LOUDSPEAKER "L" LOSS PADS

dB	4 ohms		8 ohms		16 ohms	
loss	R1	R2	R1	R2	R1	R2
1	.44	32.8	.87	65.6	1.74	131
2	.82	15.5	1.65	30.9	3.29	61.8
3	1.17	9.70	2.34	19.4	4.67	38.8
4	1.48	6.84	2.95	13.7	5.91	27.4
5	1.75	5.14	3.50	10.3	7.00	20.6
6	2.00	4.02	3.99	8.04	7.98	16.1
7	2.21	3.23	4.43	6.46	8.85	12.9
8	2.41	2.65	4.82	5.29	9.63	10.6
9	2.58	2.20	5.16	4.40	10.3	8.80
10	2.74	1.85	5.47	3.70	10.9	7.40
11	2.87	1.57	5.75	3.14	11.5	6.28
12	3.00	1.34	5.99	2.68	12.0	5.37
13	3.11	1.15	6.21	2.31	12.4	4.62
14	3.20	1.00	6.40	1.99	12.8	3.99
15	3.29	.87	6.58	1.73	13.2	3.46
16	3.37	.75	6.73	1.51	13.5	3.01
17	3.44	.66	6.87	1.32	13.7	2.63
18	3.50	.58	6.99	1.15	14.0	2.30
19	3.55	.51	7.10	1.01	14.2	2.02
20	3.60	.44	7.20	.89	14.4	1.78

Loss pads are useful for passive crossover design to adjust the relative output levels of system drivers of differing sensitivities, for attenuation of horns in clusters driven by single amplifiers, and so on.

The circuit used to produce attenuation is the same as that produced by conventional rotary type variable L-pads but offer fixed resistor stability in trade for not being adjustable.

To implement a fixed L-pad attenuator, use the rule of thumb that the two resistors should have a wattage rating equal to the available power divided by the total resistor value and then multiplied by the value of each individual resistor, for example, a 6 dB pad for an 8-ohm driver driven by a 100 watt source calls for an 8 and a 4 ohm resistor. The required power rating of each resistor is found by dividing 100 watts by 12 (the total ohms of both resistors), and then multiplying the resulting number (8.33) by 8 (66.7) and then by 4 (33.3). To check on yourself, add the power ratings you get for the two resistors, and you should get the original power rating (100 watts for this example).