Superlux®
JUST PLAY IT

# PRA538

*Install Gooseneck*
*Dynamic Microphone*

# User Guide

GOANG-FANN CO., LTD.


LB100053801EN (Rev. 1)

## Specifications

### Type
Heavy duty gooseneck

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

### Frequency response
100 to 15,000 Hz (Figure 2)

### Sensitivity
(at 1,000 Hz Open Circuit Voltage)
-58dBV/Pa (1.26mV/Pa)  3dB  1Pa=94dB SPL.

### Rated impedance
500Ω

### Minimum load impedance
500Ω

### Connector
striped wire connection,color coded.

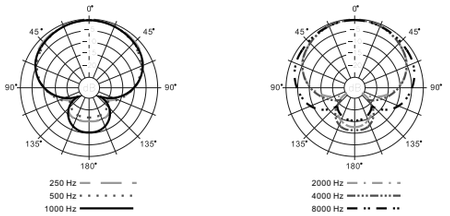
### Finish
metal structure,matte black painting.

### Environmental conditions
The PRA538 operates between -10℃ to +50℃(14℉ to 122℉) with relative humidity between 0 to 95%.

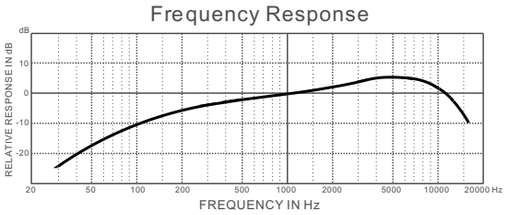
### Dimensions
PRA538S  32.0mm(1.26in.) X 400.0mm(15.75in.)
PRA538M  32.0mm(1.26in.) X 580.0mm(22.83in.)Figure 3

### Net weight
150g (5.29oz.)






TYPICAL SUPERCARDIOID POLAR PATTERN (Figure 1)

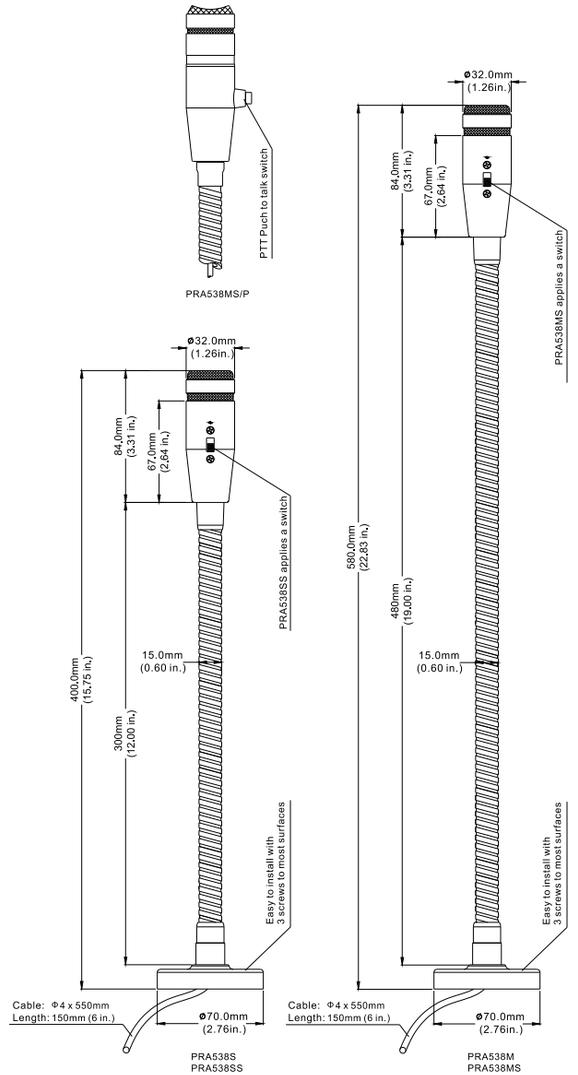



TYPICAL FREQUENCY RESPONSE (Figure 2)

## Features

- Tailored frequency response to increase the intangibility of audio reinforcement or recordings.
- Super cardioids increase gain before feedback.
- Matte black coating with sturdy structure.
- 2 lengths to choise: 12" (PRA538S) or 19" (PRA538M).
- Additional S suffix indicates a muting on/off switch is integrated. (PRA538SS, PRA538MS).
- PRA538MS/P incorporating a PTT (push-to-talk) function that can remote control other devices. A GT2C is included.
- Tinned striped wires for installation convenience. Balanced signal, please refer to wiring diagram for connection indications.





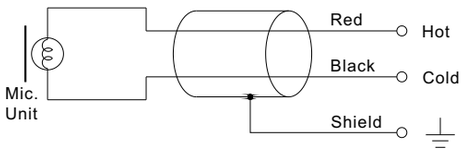

Dimensions (figure 3)

The PRA538 series gooseneck microphones are super cardioid, dynamic type capsule integrated with internal shock mount to reduce handling noise. Tailored frequency response is very suitable for human voices applications such as speech, announcement in public transportation systems and gathering venues.

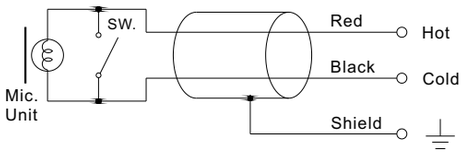
Low handling noise, bend and set, minimized bounce back gooseneck tube has very good service time.

Easy to install with 3 screws to most surfaces. Please refer to the wiring information below.

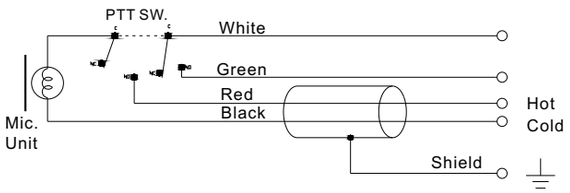
## Wiring diagram




PRA538S/PRA538M




PRA538SS/PRA538MS




PRA538MS/P

## Supplied accessories

Pop screen ---------- S19

S19
Wind screen



## 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 emphasing are typical skill.

### Variable response

Incorporating switchable filters to elliminates 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 dynamic gooseneck microphone

Super Cardioid dynamic 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

Dynamic 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.



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