# ${\it Multiple-Chamber\ Aligned\ in\ Parallel\ (MCAP)\ Speaker\ System} \\ {\it Application\ Report}$

## Full-Ramge Speaker System with MCAP Enclosure - TR200a -

### Principal Design

| General Information            |                                  | Summary   |
|--------------------------------|----------------------------------|---|
| Document Release Date          | 12/07/08                         | TR200a consists of a main chamber and 3   |
| Manufactured Year              | 2007                             | subchambers.  |
| Document ID                    | MCAPAP004E                       | This is one of old designs. Cross sectional   |
| Model ID                       | TR200a                           | area of open-air duct seemed to be a little bit<br>too big, so that low end frequency was |
| Used Driver(s)                 | Fostex FE206Σ,<br>FT96H(+0.68μF) | relatively higher than new models, while driver size is larger 8 inches.                  |
| Alternative Drivers            | FE206E, FF225K                   | This system sounds very clear and   |
| Overall Size(H×W×D)[mm]        | 900 x 290 x 320                  | preferable like very expensive system. There  |
| Characteristic Frequencies[Hz] | 45, 55, 64, 70, 92, 121          | is no impression to be lack of lower  |
| Required DIY Skill             | Relatively High                  | frequency range, while listening music source.  |
| Designed by                    | S. Suzuki                        |   |

### **Enclosure Details**

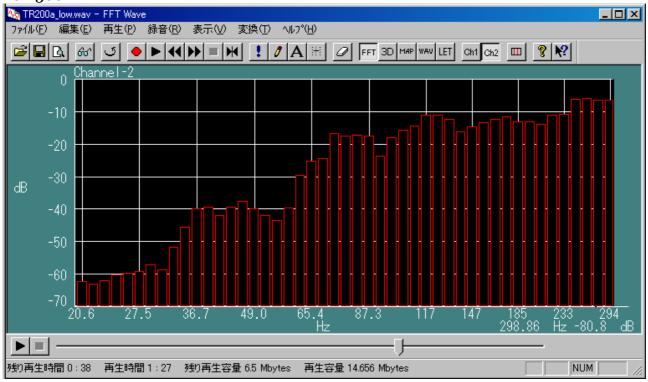
| Item          | Specificetion | Drawing  |
|---------------|---------------|--|
| Model ID      | TR200a        | Summer of Summer of  |
| Main chamber  | 33.6[L]       |  |
| Subchamber #1 | 14.0 [L]      |  |
| Subchamber #2 | 14.0 [L]      | G Section AA Section BB Section CC Section DD  |
| Subchamber #3 | 16.0[L]       | ]<br> E  |
| Duct #1       | 50 x 50 x 115 | 200 200 200 200 200 200 200 200 200 200  |
| Duct #2       | 50 x 50 x 132 |  |
| Duct #3       | 50 x 50 x 260 |  |
| Duct #4       | 50 x 50 x 132 |  |
| Duct #5       | 24 x 24 x 142 |  |
| Duct #6       | 24 x 24 x 182 |  |
|               |               | TR200a Assembly Section GG   |
|               |               | Material of this enclosure was 15 mm thickness combined panel wood plate (1920 x 910 x 15 2-pieces). |

Any questions should be asked to Shigeru Suzuki (mcapspeakers@gmail.com).

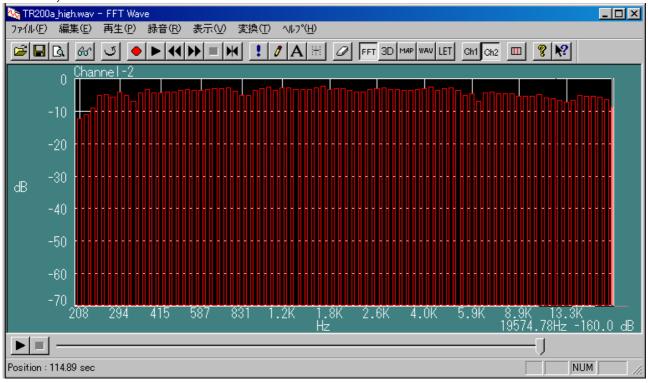
# $\begin{tabular}{ll} \it Multiple-Chamber A ligned in Parallel (MCAP) Speaker System \\ \it Application Report \end{tabular}$

### **Frequency Response**

### 20 - 300Hz



#### 200-20,000Hz



End of report