Debug Matrices / M_debug

```
G =
[[ 0.01+0.j -0.01+0.j  0.  +0.j  0.  +0.j  0.  +0.j  0.  +0.j  0.  +0.j
   1.  +0.j]
 [ 0.09+0.j  0.01+0.j -0.1 +0.j  0.  +0.j  0.  +0.j  1.  +0.j  0.  +0.j
   0.  +0.j]
 [ 0.  +0.j  0.  +0.j  0.  +0.j  0.  +0.j  0.  +0.j  0.  +0.j  1.5 +0.j
   0.  +0.j]
 [-0.1 +0.j  0.  +0.j  0.1 +0.j  0.  +0.j  0.  +0.j  0.  +0.j -0.5 +0.j
   0.  +0.j]
 [ 0.  +0.j  0.  +0.j  0.  +0.j  0.  +0.j  0.  +0.j  0.  +0.j  0.  +0.j
  -1.  +0.j]
 [ 0.  +0.j  1.  +0.j  0.  +0.j  0.  +0.j  0.  +0.j  0.  +0.j  0.  +0.j
   0.  +0.j]
 [ 0.  +0.j  0.  +0.j  0.  +0.j  1.  +0.j  0.  +0.j  0.  +0.j  0.  +0.j
   0.  +0.j]
 [ 1.  +0.j -2.  +0.j  0.  +0.j  2.  +0.j -1.  +0.j  0.  +0.j  0.  +0.j
   0.  +0.j]]
C =
[[0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j]
 [0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j]
 [0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j]
 [0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j]
 [0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j]
 [0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j]
 [0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j]
 [0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j 0.+0.j]]
L =
[[ 0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j
   0.   +0.j  0.   +0.j]
 [ 0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j
   0.   +0.j  0.   +0.j]
 [ 0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j
   0.   +0.j  0.   +0.j]
 [ 0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j
   0.   +0.j  0.   +0.j]
 [ 0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j
   0.   +0.j  0.   +0.j]
 [ 0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j -0.001+0.j
   0.   +0.j  0.   +0.j]
 [ 0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j
   0.   +0.j  0.   +0.j]
 [ 0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j  0.   +0.j
   0.   +0.j  0.   +0.j]]
RHS = [ 0.  +0.j  0.  +0.j -0.02+0.j  0.  +0.j  0.02+0.j  0.  +0.j 10.  +0.j
  0.  +0.j]

Unknowns:
['V1', 'V2', 'V3', 'V4', 'V5', 'L1_I', 'V1_I', 'E1_I']

M_debug at f=1000.0 Hz:
[[ 0.01+0.j     -0.01+0.j      0.  +0.j      0.  +0.j      0.  +0.j
   0.  +0.j      0.  +0.j      1.  +0.j    ]
 [ 0.09+0.j      0.01+0.0063j -0.1 +0.j      0.  +0.j      0.  +0.j
   1.  +0.j      0.  +0.j      0.  +0.j    ]
 [ 0.  +0.j      0.  +0.j      0.  +0.j      0.  +0.j      0.  +0.j
   0.  +0.j      1.5 +0.j      0.  +0.j    ]
 [-0.1 +0.j      0.  +0.j      0.1 +0.j      0.  +0.j      0.  +0.j
   0.  +0.j     -0.5 +0.j      0.  +0.j    ]
 [ 0.  +0.j      0.  +0.j      0.  +0.j      0.  +0.j      0.  +0.j
   0.  +0.j      0.  +0.j     -1.  +0.j    ]
 [ 0.  +0.j      1.  +0.j      0.  +0.j      0.  +0.j      0.  +0.j
   0.  -6.2832j  0.  +0.j      0.  +0.j    ]
 [ 0.  +0.j      0.  +0.j      0.  +0.j      1.  +0.j      0.  +0.j
   0.  +0.j      0.  +0.j      0.  +0.j    ]
 [ 1.  +0.j     -2.  +0.j      0.  +0.j      2.  +0.j     -1.  +0.j
   0.  +0.j      0.  +0.j      0.  +0.j    ]]
```

FLOPs & Timing

```
Frequency(Hz), FLOPs
1, 4.6933e+02
1.021, 4.6933e+02
1.042, 4.6933e+02
1.064, 4.6933e+02
1.087, 4.6933e+02
1.109, 4.6933e+02
1.133, 4.6933e+02
1.156, 4.6933e+02
1.181, 4.6933e+02
1.205, 4.6933e+02
 ... (omitted many)

TOTAL SWEEP FLOPs = 4.6933e+05
TOTAL TIME (sec) = 2.56
```

Final Summary

```
AC Simulation completed
Frequency Points = 1000
Total Time = 2.56 s
Total FLOPs = 4.6933e+05
```