# CONTROLLED MAGNETIC MICROPHONE

#### **GENERAL**

The Model 520 microphone is a pressure operated unit using the balanced armature, controlled magnetic principle. The microphone is a rugged unit with smooth response and an omnidirectional pickup pattern.

The die-cast metal case is streamlined for improved acoustical performance and modern appearance. The microphone is suitable for mounting on desk or floor stands with %"-27 threads.

The Model 520 is provided with an attached 2.1m (7 ft) single-conductor shielded cable.

#### **APPLICATIONS**

The Model 520 microphone is suitable for public address, tape recording, paging systems, amateur communications, and similar applications. It may be used with all standard high-impedance public address amplifiers.

This microphone is unusually rugged and practically immune to severe moisture and temperature condi-

#### CONNECTIONS

Model 520 is a high-impedance microphone suitable for use with amplifiers with high-impedance microphone inputs. For connection to high-impedance inputs, the BLACK cable lead is the "hot" conductor; the shield is connected to the amplifier or chassis ground. In certain amplifiers, the grid bias is obtained by having a grid leak between grid and cathode. When such amplifiers are used with any controlled magnetic or dynamic microphones, it is recommended that a coupling condenser be connected between the microphone and the input grid. The condenser should be .01 mfd or larger.

If cable lengths greater than that supplied with the Model 520 are desired, single-conductor shielded cable may be used. Cable lengths over 7.6m (25 ft) will result in some loss of high-frequency response.

## **IMPORTANT**

Shure Microphone cables are selected after exhaustive tests to insure superior performance in microphones because of low capacities, superior shielding properties and unusually long life under severe use.

Cables with plastic insulation should not be subjected to excessive soldering-iron heat. Carefully clean and tin the conductors and the connections to which the conductors are to be soldered. The soldering operation can then be done with a minimum of heat, thereby avoiding any possibility of damage to the cable.

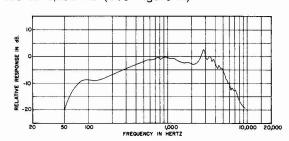


#### **SPECIFICATIONS**

Controlled magnetic

# Frequency Response

100 to 9,000 Hz (See Figure A)



FREQUENCY RESPONSE FIGURE A

# Polar Pattern

Omnidirectional

# **Impedance**

Microphone impedance is High for connection to high-impedance amplifier inputs

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

Open Circuit Voltage ..... -54 dB (2.0 mV) (0 dB = 1 volt per microbar)

#### Cable

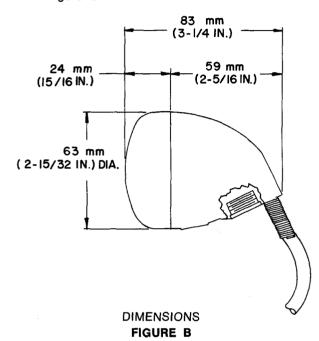
Attached 2.1m (7 ft) single-conductor shielded

#### Case

Metallic green and chrome finished

# **Dimensions**

See Figure B



# **Net Weight**

340 grams (3/4 lb) with attached cable

### **Shipping Weight**

680 grams (11/2 lb)

#### **OPTIONAL ACCESSORIES**

Desk Stand	 S37A
Floor Stand	 .MS10C

#### REPLACEMENT PARTS

Cartridge ......R5

### **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.