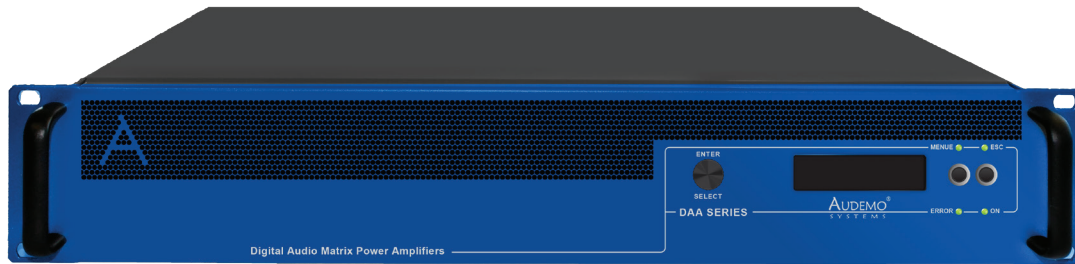


## DAA-2354 C

Digital-Audio-Matrix-Quad-Power-Amplifier 4x 900/600W



### 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 Quad Power Amplifier DAA-2354 C is a professional, fully monitored Class D 100V quad 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 four 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-2354 C has built-in slots for the digital amplifier control module, 4 NF input transformers for all channels 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 (Optional), the DAA-2354 C 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.

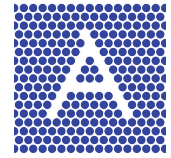
The integrated, automatically activating device sleep mode enables energy consumption to be optimized and the operating state to be automatically reactivated within 50µs after user-relevant events have been detected.

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 48 kHz which is equivalent to 17.17 m.

The DAA-2354 C 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 module), the amplifier can be used for a wide variety of applications and can be easily coupled to other DANTE-capable devices.

An RJ-45 connector is available for the analogue feed of the 4 NF signals. The connector can feed 4 balanced audio input signals. A second connector is used to loop through the audio input to the next amplifier. Each of the four audio inputs can be permanently assigned to each of the 4 amplifier channels or used as a priority input. In order to eliminate hum loops, an 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 digital audio input for each 100 volt line output based on DANTE™. These can be distributed arbitrarily to the amplifier channels or used as a priority input and then fed into the power amplifier channels.

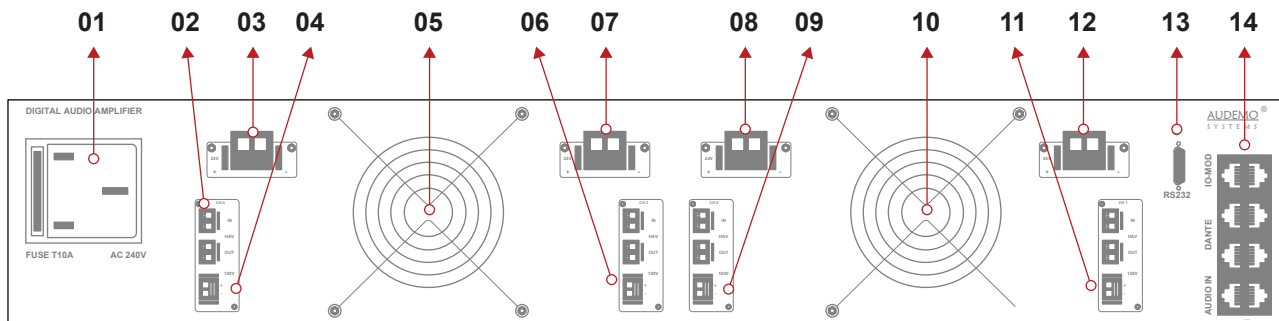
A slot for a DMS-2043 B (option) is already integrated for each power amp channel for emergency switching in the event of a power amp channel failure.

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

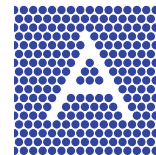
The HF Shielding Module DAA-2389 B effectively protects the electronic components against high-frequency electromagnetic radiation by means of system-grounded shielding.

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  | 4 x connections for backup amplifier input and output for looping                                                                                                                                                                                    |
| 3  | 24V DC input amplifier channel 4 for supply voltage (optional)                                                                                                                                                                                       |
| 4  | Output amplifier channel 4 for 100V loudspeaker                                                                                                                                                                                                      |
| 5  | Fan, temperature controlled and monitored                                                                                                                                                                                                            |
| 6  | Output amplifier channel 3 for 100V loudspeaker                                                                                                                                                                                                      |
| 7  | 24V DC input amplifier channel 3 for supply voltage (optional)                                                                                                                                                                                       |
| 8  | 24V DC input amplifier channel 2 for supply voltage (optional)                                                                                                                                                                                       |
| 9  | Output amplifier channel 2 for 100V loudspeaker                                                                                                                                                                                                      |
| 10 | Fan, temperature controlled and monitored                                                                                                                                                                                                            |
| 11 | Output amplifier channel 1 for 100V loudspeaker                                                                                                                                                                                                      |
| 12 | 24V DC input amplifier channel 1 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>1x RJ45 ports for analog audio IN channels 1 - 4<br>1x RJ45 ports for analog audio OUT channels 1 - 4 |



## TECHNICAL SPECIFICATIONS:

### Digital-Audio-Matrix-Quad-Power-Amplifier 4x 900/600W (DAA-2354 C)

Output Power (Program/Rms)	4 x 900/600 W
Input Sensitivity	4 x 1 V, 10 kOhm, Symmetric, 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
Dimensions (W x H x D)	483 x 88 x 330 mm (2U)
Weight (At Full Configuration)	8.8 KG
Operating Temperature	-5 C° to + 55 C°
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

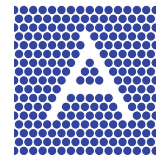
\* It is not included in the standard version

### 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-2354 C	Digital-Audio-Matrix-Quad-Power-Amplifier 4x 900/600W	
DMS-2034 B	Digital-Media-Networking-Module (DANTE™)	1x or
DMS-2036 B	Digital-Audio-Network-Module (AUDEMO-NET)	1x

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