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.

<table>
<thead>
<tr>
<th>INPUT TYPE</th>
<th>WIRE COLOR</th>
<th>FUNCTION</th>
<th>XLR CONNECTOR</th>
<th>1/4 IN. PHONE PLUG</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNBALANCED</td>
<td>WHITE</td>
<td>AUDIO</td>
<td>PIN 2</td>
<td>TIP</td>
</tr>
<tr>
<td></td>
<td>GREEN</td>
<td>AUDIO GROUND</td>
<td>PIN 3</td>
<td>SLEEVE</td>
</tr>
<tr>
<td></td>
<td>SHIELD</td>
<td>CHASSIS GROUND</td>
<td>PIN 3</td>
<td>SLEEVE</td>
</tr>
<tr>
<td>BALANCED</td>
<td>WHITE</td>
<td>AUDIO +</td>
<td>PIN 2</td>
<td>TIP</td>
</tr>
<tr>
<td></td>
<td>GREEN</td>
<td>AUDIO –</td>
<td>PIN 3</td>
<td>RING</td>
</tr>
<tr>
<td></td>
<td>SHIELD</td>
<td>CHASSIS GROUND</td>
<td>PIN 1</td>
<td>SLEEVE</td>
</tr>
</tbody>
</table>

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 MΩ or greater input impedance; ac voltmeter 1 MΩ or greater input impedance.)

Type
Dynamic

Frequency Response
200 to 5,000 Hz (see Figure 2)

Polar Pattern
Omnidirectional

Impedance (at 1,000 Hz)
400 ohms

Output Level (at 1,000 Hz)
–33 dB ± 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®

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).

Optional 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 Incorporated http://www.shure.com
United States, Canada, Latin America, Caribbean:
5800 W. Touhy Avenue, Niles, IL 60714-4608, U.S.A.
Phone: 847-600-2000 U.S. Fax: 847-600-1212 Intl Fax: 847-600-6446
Europe, Middle East, Africa:
Shure Europe GmbH, Phone: 49-7131-72140 Fax: 49-7131-721414
Asia, Pacific:
Shure Asia Limited, Phone: 852-2893-4290 Fax: 852-2893-4055