MPA / DA Series

REMOTE CONTROLLABLE CLASS-D INSTALLATION AMPLIFIERS

User manual

Active audio

- MPA4350
- MPA4700
- MPA41500

Dante™

- MPA4350 DANTE
- MPA4700 DANTE
- MPA41500 DANTE
- MPA16700 DANTE

APG

- DA1.4
- DA2.8
- DA6

Dante™

- DA1.4 DANTE
- DA2.8 DANTE
- DA6 DANTE
- DA11.2 DANTE

DOP-1816_C - 12/2025

Important Safety Instructions

CAUTION: to reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of an uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the equipment.

Instructions

Before installing or operating the equipment, read all safety instructions, warnings and operating instructions. Heed all warnings. Follow all instructions. Keep all safety, installation and operating instructions for future reference.

Installing and Operation Location

Do not use this apparatus near water. Do not expose this apparatus to drips or splashes. Do not place any objects filled with liquids, such as vases, on the apparatus.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. No naked flames, such as lighted candles, should be placed on the apparatus.

Do not install the apparatus in a confined space such as a book case or similar unit. Do not block any ventilation openings.

Ensure that foreign objects and liquids cannot get into the equipment.

Install in accordance with the manufacturer's instructions. Only use attachments/accessories specified by the manufacturer.
Use only with the cart, stand, tripod, bracket or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over .

The apparatus should be located close enough to the AC outlet so that you can easily grasp the power cord plug at any time.

The mains plug, the appliance coupler or the mains switch is used as the disconnect device. Either device shall remain readily operable when the apparatus is installed or used.

Power Source and Grounding

This product should be operated only from the power source indicated on the apparatus or in the operating instructions. If you are not sure of the type of power supply to the premises where the equipment is to be used, consult your product dealer or local power company.

Do not defeat the safety purpose of the polarised or grounding-type plug. A polarised plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Connect Class I construction apparatus to an AC outlet with a protective grounding connection.
Do not overload wall outlets, extension cords or integral convenience receptacles, as this can result in a risk of fire or electric shock.
Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
Unplug this apparatus during lightning storms or when unused for long periods of time.

Power supply class I grounding requirements:

For protection from fault currents, the equipment shall be connected to a grounding terminal. Plug the system power cord into an AC outlet that provides a ground connection. Substitute cords may not provide adequate fault protection. Only use the power cord supplied with this product or an authorized/equivalent replacement

Safety notices:

Denmark:
Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord.

Finland:
Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan.

Norway:
Apparatet må tilkoples jordet stikkontakt.

Sweden:
Apparaten skall anslutas till jordat uttag

Cleaning, Maintenance and Servicing

Unplug the apparatus from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personal.

Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.

Intended Use

The equipment may only be used for the purpose described in the operation instructions. Never carry out any work on the equipment other than as specified in the operating manual.

Never push objects of any kind into this product through openings, as they may touch dangerous voltage points or short-cut parts, which could result in a fire or electric shock.

Children should never use the apparatus without close adult supervision.

WARNING: Excessive sound pressure levels can cause hearing loss.

Environmental Precaution

Electrical and electronic equipment may contain hazardous substances for humans and their environment.

The "crossed out wheelie bin" symbol present on the device and represented above is there to remind one of the obligation of selective collection of waste. This label is applied to various products to indicate that the product is not to be thrown away as unsorted municipal waste. At the end of life, dispose of this product by returning it to the point of sale or to your local municipal collection point for recycling of electric and electronic devices.

Customer participation is important to minimize the potential affects on the environment and human health that can result from hazardous substances that may be contained in this product.

Please, dispose of this product and its packaging in accordance with local and national disposal regulations including those governing the recovery and recycling of waste electrical and electronic equipment. Contact your local waste administration, waste collection company or dealer.

Table of Contents

Dear Customer,

Thank you for choosing the MPA / DA series for your sound reinforcement needs. The innovative MPA / DA series is a professional amplifier solution equipped with integrated DSP features.

Foreword

The MPA / DA series professional amplifiers feature built-in DSP and secure remote control over the cloud. Easily connect the amplifier to the AMI Software (Windows PC) with the built-in WiFi hotspot, or to a local area network via cat5 cable. The unique internal streaming source option makes it possible to playback Spotify and Apple AirPlay sources straight from your mobile device without the need for external hardware.

Featuring high-end studio-grade analogue circuit designs, the MPA / DA series Series sets a new benchmark in powered system management and speaker processing design. The proprietary Class-D amplifier control loop features GlidePath technology and exceptionally low intermodulation figures, resulting in wide stereo imaging.

MPA / DA series is founded on our proprietary GlidePath architecture, with DSP and amplifier circuits fully integrated for outstanding performance. GlidePath employs DC coupling throughout the signal path, dramatically reducing the time offsets and distortion associated with AC coupling. The result: crisper, punchier bass and brighter, more natural high frequencies, delivering superb intelligibility and higher perceived volume. MPA / DA series models with power ratings ranging from 350W to 3000W per channel fit all applications from small commercial spaces to the largest theatre.

Whether the application is a standalone system amplifier, or a comprehensive networked system with multiple amplifiers, the MPA / DA series is designed to provide the solution that our clients demand. With comprehensive loudspeaker preset capability, implementing MPA / DA series into your system couldn't be easier.

Download AMI software :

http://ami.arbane-groupe.com/

Product Highlights

- Class D, DC coupled amplifiers
- All models can directly drive low impedance or 70/100V loudspeakers
- Intuitive AMI Software
- Built-in Wi-Fi Hotspot for access without network connectivity
- Internal streaming source supporting Spotify and Apple Airplay
- Four analog balanced line inputs
- Dante™ audio network integrated in 'D' models
- 3 stages of on board 64bit DSP:

  User processing DSP facilities:

  - Gain, mute and phase inversion
  - Delay, up to 250ms (combined with group delay)
  - X-over HPF and LPF
  - 12-band parametric filtering
  - RMS and Peak limiter

  Speaker processing DSP facilities:

  - Delay up to 30ms
  - 12-band parametric filtering
  - X-over HPF and LPF
  - FIR filter implementation
  - RMS and Peak limiter

  Group processing DSP facilities (feature to come with future AMI updates):

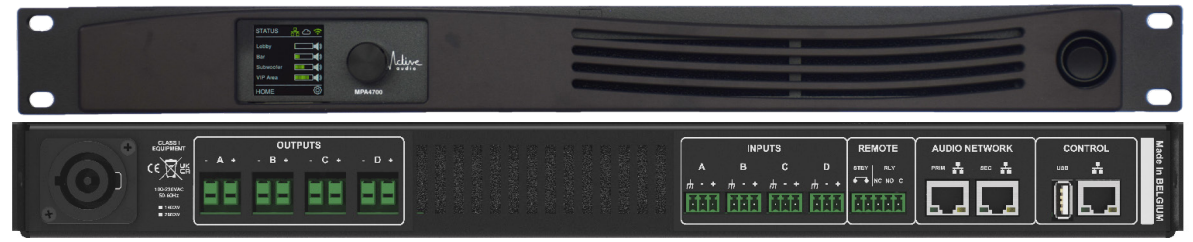
  - *6 output groups, assignable between multiple amplifiers in the network*
  - *Group delay, up to 250ms (combined with user delay)*
  - *Group gain, mute and phase inversion*
  - *Additional 12-band parametric EQ per group*
- Internal Global Preset and Speaker Preset library
- Apex GlidePath technology - our proprietary control loop provides a load independent frequency response and low harmonic and intermodulation distortion
- Power supply with worldwide operation from 100-240 Vac. Active power factor correction circuitry ensures efficient use of the mains power system
- Low idle loss (heat) through the use of a proprietary control loop which relaxes the output stages' dead time
- Daylight viewable colour OLED display
- Slimline 1U chassis

MPA / DA Series

MPA4350 / DA1.4	4 x 350W	**MPA4350 DANTE / DA1.4 DANTE**	4 x 350W with 4x4 Dante™

MPA4700 / DA2.8	4 x 700W	**MPA4700 DANTE / DA2.8 DANTE**	4 x 700W with 4x4 Dante™

MPA41500 / DA6	4 x 1500W	**MPA41500 DANTE / DA6 DANTE**	4 x 1500W with 4x4 Dante™



MPA16700 DANTE / DA11.2 DANTE	16 x 700W with 16x16 Dante™

Before You Get Started

About this Manual

Carefully read all instructions and warnings before operating this device. Keep this manual in a safe place so that it can be referred to when required.

This manual describes use of the MPA / DA series.

Inspection and Unpacking

This appliance has been carefully packed in the factory and the packaging was designed to withstand rough handling. Should the unit appear to have been damaged in transit, do not discard any of the packing material and notify the carrier immediately as they will be responsible.

Save all the packing materials for future use if you ever need to ship the unit again.

Please check the list below against the contents of the packaging. If any items are missing or damaged, contact Arbane Groupe at service@arbane-groupe.com.

- MPA / DA series amplifier
- AC power cable Europe
- Network cable, “straight” type
- Quickstart Guide

Operating Environment

The MPA / DA series is designed to operate in most normal climates, at a temperature between 0 °C and 50 °C (32 - 122 °F), with relative humidity between 10% and 60%.

The MPA / DA series incorporates internal fan-cooling, which should keep the unit within its operating temperature. However, should the unit be installed in an equipment rack it is important to ensure that the temperature inside the rack does not exceed the upper limit. Under such circumstances, additional rack-mounted cooling fans may be necessary.

Do not block any ventilation openings.

Fit solid blanks (not ventilation blanks) to unused rack spaces to ensure effective air circulation. Leaving gaps in between items of equipment degrades the effectiveness of forced–air cooling.

Power Requirements

Before you connect any unit to the mains, please make sure that the voltage of your local AC supply is within the acceptable range of the unit.

The MPA / DA series is designed to work from an AC supply between 100 V and 240 V, at a frequency between 50 and 60 Hz. No AC voltage selector is provided as the device automatically adjusts to the incoming AC voltage.

Precautions should be taken so that the appliance is properly grounded at all times. This unit must be earthed.

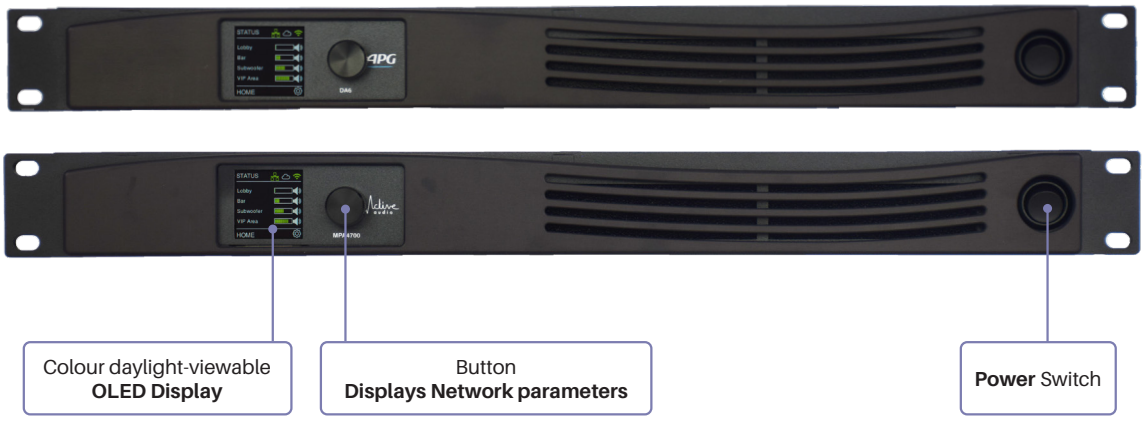
Installation

If the unit is brought into a warm room from a cold environment, internal condensation may occur. Ensure that the unit has been allowed to reach ambient temperature before switching it on. We recommend one hour.

Although this unit is intended for installation in a standard 19-inch rack it can nevertheless be used free standing. If the unit is installed in a flight-case or in an equipment rack, fix the unit with all four screws through the front panel holes and the four screws from the back panel. For normal use no extra support is needed, but in more extreme conditions, such as on the road, we recommend the unit is supported at the rear.

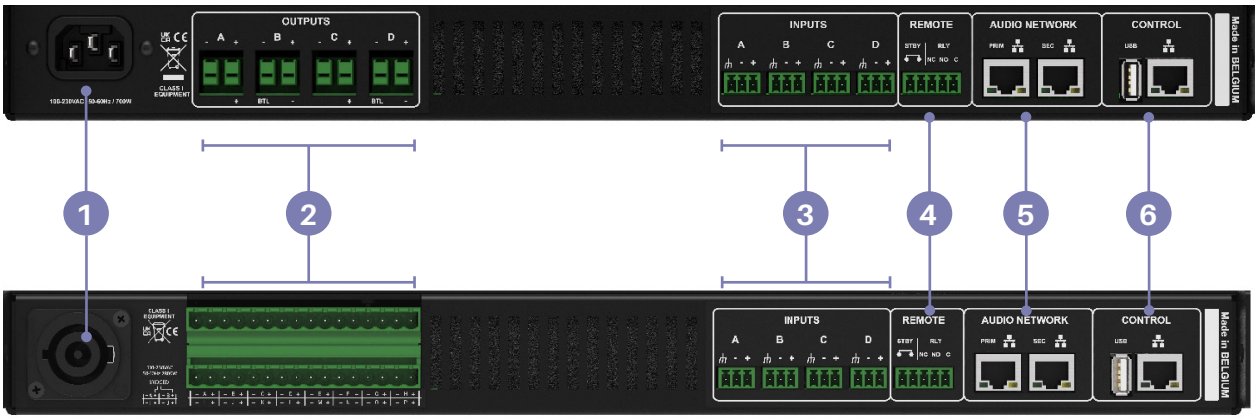
Front Panel

The front panel features a modern and intuitive design, with a daylight-viewable color OLED display a single rotary encoder for front-panel operation, a physical power switch and ventilation vents. All incorporated within a compact 1U 19" rack frame, ensuring both functionality and space efficiency.



Rear Panel

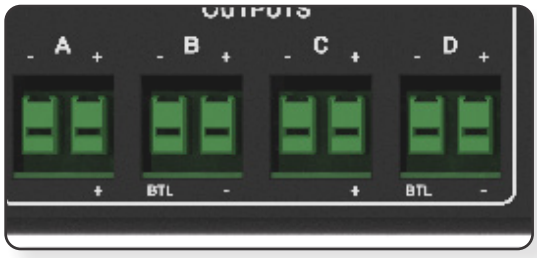
MPA/DA DANTE - 4 channel



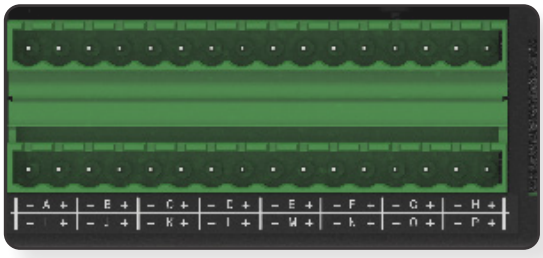
MPA/DA DANTE - 16 channel

1 IEC connectors accept worldwide operation from 100-240Vac. MPA / DA series must be grounded (earthed) with the safety ground pin to the mains distribution system. Never disconnect the earth (ground) pin on the mains cable (AC power cord).

2 Amplifier output connectors are sturdy terminal block connectors. Channels are located from left to right. Each channel has a marked hot (+) and cold (-) terminal.



4 channel models

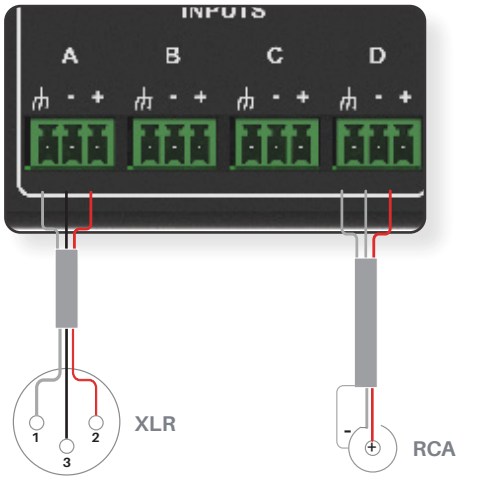


16 channel MPA16700 DANTE

3 Balanced analog line inputs are available on terminal block connectors with clearly marked hot (+), cold (-) and ground terminals.

The use of twin-and-screen cable is recommended. In order to link inputs, physical splits can be made directly on the terminal block connectors.

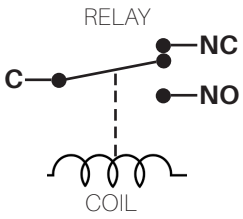
The input impedance is 20k Ohms.



Balanced
1 = Ground
2 = Hot +
3 = Cold -

Unbalanced
Pin = Hot +
Screen = Cold -
Screen = Ground

4 Terminal block connector for REMOTE applications, EN-54 ready.



STBY (Standby)
Engaging the two pins will put the amplifier modules within the CloudPower unit into Standby mode. The amplifier's DSP and controller continue running. Standby mode can be engaged via UDP commands.

RLY (Relay)
When the amplifier is turned on and is functioning normally, the relay engages and a connection between the two pins is established. If the amplifier is turned off, or if a fault is detected, the relay opens and disengages the two pins. Connecting multiple amplifier relays in series allows system warning / fault indication through open circuit. This will fulfil the amplifier fault-warning requirement in an EN54 VACIE fire alarm system.

GPI (General Purpose Input)
Engaging the two pins will MUTE all channels. This will fulfil the amplifier MUTE requirement in an EN54 VACIE fire alarm system. After the GPI is disengaged, the mutes will return to their last known settings.

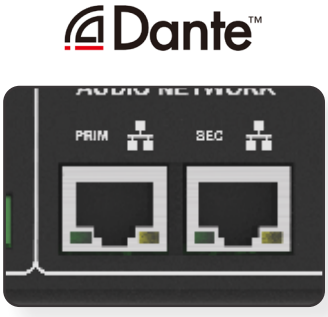
Please note: these features are slated for implementation in firmware versions beyond 1.3

5 RJ-45 Ethernet connectors are available for Dante™ network connectivity on the 'D' models.

Each Dante™ card comes with two network ports: one primary and one secondary.
The secondary network port can be configured to provide redundancy for the primary network port. Creating a parallel network ensures that any cable or switch failure does not result in audio loss.

By default, the Dante card is configured in "switched" mode, allowing devices to be connected in a daisy-chain within a single network. However, it is not advisable to use daisy chain mode for more than a few devices.

To enable redundant mode, please configure the settings within Dante™ Controller.

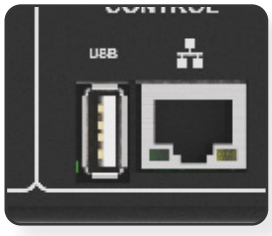


When the device is connected to an active network, the yellow LINK LED above the in-use connector lights up. Data activity on the network is indicated by the illumination of the green ACT LED. It is normal for the ACT LED to flicker either sporadically or continuously.

The switched 100/1000 Base-T network connections automatically detect whether standard or crossover Cat-5e cables are in use. The green ACT LED flashes to signify network activity. When a 1000 Mbps connection is established, the orange LED remains solid to indicate a 1000 Mbps connection.

6 RJ-45 Ethernet connector for control via the AMI software. Connect this port to your LAN.

The USB connector is intended for service only.



Processing & Signal Flow

The MPA / DA series offers DSP processing in three stages. Speaker specific processing can be provided by a manufacturer and loaded onto a channel using a SPEAKER PRESET. Additionally, users can apply two layers of processing: first, through the USER controls, affecting individual channels, and second, through six GROUP controls (not implemented yet), which can affect multiple channels simultaneously.

The figure below depicts a simplified version of the signal flow:

USER Processing Features

The USER controls are channel-based features that apply to each channel individually.
They can be operated via AMI software and offer the following controls:

Mixer Matrix	Allows the summation of all available analog and digital inputs via faders.
Mute	Controls the mute status.
Gain	Controls the amout of gain, ranging from -80 dB to 15 dB.
Polarity	Flips the polarity 180°.
12 Band PEQ	12 bands of EQ with a choice of 16 different filter types per band including all-pass filters.
IIR HPF	X-Over infinite impulse response high-pass filter, with a choice of 19 filter variations.
IIR LPF	X-Over infinite impulse response low-pass filter, with a choice of 19 filter variations.
User Delay	Set a delay time up to 250 ms. Note: the USER delay time is shared with the GROUP delay time, their sum cannot exceed 250ms.
RMS Limiter	RMS limiter with adjustable threshold, attack and release times.
Peak Limiter	Peak limiter with adjustable threshold and release time. Note: the USER RMS and peak limiter are processed after the group processing block
70/100V HPF	An extra 100 Hz 12dB/oct high-pass filter to protect transformers from distortion and damage when driving a 70/100V system. Note: This filter is processed at the very end of the signal chain, after the SPEAKER processing and can only be activated via the AMI settings (feature to come with furure AMI update).

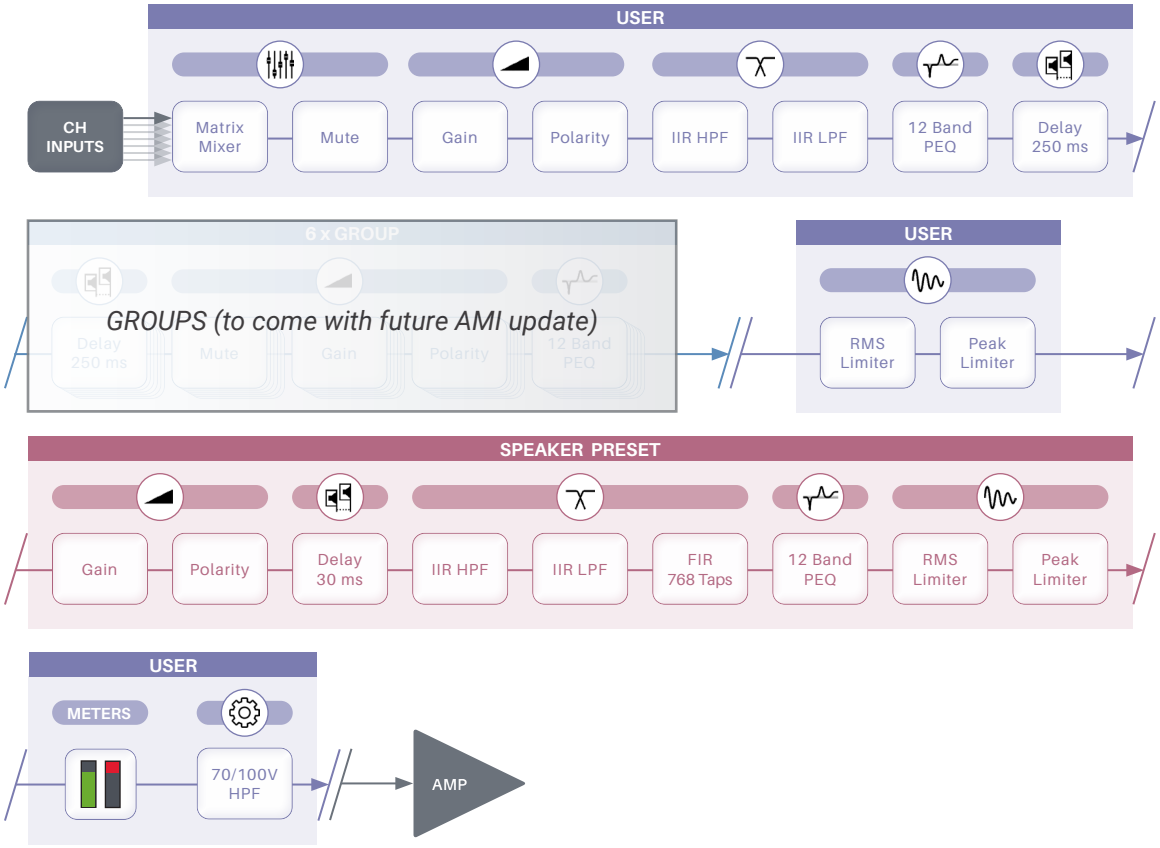
SPEAKER PRESET Processing Features

SPEAKER PRESETS are channel-based features that can be loaded onto individual channels using preset files. The user doesn't have direct access to these controls but can choose to load or clear the speaker preset from a channel. A speaker preset can contain the following features:

Gain	Controls the amout of gain, ranging from -80 dB to 15 dB.
Polarity	Flips the polarity 180°.
Speaker Delay	Set a delay time up to 30 ms. Note: the speaker delay is added on top of the combined 250 ms USER/GROUP delay.
12 Band PEQ	12 bands of EQ with a choice of 16 different filter types per band including all-pass filters.
IIR HPF	X-Over infinite impulse response high-pass filter.
IIR LPF	X-Over infinite impulse response low-pass filter.
FIR Filter	Allows to load a FIR filter file with 768 taps.
RMS Limiter	RMS limiter with adjustable threshold, attack and release times.
Peak Limiter	Peak limiter with adjustable threshold and release time. Note: these are the last limiters at the end of the signal chain.

Detailed Signal Path

The chart below illustrates the most extensive signal path possible for a single channel, utilizing the complete processing capability of the MPA / DA series. Note that the group blocks consist of 6 layers, indicating that a single channel can undergo processing by all six groups simultaneously. The VU meters, which are visable in the AMI software and on the front panel OLED display, are measured at the end of the signal path, just prior to the 70/100V high-pass-filter which closes the processing chain.



Processing Details

Delay from input to output
Min: 1 ms caused by latency, even with all processing features enabled (exept for delay).
Max: 1 ms latency + 250 ms user/group delay + 30 ms speaker preset delay = 281 ms in total.

Max PEQ bands per channel
12 user bands + 6 x 12 group bands + 12 speaker preset bands = 96 PEQ bands in total.

Additional filters
+ 2 user crossover filters + 2 speaker crossover filters + speaker FIR filer + 70/100V HPF = a maximum of 102 possible filters on a single channel.

Max limiters per channel
User RMS & Peak + Speaker RMS & Peak = 4 limiters in total.

Limiter gain reduction metering
The gain reduction meters correspond to all limiters in the signal path, indicating the total limiter activity from input to output.

Gain scale
At 0 dB gain setting, the amplification from the line input to the amplifier output is 26 dB.
With a gain setting of +15 dB, the amplification reaches 41 dB.

Output Operation

70/100V System
WARNING

When utilizing the amplifier with a 70 or 100V transformer system, ensure that you employ a high-pass filter (HPF) to prevent significant transformer saturation. Our recommended configuration is a 63Hz HPF with a 24dB/octave roll-off. The minimum response requirement is -3dB at 70Hz with a 12dB/octave slope.

Presets

The MPA / DA series amplifier has two types of preset libraries,
Global Presets and **Speaker Presets**.

Speaker Preset files contain specific DSP processing settings that can be applied to individual amplifier channels. End users have the option to select a loudspeaker type from a preset library, eliminating the need to configure parameters manually.

These speaker presets are developed by Arbane Groupe. If necessary, users can further customize processing using the USER controls. Speaker presets can be loaded onto a channel using the AMI software.

Global Preset files contain all audio DSP settings for each of the amplifier's channels, including:
USER, GROUP and SPEAKER PRESET parameters.

They do not contain any other settings found in the settings menu such as:
Output operation and configuration (100V HPF, bridge mode), network settings and streaming account details.

Operation Interfaces

A MPA / DA series device can be controlled through either of the following interfaces:

AMI Software

The AMI software can be accessed in the following ways:

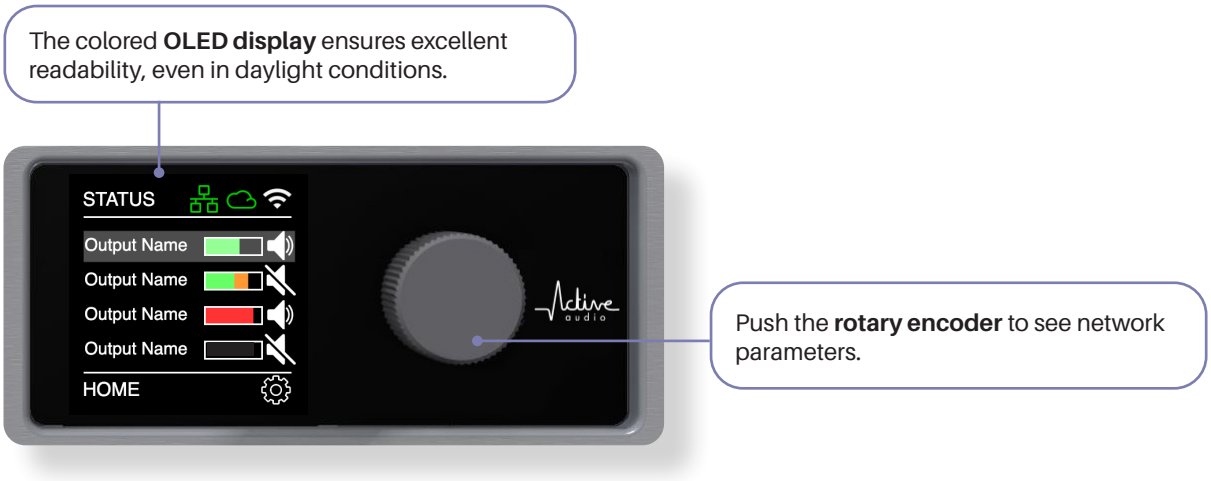
- » Via a local network, whether wired or wireless
- » Using the internal hotspot, removing the need for an active network or wired connection.

Front Panel OLED

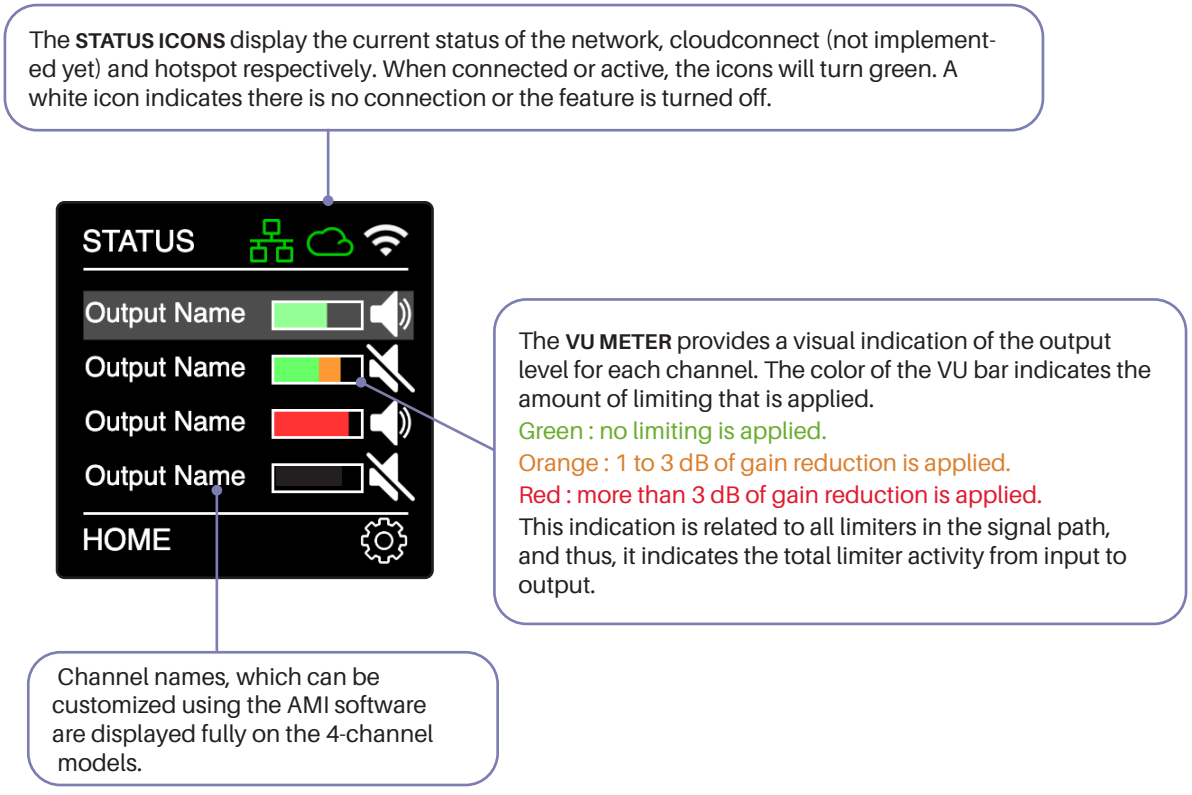
Serves as a viewing method that does not require additional devices or a network connection.

Front Panel Operation

While the MPA / DA series is designed for use with its intuitive AMI software, the front panel provides a method of viewing the amplifier's most important features (channel names, mute state and output levels). It grants access to the amplifier's IP configuration by pressing the rotary encoder.



The homepage displays the most important statuses of the amplifier, including the output level and mute status of all channels, along with the status of the network features.



Notes on Networking

Providing that the network is properly configured, AMI is capable of automatically detecting and controlling any MPA / DA series device connected to the network. Please refer to the AMI Quickstart guide for more details : https://ami.arbane-groupe.com/ami/quickstart/index.htmlquickstart/index.html

Configuring simple IP networks is something that most system engineers would be aware of. Explaining the details of IP networking is therefore outside the scope of this manual. However, we believe it is important to address certain key aspects for better understanding.

IP Addresses

All computers, whether they are Windows, Linux or Mac OS based, and most network-based devices such as the MPA / DA series, obtain an IP address by the following means:

- If a static IP address has been assigned to the computer or device, then that IP address must always be used. Static IP addresses are fixed and do not change. This is useful when installing MPA / DA series devices into fixed installations whereby all networked audio equipment has been assigned a unique and unchanging IP address. This is very useful for network management.
- If the device or computer is set to automatic mode (whereby no static IP address has been defined) then a unique IP address will be used; however this address may vary every time the device is connected to the network. If a DHCP server is available on the network then the MPA / DA series device will use the IP address provided by it.

Further information

In most applications, communication between the MPA / DA series and AMI software will not require any configuration and will effectively work 'out of the box'. However, when the MPA / DA series is used in more network critical environments (e.g., broadcast or AV installations) some additional network settings may be required and the information provided below may be of interest.
The communication protocol used by the MPA / DA series is UDP/IP based. It is based on Unicast communications (point-to-point) for the remote control of properties (e.g., modifying an input gain or the frequency of a filter) and Multicast (point-to-multipoint) for auto-discovery of devices and property changes (such as driving meters within AMI). Multicasting is preferred over broadcasting as it is more suited for network bandwidth control.

Ethernet cables

Nowadays, computers and network devices automatically detect the type of connection (irrespective of whether straight or crossover Ethernet cabling is used). The MPA / DA series operates in the same manner, hence there is no need to worry about cable wiring when out in the field.
Remember that there are limits to Ethernet cable length between two devices and this is 95 meters. Any connection will add about 10 m.

Going wireless

Using wireless networks may be challenging, but the key to success is to use good quality rugged wireless access points and to configure them correctly.
Configuring an access or router point is not that difficult. You just have to install AMI software to access the device. In some applications, there may be a requirement to boost the signal level of both the access point and computer (outdoor stadium shows for example). External boosters are available but these will require that the original antenna of the access point or computer be removed (this has a bearing on the type of access hence there is no need to worry about cable wiring when out in the field.
Remember that there are limits to Ethernet cable length between two devices and this is 95 meters. Any connection will add about 10 m.

Specifications 4 Channel Models

Operating conditions	
Temperature	0° to 50° C, 10 to 60 % non-condensing
Storage temperature	-20° to 70° C
Safety / Compliance	CE Certificate

Amplification and power supply	
Amplification class	Class D GlidePath technology
Power supply model	Universal switch mode power supplies with active PFC
Power Factor	> 0,9 above 1/2 P
Mains Rating	100 - 240V @ 50-60 Hz
Operating Voltage	90 - 260V
AC Mains connector	IEC C20 Inlet (20 A max) , MPA41500 -3004: Powercon 32A

MAX AVERAGE POWER CONSUMPTION (1/8)	MPA4350 / DA1.4	MPA4700 / DA2.8	MPA41500 / DA6
Watts (W)	700	700	1400
Amps @ 230V	3.1	3.1	6.1
Amps @ 120V	5.9	5.9	11.7

Audio Specifications	
Frequency response	1Hz - 22kHz
Distortion THD+N	0,05% @ P/2 , 20Hz- 20 kHz, 22 kHz BW
Noise level (20 Hz - 20 kHz @ 8 ohm)	< 100 uV (A)
Latency	1 mS
Phase response	±10 deg 3 Hz - 20 kHz
S/N (20 Hz - 20 kHz @ 8 ohm)	MPA4350 - 704: 115 dB (A), MPA41500 - 30004: 118 dB (A)
Damping factor	4000@8ohm <1Khz
Input sensitivity	Settable in speaker preset. By default analog in to amplifier output = 26dB

DSP	
Digital Signal Processor	64 bit FIXED POINT
I/O Routing	Flexible routing matrix

Dante Audio Networking
Dante card prefitted in MPA4350 DANTE / MPA4700 DANTE / MPA41500 DANTE / DA1.4 DANTE / DA2.8 DANTE / DA6 DANTE Retrofit option card available for MPA4350 / MPA4700 / MPA41500 / DA1.4 / DA2.8 / DA6
4 Dante input channels with adjustable gain in the amplifier channel mixer
Supports 48/96kHz Dante networks
Two Gigabit network ports for the Dante network, configurable in switched or redundant mode
Supports AES67
Locate function (from Dante Controller, locate mode can be switched on to make the network port LEDs flash to locate them)

User processing functions per channel	
Gain:	-80 to +15dB, 0,1dB steps
Polarity:	Normal / inverted
Delay:	0 to 250 ms (Shared between User and Group settings)
PEQ:	12 x PEQ. Each PEQ can be set to a choice of multiple filter types
HP/LP filters:	Bessel , Butterworth and Linkwitz Riley with slopes from 6 to 48 dB/oct
Limiter:	Peak voltage, RMS voltage
Group processing functions	
Six global processing group overlays which can link any amplifier channel in the network	
Gain:	-80 to +15dB, 0,1dB steps
Polarity:	Normal / inverted
Delay:	0 to 250 ms (Shared between User and Group settings)
PEQ:	12 x PEQ. Each PEQ can be set to a choice of multiple filter types
Speaker processing functions	
Gain:	-80 to +15dB, 0,1dB steps
Polarity:	Normal / inverted
Delay:	0 to 250 ms (Shared between User and Group settings)
PEQ:	12 x PEQ. Each PEQ can be set to a choice of multiple filter types
HP/LP filters:	Bessel , Butterworth and Linkwitz Riley with slopes from 6 to 48 dB/oct
Limiter:	Peak voltage, RMS voltage
FIR filters:	768 taps per channel
Circuit protection	
Mains and power supply	Under, over voltage, over current protection
Power outputs	DC, Over-temp, Over-current limiter, VHF
Cooling	Cooling fans with signal control speed
Inputs	
Analog	4 balanced analog line inputs 4x 3-pin Phoenix
A/D conversion	32 bit
Input impedance	10k Ohm
Max. Input level	21 dBu
Digital	4 input Dante - integral in MPA4350 DANTE / MPA4700 DANTE / MPA41500 DANTE / DA1.4 DANTE / DA2.8 DANTE / DA6 DANTE - Retrofit module available for MPA4350 / MPA4700 / MPA41500 / DA1.4 / DA2.8 / DA6
Internal Streaming source	Two channel internal streaming source supporting Spotify and AirPlay
Remote control and monitoring	
Network connection	Single port Ethernet interface
Remote control software	AMI
Front panel indicators	
Daylight viewable colour OLED display	Real time level , limit and fault indicators

Amplifier model	MPA4350	MPA4700	MPA41500
Total burst power (all channels driven)	1400	2800	6000
2 ohms (with correct limiter setup)	350	700	1500
4 ohms	350	700	1500
8 ohms	350	500	1500
16 ohms	250	250	1000
Hi-Z 70V	280	280	1500
Hi-Z 100V	140	140	1500
Max Output Power bridged mode	**MPA4350**	**MPA4700**	**MPA41500**
4 ohms	700	1400	NA
8 ohms	700	1400	NA
16 ohms	700	1000	NA
Power and Thermal 115V	**MPA4350**	**MPA4700**	**MPA41500**
Idle Power	30W	30W	60W
Idle Current Draw	0.3A	0.3A	0.6A
Idle Thermal loss	102 BTU/h	102 BTU/h	204 BTU/h
1/8 Power @ 4 Ohm Power	185W	375W	800W
1/8 Power @ 4 Ohm Current Draw	1.6A	3.3A	7A
1/8 Power @ 4 Ohm Thermal loss	341 BTU/h	682 BTU/h	1364 BTU/h
Power and Thermal 230V	**MPA4350**	**MPA4700**	**MPA41500**
Idle Power	30W	30W	60W
Idle Current Draw	0.15A	0.15A	0.3A
Idle Thermal loss	102 BTU/h	102 BTU/h	204 BTU/h
1/8 Power @ 4 Ohm Power	185W	375W	800W
1/8 Power @ 4 Ohm Current Draw	0.8A	1.65A	3.5A
1/8 Power @ 4 Ohm Thermal loss	320 BTU/h	640 BTU/h	1280 BTU/h
Physical	**MPA4350**	**MPA4700**	**MPA41500**
Unit Dimensions	483 x 44.5 x 358 mm	483 x 44.5 x 358 mm	483 x 44.5 x 458 mm
Shipping Dimensions	610 x 150 x 420 mm	610 x 150 x 420 mm	610 x 150 x 610 mm
Unit Weight	5 kg - 11 Lbs	6 Kg - 13 Lbs	8 kg - 17 Lbs
Shipping weight	6.5 Kg - 14.5 Lbs	7.5 Kg - 16.5 Lbs	9.5 Kg - 21 Lbs

MPA4350 / MPA4700

MPA41500

Specifications MPA16700 DANTE / DA11.2 DANTE

Operating conditions	
Temperature	0° to 50° C, 10 to 60 % non-condensing
Storage temperature	-20° to 70° C
Safety / Compliance	CE Certificate
Amplification and power supply	
Amplification class	Class D GlidePath technology
Power supply model	Universal switch mode power supplies with active PFC
Power Factor	> 0,9 above 1/2 P
Mains Rating	100 - 240V @ 50-60 Hz
Operating Voltage	90 - 260V
AC Mains connector	Powercon 32A
Max. average power consumption (1/8)	
Watts (W)	700W
Amps @ 230V	3,1
Amps @ 120V	5,9
Audio Specifications	
Frequency response	1Hz - 22kHz
Distortion THD+N	0,05% @ P/2 , 20Hz- 20 kHz, 22 kHz BW
Noise level (20 Hz - 20 kHz @ 8 ohm)	< 100 uV (A)
Latency	1 mS
Phase response	±10 deg 3 Hz - 20 kHz
S/N (20 Hz - 20 kHz @ 8 ohm)	118 dB (A)
Damping factor	4000@8ohm <1Khz
Input sensitivity	Settable in speaker preset. By default analog in to amplifier output = 26dB
DSP	
Digital Signal Processor	64 bit fixed point
I/O Routing	Flexible routing matrix
Dante™ Audio Networking	
16 Dante input channels with adjustable gain in the amplifier channel mixer	
Supports 48/96kHz Dante networks	
Two Gigabit network ports for the Dante network, configurable in switched or redundant mode	
Supports AES67	
Locate function (from Dante Controller, locate mode can be switched on to make the network port LEDs flash to locate them)	

User processing functions per channel	
Gain:	-80 to +15dB, 0,1dB steps
Polarity:	Normal / inverted
Delay:	0 to 250 ms (Shared between User and Group settings)
PEQ:	12 x PEQ. Each PEQ can be set to a choice of multiple filter types
HP/LP filters:	Bessel , Butterworth and Linkwitz Riley with slopes from 6 to 48 dB/oct
Limiter:	Peak voltage, RMS voltage
Group processing functions	
Six global processing group overlays which can link any amplifier channel in the network	
Gain:	-80 to +15dB, 0,1dB steps
Polarity:	Normal / inverted
Delay:	0 to 250 ms (Shared between User and Group settings)
PEQ:	12 x PEQ. Each PEQ can be set to a choice of multiple filter types
Speaker processing functions	
Gain:	-80 to +15dB, 0,1dB steps
Polarity:	Normal / inverted
Delay:	0 to 250 ms (Shared between User and Group settings)
PEQ:	12 x PEQ. Each PEQ can be set to a choice of multiple filter types
HP/LP filters:	Bessel , Butterworth and Linkwitz Riley with slopes from 6 to 48 dB/oct
Limiter:	Peak voltage, RMS voltage
FIR filters:	768 taps per channel

Circuit protection	
Mains and power supply	Under, over voltage, over current protection
Power outputs	DC, Overtemp, Overcurrent limiter, VHF
Cooling	Cooling fans with signal control speed
Inputs	
Analog	4 balanced analog line inputs 4x 3-pin Phoenix
A/D conversion	32 bit
Input impedance	10 kOhm
Max. input level	21 dBu
Digital	16 x 16 Dante digital network card
Internal Streaming source	Two channel internal streaming source supporting Spotify and AirPlay
Remote control and monitoring	
Network connection	Single port Ethernet interface
Remote control software	AMI
Front panel indicators	
Daylight viewable colour OLED display	Real time level , limit and fault indicators

Amplifier model	MPA16700 DANTE / DA11.2 DANTE
Total burst power (all channels driven)	11200
2 ohms (with correct limiter setup)	700
4 ohms	700
8 ohms	500
16 ohms	250
Hi-Z 70V	280
Hi-Z 100V	140
Max Output Power bridged mode	
4 ohms	1200W
8 ohms	1400W
16 ohms	1000W
Power and Thermal 115V	
Idle Power	120W
Idle Current Draw	1.2A
Idle Thermal loss	408 BTU/h
1/8 Power @ 4 Ohm Power	1600W
1/8 Power @ 4 Ohm Current Draw	14A
1/8 Power @ 4 Ohm Thermal loss	2729 BTU/h
Power and Thermal 230V	
Idle Power	120W
Idle Current Draw	0.6A
Idle Thermal loss	408 BTU/h
1/8 Power @ 4 Ohm Power	1600W
1/8 Power @ 4 Ohm Current Draw	7A
1/8 Power @ 4 Ohm Thermal loss	2560 BTU/h
Physical	
Unit Dimensions	483 x 44.5 x 415 mm
Shipping Dimensions	560 x 120 x 610mm
Unit Weight	10 kg - 22 Lbs
Shipping weight	11.5 Kg - 25 Lbs

In the interest of continuous product improvement all values specified are subject to change without notice.

MPA16700 DANTE / DA11.2 DANTE

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DOP_1816_C - 12/2025