



**SHURE**

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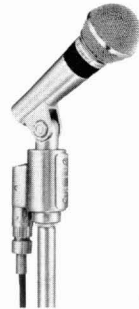
MICROPHONES AND ELECTRONIC COMPONENTS

AREA CODE 312/328-9000 • CABLE: SHUREMICRO

**DATA SHEET**

**MODEL 566 UNISPHERE I**

## UNIDIRECTIONAL DYNAMIC MICROPHONE WITH BUILT-IN VIBRATION-ISOLATION SHOCK MOUNT



**General:** The Model 566 Microphone is a unidirectional dynamic microphone with a strong, built-in, wire-mesh spherical front that contains a very effective filter designed to provide excellent protection from wind and "pop" (explosive breath sounds). The built-in vibration-isolation shock mount prevents the pickup of mechanical vibrations. The unit provides wide range reproduction of music and voice —can be effectively used outdoors and indoors.

The Unisphere I is ideal for use by professional entertainers in high quality theatre-stage sound systems, indoor or outdoor recording, cathedrals and churches, and critical public-address systems such as those used in political conventions and legislatures, convention halls, hotels, public auditoriums, stadiums, etc.

The Model 566 features an exceptionally uniform and effective unidirectional pickup pattern—provides an easy solution to feedback problems in reverberant locations, permits best utilization of space in small studios, facilitates orchestral placement, and provides practically complete exclusion of unwanted noises.

### Microphone Features:

- A built-in wire-mesh screen and internal filter provides protection from wind, and "pop" (explosive breath sounds). This filter also enables singers and speakers to perform close to the microphone.
- Unusually effective cardioid pickup pattern eliminates feedback (annoying loudspeaker "squeals"). In addition they prevent echoing (boominess) that sometimes occurs in partially-filled halls. These microphones can also be used closer to loudspeakers than usual, without creating feedback problems.
- Response especially effective for announcing, narration, vocal music and combo groups.
- Cartridge and microphone body separately shock mounted for quiet operation.

The Model 566 is dual impedance, 50 ohms or 150 ohms, for connections into microphone inputs rated at 25 to 250 ohms.

The microphone is recommended where long cable lengths are required or under conditions of severe hum disturbance. The permissible cable length is practically unlimited, since neither response nor level is appreciably affected. For use with high impedance amplifiers, Shure Model A95A Line Matching Transformer is available for coupling the low impedance line to the amplifier input. The Shure Model A95A transformer permits coupling a low impedance line to the high impedance input.

### SWITCH ADAPTER INSTALLATION

Remove the impedance switch cover plate by removing the two #2-56 binding head machine screws at each end of the cover plate. Position the switch plate in place of the cover plate. (The key of the switch plate must be set into the slot of the impedance change switch in the microphone). Replace the two #2-56 binding head machine screws.

The center position on the switch plate "O" for the "OFF" position, "L" position for microphone rating impedance of 25-50 ohms; and "H" position for microphone rating impedance of 150- 250 ohms. Most applications require use of only one impedance. In this case, insert the small #2-56 fillister head screw in the threaded hole below the impedance position NOT being used. This prevents the switch from accidentally being turned to the wrong impedance setting during use as "ON-OFF" switch.

### OPTIONAL ACCESSORIES

Line Matching Transformer .....	A95A
Vibration-Isolation Stand .....	S39A
Desk Stand .....	S33B
Quick Disconnect Isolation Unit .....	A45

### REPLACEMENT PARTS

Cartridge .....	R66
Cable .....	C65
Case Assembly .....	RK77C
Connector Assembly .....	RK78SM
Screen and Grille Assembly .....	RS65
On-Off Switch .....	RK76S

**Guarantee:** This Shure product is guaranteed in normal use to be free from electrical and mechanical defects for a period of one year from the date of purchase. Please retain proof of purchase date. This guarantee includes all parts and labor.

**Shipping Instructions:** Carefully repack the unit and return it prepaid to the factory. 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.

**MODEL 566**  
**ARCHITECT'S SPECIFICATIONS**

The microphone shall be Shure Model 566 or equivalent. A moving coil (dynamic) microphone with a frequency range of 40 to 15,000 Hz., this unit shall have a cardioid polar characteristic. The cancellation at the sides shall be approximately 6 db and the cancellation at the rear shall be 15 to 20 db. The microphone shall be equipped with a three-position impedance "Off" switch for adjusting the microphone rating impedance for 50 ohms and 150 ohms.

The microphone output shall be:

50 ohms, (low) impedance —57.5 db  
(0 db = 1 milliwatt with 10 microbars)

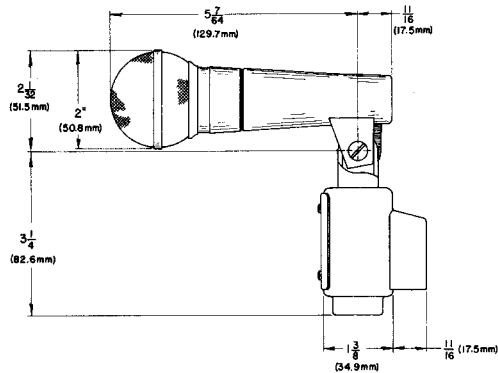
150 ohms, (medium) impedance —57.5 db  
(0 db = 1 milliwatt with 10 microbars)

The microphone rating Gm (sensitivity) at 1,000 Hz. shall be within 3 db of the following levels.

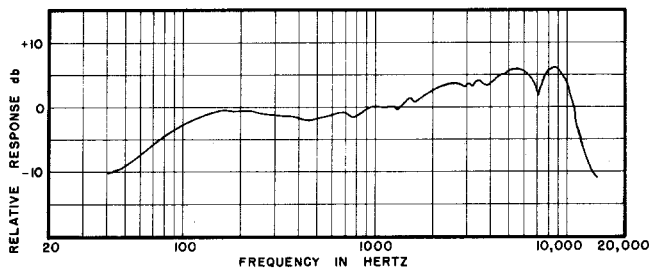
Low impedance .....—154.5 db  
Medium Impedance .....—154.0 db  
EIA Standard SE-105 August 1949

The microphone shall be provided with a swivel adjustable through 180°. The microphone shall be equipped with a vibration-isolation unit in combination with the stand connector. The microphone will mount on a stand having 5/8"-27 thread.

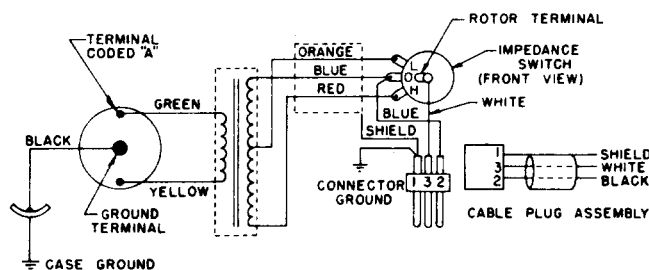
The overall dimensions shall be 5-9/32" (134.1 mm) in height, 2-1/32 (51.5 mm) in width, and 6 1/2" (165.1 mm) in depth.



OVER-ALL DIMENSIONS  
**FIGURE A**



FREQUENCY RESPONSE  
**FIGURE B**



POSITIVE PRESSURE PRODUCES POSITIVE VOLTAGE AT PIN 2 WITH RESPECT TO PIN 3  
INTERNAL CONNECTIONS

**FIGURE C**

**SPECIFICATIONS**

**Type:**

Dynamic

**Frequency Response:**

40 to 15,000 Hz. (See Figure B)

**Polar Pattern:**

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

**Microphone Rating Impedance:**

Dual. Choice of 50 ohms "L" or 150 ohms "H," selected by impedance switch for connections into microphone inputs rated at 25 to 250 ohms. (See "switch" below. Factory set to 150 ohms when shipped).

**Output Level:**

1,000 Hz. response.

Model 546.....50 ohm "L" position  
Open Circuit Voltage.....— 83.0 db\* (.071 mv)  
Power Level.....— 57.5 db\*\*  
EIA Microphone Rating  
Gm (sensitivity) .....—154.5 db\*\*\*

Model 546.....150 ohm "H" position  
Open Circuit Voltage.....— 76.5 db\* (.149 mv)  
Power Level.....— 57.5 db\*\*  
EIA Microphone Rating  
Gm (sensitivity) .....—154.0 db\*\*\*

\*0 db = 1 volt per microbar.

\*\*0 db = 1 milliwatt with 10 microbars.

\*\*\*0 db = EIA Standard SE-105, August 1949.

**Switch:**

Impedance selection switch with center position "OFF." May be used with "Tamper-proof" cover, or accessory (included) "ON-OFF" knob.

**Swivel:**

Positive action life-time swivel permits tilting of head through 180°.

**Shock Mount:**

Special vibration-isolation of rubber construction.

**Case:**

Chrome-plated die-cast case and "Armo-Dur."

**Cable:**

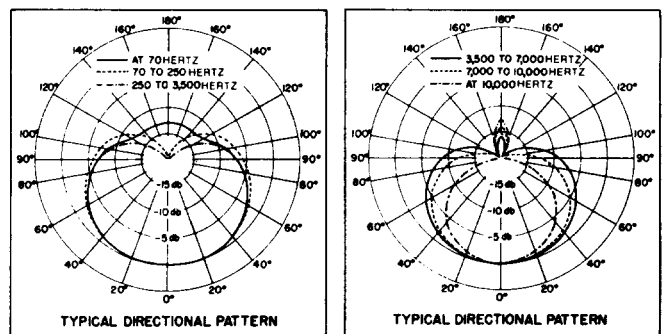
20-foot (6.1 m) two conductor shielded with a professional three-pin female audio connector on microphone end designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series or equivalent connector.

**Dimensions:**

See Figure A

**Net Weight Less Cable:**

1 1/4 pounds (567 grams)



**FIGURE D**