MICROPHONES AND ELECTRONIC COMPONENTS

# DATA SHEET MODEL VR230



#### **GENERAL**

The VR230 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.

The VR230 microphone is particularly useful for voice processing and computer voice recognition. 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 hairstyle, and the microphone boom length and cartridge position are fully adaptable to any facial conformation. The VR230's light weight reduces user fatigue even when worn for long sessions.

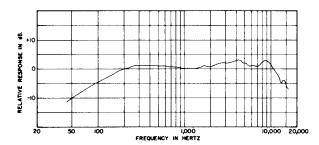
### SPECIFICATIONS

#### **MICROPHONE**

Type

Dynamic, Close-Talking

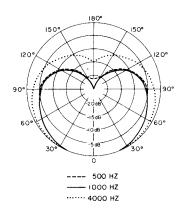
Frequency Response (at 8 mm [5/16 in.]) 50 to 15,000 Hz (see Figure 1)



TYPICAL MICROPHONE FREQUENCY RESPONSE FIGURE 1

#### **Polar Pattern**

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



TYPICAL POLAR PATTERN
FIGURE 2

#### **Impedance**

Microphone rating impedance is 150 ohms (200 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms

#### Output Level (close-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 millioersted field

#### Phasing

Positive pressure on diaphragm produces positive voltage on cable shield

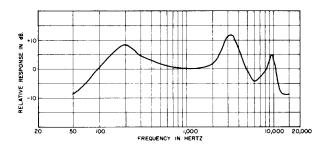
#### **RECEIVER**

#### Type

Dynamic, open air, left side only

#### **Frequency Response**

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



TYPICAL RECEIVER FREQUENCY RESPONSE FIGURE 3

#### **Impedance**

8 ohms at 1,000 Hz

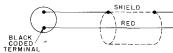
#### **Phasing**

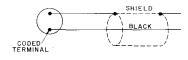
Positive voltage on cable conductor produces positive pressure

#### Output Level (at 1,000 Hz)

94 dB SPL at ear with 1 mW input

MICROPHONE





REGEIVER
INTERNAL CONNECTIONS

#### FIGURE 4

#### **GENERAL**

#### Cable

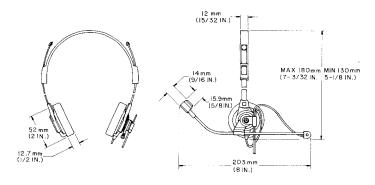
2.1m (7 ft) attached, two single-conductor shielded cables

#### Headset

Stainless steel and thermoplastic with foam earpads

#### **Dimensions**

See Figure 5



OVERALL DIMENSIONS

FIGURE 5

#### **Net Weight**

100 grams (3.5 oz)

#### **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 only 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 FIGURE 6

#### **GUARANTEE**

This Shure product is guaranteed in normal use to be free from electrical and mechanical defects for a period of one year from date of purchase. Please retain proof of purchase date. This guarantee includes all parts and labor. This guarantee is in lieu of any and all other guarantees or warranties, express or implied, and there shall be no recovery for any consequential or incidental damages.

#### SHIPPING INSTRUCTIONS

Carefully repack the unit, have it insured, and return it prepaid to:

Shure Brothers Incorporated Attention: Service Department 222 Hartrey Avenue Evanston, Illinois 60204

If outside the United States, return the unit to your dealer or Authorized Shure Service Center for repair. The unit will be returned to you prepaid.