



# D106

## Multi-media Dynamic Microphone

# User Guide



## Specifications

### Type

Dynamic microphone

### Polar pattern

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

### Frequency response

70 to 12,000 Hz (Figure 2)

### Sensitivity (at 1,000 Hz Open Circuit Voltage)

-53dBV/Pa (2.0mV/Pa)  
1Pa=94dB SPL

### Rated impedance

500Ω

### Environmental conditions

The D106 operates between -10 to +50 (14 to 122 ) with relative humidity between 0 to 95%.

### Connector

3.5 stereo phone plug  
3.5 to 6.3 stereo plug adapter

### Finish

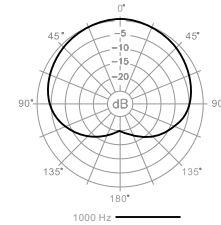
Black rubber finish

### Dimensions

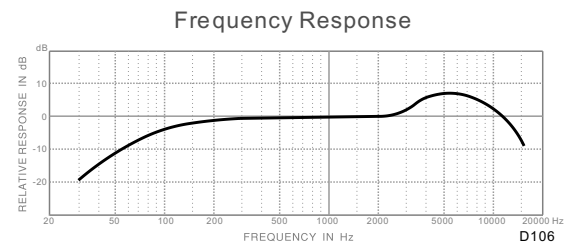
Φ54.0mm(2.13in.) X 174.0mm(6.58in.) (Figure 3)

### Net weight

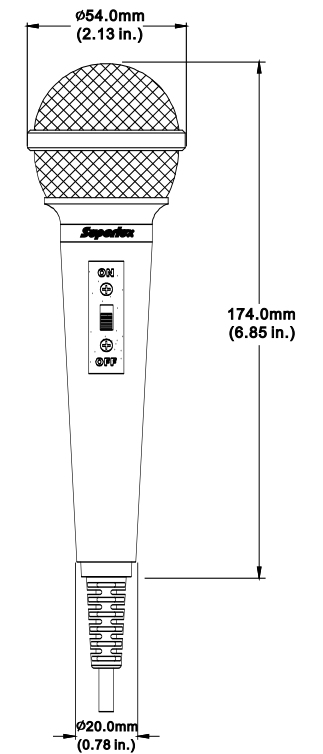
230g(8.11 oz.)



TYPICAL POLAR PATTERN (Figure 1)



TYPICAL FREQUENCY RESPONSE (Figure 2)



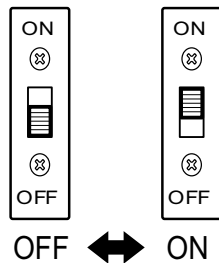
Dimensions (Figure 3)

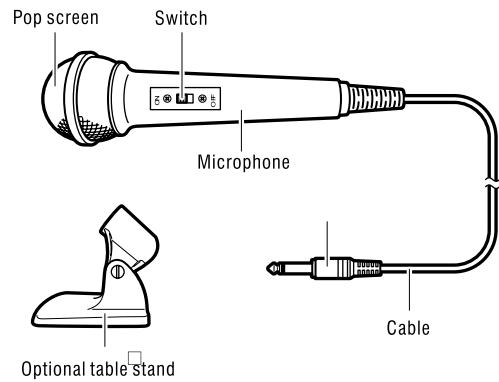
## Description

The D106 is a dynamic, professional quality cardioids microphone for PC based applications such as on-line game, live chat and multi-media. A 3.5mm to 6.3mm adapter plug is included for both size sockets connection. Integrated On/Off switch for convenient talking control, the D106 is a good choice for MA500, MA818 personal PA system.

## Features

- Typical speech/vocal frequency response.
- Powerful sound with detail resolution ability.
- Typical cardioids polar pattern, high gain before feedback
- Integrated On/Off switch
- For singing and speech.





## Supplied accessories

Microphone clip-----HM42A



HM42A

## Optional accessories

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



S40  
Foam windscreen



HM6  
Table stand



MS131  
Adjustable boom stand



MS104  
Instrument boom stand

## 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



#### 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't require power to operate.

### About Frequency Response

#### Flat

Suitable for working at controlled environment, or for acoustic measurements. Although people pursue flatness, but for non-professionals, it is a challenge to make it work as expected.

#### Popular curve response

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

#### Variable response

Incorporating switchable filters to eliminate 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 singers like to take this bass boost advantage which is not good for speech.

## 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 few microphones as possible in one space, or turn-on as few microphones as possible at the same time.

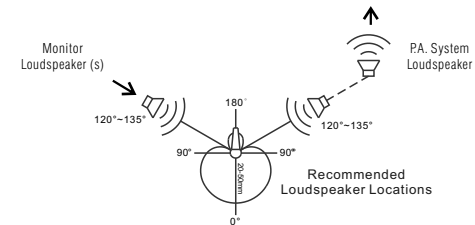
To reduce crosstalk between microphones, a 1:3 guide line shall be followed: The distance between microphone A to the sound source A is "1", the distance between any other microphone to the sound source A shall be more than 3 times.

When the (super) cardioid microphone gets closer to the sound source, the low frequency response is boosted, as so-called "proximity effect". Experience singers take advantage 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 increasing the distance to reduce the bass when needed.

Reflecting surfaces 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 outdoors or in a 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 to 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 exactly at the sweet spot and keep it there. Choose heavy duty microphone stand for studio condenser microphone which weighs much more than handheld microphone.

Superlux provides a wide range of microphone stands for various demands. Big Foot Willie is specially developed for large condenser microphones that are 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 limited space live sound applications.

## Maintenance

Condenser microphone shall be kept in a low humidity environment for best sound performance. Store the condenser microphones in an air-conditioned room or dehumidifier to keep away from 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