

LANGEVIN

DYNAMIC

MICROPHONES

MD 421HL

DIRECTIONAL STUDIO MICROPHONE



The MD 421 HL is a dynamic microphone of the very highest caliber, designed to meet the most demanding requirements of the recording, film, and broadcast industries, as well as those of the advanced amateur. This microphone enjoys an excellent reputation, and can be seen in the company of many famous performers and statesmen throughout the world today. The MD 421 HL covers the spectrum of 30 to 17,000 cps with a "transparent" quality which captures every nuance in a vocal pianissimo as well as the loudest crescendos of the symphony orchestra. Its response curve is exceptionally flat, assuring perfect frequency linearity and tonal balance throughout the audio spectrum. Because of its excellent directional characteristics, which are virtually independent of frequency, the MD 421 HL is ideal for use in "spot" recording where surroundings may be acoustically unfavorable, or in high-fidelity studio public-address systems, where faithful reproduction must be combined with freedom from acoustic feedback. The MD 421 HL has an especially high nominal front-to-back ratio of 16 db. It is equipped with a special compensation coil which protects against the effects of stray magnetic fields.

MD 211N

STUDIO MICROPHONE



The compactness of the MD 211 N is deceiving, for it belies the performance of this model. Besides possessing superior characteristics, as the specifications indicate, the MD 211 N is an exceptionally rugged microphone. Tested under extremes of humidity, shock and current, the microphone proved so durable that it could even be used as a speaker in emergencies! The MD 211 N has spherical directional characteristics, and provides exceptionally faithful reproduction in the wide range of 40 to 20,000 cps.

These microphones are astoundingly uniform and linear. Comparison of a test report curve (individually plotted and packed with each unit) from an MD 211 N selected at random with the nominal curve on the back will reveal a maximum divergence of only ± 2.5 db within the 40-17,000 cps range of the plot. These qualities are truly unusual in a microphone which is not custom made, let alone one which is so compact.

MD 21N

PROFESSIONAL MICROPHONE



When statesmen speak, the world listens. The microphone used to pick up their words has no second chance - it has to do for millions what is normally done in a conversation between two people.

The MD 21 N, the "work horse" of the broadcast industry, has become the standard of comparison. Its wide acceptance and almost legendary reputation for quality and durability are the result of many exclusive Langevin advances in microphone manufacture and design.

The MD 21 N operates as a pressure receiver with spherical directional characteristics. Its response curve is exceptionally flat between 40 and 17,000 cps, with a gentle rolloff above this frequency, to meet broadcasting and recording requirements.

MD 214N

LAVALIER MICROPHONE



There are many situations in stage and film work, as well as in television, where the performer must have his hands free, both for singing and for speaking, or where the microphone must be as inobtrusive as possible. A properly designed lavalier microphone is ideal for these applications. You have noticed, no doubt, we said "properly designed." This is because certain problems must be overcome in lavalier design.

A microphone which touches the chest is in an extremely poor position for proper pickup of higher frequencies. If, for instance, our superlative MD 211 N dynamic microphone were used as a lavalier microphone, the results would be quite poor, because high frequencies would be muffled. Midrange frequencies, on the other hand, would be emphasized, because the chest tends to resonate at these frequencies (practically the same for men and women,) and acts as a sound source, producing undesired tonal coloration by adding extra sound at these frequencies.

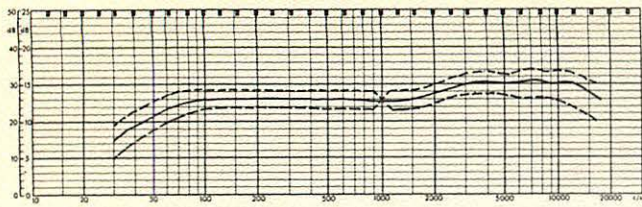
Langevin



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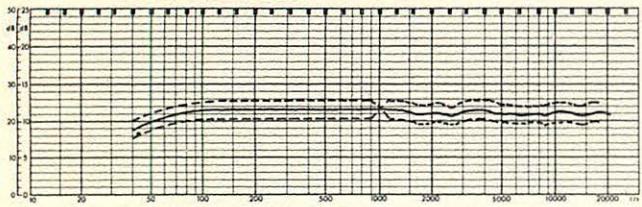
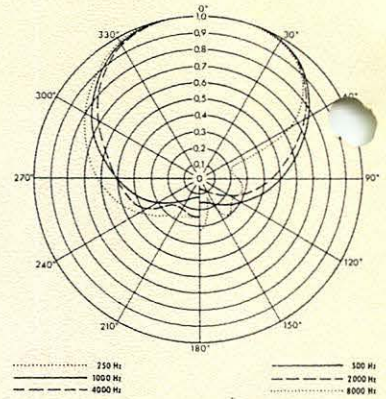
Langevin



Frequency response (with tolerance limits)

MD 421HL

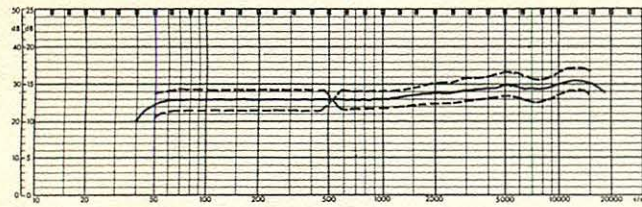
Directional characteristic . . . cardioid
 Front to back discrimination at 1000 cps and 180° . . . 16 db
 Acoustic mode of operation . . . pressure gradient
 Frequency range . . . 30 to 17000 cps
 Maximum deviation . . . see tolerances in curve above
 Output level, ref . . . - 53 dbm and 1mw/10 dynes/cm² . . . - 54 dbm
 EIA rating . . . - 145.8 db and - 150 db
 Impedance . . . 200 Ω and 24 kΩ
 Bass control . . . continuous variable
 Pin connection . . . 1+2 high impedance 3+2 low impedance plug shell = shield
 Connector required . . . T 3261/1 (supplied with microphone)
 Magnetic stray interference . . . 5 μV/50 mGauss
 Dimensions . . . 6.96 x 1.9 x 1.81"
 Weight (without adaptor) . . . 15 oz.



Frequency response (with tolerance limits)

MD 211 N

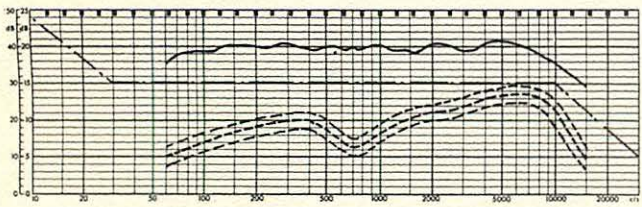
Directional characteristic . . . omnidirectional
 Acoustic mode of operation . . . pressure receiver
 Maximum deviation from nominal frequency response between 40 + 17000 cps . . . ± 2.5 db
 Output level ref. 1 mw/10 dynes/cm² . . . - 56.8 dbm
 EIA rating . . . - 149.3 db
 Impedance . . . 200 Ω
 Connector required (supplied with microphone) . . . T 3261/1
 Pin connection . . . 1 Audio, 3 Audio, 2 shield
 Magnetic stray interference . . . 40 μV/50 mGauss
 Dimensions . . . 7/8" dia. - 4 9/16" long
 Weight . . . 4.5 oz.



Frequency response (with tolerance limits)

MD 21N

Directional characteristic . . . omnidirectional
 Acoustic mode of operation . . . pressure receiver
 Maximum deviation from nominal frequency response between 50 and 15000 cps . . . ± 3 db
 Output level ref. 1 mw/10 dynes/cm² . . . - 53 dbm
 EIA rating . . . - 145.8 db
 Impedance . . . 200 Ω
 Pin connection . . . 1 audio 3 audio 2 shield
 Connector required . . . T 3261/1 (supplied with microphone)
 Magnetic stray interference . . . 100 μV/50 mGauss
 Dimensions . . . 4 9/16 x 1 7/8 x 1 7/8"
 Weight . . . 10 oz.



— Frequency response used as a lavalier microphone
 - - - Frequency response in a free soundfield on axis

MD 214 N

Directional characteristic . . . omnidirectional
 Acoustic mode of operation . . . pressure receiver
 Maximum deviation from nominal frequency response . . . ± 2.5 db
 Output level ref. 1 mw/10 dynes/cm² . . . - 59 dbm
 EIA rating . . . - 151.8 db
 Impedance . . . 200 Ω
 Magnetic stray interference . . . 8 μV/50 mGauss
 Dimensions . . . 3 x 1 1/8 x 1 1/8 inches, cord length 33 feet
 Weight . . . 5 oz. (without cord)