
MODEL 500HH

HAND HELD MICROPHONE

The IED 500HH is a hand held microphone designed specifically for use with versions of the 500 and 508 Series microphone Stations in which hand held microphones are used.

The hand held microphone assembly contains an omnidirectional electret condenser microphone cartridge integrated with a microphone preamplifier and an audio line driver. The microphone element and preamplifier are mounted in a teardrop shaped molded black textured Cyclolac™ housing. The use of an omnidirectional element eliminates the proximity effect.

The electret condenser cartridge is positioned in the housing such that its frequency response is enhanced. The microphone element location provides the mechanism for good acoustical coupling to provide a full-bodied, highly intelligible voice signal. The built-in preamplifier and line driver circuitry provide a line level audio signal which can drive long cable lengths without high frequency rolloff and minimize the susceptibility to interference.

The electret condenser microphone cartridge consists of a high voltage internal membrane, metal electrode and a Field Effect Transistor (FET). The requirement for a high voltage bias is not necessary as with ordinary condenser microphone elements. The cartridge features include a highly efficient electrical specification, pressure type operating principle, low impedance (2.2 kΩ), and high reliability under adverse shock, vibration and other environmental conditions.

The 500HH assembly is supplied with a circular coiled cable which is built into the housing assembly. A strain relief is built into the housing end of the cable and locks into the housing. The terminations at each end are molded, 6 wire, RJ11 connectors which provide extra strength and resistance to failure by pull-out. In the event that a cord failure does occur, it is easily replaced.

The 500HH Hand Held Microphone is used in extended distance applications and can be located as far as 1000 feet from the microphone station with which it is used. Up to 4 500HH Hand Held Microphones can be used with an individual 500 Series or 508 Series microphone station.



IED Model 500HH



SPECIFICATIONS

ACOUSTIC

- | | |
|----------------------------------|------------------------------|
| 1. Transducer Type | Electret Condenser Cartridge |
| 2. Operating Principle | Pressure Receiver |
| 3. Pattern | Omnidirectional |

ELECTRICAL, ANALOG

- | | |
|---|--------------------|
| 1. Frequency Response | See Figure 1 |
| 20 Hz - 20 kHz | |
| 2. Input Sensitivity | -64 dB, ±3 dB |
| 0 dB = 1 V/mbar, 1 kHz | |
| 3. Noise Referred to the Input (NRI) | <-90 dB |
| 20 Hz - 20 kHz, referred to +4 dBu output | |
| 4. Output Impedance, Z _{OUT} | <1 Ω |
| 5. Maximum Output | +4 dBu |
| 6. Normal Output | -20 dBu |
| 7. Power Supply | |
| Supply Voltage Range | 14.25 V to 15.75 V |
| Supply Current | 3 mA |
| V = +15 VDC | |

CONTROLS

- | | |
|----------------------------------|-------------------------------------|
| 1. Push-to-Talk Switch | 2-pole, Double Throw, Spring Return |
|----------------------------------|-------------------------------------|

CABLE

- | | |
|--|-------------------------------|
| 1. Connecting Cable | IED Part Number IED500HHCA-1D |
| 6 conductor coiled cord, round cross section with molded RJ11 connectors | and strain relief |
| 2. Cable Length | |
| Retracted | 24" |
| Extended | 120" |

MECHANICAL

- | | |
|---|------------------------|
| 1. Housing Material | Molded black Cyclolac™ |
| 2. Size, Overall, Less Cable (see figure 3) | |
| Height | (100 mm) 3.938" |
| Width | (75.4 mm) 2.969" |
| Depth | (54.8 mm) 2.156" |
| 3. Weight, Max. | (239 gm) .527 lb |
| Including Coiled Cord | |

ENVIRONMENTAL

- | | |
|--|------------------------------------|
| 1. Operating Temperature Range | (+32 °F - +104 °F) 0 °C - +40 °C |
| 2. Storage Temperature Range | (-40 °F - +158 °F) -40 °C - +70 °C |

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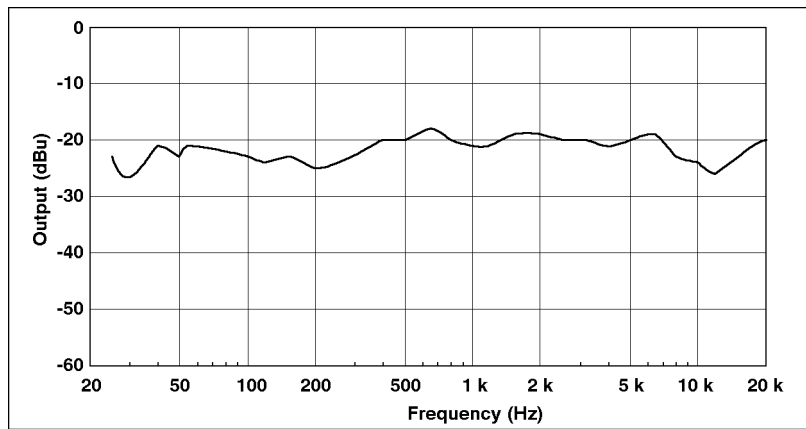


Figure 1 - 500HH Frequency Response

WIRE COLOR	FUNCTION
White	+15 VDC
Black	Switch
Yellow	Ground
Red	Audio Out +
Blue	Audio Out -

Figure 2 - RJ11 Hand Held Microphone Connector



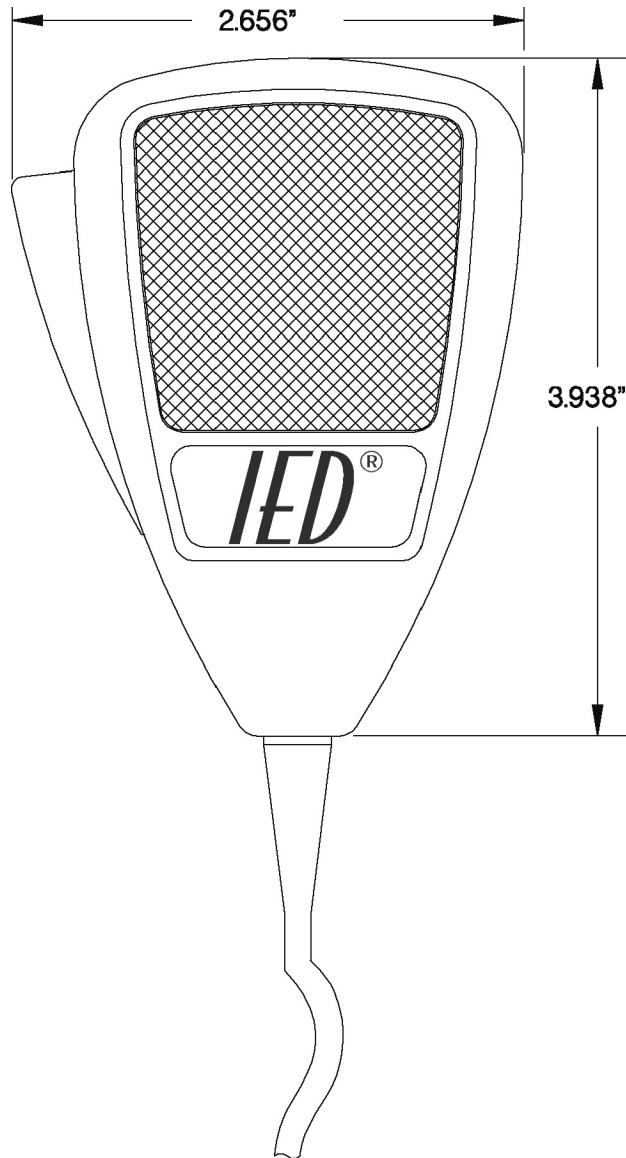


Figure 3 - Model 500HH Hand Held Microphone

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