x 4800 / 1 x 6000 |
|                                               | 2,7 Ω                                                                                                                                                               | 4 x 600 / 1 x 800  | 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 600 / 1 x 600  | 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 1200 | 4 x 1200 / 1 x 1800 | 4 x 2400 / 1 x 2500 | 4 x 3500 / 1 x 3500 |
| <b>Peak Output Voltage</b>                    | 150 V                                                                                                                                                               | 150 V              | 150 V               | 235 V               |                     |
| <b>Peak Output Current</b>                    | 25 A                                                                                                                                                                | 36 A               | 50 A                | 71 A                |                     |
| <b>Total Harmonic Distortions</b>             | < 0,05 %                                                                                                                                                            |                    |                     |                     |                     |
| <b>SMTPE</b>                                  | < 0,05 %                                                                                                                                                            |                    |                     |                     |                     |
| <b>Damping Factor</b> (20 - 500 Hz @ 8 Ω)     | > 500                                                                                                                                                               |                    |                     |                     |                     |
| <b>Crosstalk</b> (20 - 1000 Hz)               | > 70 dB (A)                                                                                                                                                         |                    |                     |                     |                     |
| <b>Signal to Noise Ratio</b> (20 Hz - 20 kHz) | 111 dB (A)                                                                                                                                                          | 111 dB (A)         | 111 dB (A)          | 115 dB (A)          |                     |
| <b>Max DSP Input Level</b> (balanced)         | + 20 dBu                                                                                                                                                            |                    |                     |                     |                     |
| <b>Voltage Gain</b>                           | 26 . . . 44 dB in 1 dB increments                                                                                                                                   |                    |                     |                     |                     |
| <b>Cooling</b>                                | front to rear airflow, temperature controlled fans                                                                                                                  |                    |                     |                     |                     |
| <b>User Interface</b>                         | 4.3" touch display + push-encoder                                                                                                                                   |                    |                     |                     |                     |
| <b>Inputs</b>                                 | 4 x XLR analogue - 2 x switchable AES 3                                                                                                                             |                    |                     |                     |                     |
| <b>Outputs</b>                                | 4 x Speakon NL4 1+/-, 2+/-, 4 x XLR loop thru                                                                                                                       |                    |                     |                     |                     |
| <b>Connectivity</b>                           | 1 x USB-B, 2 x RJ45 w / ethernet switch                                                                                                                             |                    |                     |                     |                     |
| <b>Mains Connector</b>                        | PowerCON®                                                                                                                                                           | PowerCON®          | PowerCON®           | PowerCON® 32        |                     |
| <b>Operating Mains Voltage</b>                | 90 - 265 V AC                                                                                                                                                       |                    |                     |                     |                     |
| <b>Current Draw</b> (@1/8 output power)       | 2,1 A                                                                                                                                                               | 3,7 A              | 7,3 A               | 14 A                |                     |
| <b>Power Consumption</b> (idle/sleep/standby) | < 100 W (S 20: < 140 W) / < 40 W / < 5 W                                                                                                                            |                    |                     |                     |                     |
| <b>Protections</b>                            | 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 |                    |                     |                     |                     |
| <b>Weight</b>                                 | 6,7 kg                                                                                                                                                              | 6,8 kg             | 7 kg                | 9,5 kg              |                     |
| <b>Size</b> (height x width x depth)          | 88 (2 HU) x 483 (19") x 330 (S 20: 360)                                                                                                                             |                    |                     |                     |                     |
| <b>Order No.</b>                              | <b>01823</b><br><b>01821/AES 67</b> (AES 67 Board), <b>01821/GPIO</b> (GPIO Karte)                                                                                  | <b>01825</b>       | <b>01827</b>        | <b>01829</b>        |                     |

**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)

