



D105S

Dynamic microphone

User Guide



Specifications

Type
Dynamic microphone

Element
Pressure gradient

Polar pattern
Unidirectional (Super Cardioid), rotationally symmetrical about microphone axis, uniform with frequency. (Figure 1)

Frequency response
70 to 14,000 Hz (Figure 2)

Sensitivity
(at 1,000 Hz Open Circuit Voltage)
-52dBV/Pa (2.5mV/Pa) □ 3dB
1Pa=94dB SPL

Rated impedance
500?

Minimum load impedance
500Ω

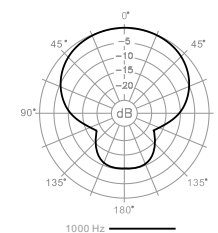
Connector
3 pin male XLR type

Finish
Charcoal gray paint

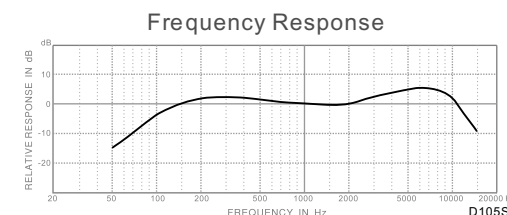
Environmental conditions
The D105S operates between
-10°C to +50°C(14°F to
122°F) with relative humidity

Dimensions
Φ45.0mm(1.77in.) X 180.0mm
(7.09in.) (Figure 3)

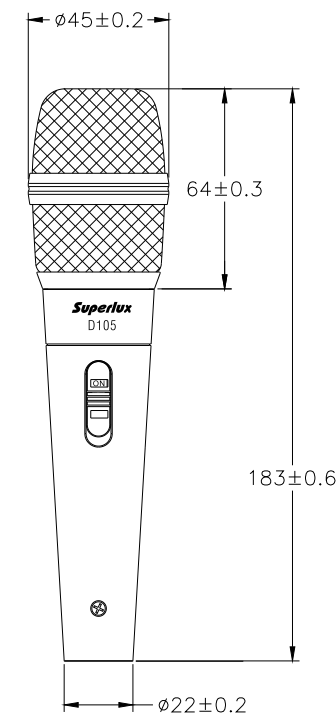
Net weight
270g (9.52oz.)



TYPICAL POLAR PATTERN (Figure 1)



TYPICAL FREQUENCY RESPONSE (Figure 2)



Dimensions (Figure 3)

Description

Superlux D105S is a hand held microphone for project installation. Integrating on/off switch, good electro-acoustic performance, sleek shape and rigid structure, the D105S is suitable for live sound vocal, recordings, conferences, and

Features

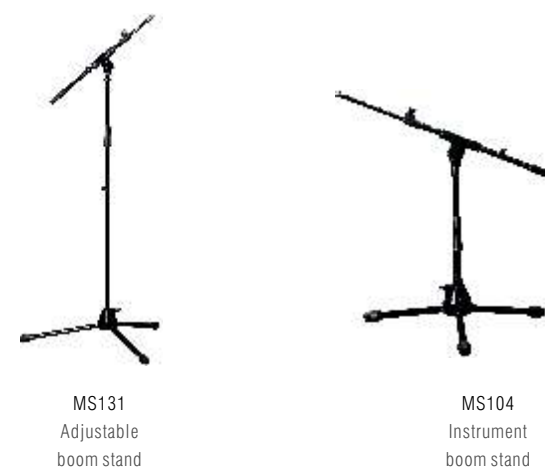
- Flat low frequency with slight emphasis on mid-high.
- Vocal tailor response for close-up singing or speaking.
- High sensitivity and low distortion
- High gain before feedback

Supplied accessories



Optional accessories

- Foam windscreen, various color ----- S40
- Table stand -----HM6
- Adjustable boom stand ----- MS131
- Instrument boom stand ----- MS104



Knowing your microphone

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

Type of transducer



Dynamics

Durable and simple structure, operates in all kinds of environments. A good dynamic microphone is capable to operate at very high sound pressure level without distortion. Due to structure limit, dynamics cannot be built as small as condenser, but dynamics doesn require power to operate.

About Frequency Response

Flat

Suitable for working at controlled environment, or for acoustic measurements. Although people persuit flatness, but for none-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



Super Cardioid

Narrower than cardioid pattern. Suitable for multiple microphone setup. Least sensitive angle pointing toward side to rear where most stage monitors are located. Same proximity effect as cardioid microphone.

Using a handheld microphone

For best signal to noise ratio, distance from the handheld microphone to the sound source shall be as short as possible.

For higher gain before feedback and lowest background noise, the microphone shall be pointed directly to the sound source. (refer to the illustration below) The sensitivity of a super cardioid microphone is highest on axis and lowest at 120 to 135 degrees.

To avoid interference between multiple microphones, each sound source shall be picked-up by one microphone, use as less microphones as possible in one space, or turn-on as less microphones as possible at the same time.

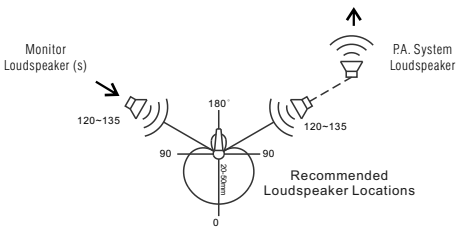
To reduce crosstalk between microphones, an 1:3 guide line shall be follow: The distance between microphone A to the sound source A is “ 1” , the distance between any other microphone to the sound source A shall be more than 3 times.

When the (super) cardioid microphone get closer to the sound source, the low frequency response is boosted, as so call “proximity effect” . Experience singer takes advantages of the proximity effect to improve the richness of his/her voice or to increase the bass of the instrument as if an extremely high quality equalizer is used. Same idea to reduce the bass by increase the distance to reduce the bass when needed.

Reflecting surface affect sound as well. Beware of these surfaces such as wall, table, or floor. Place the microphone away from the hard surfaces or directly contact these surfaces to form a pressure zone microphone.

When using the microphone outdoor or in windy environment, additional foam wind screen helps to reduce wind noise.

Keep grill pop screen clean to avoid degrading the sound quality. Do not expose the microphone at high humidity/temperature environment to avoid damage.



Mounting the microphone

Pressure gradient microphone is very sensitive to vibration. Suitable shock mount for high performance microphone is necessary for extreme low noise recording. Sturdy stand can set the microphone excatly at the sweet spot and keep it there. Choose heavy duty microphone stand for studio condenser microphone which weights much more than handle microphone.

Superlux provides wide range of microphone stands for various demands. Big Foot Willie is specially developed for large condenser microphones that able to support 2 large microphones with stereo bracket for single point stereo recording.

Extension foot on all the 'E' versions serve to mount heavy studio microphone in limit space live sound applications.

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