

SHURE®

GENERAL

The UNISPHERE® I Model 565SH is a dual-impedance unidirectional dynamic microphone with an attached swivel mount and an On-Off switch. The microphone has a strong, wire-mesh spherical front grille that contains a very effective filter for excellent protection from wind and "pop" (explosive breath sounds.) The microphone provides wide-range reproduction of voice and music, effective either indoors or outdoors.

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

The UNISPHERE I features an exceptionally uniform cardioid pickup pattern that provides an effective 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.

Model 565SH is designed for applications where a stand-mounted microphone with an On-Off switch is required.

Microphone Features:

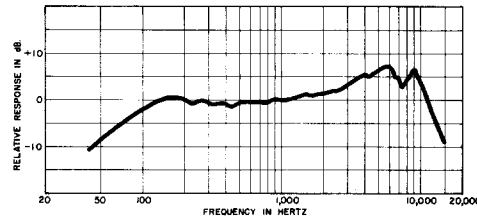
- A wire-mesh screen and built-in filter provides protection from wind and "pop". Enables singers and speakers to perform close to the microphone
- Unusually effective cardioid pickup pattern reduces feedback (annoying loudspeaker squeals) and prevents echoing (boominess) that sometimes occurs in partially filled halls. Can also be used closer to loudspeakers than usual without creating feedback problems
- Excellent reproduction of voice and music
- Shock mounted cartridge for quiet operation
- Quick, neat, solderless impedance selection
- Built-in, long-life On-Off switch, an integral part of the attached swivel mount
- Rugged professional three-pin audio connector on the microphone
- Strong, detachable cable especially selected for effective shielding from hum pickup
- Can be used indoors or outdoors, dependable under all operating conditions



SPECIFICATIONS

Type
Dynamic

Frequency Response
50 to 15,000 Hz (see Figure 1)



TYPICAL FREQUENCY RESPONSE
FIGURE 1

Polar Pattern

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

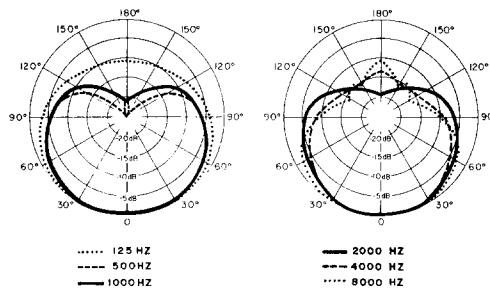


FIGURE 2

UNIDIRECTIONAL DYNAMIC MICROPHONE
MODEL 565SH

SHURE®

Impedance

Dual. Microphone rating impedance is 150 ohms (250 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms and "High" for connection to high-impedance microphone inputs. Wired for low impedance as supplied. To change impedance, see sections on Impedance Selection and Connections.

Output Level (at 1,000 Hz)

	IMPEDANCE	
	Low	High
Open Circuit Voltage*	-76.0 dB (0.16 mV)	-54.0 dB (2.0 mV)
Power Level**	-56.0 dB	

*0 dB = 1 volt per microbar
 **0 dB = 1 milliwatt per 10 microbars

Phasing

Positive pressure on diaphragm produces positive voltage on pin 2 when connected for low impedance, on pin 1 when connected for high impedance. (See Figure 4.)

Switch

Built-in On-Off switch, integral part of swivel mount

Cartridge Shock Mount

Internal rubber vibration-isolator

Cable

4.6m (15 ft) two-conductor shielded, detachable, with professional three-socket audio connector* on microphone end

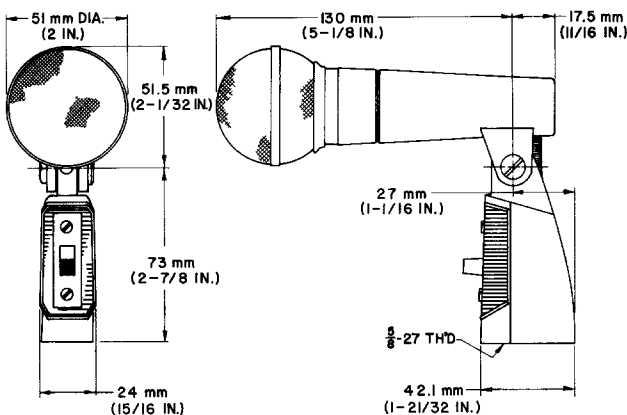
*Designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series, or equivalent connector

Case

Black and chrome finished metal with steel mesh grille

Dimensions

See Figure 3



OVERALL DIMENSIONS
FIGURE 3

Net Weight (less cable)
 425 grams (15 oz)

Packaged Weight
 1.07 kg (2 lb, 6 oz)

IMPEDANCE SELECTION

The Model 545SH is supplied connected for low-impedance operation. The low-impedance connection 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 by long cables. Shure Model A95 Series Line Matching transformers are available for use when a low-impedance microphone line is desirable but the associated amplifier has a high-impedance input. These transformers provide a proper impedance match between a 19 to 300 ohm microphone line and a high-impedance input and are available with various input and output connectors.

To change the Model 545SH to high impedance, proceed as follows.

1. Remove the two screws that hold the switch.
2. Gently pull the switch and its plastic housing forward out of the swivel, taking care not to break any leads.
3. With a long-nose pliers, lift upward and disconnect the 2-terminal black plastic impedance selection socket from the back of pin 3 of the audio connector. Take care not to break leads while performing this operation.
4. With the long-nose pliers, replace the impedance selection socket with pin 3 of the audio connector inserted in socket terminal "H". Press the plastic socket firmly in place.
5. Reassemble the switch housing, switch, and switch-plate in the swivel, taking care not to pinch any leads.
6. Fasten securely with the two previously removed screws.

CONNECTIONS

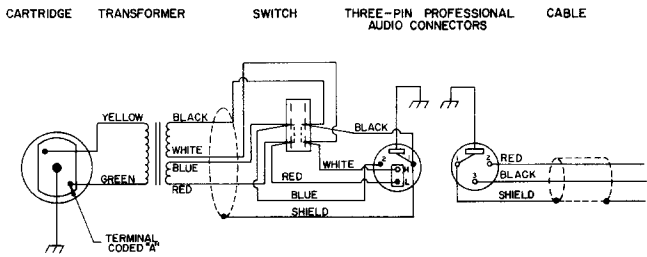
When using the microphone in low-impedance, the BLACK and RED cable leads are the "hot" conductors for balanced-line connections; the shield is connected to the chassis or amplifier ground.

When using the microphone in high impedance, the BLACK cable lead is the "hot" conductor; the shield is connected to the chassis or amplifier ground. The RED cable lead should be insulated.

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

Lockplate90NR1371

OPTIONAL ACCESSORIES

Line Matching TransformerA95 Series
 Desk StandS33B, S37A, S39A
 Quick Disconnect AdapterA45
 WindscreenA61WS Series

REPLACEMENT PARTS

Dynamic CartridgeR65
 Cable and Plug AssemblyC59
 Screen and Grille AssemblyRS65

ARCHITECTS' SPECIFICATIONS

The microphone shall be a moving coil (dynamic) type with a frequency response of 50 to 12,000 Hz. The 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 dual impedance with a rated impedance of 150 ohms for connection to microphone inputs rated at 19 to 300 ohms and "High" for connection to high-impedance microphone inputs. Impedance change shall be solderless at the microphone connector.

The microphone output shall be:

- Low Impedance -56.0 dB
 (0 dB = 1 milliwatt per 10 microbars)
- High Impedance -54.0 dB
 (0 dB = 1 volt per microbar)

The microphone shall be provided with a swivel mount with an integral On-Off switch and shall be suitable for mounting on a stand having a 5/8"-27 thread. The microphone shall also be provided with a detachable 4.6m (15 ft) two-conductor shielded cable with a three-socket professional audio connector* at the microphone end. The overall dimensions of the microphone shall be 125 mm (4-29/32 in.) in height, 51 mm (2 in.) in width and 157 mm (6-3/16 in.) in depth.

The microphone shall be Shure Model 565SH or equivalent.

*Designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series, or equivalent connector

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.