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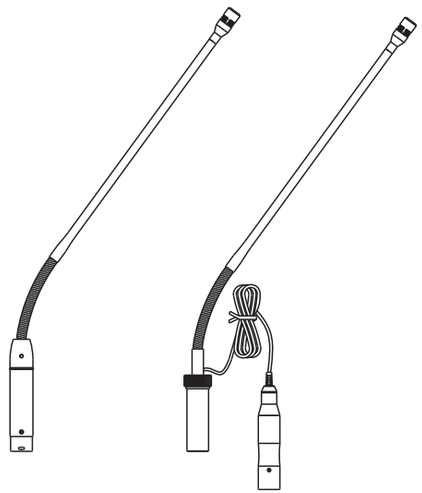


PRA528B
PRA528C

Gooseneck
Condenser Microphone

User Guide

GOANG-FANN CO., LTD.

2007. SUPERLUX Inc.
LB10528BC01EN (Rev. 1)

Specifications

Type
Back Electret
Condenser Microphone

Element
Pressure gradient,
FET preamplifier

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

Frequency response
50 to 16,000 Hz (Figure 2)

Sensitivity
(at 1,000 Hz Open Circuit Voltage)
-39dBV/Pa (11mV/Pa)
1Pa=94dB SPL

Rated impedance
200Ω

Minimum load impedance
1000Ω

Equivalent noise level
(A-weighted)
26dB

Max. SPL (1 kΩ load)
132dB SPL (THD≦1% 1kHz)

Dynamic range at 1 kΩ Load
106dB

Power supply
9 to 52 Vdc phantom power

Current consumption
3mA

Polarity
Pin 2 output positive voltage (related to pin 3) when diaphragm receives positive pressure. (Diaphragm moving inward)

Connector
3 pin male XLR type

Finish
Black paint

Environmental conditions
The PRA528 operates between -10 to +50 (14 to 122) with relative humidity between 0 to 95%.

Net weight
PRA528BM: 150g (5.29 oz.)
PRA528BL: 160g (3.65 oz.)
PRA528CM: 200g (7.05 oz.)
PRA528CL: 220g (7.75 oz.)

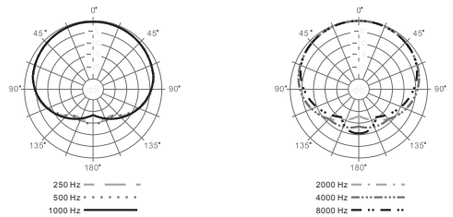
Model (Dimensions figure 3)

PRA-528BM
Head Φ12.5mm, total length 450mm, 1 section of flexible gooseneck.

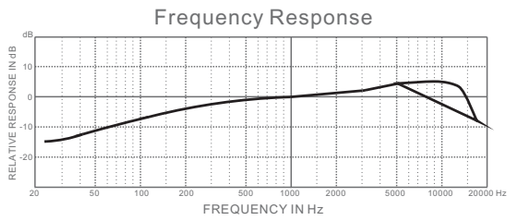
PRA-528BL
Head Φ12.5mm, total length 600mm, 1 section of flexible gooseneck.

PRA-528CM
Head Φ12.5mm, total length 450mm (without flange), 1 section of flexible gooseneck.

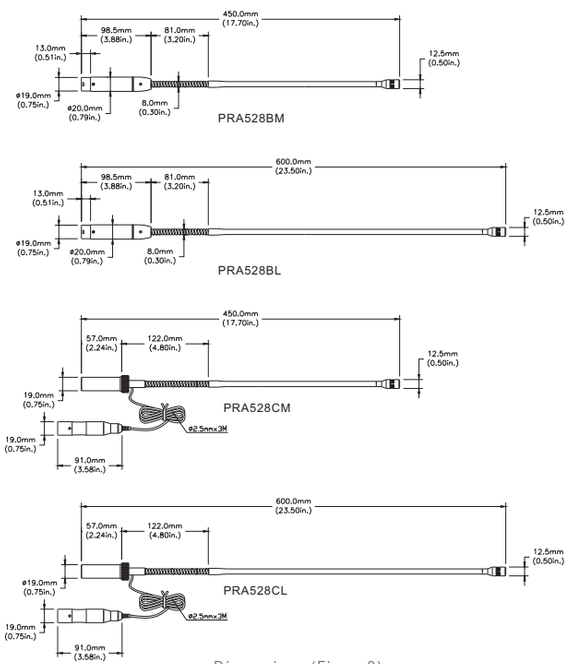
PRA-528CL
Head Φ12.5mm, total length 600mm (without flange), 1 section of flexible gooseneck.



PRA528 SERIES
TYPICAL POLAR PATTERN (Figure 1)



PRA528 SERIES
TYPICAL FREQUENCY RESPONSE (Figure2)



Dimensions (Figure3)

Description

PRA-528B/C series are stationary gooseneck microphones for conferences; they feature a back-electret condenser construction. Their tailored frequency response, excellent cardioid polar pattern and high gain before feedback make them the ideal candidates for conference.
There are two members in this series: PRA528B is a plug-in microphone for quick installation, while PRA528C is a short-based microphone with a separated preamplifier. Each mode has a section of adjustable gooseneck, which makes it convenient to change the direction. There are two lengths and various installing modes to accommodate the demands of different applications.

Features

- Extended frequency response and wide dynamic range to pick up vocals exactly and clearly.
- Balanced output to ensure the signal transference free of noise in long cable.
- Two gooseneck lengths and two installation modes for different applications.
- PRA528 are tested with 2000 noiseless bending cycles to ensure durability.
- Comes with standard base and pop screen for easy installation and up-close speech.

Supplied accessories

PRA528B

Standard base ---------- HM22
Anti-shock cover with lock-in device ---------- HM23
Foam windshield ---------- S21F

PRA528C

Standard base ---------- HM22
Screw flange for 5/8" thread ---------- GT4B
Pop screen ---------- S21F

HM22
Standard base

HM23
Anti-shock cover with lock-in device

S21F
Foam windshield

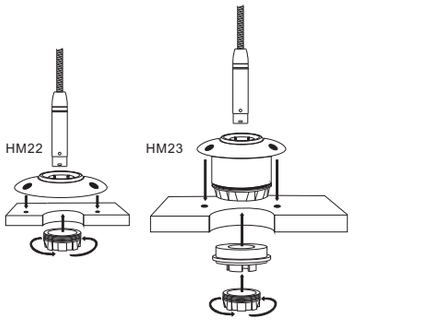
GT4B
Screw flange for 5/8" thread

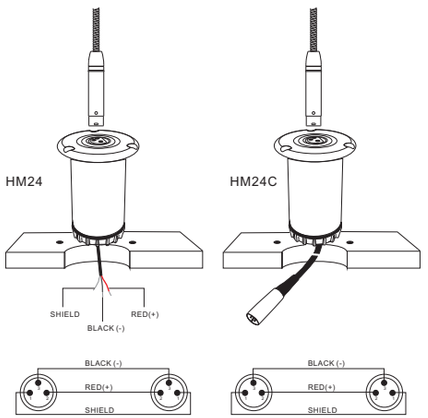
Optional accessories

Gooseneck microphone base ---------- DS002
XLR female socket with open ends cable ---------- HM24
XLR female socket with XLR male plug ---------- HM24C
Pop screen ---------- S22F
Surface mount XLR3F base ---------- GT6F

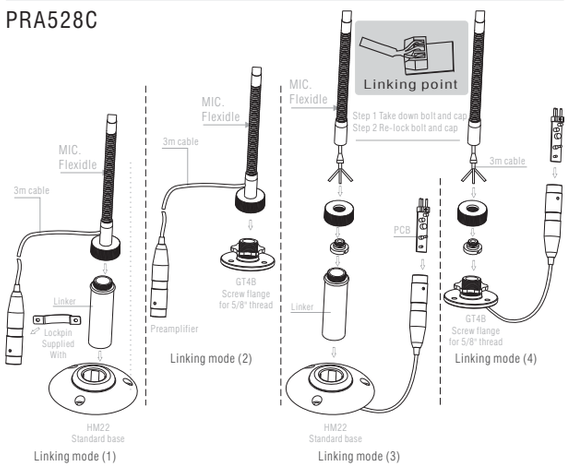
Assembling Diagram

PRA528B

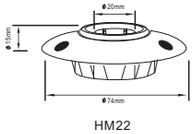




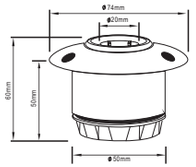
PRA528C



Assemble dimensions



HM22



HM23

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

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. PRA528 series work with 9 to 52VDC phantom only. Please make sure your sound system provide adaquate power to the microphone.

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

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 speech.

Using condenser gooseneck microphone

Uni-directional condenser microphone features very high sensitivity at -39dBV/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.

GF PRO AUDIO

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