Ottocanali Series

8-Channel High-Performance Power Amplifier with optional DSP and Dante™ For Lo-Z & Hi-Z Installations





















- ► Multi-zone venues
- ► Themed entertainment, amusement parks, shopping malls
- ► Cruise ships
- ► Stadiums, arenas, convention centers
- ► Houses of worship
- ► Theaters, auditoriums, concert halls
- ► Main systems, central or distributed, lo-Z/hi-Z

Even more flexible and reliable, the new Ottocanali Series includes three models namely the Ottocanali 4K4, 8K4 and 12K4 – available with optional DSP and Dante™ by Audinate® – up to a total of 12,000 W at 4 ohm, ideal for multizone applications in mid to large-scale installs.

Ottocanali implements two redundant universal switch mode power supplies with PFC and patented SRM (Smart Rails Management) technology that maximizes the efficiency.

Powersoft Ottocanali offers a wide range of system control and monitoring functions as well as sound shaping options; the DSP version offers extensive feature set:

- Flexible routing/mixing provided by the internal 8x8 input/output matrix, allows the user to mix and route analog and digital I/O.
- Input and output IIR, FIR, IIR+FIR equalizers and raised-cosine filters.
- ► Complete sets of limiters: peak, RMS voltage, RMS current, and TruePower™.
- Compensation of the speaker cable losses with Active
 DampingControl[™] and LiveImpedance[™] load monitoring
- Customizable input backup policy that allows to automatically switch input source in case of signal failure.
- ► Easy plug-and-play dual redundant Dante[™] ports.

Practical and versatile, 8 channels for lo-Z or distributed line systems all neatly packed into a double rack unit:

- Directly drives any mixed configuration of low impedance loads and 70V/100V lines.
- Implements HPF filter to either 35 Hz or 70 Hz configurable per channel.
- GPIO, remote on/off switch and MAIN/AUX input selection.
- Dual redundant universal switch mode power supply with PFC (Power Factor Correction) ensure unparalleled system reliability.

Outstanding low power consumption and heat dissipation: the ideal main system in any venue where performance is priority.



Ottocanali Series

8-Channel High-Performance Power Amplifier with optional DSP and Dante™ For Lo-Z & Hi-Z Installations

Specifications

| Channel Handling | | |
|---------------------------|------------------------------------|---------------------------------------|
| Number of output channels | 8 mono, bridgeable per ch. pair | 2x 8 pin Phoenix DFK-PC 4/8-G-7,62 |
| Number of input channels: | | |
| Analog | 8 Main Line | 12 pin Phoenix MC 1.5/12-ST-3.81 |
| | 8 Aux | 12 pin Phoenix MC 1.5/12-ST-3.81 |
| Digital* | 16 Dante™ | 2x RJ45 |

| Audio | |
|------------------------------------------------------------------------------|------------------------------|
| Gain | 32 dB |
| S/N ratio (amplifier section, 20 Hz - 20 kHz A weighted) | > 106 dB |
| Output Noise A-Weighted @ 8 Ω - Analog to Analog / Digital to Analog | < -70.0 dBV |
| Dynamic Range A-Weighted @ 8 Ω - Analog to Analog / Digital to Analog | 114,3 dB |
| Damping Factor @ 8 Ω, 100Hz | > 10000 |
| Slew Rate (input filter bypassed) | > 50 V/µs |
| Frequency Response (± 0.5 dB , 1 W @ 8 Ω) | 20 Hz - 20 kHz |
| Crosstalk (1 kHz) | -65 dB |
| THD+N (from 0.1 W to Full Power) | < 0.08% (typical < 0.05%) |
| DIM (from 0.1 W to Full Power) | < 0.8% (typical < 0.05%) |
| Input Impedance | 20 kΩ Balanced |
| Maximum input level | 6V/ +17.8 dBu |
| | |

| DSP* | PRELIMINARY |
|-----------------------|----------------------------------------------------------------------------------------------------------------------|
| Remote control | Complete user interface integrated into Armonía Pro Audio Suite™ |
| AD converters | 24 Bit Tandem™ @ 96 kHz 129 dB Dynamic Range - 0.00056 % THD+N |
| DA converters | 24 Bit Tandem™ @ 192 kHz 121 dB Dynamic Range - 0.00084 % THD+N |
| Sample rate converter | 24 Bit @ 44.1 kHz to 192 kHz 140 dB Dynamic Range - 0.0001 % THD+N |
| Internal precision | 40 bit floating point |
| Delay | 2 s + 100 ms for time alignment |
| Equalizer | Raised-cosine, custom FIR, parametric IIR: peaking, hi/lo-shelving, all-pass, band-pass, band-stop, hi/lo-pass |
| Crossover | linear phase (FIR), hybrid (FIR-IIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR) |
| Limiters | TruePower™, RMS voltage, RMS current, Peak limiter |
| Damping control | Active DampingControl™ |

 $^{^{\}star}$ Available only on Ottocanali DSP version.

| Output Stage | 1 | 4K4 | 8K4 | 12K4 |
|---------------------------------|----------------------|-----------------------|-----------------------|-----------------------|
| Input sensitivity @ 8 Ω load | @ max out power | 1.2V/3.8 dBu | _ | 1.94 V / 8 dBu |
| | @ 1000 W out power | _ | 1.6V/6.3 dBu | 1.6V/6.3 dBu |
| Max output power | er per channel | | | |
| 8 Ω | | 250 W | 600 W | 850 W |
| 4 Ω | | 500 W | 1000 W | 1500 W |
| 2 Ω | | 450 W | 850 W | 1000 W |
| Max output power | er in bridged mode (| channel pair) | | |
| 8 Ω | | 1000 W | 2000 W | 3000 W |
| 4 Ω | | 900 W | 1700 W | 2200 W |
| Max unclipped or | utput voltage | 65 V _{peak} | 90 V _{peak} | 90 V _{peak} |
| Max output curre | nt | 15 A _{peak} | 23 A _{peak} | 23 A _{peak} |
| Hi-Z distributed li | nes @ 70V | | | |
| Max output p | ower per channel | 500 W | 1000 W | 1500 W |
| Max unclippe | d output voltage | 100 V _{peak} | 100 V _{peak} | 100 V _{peak} |
| Hi-Z distributed li | ines @ 100V | | | |
| Max output p | ower per channel | 500 W | 1000 W | 1500 W |
| Max unclippe | d output voltage | 140 V _{peak} | 140 V _{peak} | 140 V _{peak} |
| | | | | |

The power figure is calculated by driving and loading symmetrically all the channels: uneven loads allow to achieve highest performance.

AC Mains Power

| Power supply | Redundant universal, regulated switch mode with PFC (Power Factor Correction) |
|----------------------------|-------------------------------------------------------------------------------|
| Nominal power requirements | 100 - 240 V @ 50/60Hz |
| Operating range | 90 - 264 V |

Thermal

| temperature | 0° - 45° C / 32° - 113° F |
|---------------------|------------------------------------------------------------------|
| Thermal dissipation | Fan variable speed, temperature controlled front to rear airflow |

Other

Aux command (triggering aux inputs) and aux voltage for remote on/off switching

Aux front switch enabling and external 24 V DC (0.2 A) auxiliary supply

Construction

| Dimensions L x H x W | 483 mm x 89 mm x 360 mm (19.0 in x 3.5 in x 14.2 in) |
|----------------------|------------------------------------------------------|
| Weight | 14 kg (30.8 lb) |



