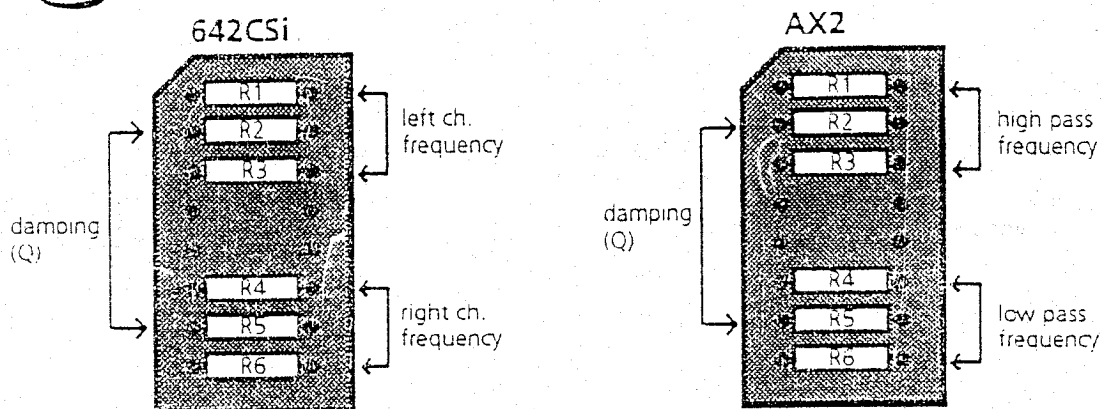




Installation notes

Frequency adjustment on 642CSi and AX2



To change frequency

Change resistors R1, R3, R4, and R6 according to the diagram above for the appropriate model. Use values from the table below or calculate from the equation;

$$\frac{15.900}{\text{frequency}} = \text{resistor value in kilohms}$$

To change damping ("Q")

Calculate the required resistor value for R2 and R5 from the equation;

$$\frac{47}{2 - \frac{1}{Q}} = \text{resistor value in kilohms}$$

The standard value for the damping resistor is 80.6 kilohms for a Q value of .707. This is known as a "Butterworth" maximally flat alignment and is the most popular choice.

Table of resistor values

closest standard values for 1% metal film type

frequency	resistor	frequency	resistor	frequency	resistor	frequency	resistor
50.0Hz.	316kΩ	140Hz.	113kΩ	1.00kHz	15.9kΩ	3.00kHz	5.36kΩ
55.0	287	150	106	1.25	12.7	3.10	5.11
60.0	267	160	100	1.50	10.6	3.20	4.99
65.0	243	170	93.1	1.75	9.09	3.30	4.75
70.0	226	180	88.7	2.00	7.95	3.40	4.64
75.0	210	190	84.5	2.10	7.50	3.50	4.53
80.0	200	200	80.6	2.20	7.32	3.60	4.42
85.0	187	210	76.8	2.30	6.98	3.70	4.32
90.0	178	220	73.2	2.40	6.65	3.80	4.22
95.0	169	230	69.8	2.50	6.34	3.90	4.12
100	158	240	66.5	2.60	6.19	4.00	4.02
110	143	250	63.4	2.70	5.90	4.50	3.57
120	133	260	60.4	2.80	5.62	5.00	3.16
130	121	270	59.0	2.90	5.49	5.50	2.87

