

Version 5.0 by Jeff Bagby

[illegible]

Active Circuit Response Designer

Circuit / Amp Name: **Dayton SP4A50** Parametric EQ: **Off**

Five Band Parametric Bass Equalizer

Band	1	2	3	4	5
Fc	21 Hz	32 Hz	42 Hz	52 Hz	62 Hz
Gain (dB)	0	0	0	0	0
Q	1	1	1	1	1
Shelf	0	0	0	0	0

Selectable Textbook High Pass Filter

Fc: **Selected Textbook Response** Load High Pass
 20 Hz First Order Butterworth High Pass Filter: **Off**

Optional Second Order Adjustable High Pass Filter - Stage One

Stage One: Fc: **Q** Gain (dB)
 30 Hz 2 0

Optional Second Order Adjustable High Pass Filter - Stage Two

Stage Two: Fc: **Q** Gain (dB)
 15 Hz 0.7 -3.1 dB

Selectable Textbook Low Pass Filter

Fc: **Textbook Response** Load Low Pass
 80 Hz Fourth Order Butterworth-Riley Low Pass Filter: **Off**

Linkwitz Transform - Bi-quad Phase Shifter

F0	G0	Fp	Gp	Gain (dB)
4 Hz	70 Hz	20 Hz	0.7	15.5 dB

Linkwitz: **ON**

Derived Driver, Box and System Data		Calculated Alignment Data	
Calculated Driver Parameters			
SPL 1 W / Meter (dB)	96.39	Effective Qtc	0.701
SPL 2.83V / Meter (dB)	97.52	Sealed Fc (Hz)	62.07
System DCR (Ohms)	5.20	EBP (Fs/Ges)	81.68
Applied Voltage (V)	13.08		
Efficiency No (%)	2.19%		
Qts (with series R)	3.385	Max Output W / Filter	110.65
Cms (mm/N)	0.125	Relative -3 dB Point	30.55 Hz
Mms (kg)	0.186	Relative -6 dB Point	22.95 Hz
Rms (kg/s)	4.706	Relative -10 dB Point	17.4 Hz
BL (kgm/s²)	22.287		
Max Output (dB)	110.69		

Box Volume And Vent Calculator		Transfer Vab	Transfer Port
Height (Outside Dim)	42	English Units: Inches	
Width (Outside Dim)	14		
Depth (Outside Dim)	12		
Wall Thickness	0.75	Port Diameter	2
Baffle Thickness	0.75	Port Length	8.25
Volume - Vab (Liters)	86.63	Number of Ports	1
Volume - Vab (Ft³)	3.06	Tuned Port Fb	16.8 Hz

