



**Key Features:**

- Digital 4 x 4 audio mixing matrix with level controls in all inputs and outputs
- Parametric 3-band equalizer for all 4 inputs
- Delay processor for all 4 outputs (optional)
- Multi-chime gong signal (optional)
- Alarm generator (optional)
- Signal generator and evaluation used for pilot tone surveillance
- Voice message recording and playback (optional)
- General purpose inputs
- General purpose outputs
- Linking of internal and external control inputs and outputs
- Monitoring facility for all inputs and outputs as well as DPA 4000 Series power amplifiers and other external audio sources.

**General Description:**

The DPM 4000 represents the paging management / control unit of the ProAnnounce system incorporating all primary functions that are needed in advanced PA-system installations.

The DPM 4000 employs a digital audio matrix providing four inputs and four outputs. Additional matrix junctions for the integrated gong and alarm signal generators, the vocal recording/playback unit, and the lock-on of the pilot tone and its evaluation are incorporated. All input signals and internally generated signals can be mixed inside the matrix and sent to the four output channels. Simple four-zone paging systems can be constructed using direct routing of output channels to dedicated zone amplifiers. More complicated (larger than four zone) systems can be constructed by using a system controlled relay matrix either pre- or post- amplifier. The DPM 4000 provides priority control of pages and other functions.

The DPM 4000 provides a variety of tone generators for the generation of gong, alarm, and pre-recorded messages. Signal generation is realized through DSP-algorithms, which are extremely flexible in use, so that they can be adjusted to match nearly any possible application. Factory presets include 6 different gong signals and 17 different alarm signals.



**Technical Specifications:**

|                       |  |
|-----------------------|--|
| Supply voltage        | 24 V DC (21.6 ... 31.2 V DC)   |
| Nominal power cons.   | 500 mA   |
| Maximum power cons.   | 6.7 A  |
| Frequency Response    | 20 Hz ... 20 kHz, ± 0.5 dB   |
| S/N ratio             | > 100 dB (A-weighted)  |
| Distortion            | < 0.01 %   |
| 24 V output           | 24 V DC / 400 mA max. (21.6 ... 31.2 V DC)                             |
| Ready output          | Floating relay contacts, 1 A / 24 V DC                                 |
| Logic inputs          | 2, floating via opto-coupler, bi-pole                                  |
| Maximum input voltage | UIN max = ± 31 V   |
| RS-232 interface      | 19,200 Baud, 8 data bits, 1 stop bit, no parity, Xon/Xoff              |
| Serial port           | RS-485 standard  |
| Supply output         | Short-circuit protected, electronically programmable fuse              |
| Supply voltage        | 24 V DC (21.6 to 31.2 V DC)  |
| Nominal current       | 330 mA, 660 mA, 990 mA (selectable, electronic fuse)                   |
| Monitor input         | Electronically balanced  |
| Nominal input level   | +2.2 dBu / 1 V   |
| Max. input level      | +10 dBu / 2.5 V  |
| Input balance         | > -30 dB   |
| Monitor output        | 6.3 mm phone jack, either for the connection of headphones or speakers |
| Output level          | Headphones: 650 mV / -1.5 dBu, Loudspeakers: 1.8 V / 7.2 dBu           |
| Output power handling | Headphones: 50 mW / 8 Ω, Loudspeakers: 380 mW / 8 Ω                    |
| Operating temp.       | +5 °C to +40 °C  |
| Dimensions W x H x D  | 19", 2 HU 483 x 88 x 337 mm  |
| Installation depth    | 340 mm (410 mm incl. connectors)                                       |
| Weight                | 6.4 kg   |

## Architecture & Engineering Specifications:

The unit shall employ a digital audio matrix providing four inputs and four outputs. Additional matrix junctions for the integrated gong and alarm signal generators, the vocal recording/playback unit, and the lock-on of the pilot tone and its evaluation shall be incorporated. All input signals and internally generated signals shall be capable of being mixed inside the matrix and sent to any of four channels. More complicated (larger than four zone) systems shall be capable of being constructed by using a system controlled relay matrix either pre- or post- amplifier. The unit shall provide priority control of pages and other functions.

The unit shall provide a variety of tone generators for the generation of gong, alarm, and pre-recorded message signals. Signal generation shall be realized through DSP-algorithms, which are extremely flexible in use, so that they can be adjusted to match nearly any possible application. The unit shall provide factory presets which will include 6 different gong signals and 17 different alarm signals.

The unit shall accept a variety of different input cards, which enable it to function with microprocessor, controlled paging stations, stereo line level input sources, and balanced mic / line level input sources.

The unit shall also be able to be expanded through the use of an expansion accessory.

The unit shall be the Dynacord ProAnnounce DPM4000.

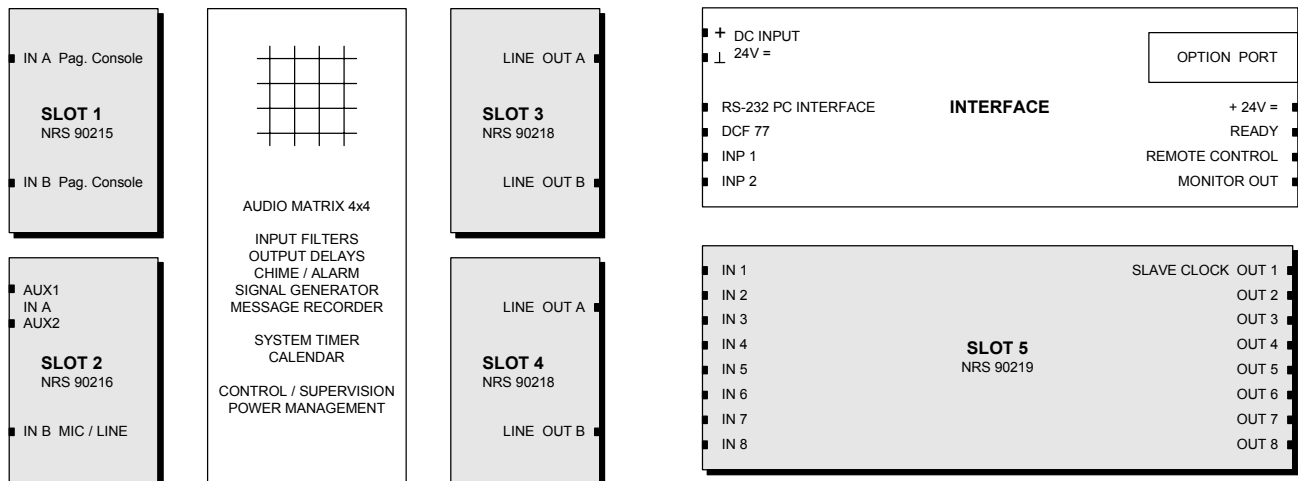
## Available Accessories:

| Model    | Cat. No. | Description                   |
|----------|----------|-------------------------------|
| NRS90215 | 121665   | Input module – 2 DPC          |
| NRS90216 | 121666   | Input module – mc/line + aux  |
| NRS90217 | 121667   | Input module – 2 mic/line     |
| NRS90228 | 121680   | Input module – 2 aux          |
| NRS90234 | 121736   | Input module – mic/line + DPC |
| NRS90218 | 121668   | Output module – XLR line      |
| NRS90205 | 121648   | Message Memory module         |
| NRS90227 | 121679   | Output transformer            |
| NRS90208 | 121641   | Input transformer             |

## Ordering Information:

| Model   | Cat. No. | Description            |
|---------|----------|------------------------|
| DPM4000 | 121795   | 4x4 Digital Matrix CPU |

## Block Diagram:



12000 Portland Av. South, Burnsville, MN 55337  
 Phone: 952-887-4051, Fax: 952-887-0043  
[www.electrovoice.com](http://www.electrovoice.com)  
 Telex Communications Inc 11/2002  
 Part Number 38109-xxx Rev A

USA and Canada Only. For customer orders contact  
 Customer Service at: 800/392-3497 Fax: 800/955-6831