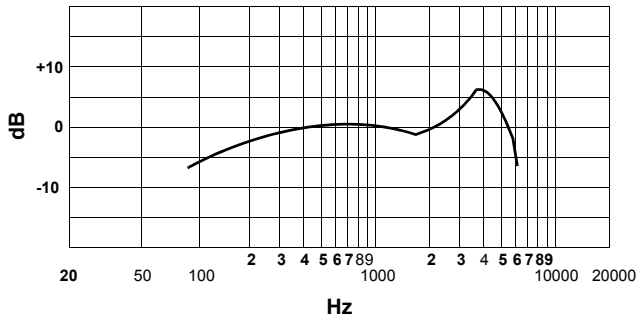
Model 562 User Guide
NOISE-CANCELING DYNAMIC MICROPHONE

The Shure Model 562 is a noise-canceling dynamic microphone designed for voice applications in fixed-station paging and radio communications. It provides highly intelligible speech communication where high volume background noise is present. The 562 has a smooth response and is ruggedly constructed to withstand a wide range of humidities and temperatures. With its standard 5/8"–27 thread mount, the 561 attaches directly to boom or a gooseneck with the cable concealed inside.

The frequency response and noise-canceling characteristics of the 562 make it ideal for language labs, paging applications in noisy environments, and base-station communications. It is also effective as a talkback or cuing microphone in TV, film, and recording studios. The 562's low impedance allows you to use long lengths of cable without affecting level or response characteristics.

Features

- Excellent response for voice reproduction
- Noise-canceling design
- Low impedance
- Rugged construction
- Withstands wide range of temperatures and humidities
- Mounts on gooseneck and lockable with Allen setscrew (Allen wrench supplied)



TYPICAL FREQUENCY RESPONSE
Figure 1

SPECIFICATIONS

Type
Noise-canceling Dynamic

Frequency Response
100 to 6,000 Hz (See Figure 1)

Impedance
150 Ohms, rated (180 Ohms, actual). Designed for connection to inputs rated 19 to 300 Ohms.

Output Level (at 1,000 Hz)
Open Circuit Voltage .....–64 dBV/Pa (0.6 mV)
.....(1 Pa = 94 dB SPL)

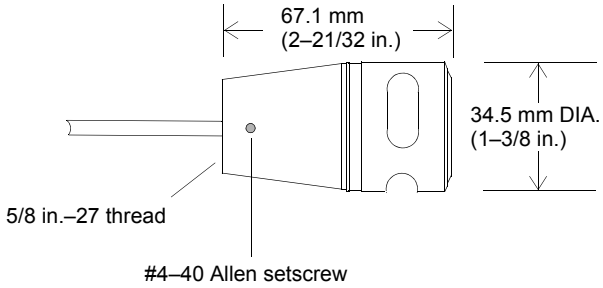
Polarity
Positive pressure on diaphragm produces positive voltage on the white cable lead relative to the black lead.

Cable
1.2m (4 ft.), non-detachable, two-conductor shielded

Stand Thread
Suitable for mounting on stand or gooseneck with 5/8"–27 thread.

Case
Silver and black aluminum with stainless steel grille

Dimensions
See Figure 2



OVERALL DIMENSIONS
Figure 2

Net Weight
128 grams (4.5 oz.)

Packaged Weight
241 grams (8.5 oz.)

Certification
Conforms to European Union directives, eligible to bear CE marking; meets European Union EMC Immunity Requirements (EN 50082-1: 1992).

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WIRING AND INSTALLATION

The 562 may be wired for balanced or unbalanced operation. For unbalanced operation, the white cable wire is connected to the audio input, the black cable wire is connected to the audio ground, and the shield is connected to the chassis ground. See Table 1.

For balanced operation, the white cable wire is connected to the audio input positive (+), the black wire is connected to the audio negative (–), and the shield is connected to the chassis ground. See Table 1.

Table 1. Cable-to-Connector Wiring

INPUT TYPE	WIRE COLOR	FUNCTION	XLR CONNECTOR	1/4 IN. PHONE PLUG
UNBALANCED	WHITE	AUDIO	PIN 2	TIP
	BLACK	AUDIO GROUND	PIN 3	SLEEVE
	SHIELD	CHASSIS GROUND	PIN 1	SLEEVE
BALANCED	WHITE	AUDIO +	PIN 2	TIP
	BLACK	AUDIO –	PIN 3	RING
	SHIELD	CHASSIS GROUND	PIN 1	SLEEVE

Once mounted to a stand or gooseneck, the 561 can be locked in place by tightening the setscrew over the mounting threads.

NOISE-CANCELLATION

The Model 562 cancels noise because of its frequency response and distance discrimination. By performing optimally in the frequency range between 100 and 6,000 Hz, the 562 avoids picking up noise outside this range. Its design also utilizes acoustic interference to reject sounds originating from a distance in favor of sounds originating from a near source.

To obtain optimal noise-canceling performance, the model 562 must be “close talked.” Place your lips as close to the microphone grille as comfort will permit. A distance between roughly 6 mm and 25 mm (1/4 in. and 1 in.) provides the greatest discrimination between speech and ambient noise.

POLARITY

If multiple microphones are in use simultaneously, they should be wired with common polarity. To determine whether two microphones have the same polarity, talk or sing into both while holding them 8 to 10 cm. apart. The volume of the amplified sound should remain the same whether the speaker is talking directly into either microphone, or is positioned equally between them. If the volume drops when talking into both microphones, they are wired with different polarity. The polarity of individual microphones may also be checked with polarity-checking devices.

To reverse the polarity of the 562, the BLACK and WHITE leads must be interchanged either at the microphone cartridge (See Table 1) or at the amplifier or mixer input. This should be performed by your dealer, the Shure Factory Service Department, or other qualified service personnel.

ACCESSORIES

Furnished

Allen Wrench (No. 4) 80A67

Optional

Gooseneck (12 in., 18 in.) G12, G18
Gooseneck, Side vent (6 in., 18 in.) G6A, G18A
Gooseneck, Side vent,
3-pin connector G12-CN, G18-CN
Mounting Flange A12
Heavy-Duty Mounting Flange A13HD
Windscreen ..... A58WS Series

REPLACEMENT PARTS

Cartridge R90
Screen and Grille Assembly 90FR2600
Cable 70A292
Case 31A1238A

ARCHITECTS' SPECIFICATION

The microphone shall be a moving coil (dynamic) type with a frequency response of 100 to 6,000 Hz. The unit shall be a noise-canceling type. The microphone shall be low impedance with a rated impedance of 150 ohms for connection to microphone inputs rated 19 to 300 ohms. The microphone output shall be –64 dBV/Pa. It shall be equipped with a non-detachable 1.2 m (4 ft.) cable and shall be threaded for mounting on a stand or gooseneck with a 5/8"–27 thread. The overall dimensions of the microphone shall be 67 mm (2–21/32 in.) in length and 34.5 mm (1–3/8 in.) in diameter. The microphone shall be the Shure Model 561 or equivalent.

SHURE®

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