

## Technical Data Sheet



### Description

The MCP-90-0 microphone is a phantom-powered “back-electret” miniature condenser flush microphone. The back-electret feature provides greater sensitivity, wider frequency response, and superior immunity from handling noise than a diaphragm-electret microphone. This microphone is under 2” in length and extends less than 1” from the intercom panel, lending to use in small, confined spaces without the obtrusiveness of a regular size mic. The removable windscreen (figure 1) provides pop filtering, response-shaping and overload protection to further enhance the acoustic performance of the microphone. The MCP-90 microphones are mechanically designed for quick, easy mounting to RTS™ keypanels and selected Audiocom® intercoms. The frequency response is tailored for full-range sound reproduction with natural sound pick-up optimized for close-up use. The microphones are fitted with a threaded TRS male connector that is compatible with RTS™ standard threaded TRS female connectors. The MCP-90 series is designed to be phantom powered with a wide voltage range of 1.5 to 9 VDC.



*Figure 1. Microphone windscreen*

### Installation

Insert the TRS end of the microphone into the threaded TRS connector. When the threads are reached, begin turning the microphone (as a unit) in a clockwise manner until the microphone is completely screwed into the unit.

**Note:** To prevent damage to the microphone, finger-tighten the unit to the intercom panel.

## MCP-90-0

### Architectural & Engineering Specifications

The microphone is a single-D cardioid back-electret condenser type with frequency response of 100 to 15,000 Hz.

The microphone has an output impedance compatible with RTS™ equipment. The output level is -47 dBv / Pascal @ 1kHz. The microphone has a back-electret generating element whose output will not be appreciably affected by temperature extremes from -29°C (-20°F) to 74°C (135°F) and/or humidity extremes. The microphone is fitted with a threaded TRS male type connector that is compatible with RTS™ keypanels.

### Please Contact Us

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## Specifications

### Generation Element:

Dual condenser, back-electret

### Frequency Response:

100 Hz to 15,000 Hz

### Polar Patterns:

Cardioid

### Sensitivity:

### Open Circuit Voltage:

4.5mV (-47 dB)/pascal @ 1 kHz

### Dynamic Range:

102 dB

### Output Impedance:

Compatible with RTS™ and Telex intercom panels.

### Power Requirements:

1.5 to 9 VDC phantom supply

### Current Consumption:

<500  $\mu$ A

### Color:

Nonreflecting black

### Environmental Conditions, Relative

#### Humidity 0-50%:

-29° to 74°C (-20° to 165°F)

#### Relative Humidity 0 to 95%:

-29° to 57°C (-20° to 135°F)

### Mounting:

Male threaded TRS

### Dimensions

#### Knurled Stem to Head Length:

MCP-90-0: 43.82 mm (1.725")

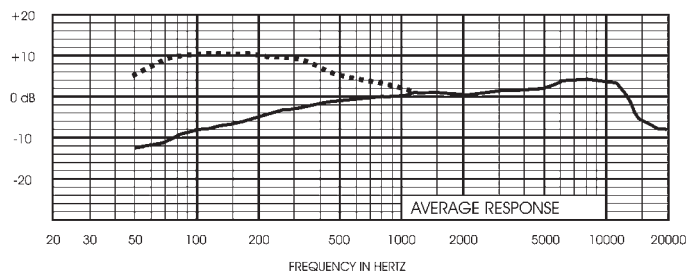
#### Maximum Head Diameter:

14 mm (0.55 in.)

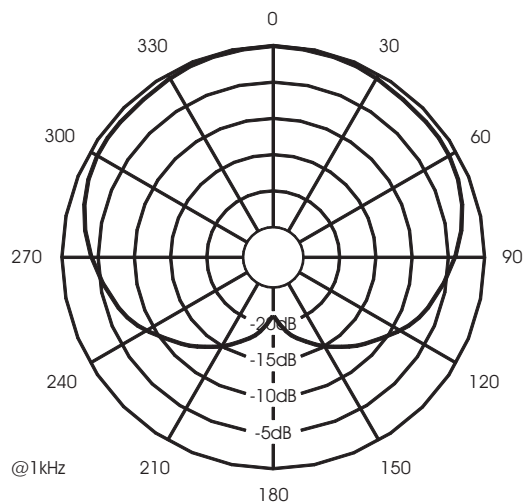
### Accessories Furnished:

Specially designed windscreen to prevent overloading and distortion in normal operation.

## Response

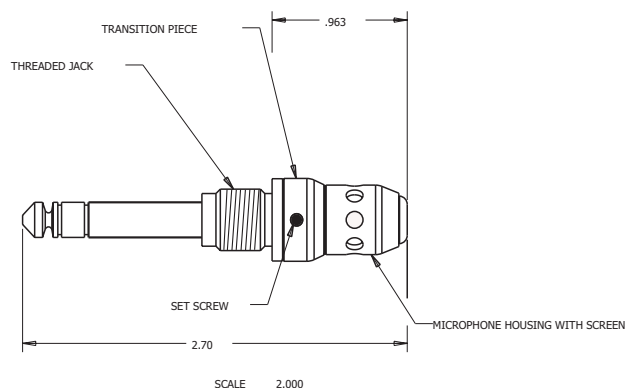


*Frequency Response*



*Polar Response*

## Dimensions



*Model Lengths*

## Warranty

Products are warranted by Telex Communications, Inc. to be free from defects in materials and workmanship for a period of one year from the date of sale.

The sole obligation of Telex during the warranty period is to provide, without charge, parts and labor necessary to remedy covered defects appearing in products returned prepaid to Telex. This warranty does not cover any defect, malfunction or failure caused beyond the control of Telex, including unreasonable or negligent operation, abuse, accident, failure to follow instructions in the manual, defective or improper associated equipment, attempts at modification and repair not authorized by Telex, and shipping damage.

To obtain warranty service, follow the procedures entitled "Procedure for Returns" and "Shipping to Manufacturer for Repair or Adjustment".

This warranty is the sole and exclusive express warranty given with respect to RTS products. It is the responsibility of the user to determine before purchase that this product is suitable for the user's intended purpose.

ANY AND ALL IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY ARE LIMITED TO THE DURATION OF THIS EXPRESS LIMITED WARRANTY.

NEITHER TELEX NOR THE DEALER WHO SELLS TELEX PRODUCTS IS LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND.