



Esoteric

Audio

Devices



EAD E170

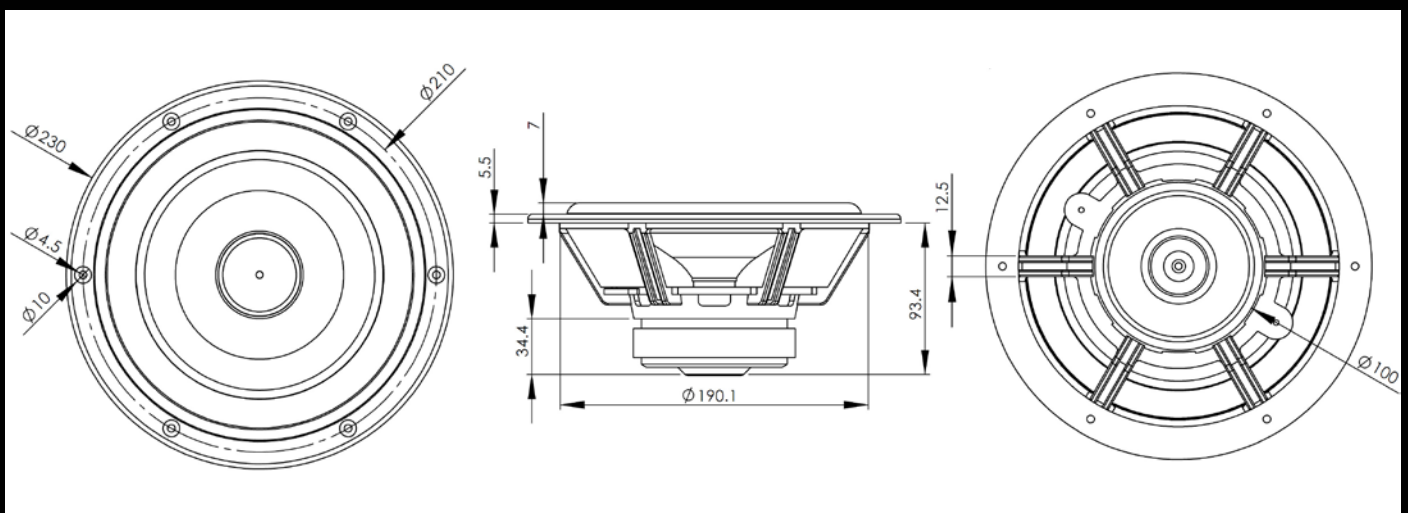
Nothing is so good that it can't be improved!
E170 has gone through a second face lift. Most noticeable is the new tailored aluminum chassis.

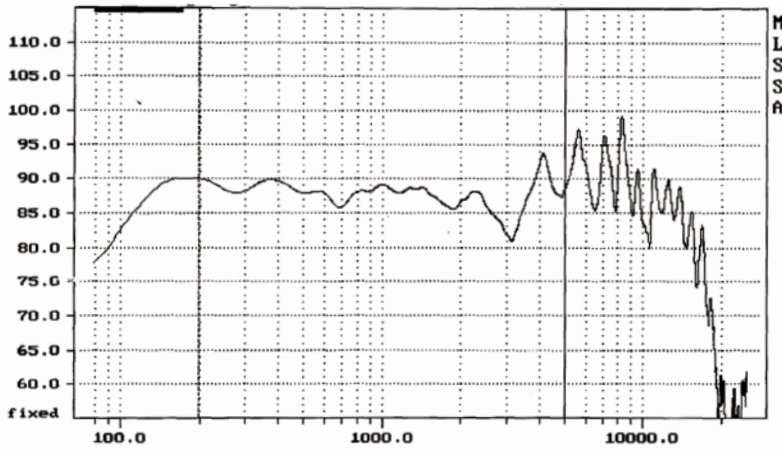
Then we added a new rim, spider, and a new stronger glue. This gave us a design that can take a lot of "abuse" with a more linear behaviour. E170 goes even deeper (24Hz) and extends up to around 15Khz, making it a very wide range bass unit which can be easily combined with a number of tweeters in a 2-way system. In combination with our new E60, you get numerous crossover options from 120 to 2,5Khz. Why not try a linear array of 4, 9 or even 16x E60 units for example?

We kept the dual coil and made Qt lower (0.437 in 80hm).

For the advanced designer, the dual coil gives a number of options, firstly by connecting the two coils in single, series or parallel mode (16,32 or 8 Ohm), but then also when connecting multiple drivers from 2 to endless linear arrays. By shorting one coil with a resistor for example, you can get even more options, controlling the Q. (Qts will come down to almost half by simply shortening the second coil).

E170 now comes with individual parameters included in each box!





Frequency

Parameters

Thiele/Small Parameters, 1 coil (16 ohm)

"Method: Fixed-Mmd (23.670 grams)"
 "OCR mode: Fixed (12.51 ohms)"
 "Area (Sd): 224.32 sq cm"
 MLSSA: Frequency Domain
 "Series resistance: 75.00 ohms"
 "Stimulus level: 3.83 volts"
 "SPLref reference-impedance: 8 ohms"
 "Large units (volume = liters, mass = grams)"
 0.584 "RMSE-free Ohms"
 24.281 "Fs Hz"
 12.510 "Re Ohms"
 51.535 "Res Ohms"
 4.014 "Qms"
 0.974 "Qes"
 0.784 "Qts"
 0.465 "L1 mH"
 0.752 "L2 mH"
 8.303 "R2 Ohms"
 0.000 "RMSE-load Ohms"
 118.747 "Vas(Sd) liters"
 25.571 "Mms (Sd) grams"
 1680.215 "Cms(Sd) iEM/Newton"
 7.077 "Bi(Sd) Tesla-M"
 82.304 "SPLref(Sd) dB"
 0.003 "Rub-index"
 X-max +/- 7.8mm (15.6mm p-p)
 Power60W cont. 100W Max. In music

Thiele/Small Parameters, 2 coils in parallel (8 ohm)

"Method: Fixed-Mmd (23.670 grams)"
 "OCR mode: Fixed (6.29 ohms)"
 "Area (Sd): 224.32 sq cm"
 MLSSA: Frequency Domain
 "Series resistance: 75.00 ohms"
 "Stimulus level: 3.83 volts"
 "SPLref reference impedance: 8 ohms"
 "Large units (volume = liters, mass = grams)"
 0.533 "RMSE-free Ohms"
 24.484 "Fs Hz"
 6.290 "Re Ohms"
 53.167 "Res Ohms"
 4.131 "Qms"
 0.489 "Qes"
 0.437 "Qts"
 0.460 "L1 mH"
 0.764 "L2 mH"
 8.523 "R2 Ohms"
 0.000 "RMSE-load Ohms"
 116.781 "Vas(Sd) liters"
 25.571 "Mms(Sd) grams"
 1652.402 "Cms(Sd) CEM/Newton"
 7.115 "Bi(Sd) Tesla-M"
 88.323 "SPLref(Sd) dB"
 0.003 "Rub-index"
 X-max +/- 7.8mm (15.6mm p-p)
 Power60W cont. 100W Max. In music

Thiele/Small Parameters, 2 coils series (32 Ohms)

"Method: Fixed-Mmd (23.670 grams)"
 "OCR mode: Fixed (25.20 ohms)"
 "Area (Sd): 224.32 sq cm"
 MLSSA: Frequency Domain
 "Series resistance: 75.00 ohms"
 "Stimulus level: 3.83 volts"
 "SPLref reference impedance: 8 ohms"
 "Large units (volume = liters, mass = grams)"
 2.269 "RMSE-free Ohms"
 24.196 "Fs Hz"
 25.200 "Re Ohms"
 209.011 "Res Ohms"
 3.970 "Qms"
 0.479 "Qes"
 0.427 "Qts"
 1.826 "L1 mH"
 3.080 "L2 mH"
 34.689 "R2 Ohms"
 0.000 "RMSE-load Ohms"
 119.582 "Vas (Sd) liters"
 25.571 "Mms(Sd) grams"
 1692.038 "Cms(Sd) GEM/Newton"
 14.306 "Bi(Sd) Tesla-M"
 82.334 "SPLref(Sd) dB"
 0.003 "Rub-index"
 X-max +/- 7.8mm (15.6mm p-p)
 Power 60W cont. 100W Max. In music

Test conditions:

Break in : 15min at 10V at resonance.

Equipment : MLSSA 10 WI Rev 8 with RCAI Box

Stimulus level for Parameter measurement : 3.83 V and 2.83 V for SPL.

Frequency plot (2 pi measurement) in flat baffle. Anechoic chamber 4 mtr width x 3 mtr depth. Walls lined up with 1 1/2' high density glass wool wedges.

Microphone : G.R.A.S. 1/2" Free Field Microphone 40AC with Preamp 26AK and **Power module**: 12AK

Temperature : 24 deg C, Humidity 80%

Fs Method : Fixed Mass

All parameters are preliminary and subject to change.