

SHURE®

Shure Brothers Incorporated
222 Hartrey Avenue
Evanston IL 60202-3696 U.S.A.

Model 512 User Guide



GENERAL

The 512 combines an efficient "open-air" headphone with a wide-frequency-range, close-talking, dynamic microphone. The headset-microphone combination is very lightweight, durable, and extremely comfortable.

Designed for sports and news announcing, intercommunication systems, and special events remote broadcasting, the 512 offers convenient, hands-free operation without user fatigue. Its close-talking characteristics and unidirectional pickup pattern reduce unwanted background noise, permitting its use in noisy environments. The microphone characteristics are tightly controlled, resulting in consistent response and output, while the receiver response is especially tailored to enhance voice intelligibility.

The headband easily adjusts to fit any head size or hair style, and the microphone boom length and cartridge position are fully adaptable to any facial configuration. The 512's light weight reduces user fatigue even when worn for long periods.

The 512 is supplied with a foam windscreen/pop filter to help minimize unwanted noise when the talker has a tendency toward explosive "p" or "t" sounds. A cable clip secures the cable to clothing, keeping it out of the way and diminishing cable noise.

SPECIFICATIONS

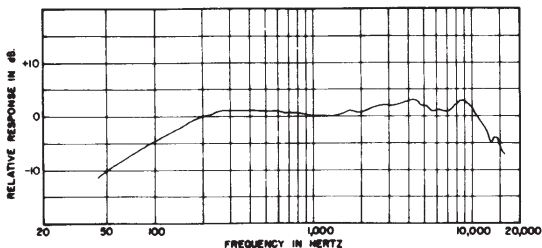
MICROPHONE

Type

Dynamic, Close-Talking

Frequency Response (at 8 mm [5/16 in.]

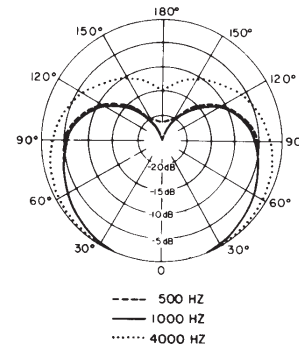
50 to 15,000 Hz (see Figure 1)



TYPICAL MICROPHONE FREQUENCY RESPONSE
FIGURE 1

Polar Pattern

Cardioid (unidirectional) response—uniform with frequency, symmetrical about axis (see Figure 2)



TYPICAL POLAR PATTERNS
FIGURE 2

Impedance

Microphone rating impedance is 150 ohms (200 ohms actual) for connection to microphone inputs rated at 15 to 300 ohms

Output Level (closed-talked at 1,000 Hz)

Open Circuit Voltage -47.0 dB (4.5 mV)

0 dB = 1 volt per 100 microbars

Power Level -66.0 dB

0 dB = 1 milliwatt per 10 microbars

Hum Sensitivity (typical)

38.4 dB equivalent SPL in 1 millioersted field

Phasing

Positive pressure on diaphragm produces positive voltage on red lead and pin 2 of connector

RECEIVER

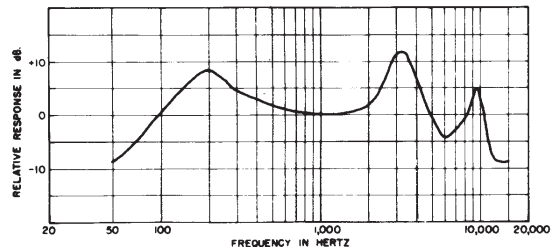
Type

Dynamic, open air, left side only

Frequency Response

100 to 10,000 Hz, tailored for voice intelligibility (see Figure 3)

TYPICAL RECEIVER FREQUENCY RESPONSE
FIGURE 3



Impedance

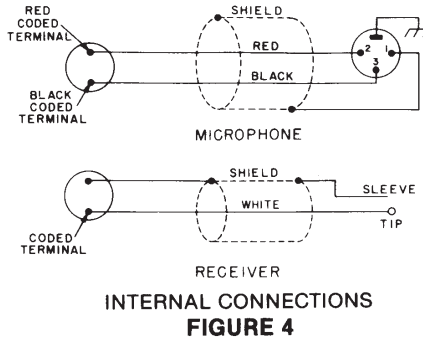
300 ohms at 1,000 Hz

Phasing

Positive voltage on cable conductor produces positive pressure

Output Level (at 1,000 Hz)

94 dB SPL at ear with 1 mW input



GENERAL

Cable

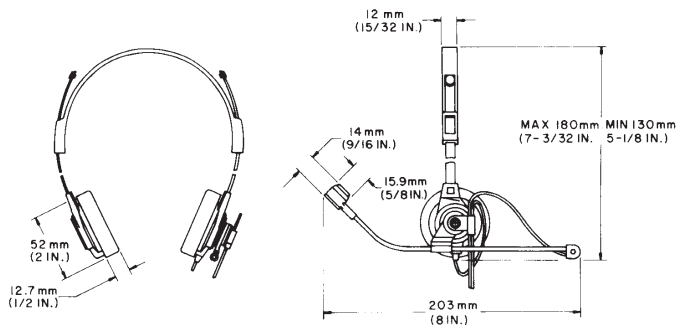
2.1 m (7 ft) attached cables: one 2-conductor shielded with black 3-pin XLR connector (microphone) and one single-conductor shielded with 2-circuit phone plug (receiver)

Headset

Stainless steel and thermoplastic with foam earpads

Dimensions

See Figure 5



Net Weight

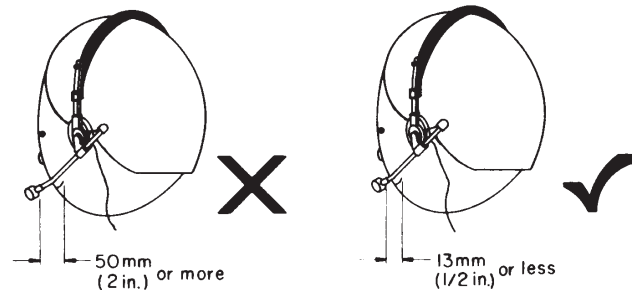
186 grams (6.5 oz) including connectors

USING THE MICROPHONE

Snap the microphone boom into the rotating holder below the left earpiece. Put on the headset and adjust the earpads to the most comfortable position. (Remember that this headset is designed for use with the microphone on the left side.) Slide and twist the microphone boom, and rotate its holder, until the microphone is located as close as possible to the left corner of the mouth (not directly in front). See Figure 6 for optimum microphone position.



LOCATE MICROPHONE AT CORNER OF MOUTH



LOCATE MICROPHONE CLOSE TO MOUTH
FIGURE 6

REPLACEMENT PARTS

Microphone Cartridge	R93
Receiver Cartridge	90FA2600
Pop Filter	90RX1371
Foam Earpad	49A78A



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