



## E306

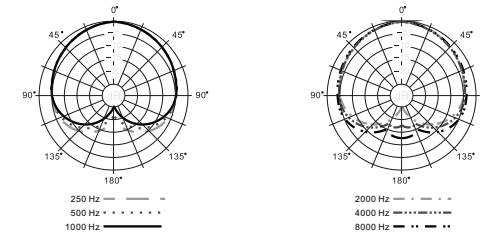
Install Gooseneck  
Condenser Microphone

# User Guide

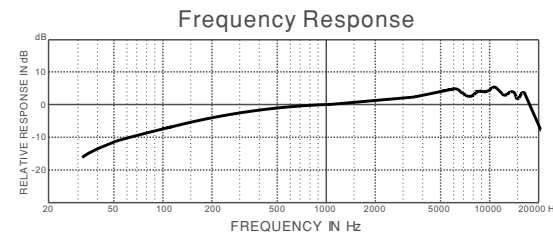


## Specifications

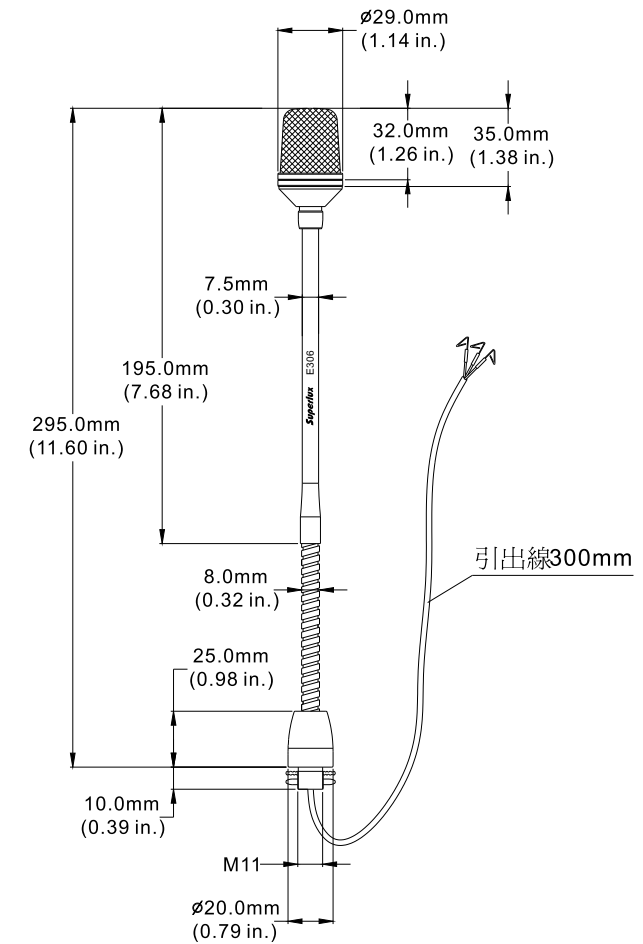
<b>Type</b> Back Electret Condenser	<b>Signal-to-noise ratio</b> 69 dB
<b>Element</b> Pressure gradient, FET preamplifier	<b>Power supply</b> 9 to 52V Phantom
<b>Polar pattern</b> Unidirectional (Cardioid), rotationally symmetrical about microphone axis, uniform with frequency. (Figure 1)	<b>Current consumption</b> 4mA
<b>Frequency response</b> 60 to 15,000 Hz (Figure 2)	<b>Polarity</b> Pin 2 output positive voltage (related to pin 3) when diaphragm receives positive pressure. (Diaphragm moving inward)
<b>Sensitivity</b> (at 1,000 Hz Open Circuit Voltage) -43dBV/Pa (7.1mV/Pa) ±3dB 1Pa=94dB SPL	<b>Connector</b> Wire out
<b>Rated impedance</b> 200Ω	<b>Finish</b> Metal construction with black painted finish
<b>Minimum load impedance</b> 1,000Ω	<b>Environmental conditions</b> The E306 operates between -10°C to +50°C (14°F to 122°F) with relative humidity between 0 to 95%.
<b>Equivalent noise level</b> (A-weighted) 25dB (IEC/DIN 651)	<b>Dimensions</b> φ29.0mm(11.40in.) X 305.0mm (12.00in.) (Figure 3)
<b>Max. SPL</b> (1 kΩ load) 137dB SPL (THD≤1% 1kHz)	<b>Net weight</b> 150g (5.29oz.)
<b>Dynamic range</b> (1 kΩ Load) 112dB	



TYPICAL CARDIOID POLAR PATTERN (Figure 1)



TYPICAL FREQUENCY RESPONSE (Figure 2)



Dimensions (figure 3)

The E306 conference style condenser microphone, which is designed for speech, conference, and vocal. Incorporating high sensitivity and wide frequency response to precision sound pick up.

Simple mounting with tightening gaskets, to install the microphone onto a podium or to fix with 5/8" nut on a base.

## Features

- Cardioid polar pattern to emphasis on-axis sound while suppressing surrounding noise.
- High dynamic range, wide frequency response and low distortion.
- 5/8" thread for easy mounting.
- 30 cm open end cable. Red for hot signal, white for inverting signal (cold), shield for grounding.
- Noiseless single bending with bend to set positioning performance.
- High performance foam wind screen to prevent pop noise.

## Supplied accessories

Black wind screen ----- S18



S18

Black wind screen

## Knowing your microphone

Superlux provides variety selection of microphones for professionals and amateurs. To know your microphone is the first step to successful result.

### Type of transducer



#### Condenser

Extremely light weight diaphragm, very sensitive to sound. Very small versions available for hiding applications. High performance condenser microphones are regarded as standard equipment of recording studios for extreme detail capturing. Operates with power, such as phantom or battery.

### Powering microphone

Condenser microphones work with power. Professional standard is 48VDC phantom power. Some microphones work with lower voltage as low as 1.5VDC, such as battery power model. E306 work with 9~52VDC phantom only. Please make sure your sound system provide adequate power to the microphone.

### About Frequency Response

#### Flat

Suitable for working at controlled environment, or for acoustic measurements. Although people pursuit flatness, but for non-professionals, it is a challenge to makes it works as expectation.

#### Popular curve response

Based on years of practical experience of pro users. There are curves to be build for various applications, so that it is very simple to use the microphone for the purpose. Limiting bandwidth, and emphasizing are typical skill.

#### Variable response

Incorporating switchable filters to eliminates interference, such as sub-sonic filter to cut air-conditioner and floor vibrations. And allows full flat when used in controlled environment.

## Directivity



#### Cardioid

Picks up most signal on axis. Rejects side and picks up least to the back. Suitable for live sound re-inforcement. Apparent proximity effect and most singer likes to take this bass boost advantages which is not good for

### Using condenser gooseneck microphone

Cardioid condenser microphone features very high sensitivity at -43dBV/Pa for high intelligible speech application. Reduced off-axis sensitivity to keep lower background noise and maximized on-axis sensitivity for highest gain before feedback in live sound system.

User shall keep 15 cm to 40 cm from microphone, and maintain average speech level. Up close will result excessive bass due to proximity effect which interfere intelligibility. Maintain their speaking in front of the microphone for high gain before feedback.

Quality conference microphone incorporating built-in limiter to prevent distortion due to exciting user or close up speaker.

Choices of gooseneck for various demands. For aesthetic, single or double bend goosenecks are better choice over fully bend design. Low bending noise is another important feature of good gooseneck microphone. User shall not bend the gooseneck to hard or rush which may generate excessive noise which disturbs the audience.

In most cases, each attendee has his own microphone or share a microphone every 2 attendee. Although there are numbers of microphones in one space which is not a good criterion for feedback problem, system operator shall keep as less turn-on microphone as possible for best result. Auto-mixer is a good choice for multiple microphones installation which limit the number of turn-on microphone at the one time. Advanced auto mixer features dynamic threshold and auto gain reduction according to the number of turn-on microphones to keep the same system gain.

Wind screen is vital for windy environment such as outdoor or close to air-conditioning fan.

Keep capsule and wind screen clean for good audio performance.

### Maintainence

Condenser microphone shall be kept in low humidity environment for best sound performance. Store the condenser microphones in airconditioned room or dehumidifier to keep away form moisture. Clean air is another important factor. Keep away from smoking environment to avoid tar residuals.

**Superlux®**

marketing and sales

Superlux, Taiwan

+886-2-26931323

sales@superlux.com.tw

manufacturing & logistics.

Superlux Enterprise

Development(Shanghai)Co., Ltd.

superlux.tw