



Quality Department

25.08.2000

**AKG-Acoustics GmbH**

Lemböckgasse 21-25

A-1230 Wien

Austria

Mr. Joe Dichoso

Authorization and Evaluation Division

Att: Mr. Joe Dichoso,

7435 Oakland Mills Road

Columbia, MD 21046

Regarding: Aproval E9M HT40, E9M PT40

Dear Sir,

With our microphones ,measuring the max. bandwidth at 20kHz upper audio frequency is more significant than at 15kHz (due to preemphasis) . Therefore the laboratory took 20kHz. Highest measured deviation in overdriven condition at 10kHz is 45.8kHz (46kHz) ,which is the limit determined by the crystal in the oscillator.This means that, in the worst case , theoretically,the max. deviation could be  $46\text{kHz} / \times 2 \text{ plus } 20\text{kHz} \times 2 = 132\text{kHz}$  necessary bandwidth. (Practically measured at 10kHz:112kHz,at 20kHz:115kHz)

The value defined in the Constructional Dataform was chosen because the system is to be sold in Europe also, where 200kHz is the most manufacturer chosen and permitted value for wireless microphone systems.

Best Regards

Ing. Hans R. Pühringer  
Approbation Officer, QD

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