TRANSISTORIZED DYNAMIC HAND-HELD MICROPHONE

GENERAL

The Shure Model 596T is an amplified, dynamic, hand-held microphone designed for rugged and reliable operation in a variety of mobile and fixed-station communications applications. The 596T has an omnidirectional pickup pattern and provides highly intelligible speech communication in police, fire, taxi, bus, utility, forestry, transportation, industrial, radio-telephone, amateur radio and similar applications. In addition to a clear, crisp, natural voice response, the 596T offers extremely low sensitivity to hum pickup.

The unit fits naturally and comfortably in the hand and is not affected by heat or humidity. The exclusive ARMO-DUR case is immune to oil, grease, fumes, salt spray, sun, rust and corrosion and is outstanding in its ability to withstand mechanical shocks and vibration.

Features

- Built-in transistor amplifier (fed by dynamic microphone)
- Frequency response from 300 to 5,000 Hz, tailored for voice communications use
- Low sensitivity to hum pickup
- High-impact ARMO-DUR case is lighter and stronger than die-cast metal, comfortable to the touch in hot or cold weather
- Rugged and dependable under all operating conditions—Long-life Neoprene-jacketed coil cord
- Silver-plated switch contacts for long-term low contact resistance and reliable performance

CONNECTIONS

The internal wiring, circuitry, and switch connections of the 596T are shown in Figure 1.

RADIO INPUTS

The 596T is designed to operate with two-way radio sets with an audio input circuit similar to that shown in Figure 2.

SPECIFICATIONS

Test Conditions: (unless otherwise specified)
Audio output between White and Shield (Ground)
PTT switch depressed
Measured with High Z DMM
Standard test circuit as shown in Figure 2

Type
Dynamic (with transistor preamplifier)
Frequency Response
300 to 5,000 Hz (see Figure 3)

TYPICAL FREQUENCY RESPONSE
FIGURE 3

Sensitivity (at 1 kHz, 10 mm)
-11 dBV (282 mV)
(0 dB = 1 V at 100 μbars)

Maximum Output Level (at 1 kHz, 3% THD)
-7.2 dBV (437 mV)

Maximum Sound Pressure Level (1 kHz, 3% THD)
126 dB SPL

Magnetic Hum Sensitivity
13.4 dB max equivalent SPL per 1 mOe electromagnetic field

Current Drain
3.5 mAdc at 9.6 Vdc

Polar Pattern
Omnidirectional

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, single-throw, slide push-to-talk, silver-plated contacts

Cable
Non-detachable, 1.8 m (6 ft) extended, 5 conductor (one shielded), coiled, black Neoprene

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

Construction
Case: Black textured high-impact ARMO-DUR®

Weight
260 grams (9.2 oz) with cable

ACCESSORY
Mounting Bracket ............................................................. RK6MB

REPLACEMENT PART
Cartridge ........................................................................ RP324

MOUNTING
The 596T 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
mounting screws (not supplied).

Dimensions
see Figure 4

OVERALL DIMENSIONS
FIGURE 4

SERVICE
For service information and replacement parts, please contact
Shure’s Service department at 1-800-516-2525. Outside the United States, please contact your Authorized Shure Service Center