

OctiWave-Lite First Four Frequency Generators

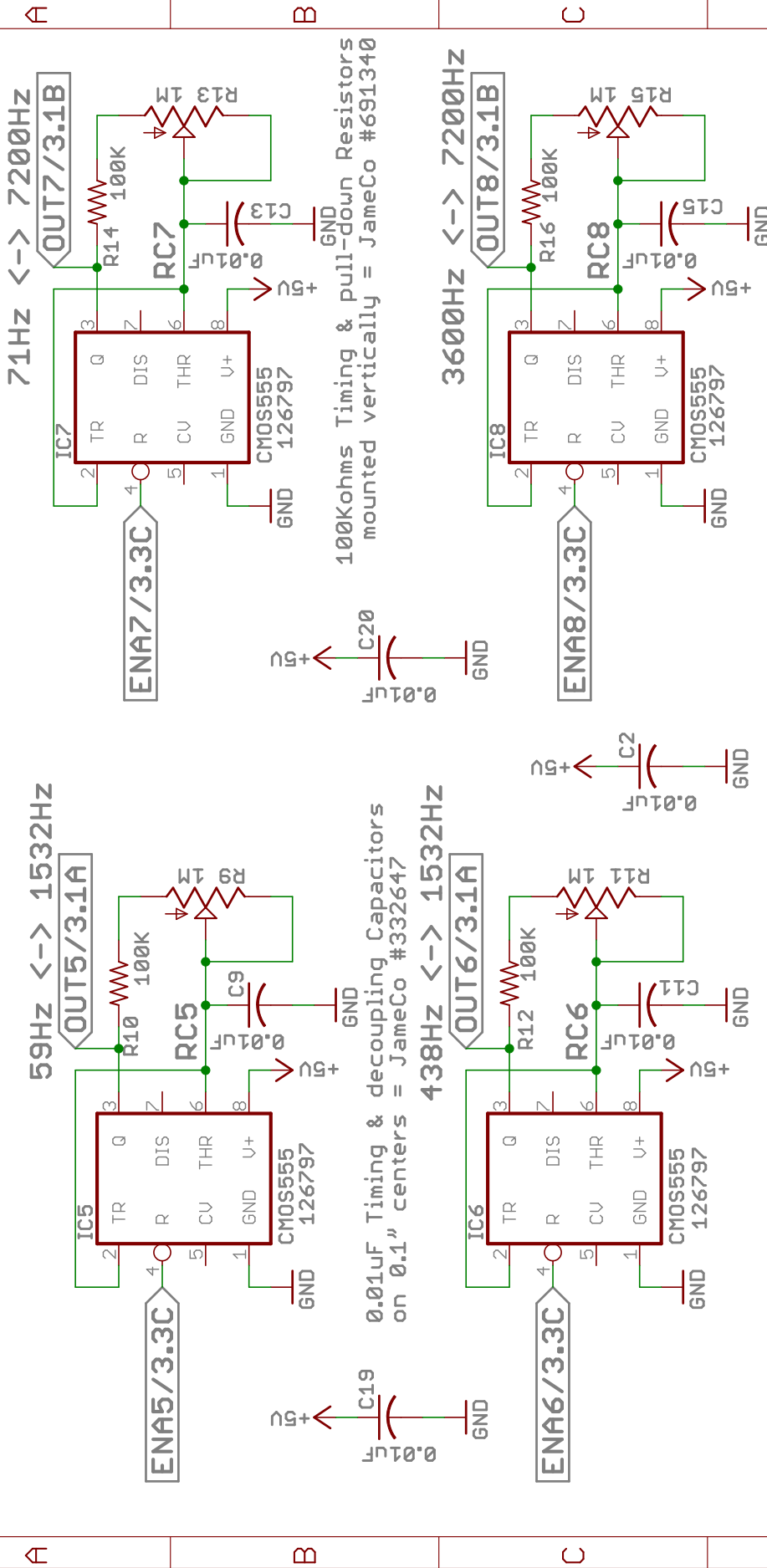
OctiWaveLite-Sch1p1
12/17/2017 6:24:23 PM
Sheet: 1/5

1 2 3 4

1 2 3 4

1 2 3 4

Important Note about Timing Components: Many other frequency spans are possible. 8 sets in these schematics selected from examples on sheet 5.



The footprint for timing capacitors C9, C11, C13, and C15 accept either 0.1" or

The even-numbered fixed resistors establish the Minimum Resistance and the Maximum Frequency per Frequency Generator. They are mounted vertically where the bare lead is the Output Wave.

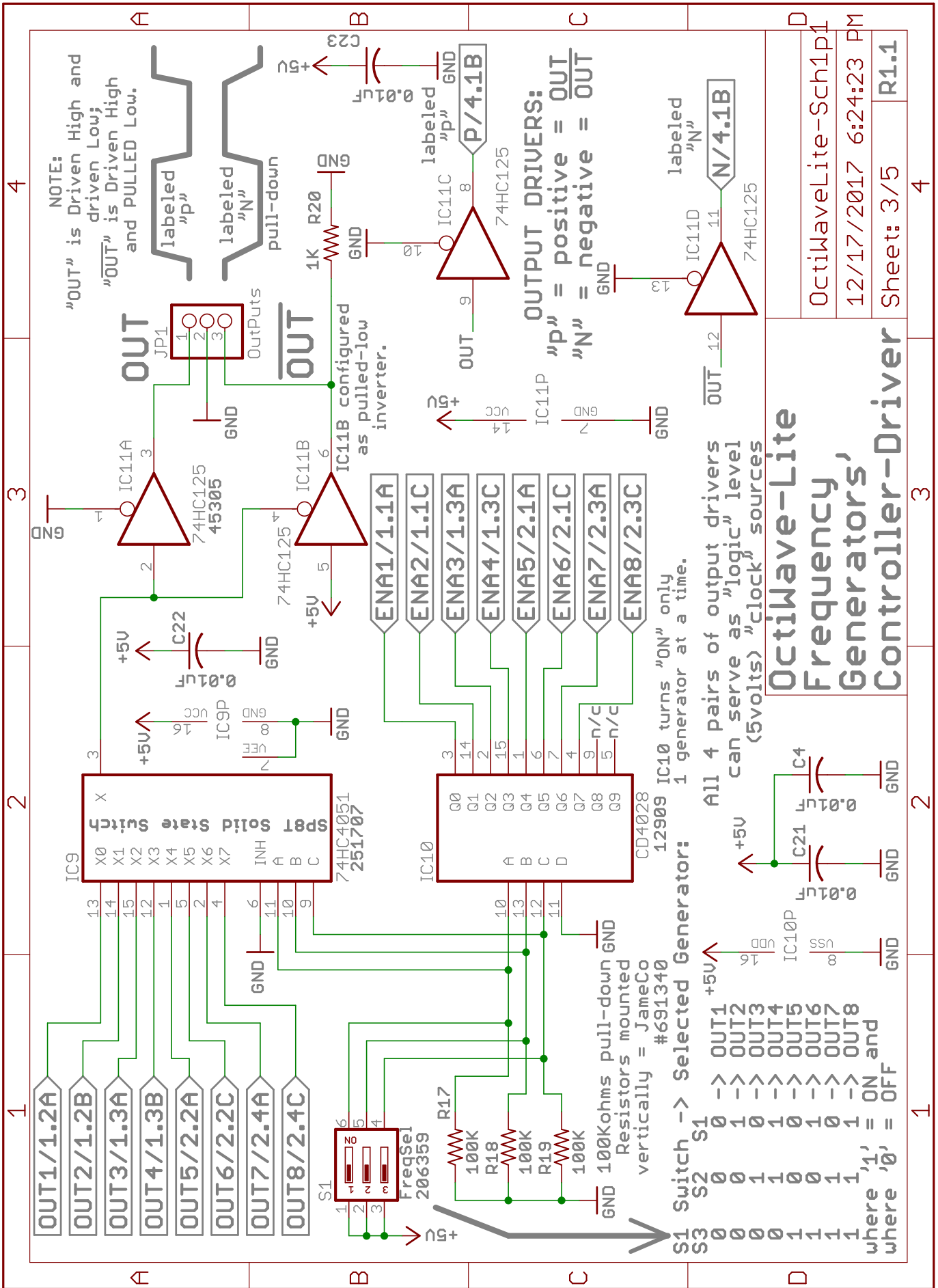
OctiWave-Lite Last Four Frequency Generators

OctiWaveLite-Sch1p1

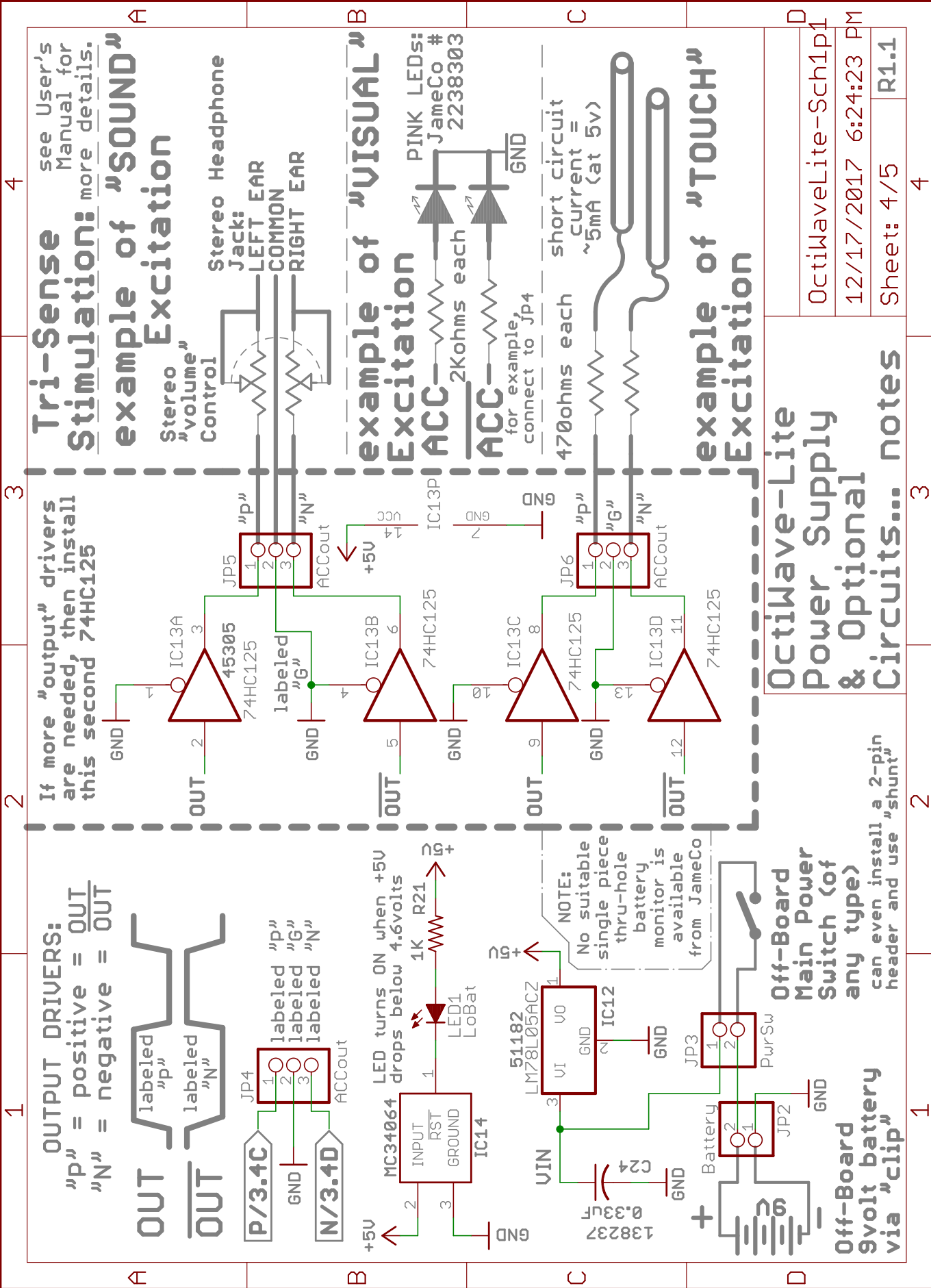
12/17/2017 6:24:23 PM

Sheet: 2/5 R1.1

1 2 3 4



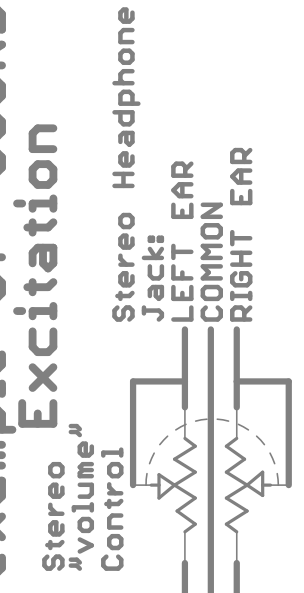
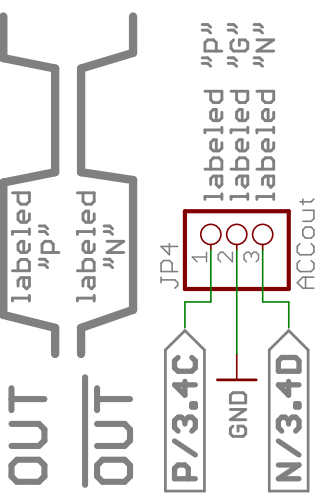
OctiWaveLite-Sch1p1
12/17/2017 6:24:23 PM
Sheet: 3/5



**Tri-Sense
Stimulation: "SOUND"**
see User's Manual for more details.

If more "output" drivers are needed, then install this second 74HC125

OUTPUT DRIVERS:
"p" = positive = OUT
"N" = negative = OUT



OctiWave-Lite Power Supply & Optional Circuits... notes

OctiWaveLite-Sch1p1	4
12/17/2017 6:24:23 PM	3
Sheet: 4/5	4
R1.1	

A	1	2	3	4
B	1	2	3	4
C	1	2	3	4
D	1	2	3	4

FORMULA:
Fixed Resistor +
Potentiometer = "R"
FREQUENCY =
1.44 / (2*R*C)

Duty Cycle =
50%; +/- 0.5%

Bourns' 3296W MCM
Pots: Electronics #:
 5Kohms 287-1116
 10Kohms 287-1118
 20Kohms 287-1120
 25Kohms 287-1122
 50Kohms 287-1124
 100Kohms 287-1126
 200Kohms 287-1128
 250Kohms 287-1130
 500Kohms 287-1132
 1Mohms 287-1134

Potentiometer: JameCo
Part #:
 10Kohms 241146
 25Kohms 853716
 50Kohms 853791
 100Kohms 853599
 200Kohms 853695
 250Kohms 1967248
 1Mohms 853610

<<< Channel 8

<<< Channel 7

<<< Channel 6

<<< Channel 5

<<< Channel 4

<<< Channel 3

<<< Channel 2

<<< Channel 1

CALCULATED FREQUENCIES

Tolerances for JameCo Components

+/- 10%
 +/- 5%
 +/- 10%

Testing on actual components for many of the CALCULATED Frequencies and Spans shown above resulted in Deviations of +9.57% down to -1.44%, with most frequencies being above calculated values.

OctiWave-Lite
Some example
RC Values &
Frequencies

OctiWaveLite-Sch1p1
 12/17/2017 6:24:23 PM
 Sheet: 5/5 R1.1