

Processor

Digital system processor

4 analog inputs / 8 analog outputs
4 digital AES3 inputs / 8 digital AES3 outputs
24 bit/96 kHz A/D and D/A converters
50 configurable presets

Features

High audio quality
Dedicated APG presets
Control software
User friendly
Grouping functionality

Applications

System management and signal processing for large, complex APG systems, with or without subs
Digital delay
Loudspeaker pre-EQ
Signal routing and zoning

Specifications

Bandwidth: 10 Hz - 40 kHz
Dynamic Range > 118 dB
High-pass / low-pass / shelving filters
Crossover filters: Bessel, Butterworth, Linkwitz
Riley, Hardman, LIR
Single threshold limiter or simulating a crossover
Parametric EQ: 8-band per output
6-band EQ per input

APG dynamic protection
Lock function for front panel controls
RJ45 Ethernet Port as standard, automatic PC network connection via DHCP
Dante compatibility option

The DMS48F is a 4-in/8-out digital signal processor enabling all matrixing and routing possibilities. The DMS48F is characterized by the quality of its design and its high specification I/O converters for an extraordinary level of performance.

Its easy-to-access interface comprises three velocity-sensitive rotary encoders which provide intuitive parameter control and configuration as if analogue filters had been applied.

The device includes all the necessary processing and filtering functions across 50 presets: Each input features: gain, high-pass filter, high and low shelving, 6-band parametric EQ, delay. Each output features: gain, crossover, high and low shelving, 8-band parametric EQ, phase reverse, delay, limiter, plus dynamic, thermal and excursion protection.

APG Live Manager software enables remote control of the device via Ethernet protocol. Standard or custom presets are provided for APG's Micro Axial, Micro, and Dispersion Series loudspeakers and the UNILINE system.

DMS48F



Digital System Processor DMS48F

The APG DMS48F digital processor is primarily intended for the management and processing of large, complex systems, but also for loudspeaker processing in cases where systems are operated at their maximum power. The large number of filtering, equalization and time alignment functions makes the product ideal for the configuration and processing of FOH systems.

The DMS48F increases system reliability by integrating complex and innovative dynamic protection systems that are adapted to each speaker. Excursion and temperature settings are digitally simulated and controlled, which enables the speakers to be used safely up to their maximum performance ratings.

The DMS48F incorporates grouping features which enable system configuration from the presets of each speaker.

Thanks to its flexible and modular system configuration, its high quality processing and its active loudspeaker protection, the DMS48F offers sophisticated, versatile and reliable system management, regardless of the APG system used.

APG Live Manager software is easily installed and intuitive to use and provides excellent real-time control of all parameters of the current program.

APG

DMS48F

Technical Specifications



General

DMS48F

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|----------------------|--|
| Inputs | 4 (Analog or AES3) Dante (option) |
| Input Impedance | > 10 kOhm, Electronically balanced |
| Maximum Input level | +20 dBu |
| Outputs | 8 (Analog or AES3) |
| Output Impedance | <100 Ohm, balanced ground |
| Maximum Output Level | +18 dBu into 600 Ohm load |
| Sample Rate | 96 kHz |
| Bit Depth | 24 bits |
| Frequency Response | 10 Hz à 40 kHz, +/-3 dB (disabled filters) 20 Hz à 20 kHz, +/-0.5 dB (disabled filters) |
| THD | <0.008 %, (+10 dBu, 20 Hz to 20 kHz, 30 kHz bandwidth) |

Processing

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|--------------------------------------|--|
| Gain | +20 dB to -80 dB and mute, 0,2 dB steps |
| Virtual inputs | 4 virtual inputs A, B, C and D linked to selectable physical inputs (1, 2, 3, 4, 1+2, 3+4) |
| Output channel sources | Selectable virtual input A, B, C or D |
| HP/LP filters selectable frequencies | Off, 20.2 Hz to 25.6 kHz, 1/80 octave steps |
| HP/LP filters type | 12, 18 and 24 dB/octave Bessel and Butterworth 12, 24 and 48 dB/octave Linkwitz Riley 4th or 8th order Hardman Linear phase filters LIR |
| Delay | Input 1 s, output 1 s max |
| Limiter | High performance limiter, adjustable threshold in 0.2dB steps Crossover limiter for passive loudspeakers |
| Protections | Over-excursion and overheating protections |
| EQ Frequency | 10 Hz to 25.6 kHz, 1/80 octave steps |
| EQ Gain | +15 dB to -15 dB, 0.2 dB steps |
| EQ Width | 0.1 to 5.0 octaves bandwidth, 1/32 octave steps |

Connectors

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|----------------|------------------|
| Audio inputs | 3 pin female XLR |
| Audio outputs | 3 pin male XLR |
| Ethernet port | Shielded RJ45 |
| Auxiliary port | Shielded RJ45 |
| Mains | 3 pin IEC |

Characteristics

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|----------------------|---|
| Mains Power | Universal switch-mode PSU, 85V to 230V AC, 50/60 Hz |
| Consumption | 30 Watts |
| Dimensions (H, W, D) | 1.7" x 19" x 10" (44 x 482 x 254 mm) |
| Weight | 6 lb |

Control Software APG Live Manager

Control software of the DMS48F via a computer PC, smartphone or tablet.



APG