

TELEX

Technical Data Sheet

Model 38 T

Electret Aviation Microphone



General Description

The Model 38T is a noise-canceling, hand-held aviation microphone. It consists of an electret microphone element, a microphone amplifier, and a push-to-talk switch enclosed in a rugged, black plastic housing. The 38T is extremely resistant to interference, hum, and squealing induced by 400Hz power systems. Also, the harsh switch popping common to other microphones has been eliminated in the 38T through the use of electronic switching. The 38T is approved under Federal Aviation Agency TSO-C58

This technical data sheet documents three (3) versions of the 38T microphone, distinguished by different plugs, output levels, and switching arrangements. Differences are indicated by Bosch catalog numbers.

Design Features

Noise Cancellation

The 38T cancels noise best when held very close to the mouth, and it discriminates against all sounds more than 1/2-inch away. A position at one side of the mouth is best to minimize popping, hissing and breathing sounds when speaking.

Microphone Gain Adjustment

The gain is adjustable through an opening in the side of the microphone housing using a small, flat-blade screwdriver. Clockwise rotation of the control increases gain. Adjustment by a qualified avionics technician is recommended, as excessive gain can cause transmitter overload distortion.

Specifications

Microphone Type:

Close talking differential, electret element

Frequency Response

300-3000Hz

Matching Impedance

50-600 Ω

Sensitivity (re: 1V/ μ bar at 1kHz)

Catalog No. 63999-000: -51 \pm 1dB

Catalog No. 63999-001: -54 \pm 3/-0dB

Catalog No. 63999-003: -48 \pm 3dB

Supply Voltage

8-16 Vdc

Current Requirements

11.2mA at 12 volts, 150 Ω load

Switching

Microphone and relay circuits normally open, sequential

Cord

Four (4) conductor coil cord. 6ft (1.8m) extended, 11.5 inches (292mm) retracted

Plug Type

Catalog No. 63999-000: PJ-068 (M642/5-1

Catalog Nos. 63999-001 & -003: XLR-4-12C (or equivalent)

Weight

8oz. (277g)

Color

Black

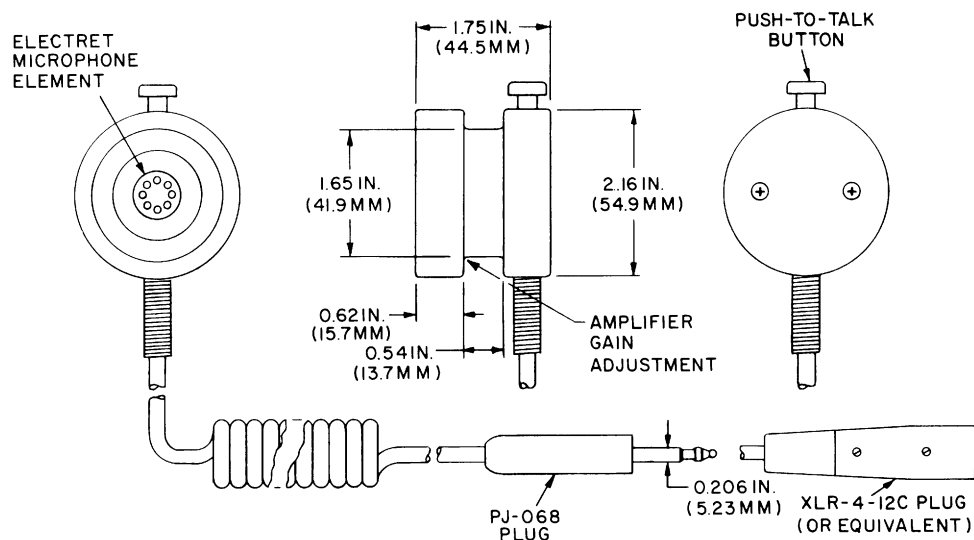


Figure 1: Dimensional Drawing

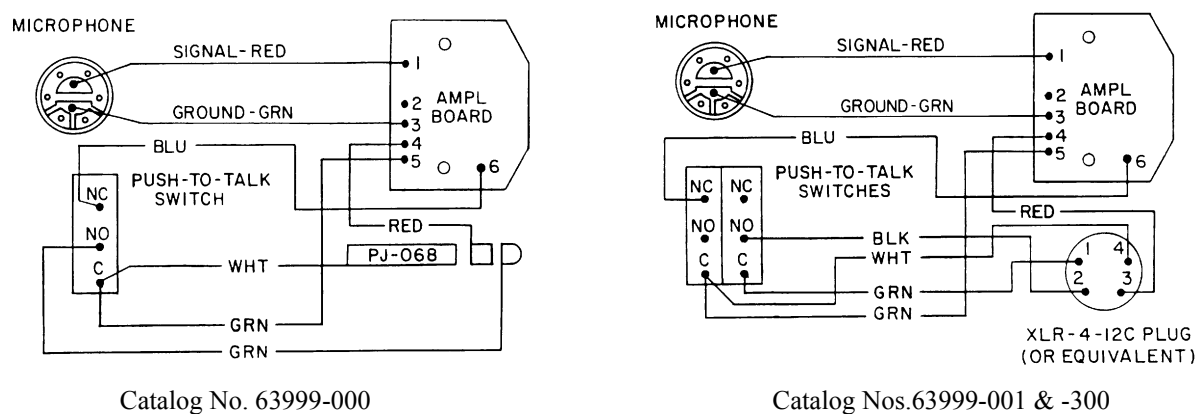


Figure 2: Wiring Diagrams

Ordering Information

Model 38T with PJ-068 plug	Catalog No. 63999-000
Model 38T w/XLR Plug (-54dB sens).....	Catalog No. 63999-001
Model 38T w/XLR Plug (-48dB sens).....	Catalog No. 63999-003