ADVANCED LOUDSPEAKERS

True ribbons for the truth never experienced before
RAAL is proud to present the pinnacle of contemporary true ribbon transducer design. It defines new limits to an old concept. Superior in sound quality and reliability, it deals with every task by incomparable dominance. The uncompressed reproduction of the signal dynamics, is what makes it better than any corrugated true ribbon design and, still, it has only 4 micrometer Aluminum foil. New ideas, science, art and experience, brought together. Painstakingly bred by connoisseurs for their own kind.

**MODEL**

**140-15D** FLATFOIL

**FEATURES:**
- Special FLATFOIL pure aluminium ribbon
- Special SYMMLEAD low inductance signal path
- Special EQUAFIELD NdFeB magnetic structure
- Special “non-wave-guide” INOX front plate
- Unique “Deflector pads”
- Exceptional vertical dispersion
- Super-fast settling time
- Flat frequency response
- Low distortion
- Highest reliability
- High signal power handling

*FLATFOIL*, SYMMLEAD® and EQUAFIELD® are registered trademarks of RAAL advanced loudspeakers d.o.o.
RAAL
140-15D FLATFOIL™
SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIBBON MATERIAL</td>
<td>ALUMINIUM</td>
</tr>
<tr>
<td>RIBBON DIMENSIONS</td>
<td>(140 x 15 x 0.004) mm</td>
</tr>
<tr>
<td>RIBBON MASS</td>
<td>0.022 g</td>
</tr>
<tr>
<td>RIBBON AREA</td>
<td>21 cm sq.</td>
</tr>
<tr>
<td>GAP INDUCTION</td>
<td>0.51 T</td>
</tr>
<tr>
<td>FREQUENCY RESPONSE</td>
<td>500 Hz ~ 100 kHz</td>
</tr>
<tr>
<td>SENSITIVITY</td>
<td>95 dB / 1m / 2.83 V</td>
</tr>
<tr>
<td>IMPEDANCE</td>
<td>8 Ohm</td>
</tr>
<tr>
<td>PROGRAM POWER HANDLING</td>
<td>200 W*</td>
</tr>
<tr>
<td>*RECOMMENDED CROSSTER</td>
<td>4TH ORDER L-R @ 1600 Hz</td>
</tr>
</tbody>
</table>
RAAL
140-15D FLATFOIL

PERFORMANCE:

SPL vs FREQ. & HORIZONTAL DISPERSION

SPL vs FREQ. & VERTICAL DISPERSION

IMPULSE RESPONSE

IMPEDANCE

HARMONIC DISTORTION

SPECTRAL DECAY
Mechanical drawing

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Recommended crossover network

![Crossover Network Diagram]

**The exact values should be determined by acoustic measurements with the bass-mid unit.**

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Replacing the ribbon replacement kit on RAAL ribbon speakers

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**RAAL ADVANCED LOUDSPEAKERS D.O.O.**

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