



ELECTRO MAGNETIC COMPONENTS, INC. - **ELECTROMAG**

Manufacturers of long life, high quality magnetic heads

Motion Picture Sound Recording Heads



ENGINEERED FOR SUPERIOR PERFORMANCE

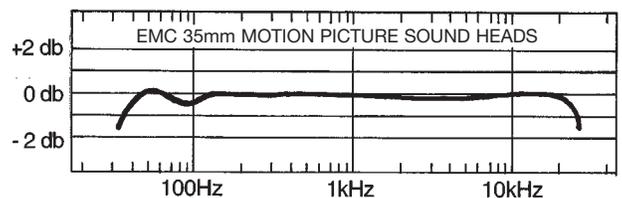
Electro Magnetic Components has developed a patented new series of long life magnetic heads for all track formats used in motion picture sound recording. The unique elliptical contour on the face of EMC heads combined with the patented material used in the face give an unparalleled combination of intimate tape to head contact and prodigiously long life. These heads have been extensively tested and compared to the leading competitors and in every test EMC was the leader. They exhibited lower distortion, better high frequency response, essentially non-existent head bumps, less crosstalk, and have less tape to head friction. All EMC heads use hum bucking windings that provide common mode protection and virtually eliminate hum fields.

EMC heads are manufactured in a strict environment that consistently assures the highest quality tape head products. A step in the construction of the heads involves the fitting of the face of the head to the bottom. These surfaces are flat to within one wavelength of light to insure flawless mating. Because of this type of construction, if the head face is not relappable when the time comes, the face is simply removed (at the factory) and new face is installed at a fraction of the cost for a new head. No other company offers a system like this that saves you so much in operating costs. EMC heads provide the lowest life cycle cost available, backed up with technical support, all aimed at the common goal of giving you the best sound recording heads available.

With over 20 U.S. and International patents involving the construction and assembly of magnetic heads, you might be interested in receiving our technical papers explaining how these heads are different from "all the others".

INSTALL EMC HEADS AND EXPERIENCE THE LONG LIFE, ELECTRICAL EXCELLENCE AND MAINTENANCE FREE PERFORMANCE YOU HAVE BEEN LOOKING FOR.

TYPICAL FREQUENCY RESPONSE CURVE



EMC 35MM and 16MM heads retrofit to all types of recorders including Magna-Tech, RCA, MTM, KEM, Westrex and others. All long life EMC heads come with durable phenolic or metal base mounts and stainless steel hardware. Typical Inductance values match original OEM specifications.

PROFESSIONAL RELAPPING SERVICE

Original manufacturers of recorders trust Electromag as a primary supplier of magnetic heads. So, when you need a magnetic head assembly relapped, turn to professionals with the facility, trained staff, digital optics and technical expertise that is demanded for this precise art. You can always depend on EMC.

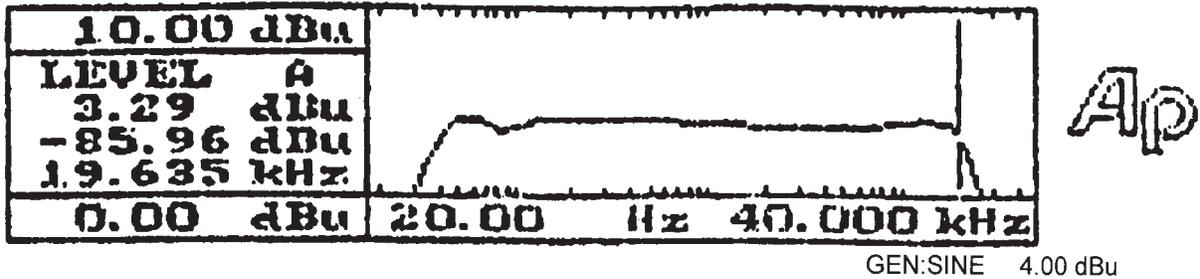


FREQUENCY RESPONSE COMPARISON

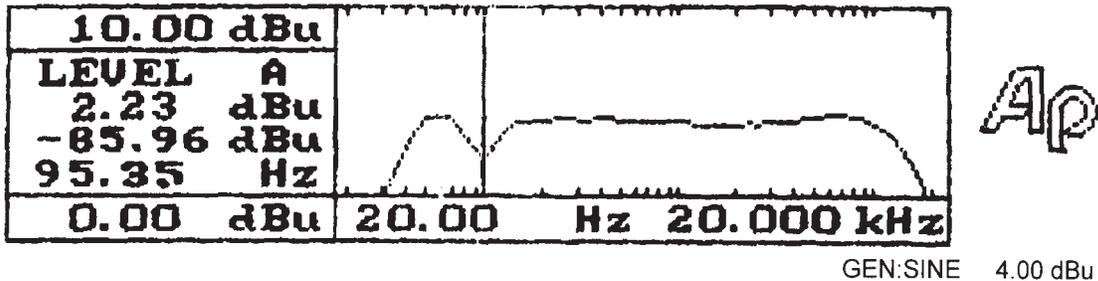
The frequency response curves printed below show the response of three different six track record/play head stacks. The curves were generated using standard Magna-Tech electronics. All three traces are from track three in each headstack. The EMC heads exhibit a flat response from 30 Hz to 20 kHz. Selection of the head damping resistor allows the 20 kHz response to be flat independent of machine to machine variations in cable capacitance. Teccon and AMB heads start to roll off at 10 kHz and are down 4 dB at 20 kHz.

The low end is governed by the geometric design of the face of the the head. EMC heads are engineered to have true elliptical contours that virtually eliminate low frequency head bumps. The result is a slight dip at 90 Hz and a small bump at 45 Hz. Teccon and AMB heads both show large low frequency excursions that make proper setting of the low end critical in order to avoid low frequency build up. Note that the EMC plot is a 40 kHz plot.

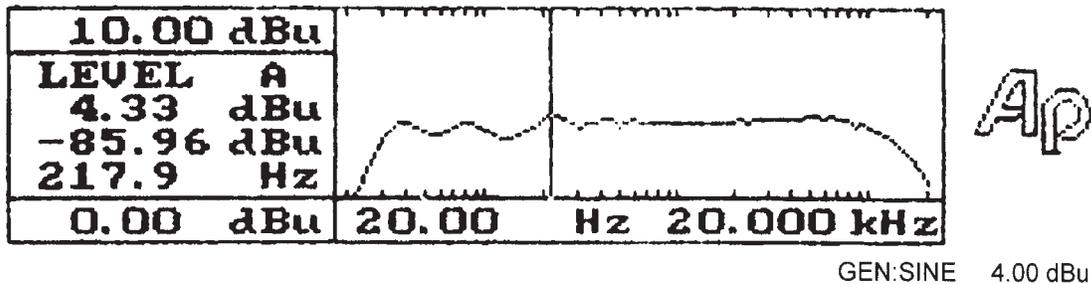
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