# Full-Range Speaker System with MCAP Enclosure - TR130a -

# Principal Design

General Information		Summary
Document Release Date	2008/10/26	This speaker system is a compact 1 cft
Manufactured Year	2006	speaker system with 3 sub-chambers and 6
Document ID	MCAPAP003E	ducts. Duct lengths may be reconsidered, but
Model ID	TR130a	shows relatively good performance without changing design.
Used Driver(s)	Cantare 5FR MK II	Sound pressure level of lower range
Alternative Drivers	no suggestion	(40-100Hz) is approximately 18dB lower than
Overall Size (H×W×D)[mm]	300×300×300	higher range, still lack of low frequency is not
Characteristic Frequencies[Hz]	59, 66, 67, 97, 114, 118	tangible while listening music sources.
Required DIY Skill	Relatively High	
Designed by	S. Suzuki	

### **Enclosure Details**

Item	Specification	Drawing
Number of Sub-chambers	3	36   36   1   300   1   36   1   30   1   3   3   3   3   3   3   3   3   3
Main Chamber	4.29[L]	<u> </u>
Sub-chamber #1	3.79[L]	300 Section 84 129 Section 120 Section 136 Section 14 157 Section 18
Sub-chamber #2	3.97[L]	
Sub-chamber #3	4.70[L]	
Duct #1 W×H×L[mm]	36×36×77	
Duct #2 W×H×L[mm]	36×36×96	
Duct #3 W×H×L[mm]	36×36×106	
Duct #4 W×H×L[mm]	36×36×168	
Duct #5 W×H×L[mm]	36×36×168	
Duct #6 W×H×L[mm]	36×36×168	

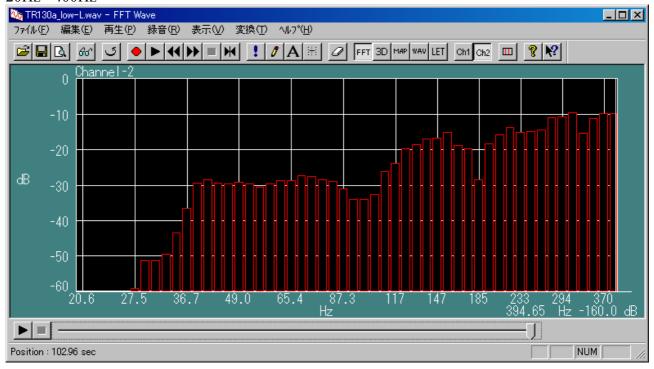
### **Additional Notes**

This enclosure was originally designed for limited model FF125K by Fostex. Original model has much higher response in middle range frequency region, and low boost by control amplifier was required. Cantare's 5FR MK II matches better than FF125K. 10cm or 12cm drivers may be used, but 13cm ones will be better.

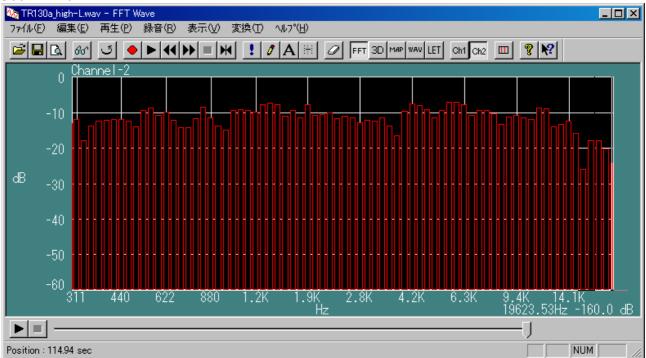
# Multiple-Chamber Aligned in Parallel (MCAP) Speaker System Application Report

### Frequency Response

#### 20Hz - 400Hz



## 300Hz - 20kHz



Any question shoud be asked to:

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