**RoomMatch® Utility RMU108**
small-format under-balcony fill loudspeaker

**Key Features**

Award-winning RoomMatch sound – now in smaller, 2-way, point-source designs for high-level foreground music, under-balcony, zone-fill and vocal-range floor monitor applications

Bose EMB2 compression driver – for lower distortion and improved vocal clarity compared to conventional foreground/fill models; also provides consistent mid/high sonic character compared to that of RoomMatch full-range and other RoomMatch Utility models

90° x 60° constant-directivity high-frequency horn – gives wide, even coverage and may be rotated in enclosure

1 x Bose LF8 8-inch woofers – with 2.0-inch long-excursion voice coil extends response to 80 Hz for lowest vocal range

80 Hz – 16 kHz frequency response and 121 dB maximum peak SPL – deliver the performance required for most demanding applications

Flexible mounting with included U-bracket – rear enclosure panel also includes 4 x M8 threaded inserts in 5.0” x 2.75” (127mm x 70mm) pattern to accept third-party accessory mounting brackets

**Product Overview**

The RoomMatch Utility RMU108 small-format sound reinforcement loudspeaker is intended for use in high-quality foreground music, under-balcony, zone fill and vocal-range floor monitor applications. The design features a single Bose® EMB2 compression driver to provide mid/high frequency voicing similar to that of RoomMatch full-range array modules and all RoomMatch Utility models. A single 8-inch woofer provides full-range output and a multi-angle enclosure with rotatable high-frequency waveguide increases mounting flexibility.

**Technical Specifications**

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<tr>
<th>System Performance</th>
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<tbody>
<tr>
<td>Frequency Response (±3 dB)</td>
<td>90 Hz - 16 kHz</td>
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<tr>
<td>Frequency Range (-10 dB)</td>
<td>80 Hz - 16 kHz</td>
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<td>Recommended High-Pass Protection Filter</td>
<td>80 Hz with minimum 12-dB / octave filter</td>
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<tr>
<td>Nominal Coverage Pattern (H x V)</td>
<td>90° x 60° (rotatable high-frequency horn)</td>
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<tr>
<td>Crossover Type</td>
<td>passive (1.5 kHz crossover frequency)</td>
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<th>Power Handling, long-term continuous</th>
<th></th>
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<tr>
<td>Power Handling, Peak</td>
<td>800 W</td>
</tr>
<tr>
<td>Sensitivity (SPL / 1 W @ 1 m)²</td>
<td>91 dB</td>
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<tr>
<td>Calculated Maximum SPL @ 1 m²</td>
<td>114 dB</td>
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<tr>
<td>Calculated Maximum SPL @ 1 m, peak⁴</td>
<td>120 dB</td>
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<td>Nominal Impedance</td>
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<td>Shipping Weight</td>
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<tr>
<th>Product Code</th>
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<td>White</td>
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Footnotes:

1 Frequency response and range measured on-axis with passive crossover in an anechoic environment.

2 Sensitivity measured in half-space boundary conditions with passive EQ, referenced to 1W/m.

3 Maximum SPL, calculated from sensitivity and power handling specifications, exclusive of power compression.

⁴ Bose extended-lifecycle test using pink noise filtered to meet IEC268-5, 6-dB crest factor, 500-hour duration.

⁵ AES standard 2-hour duration with IEC system noise.
**Directivity Index and Q**

![Graph showing Directivity Index and Q](image)

**Beamwidth**

![Graph showing Beamwidth](image)

**Impedance**

![Graph showing Impedance](image)

**On-Axis Response**

![Graph showing On-Axis Response](image)
RoomMatch® Utility RMU108
small-format under-balcony fill loudspeaker

Wiring Diagram
RoomMatch® Utility RMU108
small-format under-balcony fill loudspeaker

Horizontal Plots

125 Hz Octave Band

250 Hz Octave Band

500 Hz Octave Band

1000 Hz Octave Band

2000 Hz Octave Band

4000 Hz Octave Band

8000 Hz Octave Band

16000 Hz Octave Band
Vertical Plots

125 Hz Octave Band

250 Hz Octave Band

500 Hz Octave Band

1000 Hz Octave Band

2000 Hz Octave Band

4000 Hz Octave Band

8000 Hz Octave Band

16000 Hz Octave Band

- 100 Hz
- 125 Hz
- 160 Hz
- 200 Hz
- 250 Hz
- 315 Hz
- 800 Hz
- 1000 Hz
- 1250 Hz
- 1600 Hz
- 2000 Hz
- 2500 Hz
- 3150 Hz
- 4000 Hz
- 5000 Hz
- 6100 Hz
- 8000 Hz
- 10000 Hz
- 12500 Hz
RoomMatch® Utility RMU108
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Architects’ and Engineers’
Specifications

The 2-way, full-range loudspeaker shall contain a single 2-inch titanium-diaphragm compression driver and a single 8-inch cone transducer with 2-inch voice coil. The loudspeaker shall contain a passive crossover network with 1500 Hz crossover point that provides consistent coverage and frequency response near crossover region.

The 2-way, full-range loudspeaker shall meet the following performance specifications: On-axis system frequency response shall be 90 Hz to 16 kHz (+/- 3 dB) without need for active equalization. The loudspeaker sensitivity shall be 91dB SPL in free field with 1 W input at 1 meter. The long-term power handling rating shall be 250 W (AES test methodology using pink noise, 6 dB crest factor, 2-hour duration). Maximum continuous output shall be 115 dB SPL and the maximum peak output shall be 121 dB SPL, both in free field. The nominal coverage pattern of the high-frequency horn shall be 90° horizontal and 60° vertical, with the horn capable of being rotated 90° in the enclosure by the installer.

The loudspeaker enclosure shall be constructed of Baltic birch plywood, protected by a two-part polyurethane coating. The multi-angle enclosure will allow placement on floors with an approximate 45° acoustic axis referenced to the floor surface. The transducers shall be protected by a 1.5-mm perforated steel grille with powder-coated finish. Input connectors shall be two (2) Neutrik® NL4 Speakon® connectors and one barrier strip terminal, wired in parallel. The finish will be available in black or white (paintable). Loudspeaker dimensions shall be 9.3” x 18.5” x 10.5” (236 x 470 x 267 mm) and net weight shall be 21 lb. (9.5 kg). The loudspeaker shall be the Bose RoomMatch Utility RMU108 model.