

### DESCRIPTION

The *Digital Speaker Management System* PS266 control unit is a high performance, easy-to-use signal processor designed for professional audio systems, capable of handling two input and six output channels. The product precision and reliability are complemented by highly flexible parameters enabling various operations, which guarantee the utmost durability of the controlled loudspeaker systems. Various types of low-pass and high-pass filters allow the application of highly selective cuts (with high slopes) without introducing excessive phase rotations. The user friendly software (*Digital Speaker*) provides comprehensive control of all parameters even for the most critical applications - Gain, Equalization, Crossover, Delay and Limiter parameters can be set by connecting the unit to a PC or just using the front panel controls. Possible configurations can also be viewed in the rear-lit LCD display. Data is saved and transferred through the MIDI system (*sysex*). The PS266 provides a comprehensive solution for controlling acoustic speakers to satisfy any customer requirement. Thanks to its rigid chassis, the processor can be perfectly anchored in professional rack, guaranteeing maximum reliability at all times and under any operating conditions.

### FEATURES

- Ultra-compact
- High electro-mechanical efficiency and reliability
- Max 12 EQ bands (*parametric* or *shelving*) for each input/output channel
- HPF-LPF filter selection for each channel
- Highly versatile thanks to multiple possible configurations
- 60 memory locations
- Security lock outs
- Polarity reversal on every output
- Designed for 19" rack unit installation (1RU)

### REGULATORY COMPLIANCE

This product complies with the *EMC Directive 89/336/EEC* as issued by the *Commission of the European Community*. Compliance with these directives implies conformity with the following European standards:

- EN55103-1 Electromagnetic Interference (*Emission*)
- EN55103-2 Electromagnetic Susceptibility (*Immunity*)
- EN60065 Electrical Safety (*Safety*).

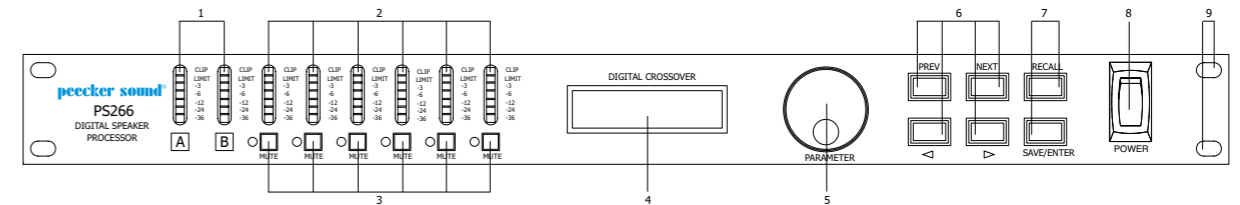
This product is intended for operation in the E2 (*commercial & light industrial*) and E3 (*urban outdoors*) Electromagnetic Environments.

### TECHNICAL SPECIFICATIONS

Input Channels	<b>2</b>
Input Gain	<b>-15 ÷ +15 dB</b>
Output Channels	<b>6</b>
Output Gain	<b>-15 ÷ +15 dB</b>
Output Polarity	<b>norm, invert</b>
Output HPF Freq.	<b>15 Hz ÷ 16 kHz</b>
Output HPF Shapes	<b>But6, But12, But18, But24, But48, Bes12, Bes24, LR12, LR24, LR48</b>
Output LPF Freq.	<b>15 Hz ÷ 16 kHz</b>
Output LPF Shapes	<b>But6, But12, But18, But24, But48, Bes12, Bes24, LR12, LR24, LR48</b>
Output Limiter Threshold	<b>-10 ÷ +20 dBu</b>
Parametric EQ. Freq.	<b>15 Hz ÷ 16 kHz</b>
Parametric EQ. Width	<b>0.05 ÷ 3 octaves (0.05 step)</b>
Parametric EQ. Gain	<b>-15 ÷ +15 dB</b>
Shelving EQ. Freq.	<b>15 Hz ÷ 16 kHz</b>
Shelving EQ. Gain	<b>-15 ÷ +15 dB</b>
Delay	<b>0 ÷ 635 ms (21 µs step)</b>
PC Remote Control	<b>Digital Speaker software</b>
<b>Acoustic specifications</b>	
Input Impedance	<b>10 kΩ, electronically balanced</b>
Output Impedance	<b>&lt; 50 Ω, electronically balanced</b>
Max Input Level	<b>20 dBu</b>
Max Output Level	<b>20 dBu (@ 600 Ω)</b>
DSP Word Code	<b>24 bit</b>
DSP Sample Rate	<b>48 kHz</b>
Frequency Response	<b>15 Hz ÷ 20 kHz (± 0.25 dB) 15 Hz ÷ 40 kHz (± 3 dB)</b>
Dynamic Range	<b>&gt; 112 dBA typ (20 Hz ÷ 20 kHz)</b>
THD	<b>&lt; 0.008% (20 Hz ÷ 20k Hz)</b>
Power Requirements	<b>90-250 VAC, 50/60 Hz</b>
Power Consumption	<b>&lt; 25 W</b>
<b>Environmental</b>	
Temperature	<b>0 ÷ +55 °C</b>
Humidity	<b>0 ÷ 80% RH (non-condensing)</b>
<b>Connectors</b>	
Audio Inputs	<b>3-pin female Neutrik® XLR</b>
Audio Outputs	<b>3-pin male Neutrik® XLR</b>
Comms	<b>9-pin female DE-9 5-pin MIDI</b>
Mains	<b>3-pin IEC</b>
<b>Dimensions and Weight</b>	
Dimensions (WxHxD)	<b>483 (19") x 44 (1RU) x 225 mm</b>
Net Weight	<b>3 kg</b>

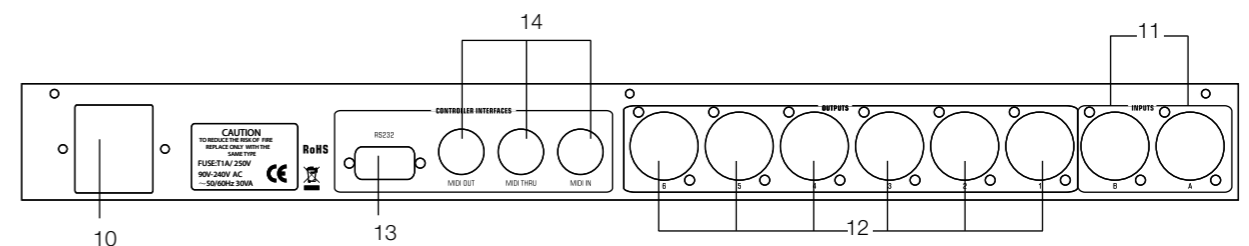
All measurements have been taken in Sound Corporation research laboratories

### FRONT PANEL



- LED input bar graphs** - The LED input bar graphs show the level of input signal, respond to inputs from -30 dB to -3 dB and indicate the input signal clipping.
- Output LED bar graphs** - The output LED bar graphs indicate the output signal level in relation to the limiter threshold.
- MUTE** - The indicators next to the MUTE buttons show their current status. Press these buttons to switch the *mute* function ON>OFF and vice-versa.
- Display (2x16 character LCD)** - The LCD display shows information on the selected parameters. The bottom line of the default screen appearing after start-up shows the number and name of the last program saved. The memory of the unit will always contain at least one allocated program if nothing is specified in the bottom section.
- Rotary encoder** - It allows the scrolling and selection of the menu parameters. Obviously, it can also modify the values of the parameters.
- PREV, NEXT, ◀, ▶** - These buttons allow access to the various screens and selection of the parameter to be adjusted (PREV / NEXT) as well as the value of the selected parameter (◀, ▶). Should the parameter not be numerical, these buttons can be used to scroll through the list of options.
- RECALL, SAVE/ENTER** - Use these buttons to save the programs in a new memory location and to recall settings saved in internal memories. The SAVE button can also be used as an ENTER key to confirm certain operations. Pressing the SAVE key when in RECALL mode will exit the operation.
- POWER** - On/Off switch
- Rack installation holes

### REAR PANEL



- AC Power socket** - The processor has a power supply operating capability ranging from 90 V to 250 V, at 50-60 Hz, with automatic adjustment to the input voltage.
- Audio Input connectors** - The audio input connections are made using electronically balanced *Cannon® XLR* connectors. The two inputs provide the input for the DSP chain.
- Audio Output connectors** - The audio output connections are made using electronically balanced *Cannon® XLR* connectors. The six outputs provide the direct output to other devices.
- DB9 socket (RS232 standard)** - The PS266 processor can be entirely controlled via a PC through the *Digital Speaker* software. The connection is normally made via the serial port connector (RS232).
- MIDI OUT, MIDI THRU, MIDI IN connectors** - The three MIDI connectors are required for transmitting and receiving Program changes and for transmitting the system exclusive dump data between the different units.