EM-800/700/600/410
WIRED MICROPHONES

Microphones designed with superior voice clarity for speech applications ensure optimal intelligibility.
TOA introduces a new line of microphones that offer superb sound quality and reliability. Featuring extended high-frequency response to enhance clarity and high resistance to ambient noise, speech reproduction is exemplary.

Stylishly designed and compact, the new TOA microphones comprise the EM-800 Gooseneck, the EM-700 Boundary, the EM-600 Flush Mount Boundary, and the EM-410 Lavalier models.

**EM-800 Gooseneck Microphone**
- Ideal for speech applications including meetings, lectures, and religious services.
- Electret condenser microphone element with cardioid pattern for focused pickup.
- Excellent high-frequency response of 60 – 20k Hz delivers clear output even through a PA system.
- High sensitivity (–35dB) provides a satisfying tonal response.
- Gooseneck with two adjustment points allows more flexible microphone positioning angles.
- Rejection of undesirable off-axis sound minimizes possible feedback.
- Phantom power range of 9 to 52 volts enhances operational versatility.
**EM-700**

*Boundary Microphone*

- Ideal for speech and recording applications at meetings, lectures, and religious services.
- Electret condenser microphone element with cardioid pattern for focused pickup.
- Design, optimized to deliver best performance when used on a desk.
- Slim, stylish design suits interior decor.
- Rejection of undesirable off-axis sound minimizes possible feedback.
- Low-cut filter switch prevents interference from ambient noise from being picked up.
- Wide frequency range of 35 – 20 kHz provides well-balanced sound with clarity and a satisfying tonal response.
- Phantom power range of 9 to 52 volts enhances operational versatility.

**EM-600**

*Flush-Mount Boundary Microphone*

- Ideal for conference room recording and security monitoring.
- Electret condenser microphone element with omnidirectional pattern for comprehensive pickup.
- Unobtrusive design allows easy flush-mounting in walls, ceilings, and desktops.
- Optimized to deliver best performance when used on a desk or attached to a ceiling.
- A 50 Hz low-cut filter reduces intrusive noise, such as air conditioner rumble or door opening/closing.
- Two rubber isolation rings are provided as an accessory serving to reduce vibration.
- Wide frequency range of 30 – 20 kHz provides well-balanced sound with clarity and a satisfying tonal response.
- Phantom power range of 9 to 52 volts enhances operational versatility.

**EM-410**

*Lavalier Microphone*

- Ideal for voice-oriented applications such as lectures, presentations and religious services.
- Compact electret condenser microphone element with hypercardioid pattern for highly focused pickup.
- Designed for best performance when attached to the chest area.
- The cable holder minimizes noise from cable and clothes rustling.
- Capsule rotates 360 degrees, for optimal pickup even when worn on a lapel.
- Phantom power range of 9 to 52 volts enhances operational versatility.
**SPECIFICATIONS**

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Element</td>
<td>Electret condenser</td>
<td>Electret condenser</td>
<td>Electret condenser</td>
<td>Electret condenser</td>
<td>Electret condenser</td>
</tr>
<tr>
<td>Polar Pattern</td>
<td>Cardioid</td>
<td>Cardioid</td>
<td>Omnidirectional</td>
<td>Hypercardioid</td>
<td></td>
</tr>
<tr>
<td>Rated Impedance</td>
<td>120 Ω, balanced</td>
<td>120 Ω, balanced</td>
<td>120 Ω, balanced</td>
<td>120 Ω, balanced</td>
<td>120 Ω, balanced</td>
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<tr>
<td>Rated Sensitivity</td>
<td>–35 dB (1kHz 0 dB = 1 V/Pa)</td>
<td>–33 dB (1kHz 0 dB = 1 V/Pa)</td>
<td>–38 dB (1kHz 0 dB = 1 V/Pa)</td>
<td>–47 dB (1kHz 0 dB = 1 V/Pa)</td>
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<tr>
<td>Phantom Power</td>
<td>9 – 52V DC</td>
<td>9 – 52V DC</td>
<td>9 – 52V DC</td>
<td>9 – 52V DC</td>
<td></td>
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<tr>
<td>Frequency Response</td>
<td>60 Hz – 20kHz</td>
<td>35 Hz – 20kHz</td>
<td>30 Hz – 20kHz</td>
<td>100 Hz – 15kHz</td>
<td></td>
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<tr>
<td>Low Cut</td>
<td>—</td>
<td>100 Hz – 12 dB/oct</td>
<td>—</td>
<td>—</td>
<td></td>
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<tr>
<td>Input Connector</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Output Connector</td>
<td>XLR-3-12 equivalent</td>
<td>XLR-3-32 equivalent</td>
<td>XLR-3-12 equivalent</td>
<td>Blanced-phone plug</td>
<td></td>
</tr>
<tr>
<td>Cable Length</td>
<td>—</td>
<td>7.5m (24.61 ft)</td>
<td>—</td>
<td>5.0m (16.4 ft)</td>
<td></td>
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<tr>
<td>Operating Temperature</td>
<td>0°C to +40°C (32°F to 104°F)</td>
<td>0°C to +40°C (32°F to 104°F)</td>
<td>0°C to +40°C (32°F to 104°F)</td>
<td>0°C to +40°C (32°F to 104°F)</td>
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<tr>
<td>Finish</td>
<td>Body, Shaft: Copper alloy, black, semi-gloss, paint</td>
<td>Die-cast zinc black, mat finish, paint</td>
<td>Body: Die-cast aluminum, black, mat finish, paint</td>
<td>Head: Zinc-plated steel wire, white, semi-gloss, paint</td>
<td>Body: Copper alloy, black, semi-gloss, paint</td>
</tr>
<tr>
<td>Dimensions</td>
<td>ø12 × 420mm (ø0.47” × 16.54”)</td>
<td>115 (W) × 40 (H) × 124 (D)mm (4.53” × 1.57” × 4.88”)</td>
<td>80 (W) × 23 (H) × 83 (D)mm (3.12” × 0.91” × 3.27”) (cord excluded)</td>
<td>ø28 × 68mm (ø1.1” × 2.68”) (cord excluded)</td>
<td>ø8.9 × 28.6mm (ø0.35” × 1.13”) (cord excluded)</td>
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<tr>
<td>Weight</td>
<td>135g (0.3 lb)</td>
<td>715g (1.58 lb)</td>
<td>290g (0.64 lb)</td>
<td>85g (0.19 lb)</td>
<td>100g (0.22 lb)</td>
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<tr>
<td>Accessory</td>
<td>Windscreen × 1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Rubber Isolation Ring × 2, M20 Nut × 1</td>
</tr>
<tr>
<td>Applicable Stand</td>
<td>Microphone Stand: ST-800 (option)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Windscreen × 1, Clip Holder × 1</td>
</tr>
</tbody>
</table>

**CHARACTERISTIC DIAGRAMS**

**Frequency Response (1W/1m)**

**Polar Response**