

### DYNAMIC HAND-HELD COMMUNICATIONS MICROPHONE



#### GENERAL

The Shure Model 596LB is a compact, hand-held dynamic, low-impedance communications microphone with a 200 to 5,000 Hz frequency response. Designed especially for voice communications use, it is an economical unit for applications in budget-restricted paging and other installations. The microphone is compatible with many popular paging amplifier inputs. Its tailored frequency response provides clear, intelligible operation. The ARMO-DUR® case is small, light and sturdy, and fits comfortably in the palm of the hand. It has a long-life push-to-talk switch, and a durable coiled cable for years of reliable performance. The 596LB has a low-impedance output. The 596LB is furnished with a sturdy mounting bracket for permanent installation.

#### Features

- Omnidirectional pickup pattern for optimum off-axis operation
- Frequency response from 200 to 5,000 Hz, tailored for voice communications
- Economical—the perfect choice for modest paging installations
- Rugged and dependable under most operating conditions
- Silver-plated switch contacts for long-term low contact resistance and reliable performance
- Long-life vinyl-jacketed coil-cord for years of trouble-free operation
- Output impedance matches most paging amplifier inputs
- Virtually indestructible ARMO-DUR case
- Sturdy, convenient mounting button for attaching to equipment or nearby surface using supplied mounting bracket

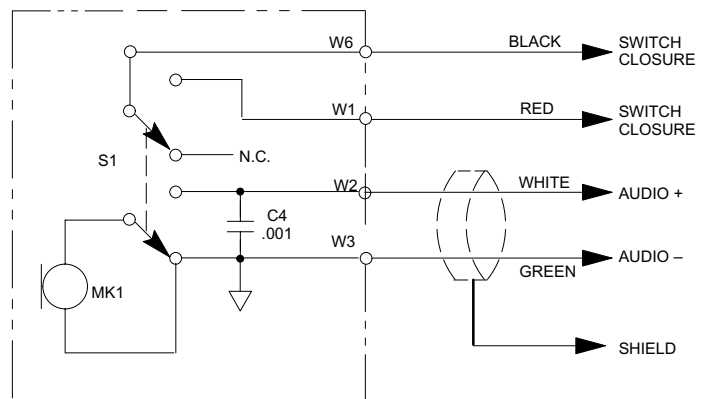
#### MOUNTING

The 596LB is provided with a rear-case hang-up button for use with a mounting bracket on or near associated equipment. The bracket has mounting holes with clearance for No. 6 or No. 8 screws (not supplied).

#### CONNECTIONS

The internal switch connections of the 596LB are shown in Figure 1. The 596LB has a four-conductor, coiled-cord cable (two conductors shielded) and a double-pole, double-throw, push-button switch to control the microphone circuit and an external relay or switching circuit. The RED and BLACK unshielded leads control the relay or switching circuit. Refer to the following tables and to the wiring diagram below.

INPUT TYPE	WIRE COLOR	FUNCTION	XLR CONNECTOR	1/4 IN. PHONE PLUG
UNBALANCED	WHITE	AUDIO	PIN 2	TIP
	GREEN	AUDIO GROUND	PIN 3	SLEEVE
	SHIELD	CHASSIS GROUND	PIN 1	SLEEVE
BALANCED	WHITE	AUDIO +	PIN 2	TIP
	GREEN	AUDIO -	PIN 3	RING
	SHIELD	CHASSIS GROUND	PIN 1	SLEEVE



WIRING DIAGRAM  
FIGURE 1

The 596LB can be wired for balanced-line operation and is recommended for use where long cable lengths are required, or conditions where severe hum pickup may exist. The 596LB can be fed directly into a standard low-impedance amplifier input, or a Shure A95 Series Line Matching Transformer (at the equipment end of the cable) can be used for coupling the 596LB to the input of a high-impedance amplifier. A two-conductor shielded cable can be used for extending only the microphone circuit. If both the microphone and the remote circuit are to be extended, a four-conductor with two shielded conductors should be used.

The microphone circuit of the 596LB is normally open when the microphone switch button is not depressed.



## OPERATION

The 596LB will operate satisfactorily under most conditions of humidity, heat and cold. Dropping the microphone or other severe mechanical shocks should be avoided.

## SPECIFICATIONS

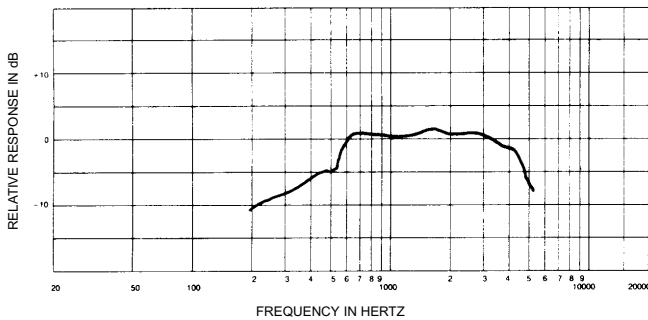
(Test conditions unless otherwise specified: audio output measured between white lead and green lead; PTT switch depressed; dc voltmeter 10 M $\Omega$  or greater input impedance; ac voltmeter 1 M $\Omega$  or greater input impedance.)

### Type

### Dynamic

### Frequency Response

200 to 5,000 Hz (see Figure 2)



TYPICAL FREQUENCY RESPONSE  
FIGURE 2

### Polar Pattern

Omnidirectional

### Impedance (at 1,000 Hz)

400 ohms

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

-33 dB  $\pm$  3.0 dB

(0 dB = 1 V/10 Pascal. 1 Pa = 94 dB SPL)

### Hum Sensitivity

36 dB maximum equivalent SPL per 1 mOe electromagnetic field

### Environmental Conditions

Operating Temperature: -40° to 74° C (-40° to 165° F)

Storage Temperature: -54° to 85° C (-65° to 185° F)

Relative Humidity: . . . . .0 to 95% (non-condensing)

## Switch

Double-pole, double-throw, push-to-talk, normally open

## Cable

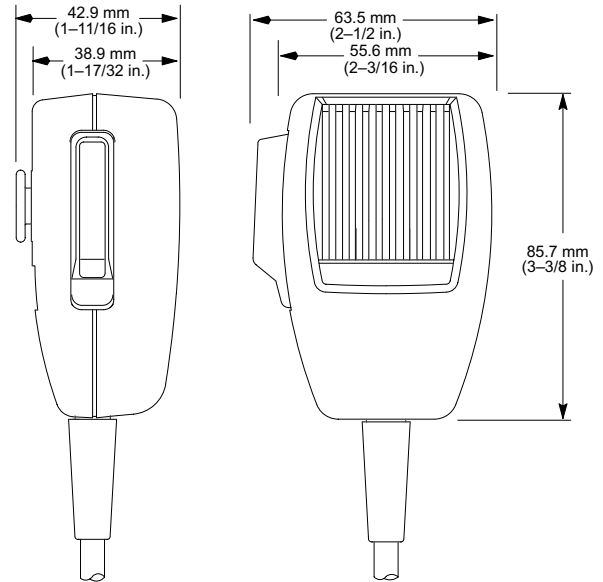
1.5 m (5 ft) extended length, 4-conductor (2 shielded), vinyl-jacketed coil-cord

## Construction

Case Black textured high-impact ARMO-DUR<sup>®</sup>

## Dimensions

See Figure 3



OVERALL DIMENSIONS  
FIGURE 3

## Net Weight

248 grams (8.68 oz) with cable

## CERTIFICATION

Conforms to European Union directives, eligible to bear CE marking; meets European Union EMC Immunity Requirements (EN 50 082-1, 1992).

## FURNISHED ACCESSORY

Mounting Bracket (3 in kit)..... RK6MB

## REPLACEMENT PARTS

For additional service or parts information, please contact Shure's Service department at 1-800-516-2525. Outside the United States, please contact your authorized Shure Service Center.

# SHURE<sup>®</sup>

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