- Sound Reception System (MSD-100)

This sound reception system is acoustic electronic navigational aids to enable the officer on the watch to hear outside sound signals at totally enclosed bridge in order to perform the look-out function as required in the International Regulations for Preventing Collisions at Sea, 1972 and SOLAS 2002 (resolution A.694(17)) revisions. Thus, this system receives the sound signals in all directions in the audio frequency 70Hz~820Hz and re-produces these incoming signals electrically inside wheel house.

The four microphones operate in pair depending of the approximate direction of the received sound signal by these combinations. The value for detection of sound signal is 75dBA.

The microphones operate in pair depending of the approximate direction of the received sound signal by these combinations among forward and after or port and starboard. The IEC60945 and ISO14859 test is in progress for MED by KR Register and DNV type approval certificate.
Sound Reception System (MSD-100)

- **Name of Model (MSD-100)**
  The system includes main unit, microphone and power supply unit.

<table>
<thead>
<tr>
<th>No</th>
<th>Model</th>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MSD-100</td>
<td>Main Unit</td>
<td>Inside Wheel House</td>
</tr>
<tr>
<td>2</td>
<td>M-100</td>
<td>Water Tight Mic.</td>
<td>Wing/Bow/Stern</td>
</tr>
<tr>
<td>3</td>
<td>MPS-030A</td>
<td>Power Supply</td>
<td>Inside Wheel House</td>
</tr>
</tbody>
</table>

- **Functional Requirements**
  1. Audio band: 70 Hz - 820 Hz
  2. Reproducing outside sound signals inside the bridge
  3. Indicating the approximate direction of sound signals.
  4. Suppressing unwanted background noise
  5. Allowing reception of meaningful sounds.

- **Installation of MRD-100 system**
  1. The microphones should be installed in such a way that they are as far from noise sources, wind noise and mechanical vibrations.
  2. The display should be installed so that it is visible at least from the conning position.

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**Agent of MRC**

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