

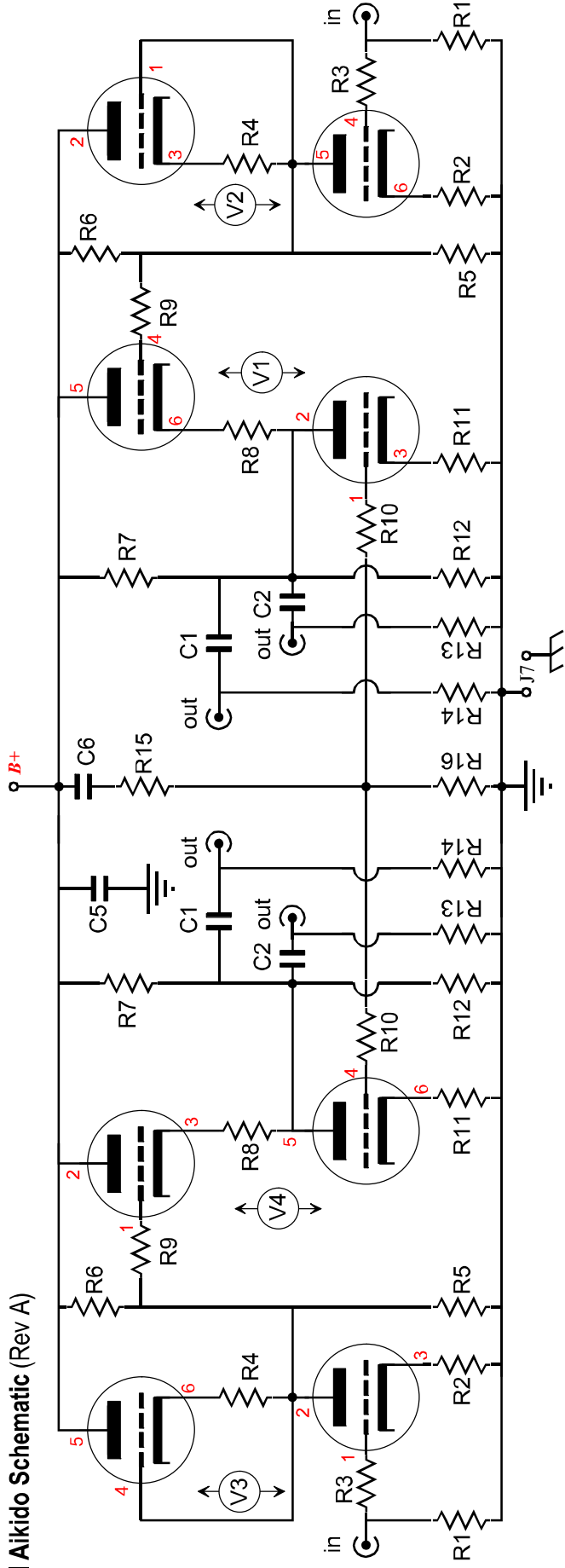
[illegible]

	[6/12]SN7 & [6/12]SN7	[6/12]SL7 & [6/12]SN7	[6/12]SN7 & 6BX7
B+ Voltage =	170V - 300V (300V)	200V - 300V (300V)	200V - 300V (200V)
Heater Voltage =	6.3V/12.6V	6.3V/12.6V	6.3V
R1,5,6,7,12,13 =	1M	Same	Same
R2,4 =	270 - 1k (470)*	470 - 2k (1k)*	270 - 1k (330)*
R3,9,10 =	100 - 1k (300)*	Same	Same
R8, R11 =	240* [Iq = 10mA]	390* [Iq = 17mA]	158* [Iq = 30mA]
R15 =	83.3k	Same	66.1k
R16 =	100k	"	"
R17 =	0, Jumper	"	"

C1 =	0.1 - 10μF* Film or oil	Same	Same
C2 =	0.1 - 10μF* Film or oil	"	"
C5 =	0.1 - 10μF*	"	"
C6 =	0.047μF - 0.22μF* Film or oil	"	"
C5 =	100 - 1kμF, 16V Electrolytic	"	"

(input) V1 =	6SN7, 12SN7, 12SX7, 5692, B65, ECC32, ECC33	6SL7, 6SU7, 12SL7, 5691	6SN7, 12SN7, 12SX7, 5692, B65, ECC32, ECC33
(output) V2=	6SN7, 12SN7, 12SX7, 5692, B65, ECC32, ECC33	Same	6BL7, 6BX7

Octal Aikido Schematic (Rev A)



Part Values

R1, R6, R5, R7, R12, R13, R14 = 1M
R3, R9, R10 = 100 - 470 ohm*
R2, R4 = 200 - 2k (depends on tube)*
R8, R11 = 100 - 1k (depends on tube)*
R15 = $R_{16} \times (\mu - 2) / (\mu + 2)$ eg 82k for 6SN7
R16 = 100k

*High-quality resistors

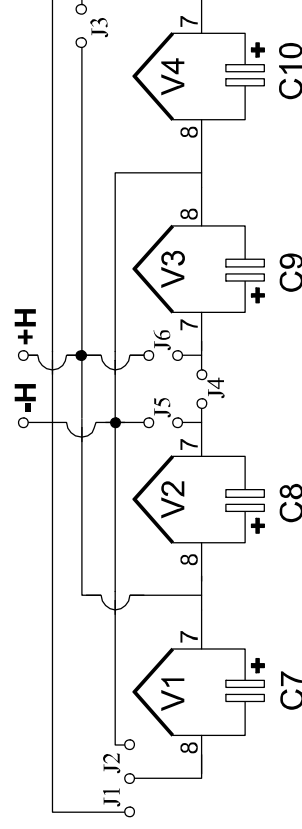
All resistors 1/2W or higher

C1 = 0.1 - 4μF (voltage rating must exceed B+ voltage)
C2 = 0.1 - 4μF (voltage rating must exceed B+ voltage)
C5 = 1 - 10μF (voltage rating must exceed B+ voltage)
C6 = 0.1μF (voltage rating must exceed B+ voltage)
C7, C8, C9, C10 = 10-100μF (Use only with DC power supply; heater-shunting capacitors, from pins 7 to 8; voltage rating must exceed heater power-supply voltage)

(inputs) V2, V3 = 6SL7, 6SN7, 12SL7, 12SN7, 12SX7, 5691, 5692, B65, ECC32, ECC33

(outputs) V1, V4 = 6AS7, 6BL7, 6BX7, 6SN7, 8SN7, 12SN7, 12SX7, 5692, 6080, B65, ECC32, ECC33

Filament Jumper Wire Schedule



With a 6.3V heater PS

Use J2, J3, J5, and J6 only.

All tubes must be 6.3V heater types, such as 6BL7, 6SN7.

With a 12.6V heater PS

Output Tubes V1 and V4:

If tubes are 6.3V, use J1 only.

If tubes are 12.6V, use J2 and J3 only.

Input Tubes V2 and V3:

If tubes are 6.3V, use J4 only.

If tubes are 12.6V, use J5 and J6 only.