Smart SMS-AMP

The Intelligent Sound Masking System

Smart SMS is designed to provide the best masking sound while preserving the comfort of the occupants. The precise adjustment of the masking sound to the specific characteristics and noise conditions of each work area is what distinguishes this system.

Sound Masking System Amplifier

The SmartSMS-AMP is a DSP-based system that provides unique adjustment functions and ensures the generation of the optimum masking sound regardless of the characteristics of the room.

Automatic Equalization Process

Adjusts automatically the masking spectrum for the specific architectural characteristics of the building. The adjustment is quick and precise.

Active Adjustment of the Masking Sound Level

Continuously measures the ambient noise and automatically adjusts the masking sound level accordingly. It maximizes the privacy in the treated space while preserving the occupants' comfort.

The SMS-AMP is available in 1, 2, 4 or 8 channel versions and integrates the controller, the noise generators, the equalizers and the 25-Volt amplifiers. It combines sound masking, music diffusion and paging systems, all integrated in one convenient rackmount package.

Product Features

- Fully adjustable output channels, e.g. 1/3 octave equalizers (±0.1 dB Adjustment)
- Auxiliary inputs for music or paging, 1/3 octave band equalizer on each output
- Up to 8 SMS-AMP units can be networked through a USB if more than 8 channels are needed
- Inputs for active sound level sensors
- Programmable phase-in timer (up to 2 months)
- Volume control knob allows easy volume adjustments
- The DSP processor is controlled from a PC connected through a USB port
- Includes a UL and FCC certified 110-240 VAC – 25 VDC external power supply
- Optional internal clock for calendar function allows time-based automatic adjustments

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Automatic Equalization Process Features

- Integrated 1/3 octave frequency analyzer, real-time measurement of the masking spectrum during the calibration
- Optional wireless connection between the computer and the SmartSMS allows to easily perform the equalization alone
- Automatic calculation of the masking sound ensure generation of the target masking sound in the room
  Different target masking sound spectrums can be applied to different zones
- A bank of target spectrums is available, spectrum editor function allows to create custom spectrums
- Equalization can be performed manually, if desired, with a 1/3 Octave band equalizer

Active Adjustment Features

- Unique active adjustment system which controls the masking volume based on the level of disturbing noise of the room
- The disturbing noise is measured by sound level sensors installed in the ceiling – up to 8 sensors per zone
- The masking sound level is adjusted automatically in real-time
- Rate of adjustment, high limit and low limit are programmable separately on each output
- Input mixer allows the combination of any active input with any output channel

The SMS-AMP Sound Masking System only requires to be connected to 25-Volt speakers to generate masking sound. All the sound generators, equalizers, mixers and amplifiers are included in one simple rackmount unit. Internal active system preamplifier allows to connect up to 4 active sensors directly to the SMS unit inputs.
We Identify and S.T.O.P. Your Noise Problem

**Smart Sound Masking System Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Channels</th>
<th>Auxiliary Inputs</th>
<th>Active Inputs</th>
<th>Power per Channel</th>
<th>Maximum Speakers per Channel</th>
<th>Maximum Speakers per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMS-AMP-1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>20 W</td>
<td>10 Paging, 20 No Paging</td>
<td>10 Paging, 20 No Paging</td>
</tr>
<tr>
<td>SMS-AMP-2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>80 W</td>
<td>32 Paging, 64 No Paging</td>
<td>64 Paging, 128 No Paging</td>
</tr>
<tr>
<td>SMS-AMP-4</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>80 W</td>
<td>32 Paging, 64 No Paging</td>
<td>120 Paging, 240 No Paging</td>
</tr>
<tr>
<td>SMS-AMP-8</td>
<td>8</td>
<td>4</td>
<td>8</td>
<td>80 W</td>
<td>32 Paging, 64 No Paging</td>
<td>240 Paging, 240 No Paging</td>
</tr>
</tbody>
</table>

**AC Input:** 100-240 V, 50-60 Hz

**Power Consumption:** Maximum: 7.5 A; Typical: < 1 A

**Frequency Response:** 100-10,000 Hz

**Distortion:** less than 1%

**Auxiliary inputs impedance:** 80 kOhms

**Auxiliary inputs maximum voltage:** \( \pm 10 \text{ V} \)

**Active inputs impedance:** 80 kOhms

**Active inputs maximum voltage:** \( \pm 2 \text{ V} \)

**Smart Sound Masking System Dimensions and Weight**

<table>
<thead>
<tr>
<th>Model</th>
<th>SMS Size (W × H × D)</th>
<th>Shipping Size (W × H × D)</th>
<th>SMS Weight</th>
<th>Shipping Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMS-AMP-1</td>
<td>17&quot; × 3-7/8&quot; × 10-3/4&quot;</td>
<td>22&quot; × 9&quot; × 15&quot;</td>
<td>11 lbs</td>
<td>17 lbs</td>
</tr>
<tr>
<td>SMS-AMP-2</td>
<td>17&quot; × 3-7/8&quot; × 10-3/4&quot;</td>
<td>22&quot; × 9&quot; × 15&quot;</td>
<td>14.3 lbs</td>
<td>20 lbs</td>
</tr>
<tr>
<td>SMS-AMP-4</td>
<td>17&quot; × 3-7/8&quot; × 10-3/4&quot;</td>
<td>22&quot; × 9&quot; × 15&quot;</td>
<td>18.3 lbs</td>
<td>24 lbs</td>
</tr>
<tr>
<td>SMS-AMP-8</td>
<td>17&quot; × 3-7/8&quot; × 16-1/8&quot;</td>
<td>22&quot; × 9&quot; × 19&quot;</td>
<td>31.9 lbs</td>
<td>37 lbs</td>
</tr>
</tbody>
</table>

**Acoustical Surfaces, Inc.**

**SOUNDPROOFING, ACOUSTICS, NOISE & VIBRATION CONTROL SPECIALISTS**

123 Columbia Court North • Suite 201 • Chaska, MN 55318
(952) 448-5300 • Fax (952) 448-2613 • (800) 448-0121
Email: sales@acousticalsurfaces.com
Visit our Website: www.acousticalsurfaces.com

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