

Description of Measurement System and Environment

Summary of Testing Equipment and Environment

Table 1 List of measurement equipment

Equipment	Description	Note
Microphone	ACO 7052	
Microphone Amplifier	Uniel Electrics EF-408	Power: AA Dry battery × 8
Amplifier	Power: Accuphase P-350 Contrpl: Accuphase C-2000	
Test Signal	Created by Wave Gene Ver. 1.31E. Copied to CD-R disc	Details are shown separately.
Analizing Software	FFT Wave Ver. 7.2	Details are shown separately.
CD Player	Hitachi DVD-P900	
Sound Card	Sound Blaster 5.1	
Computer	Windows XP SP3 PC	
Measurment Room	Furnished general purpose room 3.8[m] × 2.3[m] × 2.4[m]	Not a special measurement room

Response Curve of ACO 7052

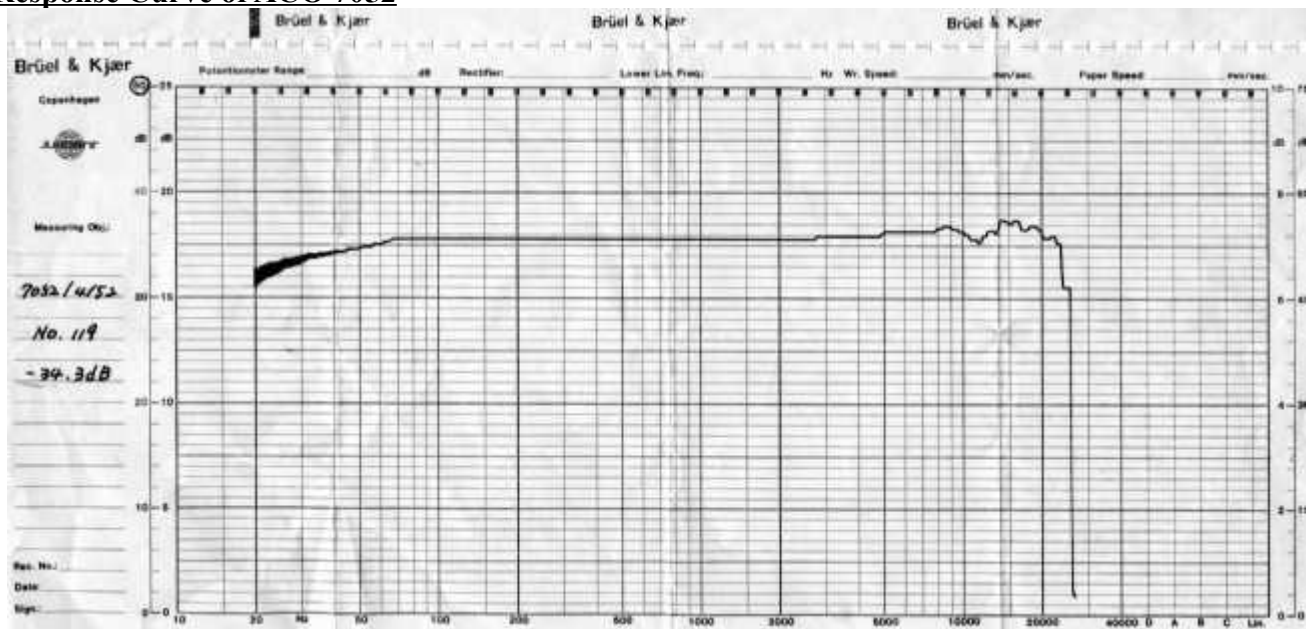


Figure 1 Frequency Response of ACO 7012 Microphone

Multiple-Chamber Aligned in Parallel (MCAP) Speaker System

Test Setting Overview

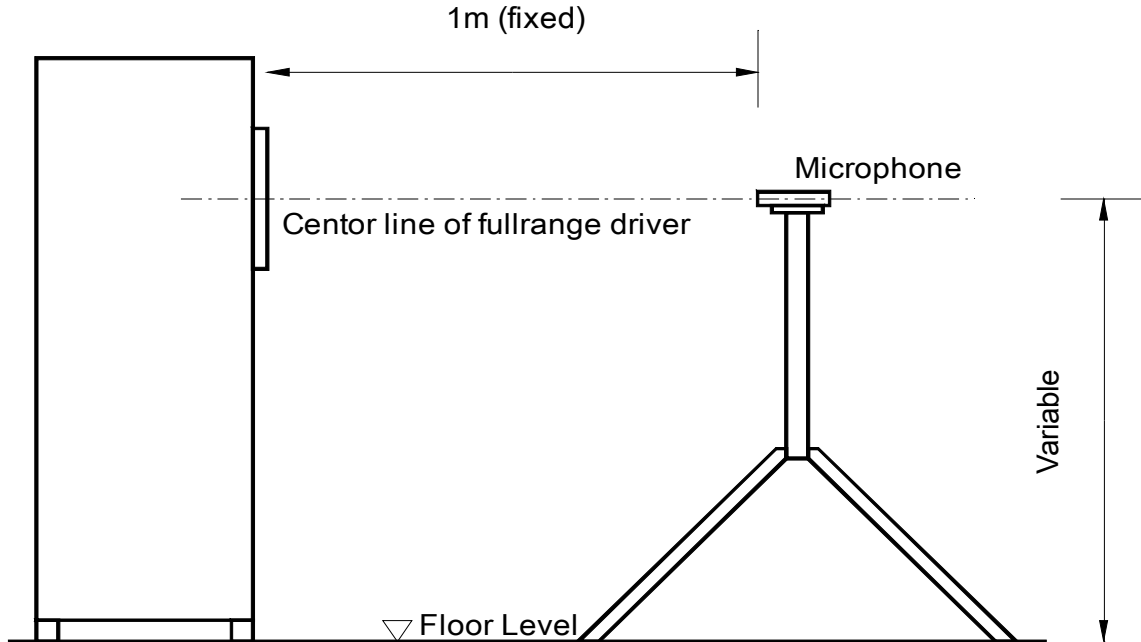


Figure 2 Installation of Measurement System

Test Signal & FFT Analysis

Frequency response is separated to two ranges: 10Hz - 400Hz and 300Hz - 20kHz.

Lower Frequency Range: Linear sweep signal 10Hz - 1000Hz (120s, 8.33Hz/s)
 Higher frequency Range: Linear sweep signal 10Hz - 22000Hz (164s, 134.09[Hz/s])

Table 2 Setting of Fast Fourier Transform Software(FFT Wave Ver.7.2)

	Lower Frequency	Higher Frequency	Note
Displayed Range	20Hz - 400Hz	300Hz - 20kHz	
Analysis Resolution	0.337Hz	2.69Hz	
Time Window	2.97s	0.372s	
Window Function	Blackman	Blackman	
Displayed Resolution	1/12 octave band	1/12 octave band	
Sound Pressure Level	Relative value	Relative value	Not an absolute value

Any question should be asked to:

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