222 HARTREY AVE., EVANSTON, IL, 60204 U.S.A. AREA CODE 312/866-2200 • CABLE: SHUREMICRO

TWX: 910-231-0048 MICROPHONES AND ELECTRONIC COMPONENTS

## DATA SHEET

**MODEL LM1000 UNISPHERE® B** 

## UNIDIRECTIONAL DYNAMIC MICROPHONE

TELEX: 72-4349



#### **GENERAL**

The Model LM1000 UNISPHERE® B is a unidirectional dynamic microphone with a very effective filter for excellent protection from breath popping and wind noise. The microphone provides natural, lifelike reproduction of vocal and instrumental music; it is ideal for sound reinforcement and tape recording.

This microphone is particularly suitable when unidirectional sound pickup is required because of feedback problems. Because it is unidirectional and picks up sound from the front while suppressing sound from the rear, the LM1000 can be used closer than usual to loudspeakers without the annoying squeal caused by feedback. It also permits higher amplifier gain before feedback. It is very appropriate in locations such as theaters, night clubs, auditoriums, schools and churches; indoors or outdoors.

Model LM1000-CN is supplied with a 7.6-meter (25-foot), two-conductor, shielded cable with XLR-type professional audio connectors. Model LM1000-LC is suplied without cable.

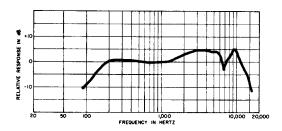
## Microphone Features:

- Ball-type grille filter provides protection from pop and wind; permits closeup microphone use without breath popping; permits outdoor use without wind noise
- True cardioid pickup pattern, symmetrical about axis and uniform at all frequencies, suppresses feedback, retains same tonal quality of voice or music even if performer or speaker moves about
- Shock-mounted cartridge minimizes handling and mechanical noise
- Built-in On-Off switch with provision for locking switch on
- Adjustable swivel adapter supplied—allows aiming microphone and permits quick removal for handheld use

## **SPECIFICATIONS**

# Dynamic

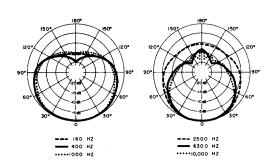
## Frequency Response 80 to 13,000 Hz (See Figure I)



TYPICAL FREQUENCY RESPONSE FIGURE 1

#### **Polar Pattern**

Cardioid (unidirectional) pattern - Effective rejection of sound at rear of the microphone is uniform at all frequencies, while front pickup characteristics are uniform about the axis. See Figure 2



TYPICAL POLAR PATTERNS FIGURE 2

#### **Impedance**

Microphone rating impedance is 150 ohms (180 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms

## Output Level (at 1,000 Hz)

Open Circuit Voltage\* ..... – 82.0 dB (.08 mV) 

\* 0 dB = 1 volt per microbar

\*\* 0 dB = 1 milliwatt with 10 microbars

## **Phasing**

Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3.

## **Switch**

Built-in On-Off switch with lockplate. To lock switch in On position, remove screw on lockplate and turn lockplate 180°. Reassemble and tighten screw.

## Cartridge Shock Mount

Internal rubber vibration-isolator

#### Connector

Three-pin professional audio connector\*

#### Cable (LM1000-CN only)

7.6m (25 ft) two conductor shielded with professional 3-socket and 3-pin audio connectors\*

### **Swivel Adapter**

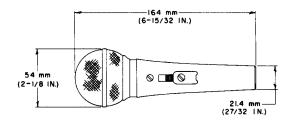
Positive action, adjustable through 90° from vertical to horizontal, permits easy removal for handheld use, suitable for mounting on stand with %"-27 thread

#### Case

Black-enameled die casting with black steel-mesh grille

#### **Dimensions**

See Figure 3



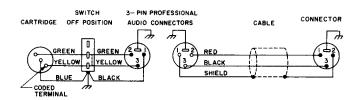
OVERALL DIMENSIONS FIGURE 3

#### Net Weight (less cable) 340 grams (12 oz)

## **PHASING**

To test two microphones and/or their cables for proper phasing, connect them to an amplifier and talk or sing into them while holding them three or four inches apart. The sound from the speakers should be the same when talking into either microphone or directly between them if they are in phase with each other. If the sound drops drastically, or if a dead spot is found when talking between the two microphones, either the microphones or their cables (low impedance only) are out of phase. All cables and microphones should be tested in this manner to insure that they are in phase with each other.

To change the phase of a low-impedance microphone cable, either use a Shure A15PRS Phase Reverser or interchange the wires connected to pins 2 and 3 of the connector. To change the phase of a microphone, the microphone cartridge leads must be interchanged (see Figure 4). This should be performed by your dealer, the Shure Factory Service Department, or other qualified service personnel.



## INTERNAL CONNECTIONS FIGURE 4

#### **FURNISHED ACCESSORIES**

Swivel Adapter	A25B
Cable (LM1000-CN only)	. C25J

#### **OPTIONAL ACCESSORIES**

Line Matching Transformer	195 Series
Desk Stand	
Quick Disconnect Adapter	A45
Isolation Mount	
Dual Mount	
Windscreen	<b>NS Series</b>
Floor Stand (Weighted base)	. MS-10C
Floor Stand (Tripod base)	S15
Baby Boom	

## REPLACEMENT PARTS

Cartridge	R15
Switch	RK81S
Screen and Grille	90E1498
Plug Element	

## **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.

<sup>\*</sup> Designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series or equivalent connector.