

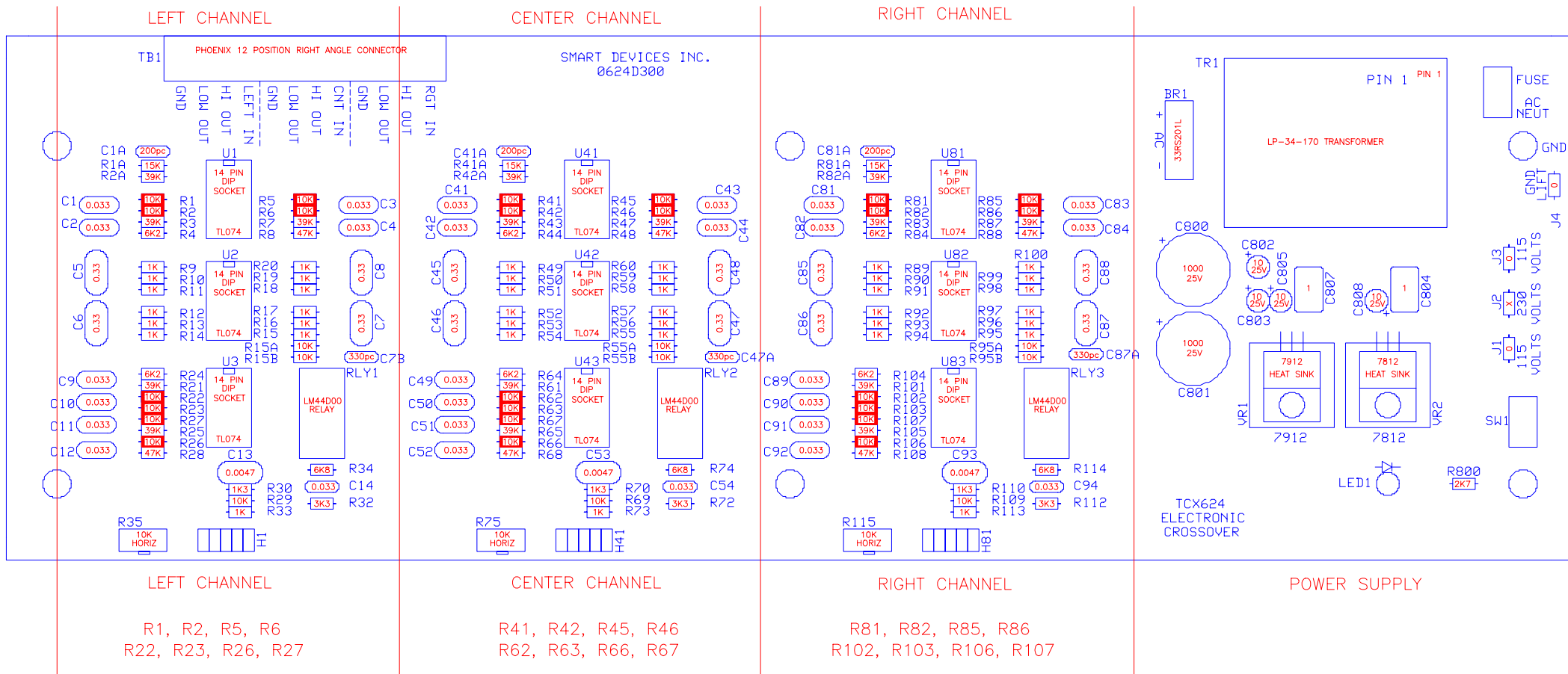
Model TCX624 Crossover Frequency Change Instructions

To change the crossover of a SMART Model TCX624 Crossover, it is necessary to change 8 resistors per channel, for a total of 24 resistor value changes. The chart below lists a number of frequencies starting at 250 Hertz and spaced at 25 Hertz intervals up to 1800 Hertz. The resistor values listed are available as 1% standard values. These are not the exact calculated values, but will result in frequencies very close to the stated frequency.

Above 1200 Hz, please note that there are instances where two adjacent frequencies have the same resistor value. Because resistors are available only in certain values, it is not possible to hit exactly the frequency you want. In cases where the resistor value is the same for 2 adjacent frequencies, the actual frequency will be between the 2 frequencies listed. For example, 1225 Hz and 1250 Hz both show a 3.92 K resistor value. The actual theoretical frequency will be 1237 Hz. Also, there are capacitors in the circuitry which have a certain tolerance, and when all the tolerances are considered, the final frequency will not necessarily be what you think. From a practical standpoint, it does not really matter anyway as long as you are reasonably close to the frequency you want.

FREQUENCY	RESISTOR VALUE	FREQUENCY	RESISTOR VALUE	FREQUENCY	RESISTOR VALUE
250	19.6 k	775	6.19 k	1300	3.74 k
275	17.8 k	800	6.04 k	1325	3.65 k
300	16.2 k	825	5.90 k	1350	3.57 k
325	15.0 k	850	5.76 k	1375	3.48 k
350	14.0 k	875	5.49 k	1400	3.48 k
375	13.0 k	900	5.36 k	1425	3.40 k
400	12.1 k	925	5.23 k	1450	3.32 k
425	11.5 k	950	5.11 k	1475	3.32 k
450	10.7 k	975	4.99 k	1500	3.24 k
475	10.2 k	1000	4.87 k	1525	3.16 k
500	9.76 k	1025	4.75 k	1550	3.09 k
525	9.31 k	1050	4.64 k	1575	3.09 k
550	8.87 k	1075	4.53 k	1600	3.01 k
575	8.45 k	1100	4.42 k	1625	3.01 k
600	8.06 k	1125	4.32 k	1650	2.94 k
625	7.68 k	1150	4.22 k	1675	2.87 k
650	7.50 k	1175	4.12 k	1700	2.87 k
675	7.15 k	1200	4.02 k	1725	2.80 k
700	6.98 k	1225	3.92 k	1750	2.80 k
725	6.65 k	1250	3.92 k	1775	2.74 k
750	6.49 k	1275	3.83 k	1800	2.67 k

The next page shows a layout of the circuit board. Each channel is identified along with the resistors to be changed. If you are careful, you can change the resistors from the top of the board without having to remove the board from the chassis. Heat up and carefully remove the old resistors. Be VERY careful to avoid pulling the plating from the hole. Use a solder sucker or wick to remove the solder from the holes. Cut the new resistor leads to the proper length, and insert into the holes. Solder carefully from the top of the board. With care, this process is fairly easy to do.



TO CHANGE THE CROSSOVER FREQUENCY, CHANGE THE RESISTORS LISTED ABOVE.
 THE RESISTORS TO BE CHANGED ARE SHADED IN RED.
 CHANGE TO THE CALCULATED VALUES OR THE VALUES FROM THE CHART ON PAGE 1
 THE ORIGINAL VALUES ARE 10K OHMS.