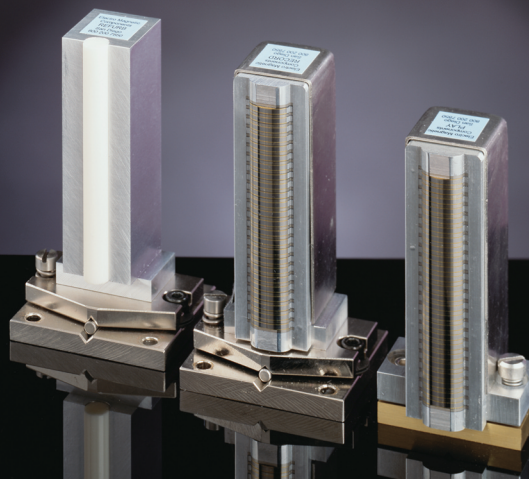




ELECTRO MAGNETIC COMPONENTS, INC. - **ELECTROMAG**

Manufacturers of long life, high quality magnetic heads

# 24 Track Magnetic Recording Heads



## ENGINEERED FOR SUPERIOR PERFORMANCE

Electromag has over 25 years experience in the design and production of magnetic heads for all types of recorders. A new long life head with a tape-friendly elliptical contour has been designed for 24 track two inch studio recording. This unique contour produces the flat frequency response shown at the right. This contour also minimizes the drag on the magnetic tape to promote better tracking as the head wears.

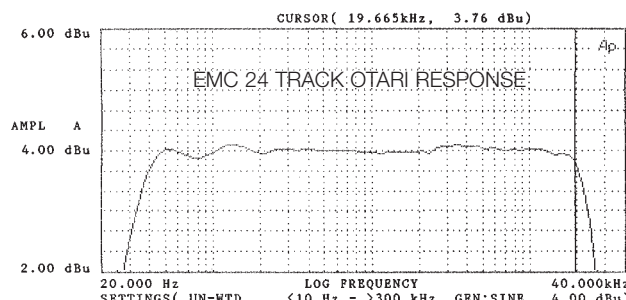
The unique elliptical contour on the face of the heads combined with the patented material used in the face give an unparalleled combination of intimate tape to head contact and prodigiously long life. These heads exhibit lower distortion, better high frequency stability, essentially non-existent head bumps, less crosstalk and have less tape to head friction.

The photograph shows Otari and Ampex heads as well as a dummy head for use on play only machines. Electromag heads retrofit to all 24 track recorders and provide azimuth adjustment built into the head case for models that originally used fixed base mounting.

Electromag heads are engineered to give the mechanical support required to virtually eliminate gap scatter and maintain track placement within 0.001 in. of the standard 24 track format. The frequency response and distortion curves on the reverse side of this sheet exhibit the electrical excellence that EMC products are known for.

You can always depend on EMC for trouble free performance. **And remember**, if you ever wear out an Electromag head you can get a new one for one-half price.

## TYPICAL FREQUENCY RESPONSE CURVE



Electrical performance – **The Best**

Mechanical track placement – Within 0.001 in.

No gap scatter compensation required

0.4 % THD + N at 1 kHz

Life cycle cost – **The Lowest**

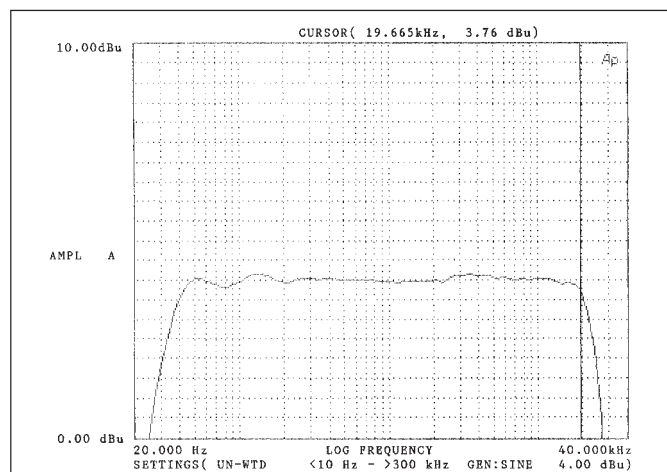
## PROFESSIONAL RELAPPING SERVICE

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.

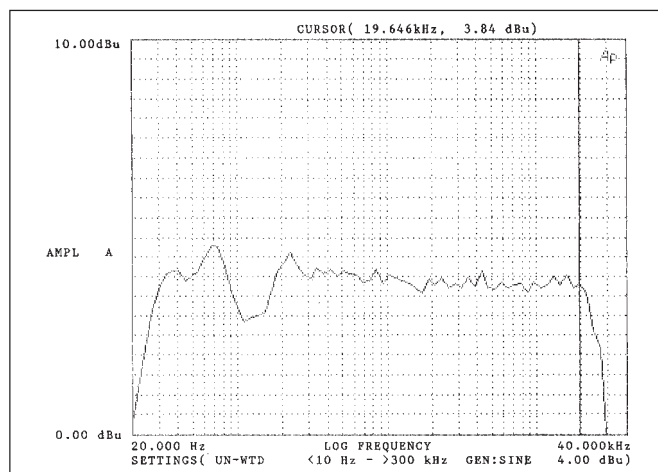
INSTALL EMC HEADS AND EXPERIENCE THE LONG LIFE, ELECTRICAL EXCELLENCE AND MAINTENANCE FREE PERFORMANCE YOU HAVE BEEN LOOKING FOR.

## ENGINEERED FOR ELECTRICAL EXCELLENCE

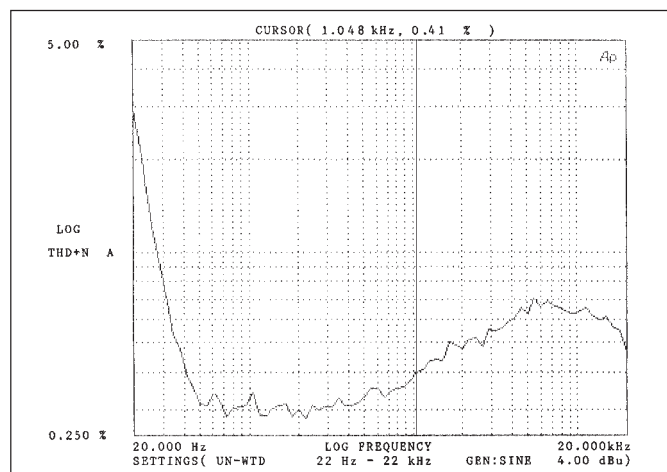
Electromag has engineered a unique design to avoid low frequency build up and maintain a flat response up to 20 kHz. This is illustrated by the frequency response curves below which are taken using an Otari MTR 90 II with 2 3/4 db overbias at 10 kHz on Zonal 700 tape. These curves demonstrate the perfectly flat frequency response and low total harmonic distortion that EMC heads can bring to your studio. Ask for a demonstration on your own studio equipment.



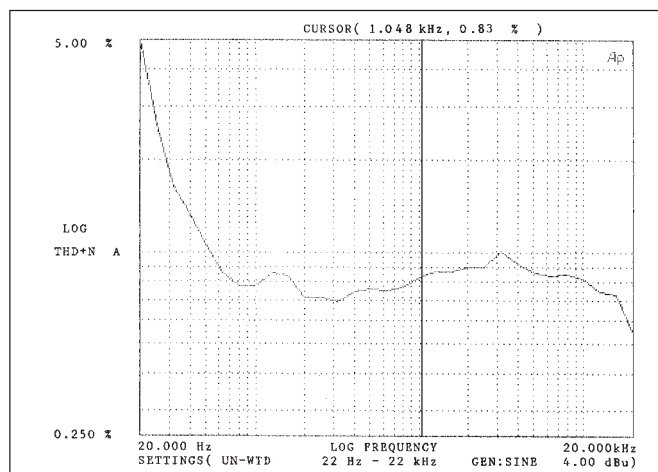
**ELECTRO MAGNETIC COMPONENTS  
TWO INCH 24 TRACK RECORD AND PLAY HEADS**



**OTARI STANDARD HEADS  
TWO INCH 24 TRACK RECORD AND PLAY HEADS**



**ELECTRO MAGNETIC COMPONENTS  
TWO INCH 24 TRACK RECORD AND PLAY HEADS**



**OTARI STANDARD HEADS  
TWO INCH 24 TRACK RECORD AND PLAY HEADS**

## ENGINEERED FOR EXTRA LONG LIFE

Electromag has a patented manufacturing process that uses ceramic materials as the bonding agent between each layer of magnetic metal in place of the epoxy used in standard soft faced heads. The long wearing ceramic material is engineered to produce a core that is stress free and displays the ideal magnetic properties of the virgin magnetic material used to design audio recording systems. As shown in the illustration, the tape travels across the head parallel to the laminations and wears the softer magnetic material down 3 to 10 microinches. This leaves the ceramic slightly higher which provides a long wearing surface for the magnetic tape to ride on throughout the life of the head. The 10 microinch separation loss is negligible at audio wavelengths.

