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# **D** Series Four-Channel Digital Power Amplifier with built-in DSP

D Series is a four-channel digital power amplifier that integrates Class D power amplification technology with high-precision DSP digital signal processing, enhancing audio performance and ease of operation. It comes with IIR filter, FIR filter, and optional Dante network functionality for precise audio tuning and optimization.

Users can configure and control the amplifier rapidly via the display and USB interface on the front panel and the Ethernet. Thanks to its exceptional performance and user-friendly software interface, the D Series amplifier is the perfect choice for professional audio systems.



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# **BrainCore**<sup>TM</sup>

BrainCore<sup>™</sup> is an innovative core application technology independently developed by Audiocenter, dedicated to delivering audio systems with supreme performance and high reliability.

Utilizing advanced technology and scientific methods, BrainCore<sup>™</sup> optimally analyzes and processes signals, power amplifiers, and speakers. This results in excellent frequency response and audio reproduction, even at high SPL levels.



#### Highlights

#### Integrated Design and Performance Maximization

The D Series is a four-channel digital DSP power amplifier that combines Class D power amplification technology with high-precision DSP. It greatly satisfies the parameter and performance requirements of audio systems and maximizes the performance of the equipment itself. Additionally, it simplifies the tuning and management processes of audio systems, enhancing the ease of operation and efficiency.

#### Intelligent Audio System Management

#### **Remote Monitoring and Control**

With the D Series amplifier, users can remotely monitor and control the status of audio equipment, adjust settings in real-time, greatly enhancing the convenience and efficiency of monitoring.

#### **Centralized Management and Maintenance**

By centrally managing the audio system over the network and carrying out software updates, parameter configurations, and maintenance tasks altogether, the efficiency of operational maintenance can be significantly enhanced.

#### Simplified Installation and Cost Reduction

Transmitting audio signals via the network reduces reliance on traditional audio wiring, simplifying the installation process and reducing construction costs and complexity.

#### High-Efficiency Class D Power Amplifier

The D Series utilizes Class D amplification technology, with an efficiency exceeding 90%, which significantly reduces energy loss during power conversion. This not only decreases heat generation but also lowers energy consumption while maintaining excellent sound quality.

The D Series is capable of stable operation in high-temperature environments up to 60°C and as low as -20°C in low-temperature conditions, with very high reliability and durability.

#### • Superior Manufacturing Craftwork

High-efficiency switching power supply technology for optimized energy conversion and efficient use. Comprehensive protection circuits ensure stable system operation and safety. Compact size and light weight facilitate installation and deployment. Modular design for easy maintenance and upgrades

# <u>⊿</u>Dante<sup>™</sup>

Audinate's Dante audio networking technology is a widely adopted networked audio solution in the world, extensively used in commercial installations, live performances, recording and production.

The D Series digital power amplifiers feature full Dante capabilities, with a channel capacity of up to 512x512, ensuring immediate and seamless compatibility with the complete Dante system.

#### Network Control

BrainCore NET network control system provides powerful real-time control and monitoring capabilities for complex systems, capable of managing up to 250 devices simultaneously.

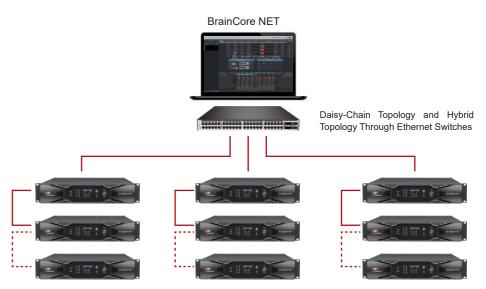
Regardless of changes in DSP topology or device quantity, BrainCore NET software offers a centralized working platform, greatly simplifying the construction process of DSP design, making it easy to handle even complex DSP projects.

The system supports various network topologies and is easy to configure, allowing system designers to flexibly choose the topology that best suits the needs of each project.

It's particularly worth mentioning that the Dante version of the D Series integrates Dante network audio transmission with software network control connections on a single RJ45 port, achieving an integrated solution that offers users greater convenience and efficiency.







Daisy-Chain Topology

Daisy chain topology and hybrid topology



#### High-Fidelity Sound Quality

### Powerful DSP Processing

#### **High-Resolution Conversion**

With a 48kHz sampling rate and 24-bit quantization precision, it achieves very low noise and extended dynamic range.

#### Advanced Digital Processing

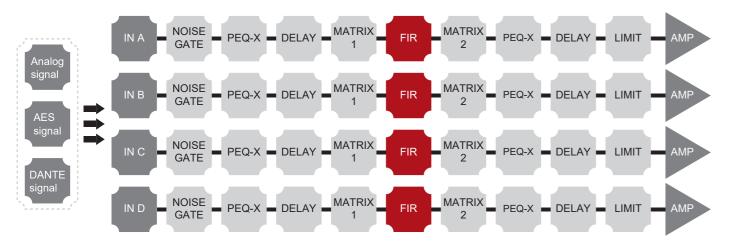
Equipped with the latest 32-bit floating-point digital processors, optimizing analog signal processing.

#### **IIR Filters**

Offering a variety of Bessel, Butterworth, Linkwitz-Riley filters, supporting high-pass, low-pass, and parametric equalization, easily achieving -48dB/octave adjustments and phase control.

#### FIR Filters

Enhancing the impact of audio, ensuring a more dynamic and impactful sound experience. Linear phase response retains the original transient characteristics of the audio signal, resulting in finer and more precise notes.



DSP processors, with their 48kHz sampling rate and 24-bit guantization precision, combined with IIR and FIR filter technologies, accurately generate linear phase curves, significantly improving pulse response quality.

This combination of technologies meets the needs of an ideal crossover, allowing sound engineers to accurately reproduce the perfect sound quality of speakers on-site, providing users with balanced, natural, transparent, and authentic auditory experiences.

#### ◆ Perfect Integration of BrainCore<sup>™</sup> Technology

Perfectly integrating BrainCore<sup>™</sup> technology, providing precise digital processing through superior Limita<sup>™</sup> processing technology, ensuring the system operates safely and reliably.

#### AES Digital Audio Input

Supporting standard AES/EBU digital audio input, we offer customers a variety of widely recognized digital audio input solutions in the industry for high-quality audio transmission and precise control of audio equipment.

#### Dante Network Audio Transmission and Control

Integrating Dante network audio transmission and control technology, allowing for long-distance, high-precision audio signal transmission and control over Ethernet, ensuring stable and reliable sound quality.

#### Supports dual signals and hot backup, with seamless switching

Capable of handling both Dante digital and analog signals, it features automatic hot backup to ensure immediate and seamless switching in case of primary audio source failure, maintaining stable transmission. Users can easily manage backups, ensuring audio reliability.

#### High-Efficiency Class D Power Amplifier

The D Series utilizes Class D amplification technology, with an efficiency exceeding 90%, which significantly reduces energy loss during power conversion. This not only decreases heat generation but also lowers energy consumption while maintaining excellent sound quality.

#### Manufactured to German Precision Standards, Durable and Long-lasting

#### European R&D design, German standard engineering The power amplifier module and DSP module were designed by Audiocenter's R&D team in Europe and manufactured according to German standard engineering. The system operates stably and efficiently, ensuring high-quality audio output.

#### High Reliability

Amplifier modules and DSP modules have been sold globally for over 500,000 units and have been proved to be very stable and reliable.





#### Comprehensive Protection Circuits

The D Series is equipped with comprehensive protection circuits, including limiter protection, soft start protection, DC protection, short circuit protection, and thermal protection, which can better protect the power amplifier, ensuring stable sound quality and speaker longevity.

#### • High Standards

All input and output connectors are professional-grade quality components.

High-quality components ensure the amplifier operates stably in harsh environments.



#### **User-Friendly TFT Display**

The 2-inch TFT display on the front panel of the D Series provides a user-friendly control interface. It offers quick system settings, network settings, monitoring, and built-in preset memory functions, allowing for switching to different modes anytime, anywhere.

Menu settings include volume, sensitivity, presets, PEQ, delay, signal source, TFT display brightness, auto-lock and IP settings.

| D4.4K-D 🖰 1.Def                            | aul   |
|--|-------|
| MASTER. VOL 0.00                           |       |
| 1 2 MATRIX 3 4 MA                          | ATRIX |
| OdBu 🗛 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII  | +0    |
| OdBu B                                     | +0    |
|  | +0    |
| OdBu D IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | +0    |

#### **Intuitive PC Operation Software**

Engineers in AUDIOCENTER, with their in-depth expertise and years of research, have integrated advanced DSP processors into the D Series amplifiers. This DSP digital power amplifier provides exceptional sound quality beyond traditional analog signal processing technology, bringing you an unprecedented audio experience.

The DSP processor is easy to set up, adjust, load, and recall, allowing users to easily load or recall their customized programs or use speaker presets offered by the factory.







#### Comprehensive EQ and Filter Options

Each channel is equipped with 15-band input EQ and 10-band output EQ, with a variety of EQ filter types to choose from. There are options of Butterworth, Bessel, Linkwitz and  $6 \sim 48$  dB/Oct for the high and low-pass crossovers.

#### **Professional FIR Filters**

The D Series supports the import of third-party software and captures data through SMARRT testing, allowing users to edit personalized settings directly within the software and save them for use.

It supports up to 4×2048 Taps, ensuring the precision of audio processing.

#### Limiter Management

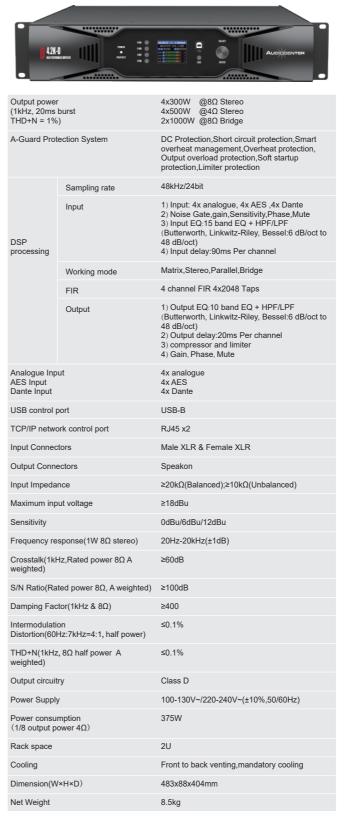
The superior Limita™ processing technology offers precise digital processing, ensuring that the system can operate safely and reliably.

#### Preset Management

The D Series amplifier offers two preset management modes: channel preset management and system preset management.

Users can easily call up the corresponding presets with one click to achieve satisfactory audio quality. This simplifies operations and enhances efficiency, allowing field application engineers to complete their tasks easily and efficiently.

### D4.2K-D





# D4.2K

| <b>4.2K</b>   |                                |   |  |  |
|---|--------------------------------|---|--|--|
| Output power<br>(1kHz, 20ms<br>THD+N = 1%               | burst                          | 4x300W @8Ω Stereo<br>4x500W @4Ω Stereo<br>2x1000W @8Ω Bridge  |  |  |
| A-Guard Protection System                               |                                | DC Protection, Short circuit protection, Smart<br>overheat management, Overheat protection,<br>Output overload protection, Soft startup<br>protection, Limiter protection   |  |  |
|   | Sampling rate                  | 48kHz/24bit   |  |  |
| DSP<br>processing                                       | Input                          | 1) Input: 4x analogue, 4x AES<br>2) Noise Gate,gain,Sensitivity,Phase,Mute<br>3) Input EQ:15 band EQ + HPF/LPF<br>(Butterworth, Linkwitz-Riley, Bessel:6 dB/oct to<br>48 dB/oct)<br>4) Input delay:90ms Per channel |  |  |
|   | Working mode                   | Matrix,Stereo,Parallel,Bridge   |  |  |
|   | FIR                            | 4 channel FIR 4x2048 Taps   |  |  |
|   | Output                         | 1) Output EQ:10 band EQ + HPF/LPF<br>(Butterworth, Linkwitz-Riley, Bessel:6 dB/oct to<br>48 dB/oct)<br>2) Output delay:20ms Per channel<br>3) compressor and limiter<br>4) Gain, Phase, Mute                        |  |  |
| Analogue Inp<br>AES Input<br>Dante Input                | ut                             | 4x analogue<br>4x AES<br>/  |  |  |
| USB control p   | port                           | USB-B   |  |  |
| TCP/IP netwo  | ork control port               | RJ45 x2   |  |  |
| Input Connec  | tors                           | Male XLR & Female XLR   |  |  |
| Output Conne  | ectors                         | Speakon   |  |  |
| Input Impeda  | nce                            | ≥20kΩ(Balanced);≥10kΩ(Unbalanced)   |  |  |
| Maximum inp   | ut voltage                     | ≥18dBu  |  |  |
| Sensitivity   |                                | 0dBu/6dBu/12dBu   |  |  |
| Frequency re  | sponse(1W 8Ω stereo)           | 20Hz-20kHz(±1dB)  |  |  |
| Crosstalk(1kł<br>weighted)                              | Hz,Rated power 8Ω A            | ≥60dB   |  |  |
|   | ted power 8Ω, A weighted)      | ≥100dB  |  |  |
|   | tor(1kHz & 8Ω)                 | ≥400  |  |  |
| Intermodulati<br>Distortion(60)                         | on<br>Hz:7kHz=4:1, half power) | ≤0.1%   |  |  |
| THD+N(1kHz<br>weighted)                                 | $r, 8\Omega$ half power A      | ≤0.1%   |  |  |
| Output circuitry  |                                | Class D   |  |  |
| Power Supply  |                                | 100-130V~/220-240V~(±10%,50/60Hz)   |  |  |
| Power consumption $(1/8 \text{ output power } 4\Omega)$ |                                | 375W  |  |  |
| Rack space  |                                | 2U  |  |  |
| Cooling   |                                | Front to back venting,mandatory cooling   |  |  |
| Dimension(W×H×D)  |                                | 483x88x404mm  |  |  |
| Net Weight  |                                | 8.5kg   |  |  |



05/06



# D4.4K-D

| <b>1</b> 4484                                |                                |  |  |  |
|--|--------------------------------|--|--|--|
| Output power<br>(1kHz, 20ms<br>THD+N = 1%    | burst                          | 4x600W @8Ω Stereo<br>4x1000W @4Ω Stereo<br>2x2000W @8Ω Bridge  |  |  |
| A-Guard Protection System                    |                                | DC Protection,Short circuit protection,Smart<br>overheat management,Overheat protection,<br>Output overload protection,Soft startup<br>protection,Limiter protection   |  |  |
|  | Sampling rate                  | 48kHz/24bit  |  |  |
| DSP<br>processing                            | Input                          | <ol> <li>Input: 4x analogue, 4x AES ,4x Dante</li> <li>Noise Gate,gain,Sensitivity,Phase,Mute</li> <li>Input EQ:15 band EQ + HPF/LPF</li> <li>(Butterworth, Linkwitz-Riley, Bessel:6 dB/oct to<br/>48 dB/oct)</li> <li>Input delay:90ms Per channel</li> </ol> |  |  |
|  | Working mode                   | Matrix,Stereo,Parallel,Bridge  |  |  |
|  | FIR                            | 4 channel FIR 4x2048 Taps  |  |  |
|  | Output                         | 1) Output EQ:10 band EQ + HPF/LPF<br>(Butterworth, Linkwitz-Riley, Bessel:6 dB/oct to<br>48 dB/oct)<br>2) Output delay:20ms Per channel<br>3) compressor and limiter<br>4) Gain, Phase, Mute   |  |  |
| Analogue Inp<br>AES Input<br>Dante Input     | ut                             | 4x analogue<br>4x AES<br>4x Dante  |  |  |
| USB control p                                | port                           | USB-B  |  |  |
| TCP/IP netwo                                 | ork control port               | RJ45 x2  |  |  |
| Input Connectors                             |                                | Male XLR & Female XLR  |  |  |
| Output Conne                                 | ectors                         | Speakon  |  |  |
| Input Impeda                                 | nce                            | ≥20kΩ(Balanced);≥10kΩ(Unbalanced)  |  |  |
| Maximum inp                                  | out voltage                    | ≥18dBu   |  |  |
| Sensitivity                                  |                                | 0dBu/6dBu/12dBu  |  |  |
| Frequency re                                 | sponse(1W 8Ω stereo)           | 20Hz-20kHz(±1dB)   |  |  |
| Crosstalk(1kł<br>weighted)                   | Hz,Rated power 8Ω A            | ≥60dB  |  |  |
| S/N Ratio(Ra                                 | ted power 8Ω, A weighted)      | ≥100dB   |  |  |
| Damping Fac                                  | tor(1kHz & 8Ω)                 | ≥400   |  |  |
| Intermodulati<br>Distortion(60               | on<br>Hz:7kHz=4:1, half power) | ≤0.1%  |  |  |
| THD+N(1kHz, $8\Omega$ half power A weighted) |                                | ≤0.1%  |  |  |
| Output circuitry                             |                                | Class D  |  |  |
| Power Supply                                 |                                | 100-130V~/220-240V~(±10%,50/60Hz)  |  |  |
| Power consu<br>(1/8 output p                 |                                | 750W   |  |  |
| Rack space                                   |                                | 2U   |  |  |
| Cooling                                      |                                | Front to back venting, mandatory cooling   |  |  |
| Dimension(W×H×D)                             |                                | 483x88x404mm   |  |  |
| Net Weight                                   |                                | 10.0kg   |  |  |
|  |                                |  |  |  |

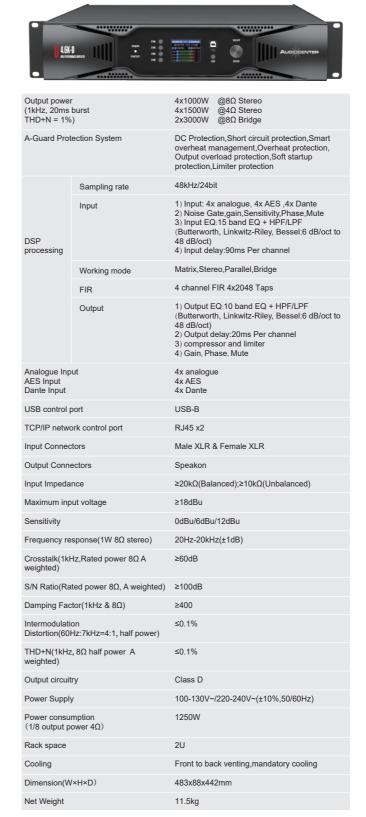


## D4.4K

| Output power<br>(1kHz, 20ms burst<br>THD+N = 1%) |                                | 4x600W         @8Ω Stereo           4x1000W         @4Ω Stereo           2x2000W         @8Ω Bridge   |  |  |
|--|--------------------------------|---|--|--|
| A-Guard Protection System                        |                                | DC Protection,Short circuit protection,Smart<br>overheat management,Overheat protection,<br>Output overload protection,Soft startup<br>protection,Limiter protection  |  |  |
|  | Sampling rate                  | 48kHz/24bit   |  |  |
| DSP<br>processing                                | Input                          | 1) Input: 4x analogue, 4x AES<br>2) Noise Gate,gain,Sensitivity,Phase,Mute<br>3) Input EQ:15 band EQ + HPF/LPF<br>(Butterworth, Linkwitz-Riley, Bessel:6 dB/oct to<br>48 dB/oct)<br>4) Input delay:90ms Per channel |  |  |
|  | Working mode                   | Matrix,Stereo,Parallel,Bridge   |  |  |
|  | FIR                            | 4 channel FIR 4x2048 Taps   |  |  |
|  | Output                         | 1) Output EQ:10 band EQ + HPF/LPF<br>(Butterworth, Linkwitz-Riley, Bessel:6 dB/oct to<br>48 dB/oct)<br>2) Output delay:20ms Per channel<br>3) compressor and limiter<br>4) Gain, Phase, Mute                        |  |  |
| Analogue Inp<br>AES Input<br>Dante Input         | ut                             | 4x analogue<br>4x AES<br>/  |  |  |
| USB control p                                    | port                           | USB-B   |  |  |
| TCP/IP netwo                                     | ork control port               | RJ45 x2   |  |  |
| Input Connec                                     | tors                           | Male XLR & Female XLR   |  |  |
| Output Conne                                     | ectors                         | Speakon   |  |  |
| Input Impeda                                     | nce                            | ≥20kΩ(Balanced);≥10kΩ(Unbalanced)   |  |  |
| Maximum inp                                      | ut voltage                     | ≥18dBu  |  |  |
| Sensitivity                                      |                                | 0dBu/6dBu/12dBu   |  |  |
| Frequency re                                     | sponse(1W 8Ω stereo)           | 20Hz-20kHz(±1dB)  |  |  |
| Crosstalk(1kH<br>weighted)                       | lz,Rated power 8Ω A            | ≥60dB   |  |  |
| S/N Ratio(Ra                                     | ted power 8Ω, A weighted)      | ≥100dB  |  |  |
| Damping Fac                                      | tor(1kHz & 8Ω)                 | ≥400  |  |  |
| Intermodulation<br>Distortion(60H                | on<br>Hz:7kHz=4:1, half power) | ≤0.1%   |  |  |
| THD+N(1kHz<br>weighted)                          | , $8\Omega$ half power A       | ≤0.1%   |  |  |
| Output circuitry                                 |                                | Class D   |  |  |
| Power Supply                                     |                                | 100-130V~/220-240V~(±10%,50/60Hz)   |  |  |
| Power consumption<br>(1/8 output power 4Ω)       |                                | 750W  |  |  |
| Rack space                                       |                                | 2U  |  |  |
| Cooling  |                                | Front to back venting,mandatory cooling   |  |  |
| Dimension(W×H×D)                                 |                                | 483x88x404mm  |  |  |
| Net Weight                                       |                                | 10.0kg  |  |  |



## D4.6K-D





# D4.6K

| <b>4.6</b> K  |                                |   |  |  |
|---|--------------------------------|---|--|--|
| -   |                                |   |  |  |
| Output nouse  |                                | 4v1000W @90 Stores  |  |  |
| Output power<br>(1kHz, 20ms<br>THD+N = 1%               | burst                          | 4x1000W         @8Ω Stereo           4x1500W         @4Ω Stereo           2x3000W         @8Ω Bridge  |  |  |
| A-Guard Protection System                               |                                | DC Protection, Short circuit protection, Smart<br>overheat management, Overheat protection,<br>Output overload protection, Soft startup<br>protection, Limiter protection   |  |  |
|   | Sampling rate                  | 48kHz/24bit   |  |  |
| DSP<br>processing                                       | Input                          | 1) Input: 4x analogue, 4x AES<br>2) Noise Gate,gain,Sensitivity,Phase,Mute<br>3) Input EQ:15 band EQ + HPF/LPF<br>(Butterworth, Linkwitz-Riley, Bessel:6 dB/oct to<br>48 dB/oct)<br>4) Input delay:90ms Per channel |  |  |
|   | Working mode                   | Matrix,Stereo,Parallel,Bridge   |  |  |
|   | FIR                            | 4 channel FIR 4x2048 Taps   |  |  |
|   | Output                         | 1) Output EQ:10 band EQ + HPF/LPF<br>(Butterworth, Linkwitz-Riley, Bessel:6 dB/oct to<br>48 dB/oct)<br>2) Output delay:20ms Per channel<br>3) compressor and limiter<br>4) Gain, Phase, Mute                        |  |  |
| Analogue Inp<br>AES Input<br>Dante Input                | ut                             | 4x analogue<br>4x AES<br>/  |  |  |
| USB control p   | port                           | USB-B   |  |  |
| TCP/IP netwo  | ork control port               | RJ45 x2   |  |  |
| Input Connec  | tors                           | Male XLR & Female XLR   |  |  |
| Output Conne  | ectors                         | Speakon   |  |  |
| Input Impeda  | nce                            | ≥20kΩ(Balanced);≥10kΩ(Unbalanced)   |  |  |
| Maximum inp   | ut voltage                     | ≥18dBu  |  |  |
| Sensitivity   |                                | 0dBu/6dBu/12dBu   |  |  |
| Frequency re  | sponse(1W 8Ω stereo)           | 20Hz-20kHz(±1dB)  |  |  |
| Crosstalk(1kł<br>weighted)                              | Hz,Rated power 8Ω A            | ≥60dB   |  |  |
| S/N Ratio(Ra  | ted power 8Ω, A weighted)      | ≥100dB  |  |  |
|   | tor(1kHz & 8Ω)                 | ≥400  |  |  |
| Intermodulation<br>Distortion(60)                       | on<br>Hz:7kHz=4:1, half power) | ≤0.1%   |  |  |
| THD+N(1kHz, $8\Omega$ half power A weighted)            |                                | ≤0.1%   |  |  |
| Output circuitry  |                                | Class D   |  |  |
| Power Supply  |                                | 100-130V~/220-240V~(±10%,50/60Hz)   |  |  |
| Power consumption $(1/8 \text{ output power } 4\Omega)$ |                                | 1250W   |  |  |
| Rack space  |                                | 2U  |  |  |
| Cooling   |                                | Front to back venting,mandatory cooling   |  |  |
| Dimension(W×H×D)  |                                | 483x88x442mm  |  |  |
| Net Weight  |                                | 11.5kg  |  |  |





# D4.10K-D

|   | -                              |   |  |  |
|---|--------------------------------|---|--|--|
|   |                                |   |  |  |
| Output power<br>(1kHz, 20ms<br>THD+N = 1%       | burst                          | 4x1600W @8Ω Stereo<br>4x2500W @4Ω Stereo<br>2x5000W @8Ω Bridge  |  |  |
| A-Guard Protection System                       |                                | DC Protection,Short circuit protection,Smart<br>overheat management,Overheat protection,<br>Output overload protection,Soft startup<br>protection,Limiter protection  |  |  |
|   | Sampling rate                  | 48kHz/24bit   |  |  |
| DSP<br>processing                               | Input                          | 1) Input: 4x analogue, 4x AES ,4x Dante<br>2) Noise Gate,gain,Sensitivity,Phase,Mute<br>3) Input EQ:15 band EQ + HPF/LPF<br>(Butterworth, Linkwitz-Riley, Bessel:6 dB/oct to<br>48 dB/oct)<br>4) Input delay:90ms Per channel |  |  |
|   | Working mode                   | Matrix,Stereo,Parallel,Bridge   |  |  |
|   | FIR                            | 4 channel FIR 4x2048 Taps   |  |  |
|   | Output                         | 1) Output EQ:10 band EQ + HPF/LPF<br>(Butterworth, Linkwitz-Riley, Bessel:6 dB/oct to<br>48 dB/oct)<br>2) Output delay:20ms Per channel<br>3) compressor and limiter<br>4) Gain, Phase, Mute                                  |  |  |
| Analogue Inp<br>AES Input<br>Dante Input        | ut                             | 4x analogue<br>4x AES<br>4x Dante   |  |  |
| USB control p                                   | port                           | USB-B   |  |  |
| TCP/IP netwo                                    | ork control port               | RJ45 x2   |  |  |
| Input Connectors                                |                                | Male XLR & Female XLR   |  |  |
| Output Connectors                               |                                | Speakon   |  |  |
| Input Impedance                                 |                                | ≥20kΩ(Balanced);≥10kΩ(Unbalanced)   |  |  |
| Maximum input voltage                           |                                | ≥18dBu  |  |  |
| Sensitivity                                     |                                | 0dBu/6dBu/12dBu   |  |  |
| Frequency re                                    | sponse(1W 8Ω stereo)           | 20Hz-20kHz(±1dB)  |  |  |
| Crosstalk(1kH<br>weighted)                      | lz,Rated power 8Ω A            | ≥60dB   |  |  |
| S/N Ratio(Ra                                    | ted power 8Ω, A weighted)      | ≥100dB  |  |  |
|   | tor(1kHz & 8Ω)                 | ≥400  |  |  |
| Intermodulation<br>Distortion(60)               | on<br>Hz:7kHz=4:1, half power) | ≤0.1%   |  |  |
| THD+N(1kHz, $8\Omega$ half power A weighted)    |                                | ≤0.1%   |  |  |
| Output circuitry                                |                                | Class D   |  |  |
| Power Supply                                    |                                | 100-130V~/220-240V~(±10%,50/60Hz)   |  |  |
| Power consumption (1/8 output power $4\Omega$ ) |                                | 2000W   |  |  |
| Rack space                                      |                                | 2U  |  |  |
| Cooling   |                                | Front to back venting,mandatory cooling   |  |  |
| Dimension(W×H×D)                                |                                | 483x88x485mm  |  |  |
| Net Weight                                      |                                | 14.5kg  |  |  |



# D4.10K

| <b>1</b> 4.10K  |                                |   |  |  |  |
|---|--------------------------------|---|--|--|--|
| Output power<br>(1kHz, 20ms<br>THD+N = 1%               | burst                          | 4x1600W @8Ω Stereo<br>4x2500W @4Ω Stereo<br>2x5000W @8Ω Bridge  |  |  |  |
| A-Guard Protection System                               |                                | DC Protection,Short circuit protection,Smart<br>overheat management,Overheat protection,<br>Output overload protection,Soft startup<br>protection,Limiter protection  |  |  |  |
|   | Sampling rate                  | 48kHz/24bit   |  |  |  |
| DSP<br>processing                                       | Input                          | 1) Input: 4x analogue, 4x AES<br>2) Noise Gate,gain,Sensitivity,Phase,Mute<br>3) Input EQ:15 band EQ + HPF/LPF<br>(Butterworth, Linkwitz-Riley, Bessel:6 dB/oct to<br>48 dB/oct)<br>4) Input delay:90ms Per channel |  |  |  |
|   | Working mode                   | Matrix,Stereo,Parallel,Bridge   |  |  |  |
|   | FIR                            | 4 channel FIR 4x2048 Taps   |  |  |  |
|   | Output                         | 1) Output EQ:10 band EQ + HPF/LPF<br>(Butterworth, Linkwitz-Riley, Bessel:6 dB/oct to<br>48 dB/oct)<br>2) Output delay:20ms Per channel<br>3) compressor and limiter<br>4) Gain, Phase, Mute                        |  |  |  |
| Analogue Inp<br>AES Input<br>Dante Input                | ut                             | 4x analogue<br>4x AES<br>/  |  |  |  |
| USB control p   | port                           | USB-B   |  |  |  |
| TCP/IP netwo  | ork control port               | RJ45 x2   |  |  |  |
| Input Connec  | tors                           | Male XLR & Female XLR   |  |  |  |
| Output Conne  | ectors                         | Speakon   |  |  |  |
| Input Impeda  | nce                            | ≥20kΩ(Balanced);≥10kΩ(Unbalanced)   |  |  |  |
| Maximum inp   | ut voltage                     | ≥18dBu  |  |  |  |
| Sensitivity   |                                | 0dBu/6dBu/12dBu   |  |  |  |
| Frequency re  | sponse(1W 8Ω stereo)           | 20Hz-20kHz(±1dB)  |  |  |  |
| Crosstalk(1kH<br>weighted)                              | lz,Rated power 8Ω A            | ≥60dB   |  |  |  |
| S/N Ratio(Ra  | ted power 8Ω, A weighted)      | ≥100dB  |  |  |  |
| Damping Fac   | tor(1kHz & 8Ω)                 | ≥400  |  |  |  |
| Intermodulation<br>Distortion(60)                       | on<br>Hz:7kHz=4:1, half power) | ≤0.1%   |  |  |  |
| THD+N(1kHz<br>weighted)                                 | , $8\Omega$ half power A       | ≤0.1%   |  |  |  |
| Output circuitry  |                                | Class D   |  |  |  |
| Power Supply  |                                | 100-130V~/220-240V~(±10%,50/60Hz)   |  |  |  |
| Power consumption $(1/8 \text{ output power } 4\Omega)$ |                                | 2000W   |  |  |  |
| Rack space  |                                | 2U  |  |  |  |
| Cooling   |                                | Front to back venting,mandatory cooling   |  |  |  |
| Dimension(W×H×D)  |                                | 483x88x485mm  |  |  |  |
| Net Weight  |                                | 14.5kg  |  |  |  |



## D Series Specifications

| SPECIFICATIONS  | 1                   | D4.2K  | D4.2K-D                       | D4.4K                     |
|---|---------------------|--|-------------------------------|---------------------------|
| Output power<br>(1kHz,                                | 8Ω Stereo           | 4x300W   |                               | 4                         |
| 20ms burst  | 4Ω Stereo           | 4x5  | 4x500W                        |                           |
| THD+N = 1%) 8Ω Bridge                                 |                     | 2×10   | W000                          | 2                         |
| A-Guard Protection Syst                               | em                  |  | DC Protectio<br>Output overlo |                           |
|   | Sampling rate       |  |                               |                           |
|   | Input               | 1) Input: 4x analogue, 4x A<br>2) Noise Gate,gain,Sensitiv<br>3) Input EQ:15 band EQ +<br>4) Input delay:90ms Per ch |                               |                           |
| DSP   | Working mode        |  |                               |                           |
| processing  | FIR                 |  |                               |                           |
|   | Output              | 1) Output EQ:10 band E<br>2) Output delay:20ms P<br>3) compressor and limit<br>4) Gain, Phase, Mute                  |                               | 20ms Per ch<br>nd limiter |
|   | Analogue            |  |                               |                           |
| Input   | AES                 |  |                               |                           |
|   | Dante               | /  | 4x Dante                      | /                         |
| Control port  | USB                 |  |                               |                           |
|   | TCP/IP              |  |                               |                           |
| Connectors  | Input               |  |                               |                           |
|   | Output              |  |                               |                           |
| Input Impedance                                       | Balanced            |  |                               |                           |
|   | Unbalanced          |  |                               |                           |
| Maximum input voltage                                 |                     |  |                               |                           |
| Sensitivity   |                     |  |                               |                           |
| Crosstalk(1kHz,Rated po                               | ower 8Ω A weighted) |  |                               |                           |
| Crosstalk(1kHz,Rated po                               | ower 8Ω A weighted) |  |                               |                           |
| S/N Ratio(Rated power 8                               | 3Ω, A weighted)     |  |                               |                           |
| Damping Factor(1kHz &                                 | 8Ω)                 |  |                               |                           |
| Intermodulation Distortio<br>(60Hz:7kHz=4:1, half por |                     |  |                               |                           |
| THD+N(1kHz, 8Ω half po                                | ower A weighted)    |  |                               |                           |
| Output circuitry                                      |                     |  |                               |                           |
| Power Supply  |                     |  |                               |                           |
| Power consumption (1/8                                | output power 40)    | 37   | 5W                            |                           |
| Rack space  |                     |  |                               |                           |
| Cooling   |                     |  |                               | F                         |
| Dimension(W×H×D)                                      |                     | 483×88   | ×404mm                        | 483×                      |
| Net Weight  |                     | 8.8  | ōkg                           |                           |
|   |                     |  |                               |                           |

| (                      | D4.4K-D   | D4.6K             | D4.6K-D         | D4.10K           | D4.10K-D |  |
|------------------------|---|-------------------|-----------------|------------------|----------|--|
| 4x600W 4x1000W 4x1600W |   |                   |                 |                  | 00W      |  |
|                        |   |                   |                 |                  | 4x2500W  |  |
| 2×2(                   | 2×2000W 2×3000W 2×5000W                                 |                   |                 |                  |          |  |
| -                      | rotection,Smart<br>Soft startup prote                   |                   | -               | at protection,   |          |  |
|                        | 48kHz   | z/24bit           |                 |                  |          |  |
| vity,F                 | ,4x Dante (D4.2l<br>Phase,Mute<br>F/LPF(Butterwor<br>el |                   |                 |                  | 1        |  |
|                        | Matrix,Stereo,  | Parallel,Bridge   |                 |                  |          |  |
|                        | 4 channel FIR   | 4x2048 Taps       |                 |                  |          |  |
| + HP<br>:hani          | F/LPF(Butterwo<br>nel                                   | rth, Linkwitz-Ril | ey, Bessel:6 dB | /oct to 48 dB/oc | t)       |  |
|                        | 4x ana  | alogue            |                 |                  |          |  |
|                        | 4x /  | AES               |                 |                  |          |  |
|                        | 4x Dante  | /                 | 4x Dante        | /                | 4x Dante |  |
|                        | US  | B-B               |                 |                  |          |  |
|                        | RJ4   | 5 x2              |                 |                  |          |  |
|                        | Male XLR &  | Female XLR        |                 |                  |          |  |
|                        | Spea  | akon              |                 |                  |          |  |
|                        | ≥20   | )kΩ               |                 |                  |          |  |
|                        | ≥1(   | )kΩ               |                 |                  |          |  |
|                        | ≥18   | dBu               |                 |                  |          |  |
|                        | 0dBu / 6dB  | 3u / 12dBu        |                 |                  |          |  |
|                        | 20Hz-20k  | Hz(±1dB)          |                 |                  |          |  |
|                        | ≥60   | )dB               |                 |                  |          |  |
|                        | ≥10   | 0dB               |                 |                  |          |  |
|                        | ≥4  | 00                |                 |                  |          |  |
|                        | ≤0.   | 1%                |                 |                  |          |  |
|                        | ≤0.   | 1%                |                 |                  |          |  |
|                        | Clas  | ss D              |                 |                  |          |  |
| 100                    | -130V~/220-240  | )V~(±10%,50/60    | )Hz)            |                  |          |  |
| 75                     | 750W 1250W 2000W  |                   |                 |                  |          |  |
|                        | 2   | U                 |                 |                  |          |  |
| Fror                   | nt to back venting                                      | g,mandatory co    | oling           |                  |          |  |
| 3×88                   | ×404mm  | 483×88            | ×442mm          | 483×88>          | ×485mm   |  |
| 10                     | .0kg  | 11.               | 5kg             | 14.              | 5kg      |  |
|                        |   |                   |                 |                  |          |  |

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