

PRA518 SERIES

Gooseneck
Condenser Microphone

User Guide



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 (IEC/DIN 651)

Model (figure 3)

PRA-518AS

Max. Φ19mm, head = 8mm,
total length 300mm, all flexible
gooseneck.

PRA-518AL

Max. Φ19mm, head Φ8mm,
total length 600mm, 2 sections
of flexible goosenecks.

PRA-518BL

Max. Φ19mm, head Φ8mm,
total length 600mm, 1 section of
flexible gooseneck.

Max. SPL (1 kΩ load)

130dB SPL (THD≤1% 1kHz)

Dynamic range at 1 kΩ Load

104dB

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

Integral 3 pin male XLR type

Finish

Black finish

Net weight

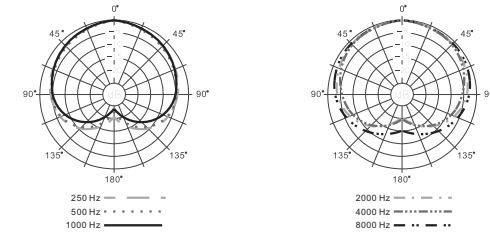
PRA518AS: 130g (4.59 oz.)
PRA518AM: 150g (5.29 oz.)
PRA518AL: 165g (5.82 oz.)
PRA518BM: 150g (5.29 oz.)
PRA518BL: 165g (5.82 oz.)

PRA-518AM

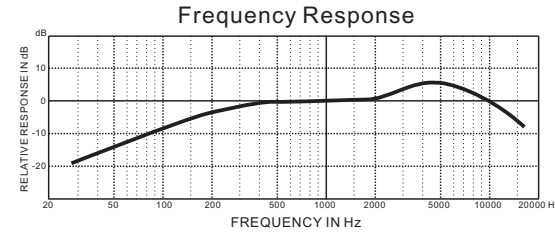
Max. Φ19mm, head Φ8mm,
total length 450mm, 2 sections
of flexible goosenecks.

PRA-518BM

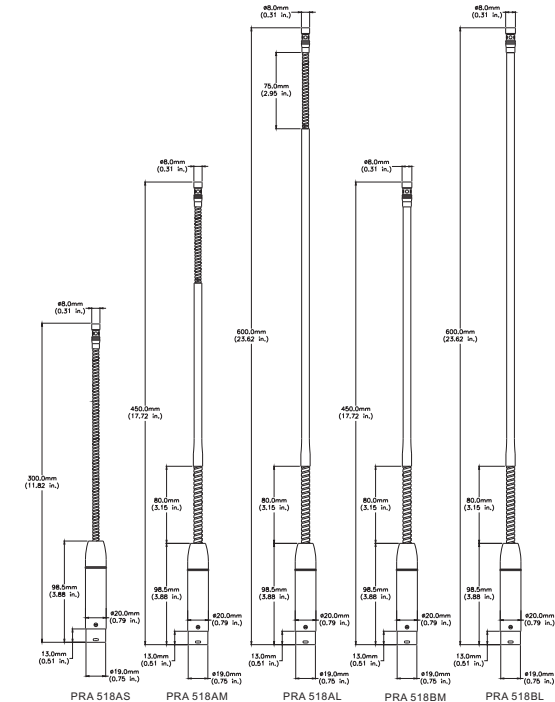
Max. Φ19mm, head Φ8mm,
total length 450mm, 1 section of
flexible gooseneck.



PRA518 SERIES
TYPICAL POLAR PATTERN (Figure 1)



PRA518 SERIES
TYPICAL FREQUENCY RESPONSE (Figure2)



Dimensions (Figure3)

Description

PRA518 series are super-miniature gooseneck back electret condenser microphones for conferences. They are designed to fit for the demands of conferences in tailored frequency response, excellent cardioid polar pattern, and high gain before feedback.

PRA-518 features innovated goosenecks that hardly have any noticeable noise in flexing. Three lengths and three flexible modes are available to suit different applications.

The supplied standard accessories intend for the fixing and installation of general applications, while optional accessories are availed for special applications.

Features

- Extended frequency response and wide dynamic range to pick up vocals accurately.
- Balanced output to guarantee the long cable free of noise.
- Three lengths and three flexible modes for different applications.
- Unnoticeable head with diameter of 8mm, never block the user.
- Supplied with standard base for conference and foam windshield.

Accessories

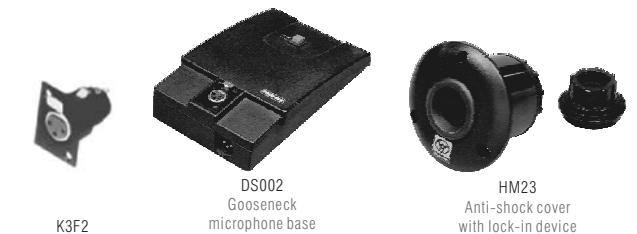
Supplied accessories

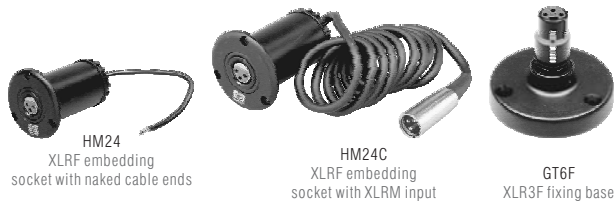
Standard base ----- HM22
Foam windshield ----- S04



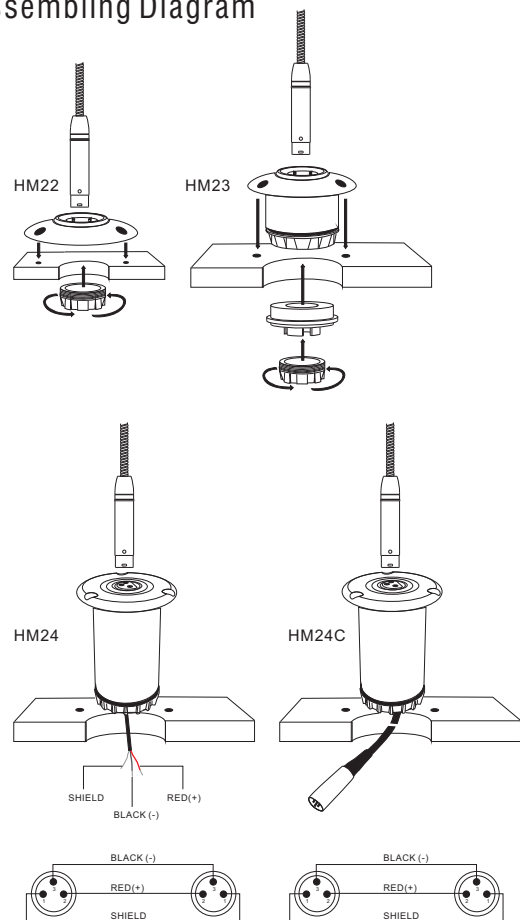
Optional accessories

Gooseneck microphone base ----- DS002
XLR embedding socket with naked cable ends ----- HM24
XLR embedding socket with XLRM input ----- HM24C
Anti-shock cover with lock-in device ----- HM23
XLR3F socket ----- K3F2
XLR3F fixing base ----- GT6F

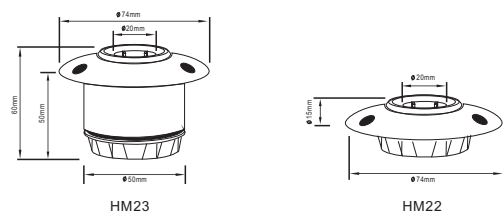




Assembling Diagram



Assemble dimensions



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. PRA518 SERIES 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 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



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.



GOANG-FANN CO.,LTD.
 3F, No. 7, Alley 2, Lane 342, Fu-Der 1st Road
 Hsichih, Taipei, Taiwan
 Tel: 886-2-2693 1323
 Fax: 886-2-2694 8990
 E-mail: sales@superlux.com.tw
 Http://www.superlux.com.tw