MICROPHONES AND ELECTRONIC COMPONENTS

AREA CODE 312/328-9000 . CABLE SHUREMICRO

SHURE

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MODEL 580SA-MP UNIDYNE A

UNIDIRECTIONAL DYNAMIC MICROPHONES MATCHED PAIR

General: The Model 580SA-MP is a set of two matched Unidyne A Unidirectional Dynamic Microphones. The units are matched within 1.0 db in level and within 1.5 db for frequency response.

For convenient connection to most tape recorders, standard phone plugs (See Figure D) have been installed on the microphone cables. All other features, specifications, and performance data listed for the Model 580SA (reverse side of data sheet) apply to the Model 580SA-MP Microphones.

Application: The matched Model 580SA Microphones are primarily intended for stereo recording or similar use. Many acoustic conditions affect the final placement of microphones during a stereo recording. It is usually necessary to experiment with various locations of the microphones to achieve placement best suited to your individual requirements. For pickup of large groups it may be advisable to raise the microphones above the performers to gain balance between front and rear of the group.

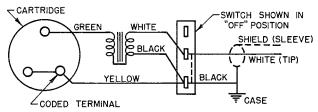
ARCHITECT'S SPECIFICATIONS

SHURE MODEL 580SA-MP

The microphones shall be Shure Model 580SA-MP or equivalent. The microphones shall be a matched pair of Unidirectional Dynamic Microphones with a frequency range of 50 to 13,000 Hertz. The microphones 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 microphones shall have a single high impedance input for connection into a high impedance input.

The microphone output shall be —56.5 db where 0 db = 1 volt per microbar. The microphone rating impedance is 40,000 ohms and the Gm (sensitivity) at 1,000 Hz. shall be within 3 db of —152.5 db referenced to EIA Standard SE-105, August, 1949.

The Model 580SA-MP Microphones shall be provided with a swivel adapter adjustable through 90° from vertical to horizontal. The microphones shall be equipped with a built-in "On-Off" switch and a one conductor, shielded cable, non-detachable. The cable shall have a standard phone plug installed on the cable. The microphone swivel adapter shall mount on a stand having a $\frac{5}{4}$ "-27 thread. The over-all dimension of each microphone shall be $6\frac{41}{64}$ " (168.8 mm) in length and $1\frac{13}{16}$ " (46.0 mm) in diameter.



MODEL 580SA-MP INTERNAL CONNECTIONS FIGURE D

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U.S. Patents 3,132,713 and 3,240,883 Printed in U.S.A.

MODELS 580SA AND 580SB UNIDYNE A MODEL 580SA-MP (see back page)

UNIDIRECTIONAL DYNAMIC MICROPHONES



General: The Model 580 Series Unidyne A Microphones are moving coil dynamic units built to provide wide range reproduction of music and voice and featuring an excellent unidirectional microphone pickup pattern. These unidirectional microphones are ideal for quality public address, theater-stage sound systems, recording, and other sound reinforcement applications.

The microphone features:

- Exceptional true cardioid pickup pattern: symmetrical about axis and uniform at all frequencies—providing highly effective suppression of feedback
- · Uniform shaped response, particularly suitable for the professional entertainer
- A built-in "ON-OFF" switch with provisions for locking switch in its "ON" position
- Versatility—for use in the hand or on a stand—for use indoors or outdoors
- Dependability under all operating conditions

The Model 580 Microphones are supplied with an adjustable swivel adapter which permits the microphone to be tilted through 90° from vertical to horizontal. This swivel, also, allows for "quick-disengage" for use as a hand microphone.

The Model 580SA is high impedance and may be used with any high gain amplifier with an input impedance of 100,000 ohms or more.

The Model 580SB is low impedance and is recommended where long cable lengths are required or under conditions of severe hum disturbance. For use with high impedance amplifiers, Shure Model A95A Line Matching Transformer is available for coupling the low impedance microphone to the amplifier input.

The Model 580SA Gold features a gold finish. Specifications in other respects are the same as those for the Model 580SA.

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 solderingiron 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.

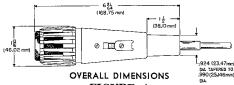


FIGURE A ARCHITECT'S SPECIFICATIONS

SHURE MODEL 580SB

The microphone shall be Shure Model 580SB or equivalent. The microphone shall be a moving-coil dynamic type microphone with a shaped frequency of 50 to 13,000 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 has a single low impedance for connection into a 50 to 250 ohm line.

The microphone output shall be -57.0 db where 0 db = 1 milliwatt with 10microbars.

The microphone rating impedance is 150 ohm and the Gm (Sensitivity) at 1,000 Hz. shall be within ± 3 db of -151.0 referenced to EIA Standard SE-105 August

The Model 580SB shall be provided with a swivel adapter adjustable through 90° from vertical to horizontal. The microphone is equipped with a built-in "ON-OFF" switch and a two conductor, shielded cable, non-detachable. The microphone swivel adapter will mount on a stand having $\frac{5}{6}$ "-27 thread. The overall dimensions shall be 6^{41} %4" (168.8 mm) in length and 1^{13} %16" (46.0 mm) in diameter.

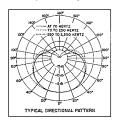
ARCHITECT'S SPECIFICATIONS

SHURE MODEL 580SA

The microphone shall be Shure Model 580SA or equivalent. The microphone shall be a moving-coil dynamic type microphone with a shaped frequency range of 50 to 13,000 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 has a single high impedance for connection into a high impedance input.

The microphone output shall be -56.5 db where 0 db = 1 volt per microbar. The microphone rating impedance is 40,000 ohms and the Gm (sensitivity) at 1,000 Hz, shall be within ± 3 db of -152.5 db referenced to EIA Standard, August 1949.

The Model 580SA shall be provided with a swivel adapter adjustable through 90° from vertical to horizontal. The microphone is equipped with a built-in "ON-OFF" switch and a one conductor, shielded cable, non detachable. The microphone swivel adapter will mount on a stand having a 5%"-27 thread. The overall dimensions shall be $6^{41}\%4$ " (168.8 mm) in length and $1^{13}\%6$ " (46.0 mm) in diameter.



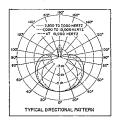


FIGURE B

FURNISHED ACCESSORY

Swivel Adapter: Model A25B positive action swivel to fit 3/8"-27 standard thread.

OPTIONAL ACCESSORIES

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

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.

REPLACEMENT COMPONENTS

Dynamic Cartridge	Model	R58
Replacement Cable for Model 580SA	Model	C60
Replacement Cable for Model 580SB		
Please write Shure Brothers, Inc., for a complete list of the Part		
Kits for Models 580SA and 580SB microphones.	•	

SPECIFICATIONS

Type: Dynamic

Frequency

50 to 13,000 Hz. Response:

Cardioid (Unidirectional) Response, Uniform with frequency, Polar Pattern:

symmetrical about the axis. (See Figure B)

Model 580SB — 150 to 250 ohms Impedance:

Model 580SA — High Impedance

Output Level: 1,000 Hz. Response

Model 580SB Low Impedance

Open circuit voltage...... 79.5 db (.105 mv)

EIA Microphone Rating

Gm (Sensitivity)......—151.0 db***

Model 580SA High Impedance

Open circuit voltage..... 56.5 db* (1.48 mv.)

EIA Microphone Rating

Gm (Sensitivity)......152.5 db***

* 0 db = 1 volt per microbar

** 0 db = 1 milliwatt with 10 microbars

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

Built-in "ON-OFF" switch with lockplate furnished. Micro-Switch:

phone is shipped with lockplate installed. To lock switch in "ON" position, put in "ON" position, loosen screw on lockplate and turn lockplate 180°. Retighten screw.

Swivel Adapter:

Shock Mount:

Positive action swivel to fit \\[\frac{1}{8}''-27 \] stand threads. Internal vibration-isolation of rubber construction.

Cable:

Highly durable with exceptionally effective hum shielding.

Model 580SB

Non-detachable 15 foot (4.6 meter)

two conductor, shielded cable

Model 580SA

Non-detachable 15 foot (4.6 meter)

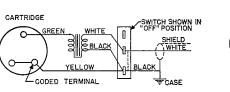
one conductor, shielded cable

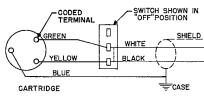
Case: Die-cast and "Armo-Dur"

Chrome and Black with stainless steel grille Case Finish:

Dimensions: See Figure A

1 pound 6 ounces (624 grams) Net Weight:





MODEL 580SA INTERNAL CONNECTIONS

MODEL 580SB INTERNAL CONNECTIONS

FIGURE C