



# EM-800/700/600/410 WIRED MICROPHONES



***Microphones designed with superior voice clarity  
for speech applications  
ensure optimal intelligibility.***



***Versatile high-performance microphones  
that can satisfy all user  
speech-application needs.***

TOA introduces a new line of microphones that offer superb sound quality and reliability. Featuring TOA's leading audio technologies that have established the company's position in sound reinforcement, security and related industries, the new microphones represent a level of performance that exceeds that of previous similar TOA microphone models. 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 such speech applications as 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.

**ST-800**  
Microphone Stand (option)







## ***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.
- Low-cut filter reduces intrusive noise, such as air conditioner rumble or door opening/closing to less than 100 Hz.
- 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.

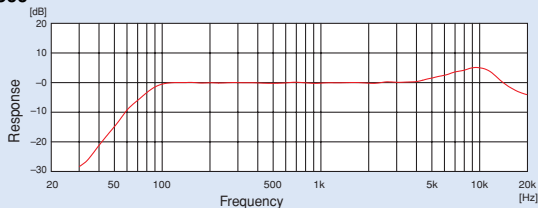
# SPECIFICATIONS

Model	EM-800 Gooseneck Microphone	ST-800 Microphone Stand	EM-700 Boundary Microphone	EM-600 Flush-Mount Boundary Microphone	EM-410 Lavalier Microphone
<b>Element</b>	Electret condenser	—	Electret condenser	Electret condenser	Electret condenser
<b>Polar Pattern</b>	Cardioid	—	Cardioid	Omnidirectional	Hypercardioid
<b>Rated Impedance</b>	120 Ω, balanced	—	120 Ω, balanced	120 Ω, balanced	120 Ω, balanced
<b>Rated Sensitivity</b>	-35 dB (1kHz 0 dB = 1 V/Pa)	—	-33 dB (1k Hz 0 dB = 1 V/Pa)	-36 dB (1k Hz 0 dB = 1 V/Pa)	-47 dB (1k Hz 0 dB = 1 V/Pa)
<b>Phantom Power</b>	9 – 52V DC	—	9 – 52V DC	9 – 52V DC	9 – 52V DC
<b>Frequency Response</b>	60 Hz – 20kHz	—	35 Hz – 20kHz	30 Hz – 20kHz	100 Hz – 15kHz
<b>Low Cut</b>	—	—	100 Hz, -12 dB/oct	—	—
<b>Input Connector</b>	—	XLR-3-31 equivalent	—	—	—
<b>Output Connector</b>	XLR-3-12 equivalent	XLR-3-32 equivalent	XLR-3-12 equivalent	XLR-3-12 equivalent	Blanced-phone plug
<b>Cable Length</b>	—	—	7.5m (24.61 ft)	—	5.0m (16.4 ft)
<b>Operating Temperature</b>	0°C to +40°C (32°F to 104°F)	—	0°C to +40°C (32°F to 104°F)	0°C to +40°C (32°F to 104°F)	0°C to +40°C (32°F to 104°F)
<b>Finish</b>	Body, Shaft: Copper alloy, black, semi-gloss, paint	Die-cast zinc black, mat finish, paint	Body: Die-cast aluminum, black, mat finish, paint Punched net: Surface-treated steel plate, black, mat finish, paint	Body: Steel, white, semi-gloss, paint Head: Zinc-plated steel wire, white, semi-gloss, paint	Body: Copper alloy, black, semi-gloss, paint
<b>Dimensions</b>	∅12 × 420mm (∅0.47" × 16.54")	115 (W) × 40 (H) × 124 (D)mm (4.53" × 1.57" × 4.88")	83 (W) × 23 (H) × 83 (D)mm (3.27" × 0.91" × 3.27") (cord excluded)	∅28 × 68mm (∅1.1" × 2.68")	∅8.9 × 28.6mm (∅0.35" × 1.13") (cord excluded)
<b>Weight</b>	135g (0.3 lb)	715g (1.58 lb)	290g (0.64 lb)	85g (0.19 lb)	100g (0.22 lb)
<b>Accessory</b>	Windscreen × 1	—	—	Rubber Isolation Ring × 2, M20 Nut × 1	Windscreen × 1, Clip Holder × 1
<b>Applicable Stand</b>	Microphone Stand: ST-800 (option)	—	—	—	—

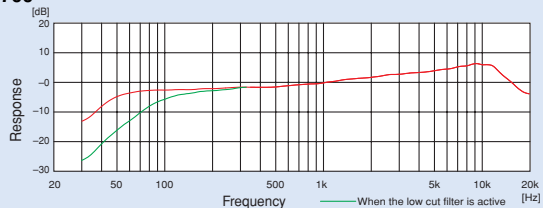
## CHARACTERISTIC DIAGRAMS

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

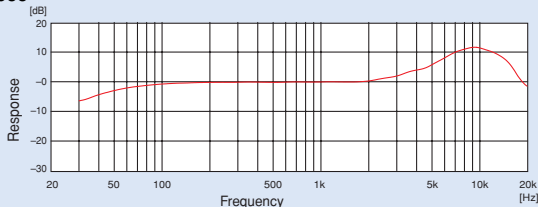
EM-800



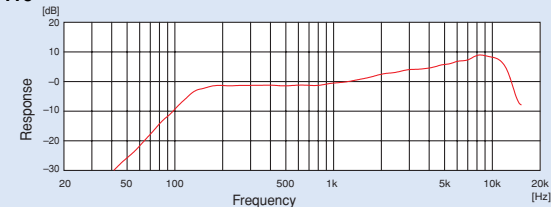
EM-700



EM-600

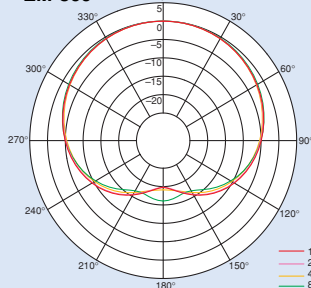


EM-410

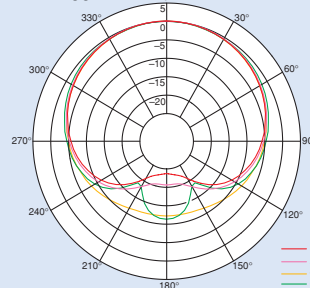


### Polar Response

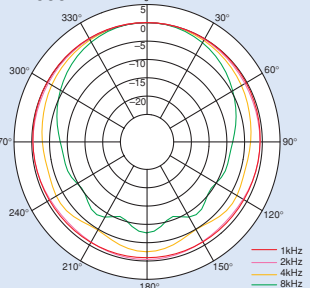
EM-800



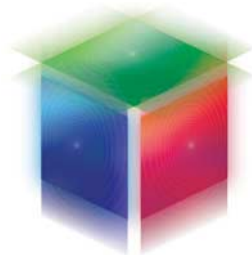
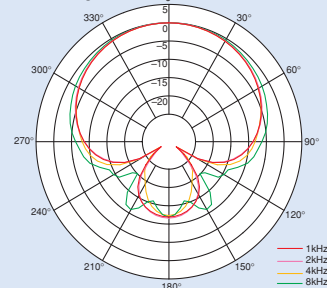
EM-700



EM-600



EM-410



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