

**SHURE**

**MICROPHONES AND ELECTRONIC COMPONENTS**

AREA CODE 312/328-9000 • CABLE SHUREMICRO

## MODEL 547 UNIDYNE III

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



The Model 547 Unidyne III Microphone is a unidirectional dynamic microphone built to provide wide range reproduction of music and voice.

The microphone is ideal for use by professional entertainers in high quality theatre-stage sound systems, recording, cathedrals and churches, and other critical public address systems such as those used in political conventions and legislatures, hotels, stadiums, and public auditoriums.

The Model 547 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.

The built-in vibration-isolation shock mount prevents the pickup of mechanical vibrations.

The microphone features:

- Unusually effective cardioid pickup pattern.
- Cartridge and microphone body separately shock mounted for quiet operation.
- Convenient impedance selection.
- An accessory switch adapter furnished to serve in applications where an ON-OFF switch is necessary at the microphone.
- Positive action detent switch.
- Dependability under all operating conditions.

The Model 547 is dual impedance for connection into 30-50 ohm or 150-250 ohm line.

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.

### FURNISHED ACCESSORIES

Case .....A49C

### OPTIONAL ACCESSORIES

Line Matching Transformer.....A95A  
 Vibration-Isolation Stand .....S39A  
 Desk Stand .....S33B  
 Quick Disconnect Isolation Unit.....A45  
 Windscreen Assembly .....A2WS

### GUARANTEE:

Each microphone is guaranteed to be free from electrical and mechanical defects for a period of one year from date of shipment from factory, provided all instructions are complied with fully. In case of damage, return the microphone to the factory for repairs. Our guarantee is voided if the microphone is subjected to accident or abuse.

### MODEL 547 ARCHITECT'S SPECIFICATIONS

The microphone shall be Shure Model 547 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 6db 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-150 ohms. (EIA Rating Impedance: 38 ohms-150 ohms.)

The microphone output shall be:

50 ohms impedance —56 db  
 (0 db = 1 milliwatt with 10 microbars)

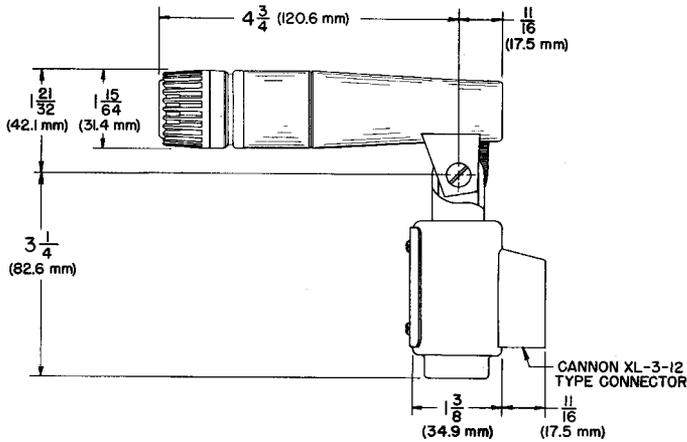
250 ohms impedance —56 db  
 (0 db = 1 milliwatt with 10 microbars)

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

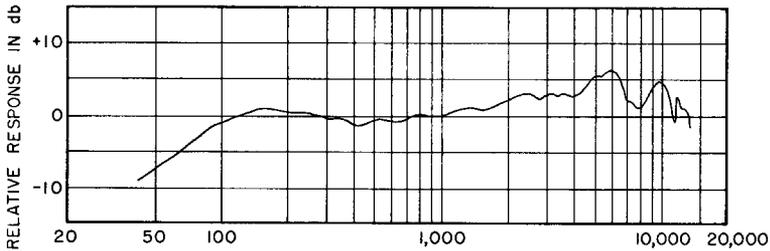
Low Impedance ..... —149 db  
 Medium Impedance ..... —148 db  
 EIA Standard SE-105 August 1949

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 3/8"-27 thread.

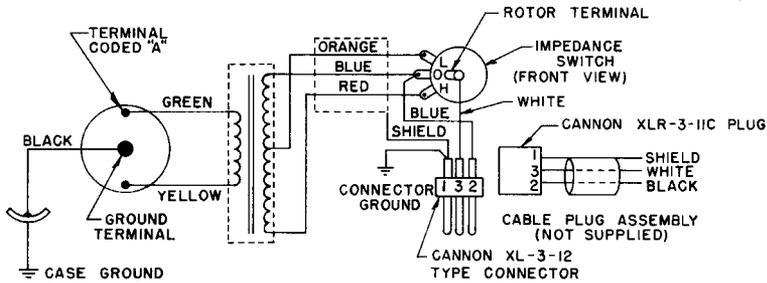
The overall dimensions shall be 4<sup>29</sup>/<sub>32</sub>" (124.7 mm) in height, 1 3/8" (34.9 mm) in width, and 6 7/8" (155.5 mm) in depth.



OVERALL DIMENSIONS  
**FIGURE A**



FREQUENCY RESPONSE IN HERTZ  
**FIGURE B**

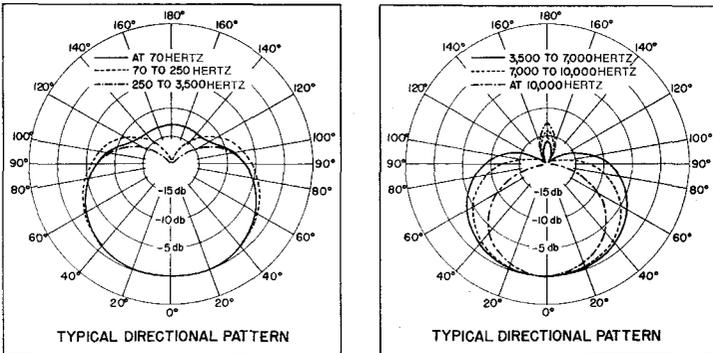


POSITIVE PRESSURE PRODUCES POSITIVE  
 VOLTAGE AT PIN 2 WITH RESPECT TO PIN 3

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)
- Impedance:** Dual. Choice of 30-50 ohms “L” or 150-250 ohms “H,” selected by impedance switch. (See “switch” below. Factory set to 150-250 ohms.)
- Output Level:** 1,000 Hz. response.  
 Model 547.....30-50 ohm “L” position  
     Open Circuit Voltage..... 83.5 db\* (.067 mv)  
     Power Level..... 56.0 db\*\*  
     EIA Microphone Rating  
         Gm (sensitivity) .....—149.0 db\*\*\*  
 Model 547.....150-250 ohm “H” position  
     Open Circuit Voltage..... 76.5 db\* (.149 mv)  
     Power Level..... 56.0 db\*\*  
     EIA Microphone Rating  
         Gm (sensitivity).....—148.0 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.”
- Dimensions:** See Figure A
- Net Weight:** 1½ pounds (510 grams)



**FIGURE D**