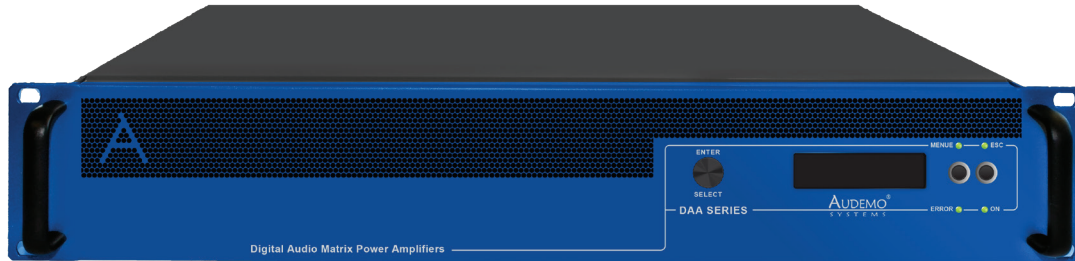


## DAA-2358 A

Digital-Audio-Matrix-Octal-Power-Amplifier 8x 150/100W



### APPLICATION

- Public Address
- Background Music
- Audio Visual

### AREA OF USE

- Health
- Education
- Retail
- Hospitality
- Stadiums
- Transportation
- Theme parks
- Military

### OVERVIEW

The PADES®2000 Digital Audio Matrix Octal Power Amplifier DAA-2358 A is a professional, fully monitored Class D 100V octal power amplifier. The switching power supply integrated in each output stage block contributes to the additional optimization of the efficiency. Its speaker outputs are designed using transformerless technology. Each of the eight power amplifiers has protective circuits against overheating and self-excitation, mains inrush current limitation and switch-on noise suppression; it is short-circuit-proof and idling-proof. All monitoring and protection functions are indicated by a display on the front. The rear connections are designed as RJ45 and Phoenix connectors. The DAA-2358 A has built-in slots for the digital amplifier control module, 8 NF input transformers for all channels (optional) and for all the built-in modules listed below. Due to its high efficiency, the technology is extremely energy-saving and is characterized by low heating of the components. By using the Digital Emergency Power Input Module DAA-2379 B, the DAA-2358 A can be operated with 24V emergency power.

The Digital-Audio-Amplifier-Control-Module DAA-2310 B enables the control and monitoring of the amplifier. With the help of the System Software License DAA-2390 B, all processes and communication with all system components can be controlled using an optional RS-232 Interface Module DAA-2387 B.

All operating functions are digitally controlled by 2 function buttons and a rotary encoder with button function. The graphic LCD display with 64 x 256 pixels allows plain text to be displayed and pictograms to be displayed. The automatically changing background color of the display is used to visualize

error states.

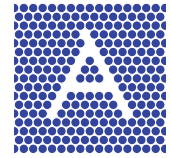
The integrated, automatically activating device sleep mode enables energy consumption to be optimized and the operating state to be automatically reactivated within 50µs after user-relevant events have been detected.

The unit is equipped with DSP tools including the matrix, mixer, 30 band graphic equalizer for each input/output and 50 msec delay function for each 100 volt output at a rate of 48kHz which is equivalent to 17.17m.

The DAA-2358A is fully integrated with DPM 2500 A and DAM 2500A types of audio matrixes for remote control and monitoring. The selection of any line audio input and the control of volume for each 100 volt output can be achieved from the main DPM 2500A and DAM 2500A. The third party integration is achieved at the audio matrix level.

By using different input modules DMS-2036 B (AUDEMO-NET Ethernet module) or DMS-2034 B (DANTE 8x8), the amplifier can be used for a wide variety of applications and can be easily coupled to other DANTE-capable devices.

Two RJ45 connectors are available for the analogue feed of the 8 NF signals. Each RJ45 connector can feed 4 balanced audio input signals. The third and fourth RJ45 connectors are used to loop through the audio input to the next amplifier. Each of the eight audio inputs can be permanently assigned to each of the 8 amplifier channels or used as a priority input. In order to eliminate hum loops, a NF Input Transformer DAA-2380 B



can also be installed in each input. This then creates a floating input for the corresponding channel.

The DMS-2034 B input module offers up to 8 digital input channels based on DANTE™. These can be mixed together as desired or used as a priority input and then fed into the power amplifier channels.

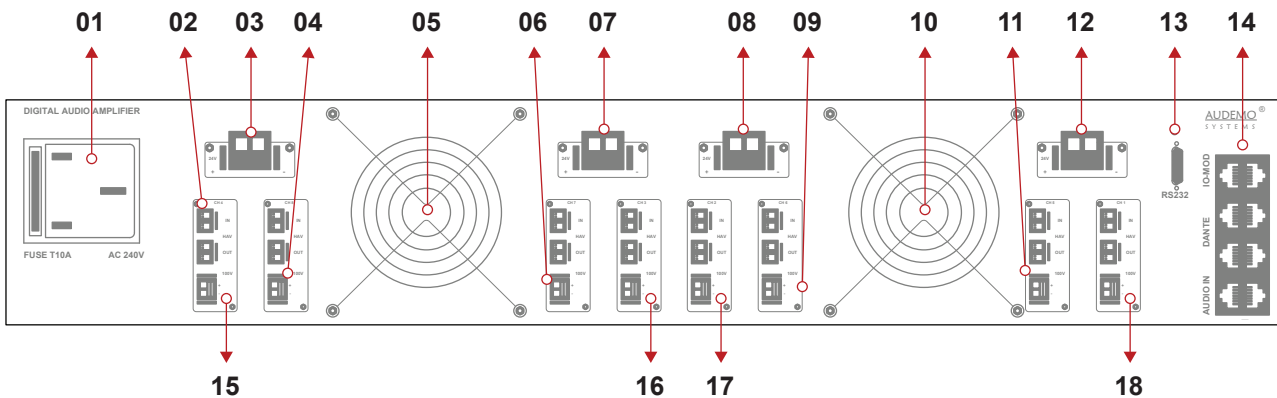
A slot for a DMS-2043 B (option) is already integrated for each power amp channel for emergency switching in the event of a power amp channel failure. With the pre-assembled backup

connection cable DMS-2015 B (option), the spare output stages can be wired efficiently to the useful output stages.

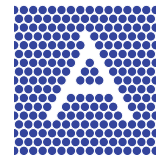
The HF Shielding Module DAA-2389 B effectively protects the electronic components against high-frequency electromagnetic radiation by means of system-grounded shielding.

For warranty reasons, all options can only be installed in the factory. All system components are delivered exclusively project-related. A purchase of individual components is unfortunately not possible.

## REAR PANEL CONNECTIONS:



- |    |  |
|----|--|
| 1  | Mains input 220V AC with fuse  |
| 2  | 8x connections for spare amplifier input and output for looping  |
| 3  | 24V DC input amplifier channel 4 and 8 for supply voltage (optional)   |
| 4  | Output amplifier channel 8 for 100V loudspeaker  |
| 5  | Fan, temperature controlled and monitored  |
| 6  | Output amplifier channel 7 for 100V loudspeaker  |
| 7  | 24V DC input amplifier channel 3 and 7 for supply voltage (optional)   |
| 8  | 24V DC input amplifier channel 2 and 6 for supply voltage (optional)   |
| 9  | Output amplifier channel 6 for 100V loudspeaker  |
| 10 | Fan, temperature controlled and monitored  |
| 11 | Output amplifier channel 5 for 100V loudspeaker  |
| 12 | 24V DC input amplifier channel 1 and 5 for supply voltage (optional)   |
| 13 | RS-232 connection for firmware update  |
| 14 | 2x RJ45 ports (IO-MOD control bus IN/OUT)<br>2x RJ45 digital connection using DMS-2034 B or DMS-2036B module ( Dante or standard Etherent )<br>2x RJ45 ports for analog audio IN channels 1-4 and 5-8<br>2x RJ45 ports for analog audio OUT channels 1-4 and 5-8 |
| 15 | Output amplifier channel 4 for 100V loudspeaker  |
| 16 | Output amplifier channel 3 for 100V loudspeaker  |
| 17 | Output amplifier channel 2 for 100V loudspeaker  |
| 18 | Output amplifier channel 1 for 100V loudspeaker  |



## TECHNICAL SPECIFICATIONS:

### Digital-Audio-Matrix-Octal-Power-Amplifier 8x 150/100W (DAA-2358 A)

|                                |  |
|--------------------------------|--|
| Output Power (Program/Rms)     | 8 x 150/100W   |
| Input Sensitivity              | 8 x 1 V, 10 kOhm, Symmetrical,<br>at DPA-2220 B with DPA-2221B |
| Frequency Range                | 20-20.000 Hz   |
| Signal-To-Noise Ratio          | >103 dB  |
| Crosstalk Attenuation          | 85 dB  |
| Distortion Factor              | < 0.29 %   |
| Equalizer                      | 30 band equalizer at each input channel and output channel     |
| Power Supply (Main Supply)     | 220-240 V AC, 50/60 Hz   |
| Power Consumption              | 1000 VA (Last)<br>19.2 VA (Quiet)<br>9,8 VA (Stand-By)         |
| Dimensions (W x H x D)         | 483 x 88 x 330 mm (2U)   |
| Operating Temperature          | -5 C° to + 55 C°   |
| Weight (At Full Configuration) | 11.6 KG  |
| Protection Class               | IP30   |

### Digital-Emergency-Power-Input-Module 24V (DAA-2279 B)

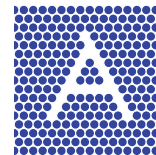
|                        |                     |
|------------------------|---------------------|
| Input Voltage          | 24 V DC (20V – 29V) |
| Output Power Max.      | 700W                |
| Input Current          | 30A                 |
| Dimensions (W x H x D) | 50 x 50 x 180 mm    |
| Weight                 | 465 g               |

### NF-Input-Transformer (DAA-2280 B)

|                        |                 |
|------------------------|-----------------|
| Transmission Ratio     | 1:1             |
| Transmission Range     | 30-20.000 Hz    |
| Distortion Factor      | < 0.4 %         |
| Dimensions (W x H x D) | 18 x 13 x 18 mm |
| Weight                 | 65 g            |

### HF-Shielding-Module (DAA-2389 B)

|                        |                |
|------------------------|----------------|
| Dimensions (W x H x D) | 35 x 48 x 1 mm |
| Weight                 | 10 g           |



### Digital-Media-Network-Module DANTE (DMS-2034 B)

|                       |                  |
|-----------------------|------------------|
| Connection Technology | 2x RJ-45         |
| Bus-Type              | Ethernet 1GB,    |
| Input Channels        | 8                |
| Output Channels       | 8                |
| Sampling Rate         | 48kHz            |
| Resolution            | 16 / 24 / 32 Bit |
| Redundant Connection  | Yes              |
| Weight                | 163 g            |

### DAA-SERIES:

| Article no. | Description  | Maximum expansion per device |
|-------------|--|------------------------------|
| DAA-2358 A  | Digital-Audio-Matrix-Octal-Power-Amplifier 8x 150/100W |                              |
| DMS-2034 B  | Digital-Media-Networking-Module (DANTE™)               | 1x                           |

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