

# USER MANUAL

## DPM-2500A Digital-Audio-Matrix



EN 54 16



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## 1. General



This operation manual includes important notes on safe operation of the unit. Please read all instructions and safety regulations. Keep these instructions for future reference. Take care that the operation manual is available to all users.

Our products are subject to continuous development. Therefore, any technical modification subject to change without notice.

### Symbols and Important Notes

This section provides you with an overview of safety warnings and symbols and their importance.

Safety Warning	Importance
<b>DANGER!</b>	Warning of a possible danger, which can lead to death or to serious injuries, if not avoided.
<b>CAUTION!</b>	Warning of a possible danger, which can lead to a possibly dangerous situation, if not avoided.

Warning Symbol	Type of risk
	Caution! Warning of a possible danger!
	Caution! Risk of electric shock!

## 2. Safety Instructions

1. Please read all instructions before operating the unit.
2. Keep these instructions for future reference.
3. Follow manufacturer's instructions.
4. Pay attention to all warnings. Do not remove any safety instruction or other information from the unit.
5. Use the unit only in the intended way.
6. Take note of applicable safety regulations.
7. **CAUTION!** Select the assembly site in such a way that the unit can be sufficiently cooled. Take care of the details of the brief instructions.
8. **CAUTION!** Do not block vents.
9. **CAUTION!** Keep away flammable materials, liquids and gases.
10. **CAUTION!** Do not use this unit near water or moisture. Take care that no liquid penetrates into the unit.
11. The installation must be carried out only with accessories recommended by AUDEMO SYSTEMS®. All options could only be assembled ex works in terms of warranty.
12. **CAUTION!** Do not open or modify the unit.
13. Opening of the security protected unit for servicing, repair and so on is only allowed by the service department of AUDEMO SYSTEMS®. Interventions to the unit and breaking the seals will invalidate the warranty agreement!
14. Opening of the unit deactivates all functions! For reactivating in factory a fee will be charged!
15. **CAUTION!** Always take care about all connections and cables after installation to avoid damages and accidents with e.g. trip hazards.
16. **DANGER!** Pay highest attention while transporting that the system could never drop down or fall over and causes injuries and material damage.
17. **CAUTION!** In any case of acute malfunction of the unit, damage or impact of objects or fluids, switch off the unit immediately and disconnect mains and emergency power supply. The unit as well as the system could only be repaired or changed by the specialized company, the contracted maintenance company or the manufacturer.
18. Clean the surface of the unit with a soft cotton cloth.
19. Pay attention to actual waste disposal laws and regulations



**DANGER!**

**Risk of electric shock of dangerous voltage within the units enclosure**

Within the units enclosure there are uninsulated parts with high electric tension. Do not remove the cover. There are no user serviceable parts inside.



**DANGER!**

**Risk of electric shock by short circuit**

Always use properly earthed mains connections. Do not manipulate any cable or cable connector. Noncompliance could lead to electric shock with danger of serious injuries, death and fire! If you are not sure please contact the specialized company, the contracted maintenance company or the manufacturer



**DANGER!**

**Possible Hearing Damage**

The system produces a volume level which could damage your hearing continuously or temporarily while listening to long to headphone or loud speaker sound sources.

Do not reproduce high volume levels for a long time. Reduce the level immediately if any noise in ear or hearing loss occurs.

**Note:** The level of the alert announcement may not be changed!



**CAUTION!**

**Operating Conditions**

The unit is intended for indoor use. To prevent damage do not use this unit near liquids and moisture. Avoid direct sunlight, heavy dirt or strong vibration.



**CAUTION!**

**Power Supply**

Verify the mains connection before installation of the unit. Compare local conditions with the information of the schematic diagram.

Initial operation, maintenance and servicing could only be affected by the specialized company, the contracted maintenance company or the manufacturer.

### 3. Technical Features

The Digital Paging Management Unit DPM-2500 A is a digital signaling audio control unit used to initiate/manage live paging, audio signal routing and playing pre-recorded audio messages. The unit is ideal for different audio applications including the voice alarm, mass notification (general alarm), background music and professional public address. It is equipped with an internal monitoring of all alarm-relevant parts, internal error logging and permanent monitoring of all PADES® 2000 system buses as well as the audio signal path from the signal source to the loudspeaker line in accordance with the standard requirements of VDE 0828 and EN54 Part 16. The DPM-2500A is equipped with 4 independent (DSP-based) audio input channels. On the output side, you can use four independent preamplifier outputs for DPM -2500 A and DPM-2500B versions. The digital paging management unit is used in combination with DAA amplifiers and DMS-2021A to power multi-independent loudspeaker outputs supporting class A or class A/B wiring.

Up to ten digital selective remote microphone units DPM- 2550 A or DPM-2550 B can be operated with each DPM unit. If a DAM-2550 A system call station is to be connected to the paging management unit, this can be done over TCP/ IP media or RS 485.

The unit can be equipped with a digital Dante-enabled card, model number DMS -2034A. For more details: Review the user manual for DMS-2034A.

The audio signal processing allows the simultaneous operation of 4 independent speech paths in connection with a supplementary software license. With the digital-analog input module, up to 4 monitored digital or analog inputs are available. In order to play a selected input channel with priority, the NF-Digital-1-Channel-Priority-Control-Module is used. Furthermore, an NF-Digital External Volume Control Module allows remote volume control of a selected input channel. On the input side, there are high-performance audio AD converters with 128x oversampling and input channel gain adjustable in 6 dB steps (0 – 42 dB), and on the output side with high-performance audio DA converter with 128x oversampling and switchable output channel gain (0/6 dB) is available. For a professional, unadulterated reproduction of speech and music, each input/output features a five-band parametric equalizer. Each audio input could be configured as a Line or Mic input supporting phantom power input.

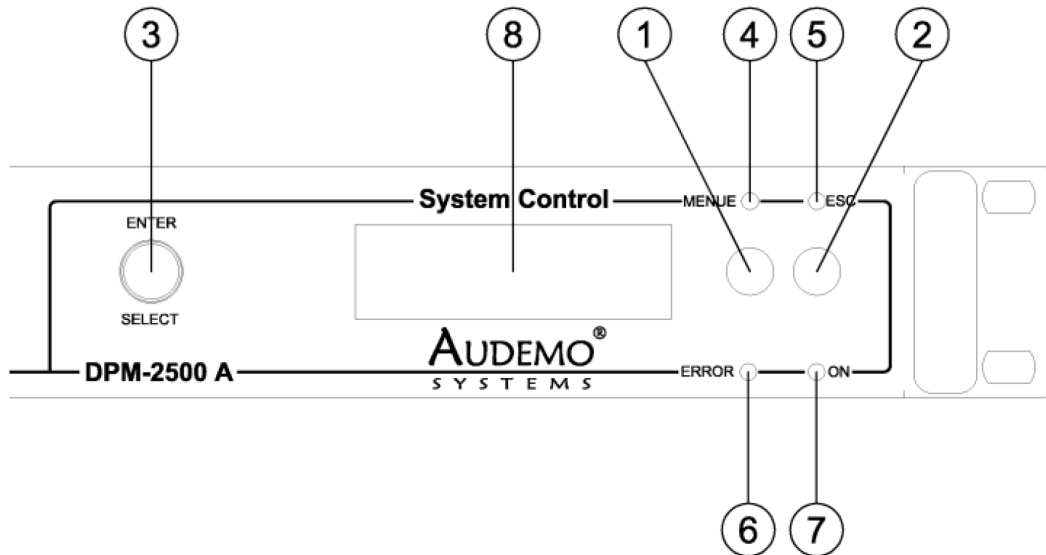
**The below list describes the control ability of the system :**

Number of Loudspeakers- Lines	1000
Number of Lines -Groups	1024
Number of Clock Events	8192
Number of Trigger Events	1024
Number of Events and Fault Logs	2047
Number of Priorities	255 x 255
Number of Signal Chain Entries	512
Number of Remote Paging Microphones DAM-2550A	64
Number of Remote Paging Microphones DPM-2550 A	32

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.

## 4. Operational Controls

### Front Panel:



- 1 Function Key MENU**  
Push the key to enter the next submenu.

- 2 Function Key ESC**  
Push the key to leave the submenu to the next higher operating level.

- 3 SELECT-Turning Encoder with ENTER-Key Function**  
Rotate the encoder to change the menu items. The menu driven handling is indicated on the integrated LCD-display. Push the encoder to confirmed a menu item (ENTER).

- 4 MENU LED**  
The green LED MENUE is illuminated on selection of a submenu.

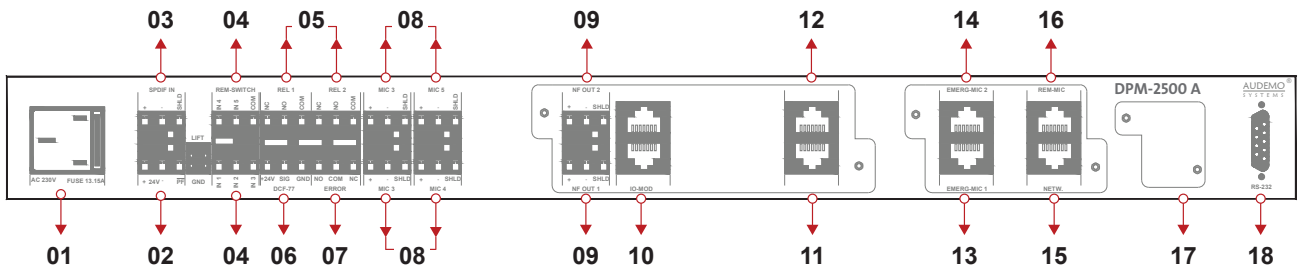
- 5 ESC LED**  
The green LED ESC is illuminated on the possibility to leave a submenu to the next (higher) operating level.

- 6 ERROR LED**  
The yellow LED ERROR is illuminated on each failure of the unit.

- 7 ON LED**  
The green LED ON is illuminated on standby of the unit.

- 8 LCD-Display**  
Display with changing colour in order to indicate an error status of the unit. The display is illuminated yellow if any failure occurs.

**Rear Panel:**



- 1 240AC 50/60Hz MAIN POWER SUPPLY
- 2 +24VDC SECONDARY POWER SUPPLY
- 3 SPDF IN
- 4 PROGRAMMABLE CONTROL INPUTS(5 INPUTS-NO/NC)
- 5 PROGRAMMABLE RELAY OUTPUTS
- 6 GPS PORT
- 7 ERROR OUTPUT
- 8 PROGRAMMABLE LINE/MIC INPUTS
- 9 PROGRAMMABLE LINE OUTPUTS
- 10 IO-MOD(2 Nos):CONTROL THE DAM-2525 AND DAA-237X RANGE OF AMP+CONTROL AND POWER FOR(DMS-2021A+DMS-2022A)
- 11 PRIMARY DANTE PORT(DMS-2034A)
- 12 SECONDARY DANTE PORT(DMS-2034A)
- 13 WALL MOUNT MICROPHONE (PRIMARY PORT TO DRIVE DAISY CHAIN OF REMOTE PAGING MICROPHONES)
- 14 SECONDARY PORT TO DRIVE DAISY CHAIN OF REMOTE PAGING MICROPHONES
- 15 ETHERNET PORT (INTEGRATION WITH MODBUS)
- 16 THIRD PORT TO DRIVE REMOTE PAGING MICROPHONES OR TO DRIVE PoE MICROPHONES
- 17 PROVISION TO DRIVE PERIPHERAL DEVICES LIKE DPA 2274A /B AND DMS-2041A
- 18 SERIAL LINK FOR PROGRAMMING



## 5. Programming DPM 2500x (digital paging module)

The programming is different depending on the internally installed or externally connected modules.

### Overview in the Pades2000 Config Tool



Example figure: Tree View Tab

Note: DPM2500 will appear always as DPM-2500B even for DPM-2500A. Serial number will define the version

5.1) Highlight the serial number under the device displayed



Example figure: Tree view tab with serial number marked

5.2) Select the device you want to configure in the Config Tool. In this case click on the TAB DPM-2500.

Now you will see the following in the main window:

DataComplete	Serial	Monitoring	HealthState	RxPackets
0	0	<input type="checkbox"/>	SystemOK	0
0	0	<input checked="" type="checkbox"/>	SystemOK	0

Example figure: main window with selected TAB "DPM-2500"

## 6. Setting up speaker lines (Speaker Line)

### 6.1) DMS-2021A

- Click on the TAB SpeakerLine - **SpeakerLine**
- Double click on the first free row in the main window.
- The following window appears:

**LINE: Toilet (A)** [ - ] [ □ ] [ × ]

Index:  [ default ] [ OK ]

Device Type:  Serial:  [ cancel ]

Relay/Ch-Index:

LineName:   Enabled

AMP-Index:   PilotTone-Check uses in LineGroup:

Index	GroupName
10	All Call
11	G-Floor
15	All
16	G-F - Toilet

**Measurement Limits**

Measure Interval  sec  Group

Repeat Impedance  Ground

Drift Range  +/- Compensation  %

**Impedance Limits** [ off ]

Detach Neg.   Error Neg.   Warn Neg.

Warn Pos.   Error Pos.   Detach Pos.

**Ground Limits** [ off ]

Warn   Error   Detach

**Measure-Results**

100 % [ 0 % ] [ -100 % ] [ Inf. ] [ 50 k ] [ 0 k ]

- Look for your device under Device Type. In this case DMS-2021A
- Enter a serial number if it was not recognized by the system.
- For Relay/Ch-Index, enter the position on the relay to which this line is connected
- Give the line a unique name for "Line Name".
- Enter the index number of your amplifier under AMP index

- Check “Enabled” to activate the line you have configured.
- Note: The “uses in LineGroup” display does not show any line groups when speaker lines are set up for the first time. This only fills up when you have created line groups, see point 7.
- Click OK to apply your settings.

DataComplete	DeviceType	Serial	RelayIndex	LineEnabled	LineName	State	ImpActualValue	ImpSetpoint	ImpDeflation	Ohm	Power
1	DMS2021A	10592	2	<input checked="" type="checkbox"/>	Toilet (A)		0.000	0.000	NaN	-	0.0
1	DMS2021A	10592	3	<input checked="" type="checkbox"/>	Toilet (B)		0.000	0.000	NaN	-	0.0
1	DMS2021A	10592	4	<input checked="" type="checkbox"/>	Corridor-Brief Room (A)		0.000	0.000	NaN	-	0.0
1	DMS2021A	10592	5	<input checked="" type="checkbox"/>	Corridor-Brief Room (B)		0.000	0.000	NaN	-	0.0

**Example image: After setting up several speaker lines**

**Note: Repeat the process as described in point 6.1 until you have set up all your speaker lines.**

## 6.2) DMS-2061A

- Click on the TAB SpeakerLine - **SpeakerLine**
- Double click on the first free row in the main window.
- The following window appears:

LINE: Toilet (A)

Index:  default OK

Device Type:  Serial:  cancel

Relay/Ch-Index:

LineName:   Enabled

AMP-Index:

uses in LineGroup:

Index	GroupName
10	All Call
11	G-Floor
15	All
16	G-F - Toilet

- Look for your device under Device Type. In this case DMS-2061A
- Enter a serial number if it was not recognized by the system.
- For Relay/Ch-Index, enter the position on the relay to which this line is connected
- Give the line a unique name for “Line Name”.
- Enter the index number of your amplifier under AMP index
- Check “Enabled” to activate the line you have configured.
- Note: The “uses in LineGroup” display does not show any line groups when speaker lines are set up for the first time. This only fills up when you have created line groups, see point 7.
- Click OK to apply your settings.

DataComplete	DeviceType	Serial	RelayIndex	LineEnabled	LineName	State	ImpActualValue	ImpSetpoint	ImpDeflation	Ohm	Power
1	DMS2061A	10592	2	<input checked="" type="checkbox"/>	Toilet (A)		0.000	0.000	NaN	=	0.0
1	DMS2061A	10592	3	<input checked="" type="checkbox"/>	Toilet (B)		0.000	0.000	NaN	=	0.0
1	DMS2061A	10592	4	<input checked="" type="checkbox"/>	Comdor-Brief Room (A)		0.000	0.000	NaN	=	0.0
1	DMS2061A	10592	4	<input checked="" type="checkbox"/>	Comdor-Brief Room (B)		0.000	0.000	NaN	=	0.0

Example image: After setting up several speaker lines

Note: Repeat the process as described in point 6.2 until you have set up all your speaker lines.

### 6.3) DMS-2068A

- Click on the TAB SpeakerLine - **SpeaklerLine**
- Double click on the first free row in the main window.
- The following window appears:

LINE: Toilet (A)

Index:

DeviceType:  Serial:

Relay/Ch-Index:

LineName:   Enabled

AMP-Index:

uses in LineGroup:

Index	GroupName
10	All Call
11	G-Floor
15	All
16	G-F - Toilet

- Enter a serial number if it was not recognized by the system.
- For Relay/Ch-Index, enter the position on the relay to which this line is connected
- Give the line a unique name for "Line Name".
- Enter the index number of your amplifier under AMP index
- Check "Enabled" to activate the line you have configured.
- Note: The "uses in LineGroup" display does not show any line groups when speaker lines are set up for the first time. This only fills up when you have created line groups, see point 7.
- Click OK to apply your settings.

options | read tab | write tab | write changes

DataComplete	DeviceType	Serial	RelayIndex	LineEnabled	LineName	State	ImpActualValue	ImpSetpoint	ImpDeflation	Ohm	Power
1	DMS2068A	10592	1	<input checked="" type="checkbox"/>	Toilet (A)		0.000	0.000	NaN	=	0.0
1	DMS2068A	10592	2	<input checked="" type="checkbox"/>	Toilet (B)		0.000	0.000	NaN	=	0.0
1	DMS2068A	10592	3	<input checked="" type="checkbox"/>	Comidor-Bnef Room (A)		0.000	0.000	NaN	=	0.0
1	DMS2068A	10592	4	<input checked="" type="checkbox"/>	Comidor-Bnef Room (B)		0.000	0.000	NaN	=	0.0

Example image: After setting up several speaker lines

Note: Repeat the process as described in point 6.3 until you have set up all your speaker lines.

### 6.4) DAA-235XX

- Click on the TAB SpeakerLine - **SpeaklerLine**
- Double click on the first free row in the main window.
- The following window appears:

LINE: Toilet (A)

Index:  default OK

Device Type:  Serial:  cancel

Relay/Ch-Index:

LineName:   Enabled

AMP-Index:

uses in LineGroup:

Index	GroupName
10	All Call
11	G-Floor
15	All
16	G-F - Toilet

Measurement Limits

Measure Interval:  sec Group:

Repeat Impedance:  Ground:

Drift +/-:  % Compensation:

Impedance Limits (off)

Detach Neg.  -50 Error Neg.  -40 Warn Neg.  -30

Warn Pos.  30 Error Pos.  40 Detach Pos.  40

Ground Limits (off)

Warn  75 Error  60 Detach  45

Measure-Results

100 % Inf.

0 % 50 k

-100 % 0 k

- Look for your device under Device Type. In this case DAA-235XX
- Enter a serial number if it was not recognized by the system.
- For Relay/Ch-Index, enter the position on the relay to which this line is connected
- Give the line a unique name for "Line Name".
- Enter the index number of your amplifier under AMP index
- Check "Enabled" to activate the line you have configured.

Note: The "uses in LineGroup" display does not show any line groups when speaker lines are set up for the first time. This only fills up when you have created line groups, see point 7.

DataComplete	DeviceType	Serial	RelayIndex	LineEnabled	LineName	State	ImpActualValue	ImpSetpoint	ImpDeflation	Ohm	Power
1	DAA235XX	10592	1	<input checked="" type="checkbox"/>	Toilet (A)		0.000	0.000	NaN	-	0.0
1	DAA235XX	10592	2	<input checked="" type="checkbox"/>	Toilet (B)		0.000	0.000	NaN	-	0.0
1	DAA235XX	10592	3	<input checked="" type="checkbox"/>	Comdor-Brief Room (A)		0.000	0.000	NaN	-	0.0
1	DAA235XX	10592	4	<input checked="" type="checkbox"/>	Comdor-Brief Room (B)		0.000	0.000	NaN	-	0.0

Example image: After setting up several speaker lines

Note: Repeat the process as described in point 6.4 until you have set up all your speaker lines.

### 6.5) DAA-236XX

- Click on the TAB Speaker Line - **SpeaklerLine**
- Double click on the first free row in the main window.
- The following window appears:

LINE: Toilet (A)

Index: 0

Device Type: DAA236XX Serial: 10592

Relay/Ch-Index: 2

LineName: Toilet (A)  Enabled

AMP-Index: 0

uses in LineGroup:

Index	GroupName
10	All Call
11	G-Floor
15	All
16	G-F - Toilet

Measurement Limits

Measure Interval: 90 sec Group: 0

Repeat Impedance: 5 Ground: 5

Drift +/-: 5 % Compensation: 0,010

Impedance Limits (off)

Detach Neg.  -50 Error Neg.  -40 Warn Neg.  -30

Warn Pos.  30 Error Pos.  40 Detach Pos.  40

Ground Limits (off)

Warn  75 Error  60 Detach  45

Measure-Results

100 % Inf.

0 % 50 k

-100 % 0 k

- Look for your device under Device Type. In this case DAA-236XX
- Enter a serial number if it was not recognized by the system.
- For Relay/Ch-Index, enter the position on the relay to which this line is connected
- Give the line a unique name for "Line Name".
- Enter the index number of your amplifier under AMP index
- Check "Enabled" to activate the line you have configured.
- Note: The "uses in LineGroup" display does not show any line groups when speaker lines are set up for the first time. This only fills up when you have created line groups, see point 7.
- Click OK to apply your settings.

options | read tab | write tab | write changes

LineGroup | Encoder | PortConfig | EmMicPort | DAM-2541 | DAM-2550 | DPM-2550 | DAM-2500 | DEU-2700 | DPM-2500 | DPU-2600 | Inputs | Outputs | Level | Buffer | CurrentEventList | ProtocolEventList

BackupProtocolEventList | Licenses | Terminal | RemoteControl | DeviceInfo | TaskStatus

Not used Modules | DAA-23xx | DAM-2522 | DCM-2870 | DMS-2010 | DMS-2021 | DMS-2025 | DMS-2042 | DMS-2061 | DMS-2068 | DPA-2274 | SignalChain | Trigger | ClockChannel | ClockEvent | AmpGroup | SpeakerLine

DataComplete	DeviceType	Serial	RelayIndex	LineEnabled	LineName	State	ImpActualValue	ImpSetpoint	ImpDeflation	Ohm	Power
1	DAA236XX	10592	1	<input checked="" type="checkbox"/>	Toilet (A)		0.000	0.000	NaN	=	0.0
1	DAA236XX	10592	2	<input checked="" type="checkbox"/>	Toilet (B)		0.000	0.000	NaN	=	0.0
1	DAA236XX	10592	3	<input checked="" type="checkbox"/>	Comdor-Brief Room (A)		0.000	0.000	NaN	=	0.0
1	DAA236XX	10592	4	<input checked="" type="checkbox"/>	Comidor-Brief Room (B)		0.000	0.000	NaN	=	0.0

Example image: After setting up several speaker lines

Note: Repeat the process as described in point 6.5 until you have set up all your speaker lines.

## 6.6) DAA-237XX

- Click on the TAB Speaker Line - **SpeaklerLine**
- Double click on the first free row in the main window.
- The following window appears:

LINE: Toilet (A)

Index:  default OK

DeviceType: DAA237XX Serial:  cancel

Relay/Ch-Index:

LineName:   Enabled

AMP-Index:

uses in LineGroup:

Index	GroupName
10	All Call
11	G-Floor
15	All
16	G-F - Toilet

Measurement Limits

Measure Interval:  sec

Repeat Impedance:  Ground:

Drift Range: +/-  % Compensation:

Impedance Limits  off

Detach Neg.  -50 Error Neg.  -40 Warn Neg.  -30

Warn Pos.  30 Error Pos.  40 Detach Pos.  40

Ground Limits  off

Warn  75 Error  60 Detach  45

Measure-Results

100 %

0 %

-100 %

- Look for your device under Device Type. In this case DAA-237XX
- Enter a serial number if it was not recognized by the system.
- For Relay/Ch-Index, enter the position on the relay to which this line is connected
- Give the line a unique name for "Line Name".
- Enter the index number of your amplifier under AMP index
- Check "Enabled" to activate the line you have configured.
- Note: The "uses in LineGroup" display does not show any line groups when speaker lines are set up for the first time. This only fills up when you have created line groups, see point 7.
- Click OK to apply your settings.

options | read tab | write tab | write changes

LineGroup | Encoder | PortConfig | EmMicPort | DAM-2541 | DAM-2550 | DPM-2550 | DAM-2500 | DEU-2700 | DPM-2500 | DPU-2600 | Inputs | Outputs | Level | Buffer | CurrentEventList | ProtocolEventList

BackupProtocolEventList | Licenses | Terminal | RemoteControl | DeviceInfo | TaskStatus

Not used Modules | DAA-23xx | DAM-2522 | DCM-2870 | DMS-2010 | DMS-2021 | DMS-2025 | DMS-2042 | DMS-2061 | DMS-2068 | DPA-2274 | SignalChain | Trigger | ClockChannel | ClockEvent | AmpGroup | SpeakerLine

DataComplete	DeviceType	Serial	RelayIndex	LineEnabled	LineName	State	ImpActualValue	ImpSetpoint	ImpDeflation	Ohm	Power
1	DAA237XX	10592	1	<input checked="" type="checkbox"/>	Toilet (A)		0.000	0.000	NaN	-	0.0
1	DAA237XX	10592	2	<input checked="" type="checkbox"/>	Toilet (B)		0.000	0.000	NaN	-	0.0
1	DAA237XX	10592	3	<input checked="" type="checkbox"/>	Comidor-Brief Room (A)		0.000	0.000	NaN	-	0.0
1	DAA237XX	10592	4	<input checked="" type="checkbox"/>	Comidor-Brief Room (B)		0.000	0.000	NaN	-	0.0

Example image: After setting up several speaker lines

Note: Repeat the process as described in point 6.6 until you have set up all your speaker lines.

## 7. Setting up line groups (Line Group)

### 7.1) DMS-2021A

Here you have the option of grouping together the individual speaker lines that you set up under point 6, for example to play announcements or background music throughout or in parts of the building.

- Click on the TAB Line Group - **LineGroup**
- Double click on the first free row in the main window.
- The following window appears:

**Group: All Call** [ - ] [ □ ] [ × ]

Index:   Enabled  Dynamic  Remote

GroupName:

used Outputs	DMS2021A	10592	RelayIndex	LineEnabled	LineName
<input checked="" type="checkbox"/> 0	DMS2021A	10592	2	<input checked="" type="checkbox"/>	Toilet (A)
<input type="checkbox"/> 1	DMS2021A	10592	3	<input checked="" type="checkbox"/>	Toilet (B)
<input type="checkbox"/> 2	DMS2021A	10592	4	<input checked="" type="checkbox"/>	Comidor, Brief Room (A)
<input type="checkbox"/> 3	DMS2021A	10592	5	<input checked="" type="checkbox"/>	Comidor, Brief Room (B)
<input type="checkbox"/> 4	DMS2021A	10592	6	<input checked="" type="checkbox"/>	Gyor Lab (A)
<input type="checkbox"/> 5	DMS2021A	10592	7	<input checked="" type="checkbox"/>	Gyor Lab (B)
<input type="checkbox"/> 6	DMS2021A	10592	8	<input checked="" type="checkbox"/>	Equipment Room (A)
<input type="checkbox"/> 7	DMS2021A	10592	9	<input checked="" type="checkbox"/>	Equipment Room (B)
<input type="checkbox"/> 8	DMS2021A	10593	0	<input checked="" type="checkbox"/>	Toilet (A)
<input type="checkbox"/> 9	DMS2021A	10593	1	<input checked="" type="checkbox"/>	Toilet (B)
<input type="checkbox"/> 10	DMS2021A	10593	2	<input checked="" type="checkbox"/>	Comidor (A)
<input type="checkbox"/> 11	DMS2021A	10593	3	<input checked="" type="checkbox"/>	Comidor (B)
<input type="checkbox"/> 12	DMS2021A	10593	4	<input checked="" type="checkbox"/>	Toilet (A)
<input type="checkbox"/> 13	DMS2021A	10593	5	<input checked="" type="checkbox"/>	Toilet (B)
<input type="checkbox"/> 14	DMS2021A	10593	6	<input checked="" type="checkbox"/>	Auditorium (A)
<input type="checkbox"/> 15	DMS2021A	10593	7	<input checked="" type="checkbox"/>	Auditorium (B)
<input type="checkbox"/> 16	DMS2021A	10593	8	<input checked="" type="checkbox"/>	Comidor (A)
<input type="checkbox"/> 17	DMS2021A	10593	9	<input checked="" type="checkbox"/>	Comidor (B)
<input type="checkbox"/> 18	DMS2021A	10593	10	<input checked="" type="checkbox"/>	Toilet (A)
<input type="checkbox"/> 19	DMS2021A	10593	11	<input checked="" type="checkbox"/>	Toilet (B)
<input type="checkbox"/> 20	DMS2021A	10593	12	<input checked="" type="checkbox"/>	Comidor (A)
<input type="checkbox"/> 21	DMS2021A	10593	13	<input checked="" type="checkbox"/>	Comidor (B)
<input type="checkbox"/> 22	DMS2021A	10593	14	<input checked="" type="checkbox"/>	Toilet (A)
<input type="checkbox"/> 23	DMS2021A	10593	15	<input checked="" type="checkbox"/>	Toilet (B)
<input type="checkbox"/> 24	DMS2021A	10593	16	<input checked="" type="checkbox"/>	Comidor (A)
<input type="checkbox"/> 25	DMS2021A	10593	17	<input checked="" type="checkbox"/>	Comidor (B)
<input type="checkbox"/> 26	DMS2021A	10593	18	<input checked="" type="checkbox"/>	Toilet (A)
<input type="checkbox"/> 27	DMS2021A	10593	19	<input checked="" type="checkbox"/>	Toilet (B)
<input type="checkbox"/> 28	DMS2021A	10593	20	<input checked="" type="checkbox"/>	Comidor (A)
<input type="checkbox"/> 29	DMS2021A	10593	21	<input checked="" type="checkbox"/>	Comidor (B)
<input type="checkbox"/> 30	DMS2021A	10593	22	<input checked="" type="checkbox"/>	Toilet (A)
<input type="checkbox"/> 31	DMS2021A	10593	23	<input checked="" type="checkbox"/>	Toilet (B)

Remote Device:  Serial:

Example illustration: Here you can see the loudspeaker lines configured under point 6.1



- Click on “Enabled” so that your group, which you are now defining, becomes active
- Give your group a unique name in “GroupName”. This is important so that you can later assign your groups accordingly. Example: “All Call” for All speaker lines if they select all
- Select the lines you want.
- When you have made your settings, click on “OK”. These are then adopted by the system.

The screenshot shows a software interface with a menu bar at the top containing options like 'BackupProtocolEventList', 'Licenses', 'Terminal', 'RemoteControl', 'DeviceInfo', and 'TaskStatus'. Below the menu is a table with columns for 'LineGroup', 'Encoder', 'PortConfig', 'EmMicPort', 'DAM-2541', 'DAM-2550', 'DPM-2550', 'DAM-2500', 'DEU-2700', 'DPM-2500', 'DPU-2500', 'Inputs', 'Outputs', 'Level', 'Buffer', 'CurrentEventList', and 'ProtocolEventList'. The main table below has columns: 'DataComplete', 'Enabled', 'IsDynamic', 'IsRemote', 'IsActive', 'GroupName', 'LineData', 'AudioChannel', 'Rem.IsTemp', 'Rem.Dev.', 'Rem.Serial', and 'Background'. Five rows are visible, each representing a line group with 'Enabled' checked and 'GroupName' values: 'All Call', 'AB', 'CD', 'EF', and 'GH'.

DataComplete	Enabled	IsDynamic	IsRemote	IsActive	GroupName	LineData	AudioChannel	Rem.IsTemp	Rem.Dev.	Rem.Serial	Background
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All Call	System.UInt32[]	00	<input type="checkbox"/>	All	0	<input type="checkbox"/>
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AB	System.UInt32[]	00	<input type="checkbox"/>	All	0	<input type="checkbox"/>
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CD	System.UInt32[]	00	<input type="checkbox"/>	All	0	<input type="checkbox"/>
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EF	System.UInt32[]	00	<input type="checkbox"/>	All	0	<input type="checkbox"/>
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	GH	System.UInt32[]	00	<input type="checkbox"/>	All	0	<input type="checkbox"/>

Example image: After setting up a line group

Note: Repeat this process, as described under Point 7.1, until you have grouped all the speaker lines you want.

## 8. Installing the Controller

### Unpacking

Unpack your controller and inspect for any damage that may have occurred during transit.

If damage is found, notify the shipping company immediately. Only you can initiate a claim for shipping damage, though AUDEMO-SYSTEMS® will be happy to help as needed. If the product arrived, showing signs of damage, save the shipping carton for the shipper’s inspection.

We also recommend that you save all packing materials for use if you ever need to transport the unit. Never ship the unit without the factory carton and packing materials.

## 9. Connections and additional Possibilities

### 9.1) Connection of loudspeaker lines

Take care for correct phase relation when you connect any loudspeaker.

**Danger!** Beware of short circuits and earth fault.

Adjust each speaker with the preset power as noticed in the cabling diagram. Test each single loudspeaker line by a measurement of line impedance at 1000 Hz (Z-Meter with tone-signal) with exact protocolling of the result.

## 10. Options

Order number	Description	Max. extension per unit
DPM-2500A	Digital-Audio- Paging-Controller	
DPM-2500B	Digital-Audio -Paging- Controller	

All options could only be assembled ex works. All components of the electroacoustic system could only be delivered referring to a project. Unfortunately, there is no possibility of buying single components.

## 11. Technical Specifications

Frequency range	20- 20000Hz
Gain Control	-42 dB
Signal-to-noise ratio	>92 dB
Harmonic distortion	< 0.01 %
DSP resolution	32 bit
Dynamic range ( DSP )	192 dB
D/A converter – resolution	24 bit
Dynamic range ( D/A converter)	118 dB
A/D converter – resolution	24 bit
Dynamic range ( A/D converter)	106 dB
Output voltage	220-240 V AC, 50 /60Hz
Emergency Power	24 VDC
Dimensions (W × D × H)	483 × 44 × 300 mm (1U)
Weight	4.7 kg
Protection rating	IP30
Temperature range (operation)	-5 to +55°C

## 12. Environment Protection



In any case of replacement, the substituted unit is taken back from the manufacturer.



This product is subjected to European directive 2002/96/EG and 2012/19/EU (WEEE-directive). Dispose this product never with your domestic waste.

Dispose a control center system with an accredited waste disposal company or your local disposal facility. Take care of applicable regulations. In case of doubt please contact your local disposal facility.