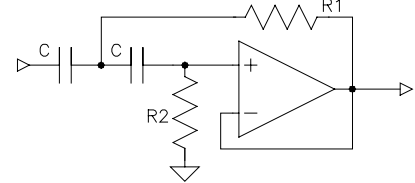


BRYSTON 10B-LR Crossover Additional Frequency/Resistor Tables

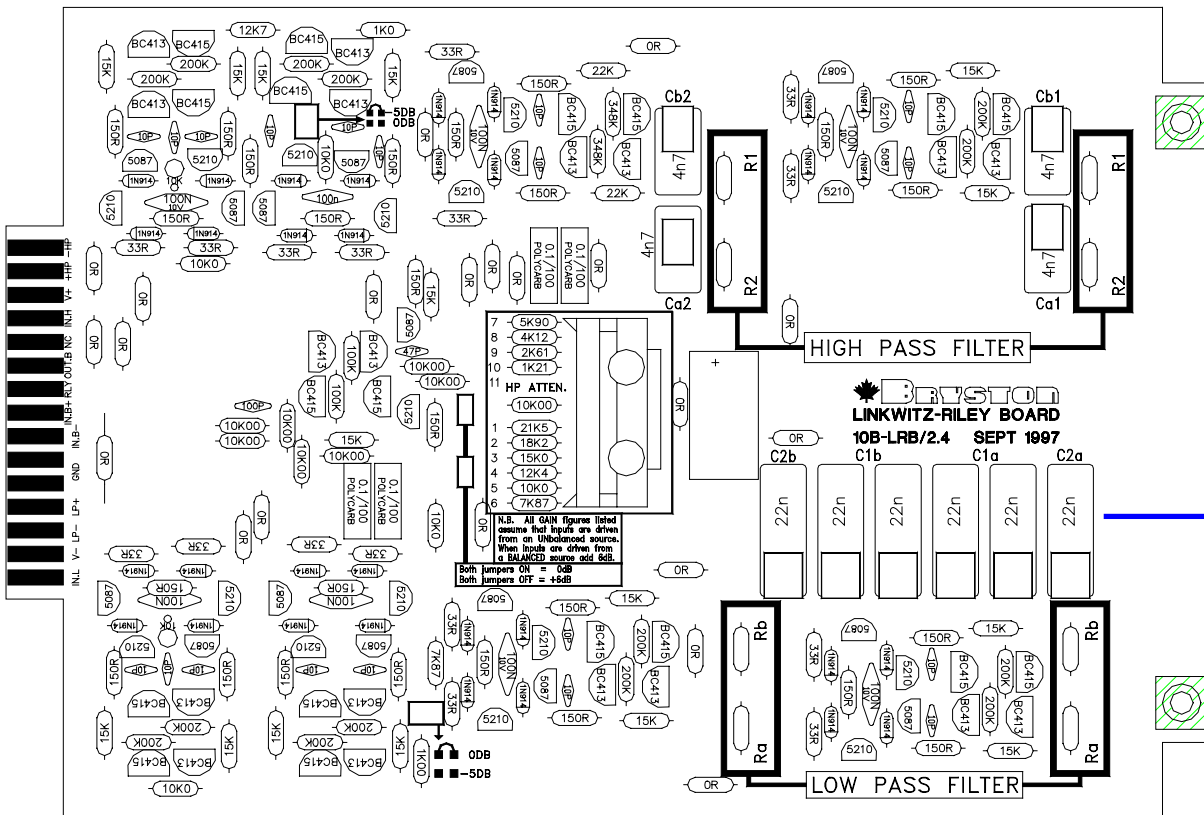
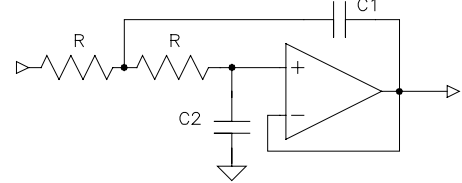
Regarding 10B-LR models: As a Linkwitz-Riley crossover filter is formed by cascading two 2nd order filters, use only the 2nd order tables (pages 2-1 to 2-3) in determining filter values.

Due to ongoing difficulty in obtaining precision polystyrene capacitors in all values, we have had to substitute capacitor values from time to time. Therefore, you may notice that the low pass capacitors (C1a, C1b, C2a & C2b ~ six axial capacitors in a row in the front left quadrant of the board) may be either 20nF, 22nF or 24nF. Also, please note that C1 is actually formed by paralleling two capacitors of the same value. Parallel capacitors are also used, on occasion, to produce other values of capacitance where needed. The value of two capacitors in parallel is equal to the sum of the two capacitances. Since the crossover point of the filter is determined by the combination of the capacitor *and* resistor values, altering the capacitor values slightly can be easily compensated for by similarly altering the relevant resistor values. Therefore, we have supplied these additional tables specifying resistors values when 20n and 24n caps are used in addition to the 10B-SUB and 10B-STD tables which can be used when 22nF caps are used in the C1 and C2 positions. Be sure to inspect the crossover channel boards and confirm which low pass capacitor value is used before selecting resistor values from the *appropriate* table.

2nd Order HIGH PASS



2nd Order LOW PASS



BRYSTON 10B-LR Crossover Additional Frequency/Resistor Tables

1% resistors from 499R to 301K and the corresponding crossover frequencies for each. Calculations are based on the following capacitor values:

LOW pass
2nd order: C1=40n, C2=20n
HIGH pass
Ca & Cb=4n7

2nd ORDER FILTER FREQUENCY/RESISTOR TABLES for BRYSTON 10B CROSSOVER

Low pass: C1=40n, C2=20n | High Pass: C(ab)=4n7 Pg.2a-1

CROSSOVER FREQ.	LOW PASS Ra ,Rb	HIGH PASS R1	R2	CROSSOVER FREQ.	LOW PASS Ra ,Rb	HIGH PASS R1	R2
11278 Hz	499R	2K100	4K220	11013 Hz	511R	2K150	4K320
10761 Hz	523R	2K210	4K420	10500 Hz	536R	2K260	4K530
10251 Hz	549R	2K320	4K640	10014 Hz	562R	2K370	4K750
9771 Hz	576R	2K430	4K870	9539 Hz	590R	2K490	4K990
9318 Hz	604R	2K550	5K110	9092 Hz	619R	2K610	5K230
8877 Hz	634R	2K670	5K360	8672 Hz	649R	2K740	5K490
8463 Hz	665R	2K800	5K620	8264 Hz	681R	2K870	5K760
8063 Hz	698R	2K940	5K900	7871 Hz	715R	3K010	6K040
7688 Hz	732R	3K090	6K190	7504 Hz	750R	3K160	6K340
7328 Hz	768R	3K240	6K490	7151 Hz	787R	3K320	6K650
6982 Hz	806R	3K400	6K810	6822 Hz	825R	3K480	6K980
6660 Hz	845R	3K570	7K150	6499 Hz	866R	3K650	7K320
6345 Hz	887R	3K740	7K500	6191 Hz	909R	3K830	7K680
6045 Hz	931R	3K920	7K870	5905 Hz	953R	4K020	8K060
5766 Hz	976R	4K120	8K250	5628 Hz	1K000	4K220	8K450
5517 Hz	1K020	4K320	8K660	5360 Hz	1K050	4K420	8K870
5260 Hz	1K070	4K530	9K090	5116 Hz	1K100	4K640	9K310
4980 Hz	1K130	4K750	9K530	4894 Hz	1K150	4K870	9K760
4769 Hz	1K180	4K990	10K000	4651 Hz	1K210	5K110	10K200
4539 Hz	1K240	5K230	10K500	4431 Hz	1K270	5K360	10K700
4329 Hz	1K300	5K490	11K000	4231 Hz	1K330	5K620	11K300
4108 Hz	1K370	5K760	11K500	4020 Hz	1K400	5K900	11K800
3936 Hz	1K430	6K040	12K100	3828 Hz	1K470	6K190	12K400
3752 Hz	1K500	6K340	12K700	3654 Hz	1K540	6K490	13K000
3562 Hz	1K580	6K650	13K300	3474 Hz	1K620	6K810	13K700
3411 Hz	1K650	6K980	14K000	3330 Hz	1K690	7K150	14K300
3234 Hz	1K740	7K320	14K700	3162 Hz	1K780	7K500	15K000
3092 Hz	1K820	7K680	15K400	3010 Hz	1K870	7K870	15K800
2947 Hz	1K910	8K060	16K200	2871 Hz	1K960	8K250	16K500
2814 Hz	2K000	8K450	16K900	2745 Hz	2K050	8K660	17K400
2680 Hz	2K100	8K870	17K800	2618 Hz	2K150	9K090	18K200
2547 Hz	2K210	9K310	18K700	2490 Hz	2K260	9K530	19K100
2426 Hz	2K320	10K000	20K000	2375 Hz	2K370	10K000	20K000
2316 Hz	2K430	10K200	20K500	2260 Hz	2K490	10K500	21K000
2207 Hz	2K550	10K700	21K500	2156 Hz	2K610	11K000	22K100
2108 Hz	2K670	11K300	22K600	2054 Hz	2K740	11K800	23K700
2010 Hz	2K800	11K800	23K700	1961 Hz	2K870	12K100	24K300
1914 Hz	2K940	12K400	24K900	1870 Hz	3K010	12K700	25K500
1821 Hz	3K090	13K000	26K100	1781 Hz	3K160	13K300	26K700
1737 Hz	3K240	13K700	27K400	1695 Hz	3K320	14K000	28K000
1655 Hz	3K400	14K300	28K700	1617 Hz	3K480	14K700	29K400
1576 Hz	3K570	15K000	30K100	1542 Hz	3K650	15K400	30K900
1505 Hz	3K740	15K800	31K600	1469 Hz	3K830	16K200	32K400
1436 Hz	3K920	16K500	33K200	1400 Hz	4K020	16K900	34K000
1366 Hz	4K120	17K400	34K800	1334 Hz	4K220	17K800	35K700
1303 Hz	4K320	18K200	36K500	1273 Hz	4K420	18K700	37K400
1242 Hz	4K530	19K100	38K300	1213 Hz	4K640	19K600	39K200
1185 Hz	4K750	20K000	40K200	1156 Hz	4K870	20K500	41K200
1128 Hz	4K990	21K000	42K200	1101 Hz	5K110	21K500	43K200

BRYSTON 10B-LR Crossover Additional Frequency/Resistor Tables

2nd ORDER FILTER FREQUENCY/RESISTOR TABLES for BRYSTON 10B CROSSOVER

Low pass: C1=40n, C2=20n | High Pass: C(ab)=4n7

Pg. 2a-2

CROSSOVER FREQ.	LOW PASS Ra, Rb	HIGH PASS R1	HIGH PASS R2	CROSSOVER FREQ.	LOW PASS Ra, Rb	HIGH PASS R1	HIGH PASS R2
1076 Hz	5K230	22K100	44K200	1050 Hz	5K360	22K600	45K300
1025 Hz	5K490	23K200	46K400	1001 Hz	5K620	23K700	47K500
977 Hz	5K760	24K300	48K700	954 Hz	5K900	24K900	49K900
932 Hz	6K040	25K500	51K100	909 Hz	6K190	26K100	52K300
888 Hz	6K340	26K700	53K600	867 Hz	6K490	27K400	54K900
846 Hz	6K650	28K000	56K200	826 Hz	6K810	28K700	57K600
806 Hz	6K980	29K400	59K000	787 Hz	7K150	30K100	60K400
769 Hz	7K320	30K900	61K900	750 Hz	7K500	31K600	63K400
733 Hz	7K680	32K400	64K900	715 Hz	7K870	33K200	66K500
698 Hz	8K060	34K000	68K100	682 Hz	8K250	34K800	69K800
666 Hz	8K450	35K700	71K500	650 Hz	8K660	36K500	73K200
634 Hz	8K870	37K400	75K000	619 Hz	9K090	38K300	76K800
604 Hz	9K310	39K200	78K700	591 Hz	9K530	40K200	80K600
577 Hz	9K760	41K200	82K500	563 Hz	10K000	42K200	84K500
552 Hz	10K200	43K200	86K600	536 Hz	10K500	44K200	88K700
526 Hz	10K700	45K300	90K900	512 Hz	11K000	46K400	93K100
498 Hz	11K300	47K500	95K300	489 Hz	11K500	48K700	97K600
477 Hz	11K800	49K900	100K00	465 Hz	12K100	51K100	102K00
454 Hz	12K400	52K300	105K00	443 Hz	12K700	53K600	107K00
433 Hz	13K000	54K900	110K00	423 Hz	13K300	56K200	113K00
411 Hz	13K700	57K600	115K00	402 Hz	14K000	59K000	118K00
394 Hz	14K300	60K400	121K00	383 Hz	14K700	61K900	124K00
375 Hz	15K000	63K400	127K00	365 Hz	15K400	64K900	130K00
356 Hz	15K800	66K500	133K00	347 Hz	16K200	68K100	137K00
341 Hz	16K500	69K800	140K00	333 Hz	16K900	71K500	143K00
323 Hz	17K400	73K200	147K00	316 Hz	17K800	75K000	150K00
309 Hz	18K200	76K800	154K00	301 Hz	18K700	78K700	158K00
295 Hz	19K100	80K600	162K00	287 Hz	19K600	82K500	165K00
281 Hz	20K000	84K500	169K00	275 Hz	20K500	86K600	174K00
268 Hz	21K000	88K700	178K00	262 Hz	21K500	90K900	182K00
255 Hz	22K100	93K100	187K00	249 Hz	22K600	95K300	191K00
243 Hz	23K200	100K00	200K00	237 Hz	23K700	100K00	200K00
232 Hz	24K300	102K00	205K00	226 Hz	24K900	105K00	210K00
221 Hz	25K500	107K00	215K00	216 Hz	26K100	110K00	221K00
211 Hz	26K700	113K00	226K00	205 Hz	27K400	118K00	237K00
201 Hz	28K000	118K00	237K00	196 Hz	28K700	121K00	243K00
191 Hz	29K400	124K00	249K00	187 Hz	30K100	127K00	255K00
182 Hz	30K900	130K00	261K00	178 Hz	31K600	133K00	267K00
174 Hz	32K400	137K00	274K00	170 Hz	33K200	140K00	280K00
166 Hz	34K000	143K00	287K00	162 Hz	34K800	147K00	294K00
158 Hz	35K700	150K00	301K00	154 Hz	36K500	154K00	309K00
150 Hz	37K400	158K00	316K00	147 Hz	38K300	162K00	324K00
144 Hz	39K200	165K00	332K00	140 Hz	40K200	169K00	340K00
137 Hz	41K200	174K00	348K00	133 Hz	42K200	178K00	357K00
130 Hz	43K200	182K00	365K00	127 Hz	44K200	187K00	374K00
124 Hz	45K300	191K00	383K00	121 Hz	46K400	196K00	392K00
118 Hz	47K500	200K00	402K00	116 Hz	48K700	205K00	412K00
113 Hz	49K900	210K00	422K00	110 Hz	51K100	215K00	432K00
108 Hz	52K300	221K00	442K00	105 Hz	53K600	226K00	453K00
103 Hz	54K900	232K00	464K00	100 Hz	56K200	237K00	475K00
98 Hz	57K600	243K00	487K00	95 Hz	59K000	249K00	499K00

BRYSTON 10B-LR Crossover Additional Frequency/Resistor Tables

2nd ORDER FILTER FREQUENCY/RESISTOR TABLES for BRYSTON 10B CROSSOVER

Low pass: C1=40n, C2=20n | High Pass: C(ab)=4n7

Pg.2a-3

CROSSOVER FREQ.	LOW PASS Ra, Rb	HIGH PASS R1 R2	CROSSOVER FREQ.	LOW PASS Ra, Rb	HIGH PASS R1 R2
93 Hz	60K400	255K00 511K00	91 Hz	61K900	261K00 523K00
89 Hz	63K400	267K00 536K00	87 Hz	64K900	274K00 549K00
85 Hz	66K500	280K00 562K00	83 Hz	68K100	287K00 576K00
81 Hz	69K800	294K00 590K00	79 Hz	71K500	301K00 604K00
77 Hz	73K200	309K00 619K00	75 Hz	75K000	316K00 634K00
73 Hz	76K800	324K00 649K00	72 Hz	78K700	332K00 665K00
70 Hz	80K600	340K00 681K00	68 Hz	82K500	348K00 698K00
67 Hz	84K500	357K00 715K00	65 Hz	86K600	365K00 732K00
63 Hz	88K700	374K00 750K00	62 Hz	90K900	383K00 768K00
60 Hz	93K100	392K00 787K00	59 Hz	95K300	402K00 806K00
58 Hz	97K600	412K00 825K00	56 Hz	100K00	422K00 845K00
55 Hz	102K00	432K00 866K00	54 Hz	105K00	442K00 887K00
53 Hz	107K00	453K00 909K00	51 Hz	110K00	464K00 931K00
50 Hz	113K00	475K00 953K00	49 Hz	115K00	487K00 976K00
48 Hz	118K00	499K00 1M0000	47 Hz	121K00	511K00 1M0200
45 Hz	124K00	523K00 1M0500	44 Hz	127K00	536K00 1M0700
43 Hz	130K00	549K00 1M1000	42 Hz	133K00	562K00 1M1300
41 Hz	137K00	576K00 1M1500	40 Hz	140K00	590K00 1M1800
39 Hz	143K00	604K00 1M2100	38 Hz	147K00	619K00 1M2400
38 Hz	150K00	634K00 1M2700	37 Hz	154K00	649K00 1M3000
36 Hz	158K00	665K00 1M3300	35 Hz	162K00	681K00 1M3700
34 Hz	165K00	698K00 1M4000	33 Hz	169K00	715K00 1M4300
32 Hz	174K00	732K00 1M4700	32 Hz	178K00	750K00 1M5000
31 Hz	182K00	768K00 1M5400	30 Hz	187K00	787K00 1M5800
29 Hz	191K00	806K00 1M6200	29 Hz	196K00	825K00 1M6500
28 Hz	200K00	845K00 1M6900	27 Hz	205K00	866K00 1M7400
27 Hz	210K00	887K00 1M7800	26 Hz	215K00	909K00 1M8200
25 Hz	221K00	931K00 1M8700	25 Hz	226K00	953K00 1M9100
24 Hz	232K00	1M0000 2M0000	24 Hz	237K00	1M0000 2M0000
23 Hz	243K00	1M0200 2M0500	23 Hz	249K00	1M0500 2M1000
22 Hz	255K00	1M0700 2M1500	22 Hz	261K00	1M1000 2M2100
21 Hz	267K00	1M1300 2M2600	21 Hz	274K00	1M1800 2M3700
20 Hz	280K00	1M1800 2M3700	20 Hz	287K00	1M2100 2M4300
19 Hz	294K00	1M2400 2M4900	19 Hz	301K00	1M2700 2M5500

Formulas for 2nd order LOW pass filter are as follows:

$$\begin{aligned}
 PI &= 3.14159 & C &= 1 / (2 * PI * Fc * R) \\
 C1 &= 1.414 * C & C2 &= .707 * C \\
 R &= Ra = Rb = 1 / (2 * PI * Fc * C) \\
 Fc &= (1 / \text{SQR}(C1 * C2 * Ra * Rb)) / (2 * PI) = (1 / \text{SQR}(C^2 * R^2)) / (2 * PI)
 \end{aligned}$$

Formulas for 2nd order HIGH pass filter are as follows:

$$\begin{aligned}
 PI &= 3.14159 & C &= Ca = Cb = 1 / (2 * PI * Fc * R) \\
 R &= 1 / (2 * PI * Fc * C) & R1 &= .707 * R \\
 R2 &= 1.414 * R \\
 Fc &= (1 / \text{SQR}(Ca * Cb * R1 * R2)) / (2 * PI) = (1 / \text{SQR}(C^2 * R^2)) / (2 * PI)
 \end{aligned}$$

BRYSTON 10B-LR Crossover Additional Frequency/Resistor Tables

2nd ORDER FILTER FREQUENCY/RESISTOR TABLES for BRYSTON 10B CROSSOVER

Low pass: C1=44n, C2=22n | High Pass: C(ab)=4n7

Pg. 2B-1

CROSSOVER FREQ.	LOW PASS Ra, Rb	HIGH PASS R1	HIGH PASS R2	CROSSOVER FREQ.	LOW PASS Ra, Rb	HIGH PASS R1	HIGH PASS R2
10253 Hz	499R	2K320	4K640	10012 Hz	511R	2K370	4K750
9782 Hz	523R	2K430	4K870	9545 Hz	536R	2K490	4K990
9319 Hz	549R	2K550	5K110	9104 Hz	562R	2K610	5K230
8882 Hz	576R	2K670	5K360	8672 Hz	590R	2K740	5K490
8471 Hz	604R	2K800	5K620	8265 Hz	619R	2K870	5K760
8070 Hz	634R	2K940	5K900	7883 Hz	649R	3K010	6K040
7694 Hz	665R	3K090	6K190	7513 Hz	681R	3K160	6K340
7330 Hz	698R	3K240	6K490	7156 Hz	715R	3K320	6K650
6989 Hz	732R	3K400	6K810	6822 Hz	750R	3K480	6K980
6662 Hz	768R	3K570	7K150	6501 Hz	787R	3K650	7K320
6348 Hz	806R	3K740	7K500	6201 Hz	825R	3K830	7K680
6055 Hz	845R	3K920	7K870	5908 Hz	866R	4K020	8K060
5768 Hz	887R	4K120	8K250	5628 Hz	909R	4K220	8K450
5495 Hz	931R	4K320	8K660	5369 Hz	953R	4K420	8K870
5242 Hz	976R	4K530	9K090	5116 Hz	1K000	4K640	9K310
5016 Hz	1K020	4K750	9K530	4873 Hz	1K050	4K870	9K760
4782 Hz	1K070	4K990	10K000	4651 Hz	1K100	5K110	10K200
4528 Hz	1K130	5K230	10K500	4449 Hz	1K150	5K360	10K700
4336 Hz	1K180	5K490	11K000	4228 Hz	1K210	5K620	11K300
4126 Hz	1K240	5K760	11K500	4029 Hz	1K270	5K900	11K800
3936 Hz	1K300	6K040	12K100	3847 Hz	1K330	6K190	12K400
3734 Hz	1K370	6K340	12K700	3654 Hz	1K400	6K490	13K000
3578 Hz	1K430	6K650	13K300	3480 Hz	1K470	6K810	13K700
3411 Hz	1K500	6K980	14K000	3322 Hz	1K540	7K150	14K300
3238 Hz	1K580	7K320	14K700	3158 Hz	1K620	7K500	15K000
3101 Hz	1K650	7K680	15K400	3027 Hz	1K690	7K870	15K800
2940 Hz	1K740	8K060	16K200	2874 Hz	1K780	8K250	16K500
2811 Hz	1K820	8K450	16K900	2736 Hz	1K870	8K660	17K400
2679 Hz	1K910	8K870	17K800	2610 Hz	1K960	9K090	18K200
2558 Hz	2K000	9K310	18K700	2496 Hz	2K050	9K530	19K100
2436 Hz	2K100	10K000	20K000	2380 Hz	2K150	10K000	20K000
2315 Hz	2K210	10K200	20K500	2264 Hz	2K260	10K500	21K000
2205 Hz	2K320	11K000	22K100	2159 Hz	2K370	11K000	22K100
2105 Hz	2K430	11K300	22K600	2055 Hz	2K490	11K800	23K700
2006 Hz	2K550	11K800	23K700	1960 Hz	2K610	12K100	24K300
1916 Hz	2K670	12K400	24K900	1867 Hz	2K740	12K700	25K500
1827 Hz	2K800	13K000	26K100	1783 Hz	2K870	13K300	26K700
1740 Hz	2K940	13K700	27K400	1700 Hz	3K010	14K000	28K000
1656 Hz	3K090	14K300	28K700	1619 Hz	3K160	14K700	29K400
1579 Hz	3K240	15K000	30K100	1541 Hz	3K320	15K400	30K900
1505 Hz	3K400	15K800	31K600	1470 Hz	3K480	16K200	32K400
1433 Hz	3K570	16K900	34K000	1402 Hz	3K650	16K900	34K000
1368 Hz	3K740	17K400	34K800	1336 Hz	3K830	17K800	35K700
1305 Hz	3K920	18K200	36K500	1273 Hz	4K020	18K700	37K400
1242 Hz	4K120	19K100	38K300	1212 Hz	4K220	19K600	39K200

BRYSTON 10B-LR Crossover Additional Frequency/Resistor Tables

2nd ORDER FILTER FREQUENCY/RESISTOR TABLES for BRYSTON 10B CROSSOVER

Low pass: C1=44n, C2=22n | High Pass: C(ab)=4n7

Pg. 2B-2

CROSSOVER FREQ.	LOW PASS Ra, Rb	HIGH PASS R1	HIGH PASS R2	CROSSOVER FREQ.	LOW PASS Ra, Rb	HIGH PASS R1	HIGH PASS R2
1184 Hz	4K320	20K000	40K200	1158 Hz	4K420	20K500	41K200
1129 Hz	4K530	21K000	42K200	1103 Hz	4K640	21K500	43K200
1077 Hz	4K750	22K100	44K200	1051 Hz	4K870	22K600	45K300
1025 Hz	4K990	23K200	46K400	1001 Hz	5K110	23K700	47K500
978 Hz	5K230	24K300	48K700	955 Hz	5K360	24K900	49K900
932 Hz	5K490	25K500	51K100	910 Hz	5K620	26K100	52K300
888 Hz	5K760	26K700	53K600	867 Hz	5K900	27K400	54K900
847 Hz	6K040	28K000	56K200	827 Hz	6K190	28K700	57K600
807 Hz	6K340	29K400	59K000	788 Hz	6K490	30K100	60K400
769 Hz	6K650	30K900	61K900	751 Hz	6K810	31K600	63K400
733 Hz	6K980	32K400	64K900	716 Hz	7K150	33K200	66K500
699 Hz	7K320	34K000	68K100	682 Hz	7K500	34K800	69K800
666 Hz	7K680	35K700	71K500	650 Hz	7K870	36K500	73K200
635 Hz	8K060	37K400	75K000	620 Hz	8K250	38K300	76K800
605 Hz	8K450	39K200	78K700	591 Hz	8K660	40K200	80K600
577 Hz	8K870	41K200	82K500	563 Hz	9K090	42K200	84K500
550 Hz	9K310	43K200	86K600	537 Hz	9K530	44K200	88K700
524 Hz	9K760	45K300	90K900	512 Hz	10K000	46K400	93K100
502 Hz	10K200	47K500	95K300	487 Hz	10K500	48K700	97K600
478 Hz	10K700	49K900	100K00	465 Hz	11K000	51K100	102K00
453 Hz	11K300	52K300	105K00	445 Hz	11K500	53K600	107K00
434 Hz	11K800	54K900	110K00	423 Hz	12K100	56K200	113K00
413 Hz	12K400	57K600	115K00	403 Hz	12K700	59K000	118K00
394 Hz	13K000	60K400	121K00	385 Hz	13K300	61K900	124K00
373 Hz	13K700	63K400	127K00	365 Hz	14K000	64K900	130K00
358 Hz	14K300	66K500	133K00	348 Hz	14K700	68K100	137K00
341 Hz	15K000	69K800	140K00	332 Hz	15K400	71K500	143K00
324 Hz	15K800	73K200	147K00	316 Hz	16K200	75K000	150K00
310 Hz	16K500	76K800	154K00	303 Hz	16K900	78K700	158K00
294 Hz	17K400	80K600	162K00	287 Hz	17K800	82K500	165K00
281 Hz	18K200	84K500	169K00	274 Hz	18K700	86K600	174K00
268 Hz	19K100	88K700	178K00	261 Hz	19K600	90K900	182K00
256 Hz	20K000	93K100	187K00	250 Hz	20K500	95K300	191K00
244 Hz	21K000	100K00	200K00	238 Hz	21K500	100K00	200K00
232 Hz	22K100	102K00	205K00	226 Hz	22K600	105K00	210K00
221 Hz	23K200	110K00	221K00	216 Hz	23K700	110K00	221K00
211 Hz	24K300	113K00	226K00	205 Hz	24K900	118K00	237K00
201 Hz	25K500	118K00	237K00	196 Hz	26K100	121K00	243K00
192 Hz	26K700	124K00	249K00	187 Hz	27K400	127K00	255K00
183 Hz	28K000	130K00	261K00	178 Hz	28K700	133K00	267K00
174 Hz	29K400	137K00	274K00	170 Hz	30K100	140K00	280K00
166 Hz	30K900	143K00	287K00	162 Hz	31K600	147K00	294K00
158 Hz	32K400	150K00	301K00	154 Hz	33K200	154K00	309K00
150 Hz	34K000	158K00	316K00	147 Hz	34K800	162K00	324K00
143 Hz	35K700	169K00	340K00	140 Hz	36K500	169K00	340K00
137 Hz	37K400	174K00	348K00	134 Hz	38K300	178K00	357K00
131 Hz	39K200	182K00	365K00	127 Hz	40K200	187K00	374K00
124 Hz	41K200	191K00	383K00	121 Hz	42K200	196K00	392K00
118 Hz	43K200	200K00	402K00	116 Hz	44K200	205K00	412K00
113 Hz	45K300	210K00	422K00	110 Hz	46K400	215K00	432K00
108 Hz	47K500	221K00	442K00	105 Hz	48K700	226K00	453K00
103 Hz	49K900	232K00	464K00	100 Hz	51K100	237K00	475K00
98 Hz	52K300	243K00	487K00	95 Hz	53K600	249K00	499K00
93 Hz	54K900	255K00	511K00	91 Hz	56K200	261K00	523K00
89 Hz	57K600	267K00	536K00	87 Hz	59K000	274K00	549K00

BRYSTON 10B-LR Crossover Additional Frequency/Resistor Tables

2nd ORDER FILTER FREQUENCY/RESISTOR TABLES for BRYSTON 10B CROSSOVER

Low pass: C1=44n, C2=22n | High Pass: C(ab)=4n7

Pg. 2B-3

CROSSOVER FREQ.	LOW PASS Ra ,Rb	HIGH PASS R1 R2	CROSSOVER FREQ.	LOW PASS Ra ,Rb	HIGH PASS R1 R2
85 Hz	60K400	280K00 562K00	83 Hz	61K900	287K00 576K00
81 Hz	63K400	294K00 590K00	79 Hz	64K900	301K00 604K00
77 Hz	66K500	309K00 619K00	75 Hz	68K100	316K00 634K00
73 Hz	69K800	324K00 649K00	72 Hz	71K500	332K00 665K00
70 Hz	73K200	340K00 681K00	68 Hz	75K000	348K00 698K00
67 Hz	76K800	357K00 715K00	65 Hz	78K700	365K00 732K00
63 Hz	80K600	374K00 750K00	62 Hz	82K500	383K00 768K00
61 Hz	84K500	392K00 787K00	59 Hz	86K600	402K00 806K00
58 Hz	88K700	412K00 825K00	56 Hz	90K900	422K00 845K00
55 Hz	93K100	432K00 866K00	54 Hz	95K300	442K00 887K00
52 Hz	97K600	453K00 909K00	51 Hz	100K00	464K00 931K00
50 Hz	102K00	475K00 953K00	49 Hz	105K00	487K00 976K00
48 Hz	107K00	499K00 1M0000	47 Hz	110K00	511K00 1M0200
45 Hz	113K00	523K00 1M0500	44 Hz	115K00	536K00 1M0700
43 Hz	118K00	549K00 1M1000	42 Hz	121K00	562K00 1M1300
41 Hz	124K00	576K00 1M1500	40 Hz	127K00	590K00 1M1800
39 Hz	130K00	604K00 1M2100	38 Hz	133K00	619K00 1M2400
37 Hz	137K00	634K00 1M2700	37 Hz	140K00	649K00 1M3000
36 Hz	143K00	665K00 1M3300	35 Hz	147K00	681K00 1M3700
34 Hz	150K00	698K00 1M4000	33 Hz	154K00	715K00 1M4300
32 Hz	158K00	732K00 1M4700	32 Hz	162K00	750K00 1M5000
31 Hz	165K00	768K00 1M5400	30 Hz	169K00	787K00 1M5800
29 Hz	174K00	806K00 1M6200	29 Hz	178K00	825K00 1M6500
28 Hz	182K00	845K00 1M6900	27 Hz	187K00	866K00 1M7400
27 Hz	191K00	887K00 1M7800	26 Hz	196K00	909K00 1M8200
26 Hz	200K00	931K00 1M8700	25 Hz	205K00	953K00 1M9100
24 Hz	210K00	1M0000 2M0000	24 Hz	215K00	1M0000 2M0000
23 Hz	221K00	1M0200 2M0500	23 Hz	226K00	1M0500 2M1000
22 Hz	232K00	1M1000 2M2100	22 Hz	237K00	1M1000 2M2100
21 Hz	243K00	1M1300 2M2600	21 Hz	249K00	1M1800 2M3700
20 Hz	255K00	1M1800 2M3700	20 Hz	261K00	1M2100 2M4300
19 Hz	267K00	1M2400 2M4900	19 Hz	274K00	1M2700 2M5500
18 Hz	280K00	1M3000 2M6100	18 Hz	287K00	1M3300 2M6700
17 Hz	294K00	1M3700 2M7400	17 Hz	301K00	1M4000 2M8000

Formulas for 2nd order LOW pass filter are as follows:

$$\begin{aligned}
 PI &= 3.14159 & C &= 1 / (2 * PI * Fc * R) \\
 C1 &= 1.414 * C & C2 &= .707 * C \\
 R &= Ra = Rb = 1 / (2 * PI * Fc * C) \\
 Fc &= (1 / \text{SQR}(C1 * C2 * Ra * Rb)) / (2 * PI) = (1 / \text{SQR}(C^2 * R^2)) / (2 * PI)
 \end{aligned}$$

Formulas for 2nd order HIGH pass filter are as follows:

$$\begin{aligned}
 PI &= 3.14159 & C &= Ca = Cb = 1 / (2 * PI * Fc * R) \\
 R &= 1 / (2 * PI * Fc * C) & R1 &= .707 * R \\
 R2 &= 1.414 * R \\
 Fc &= (1 / \text{SQR}(Ca * Cb * R1 * R2)) / (2 * PI) = (1 / \text{SQR}(C^2 * R^2)) / (2 * PI)
 \end{aligned}$$

BRYSTON 10B-LR Crossover Additional Frequency/Resistor Tables

2nd ORDER FILTER FREQUENCY/RESISTOR TABLES for BRYSTON 10B CROSSOVER

Low pass: C1=48n, C2=24n | High Pass: C(ab)=4n7

Pg. 2C-1

CROSSOVER FREQ.	LOW PASS Ra, Rb	HIGH PASS R1	HIGH PASS R2	CROSSOVER FREQ.	LOW PASS Ra, Rb	HIGH PASS R1	HIGH PASS R2
9399 Hz	499R	2K550	5K110	9178 Hz	511R	2K610	5K230
8967 Hz	523R	2K670	5K360	8750 Hz	536R	2K740	5K490
8543 Hz	549R	2K800	5K620	8345 Hz	562R	2K870	5K760
8142 Hz	576R	2K940	5K900	7949 Hz	590R	3K010	6K040
7765 Hz	604R	3K090	6K190	7577 Hz	619R	3K160	6K340
7397 Hz	634R	3K240	6K490	7226 Hz	649R	3K320	6K650
7052 Hz	665R	3K400	6K810	6887 Hz	681R	3K480	6K980
6719 Hz	698R	3K570	7K150	6559 Hz	715R	3K650	7K320
6407 Hz	732R	3K740	7K500	6253 Hz	750R	3K830	7K680
6107 Hz	768R	3K920	7K870	5959 Hz	787R	4K020	8K060
5819 Hz	806R	4K120	8K250	5685 Hz	825R	4K220	8K450
5550 Hz	845R	4K320	8K660	5416 Hz	866R	4K420	8K870
5287 Hz	887R	4K530	9K090	5159 Hz	909R	4K640	9K310
5037 Hz	931R	4K750	9K530	4921 Hz	953R	4K870	9K760
4805 Hz	976R	4K990	10K000	4690 Hz	1K000	5K110	10K200
4598 Hz	1K020	5K230	10K500	4467 Hz	1K050	5K360	10K700
4383 Hz	1K070	5K490	11K000	4264 Hz	1K100	5K620	11K300
4150 Hz	1K130	5K760	11K500	4078 Hz	1K150	5K900	11K800
3974 Hz	1K180	6K040	12K100	3876 Hz	1K210	6K190	12K400
3782 Hz	1K240	6K340	12K700	3693 Hz	1K270	6K490	13K000
3608 Hz	1K300	6K650	13K300	3526 Hz	1K330	6K810	13K700
3423 Hz	1K370	6K980	14K000	3350 Hz	1K400	7K150	14K300
3280 Hz	1K430	7K320	14K700	3190 Hz	1K470	7K500	15K000
3127 Hz	1K500	7K680	15K400	3045 Hz	1K540	7K870	15K800
2968 Hz	1K580	8K060	16K200	2895 Hz	1K620	8K250	16K500
2842 Hz	1K650	8K450	16K900	2775 Hz	1K690	8K660	17K400
2695 Hz	1K740	8K870	17K800	2635 Hz	1K780	9K090	18K200
2577 Hz	1K820	9K310	18K700	2508 Hz	1K870	9K530	19K100
2455 Hz	1K910	9K760	19K600	2393 Hz	1K960	10K000	20K000
2345 Hz	2K000	10K200	20K500	2288 Hz	2K050	10K500	21K000
2233 Hz	2K100	10K700	21K500	2181 Hz	2K150	11K000	22K100
2122 Hz	2K210	11K300	22K600	2075 Hz	2K260	11K500	23K200
2021 Hz	2K320	11K800	23K700	1979 Hz	2K370	12K100	24K300
1930 Hz	2K430	12K400	24K900	1883 Hz	2K490	12K700	25K500
1839 Hz	2K550	13K000	26K100	1797 Hz	2K610	13K300	26K700
1757 Hz	2K670	13K700	27K400	1712 Hz	2K740	14K000	28K000
1675 Hz	2K800	14K300	28K700	1634 Hz	2K870	14K700	29K400
1595 Hz	2K940	15K000	30K100	1558 Hz	3K010	15K400	30K900
1518 Hz	3K090	15K800	31K600	1484 Hz	3K160	16K200	32K400
1447 Hz	3K240	16K500	33K200	1413 Hz	3K320	16K900	34K000
1379 Hz	3K400	17K400	34K800	1348 Hz	3K480	17K800	35K700
1314 Hz	3K570	18K200	36K500	1285 Hz	3K650	18K700	37K400
1254 Hz	3K740	19K100	38K300	1225 Hz	3K830	19K600	39K200
1196 Hz	3K920	20K000	40K200	1167 Hz	4K020	20K500	41K200
1138 Hz	4K120	21K000	42K200	1111 Hz	4K220	21K500	43K200
1086 Hz	4K320	22K100	44K200	1061 Hz	4K420	22K600	45K300

BRYSTON 10B-LR Crossover Additional Frequency/Resistor Tables

2nd ORDER FILTER FREQUENCY/RESISTOR TABLES for BRYSTON 10B CROSSOVER

Low pass: C1=48n, C2=24n | High Pass: C(ab)=4n7

Pg. 2C-2

CROSSOVER FREQ.	LOW PASS Ra, Rb	HIGH PASS R1	HIGH PASS R2	CROSSOVER FREQ.	LOW PASS Ra, Rb	HIGH PASS R1	HIGH PASS R2
1035 Hz	4K530	23K200	46K400	1011 Hz	4K640	23K700	47K500
987 Hz	4K750	24K300	48K700	963 Hz	4K870	24K900	49K900
940 Hz	4K990	25K500	51K100	918 Hz	5K110	26K100	52K300
897 Hz	5K230	26K700	53K600	875 Hz	5K360	27K400	54K900
854 Hz	5K490	28K000	56K200	834 Hz	5K620	28K700	57K600
814 Hz	5K760	29K400	59K000	795 Hz	5K900	30K100	60K400
776 Hz	6K040	30K900	61K900	758 Hz	6K190	31K600	63K400
740 Hz	6K340	32K400	64K900	723 Hz	6K490	33K200	66K500
705 Hz	6K650	34K000	68K100	689 Hz	6K810	34K800	69K800
672 Hz	6K980	35K700	71K500	656 Hz	7K150	36K500	73K200
641 Hz	7K320	37K400	75K000	625 Hz	7K500	38K300	76K800
611 Hz	7K680	39K200	78K700	596 Hz	7K870	40K200	80K600
582 Hz	8K060	41K200	82K500	568 Hz	8K250	42K200	84K500
555 Hz	8K450	43K200	86K600	542 Hz	8K660	44K200	88K700
529 Hz	8K870	45K300	90K900	516 Hz	9K090	46K400	93K100
504 Hz	9K310	47K500	95K300	492 Hz	9K530	48K700	97K600
481 Hz	9K760	49K900	100K00	469 Hz	10K000	51K100	102K00
460 Hz	10K200	52K300	105K00	447 Hz	10K500	53K600	107K00
438 Hz	10K700	54K900	110K00	426 Hz	11K000	56K200	113K00
415 Hz	11K300	57K600	115K00	408 Hz	11K500	59K000	118K00
397 Hz	11K800	60K400	121K00	388 Hz	12K100	61K900	124K00
378 Hz	12K400	63K400	127K00	369 Hz	12K700	64K900	130K00
361 Hz	13K000	66K500	133K00	353 Hz	13K300	68K100	137K00
342 Hz	13K700	69K800	140K00	335 Hz	14K000	71K500	143K00
328 Hz	14K300	73K200	147K00	319 Hz	14K700	75K000	150K00
313 Hz	15K000	76K800	154K00	305 Hz	15K400	78K700	158K00
297 Hz	15K800	80K600	162K00	289 Hz	16K200	82K500	165K00
284 Hz	16K500	84K500	169K00	278 Hz	16K900	86K600	174K00
270 Hz	17K400	88K700	178K00	263 Hz	17K800	90K900	182K00
258 Hz	18K200	93K100	187K00	251 Hz	18K700	95K300	191K00
246 Hz	19K100	97K600	196K00	239 Hz	19K600	100K00	200K00
234 Hz	20K000	102K00	205K00	229 Hz	20K500	105K00	210K00
223 Hz	21K000	107K00	215K00	218 Hz	21K500	110K00	221K00
212 Hz	22K100	113K00	226K00	208 Hz	22K600	115K00	232K00
202 Hz	23K200	118K00	237K00	198 Hz	23K700	121K00	243K00
193 Hz	24K300	124K00	249K00	188 Hz	24K900	127K00	255K00
184 Hz	25K500	130K00	261K00	180 Hz	26K100	133K00	267K00
176 Hz	26K700	137K00	274K00	171 Hz	27K400	140K00	280K00
167 Hz	28K000	143K00	287K00	163 Hz	28K700	147K00	294K00
160 Hz	29K400	150K00	301K00	156 Hz	30K100	154K00	309K00
152 Hz	30K900	158K00	316K00	148 Hz	31K600	162K00	324K00
145 Hz	32K400	165K00	332K00	141 Hz	33K200	169K00	340K00
138 Hz	34K000	174K00	348K00	135 Hz	34K800	178K00	357K00
131 Hz	35K700	182K00	365K00	128 Hz	36K500	187K00	374K00
125 Hz	37K400	191K00	383K00	122 Hz	38K300	196K00	392K00
120 Hz	39K200	200K00	402K00	117 Hz	40K200	205K00	412K00
114 Hz	41K200	210K00	422K00	111 Hz	42K200	215K00	432K00
109 Hz	43K200	221K00	442K00	106 Hz	44K200	226K00	453K00
104 Hz	45K300	232K00	464K00	101 Hz	46K400	237K00	475K00
99 Hz	47K500	243K00	487K00	96 Hz	48K700	249K00	499K00
94 Hz	49K900	255K00	511K00	92 Hz	51K100	261K00	523K00
90 Hz	52K300	267K00	536K00	87 Hz	53K600	274K00	549K00
85 Hz	54K900	280K00	562K00	83 Hz	56K200	287K00	576K00
81 Hz	57K600	294K00	590K00	79 Hz	59K000	301K00	604K00

BRYSTON 10B-LR Crossover Additional Frequency/Resistor Tables

2nd ORDER FILTER FREQUENCY/RESISTOR TABLES for BRYSTON 10B CROSSOVER

Low pass: C1=48n, C2=24n | High Pass: C(ab)=4n7

Pg.2C-3

CROSSOVER FREQ.	LOW PASS Ra ,Rb	HIGH PASS R1 R2	CROSSOVER FREQ.	LOW PASS Ra ,Rb	HIGH PASS R1 R2
78 Hz	60K400	309K00 619K00	76 Hz	61K900	316K00 634K00
74 Hz	63K400	324K00 649K00	72 Hz	64K900	332K00 665K00
71 Hz	66K500	340K00 681K00	69 Hz	68K100	348K00 698K00
67 Hz	69K800	357K00 715K00	66 Hz	71K500	365K00 732K00
64 Hz	73K200	374K00 750K00	63 Hz	75K000	383K00 768K00
61 Hz	76K800	392K00 787K00	60 Hz	78K700	402K00 806K00
58 Hz	80K600	412K00 825K00	57 Hz	82K500	422K00 845K00
56 Hz	84K500	432K00 866K00	54 Hz	86K600	442K00 887K00
53 Hz	88K700	453K00 909K00	52 Hz	90K900	464K00 931K00
50 Hz	93K100	475K00 953K00	49 Hz	95K300	487K00 976K00
48 Hz	97K600	499K00 1M0000	47 Hz	100K00	511K00 1M0200
46 Hz	102K00	523K00 1M0500	45 Hz	105K00	536K00 1M0700
44 Hz	107K00	549K00 1M1000	43 Hz	110K00	562K00 1M1300
42 Hz	113K00	576K00 1M1500	41 Hz	115K00	590K00 1M1800
40 Hz	118K00	604K00 1M2100	39 Hz	121K00	619K00 1M2400
38 Hz	124K00	634K00 1M2700	37 Hz	127K00	649K00 1M3000
36 Hz	130K00	665K00 1M3300	35 Hz	133K00	681K00 1M3700
34 Hz	137K00	698K00 1M4000	33 Hz	140K00	715K00 1M4300
33 Hz	143K00	732K00 1M4700	32 Hz	147K00	750K00 1M5000
31 Hz	150K00	768K00 1M5400	30 Hz	154K00	787K00 1M5800
30 Hz	158K00	806K00 1M6200	29 Hz	162K00	825K00 1M6500
28 Hz	165K00	845K00 1M6900	28 Hz	169K00	866K00 1M7400
27 Hz	174K00	887K00 1M7800	26 Hz	178K00	909K00 1M8200
26 Hz	182K00	931K00 1M8700	25 Hz	187K00	953K00 1M9100
25 Hz	191K00	976K00 1M9600	24 Hz	196K00	1M0000 2M0000
23 Hz	200K00	1M0200 2M0500	23 Hz	205K00	1M0500 2M1000
22 Hz	210K00	1M0700 2M1500	22 Hz	215K00	1M1000 2M2100
21 Hz	221K00	1M1300 2M2600	21 Hz	226K00	1M1500 2M3200
20 Hz	232K00	1M1800 2M3700	20 Hz	237K00	1M2100 2M4300
19 Hz	243K00	1M2400 2M4900	19 Hz	249K00	1M2700 2M5500
18 Hz	255K00	1M3000 2M6100	18 Hz	261K00	1M3300 2M6700
18 Hz	267K00	1M3700 2M7400	17 Hz	274K00	1M4000 2M8000
17 Hz	280K00	1M4300 2M8700	16 Hz	287K00	1M4700 2M9400
16 Hz	294K00	1M5000 3M0100	16 Hz	301K00	1M5400 3M0900

Formulas for 2nd order LOW pass filter are as follows:

$$\begin{aligned}
 PI &= 3.14159 & C &= 1 / (2 * PI * Fc * R) \\
 C1 &= 1.414 * C & C2 &= .707 * C \\
 R &= Ra = Rb = 1 / (2 * PI * Fc * C) \\
 Fc &= (1 / \text{SQR}(C1 * C2 * Ra * Rb)) / (2 * PI) = (1 / \text{SQR}(C^2 * R^2)) / (2 * PI)
 \end{aligned}$$

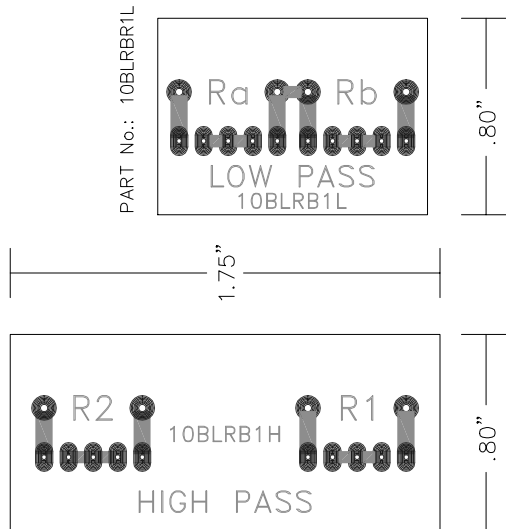
Formulas for 2nd order HIGH pass filter are as follows:

$$\begin{aligned}
 PI &= 3.14159 & C &= Ca = Cb = 1 / (2 * PI * Fc * R) \\
 R &= 1 / (2 * PI * Fc * C) & R1 &= .707 * R \\
 R2 &= 1.414 * R \\
 Fc &= (1 / \text{SQR}(Ca * Cb * R1 * R2)) / (2 * PI) = (1 / \text{SQR}(C^2 * R^2)) / (2 * PI)
 \end{aligned}$$

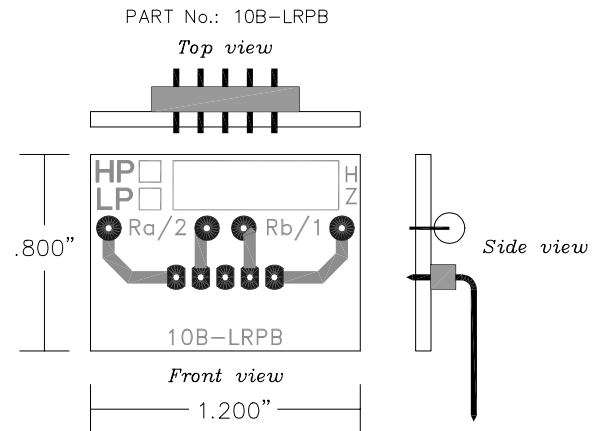
These two boards were used on the original 10B-LR (Linkwitz-Riley) crossover with main board 10B-LRB/0.0

One type of board is provided for the High Pass filter and a totally different type of board for the Low Pass filter. The two boards are not interchangeable. Each board contains two 1% resistors. Two Low pass boards and two High Pass boards are required for each crossover channel board, and thus four of each type of board are required for a dual channel 10B-LR crossover.

PART No.: 10BLRB1H



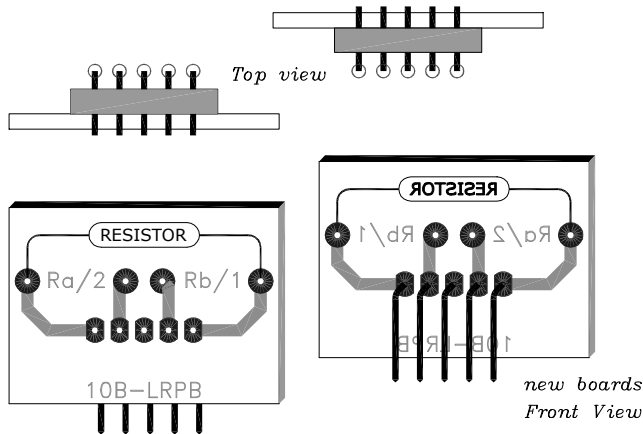
This board is used with the 2nd version of the 10B-LRB. The same board is used in both High Pass and Low Pass filter sections. Two of each board are used in the High Pass filter, and two are used in the Low Pass filter for a total of four boards for each crossover channel, and 8 boards for a two channel 10B-LR crossover.



Using New Style Programming Boards (10B-LRPB) in Older 10B-LR Crossovers

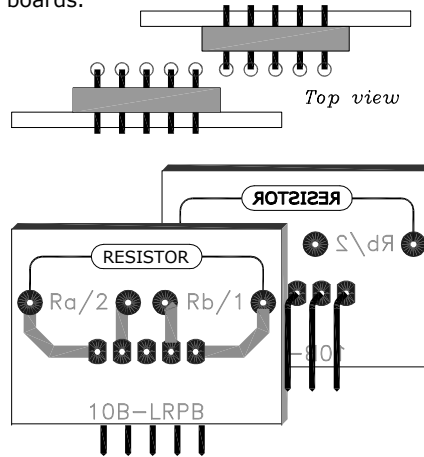
In the HIGH PASS FILTER SECTION

Two of the new 10B-LRPB programming boards can be used to replace a single 10BLRB1H board, but only when one of the boards are rotated 180°. The resistors will span the 1st and last holes on the board. The three middle pins are not used. Because the layout of the programming board is symmetrical, either board can be rotated.



In the LOW PASS FILTER SECTION

When used in the Low Pass filter section, the two 10B-LRPB boards to replace the single 10BLRB1L board must be offset from each other to fit. To be offset, one of the boards must be rotated 180°. The resistors installed on these boards will span the first and last holes as in the High Pass boards.



NOTE:

Since two of the newer 10B-LRPB boards are required to replace each of the older programming boards, a total of eight 10B-LRPB boards are required per channel, and 16 are required for both channels in a 10B-LR crossover.