

M30D



2-Channel Power Amplifier for Portable and Permanently Installed Applications



- ✓ Touring
- ✓ Installation

2CH



- ▶ Small to medium-scale systems, portable and installed
- ▶ Subwoofers
- ▶ Fullrange loudspeakers
- ▶ Hotels, restaurant and bars
- ▶ Amusement parks, themed entertainment
- ▶ Houses of worship, auditoriums
- ▶ Educational facilities
- ▶ Live and dance clubs
- ▶ Mobile DJ's

Equally versatile in both portable and installed system configurations and with delivering up to 3,000 W out of one single rack unit weighing just over 7 kg / 16 lb, the **M30D** is a flexible, cost-effective solution for small to medium sound systems.

Benefitting from core technologies of Powersoft's flagship K Series, the **M30D** sets a class standard in efficiency, leading to low power consumption, and consequently to substantial money savings on electricity, all in an eco-friendly way.

Minimum heat dissipation makes the **M30D** suitable for hot or otherwise challenging environments.

Added the legendary sound quality thanks to Powersoft's unique, patented Class D output stage design, the **M30D** represents a fantastic value, practically as well as commercially.

The **M30D** comes with 4 years warranty and, like all Powersoft products, is entirely designed and made in Italy.

| 2-channel mode | | | | mono-bridged mode |
|----------------|----------|--------------------|---------------------|-------------------|
| 4 Ω / Ch | 8 Ω / Ch | 70 V ¹⁾ | 100 V ²⁾ | 8 Ω / Ch pair |
| 1,500 W | 900 W | 1,200 W | 1,500 W | 3,000 W |

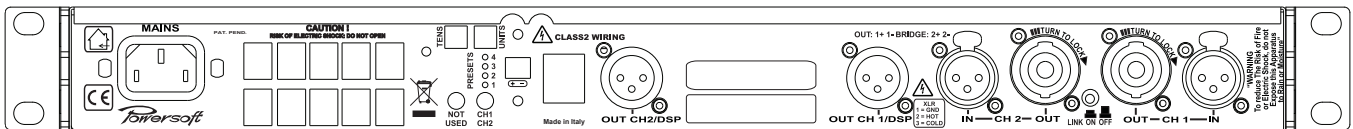
EIAJ Test Standard, 1 kHz, 1% THD

- ✓ **Legendary Powersoft efficiency:**
 - ▶ Compact and space saving: 1 RU at 358 mm / 14.1" depth
 - ▶ Green Audio Power®: minimal "carbon footprint" and operational cost of electricity
 - ▶ Plenty of power, little weight: up to 3,000 W in 7.3 kg / 16 lb
- ✓ **Unique Powersoft technology for efficient, reliable performance:**
 - ▶ Switch mode power supply, internally switchable 230/115 V nominal
 - ▶ Fixed frequency switch mode amplifier output stages
 - ▶ Patented amplifier output filters with ripple cancellation network
- ✓ **Driving distributed line systems:**
 - ▶ Able to drive 100 V distributed lines directly without the need for transformers¹⁾
- ✓ **Optimized for 4 Ω loads, thus ideally matching real-world scenarios in targeted applications**
- ✓ **Fully protected circuit design:**
 - ▶ AC protection: shuts down power supply when AC mains voltage is outside operating range
 - ▶ Clip limiter: prevents severely clipped waveforms from reaching loudspeakers, while still maintaining full peak power output
 - ▶ DC protection: protects against infrasonic signal at the outputs
 - ▶ VHF protections: protects the loudspeakers against destructive non-audible, non-musical high frequency signals
 - ▶ Short circuit protection: protects the amplifier from short circuit or similar events on the outputs; with automatic protection reset
 - ▶ Thermal protection: mutes outputs once output devices reach 75 °C / 167 °F; automatic unmute once temperature is down to 65 °C / 149 °F
- ✓ Temperature controlled continuous variable speed fan, front to rear airflow
- ✓ Recessed stepped level attenuators
- ✓ Full four years warranty
- ✓ Also available as M30D HDSP+ETH with integrated DSP and Ethernet comm port

1) External high-pass filter and voltage limiter required.

2) External high-pass filter required.





Specifications

| | | | | | |
|-------------------------------------|---|----------|--------------------|---------------------|-------------------|
| General | | | | | |
| Number of channels | 2 | | | | |
| Output power | 2-channel mode | | | | mono-bridged mode |
| EIAJ Test Standard, 1 kHz, 1% THD | 4 Ω / Ch | 8 Ω / Ch | 70 V ¹⁾ | 100 V ²⁾ | 8 Ω / Ch pair |
| | 1,500 W | 900 W | 1,200 W | 1,500 W | 3,000 W |
| Max output voltage / current | 135 V _{peak} / 65 A _{peak} | | | | |
| AC Mains Power | | | | | |
| Power supply | Universal, regulated switch mode | | | | |
| Operating voltage / Inrush current | 115 V / 230 V (factory selection) ± 15%, 50 Hz - 60 Hz / < 28 A _{RMS} | | | | |
| Consumption / current draw | @ 230 V | | @ 115 V | | |
| Idle | 37 W | 0.3 A | 37 W | | 0.6 A |
| 1/8 of max output power @ 4 Ω | 530 W | 3.54 A | 530 W | | 7 A |
| 1/4 of max output power @ 4 Ω | 1,024 W | 6.52 A | 1,024 W | | 13.04 A |
| Thermal | | | | | |
| Environmental operating temperature | 0° - 45° C / 32° - 113° F | | | | |
| Thermal dissipation | Fan, continuously variable speed, temperature controlled, front to rear airflow | | | | |
| Idle | 126 BTU/h | | | | 32 kcal/h |
| 1/8 of max output power @ 4 Ω | | | | | 133 kcal/h |
| 1/4 of max output power @ 4 Ω | | | | | 236 kcal/h |
| Audio | | | | | |
| Gain | 32 dB, 30 dB, 28 dB, 26 dB, 24 dB, 22 dB, 20 dB, 18 dB, 14 dB, 4 dB, -∞, user selectable | | | | |
| Frequency response | 10 Hz - 30 kHz (1 W @ 8 Ω, ± 3 dB) | | | | |
| S/N ratio (amplifier section) | >112 dBA (20 Hz - 20 kHz, A weighted) | | | | |
| Crosstalk separation | >70 dB @ 1 kHz | | | | |
| Input sensitivity @ 8 Ω | 2.13 V / 8.8 dBu | | | | |
| Max input level | 6 V / 17.7 dBu | | | | |
| Input impedance | 10 k Ω | | | | |
| THD+N | ≤ 0.04% @ 1/2 of full power, 8 Ω / ≤ 0.07% @ 1/2 of full power, 4 Ω | | | | |
| DIM100 IMD | typ. <0.005% (<0.02% @ >0.1 W) | | | | |
| Slew rate | 40 V/μs @ 8 Ω, input filter bypassed | | | | |
| Damping factor @ 8 Ω | >5000 @ 100 Hz | | | | |
| DSP (optional) | | | | | |
| A/D converter | CS5381, 2 channels, 24 bit / 48 kHz, 120 dB SNR | | | | |
| D/A converter | CS4398, 2 channels, 24 bit / 48 kHz, 120 dB SNR | | | | |
| Frequency response @ -3 dB | 7 Hz - 22 kHz | | | | |
| THD | < 0.01% (20 Hz - 20 kHz) | | | | |
| Presets | Bank of 4 presets, management and upload via Armonia Pro Audio Suite™ | | | | |
| Delay for time alignment | 10 ms per output | | | | |
| Crossover filters | Butterworth, Linkwitz-Riley, Bessel, 6 dB/oct to 48 dB/oct | | | | |
| Output equalizer | up to 12 biquad fully parametric per channel: peaking, hi/lo shelving, hi/lo pass, band pass, band stop, all pass. | | | | |
| Input equalizer | up to 5 biquad filters (PEQ, shelving, band pass, band stop, all pass) | | | | |
| Limiters | Peak limiter, RMS limiter, frequency dependent RMS limiter | | | | |
| Damping control | < 120 Hz, range ± 2 Ω | | | | |
| System Delay | up to 170 ms for 2 IN/2 OUT or 340 ms for 1 IN/2 OUT | | | | |
| Front Panel | | | | | |
| Indicators | 4 LEDs per channel: 3 x green, 1 x red 2 status LEDs: 1 x green, 1 x yellow | | | | |
| Controls | 1 stepped level attenuator pot per channel; mains switch | | | | |
| Maintenance | Dust filter foam behind front panel | | | | |
| Rear Panel | | | | | |
| Audio signal input connectors | 2 x balanced Neutrik® XLR female | | | | |
| Loudspeaker output connectors | 2 x Neutrik® Speakon NL4MD, 2 x Neutrik® XLR male hard-wired to the corresponding input | | | | |
| Network data port Ethernet | 1 x RJ45 with activity LED with 2 rotary address switches | | | | |
| DSP preset selection | 1 x Pushbutton (stepping through bank of 4 presets) 1 x 4 LED preset indicators | | | | |
| Aux voltage | 1 x 2-pin Phoenix type MC 1.5/2-ST-3.81 | | | | |
| AC mains | IEC C13 16 A connector; AC mains cord with 3-pin plug 15 A for US, IEC Schuko 16 A for every other nation | | | | |
| Controls | 1 x link switch, linking analog inputs 1 & 2 | | | | |
| Construction | | | | | |
| Dimensions | W 483 mm / 19", H 44.5 mm / 1.75", D 358 mm / 14.1" | | | | |
| Chassis | 1 mm (0.04") steel chassis and steel removable dust cover, 3 mm (0.12") steel front panel, screw hole protection, steel side reinforcement & rear support | | | | |
| Weight | 7.3 kg / 16 lb | | | | |

1) External high-pass filter and output voltage limiter required.
2) External high-pass filter required.

Data is subject to change without notice.
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