



MODULINK® SPEAKER MICROPHONE

GENERAL

The Shure Model 810 is a shoulder-worn speaker microphone designed for rugged and reliable operation in a variety of portable communication applications, including police, fire, utility, forestry, transportation, industrial, and emergency medical. The 810 has an omnidirectional pickup pattern and provides highly intelligible speech communication with its clear, crisp, natural voice response.

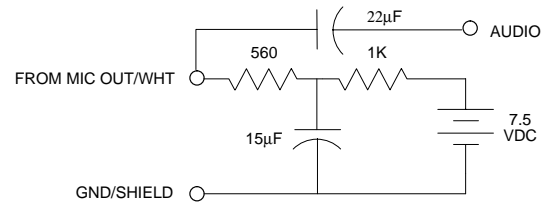
The 810 can be used with a variety of ALM cordsets to connect to many popular two-way radios. The unit fits naturally and comfortably in the hand and is not affected by heat or humidity. The exclusive ARMO-DUR® case is immune to oil, grease, fumes, salt spray, sun, rust and corrosion—and is outstanding in its ability to withstand mechanical shocks and vibration.

Features

- Frequency response from 100 to 5,000 Hz, tailored for voice communications
- Earphone accessory mutes speaker for privacy
- High-impact ARMO-DUR® case is lighter and stronger than die-cast metal, comfortable to the touch in hot or cold weather
- HI-LO speaker volume switch
- Rugged and dependable under any operating condition
- Long-life, neoprene-jacketed, interchangeable ALM coil cordsets
- Silver-plated switch contacts for long-term, low contact resistance and reliable performance

RADIO INPUTS

The 810 is designed to operate with two-way radio sets with an audio input circuit similar to that shown in Figure 1.



STANDARD TEST CIRCUIT
FIGURE 1

GENERAL SPECIFICATIONS

Test Conditions (unless otherwise specified)

- Audio output between White and Shield (Ground)
- Speaker volume switch set at "HI"
- PTT switch depressed
- Measured with High Z DMM
- Standard test circuit as shown in Figure 1

Current Drain

0.17 mAdc at 7.5 Vdc

Environmental Conditions

- Operating Temperature: -30° to 60° C (-22° to 140° F)
- Storage Temperature: -40° to 74° C (-40° to 165° F)
- Relative Humidity: 0 to 95% (non-condensing)

Switch

Double-pole, single-throw, slide push-to-talk, silver-plated contacts. 1,000,000 cycles before failure.

Cable

Detachable, 1.5 m (5 ft) extended, 5 conductor (one shielded), coiled, black neoprene with modular telephone type connector.

Certification

Eligible to bear CE Marking. Conforms to European EMC Directive 89/336/EEC. Meets applicable tests and performance criteria in European Standard EN55103 (1996) parts 1 and 2, for residential (E1) and light industrial (E2) environments.

Construction

Case: Black textured high-impact ARMO-DUR®

Weight

184 grams (6.5 oz) without cable

Dimensions

See Figure 2

MICROPHONE SPECIFICATIONS

Type

Condenser

Polar Pattern

Omnidirectional

Frequency Response

100 to 5,000 Hz (see Figure 3)

Sensitivity (at 1 kHz, 10 mm)

-56 dBV/Pa (1.58 mV)
(1 Pa = 94 dB SPL)

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

140 dB SPL

Electrostatic Hum Sensitivity

-50 dB max in 12 kV field

SPEAKER SPECIFICATIONS

Frequency Response

500 to 5,000 Hz (see Figure 4)

Sensitivity (at 1,000 Hz)

116 dB SPL at 10 mm with 1 mW input

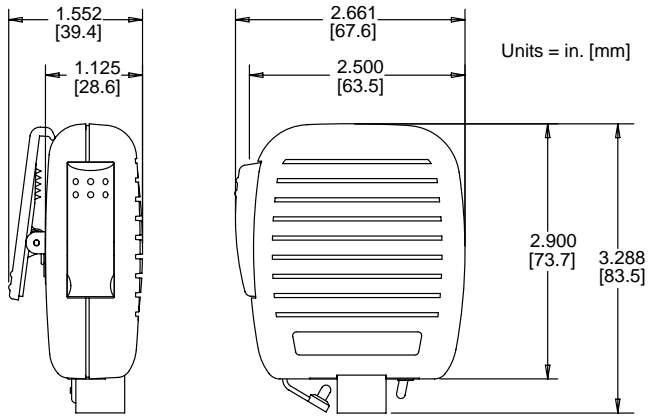
Impedance

16 Ω at 0.1 W, 1 kHz

Input Power

0.75 W normal

1.5 W maximum



OVERALL DIMENSIONS
FIGURE 2

ACCESSORIES

Screwdriver 80B498

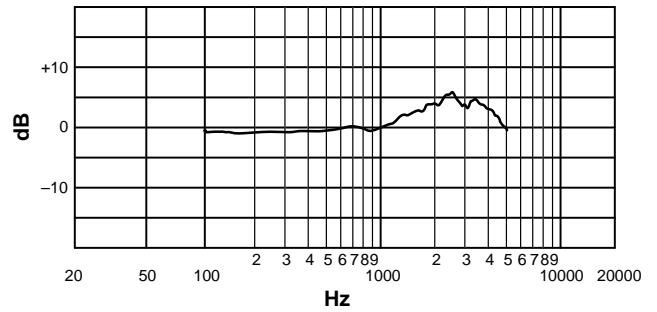
REPLACEMENT PARTS

Grommet 66C346A

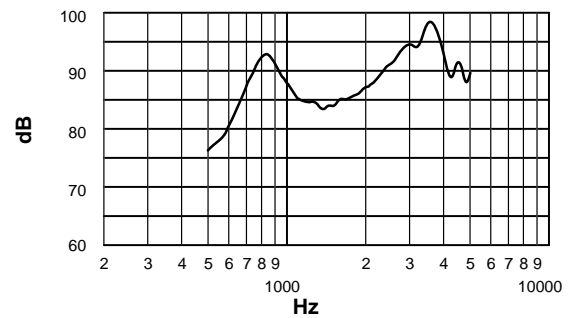
Earphone Jack Plug 66C336

MOUNTING

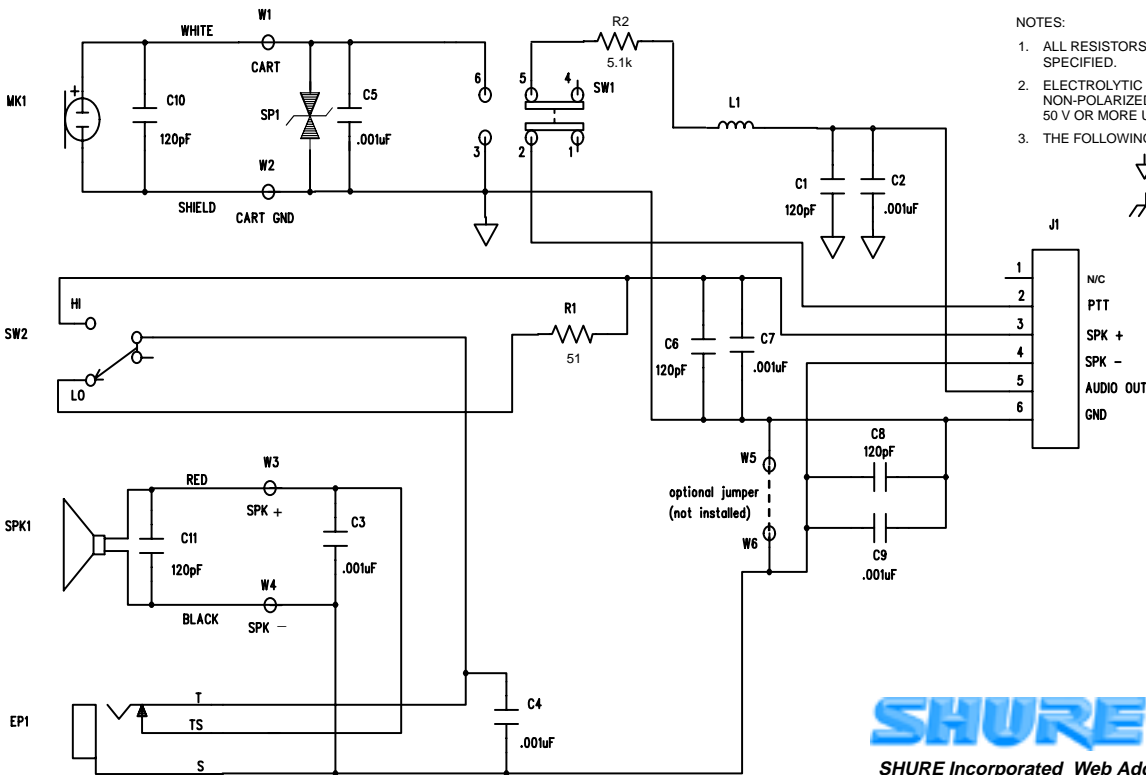
The 810 is provided with a 360° rotating spring clip on the rear case with positive detent stops every 45°.



TYPICAL MICROPHONE FREQUENCY RESPONSE
FIGURE 3



TYPICAL SPEAKER FREQUENCY RESPONSE
FIGURE 4



INTERNAL CONNECTIONS
FIGURE 5

NOTES:

1. ALL RESISTORS 1/4 WATT, 2%, UNLESS OTHERWISE SPECIFIED.
2. ELECTROLYTIC CAPACITORS SHOWN IN μF X VOLTS. NON-POLARIZED CAPACITORS IN μF, TOLERANCE 10%, AND 50 V OR MORE UNLESS OTHERWISE SPECIFIED.
3. THE FOLLOWING SYMBOLS DENOTE:
 - ▽ P.C. GROUND
 - ⏏ CHASSIS GROUND

SHURE

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