

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.01
 Actual Amplitude: 0.0100115
 Actual Power: 0.000100231
 Distortion 2H-30H: 3.82496%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 5.8726 | end: 5.8829 | delta: 0.0104 |
| P2 start: 17.1197 | end: 17.1504 | delta: 0.0307 |
| P3 start: 28.3561 | end: 28.4068 | delta: 0.0507 |
| P4 start: 39.5877 | end: 39.6571 | delta: 0.0693 |
| P5 start: 50.7969 | end: 50.8828 | delta: 0.0859 |
| P6 start: 61.9931 | end: 62.0924 | delta: 0.0993 |
| P7 start: 73.1679 | end: 73.2765 | delta: 0.1087 |
| P8 start: 84.411 | end: 84.5252 | delta: 0.1143 |

| | | |
|------------------|----------------------|-------------------------|
| H3: -0.0255584 | H21: 0.00461066 | H21f: 0.000219555 |
| H5: -0.000841419 | H23: -0.00187235 | H23f: -8.14064e-05 |
| H7: -0.00262605 | H25: 0.00415888 | H25f: 0.000166355 |
| H9: 0.00242655 | H27: 0.00275644 | H27f: 0.00010209 |
| H11: -0.00364959 | H29: 0.0256302 | H29f: 0.0008838 |
| H13: 0.00386131 | H31: 0.923353 | H31f: 0.0297856 |
| H15: -0.00414999 | H33: -1.06777 | H33f: -0.0323566 |
| H17: 0.00541059 | H35: 0.0827852 | H35f: 0.00236529 |
| H19: -0.00387476 | H37: 0.00317064 | H37f: 8.56929e-05 |

c2sd = 0.0157
 c2ed = 0.0044
 c3sd = 0.0149
 c3ed = -0.0021
 c4sd = 0.0082
 c4ed = -0.0134
 c5sd = -0.0229
 c5ed = -0.0474
 varx = 4.3979%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.02
 Actual Amplitude: 0.0200081
 Actual Power: 0.000400322
 Distortion 2H-30H: 1.84034%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 5.8841 | end: 5.9049 | delta: 0.0209 |
| P2 start: 17.138 | end: 17.2004 | delta: 0.0624 |
| P3 start: 28.3325 | end: 28.4361 | delta: 0.1036 |
| P4 start: 39.4951 | end: 39.6369 | delta: 0.1418 |
| P5 start: 50.6663 | end: 50.8404 | delta: 0.1741 |
| P6 start: 61.8458 | end: 62.0449 | delta: 0.1991 |
| P7 start: 73.0495 | end: 73.2655 | delta: 0.2159 |
| P8 start: 84.2706 | end: 84.4947 | delta: 0.2242 |

| | | |
|-------------------|----------------------|------------------------|
| H3: -0.00919429 | H21: 0.00124339 | H21f: 5.9209e-05 |
| H5: -0.00859423 | H23: 0.00177596 | H23f: 7.72156e-05 |
| H7: -0.00219345 | H25: 0.00300028 | H25f: 0.000120011 |
| H9: -0.00102664 | H27: 0.009135 | H27f: 0.000338333 |
| H11: -9.31015e-05 | H29: 0.0087747 | H29f: 0.000302576 |
| H13: 8.75313e-06 | H31: 0.9415 | H31f: 0.030371 |
| H15: 0.000338338 | H33: -1.05346 | H33f: -0.031923 |
| H17: -3.94921e-05 | H35: 0.0328154 | H35f: 0.000937583 |
| H19: 0.00039128 | H37: 0.028202 | H37f: 0.000762217 |

c2sd = 0.0625
 c2ed = 0.0259
 c3sd = 0.0374
 c3ed = -0.0188
 c4sd = -0.0227
 c4ed = -0.0953
 c5sd = -0.0783
 c5ed = -0.165
 varx = 4.4062%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.03
 Actual Amplitude: 0.0299983
 Actual Power: 0.000899896
 Distortion 2H-30H: 1.17081%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 5.8909 | end: 5.9225 | delta: 0.0316 |
| P2 start: 17.142 | end: 17.2371 | delta: 0.0951 |
| P3 start: 28.2571 | end: 28.415 | delta: 0.1578 |
| P4 start: 39.3876 | end: 39.6014 | delta: 0.2138 |
| P5 start: 50.5737 | end: 50.8346 | delta: 0.2608 |
| P6 start: 61.7759 | end: 62.0738 | delta: 0.2978 |
| P7 start: 72.9878 | end: 73.3108 | delta: 0.323 |
| P8 start: 84.2107 | end: 84.5462 | delta: 0.3355 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -0.00367502 | H21: 0.00149213 | H21f: 7.10537e-05 |
| H5: -0.00529901 | H23: 0.00366982 | H23f: 0.000159557 |
| H7: -0.00347818 | H25: 0.00415805 | H25f: 0.000166322 |
| H9: -0.00314432 | H27: 0.00515873 | H27f: 0.000191064 |
| H11: -0.000859458 | H29: 0.00347706 | H29f: 0.000119898 |
| H13: -0.000203361 | H31: 0.952826 | H31f: 0.0307363 |
| H15: 0.000447951 | H33: -1.04255 | H33f: -0.0315923 |
| H17: 8.91399e-05 | H35: 0.0143338 | H35f: 0.000409538 |
| H19: 0.000913541 | H37: 0.0185258 | H37f: 0.000500697 |

c2sd = 0.0934
 c2ed = 0.0356
 c3sd = 0.0055
 c3ed = -0.0835
 c4sd = -0.0718
 c4ed = -0.1892
 c5sd = -0.0998
 c5ed = -0.2419
 varx = 4.4077%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.04
 Actual Amplitude: 0.0400041
 Actual Power: 0.00160033
 Distortion 2H-30H: 0.812759%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 5.9338 | end: 5.9766 | delta: 0.0428 |
| P2 start: 17.1084 | end: 17.2367 | delta: 0.1283 |
| P3 start: 28.1782 | end: 28.3897 | delta: 0.2115 |
| P4 start: 39.3254 | end: 39.6107 | delta: 0.2853 |
| P5 start: 50.5132 | end: 50.8608 | delta: 0.3477 |
| P6 start: 61.7148 | end: 62.1116 | delta: 0.3968 |
| P7 start: 72.9301 | end: 73.3606 | delta: 0.4305 |
| P8 start: 84.1563 | end: 84.6037 | delta: 0.4474 |

| | | |
|-------------------|----------------------|------------------------|
| H3: -0.00176555 | H21: 0.00220567 | H21f: 0.000105032 |
| H5: -0.00299359 | H23: 0.00295614 | H23f: 0.000128528 |
| H7: -0.00273749 | H25: 0.00296711 | H25f: 0.000118684 |
| H9: -0.00268584 | H27: 0.00299753 | H27f: 0.00011102 |
| H11: -0.00158268 | H29: 0.00154769 | H29f: 5.33686e-05 |
| H13: -0.000796044 | H31: 0.958913 | H31f: 0.0309327 |
| H15: 0.000121793 | H33: -1.03547 | H33f: -0.031378 |
| H17: 0.000521697 | H35: 0.0069141 | H35f: 0.000197546 |
| H19: 0.00143449 | H37: 0.0114981 | H37f: 0.000310759 |

c2sd = 0.08
 c2ed = 0.0152
 c3sd = -0.041
 c3ed = -0.1411
 c4sd = -0.0905
 c4ed = -0.2234
 c5sd = -0.1075
 c5ed = -0.2685
 varx = 4.4061%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-----------|
| Desired Amplitude: | 0.05 |
| Actual Amplitude: | 0.050007 |
| Actual Power: | 0.0025007 |
| Distortion 2H-30H: | 0.453476% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 5.9946 | end: | 6.049 | delta: | 0.0544 |
| P2 start: | 17.0362 | end: | 17.1979 | delta: | 0.1617 |
| P3 start: | 28.117 | end: | 28.3818 | delta: | 0.2648 |
| P4 start: | 39.2741 | end: | 39.6307 | delta: | 0.3566 |
| P5 start: | 50.457 | end: | 50.8917 | delta: | 0.4346 |
| P6 start: | 61.6591 | end: | 62.1549 | delta: | 0.4958 |
| P7 start: | 72.8727 | end: | 73.4106 | delta: | 0.5379 |
| P8 start: | 84.0994 | end: | 84.6587 | delta: | 0.5593 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -0.00075931 | H21: 0.00119255 | H21f: 5.67881e-05 |
| H5: -0.00154887 | H23: 0.00178444 | H23f: 7.75844e-05 |
| H7: -0.00145734 | H25: 0.00159221 | H25f: 6.36885e-05 |
| H9: -0.0015112 | H27: 0.00156471 | H27f: 5.79522e-05 |
| H11: -0.00099555 | H29: 0.000819717 | H29f: 2.82661e-05 |
| H13: -0.000724366 | H31: 0.963608 | H31f: 0.0310841 |
| H15: -4.69446e-05 | H33: -1.02907 | H33f: -0.0311839 |
| H17: 0.000523753 | H35: 0.00254299 | H35f: 7.26568e-05 |
| H19: 0.00106153 | H37: 0.00663859 | H37f: 0.000179421 |

| |
|----------------|
| c2sd = 0.0297 |
| c2ed = -0.0456 |
| c3sd = -0.0666 |
| c3ed = -0.1845 |
| c4sd = -0.0941 |
| c4ed = -0.2511 |
| c5sd = -0.1056 |
| c5ed = -0.2957 |
| varx = 4.403%. |

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.06
 Actual Amplitude: 0.0600013
 Actual Power: 0.00360016
 Distortion 2H-30H: 0.209201%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.0168 | end: 6.0828 | delta: 0.066 |
| P2 start: 16.9703 | end: 17.1652 | delta: 0.1949 |
| P3 start: 28.0709 | end: 28.3887 | delta: 0.3177 |
| P4 start: 39.2251 | end: 39.653 | delta: 0.4279 |
| P5 start: 50.4057 | end: 50.9271 | delta: 0.5214 |
| P6 start: 61.604 | end: 62.1989 | delta: 0.5949 |
| P7 start: 72.8161 | end: 73.4617 | delta: 0.6455 |
| P8 start: 84.0435 | end: 84.7147 | delta: 0.6712 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -0.000403057 | H21: 0.000556883 | H21f: 2.65182e-05 |
| H5: -0.000738656 | H23: 0.000828623 | H23f: 3.60271e-05 |
| H7: -0.000681197 | H25: 0.000781154 | H25f: 3.12462e-05 |
| H9: -0.000697901 | H27: 0.000747885 | H27f: 2.76994e-05 |
| H11: -0.000359554 | H29: 0.000430214 | H29f: 1.4835e-05 |
| H13: -0.00020889 | H31: 0.966947 | H31f: 0.0311918 |
| H15: -1.05402e-05 | H33: -1.02335 | H33f: -0.0310105 |
| H17: 0.000205943 | H35: -4.42326e-05 | H35f: -1.26379e-06 |
| H19: 0.000388034 | H37: 0.00380684 | H37f: 0.000102888 |

c2sd = -0.0251
 c2ed = -0.0894
 c3sd = -0.0948
 c3ed = -0.1955
 c4sd = -0.1191
 c4ed = -0.2528
 c5sd = -0.1278
 c5ed = -0.2894
 varx = 4.3984%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.07
 Actual Amplitude: 0.0700005
 Actual Power: 0.00490007
 Distortion 2H-30H: 0.127449%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.03 | end: 6.1072 | delta: 0.0772 |
| P2 start: 16.9421 | end: 17.1698 | delta: 0.2278 |
| P3 start: 28.0369 | end: 28.4076 | delta: 0.3707 |
| P4 start: 39.186 | end: 39.6851 | delta: 0.4991 |
| P5 start: 50.3597 | end: 50.9679 | delta: 0.6082 |
| P6 start: 61.5519 | end: 62.2459 | delta: 0.694 |
| P7 start: 72.7613 | end: 73.5144 | delta: 0.7531 |
| P8 start: 83.9874 | end: 84.7705 | delta: 0.7832 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -0.000265617 | H21: 0.000413939 | H21f: 1.97114e-05 |
| H5: -0.000433877 | H23: 0.000467316 | H23f: 2.03181e-05 |
| H7: -0.000389984 | H25: 0.00042928 | H25f: 1.71712e-05 |
| H9: -0.000379452 | H27: 0.000455463 | H27f: 1.6869e-05 |
| H11: -0.00026266 | H29: 0.000304085 | H29f: 1.04857e-05 |
| H13: -0.00016354 | H31: 0.966708 | H31f: 0.0311841 |
| H15: -1.72018e-05 | H33: -1.02047 | H33f: -0.0309233 |
| H17: 0.000126654 | H35: -0.00162821 | H35f: -4.65202e-05 |
| H19: 0.000288897 | H37: 0.00286347 | H37f: 7.73912e-05 |

c2sd = -0.0352
 c2ed = -0.1028
 c3sd = -0.0997
 c3ed = -0.2057
 c4sd = -0.1192
 c4ed = -0.2598
 c5sd = -0.1262
 c5ed = -0.2961
 varx = 4.3917%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.08
 Actual Amplitude: 0.08
 Actual Power: 0.00640001
 Distortion 2H-30H: 0.107881%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.0513 | end: 6.1397 | delta: 0.0883 |
| P2 start: 16.93 | end: 17.1903 | delta: 0.2603 |
| P3 start: 28.0133 | end: 28.4369 | delta: 0.4236 |
| P4 start: 39.1516 | end: 39.7219 | delta: 0.5703 |
| P5 start: 50.3161 | end: 51.0111 | delta: 0.6951 |
| P6 start: 61.5022 | end: 62.2954 | delta: 0.7931 |
| P7 start: 72.7072 | end: 73.5679 | delta: 0.8607 |
| P8 start: 83.9312 | end: 84.8263 | delta: 0.8951 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -0.000259927 | H21: 0.000272259 | H21f: 1.29647e-05 |
| H5: -0.00039672 | H23: 0.000382095 | H23f: 1.66128e-05 |
| H7: -0.000338392 | H25: 0.000369589 | H25f: 1.47836e-05 |
| H9: -0.000332655 | H27: 0.000405736 | H27f: 1.50272e-05 |
| H11: -0.00018714 | H29: 0.000252697 | H29f: 8.7137e-06 |
| H13: -0.000146674 | H31: 0.964263 | H31f: 0.0311052 |
| H15: -2.44116e-05 | H33: -1.0192 | H33f: -0.0308847 |
| H17: 0.000124383 | H35: -0.00281111 | H35f: -8.03174e-05 |
| H19: 0.00023646 | H37: 0.00288032 | H37f: 7.78464e-05 |

c2sd = -0.0323
 c2ed = -0.0974
 c3sd = -0.0991
 c3ed = -0.2008
 c4sd = -0.121
 c4ed = -0.2556
 c5sd = -0.1303
 c5ed = -0.2926
 varx = 4.3834%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|------------|
| Desired Amplitude: | 0.09 |
| Actual Amplitude: | 0.09 |
| Actual Power: | 0.00810001 |
| Distortion 2H-30H: | 0.0563207% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.0547 | end: | 6.1544 | delta: | 0.0996 |
| P2 start: | 16.9044 | end: | 17.1976 | delta: | 0.2931 |
| P3 start: | 27.9814 | end: | 28.458 | delta: | 0.4765 |
| P4 start: | 39.1116 | end: | 39.7532 | delta: | 0.6415 |
| P5 start: | 50.2694 | end: | 51.0513 | delta: | 0.7819 |
| P6 start: | 61.4503 | end: | 62.3425 | delta: | 0.8922 |
| P7 start: | 72.6521 | end: | 73.6204 | delta: | 0.9683 |
| P8 start: | 83.8749 | end: | 84.882 | delta: | 1.0071 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -0.000157403 | H21: 0.000147124 | H21f: 7.00591e-06 |
| H5: -0.000169321 | H23: 0.000196253 | H23f: 8.53275e-06 |
| H7: -0.000180331 | H25: 0.000217251 | H25f: 8.69002e-06 |
| H9: -0.000170239 | H27: -0.000185136 | H27f: 6.85691e-06 |
| H11: -8.62397e-05 | H29: 0.000162395 | H29f: 5.59983e-06 |
| H13: -7.1091e-05 | H31: 0.963582 | H31f: 0.0310833 |
| H15: -1.08496e-05 | H33: -1.01578 | H33f: -0.0307813 |
| H17: 7.80238e-05 | H35: -0.00459285 | H35f: -0.000131224 |
| H19: 0.00012471 | H37: 0.00216955 | H37f: 5.86364e-05 |

| |
|-----------------|
| c2sd = -0.0381 |
| c2ed = -0.1099 |
| c3sd = -0.0991 |
| c3ed = -0.2115 |
| c4sd = -0.1182 |
| c4ed = -0.267 |
| c5sd = -0.125 |
| c5ed = -0.3044 |
| varx = 4.3745%. |

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 10/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|------------|
| Desired Amplitude: | 0.1 |
| Actual Amplitude: | 0.1 |
| Actual Power: | 0.00999999 |
| Distortion 2H-30H: | 0.0479686% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.0972 | end: 6.2081 | delta: 0.1109 |
| P2 start: 16.9036 | end: 17.2293 | delta: 0.3257 |
| P3 start: 27.9629 | end: 28.4922 | delta: 0.5294 |
| P4 start: 39.0802 | end: 39.7929 | delta: 0.7127 |
| P5 start: 50.2283 | end: 51.097 | delta: 0.8687 |
| P6 start: 61.4014 | end: 62.3928 | delta: 0.9914 |
| P7 start: 72.5985 | end: 73.6744 | delta: 1.0759 |
| P8 start: 83.8189 | end: 84.9378 | delta: 1.1189 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -0.000121932 | H21: 0.000142097 | H21f: 6.76652e-06 |
| H5: -0.000176826 | H23: 0.000164387 | H23f: 7.14724e-06 |
| H7: -0.000124244 | H25: 0.000163955 | H25f: 6.5582e-06 |
| H9: -0.000147482 | H27: 0.000181773 | H27f: 6.73234e-06 |
| H11: -8.18243e-05 | H29: 0.000119829 | H29f: 4.13204e-06 |
| H13: -5.12556e-05 | H31: 0.959188 | H31f: 0.0309415 |
| H15: 1.35592e-05 | H33: -1.0154 | H33f: -0.0307698 |
| H17: 4.08919e-05 | H35: -0.00596332 | H35f: -0.000170381 |
| H19: 0.000118749 | H37: 0.00251002 | H37f: 6.78385e-05 |

| |
|-----------------|
| c2sd = -0.0167 |
| c2ed = -0.1004 |
| c3sd = -0.0818 |
| c3ed = -0.2131 |
| c4sd = -0.1015 |
| c4ed = -0.2754 |
| c5sd = -0.1074 |
| c5ed = -0.3172 |
| varx = 4.3637%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.11
 Actual Amplitude: 0.109999
 Actual Power: 0.0120999
 Distortion 2H-30H: 0.0416708%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.0698 | end: 6.1917 | delta: 0.1219 |
| P2 start: 16.8761 | end: 17.2343 | delta: 0.3582 |
| P3 start: 27.9291 | end: 28.5113 | delta: 0.5823 |
| P4 start: 39.0385 | end: 39.8224 | delta: 0.7839 |
| P5 start: 50.18 | end: 51.1356 | delta: 0.9555 |
| P6 start: 61.3484 | end: 62.4389 | delta: 1.0905 |
| P7 start: 72.5425 | end: 73.7261 | delta: 1.1836 |
| P8 start: 83.7623 | end: 84.9933 | delta: 1.2311 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -0.000126946 | H21: 0.000114494 | H21f: 5.4521e-06 |
| H5: -0.000127498 | H23: 0.000162192 | H23f: 7.05181e-06 |
| H7: -0.000136112 | H25: 0.00014309 | H25f: 5.72359e-06 |
| H9: -0.000114374 | H27: -0.000135301 | H27f: 5.01116e-06 |
| H11: -6.7236e-05 | H29: 0.000135534 | H29f: 4.67358e-06 |
| H13: -1.78318e-05 | H31: 0.959038 | H31f: 0.0309367 |
| H15: -9.6589e-07 | H33: -1.01054 | H33f: -0.0306226 |
| H17: 3.9082e-05 | H35: -0.0078698 | H35f: -0.000224851 |
| H19: 8.20644e-05 | H37: 0.00217844 | H37f: 5.88767e-05 |

c2sd = -0.0335
 c2ed = -0.1062
 c3sd = -0.0981
 c3ed = -0.2115
 c4sd = -0.1198
 c4ed = -0.2693
 c5sd = -0.1272
 c5ed = -0.3071
 varx = 4.353%.

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 12/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.12
Actual Amplitude: 0.12
Actual Power: 0.0144
Distortion 2H-30H: 0.0324592%
First strong harmonics: 31 and 33
Pulses per sine cycle: 32
Total switching events: 64
Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.0594 | end: 6.1923 | delta: 0.1329 |
| P2 start: 16.8546 | end: 17.2455 | delta: 0.3908 |
| P3 start: 27.8982 | end: 28.5334 | delta: 0.6351 |
| P4 start: 38.999 | end: 39.8542 | delta: 0.8551 |
| P5 start: 50.1331 | end: 51.1755 | delta: 1.0424 |
| P6 start: 61.2958 | end: 62.4856 | delta: 1.1897 |
| P7 start: 72.4868 | end: 73.7782 | delta: 1.2913 |
| P8 start: 83.7055 | end: 85.0486 | delta: 1.3431 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -9.99232e-05 | H21: 8.94129e-05 | H21f: 4.25775e-06 |
| H5: -0.000102959 | H23: 0.000103525 | H23f: 4.5011e-06 |
| H7: -9.00754e-05 | H25: 0.000121805 | H25f: 4.8722e-06 |
| H9: -9.78853e-05 | H27: 0.00011475 | H27f: 4.25e-06 |
| H11: -5.59984e-05 | H29: 0.000103042 | H29f: 3.55316e-06 |
| H13: -4.57292e-05 | H31: 0.957724 | H31f: 0.0308943 |
| H15: 4.5113e-06 | H33: -1.00631 | H33f: -0.0304941 |
| H17: 1.994e-05 | H35: -0.00992062 | H35f: -0.000283446 |
| H19: 6.40414e-05 | H37: 0.00204236 | H37f: 5.51988e-05 |

c2sd = -0.0367
c2ed = -0.1133
c3sd = -0.0996
c3ed = -0.2189
c4sd = -0.1198
c4ed = -0.277
c5sd = -0.1262
c5ed = -0.3153
varx = 4.3409%.

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|------------|
| Desired Amplitude: | 0.13 |
| Actual Amplitude: | 0.130001 |
| Actual Power: | 0.0169002 |
| Distortion 2H-30H: | 0.0123745% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.086 | end: | 6.2302 | delta: | 0.1442 |
| P2 start: | 16.8449 | end: | 17.2684 | delta: | 0.4235 |
| P3 start: | 27.8743 | end: | 28.5623 | delta: | 0.688 |
| P4 start: | 38.9638 | end: | 39.8901 | delta: | 0.9263 |
| P5 start: | 50.0889 | end: | 51.2181 | delta: | 1.1292 |
| P6 start: | 61.2452 | end: | 62.534 | delta: | 1.2888 |
| P7 start: | 72.4322 | end: | 73.8311 | delta: | 1.399 |
| P8 start: | 83.6492 | end: | 85.1043 | delta: | 1.4551 |

| | | |
|-------------------|------------------|--------------------|
| H3: -3.77507e-05 | H21: 3.83067e-05 | H21f: 1.82413e-06 |
| H5: -3.5727e-05 | H23: 4.13718e-05 | H23f: 1.79877e-06 |
| H7: -4.06974e-05 | H25: 4.68887e-05 | H25f: 1.87555e-06 |
| H9: -3.85291e-05 | H27: 3.88534e-05 | H27f: 1.43901e-06 |
| H11: -1.61334e-05 | H29: 3.3879e-05 | H29f: 1.16824e-06 |
| H13: -2.06117e-05 | H31: 0.954161 | H31f: 0.0307794 |
| H15: 9.45714e-06 | H33: -1.00374 | H33f: -0.0304164 |
| H17: 3.91472e-06 | H35: -0.0119963 | H35f: -0.000342751 |
| H19: 2.54095e-05 | H37: 0.0020236 | H37f: 5.46918e-05 |

| |
|-----------------|
| c2sd = -0.0274 |
| c2ed = -0.1093 |
| c3sd = -0.0928 |
| c3ed = -0.2205 |
| c4sd = -0.1139 |
| c4ed = -0.2822 |
| c5sd = -0.1203 |
| c5ed = -0.3226 |
| varx = 4.3273%. |

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.14
 Actual Amplitude: 0.14
 Actual Power: 0.0196
 Distortion 2H-30H: 0.0313416%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.1783 | end: 6.334 | delta: 0.1557 |
| P2 start: 16.8697 | end: 17.3254 | delta: 0.4557 |
| P3 start: 27.8697 | end: 28.6103 | delta: 0.7406 |
| P4 start: 38.9413 | end: 39.9385 | delta: 0.9972 |
| P5 start: 50.0533 | end: 51.269 | delta: 1.2158 |
| P6 start: 61.2 | end: 63.8878 | delta: 1.3878 |
| P7 start: 72.3804 | end: 73.8868 | delta: 1.5064 |
| P8 start: 83.594 | end: 85.1608 | delta: 1.5669 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -8.49256e-05 | H21: 8.78683e-05 | H21f: 4.18421e-06 |
| H5: -0.000114053 | H23: 0.000109241 | H23f: 4.74959e-06 |
| H7: -7.03927e-05 | H25: 9.71188e-05 | H25f: 3.88475e-06 |
| H9: -8.47449e-05 | H27: 0.000128593 | H27f: 4.7627e-06 |
| H11: -5.37643e-05 | H29: 9.29945e-05 | H29f: 3.20671e-06 |
| H13: -2.88135e-05 | H31: 0.945136 | H31f: 0.0304883 |
| H15: 4.69801e-06 | H33: -1.00586 | H33f: -0.0304806 |
| H17: 4.53433e-05 | H35: -0.0132261 | H35f: -0.000377888 |
| H19: 7.61763e-05 | H37: 0.00313164 | H37f: 8.4639e-05 |

c2sd = 0.0498
 c2ed = -0.1047
 c3sd = -0.0128
 c3ed = -0.2571
 c4sd = -0.0229
 c4ed = -0.3474
 c5sd = -0.0179
 c5ed = -0.4098
 varx = 4.3111%.

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 15/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-------------|
| Desired Amplitude: | 0.15 |
| Actual Amplitude: | 0.15 |
| Actual Power: | 0.0225 |
| Distortion 2H-30H: | 0.00791567% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.1575 | end: | 6.3243 | delta: | 0.1668 |
| P2 start: | 16.8406 | end: | 17.329 | delta: | 0.4884 |
| P3 start: | 27.8345 | end: | 28.6279 | delta: | 0.7934 |
| P4 start: | 38.8983 | end: | 39.9666 | delta: | 1.0684 |
| P5 start: | 50.0037 | end: | 51.3063 | delta: | 1.3026 |
| P6 start: | 61.1458 | end: | 62.6328 | delta: | 1.487 |
| P7 start: | 72.3238 | end: | 73.938 | delta: | 1.6142 |
| P8 start: | 83.5369 | end: | 85.216 | delta: | 1.6791 |

| | | |
|-------------------|------------------|--------------------|
| H3: -2.09122e-05 | H21: 2.60438e-05 | H21f: 1.24018e-06 |
| H5: -2.63089e-05 | H23: 2.42191e-05 | H23f: 1.053e-06 |
| H7: -2.37792e-05 | H25: 3.27646e-05 | H25f: 1.31059e-06 |
| H9: -2.09684e-05 | H27: 2.20177e-05 | H27f: 8.15472e-07 |
| H11: -1.03488e-05 | H29: 2.30813e-05 | H29f: 7.95907e-07 |
| H13: -1.19869e-05 | H31: 0.944412 | H31f: 0.0304649 |
| H15: 4.62091e-06 | H33: -0.999697 | H33f: -0.0302939 |
| H17: 5.77366e-06 | H35: -0.016016 | H35f: -0.000457601 |
| H19: 2.16755e-05 | H37: 0.00262889 | H37f: 7.10511e-05 |

| |
|-----------------|
| c2sd = 0.0423 |
| c2ed = -0.1227 |
| c3sd = -0.0133 |
| c3ed = -0.2744 |
| c4sd = -0.0191 |
| c4ed = -0.3659 |
| c5sd = -0.0106 |
| c5ed = -0.4294 |
| varx = 4.2963%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 16/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.16
Actual Amplitude: 0.16
Actual Power: 0.0256
Distortion 2H-30H: 0.00645406%
First strong harmonics: 31 and 33
Pulses per sine cycle: 32
Total switching events: 64
Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.2463 | end: 6.4248 | delta: 0.1785 |
| P2 start: 16.8603 | end: 17.3811 | delta: 0.5208 |
| P3 start: 27.8271 | end: 28.6731 | delta: 0.846 |
| P4 start: 38.8737 | end: 40.0129 | delta: 1.1392 |
| P5 start: 49.9666 | end: 51.3557 | delta: 1.3891 |
| P6 start: 61.0996 | end: 62.6854 | delta: 1.5859 |
| P7 start: 72.2715 | end: 73.9931 | delta: 1.7216 |
| P8 start: 83.4815 | end: 85.2724 | delta: 1.7909 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -1.7866e-05 | H21: 2.21123e-05 | H21f: 1.05297e-06 |
| H5: -2.11546e-05 | H23: 1.73848e-05 | H23f: 7.55861e-07 |
| H7: -1.70755e-05 | H25: 2.02629e-05 | H25f: 8.10516e-07 |
| H9: -1.60214e-05 | H27: 2.672e-05 | H27f: 9.89628e-07 |
| H11: -1.59975e-05 | H29: 1.7926e-05 | H29f: 6.18137e-07 |
| H13: -4.1959e-06 | H31: 0.935698 | H31f: 0.0301838 |
| H15: -9.17016e-07 | H33: -1.00058 | H33f: -0.0303206 |
| H17: 8.70514e-06 | H35: -0.0176985 | H35f: -0.000505672 |
| H19: 1.62267e-05 | H37: 0.00354115 | H37f: 9.57067e-05 |

c2sd = 0.068
c2ed = -0.0765
c3sd = -0.011
c3ed = -0.2388
c4sd = -0.0308
c4ed = -0.3326
c5sd = -0.032
c5ed = -0.3958
varx = 4.2783%.

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.17
 Actual Amplitude: 0.17
 Actual Power: 0.0289
 Distortion 2H-30H: 0.0205762%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.1954 | end: 6.3847 | delta: 0.1892 |
| P2 start: 16.827 | end: 17.3801 | delta: 0.553 |
| P3 start: 27.7885 | end: 28.6872 | delta: 0.8987 |
| P4 start: 38.8282 | end: 40.0385 | delta: 1.2103 |
| P5 start: 49.9152 | end: 51.3912 | delta: 1.476 |
| P6 start: 61.044 | end: 62.7292 | delta: 1.6852 |
| P7 start: 72.2138 | end: 74.0435 | delta: 1.8297 |
| P8 start: 83.4239 | end: 85.3272 | delta: 1.9034 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -6.93435e-05 | H21: 6.60911e-05 | H21f: 3.14719e-06 |
| H5: -5.57129e-05 | H23: 7.83172e-05 | H23f: 3.40509e-06 |
| H7: -5.56109e-05 | H25: 6.67127e-05 | H25f: 2.66851e-06 |
| H9: -6.10104e-05 | H27: 7.19724e-05 | H27f: 2.66565e-06 |
| H11: -2.8936e-05 | H29: 5.2785e-05 | H29f: 1.82017e-06 |
| H13: -2.22179e-05 | H31: 0.935744 | H31f: 0.0301853 |
| H15: 1.41068e-05 | H33: -0.992795 | H33f: -0.0300847 |
| H17: 2.1927e-05 | H35: -0.0206695 | H35f: -0.000590557 |
| H19: 5.17844e-05 | H37: 0.00317183 | H37f: 8.57252e-05 |

c2sd = 0.0519
 c2ed = -0.0948
 c3sd = -0.0218
 c3ed = -0.2525
 c4sd = -0.039
 c4ed = -0.3443
 c5sd = -0.038
 c5ed = -0.4056
 varx = 4.2617%.

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 18/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.18
Actual Amplitude: 0.18
Actual Power: 0.0324
Distortion 2H-30H: 0.0168681%
First strong harmonics: 31 and 33
Pulses per sine cycle: 32
Total switching events: 64
Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.2091 | end: 6.4096 | delta: 0.2005 |
| P2 start: 16.8157 | end: 17.4012 | delta: 0.5854 |
| P3 start: 27.763 | end: 28.7143 | delta: 0.9513 |
| P4 start: 38.7914 | end: 40.0728 | delta: 1.2813 |
| P5 start: 49.8695 | end: 51.4322 | delta: 1.5627 |
| P6 start: 60.992 | end: 62.7764 | delta: 1.7844 |
| P7 start: 72.1583 | end: 74.0957 | delta: 1.9374 |
| P8 start: 83.3672 | end: 85.3827 | delta: 2.0155 |

| | | |
|-------------------|------------------|--------------------|
| H3: -4.75021e-05 | H21: 4.42296e-05 | H21f: 2.10617e-06 |
| H5: -5.44729e-05 | H23: 5.45902e-05 | H23f: 2.37349e-06 |
| H7: -4.69199e-05 | H25: 6.02069e-05 | H25f: 2.40827e-06 |
| H9: -4.43166e-05 | H27: 6.32425e-05 | H27f: 2.34231e-06 |
| H11: -2.25373e-05 | H29: 4.55928e-05 | H29f: 1.57216e-06 |
| H13: -2.27024e-05 | H31: 0.931774 | H31f: 0.0300572 |
| H15: 1.7202e-05 | H33: -0.988322 | H33f: -0.0299492 |
| H17: 1.23261e-05 | H35: -0.0234003 | H35f: -0.000668579 |
| H19: 5.43442e-05 | H37: 0.00329864 | H37f: 8.91524e-05 |

c2sd = 0.0551
c2ed = -0.0882
c3sd = -0.0239
c3ed = -0.2488
c4sd = -0.0443
c4ed = -0.3415
c5sd = -0.0455
c5ed = -0.4028
varx = 4.2431%.

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 19/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-------------|
| Desired Amplitude: | 0.19 |
| Actual Amplitude: | 0.19 |
| Actual Power: | 0.0361 |
| Distortion 2H-30H: | 0.00130214% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.2009 | end: 6.4125 | delta: 0.2116 |
| P2 start: 16.7929 | end: 17.4108 | delta: 0.618 |
| P3 start: 27.7307 | end: 28.7348 | delta: 1.004 |
| P4 start: 38.75 | end: 40.1024 | delta: 1.3524 |
| P5 start: 49.8207 | end: 51.4702 | delta: 1.6495 |
| P6 start: 60.938 | end: 62.8216 | delta: 1.8836 |
| P7 start: 72.1014 | end: 74.1467 | delta: 2.0453 |
| P8 start: 83.3101 | end: 85.438 | delta: 2.1279 |

| | | |
|-------------------|------------------|--------------------|
| H3: -3.59483e-06 | H21: 4.58389e-06 | H21f: 2.1828e-07 |
| H5: -1.51782e-06 | H23: 3.8206e-06 | H23f: 1.66113e-07 |
| H7: -4.39369e-06 | H25: 5.83162e-06 | H25f: 2.33265e-07 |
| H9: -3.63922e-06 | H27: 3.03268e-06 | H27f: 1.12321e-07 |
| H11: -2.90492e-06 | H29: 3.63615e-06 | H29f: 1.25385e-07 |
| H13: -2.02786e-06 | H31: 0.929404 | H31f: 0.0299808 |
| H15: -9.58623e-07 | H33: -0.981893 | H33f: -0.0297543 |
| H17: 2.34957e-06 | H35: -0.0265968 | H35f: -0.000759909 |
| H19: 3.2795e-06 | H37: 0.00300662 | H37f: 8.126e-05 |

| |
|-----------------|
| c2sd = 0.0587 |
| c2ed = -0.105 |
| c3sd = -0.0134 |
| c3ed = -0.2711 |
| c4sd = -0.0284 |
| c4ed = -0.3691 |
| c5sd = -0.0245 |
| c5ed = -0.4345 |
| varx = 4.2239%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 20/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-------------|
| Desired Amplitude: | 0.2 |
| Actual Amplitude: | 0.2 |
| Actual Power: | 0.04 |
| Distortion 2H-30H: | 0.00140935% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.1708 | end: 6.3933 | delta: 0.2225 |
| P2 start: 16.7645 | end: 17.4148 | delta: 0.6503 |
| P3 start: 27.695 | end: 28.7516 | delta: 1.0566 |
| P4 start: 38.7062 | end: 40.1296 | delta: 1.4234 |
| P5 start: 49.7701 | end: 51.5065 | delta: 1.7363 |
| P6 start: 60.8827 | end: 62.8657 | delta: 1.983 |
| P7 start: 72.0437 | end: 74.1971 | delta: 2.1534 |
| P8 start: 83.2526 | end: 85.493 | delta: 2.2404 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -4.67994e-06 | H21: 3.12598e-06 | H21f: 1.48856e-07 |
| H5: -5.0088e-06 | H23: 5.52684e-06 | H23f: 2.40297e-07 |
| H7: -3.95717e-06 | H25: 4.55346e-06 | H25f: 1.82138e-07 |
| H9: -4.174e-06 | H27: 4.31454e-06 | H27f: 1.59798e-07 |
| H11: -2.41471e-06 | H29: 2.69544e-06 | H29f: 9.29461e-08 |
| H13: -2.59781e-06 | H31: 0.927924 | H31f: 0.029933 |
| H15: 6.83019e-07 | H33: -0.974163 | H33f: -0.0295201 |
| H17: 2.52226e-06 | H35: -0.0299455 | H35f: -0.000855585 |
| H19: 3.49498e-06 | H37: 0.00269126 | H37f: 7.27367e-05 |

| |
|-----------------|
| c2sd = 0.0478 |
| c2ed = -0.1184 |
| c3sd = -0.0212 |
| c3ed = -0.2823 |
| c4sd = -0.0346 |
| c4ed = -0.3796 |
| c5sd = -0.0293 |
| c5ed = -0.4441 |
| varx = 4.2041%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 21/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-------------|
| Desired Amplitude: | 0.21 |
| Actual Amplitude: | 0.21 |
| Actual Power: | 0.0441 |
| Distortion 2H-30H: | 0.00218352% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.1225 | end: | 6.3556 | delta: | 0.2331 |
| P2 start: | 16.729 | end: | 17.4116 | delta: | 0.6826 |
| P3 start: | 27.6548 | end: | 28.7641 | delta: | 1.1093 |
| P4 start: | 38.6594 | end: | 40.1539 | delta: | 1.4945 |
| P5 start: | 49.7174 | end: | 51.5407 | delta: | 1.8232 |
| P6 start: | 60.8259 | end: | 62.9084 | delta: | 2.0825 |
| P7 start: | 71.9852 | end: | 74.2467 | delta: | 2.2616 |
| P8 start: | 83.1947 | end: | 85.5478 | delta: | 2.3531 |

| | | |
|-------------------|------------------|--------------------|
| H3: -4.81848e-06 | H21: 6.09193e-06 | H21f: 2.90092e-07 |
| H5: -7.08316e-06 | H23: 9.66314e-06 | H23f: 4.20136e-07 |
| H7: -4.49151e-06 | H25: 7.25662e-06 | H25f: 2.90265e-07 |
| H9: -6.82617e-06 | H27: 7.96387e-06 | H27f: 2.94958e-07 |
| H11: -4.30377e-06 | H29: 5.73232e-06 | H29f: 1.97666e-07 |
| H13: -1.61234e-06 | H31: 0.927437 | H31f: 0.0299173 |
| H15: 8.67326e-07 | H33: -0.965015 | H33f: -0.0292429 |
| H17: 2.21083e-06 | H35: -0.0335453 | H35f: -0.000958437 |
| H19: 5.51589e-06 | H37: 0.00220082 | H37f: 5.94816e-05 |

| |
|-----------------|
| c2sd = 0.0329 |
| c2ed = -0.1423 |
| c3sd = -0.028 |
| c3ed = -0.3031 |
| c4sd = -0.0367 |
| c4ed = -0.4 |
| c5sd = -0.0277 |
| c5ed = -0.4642 |
| varx = 4.1835%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.22 |
| Actual Amplitude: | 0.22 |
| Actual Power: | 0.0484 |
| Distortion 2H-30H: | 0.000747445% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.1096 | end: 6.3537 | delta: 0.2441 |
| P2 start: 16.7071 | end: 17.422 | delta: 0.7149 |
| P3 start: 27.6226 | end: 28.7844 | delta: 1.1618 |
| P4 start: 38.6177 | end: 40.1831 | delta: 1.5654 |
| P5 start: 49.6681 | end: 51.5781 | delta: 1.91 |
| P6 start: 60.7713 | end: 62.9531 | delta: 2.1818 |
| P7 start: 71.9278 | end: 74.2975 | delta: 2.3697 |
| P8 start: 83.1373 | end: 85.603 | delta: 2.4657 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -2.29973e-06 | H21: 3.05535e-06 | H21f: 1.45493e-07 |
| H5: -2.34572e-06 | H23: 2.5497e-06 | H23f: 1.10856e-07 |
| H7: -1.28128e-06 | H25: 2.42851e-06 | H25f: 9.71405e-08 |
| H9: -1.95477e-06 | H27: 2.41471e-06 | H27f: 8.94338e-08 |
| H11: -1.53664e-06 | H29: 2.18871e-06 | H29f: 7.54726e-08 |
| H13: -7.16453e-07 | H31: 0.924525 | H31f: 0.0298234 |
| H15: -7.5891e-07 | H33: -0.957732 | H33f: -0.0290222 |
| H17: 1.37984e-06 | H35: -0.037007 | H35f: -0.00105734 |
| H19: 1.37984e-06 | H37: 0.0020171 | H37f: 5.45161e-05 |

| |
|-----------------|
| c2sd = 0.0396 |
| c2ed = -0.1605 |
| c3sd = -0.0141 |
| c3ed = -0.329 |
| c4sd = -0.0165 |
| c4ed = -0.4327 |
| c5sd = -0.0016 |
| c5ed = -0.5022 |
| varx = 4.1614%. |

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 23/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.23
Actual Amplitude: 0.229999
Actual Power: 0.0528995
Distortion 2H-30H: 0.00866559%
First strong harmonics: 31 and 33
Pulses per sine cycle: 32
Total weighting events: 64
Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.1167 | end: 6.3719 | delta: 0.2552 |
| P2 start: 16.6952 | end: 17.4422 | delta: 0.747 |
| P3 start: 27.5958 | end: 28.81 | delta: 1.2142 |
| P4 start: 38.5794 | end: 40.2156 | delta: 1.6362 |
| P5 start: 49.6211 | end: 51.6177 | delta: 1.9966 |
| P6 start: 60.7181 | end: 62.9992 | delta: 2.2811 |
| P7 start: 71.8713 | end: 74.349 | delta: 2.4777 |
| P8 start: 83.0801 | end: 85.6583 | delta: 2.5782 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -2.02377e-05 | H21: 2.87381e-05 | H21f: 1.36848e-06 |
| H5: -2.73209e-05 | H23: 3.46747e-05 | H23f: 1.5076e-06 |
| H7: -2.39458e-05 | H25: 2.94326e-05 | H25f: 1.17731e-06 |
| H9: -2.13009e-05 | H27: 2.84256e-05 | H27f: 1.0528e-06 |
| H11: -1.48783e-05 | H29: 3.0129e-05 | H29f: 1.03893e-06 |
| H13: -5.25402e-06 | H31: 0.919949 | H31f: 0.0296758 |
| H15: 3.03565e-06 | H33: -0.951614 | H33f: -0.0288368 |
| H17: 9.49127e-06 | H35: -0.040373 | H35f: -0.00115351 |
| H19: 1.91725e-05 | H37: 0.00211253 | H37f: 5.70953e-05 |

c2sd = 0.0448
c2ed = -0.1574
c3sd = -0.0132
c3ed = -0.3309
c4sd = -0.0177
c4ed = -0.4372
c5sd = -0.0037
c5ed = -0.5076
varx = 4.1379%.

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 24/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-------------|
| Desired Amplitude: | 0.24 |
| Actual Amplitude: | 0.240001 |
| Actual Power: | 0.0576003 |
| Distortion 2H-30H: | 0.00655946% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.2021 | end: 6.4692 | delta: 0.2671 |
| P2 start: 16.7127 | end: 17.4918 | delta: 0.7791 |
| P3 start: 27.5864 | end: 28.8527 | delta: 1.2664 |
| P4 start: 38.5526 | end: 40.2593 | delta: 1.7067 |
| P5 start: 49.5816 | end: 51.6645 | delta: 2.0829 |
| P6 start: 60.67 | end: 63.0499 | delta: 2.3799 |
| P7 start: 71.8177 | end: 74.4031 | delta: 2.5854 |
| P8 start: 83.024 | end: 85.7144 | delta: 2.6904 |

| | | |
|-------------------|------------------|-------------------|
| H3: -2.20294e-05 | H21: 1.98912e-05 | H21f: 9.47201e-07 |
| H5: -1.66327e-05 | H23: 1.52332e-05 | H23f: 6.62311e-07 |
| H7: -2.16379e-05 | H25: 2.4538e-05 | H25f: 9.81521e-07 |
| H9: -1.42647e-05 | H27: 2.12916e-05 | H27f: 7.88577e-07 |
| H11: -7.21538e-06 | H29: 2.80447e-05 | H29f: 9.67059e-07 |
| H13: -4.59723e-06 | H31: 0.910361 | H31f: 0.0293665 |
| H15: 5.03831e-06 | H33: -0.949887 | H33f: -0.0287844 |
| H17: 9.02133e-06 | H35: -0.0433559 | H35f: -0.00123874 |
| H19: 1.4812e-05 | H37: 0.00288353 | H37f: 7.79331e-05 |

| |
|-----------------|
| c2sd = 0.0811 |
| c2ed = -0.1265 |
| c3sd = 0.0076 |
| c3ed = -0.3185 |
| c4sd = -0.0039 |
| c4ed = -0.4343 |
| c5sd = 0.0064 |
| c5ed = -0.5102 |
| varx = 4.1121%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 25/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-------------|
| Desired Amplitude: | 0.25 |
| Actual Amplitude: | 0.25 |
| Actual Power: | 0.0624999 |
| Distortion 2H-30H: | 0.00547453% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2708 | end: | 6.5498 | delta: | 0.279 |
| P2 start: | 16.7246 | end: | 17.5358 | delta: | 0.8112 |
| P3 start: | 27.5735 | end: | 28.892 | delta: | 1.3185 |
| P4 start: | 38.5232 | end: | 40.3004 | delta: | 1.7771 |
| P5 start: | 49.5405 | end: | 51.7097 | delta: | 2.1692 |
| P6 start: | 60.6206 | end: | 63.0994 | delta: | 2.4788 |
| P7 start: | 71.7633 | end: | 74.4565 | delta: | 2.6931 |
| P8 start: | 82.9676 | end: | 85.7702 | delta: | 2.8027 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -1.78091e-05 | H21: 1.71008e-05 | H21f: 8.14323e-07 |
| H5: -1.23247e-05 | H23: 1.78179e-05 | H23f: 7.74691e-07 |
| H7: -1.74333e-05 | H25: 2.02052e-05 | H25f: 8.08209e-07 |
| H9: -2.08785e-05 | H27: 1.61901e-05 | H27f: 5.99633e-07 |
| H11: -5.71252e-06 | H29: 1.47595e-05 | H29f: 5.08948e-07 |
| H13: -7.75256e-06 | H31: 0.901601 | H31f: 0.0290839 |
| H15: 5.18083e-06 | H33: -0.946917 | H33f: -0.0286945 |
| H17: 4.58918e-06 | H35: -0.0465294 | H35f: -0.00132941 |
| H19: 1.22224e-05 | H37: 0.00360409 | H37f: 9.74079e-05 |

| |
|-----------------|
| c2sd = 0.112 |
| c2ed = -0.1015 |
| c3sd = 0.0253 |
| c3ed = -0.3099 |
| c4sd = 0.0079 |
| c4ed = -0.4343 |
| c5sd = 0.0153 |
| c5ed = -0.5151 |
| varx = 4.0856%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 26/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-------------|
| Desired Amplitude: | 0.26 |
| Actual Amplitude: | 0.26 |
| Actual Power: | 0.0676001 |
| Distortion 2H-30H: | 0.00401055% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.1706 | end: | 6.4595 | delta: | 0.2889 |
| P2 start: | 16.6658 | end: | 17.5092 | delta: | 0.8434 |
| P3 start: | 27.5191 | end: | 28.8902 | delta: | 1.371 |
| P4 start: | 38.4665 | end: | 40.3148 | delta: | 1.8483 |
| P5 start: | 49.4805 | end: | 51.7368 | delta: | 2.2563 |
| P6 start: | 60.5586 | end: | 63.1373 | delta: | 2.5788 |
| P7 start: | 71.7015 | end: | 74.5035 | delta: | 2.802 |
| P8 start: | 82.9083 | end: | 85.8245 | delta: | 2.9161 |

| | | |
|-------------------|---------------------|-------------------------|
| H3: -1.16755e-05 | H21: 1.26763e-05 | H21f: 6.03633e-07 |
| H5: -1.36604e-05 | H23: 1.36299e-05 | H23f: 5.92605e-07 |
| H7: -1.13002e-05 | H25: 1.62757e-05 | H25f: 6.51028e-07 |
| H9: -9.1134e-06 | H27: 1.10485e-05 | H27f: 4.09204e-07 |
| H11: -3.13116e-06 | H29: 1.26216e-05 | H29f: 4.35229e-07 |
| H13: -6.30928e-06 | H31: 0.90391 | H31f: 0.0291584 |
| H15: 3.93076e-06 | H33: -0.9329 | H33f: -0.0282697 |
| H17: 5.83776e-07 | H35: -0.0512996 | H35f: -0.0014657 |
| H19: 1.07999e-05 | H37: 0.00232321 | H37f: 6.27894e-05 |

| |
|-----------------|
| c2sd = 0.0722 |
| c2ed = -0.1471 |
| c3sd = 0.0017 |
| c3ed = -0.3424 |
| c4sd = -0.0077 |
| c4ed = -0.4611 |
| c5sd = 0.0053 |
| c5ed = -0.538 |
| varx = 4.0613%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.27
 Actual Amplitude: 0.27
 Actual Power: 0.0728999
 Distortion 2H-30H: 0.00281966%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.2931 | end: 6.5947 | delta: 0.3016 |
| P2 start: 16.7001 | end: 17.5754 | delta: 0.8753 |
| P3 start: 27.5191 | end: 28.942 | delta: 1.4229 |
| P4 start: 38.4456 | end: 40.3639 | delta: 1.9184 |
| P5 start: 49.4449 | end: 51.7871 | delta: 2.3423 |
| P6 start: 60.5127 | end: 63.1901 | delta: 2.6774 |
| P7 start: 71.6491 | end: 74.5586 | delta: 2.9094 |
| P8 start: 82.8526 | end: 85.8808 | delta: 3.0282 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -8.52603e-06 | H21: 7.95049e-06 | H21f: 3.78595e-07 |
| H5: -8.15126e-06 | H23: 8.02905e-06 | H23f: 3.49089e-07 |
| H7: -6.94664e-06 | H25: 1.01525e-05 | H25f: 4.06102e-07 |
| H9: -6.09002e-06 | H27: 8.03675e-06 | H27f: 2.97657e-07 |
| H11: -3.14296e-06 | H29: 1.0836e-05 | H29f: 3.73657e-07 |
| H13: -4.54049e-06 | H31: 0.891304 | H31f: 0.0287518 |
| H15: 6.65218e-06 | H33: -0.932814 | H33f: -0.0282671 |
| H17: -1.32272e-07 | H35: -0.0542731 | H35f: -0.00155066 |
| H19: 9.11284e-06 | H37: 0.00365822 | H37f: 9.88709e-05 |

c2sd = 0.1132
 c2ed = -0.0877
 c3sd = 0.0126
 c3ed = -0.3014
 c4sd = -0.014
 c4ed = -0.4265
 c5sd = -0.0124
 c5ed = -0.5055
 varx = 4.032%.

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 28/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|------------|
| Desired Amplitude: | 0.28 |
| Actual Amplitude: | 0.28 |
| Actual Power: | 0.0784 |
| Distortion 2H-30H: | 0.0024567% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.3841 | end: | 6.6983 | delta: | 0.3142 |
| P2 start: | 16.7229 | end: | 17.6302 | delta: | 0.9072 |
| P3 start: | 27.5124 | end: | 28.9872 | delta: | 1.4748 |
| P4 start: | 38.4201 | end: | 40.4086 | delta: | 1.9885 |
| P5 start: | 49.406 | end: | 51.8343 | delta: | 2.4283 |
| P6 start: | 60.4647 | end: | 63.2408 | delta: | 2.7761 |
| P7 start: | 71.5954 | end: | 74.6125 | delta: | 3.0171 |
| P8 start: | 82.7965 | end: | 85.9369 | delta: | 3.1404 |

| | | |
|-------------------|-----------------------|------------------------|
| H3: -5.42078e-06 | H21: 5.92414e-06 | H21f: 2.82102e-07 |
| H5: -6.72177e-06 | H23: 9.43924e-06 | H23f: 4.10402e-07 |
| H7: -9.79613e-06 | H25: 9.39964e-06 | H25f: 3.75986e-07 |
| H9: -5.24009e-06 | H27: 6.76594e-06 | H27f: 2.5059e-07 |
| H11: -2.11903e-06 | H29: 7.85079e-06 | H29f: 2.70717e-07 |
| H13: -2.79379e-06 | H31: 0.880423 | H31f: 0.0284008 |
| H15: 2.98143e-06 | H33: -0.930599 | H33f: -0.0282 |
| H17: 2.2002e-06 | H35: -0.0574596 | H35f: -0.0016417 |
| H19: 7.71748e-06 | H37: 0.00483301 | H37f: 0.000130622 |

| |
|-----------------|
| c2sd = 0.1598 |
| c2ed = -0.0567 |
| c3sd = 0.0443 |
| c3ed = -0.2946 |
| c4sd = 0.012 |
| c4ed = -0.4334 |
| c5sd = 0.0114 |
| c5ed = -0.521 |
| varx = 4.0023%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 29/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-------------|
| Desired Amplitude: | 0.29 |
| Actual Amplitude: | 0.29 |
| Actual Power: | 0.0841002 |
| Distortion 2H-30H: | 0.00168843% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.1728 | end: | 6.4948 | delta: | 0.322 |
| P2 start: | 16.6153 | end: | 17.5547 | delta: | 0.9394 |
| P3 start: | 27.4289 | end: | 28.9565 | delta: | 1.5276 |
| P4 start: | 38.3436 | end: | 40.4036 | delta: | 2.06 |
| P5 start: | 49.3322 | end: | 51.8483 | delta: | 2.516 |
| P6 start: | 60.3933 | end: | 63.2702 | delta: | 2.8769 |
| P7 start: | 71.5278 | end: | 74.6548 | delta: | 3.127 |
| P8 start: | 82.7349 | end: | 85.99 | delta: | 3.2551 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -3.92539e-06 | H21: 6.71678e-06 | H21f: 3.19847e-07 |
| H5: -5.28619e-06 | H23: 5.57519e-06 | H23f: 2.424e-07 |
| H7: -2.6917e-06 | H25: 6.21782e-06 | H25f: 2.48713e-07 |
| H9: -5.11755e-06 | H27: 5.07878e-06 | H27f: 1.88103e-07 |
| H11: -3.54475e-06 | H29: 5.2519e-06 | H29f: 1.811e-07 |
| H13: -2.01302e-06 | H31: 0.889847 | H31f: 0.0287047 |
| H15: -7.50186e-07 | H33: -0.908461 | H33f: -0.0275291 |
| H17: 3.91e-06 | H35: -0.0636845 | H35f: -0.00181956 |
| H19: 2.75466e-06 | H37: 0.00186685 | H37f: 5.04553e-05 |

| |
|-----------------|
| c2sd = 0.0762 |
| c2ed = -0.1562 |
| c3sd = -0.0005 |
| c3ed = -0.3641 |
| c4sd = -0.0124 |
| c4ed = -0.4904 |
| c5sd = 0.0008 |
| c5ed = -0.5703 |
| varx = 3.9772%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 30/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-------------|
| Desired Amplitude: | 0.3 |
| Actual Amplitude: | 0.3 |
| Actual Power: | 0.0899997 |
| Distortion 2H-30H: | 0.00109035% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.229 | end: | 6.5629 | delta: | 0.3339 |
| P2 start: | 16.6216 | end: | 17.5928 | delta: | 0.9713 |
| P3 start: | 27.4122 | end: | 28.9916 | delta: | 1.5794 |
| P4 start: | 38.3112 | end: | 40.4414 | delta: | 2.1303 |
| P5 start: | 49.2885 | end: | 51.8907 | delta: | 2.6022 |
| P6 start: | 60.3418 | end: | 63.3177 | delta: | 2.9759 |
| P7 start: | 71.472 | end: | 74.7071 | delta: | 3.2351 |
| P8 start: | 82.6778 | end: | 86.0456 | delta: | 3.3678 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -2.95132e-06 | H21: 3.1802e-06 | H21f: 1.51438e-07 |
| H5: -1.82139e-06 | H23: 5.18039e-06 | H23f: 2.25234e-07 |
| H7: -2.27673e-06 | H25: 4.29038e-06 | H25f: 1.71615e-07 |
| H9: -3.62591e-06 | H27: 1.63025e-06 | H27f: 6.03798e-08 |
| H11: -1.26485e-06 | H29: 3.38457e-06 | H29f: 1.16709e-07 |
| H13: -1.6735e-06 | H31: 0.881245 | H31f: 0.0284273 |
| H15: 2.39479e-06 | H33: -0.90332 | H33f: -0.0273733 |
| H17: 9.37478e-07 | H35: -0.0676288 | H35f: -0.00193225 |
| H19: 2.83593e-06 | H37: 0.0023229 | H37f: 6.2781e-05 |

| |
|-----------------|
| c2sd = 0.1039 |
| c2ed = -0.1395 |
| c3sd = 0.0173 |
| c3ed = -0.3636 |
| c4sd = 0.0015 |
| c4ed = -0.4989 |
| c5sd = 0.0134 |
| c5ed = -0.5843 |
| varx = 3.9464%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 31/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-------------|
| Desired Amplitude: | 0.31 |
| Actual Amplitude: | 0.31 |
| Actual Power: | 0.0961 |
| Distortion 2H-30H: | 0.00107188% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2216 | end: | 6.5664 | delta: | 0.3448 |
| P2 start: | 16.6012 | end: | 17.6044 | delta: | 1.0031 |
| P3 start: | 27.3797 | end: | 29.0111 | delta: | 1.6314 |
| P4 start: | 38.2682 | end: | 40.469 | delta: | 2.2007 |
| P5 start: | 49.2374 | end: | 51.9261 | delta: | 2.6888 |
| P6 start: | 60.2853 | end: | 63.3607 | delta: | 3.0754 |
| P7 start: | 71.4131 | end: | 74.7568 | delta: | 3.3437 |
| P8 start: | 82.6195 | end: | 86.1007 | delta: | 3.4811 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -1.06084e-06 | H21: 2.38981e-06 | H21f: 1.138e-07 |
| H5: -4.35761e-06 | H23: 4.14048e-06 | H23f: 1.80021e-07 |
| H7: -2.02842e-06 | H25: 3.72111e-06 | H25f: 1.48844e-07 |
| H9: -4.29777e-06 | H27: 4.53351e-06 | H27f: 1.67908e-07 |
| H11: -1.37984e-06 | H29: 4.72736e-07 | H29f: 1.63012e-08 |
| H13: -6.59103e-07 | H31: 0.876646 | H31f: 0.0282789 |
| H15: -1.95848e-07 | H33: -0.893855 | H33f: -0.0270865 |
| H17: 1.54086e-06 | H35: -0.0721551 | H35f: -0.00206157 |
| H19: 3.15676e-06 | H37: 0.00202121 | H37f: 5.46274e-05 |

| |
|-----------------|
| c2sd = 0.1088 |
| c2ed = -0.1532 |
| c3sd = 0.0256 |
| c3ed = -0.3848 |
| c4sd = 0.0132 |
| c4ed = -0.526 |
| c5sd = 0.0288 |
| c5ed = -0.6153 |
| varx = 3.9158%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 32/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-------------|
| Desired Amplitude: | 0.32 |
| Actual Amplitude: | 0.32 |
| Actual Power: | 0.1024 |
| Distortion 2H-30H: | 0.00116853% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.1638 | end: | 6.5187 | delta: | 0.3549 |
| P2 start: | 16.5597 | end: | 17.5947 | delta: | 1.035 |
| P3 start: | 27.3347 | end: | 29.0181 | delta: | 1.6835 |
| P4 start: | 38.2168 | end: | 40.4882 | delta: | 2.2714 |
| P5 start: | 49.1804 | end: | 51.956 | delta: | 2.7756 |
| P6 start: | 60.2248 | end: | 63.4001 | delta: | 3.1753 |
| P7 start: | 71.3518 | end: | 74.8046 | delta: | 3.4528 |
| P8 start: | 82.5603 | end: | 86.1553 | delta: | 3.595 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -3.08307e-06 | H21: 3.69291e-06 | H21f: 1.75853e-07 |
| H5: -2.18187e-06 | H23: 4.92879e-06 | H23f: 2.14295e-07 |
| H7: -3.96395e-06 | H25: 4.36373e-06 | H25f: 1.74549e-07 |
| H9: -3.05672e-06 | H27: 4.23373e-06 | H27f: 1.56805e-07 |
| H11: -2.47939e-06 | H29: 2.666e-06 | H29f: 9.1931e-08 |
| H13: -4.56076e-07 | H31: 0.875151 | H31f: 0.0282307 |
| H15: 1.73917e-07 | H33: -0.8809 | H33f: -0.0266939 |
| H17: 2.28789e-06 | H35: -0.0770992 | H35f: -0.00220283 |
| H19: 1.89727e-06 | H37: 0.00108125 | H37f: 2.92231e-05 |

| |
|-----------------|
| c2sd = 0.0842 |
| c2ed = -0.1798 |
| c3sd = 0.0079 |
| c3ed = -0.4051 |
| c4sd = -0.0014 |
| c4ed = -0.5435 |
| c5sd = 0.0165 |
| c5ed = -0.6301 |
| varx = 3.8853%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 33/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-------------|
| Desired Amplitude: | 0.33 |
| Actual Amplitude: | 0.329998 |
| Actual Power: | 0.108899 |
| Distortion 2H-30H: | 0.00119458% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2836 | end: | 6.6516 | delta: | 0.368 |
| P2 start: | 16.5932 | end: | 17.6598 | delta: | 1.0666 |
| P3 start: | 27.3336 | end: | 29.0684 | delta: | 1.7349 |
| P4 start: | 38.1945 | end: | 40.5355 | delta: | 2.341 |
| P5 start: | 49.1432 | end: | 52.0044 | delta: | 2.8612 |
| P6 start: | 60.1774 | end: | 63.4513 | delta: | 3.2739 |
| P7 start: | 71.2982 | end: | 74.8587 | delta: | 3.5605 |
| P8 start: | 82.504 | end: | 86.2115 | delta: | 3.7075 |

| | | |
|-------------------|-----------------------|------------------------|
| H3: -1.99311e-06 | H21: 3.84385e-06 | H21f: 1.8304e-07 |
| H5: -4.4155e-06 | H23: 5.3194e-06 | H23f: 2.31278e-07 |
| H7: -2.95681e-06 | H25: 3.29323e-06 | H25f: 1.31729e-07 |
| H9: -4.85501e-06 | H27: 4.44616e-06 | H27f: 1.64673e-07 |
| H11: -1.04534e-06 | H29: 1.25296e-06 | H29f: 4.32056e-08 |
| H13: -3.89187e-07 | H31: 0.861966 | H31f: 0.0278054 |
| H15: 1.41051e-06 | H33: -0.879122 | H33f: -0.02664 |
| H17: 6.89922e-07 | H35: -0.0809079 | H35f: -0.00231165 |
| H19: 2.82021e-06 | H37: 0.00231944 | H37f: 6.26876e-05 |

| |
|-----------------|
| c2sd = 0.1238 |
| c2ed = -0.1207 |
| c3sd = 0.0166 |
| c3ed = -0.3646 |
| c4sd = -0.0107 |
| c4ed = -0.5093 |
| c5sd = -0.0048 |
| c5ed = -0.5976 |
| varx = 3.8508%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 34/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.34 |
| Actual Amplitude: | 0.34 |
| Actual Power: | 0.1156 |
| Distortion 2H-30H: | 0.000382439% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.3389 | end: | 6.719 | delta: | 0.3801 |
| P2 start: | 16.5999 | end: | 17.6981 | delta: | 1.0982 |
| P3 start: | 27.3167 | end: | 29.1031 | delta: | 1.7864 |
| P4 start: | 38.1615 | end: | 40.5725 | delta: | 2.4109 |
| P5 start: | 49.0986 | end: | 52.0459 | delta: | 2.9473 |
| P6 start: | 60.125 | end: | 63.498 | delta: | 3.3729 |
| P7 start: | 71.2416 | end: | 74.9104 | delta: | 3.6688 |
| P8 start: | 82.4465 | end: | 86.2671 | delta: | 3.8206 |

| | | |
|-------------------|------------------|-------------------|
| H3: -8.92835e-07 | H21: 1.05227e-06 | H21f: 5.01081e-08 |
| H5: -1.56246e-06 | H23: 2.02829e-06 | H23f: 8.81865e-08 |
| H7: -2.86983e-07 | H25: 8.57122e-07 | H25f: 3.42849e-08 |
| H9: -1.28965e-06 | H27: 1.28965e-06 | H27f: 4.77648e-08 |
| H11: -3.85542e-07 | H29: 4.92599e-07 | H29f: 1.69862e-08 |
| H13: -6.69626e-07 | H31: 0.85279 | H31f: 0.0275094 |
| H15: 3.72015e-07 | H33: -0.872975 | H33f: -0.0264538 |
| H17: 5.90847e-07 | H35: -0.0852107 | H35f: -0.00243459 |
| H19: 8.34096e-07 | H37: 0.00281565 | H37f: 7.60987e-05 |

| |
|-----------------|
| c2sd = 0.1619 |
| c2ed = -0.1138 |
| c3sd = 0.0504 |
| c3ed = -0.3807 |
| c4sd = 0.0245 |
| c4ed = -0.5405 |
| c5sd = 0.0335 |
| c5ed = -0.6391 |
| varx = 3.8165%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magns01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 35/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.35 |
| Actual Amplitude: | 0.35 |
| Actual Power: | 0.1225 |
| Distortion 2H-30H: | 0.000300712% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.3487 | end: | 6.7401 | delta: | 0.3914 |
| P2 start: | 16.5868 | end: | 17.7167 | delta: | 1.1299 |
| P3 start: | 27.288 | end: | 29.126 | delta: | 1.838 |
| P4 start: | 38.1206 | end: | 40.6016 | delta: | 2.481 |
| P5 start: | 49.0484 | end: | 52.082 | delta: | 3.0335 |
| P6 start: | 60.0688 | end: | 63.5412 | delta: | 3.4724 |
| P7 start: | 71.1827 | end: | 74.9603 | delta: | 3.7776 |
| P8 start: | 82.3881 | end: | 86.3223 | delta: | 3.9342 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -4.33663e-07 | H21: 8.3635e-07 | H21f: 3.98262e-08 |
| H5: -3.03564e-07 | H23: 1.03702e-06 | H23f: 4.50878e-08 |
| H7: -1.36294e-06 | H25: 1.63057e-06 | H25f: 6.52229e-08 |
| H9: -8.91418e-07 | H27: 6.58525e-07 | H27f: 2.43898e-08 |
| H11: -5.51934e-07 | H29: 2.6917e-07 | H29f: 9.28172e-09 |
| H13: 3.00228e-07 | H31: 0.846511 | H31f: 0.0273068 |
| H15: 6.50494e-07 | H33: -0.863607 | H33f: -0.0261699 |
| H17: -4.59172e-07 | H35: -0.0899999 | H35f: -0.00257142 |
| H19: 3.76602e-07 | H37: 0.00263661 | H37f: 7.12598e-05 |

| |
|-----------------|
| c2sd = 0.16 |
| c2ed = -0.1065 |
| c3sd = 0.0398 |
| c3ed = -0.3758 |
| c4sd = 0.0077 |
| c4ed = -0.5356 |
| c5sd = 0.0128 |
| c5ed = -0.6324 |
| varx = 3.7822%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 36/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.36 |
| Actual Amplitude: | 0.36 |
| Actual Power: | 0.1296 |
| Distortion 2H-30H: | 0.000351771% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.3344 | end: | 6.7366 | delta: | 0.4022 |
| P2 start: | 16.5629 | end: | 17.7244 | delta: | 1.1614 |
| P3 start: | 27.2527 | end: | 29.1424 | delta: | 1.8897 |
| P4 start: | 38.0752 | end: | 40.6264 | delta: | 2.5512 |
| P5 start: | 48.9951 | end: | 52.115 | delta: | 3.12 |
| P6 start: | 60.0103 | end: | 63.5824 | delta: | 3.572 |
| P7 start: | 71.1224 | end: | 75.009 | delta: | 3.8866 |
| P8 start: | 82.329 | end: | 86.3772 | delta: | 4.0482 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -7.02695e-08 | H21: 1.20462e-06 | H21f: 5.73629e-08 |
| H5: -6.32425e-07 | H23: 1.04488e-06 | H23f: 4.54294e-08 |
| H7: -1.20462e-07 | H25: 8.76963e-07 | H25f: 3.50785e-08 |
| H9: -1.05404e-06 | H27: 8.12003e-07 | H27f: 3.00742e-08 |
| H11: -7.09083e-07 | H29: -2.18078e-07 | H29f: -7.51992e-09 |
| H13: -8.43234e-07 | H31: 0.841714 | H31f: 0.0271521 |
| H15: 2.95132e-07 | H33: -0.852395 | H33f: -0.0258301 |
| H17: -9.9204e-08 | H35: -0.095086 | H35f: -0.00271674 |
| H19: 2.01932e-06 | H37: 0.00205176 | H37f: 5.54529e-05 |

| |
|-----------------|
| c2sd = 0.1449 |
| c2ed = -0.1076 |
| c3sd = 0.0187 |
| c3ed = -0.3736 |
| c4sd = -0.0186 |
| c4ed = -0.5298 |
| c5sd = -0.0174 |
| c5ed = -0.6225 |
| varx = 3.7476%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.37 |
| Actual Amplitude: | 0.37 |
| Actual Power: | 0.1369 |
| Distortion 2H-30H: | 0.000246825% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.328 | end: | 6.7411 | delta: | 0.4131 |
| P2 start: | 16.5424 | end: | 17.7353 | delta: | 1.1929 |
| P3 start: | 27.2194 | end: | 29.1606 | delta: | 1.9412 |
| P4 start: | 38.0309 | end: | 40.6521 | delta: | 2.6212 |
| P5 start: | 48.9424 | end: | 52.1486 | delta: | 3.2063 |
| P6 start: | 59.9522 | end: | 63.6239 | delta: | 3.6716 |
| P7 start: | 71.0621 | end: | 75.0579 | delta: | 3.9957 |
| P8 start: | 82.27 | end: | 86.4322 | delta: | 4.1622 |

| | | |
|-------------------|------------------|-------------------|
| H3: -5.46962e-07 | H21: 1.2209e-06 | H21f: 5.8138e-08 |
| H5: -2.87155e-07 | H23: 6.6884e-07 | H23f: 2.908e-08 |
| H7: -8.20443e-07 | H25: 4.75857e-07 | H25f: 1.90343e-08 |
| H9: -6.38123e-07 | H27: 8.20443e-07 | H27f: 3.03868e-08 |
| H11: -9.88261e-07 | H29: 5.65823e-07 | H29f: 1.95111e-08 |
| H13: 7.88888e-08 | H31: 0.836249 | H31f: 0.0269758 |
| H15: 0.0 | H33: -0.841454 | H33f: -0.0254986 |
| H17: 6.87725e-07 | H35: -0.100173 | H35f: -0.0028621 |
| H19: -1.29544e-07 | H37: 0.0015492 | H37f: 4.18702e-05 |

| |
|----------------|
| c2sd = 0.1414 |
| c2ed = -0.1137 |
| c3sd = 0.0129 |
| c3ed = -0.3829 |
| c4sd = -0.026 |
| c4ed = -0.541 |
| c5sd = -0.0252 |
| c5ed = -0.6338 |
| varx = 3.712%. |

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.38
 Actual Amplitude: 0.379999
 Actual Power: 0.144399
 Distortion 2H-30H: 0.00036039%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total locking events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.303 | end: 6.7265 | delta: 0.4235 |
| P2 start: 16.5135 | end: 17.7379 | delta: 1.2244 |
| P3 start: 27.181 | end: 29.1736 | delta: 1.9927 |
| P4 start: 37.9831 | end: 40.6744 | delta: 2.6913 |
| P5 start: 48.8871 | end: 52.1798 | delta: 3.2927 |
| P6 start: 59.8923 | end: 63.6637 | delta: 3.7715 |
| P7 start: 71.0008 | end: 75.1059 | delta: 4.1051 |
| P8 start: 82.2105 | end: 86.4871 | delta: 4.2766 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: 6.65712e-08 | H21: 5.611e-07 | H21f: 2.67191e-08 |
| H5: -1.398e-06 | H23: 1.83216e-06 | H23f: 7.96589e-08 |
| H7: -9.41507e-07 | H25: 1.07047e-06 | H25f: 4.28186e-08 |
| H9: -8.43235e-07 | H27: 1.53853e-06 | H27f: 5.69828e-08 |
| H11: -2.90493e-07 | H29: 1.15696e-06 | H29f: 3.98952e-08 |
| H13: -1.84351e-07 | H31: 0.831872 | H31f: 0.0268346 |
| H15: -1.73085e-07 | H33: -0.829039 | H33f: -0.0251224 |
| H17: 8.57594e-07 | H35: -0.105467 | H35f: -0.00301334 |
| H19: 1.57669e-07 | H37: 0.000726871 | H37f: 1.96452e-05 |

c2sd = 0.128
 c2ed = -0.1265
 c3sd = -0.0006
 c3ed = -0.3948
 c4sd = -0.0404
 c4ed = -0.5522
 c5sd = -0.0398
 c5ed = -0.6433
 varx = 3.6759%.

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 39/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.39 |
| Actual Amplitude: | 0.39 |
| Actual Power: | 0.1521 |
| Distortion 2H-30H: | 0.000300998% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total locking events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.1978 | end: | 6.63 | delta: | 0.4322 |
| P2 start: | 16.4497 | end: | 17.7056 | delta: | 1.2559 |
| P3 start: | 27.1218 | end: | 29.1662 | delta: | 2.0444 |
| P4 start: | 37.9213 | end: | 40.6831 | delta: | 2.7618 |
| P5 start: | 48.822 | end: | 52.2018 | delta: | 3.3798 |
| P6 start: | 59.8256 | end: | 63.6977 | delta: | 3.8721 |
| P7 start: | 70.9353 | end: | 75.1507 | delta: | 4.2154 |
| P8 start: | 82.1492 | end: | 86.5412 | delta: | 4.392 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: 3.24321e-07 | H21: 1.13049e-06 | H21f: 5.38328e-08 |
| H5: -7.00533e-07 | H23: 1.20986e-06 | H23f: 5.26025e-08 |
| H7: -1.22315e-06 | H25: 1.36993e-06 | H25f: 5.47972e-08 |
| H9: -7.35127e-07 | H27: 3.45942e-07 | H27f: 1.28127e-08 |
| H11: -7.7837e-07 | H29: 5.09966e-07 | H29f: 1.7585e-08 |
| H13: -7.18495e-07 | H31: 0.832474 | H31f: 0.026854 |
| H15: -6.48641e-08 | H33: -0.811131 | H33f: -0.0245797 |
| H17: 9.15729e-08 | H35: -0.111239 | H35f: -0.00317827 |
| H19: 5.4281e-07 | H37: -0.00123345 | H37f: -3.33366e-05 |

| |
|-----------------|
| c2sd = 0.0771 |
| c2ed = -0.1718 |
| c3sd = -0.039 |
| c3ed = -0.423 |
| c4sd = -0.0742 |
| c4ed = -0.5714 |
| c5sd = -0.0708 |
| c5ed = -0.6553 |
| varx = 3.6405%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 40/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.4 |
| Actual Amplitude: | 0.4 |
| Actual Power: | 0.16 |
| Distortion 2H-30H: | 0.000141191% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.1249 | end: | 6.5665 | delta: | 0.4416 |
| P2 start: | 16.4006 | end: | 17.6879 | delta: | 1.2873 |
| P3 start: | 27.0712 | end: | 29.1672 | delta: | 2.096 |
| P4 start: | 37.8651 | end: | 40.6971 | delta: | 2.832 |
| P5 start: | 48.7607 | end: | 52.2273 | delta: | 3.4666 |
| P6 start: | 59.7614 | end: | 63.7338 | delta: | 3.9724 |
| P7 start: | 70.8712 | end: | 75.1967 | delta: | 4.3256 |
| P8 start: | 82.0884 | end: | 86.5957 | delta: | 4.5073 |

| | | |
|-------------------|------------------|-------------------|
| H3: 1.89727e-07 | H21: 1.98762e-07 | H21f: 9.46486e-09 |
| H5: -1.89727e-07 | H23: 7.91906e-07 | H23f: 3.44307e-08 |
| H7: -6.2339e-07 | H25: 3.79455e-07 | H25f: 1.51782e-08 |
| H9: -4.00536e-07 | H27: 5.48102e-07 | H27f: 2.03001e-08 |
| H11: 6.89918e-08 | H29: 1.30847e-07 | H29f: 4.51195e-09 |
| H13: -1.75133e-07 | H31: 0.830683 | H31f: 0.0267962 |
| H15: 1.39133e-07 | H33: -0.795169 | H33f: -0.024096 |
| H17: -2.4553e-07 | H35: -0.1167 | H35f: -0.00333428 |
| H19: 3.59484e-07 | H37: -0.00267051 | H37f: -7.2176e-05 |

| |
|-----------------|
| c2sd = 0.0531 |
| c2ed = -0.2147 |
| c3sd = -0.0489 |
| c3ed = -0.4627 |
| c4sd = -0.0758 |
| c4ed = -0.6119 |
| c5sd = -0.0658 |
| c5ed = -0.6962 |
| varx = 3.6037%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.41 |
| Actual Amplitude: | 0.41 |
| Actual Power: | 0.1681 |
| Distortion 2H-30H: | 0.000115017% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.2245 | end: 6.6791 | delta: 0.4546 |
| P2 start: 16.4249 | end: 17.7433 | delta: 1.3184 |
| P3 start: 27.0637 | end: 29.2104 | delta: 2.1467 |
| P4 start: 37.8375 | end: 40.7385 | delta: 2.9011 |
| P5 start: 48.7189 | end: 52.2708 | delta: 3.5519 |
| P6 start: 59.7101 | end: 63.7814 | delta: 4.0712 |
| P7 start: 70.8148 | end: 75.2488 | delta: 4.434 |
| P8 start: 82.0307 | end: 86.6516 | delta: 4.6208 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -1.234e-07 | H21: 2.37986e-07 | H21f: 1.13327e-08 |
| H5: -1.851e-07 | H23: 5.31157e-07 | H23f: 2.30938e-08 |
| H7: -5.553e-07 | H25: -1.4808e-07 | H25f: -5.9232e-09 |
| H9: 4.52467e-07 | H27: 2.87934e-07 | H27f: 1.06642e-08 |
| H11: -2.52409e-07 | H29: 3.57435e-07 | H29f: 1.23253e-08 |
| H13: -4.27154e-08 | H31: 0.818011 | H31f: 0.0263875 |
| H15: -1.7276e-07 | H33: -0.790155 | H33f: -0.0239441 |
| H17: 1.851e-07 | H35: -0.121574 | H35f: -0.00347353 |
| H19: -2.43553e-07 | H37: -0.00201437 | H37f: -5.44424e-05 |

| |
|-----------------|
| c2sd = 0.0952 |
| c2ed = -0.177 |
| c3sd = -0.0277 |
| c3ed = -0.4482 |
| c4sd = -0.065 |
| c4ed = -0.609 |
| c5sd = -0.0608 |
| c5ed = -0.6995 |
| varx = 3.5632%. |

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 42/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.42 |
| Actual Amplitude: | 0.42 |
| Actual Power: | 0.1764 |
| Distortion 2H-30H: | 0.000177531% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2616 | end: | 6.728 | delta: | 0.4664 |
| P2 start: | 16.423 | end: | 17.7725 | delta: | 1.3495 |
| P3 start: | 27.0407 | end: | 29.2382 | delta: | 2.1975 |
| P4 start: | 37.7993 | end: | 40.7697 | delta: | 2.9704 |
| P5 start: | 48.6697 | end: | 52.3074 | delta: | 3.6377 |
| P6 start: | 59.6538 | end: | 63.8244 | delta: | 4.1706 |
| P7 start: | 70.7552 | end: | 75.2984 | delta: | 4.5432 |
| P8 start: | 81.9717 | end: | 86.707 | delta: | 4.7352 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: 3.01155e-07 | H21: 2.66737e-07 | H21f: 1.27018e-08 |
| H5: -3.61386e-07 | H23: 5.02797e-07 | H23f: 2.18608e-08 |
| H7: -4.38825e-07 | H25: 1.12752e-06 | H25f: 4.51009e-08 |
| H9: -6.6254e-07 | H27: -4.0154e-07 | H27f: -1.48718e-08 |
| H11: -3.61386e-07 | H29: 2.49231e-08 | H29f: 8.59419e-10 |
| H13: 2.22391e-07 | H31: 0.809078 | H31f: 0.0260993 |
| H15: -3.13201e-07 | H33: -0.780907 | H33f: -0.0236638 |
| H17: 1.38177e-07 | H35: -0.126719 | H35f: -0.00362055 |
| H19: 4.94528e-07 | H37: -0.00212292 | H37f: -5.73761e-05 |

| |
|----------------|
| c2sd = 0.1115 |
| c2ed = -0.1661 |
| c3sd = -0.0213 |
| c3ed = -0.4498 |
| c4sd = -0.0636 |
| c4ed = -0.6174 |
| c5sd = -0.0619 |
| c5ed = -0.711 |
| varx = 3.523%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 43/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.43 |
| Actual Amplitude: | 0.43 |
| Actual Power: | 0.1849 |
| Distortion 2H-30H: | 0.000132708% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2825 | end: | 6.7603 | delta: | 0.4779 |
| P2 start: | 16.4139 | end: | 17.7945 | delta: | 1.3806 |
| P3 start: | 27.0133 | end: | 29.2617 | delta: | 2.2484 |
| P4 start: | 37.7581 | end: | 40.7978 | delta: | 3.0397 |
| P5 start: | 48.6183 | end: | 52.3418 | delta: | 3.7235 |
| P6 start: | 59.5959 | end: | 63.866 | delta: | 4.2701 |
| P7 start: | 70.6946 | end: | 75.3473 | delta: | 4.6527 |
| P8 start: | 81.9122 | end: | 86.7622 | delta: | 4.8499 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -5.88302e-08 | H21: -1.34469e-07 | H21f: -6.40329e-09 |
| H5: -1.41193e-07 | H23: 7.36657e-07 | H23f: 3.20285e-08 |
| H7: -3.02555e-07 | H25: 4.09458e-07 | H25f: 1.63783e-08 |
| H9: -6.86353e-07 | H27: 3.66055e-07 | H27f: 1.35576e-08 |
| H11: -2.72758e-07 | H29: 7.30306e-08 | H29f: 2.5183e-09 |
| H13: 9.50334e-08 | H31: 0.80105 | H31f: 0.0258403 |
| H15: -2.00023e-07 | H33: -0.770382 | H33f: -0.0233449 |
| H17: 1.97254e-07 | H35: -0.131994 | H35f: -0.00377125 |
| H19: 3.80848e-07 | H37: -0.00249266 | H37f: -6.73692e-05 |

| |
|-----------------|
| c2sd = 0.1277 |
| c2ed = -0.1693 |
| c3sd = -0.0079 |
| c3ed = -0.4672 |
| c4sd = -0.0501 |
| c4ed = -0.644 |
| c5sd = -0.0467 |
| c5ed = -0.7431 |
| varx = 3.4824%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 44/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.44 |
| Actual Amplitude: | 0.44 |
| Actual Power: | 0.1936 |
| Distortion 2H-30H: | 6.77639e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2657 | end: | 6.754 | delta: | 0.4883 |
| P2 start: | 16.388 | end: | 17.7996 | delta: | 1.4116 |
| P3 start: | 26.9758 | end: | 29.275 | delta: | 2.2993 |
| P4 start: | 37.71 | end: | 40.8192 | delta: | 3.1092 |
| P5 start: | 48.562 | end: | 52.3716 | delta: | 3.8096 |
| P6 start: | 59.5344 | end: | 63.9046 | delta: | 4.3701 |
| P7 start: | 70.6318 | end: | 75.3946 | delta: | 4.7627 |
| P8 start: | 81.8518 | end: | 86.8171 | delta: | 4.9653 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -1.14986e-07 | H21: -1.64266e-08 | H21f: -7.8222e-10 |
| H5: 2.75967e-07 | H23: 2.99964e-07 | H23f: 1.30419e-08 |
| H7: -3.94239e-07 | H25: 1.6558e-07 | H25f: 6.62321e-09 |
| H9: 9.58219e-08 | H27: -2.55525e-08 | H27f: -9.4639e-10 |
| H11: -2.03839e-07 | H29: 2.37903e-08 | H29f: 8.20354e-10 |
| H13: -1.45944e-07 | H31: 0.795297 | H31f: 0.0256547 |
| H15: 9.19891e-08 | H33: -0.757136 | H33f: -0.0229435 |
| H17: 9.13127e-08 | H35: -0.137486 | H35f: -0.00392818 |
| H19: 8.17008e-08 | H37: -0.00347685 | H37f: -9.39689e-05 |

| |
|-----------------|
| c2sd = 0.1246 |
| c2ed = -0.187 |
| c3sd = -0.0086 |
| c3ed = -0.4906 |
| c4sd = -0.0488 |
| c4ed = -0.6719 |
| c5sd = -0.043 |
| c5ed = -0.7734 |
| varx = 3.4418%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 45/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|-------------|
| Desired Amplitude: | 0.45 |
| Actual Amplitude: | 0.45 |
| Actual Power: | 0.2025 |
| Distortion 2H-30H: | 5.2154e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.1123 | end: | 6.6076 | delta: | 0.4954 |
| P2 start: | 16.3026 | end: | 17.7453 | delta: | 1.4427 |
| P3 start: | 26.903 | end: | 29.2537 | delta: | 2.3507 |
| P4 start: | 37.6383 | end: | 40.8179 | delta: | 3.1796 |
| P5 start: | 48.4891 | end: | 52.3861 | delta: | 3.897 |
| P6 start: | 59.4618 | end: | 63.9333 | delta: | 4.4716 |
| P7 start: | 70.5621 | end: | 75.4366 | delta: | 4.8745 |
| P8 start: | 81.7884 | end: | 86.871 | delta: | 5.0826 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 1.68647e-07 | H21: 8.0308e-08 | H21f: 3.82419e-09 |
| H5: -3.37293e-08 | H23: -2.34639e-07 | H23f: -1.02017e-08 |
| H7: 4.81848e-08 | H25: -1.07934e-07 | H25f: -4.31736e-09 |
| H9: 2.06124e-07 | H27: 0.0 | H27f: 0.0 |
| H11: 1.9931e-07 | H29: 2.09355e-07 | H29f: 7.21912e-09 |
| H13: -1.55674e-07 | H31: 0.79775 | H31f: 0.0257339 |
| H15: -2.24862e-08 | H33: -0.734733 | H33f: -0.0222646 |
| H17: 6.94428e-08 | H35: -0.143278 | H35f: -0.00409365 |
| H19: -1.06514e-07 | H37: -0.00630658 | H37f: -0.000170448 |

| |
|-----------------|
| c2sd = 0.0228 |
| c2ed = -0.2248 |
| c3sd = -0.1079 |
| c3ed = -0.4853 |
| c4sd = -0.1562 |
| c4ed = -0.6376 |
| c5sd = -0.1592 |
| c5ed = -0.7155 |
| varx = 3.4029%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 46/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.46 |
| Actual Amplitude: | 0.46 |
| Actual Power: | 0.2116 |
| Distortion 2H-30H: | 0.000222947% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2722 | end: | 6.7824 | delta: | 0.5102 |
| P2 start: | 16.3538 | end: | 17.8271 | delta: | 1.4733 |
| P3 start: | 26.9108 | end: | 29.3113 | delta: | 2.4005 |
| P4 start: | 37.6201 | end: | 40.8676 | delta: | 3.2476 |
| P5 start: | 48.4531 | end: | 52.4345 | delta: | 3.9814 |
| P6 start: | 59.4138 | end: | 63.9835 | delta: | 4.5697 |
| P7 start: | 70.5073 | end: | 75.49 | delta: | 4.9827 |
| P8 start: | 81.7312 | end: | 86.9273 | delta: | 5.1962 |

| | | |
|-------------------|----------------------|-------------------------|
| H3: -1.09987e-07 | H21: 1.09201e-06 | H21f: 5.20006e-08 |
| H5: -6.59922e-07 | H23: 3.15615e-07 | H23f: 1.37224e-08 |
| H7: -8.01333e-07 | H25: 9.50287e-07 | H25f: 3.80115e-08 |
| H9: -5.13272e-07 | H27: 7.57688e-07 | H27f: 2.80625e-08 |
| H11: -2.39972e-07 | H29: -3.41339e-07 | H29f: -1.17703e-08 |
| H13: -4.06106e-07 | H31: 0.78086 | H31f: 0.025189 |
| H15: 4.50947e-07 | H33: -0.73269 | H33f: -0.0222027 |
| H17: -1.26162e-07 | H35: -0.148388 | H35f: -0.00423964 |
| H19: 5.38357e-07 | H37: -0.00500444 | H37f: -0.000135255 |

| |
|-----------------|
| c2sd = 0.1331 |
| c2ed = -0.2022 |
| c3sd = -0.0047 |
| c3ed = -0.5232 |
| c4sd = -0.0463 |
| c4ed = -0.716 |
| c5sd = -0.0394 |
| c5ed = -0.823 |
| varx = 3.3577%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|----------------|
| Desired Amplitude: | 0.47 |
| Actual Amplitude: | 0.47 |
| Actual Power: | 0.2209 |
| Distortion 2H-30H: | 0.00075515151% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2862 | end: | 6.8077 | delta: | 0.5215 |
| P2 start: | 16.3416 | end: | 17.8457 | delta: | 1.504 |
| P3 start: | 26.881 | end: | 29.3319 | delta: | 2.4509 |
| P4 start: | 37.5766 | end: | 40.8931 | delta: | 3.3165 |
| P5 start: | 48.3995 | end: | 52.4665 | delta: | 4.067 |
| P6 start: | 59.3538 | end: | 64.0232 | delta: | 4.6694 |
| P7 start: | 70.445 | end: | 75.5378 | delta: | 5.0928 |
| P8 start: | 81.6707 | end: | 86.9825 | delta: | 5.3117 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -1.6147e-06 | H21: 2.97567e-06 | H21f: 1.41698e-07 |
| H5: -2.19599e-06 | H23: 2.65373e-06 | H23f: 1.15379e-07 |
| H7: -2.35285e-06 | H25: 2.40268e-06 | H25f: 9.61071e-08 |
| H9: -2.20676e-06 | H27: 1.98549e-06 | H27f: 7.35365e-08 |
| H11: -1.20369e-06 | H29: 1.42539e-06 | H29f: 4.91515e-08 |
| H13: -9.4398e-07 | H31: 0.772769 | H31f: 0.024928 |
| H15: 7.96586e-07 | H33: -0.720902 | H33f: -0.0218455 |
| H17: 7.50362e-07 | H35: -0.153841 | H35f: -0.00439545 |
| H19: 2.82998e-06 | H37: -0.00567842 | H37f: -0.000153471 |

| |
|-----------------|
| c2sd = 0.1279 |
| c2ed = -0.1906 |
| c3sd = -0.0233 |
| c3ed = -0.5139 |
| c4sd = -0.0746 |
| c4ed = -0.7056 |
| c5sd = -0.0746 |
| c5ed = -0.8093 |
| varx = 3.3146%. |

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 48/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.48 |
| Actual Amplitude: | 0.48 |
| Actual Power: | 0.2304 |
| Distortion 2H-30H: | 4.37297e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2267 | end: | 6.7573 | delta: | 0.5306 |
| P2 start: | 16.2958 | end: | 17.8306 | delta: | 1.5348 |
| P3 start: | 26.8311 | end: | 29.3327 | delta: | 2.5016 |
| P4 start: | 37.5196 | end: | 40.9055 | delta: | 3.3859 |
| P5 start: | 48.3363 | end: | 52.4897 | delta: | 4.1533 |
| P6 start: | 59.2872 | end: | 64.0572 | delta: | 4.77 |
| P7 start: | 70.3787 | end: | 75.5826 | delta: | 5.2039 |
| P8 start: | 81.6085 | end: | 87.0371 | delta: | 5.4286 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 1.58106e-07 | H21: -7.52887e-08 | H21f: -3.58518e-09 |
| H5: -2.21349e-07 | H23: 8.24902e-08 | H23f: 3.58653e-09 |
| H7: -6.77598e-08 | H25: 1.51782e-07 | H25f: 6.07128e-09 |
| H9: 0.0 | H27: -3.51347e-08 | H27f: -1.30129e-09 |
| H11: -1.43733e-08 | H29: 1.52654e-07 | H29f: 5.26394e-09 |
| H13: 4.86481e-08 | H31: 0.769148 | H31f: 0.0248112 |
| H15: 7.37829e-08 | H33: -0.703959 | H33f: -0.0213321 |
| H17: -1.48806e-07 | H35: -0.1595 | H35f: -0.00455713 |
| H19: 1.49785e-07 | H37: -0.0075456 | H37f: -0.000203935 |

| |
|-----------------|
| c2sd = 0.0856 |
| c2ed = -0.2092 |
| c3sd = -0.0674 |
| c3ed = -0.5188 |
| c4sd = -0.1239 |
| c4ed = -0.7009 |
| c5sd = -0.1285 |
| c5ed = -0.7955 |
| varx = 3.2721%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.49 |
| Actual Amplitude: | 0.49 |
| Actual Power: | 0.2401 |
| Distortion 2H-30H: | 0.000324271% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.1676 | end: | 6.7072 | delta: | 0.5397 |
| P2 start: | 16.2508 | end: | 17.8162 | delta: | 1.5654 |
| P3 start: | 26.7815 | end: | 29.3336 | delta: | 2.5521 |
| P4 start: | 37.4626 | end: | 40.9178 | delta: | 3.4552 |
| P5 start: | 48.273 | end: | 52.5126 | delta: | 4.2396 |
| P6 start: | 59.2203 | end: | 64.091 | delta: | 4.8707 |
| P7 start: | 70.312 | end: | 75.6273 | delta: | 5.3153 |
| P8 start: | 81.5461 | end: | 87.0918 | delta: | 5.5457 |

| | | |
|-------------------|------------------|--------------------|
| H3: -9.29277e-07 | H21: 1.46029e-06 | H21f: 6.95378e-08 |
| H5: -5.88542e-07 | H23: 7.81132e-07 | H23f: 3.39623e-08 |
| H7: -9.95654e-07 | H25: 1.0284e-06 | H25f: 4.1136e-08 |
| H9: -9.46486e-07 | H27: 1.10137e-06 | H27f: 4.07913e-08 |
| H11: -4.50559e-07 | H29: 1.11086e-06 | H29f: 3.83055e-08 |
| H13: -7.14829e-08 | H31: 0.765236 | H31f: 0.024685 |
| H15: 2.68458e-07 | H33: -0.686915 | H33f: -0.0208156 |
| H17: 4.46418e-07 | H35: -0.165038 | H35f: -0.00471537 |
| H19: 8.31459e-07 | H37: -0.00938771 | H37f: -0.000253722 |

| | |
|--------|---------|
| c2sd = | 0.0459 |
| c2ed = | -0.2289 |
| c3sd = | -0.1085 |
| c3ed = | -0.5264 |
| c4sd = | -0.1695 |
| c4ed = | -0.7001 |
| c5sd = | -0.1779 |
| c5ed = | -0.7865 |
| varx = | 3.229%. |

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 50/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.5
Actual Amplitude: 0.5
Actual Power: 0.25
Distortion 2H-30H: 5.5811e-05%
First strong harmonics: 31 and 33
Pulses per sine cycle: 32
Total switching events: 64
Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.1655 | end: 6.7158 | delta: 0.5503 |
| P2 start: 16.2306 | end: 17.8265 | delta: 1.5959 |
| P3 start: 26.7465 | end: 29.3487 | delta: 2.6022 |
| P4 start: 37.4152 | end: 40.9391 | delta: 3.5238 |
| P5 start: 48.2161 | end: 52.5413 | delta: 4.3252 |
| P6 start: 59.1576 | end: 64.1283 | delta: 4.9707 |
| P7 start: 70.2477 | end: 75.6738 | delta: 5.426 |
| P8 start: 81.4847 | end: 87.1469 | delta: 5.6622 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -2.02376e-07 | H21: -1.66237e-07 | H21f: -7.91606e-09 |
| H5: -1.82138e-07 | H23: -2.63969e-08 | H23f: -1.14769e-09 |
| H7: 1.51782e-07 | H25: 8.49979e-08 | H25f: 3.39992e-09 |
| H9: -2.5297e-07 | H27: 1.57403e-07 | H27f: 5.82976e-09 |
| H11: 9.65885e-08 | H29: -2.09354e-07 | H29f: -7.21912e-09 |
| H13: 1.16755e-08 | H31: 0.757764 | H31f: 0.024444 |
| H15: -1.11307e-07 | H33: -0.67344 | H33f: -0.0204073 |
| H17: 8.92835e-08 | H35: -0.17052 | H35f: -0.00487199 |
| H19: 1.27816e-07 | H37: -0.0105148 | H37f: -0.000284183 |

c2sd = 0.0443
c2ed = -0.2371
c3sd = -0.1135
c3ed = -0.5412
c4sd = -0.1767
c4ed = -0.719
c5sd = -0.1859
c5ed = -0.8067
varx = 3.1843%.

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 51/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.51 |
| Actual Amplitude: | 0.51 |
| Actual Power: | 0.2601 |
| Distortion 2H-30H: | 0.000188757% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2116 | end: | 6.774 | delta: | 0.5623 |
| P2 start: | 16.2318 | end: | 17.8581 | delta: | 1.6262 |
| P3 start: | 26.724 | end: | 29.3759 | delta: | 2.6519 |
| P4 start: | 37.376 | end: | 40.968 | delta: | 3.592 |
| P5 start: | 48.1647 | end: | 52.5749 | delta: | 4.4103 |
| P6 start: | 59.0984 | end: | 64.1686 | delta: | 5.0702 |
| P7 start: | 70.1855 | end: | 75.7218 | delta: | 5.5363 |
| P8 start: | 81.424 | end: | 87.2023 | delta: | 5.7784 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -2.97612e-07 | H21: 4.53504e-07 | H21f: 2.15954e-08 |
| H5: -1.19045e-07 | H23: 8.79896e-07 | H23f: 3.82563e-08 |
| H7: -9.56609e-07 | H25: 6.90459e-07 | H25f: 2.76184e-08 |
| H9: -1.98408e-07 | H27: 4.51929e-07 | H27f: 1.67381e-08 |
| H11: -3.24667e-07 | H29: -2.05249e-08 | H29f: -7.07757e-10 |
| H13: -4.23524e-07 | H31: 0.747317 | H31f: 0.024107 |
| H15: 6.94427e-08 | H33: -0.66298 | H33f: -0.0200903 |
| H17: 2.62599e-07 | H35: -0.176018 | H35f: -0.00502908 |
| H19: 6.97038e-07 | H37: -0.0110385 | H37f: -0.000298337 |

| |
|-----------------|
| c2sd = 0.0536 |
| c2ed = -0.2138 |
| c3sd = -0.1229 |
| c3ed = -0.5272 |
| c4sd = -0.1983 |
| c4ed = -0.7077 |
| c5sd = -0.2158 |
| c5ed = -0.7946 |
| varx = 3.1381%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 52/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.52
Actual Amplitude: 0.52
Actual Power: 0.2704
Distortion 2H-30H: 6.12406e-05%
First strong harmonics: 31 and 33
Pulses per sine cycle: 32
Total switching events: 64
Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.121 | end: 6.6913 | delta: 0.5703 |
| P2 start: 16.1724 | end: 17.829 | delta: 1.6566 |
| P3 start: 26.6654 | end: 29.3677 | delta: 2.7023 |
| P4 start: 37.3124 | end: 40.9736 | delta: 3.6612 |
| P5 start: 48.0962 | end: 52.5928 | delta: 4.4967 |
| P6 start: 59.0275 | end: 64.1989 | delta: 5.1714 |
| P7 start: 70.116 | end: 75.7646 | delta: 5.6486 |
| P8 start: 81.3601 | end: 87.2568 | delta: 5.8967 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: 4.86481e-08 | H21: 1.59844e-07 | H21f: 7.6116e-09 |
| H5: -2.04322e-07 | H23: 2.79198e-07 | H23f: 1.2139e-08 |
| H7: 0.0 | H25: 1.86809e-07 | H25f: 7.47234e-09 |
| H9: -1.13512e-07 | H27: -6.48641e-08 | H27f: -2.40237e-09 |
| H11: 1.32677e-07 | H29: 3.01954e-07 | H29f: 1.04122e-08 |
| H13: -1.12265e-07 | H31: 0.744785 | H31f: 0.0240253 |
| H15: 1.07026e-07 | H33: -0.643304 | H33f: -0.0194941 |
| H17: -1.45944e-07 | H35: -0.181375 | H35f: -0.00518215 |
| H19: 1.45944e-07 | H37: -0.0134844 | H37f: -0.000364444 |

c2sd = -0.0296
c2ed = -0.2189
c3sd = -0.2199
c3ed = -0.497
c4sd = -0.3135
c4ed = -0.6505
c5sd = -0.3471
c5ed = -0.7138
varx = 3.0939%.

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 53/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.53 |
| Actual Amplitude: | 0.53 |
| Actual Power: | 0.2809 |
| Distortion 2H-30H: | 6.32542e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2381 | end: | 6.8226 | delta: | 0.5846 |
| P2 start: | 16.205 | end: | 17.8916 | delta: | 1.6867 |
| P3 start: | 26.6612 | end: | 29.4125 | delta: | 2.7513 |
| P4 start: | 37.2851 | end: | 41.0135 | delta: | 3.7284 |
| P5 start: | 48.0526 | end: | 52.6334 | delta: | 4.5807 |
| P6 start: | 58.9733 | end: | 64.2433 | delta: | 5.27 |
| P7 start: | 70.0565 | end: | 75.8147 | delta: | 5.7582 |
| P8 start: | 81.3004 | end: | 87.3127 | delta: | 6.0124 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 0.0 | H21: 3.00018e-07 | H21f: 1.42866e-08 |
| H5: 2.86381e-08 | H23: 8.71595e-08 | H23f: 3.78954e-09 |
| H7: -1.43191e-07 | H25: -9.1642e-08 | H25f: -3.66568e-09 |
| H9: 2.22741e-07 | H27: 2.86381e-07 | H27f: 1.06067e-08 |
| H11: -2.60347e-07 | H29: -5.92513e-08 | H29f: -2.04315e-09 |
| H13: -1.87249e-07 | H31: 0.730001 | H31f: 0.0235484 |
| H15: 9.54604e-08 | H33: -0.637201 | H33f: -0.0193091 |
| H17: 2.52689e-08 | H35: -0.186999 | H35f: -0.00534282 |
| H19: 1.58263e-07 | H37: -0.0131765 | H37f: -0.000356122 |

| |
|-----------------|
| c2sd = 0.0622 |
| c2ed = -0.2156 |
| c3sd = -0.1284 |
| c3ed = -0.5478 |
| c4sd = -0.2124 |
| c4ed = -0.739 |
| c5sd = -0.2345 |
| c5ed = -0.8295 |
| varx = 3.0453%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 54/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.54 |
| Actual Amplitude: | 0.54 |
| Actual Power: | 0.2916 |
| Distortion 2H-30H: | 0.000115215% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.1735 | end: | 6.7666 | delta: | 0.5931 |
| P2 start: | 16.1564 | end: | 17.8732 | delta: | 1.7168 |
| P3 start: | 26.6087 | end: | 29.4098 | delta: | 2.8012 |
| P4 start: | 37.2251 | end: | 41.0222 | delta: | 3.7971 |
| P5 start: | 47.9862 | end: | 52.6529 | delta: | 4.6667 |
| P6 start: | 58.9034 | end: | 64.2744 | delta: | 5.3709 |
| P7 start: | 69.9873 | end: | 75.8579 | delta: | 5.8706 |
| P8 start: | 81.2364 | end: | 87.3675 | delta: | 6.131 |

| | | |
|-------------------|------------------|--------------------|
| H3: -3.27924e-07 | H21: 6.49156e-07 | H21f: 3.09122e-08 |
| H5: -2.24862e-07 | H23: 2.68857e-07 | H23f: 1.16894e-08 |
| H7: -2.40924e-07 | H25: 1.91133e-07 | H25f: 7.64531e-09 |
| H9: -2.49847e-07 | H27: 1.45744e-07 | H27f: 5.39793e-09 |
| H11: -2.29973e-07 | H29: 4.36155e-07 | H29f: 1.50398e-08 |
| H13: 1.18918e-07 | H31: 0.725724 | H31f: 0.0234104 |
| H15: -1.68647e-07 | H33: -0.618865 | H33f: -0.0187535 |
| H17: 4.38151e-07 | H35: -0.192342 | H35f: -0.00549549 |
| H19: 1.40539e-07 | H37: -0.0154773 | H37f: -0.000418306 |

| |
|-----------------|
| c2sd = 0.0274 |
| c2ed = -0.2479 |
| c3sd = -0.1587 |
| c3ed = -0.5728 |
| c4sd = -0.2425 |
| c4ed = -0.7602 |
| c5sd = -0.2645 |
| c5ed = -0.8463 |
| varx = 2.9996%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 55/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.55
Actual Amplitude: 0.55
Actual Power: 0.3025
Distortion 2H-30H: 4.1774e-05%
First strong harmonics: 31 and 33
Pulses per sine cycle: 32
Total switching events: 64
Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.3063 | end: 6.9147 | delta: 0.6084 |
| P2 start: 16.1974 | end: 17.9441 | delta: 1.7467 |
| P3 start: 26.6094 | end: 29.4591 | delta: 2.8497 |
| P4 start: 37.2007 | end: 41.0645 | delta: 3.8638 |
| P5 start: 47.9443 | end: 52.6946 | delta: 4.7503 |
| P6 start: 58.85 | end: 64.3192 | delta: 5.4692 |
| P7 start: 69.928 | end: 75.9081 | delta: 5.9802 |
| P8 start: 81.1767 | end: 87.4235 | delta: 6.2468 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 0.0 | H21: -1.18272e-07 | H21f: -5.63199e-09 |
| H5: 2.75967e-08 | H23: 1.19986e-08 | H23f: 5.21677e-10 |
| H7: -1.37984e-07 | H25: -6.62321e-08 | H25f: -2.64929e-09 |
| H9: 2.45304e-07 | H27: 1.53315e-07 | H27f: 5.67834e-09 |
| H11: -1.75616e-07 | H29: 1.90322e-08 | H29f: 6.56284e-10 |
| H13: 1.2737e-07 | H31: 0.709759 | H31f: 0.0228955 |
| H15: 4.59945e-08 | H33: -0.613628 | H33f: -0.0185948 |
| H17: 4.05834e-08 | H35: -0.197965 | H35f: -0.00565613 |
| H19: -3.63115e-08 | H37: -0.0148996 | H37f: -0.000402692 |

c2sd = 0.0846
c2ed = -0.1931
c3sd = -0.132
c3ed = -0.5495
c4sd = -0.232
c4ed = -0.7527
c5sd = -0.264
c5ed = -0.847
varx = 2.9495%.

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 56/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.56 |
| Actual Amplitude: | 0.56 |
| Actual Power: | 0.3136 |
| Distortion 2H-30H: | 7.18409e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2852 | end: | 6.9035 | delta: | 0.6183 |
| P2 start: | 16.1679 | end: | 17.9445 | delta: | 1.7766 |
| P3 start: | 26.5678 | end: | 29.4669 | delta: | 2.899 |
| P4 start: | 37.1478 | end: | 41.0795 | delta: | 3.9318 |
| P5 start: | 47.8823 | end: | 52.7179 | delta: | 4.8355 |
| P6 start: | 58.7826 | end: | 64.3523 | delta: | 5.5697 |
| P7 start: | 69.86 | end: | 75.9523 | delta: | 6.0923 |
| P8 start: | 81.1131 | end: | 87.4785 | delta: | 6.3655 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: 0.0 | H21: 4.06559e-07 | H21f: 1.93599e-08 |
| H5: -2.71039e-08 | H23: 3.29961e-07 | H23f: 1.43461e-08 |
| H7: 3.87199e-08 | H25: 5.42079e-08 | H25f: 2.16831e-09 |
| H9: -4.51732e-07 | H27: 8.03079e-08 | H27f: 2.97437e-09 |
| H11: -8.62398e-08 | H29: 7.47695e-08 | H29f: 2.57826e-09 |
| H13: 5.21229e-08 | H31: 0.702773 | H31f: 0.0226701 |
| H15: -5.42079e-08 | H33: -0.597851 | H33f: -0.0181167 |
| H17: 1.59435e-08 | H35: -0.203369 | H35f: -0.00581055 |
| H19: 8.55913e-08 | H37: -0.0167699 | H37f: -0.000453242 |

| |
|----------------|
| c2sd = 0.0257 |
| c2ed = -0.1634 |
| c3sd = -0.2209 |
| c3ed = -0.4944 |
| c4sd = -0.3486 |
| c4ed = -0.6742 |
| c5sd = -0.4033 |
| c5ed = -0.7464 |
| varx = 2.902%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.57
 Actual Amplitude: 0.57
 Actual Power: 0.3249
 Distortion 2H-30H: 7.61497e-05%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total weighting events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.2413 | end: 6.8685 | delta: 0.6272 |
| P2 start: 16.1277 | end: 17.934 | delta: 1.8063 |
| P3 start: 26.5197 | end: 29.4681 | delta: 2.9483 |
| P4 start: 37.0902 | end: 41.0899 | delta: 3.9997 |
| P5 start: 47.8169 | end: 52.7379 | delta: 4.921 |
| P6 start: 58.7127 | end: 64.3832 | delta: 5.6705 |
| P7 start: 69.7902 | end: 75.9952 | delta: 6.205 |
| P8 start: 81.0486 | end: 87.5334 | delta: 6.4849 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: 0.0 | H21: 3.74066e-07 | H21f: 1.78127e-08 |
| H5: -1.86399e-07 | H23: 4.63103e-08 | H23f: 2.01349e-09 |
| H7: -1.90203e-08 | H25: 2.87587e-07 | H25f: 1.15035e-08 |
| H9: -2.66284e-07 | H27: 4.93119e-08 | H27f: 1.82637e-09 |
| H11: 2.29973e-07 | H29: -2.4792e-07 | H29f: -8.54895e-09 |
| H13: -2.15076e-07 | H31: 0.696968 | H31f: 0.0224828 |
| H15: 4.43807e-08 | H33: -0.580377 | H33f: -0.0175872 |
| H17: 3.91594e-08 | H35: -0.208635 | H35f: -0.00596101 |
| H19: -2.87306e-07 | H37: -0.0190699 | H37f: -0.000515402 |

c2sd = 0.0119
 c2ed = -0.2001
 c3sd = -0.2265
 c3ed = -0.5357
 c4sd = -0.3491
 c4ed = -0.7208
 c5sd = -0.3994
 c5ed = -0.7959
 varx = 2.8544%.

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 58/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.58 |
| Actual Amplitude: | 0.58 |
| Actual Power: | 0.3364 |
| Distortion 2H-30H: | 7.59418e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2797 | end: | 6.919 | delta: | 0.6393 |
| P2 start: | 16.1256 | end: | 17.9616 | delta: | 1.8359 |
| P3 start: | 26.4942 | end: | 29.4912 | delta: | 2.9969 |
| P4 start: | 37.0476 | end: | 41.1143 | delta: | 4.0668 |
| P5 start: | 47.7616 | end: | 52.7669 | delta: | 5.0053 |
| P6 start: | 58.6495 | end: | 64.4196 | delta: | 5.7701 |
| P7 start: | 69.7244 | end: | 76.041 | delta: | 6.3166 |
| P8 start: | 80.9857 | end: | 87.5889 | delta: | 6.6032 |

| | | |
|-------------------|------------------|--------------------|
| H3: -1.30846e-07 | H21: 3.30232e-07 | H21f: 1.57253e-08 |
| H5: -2.61693e-07 | H23: 3.41339e-08 | H23f: 1.48408e-09 |
| H7: 0.0 | H25: 1.88419e-07 | H25f: 7.53676e-09 |
| H9: 1.59923e-07 | H27: 1.35693e-07 | H27f: 5.02565e-09 |
| H11: -1.07056e-07 | H29: 3.6998e-07 | H29f: 1.27579e-08 |
| H13: 3.32149e-07 | H31: 0.686263 | H31f: 0.0221375 |
| H15: -4.36155e-08 | H33: -0.568353 | H33f: -0.0172228 |
| H17: -3.07874e-08 | H35: -0.214052 | H35f: -0.00611578 |
| H19: -1.99713e-07 | H37: -0.0201446 | H37f: -0.000544449 |

| |
|-----------------|
| c2sd = 0.0288 |
| c2ed = -0.1916 |
| c3sd = -0.2214 |
| c3ed = -0.5433 |
| c4sd = -0.3505 |
| c4ed = -0.7376 |
| c5sd = -0.4046 |
| c5ed = -0.8169 |
| varx = 2.8048%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 59/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.59 |
| Actual Amplitude: | 0.59 |
| Actual Power: | 0.3481 |
| Distortion 2H-30H: | 0.000133149% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.2773 | end: | 6.9271 | delta: | 0.6498 |
| P2 start: | 16.1045 | end: | 17.9699 | delta: | 1.8654 |
| P3 start: | 26.4572 | end: | 29.5028 | delta: | 3.0456 |
| P4 start: | 36.9969 | end: | 41.1309 | delta: | 4.134 |
| P5 start: | 47.7006 | end: | 52.7905 | delta: | 5.0899 |
| P6 start: | 58.5821 | end: | 64.4523 | delta: | 5.8703 |
| P7 start: | 69.6557 | end: | 76.0848 | delta: | 6.4291 |
| P8 start: | 80.9214 | end: | 87.6441 | delta: | 6.7227 |

| | | |
|------------------|-----------------------|-------------------------|
| H3: -3.00134e-07 | H21: 3.4301e-07 | H21f: 1.63338e-08 |
| H5: -1.8008e-07 | H23: 3.69109e-07 | H23f: 1.60482e-08 |
| H7: -7.35022e-07 | H25: 6.7916e-07 | H25f: 2.71664e-08 |
| H9: -5.71684e-08 | H27: 4.28763e-07 | H27f: 1.58801e-08 |
| H11: 8.18547e-08 | H29: 1.33064e-07 | H29f: 4.58842e-09 |
| H13: -1.0884e-07 | H31: 0.677817 | H31f: 0.0218651 |
| H15: 2.57258e-07 | H33: -0.553416 | H33f: -0.0167702 |
| H17: 1.43762e-07 | H35: -0.219305 | H35f: -0.00626587 |
| H19: 2.91107e-07 | H37: -0.0219502 | H37f: -0.000593249 |

| |
|-----------------|
| c2sd = 0.0208 |
| c2ed = -0.1963 |
| c3sd = -0.2373 |
| c3ed = -0.5528 |
| c4sd = -0.3728 |
| c4ed = -0.7494 |
| c5sd = -0.4311 |
| c5ed = -0.8279 |
| varx = 2.7556%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 60/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.6 |
| Actual Amplitude: | 0.6 |
| Actual Power: | 0.36 |
| Distortion 2H-30H: | 8.12071e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.4319 | end: | 7.0992 | delta: | 0.6673 |
| P2 start: | 16.1593 | end: | 18.0542 | delta: | 1.8948 |
| P3 start: | 26.4657 | end: | 29.5588 | delta: | 3.093 |
| P4 start: | 36.9769 | end: | 41.1762 | delta: | 4.1993 |
| P5 start: | 47.6605 | end: | 52.8328 | delta: | 5.1723 |
| P6 start: | 58.5288 | end: | 64.4968 | delta: | 5.968 |
| P7 start: | 69.5956 | end: | 76.1346 | delta: | 6.539 |
| P8 start: | 80.8608 | end: | 87.7004 | delta: | 6.8396 |

| | | |
|-------------------|------------------|--------------------|
| H3: -8.43233e-08 | H21: 4.03547e-07 | H21f: 1.92165e-08 |
| H5: 1.51782e-07 | H23: 9.89883e-08 | H23f: 4.30384e-09 |
| H7: -3.61386e-07 | H25: 3.64277e-07 | H25f: 1.45711e-08 |
| H9: -4.21617e-08 | H27: 2.71708e-07 | H27f: 1.00633e-08 |
| H11: -1.37984e-07 | H29: 6.10617e-08 | H29f: 2.10558e-09 |
| H13: -7.78369e-08 | H31: 0.660044 | H31f: 0.0212918 |
| H15: -6.74587e-08 | H33: -0.549291 | H33f: -0.0166452 |
| H17: 2.38089e-07 | H35: -0.224911 | H35f: -0.00642604 |
| H19: -1.66428e-07 | H37: -0.0209686 | H37f: -0.000566718 |

| |
|-----------------|
| c2sd = 0.0472 |
| c2ed = -0.0837 |
| c3sd = -0.2746 |
| c3ed = -0.4509 |
| c4sd = -0.4544 |
| c4ed = -0.6425 |
| c5sd = -0.5461 |
| c5ed = -0.7106 |
| varx = 2.7026%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.61 |
| Actual Amplitude: | 0.61 |
| Actual Power: | 0.3721 |
| Distortion 2H-30H: | 4.27467e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.3895 | end: | 7.0655 | delta: | 0.676 |
| P2 start: | 16.1182 | end: | 18.0423 | delta: | 1.9241 |
| P3 start: | 26.4162 | end: | 29.5578 | delta: | 3.1416 |
| P4 start: | 36.9174 | end: | 41.184 | delta: | 4.2666 |
| P5 start: | 47.5927 | end: | 52.8499 | delta: | 5.2572 |
| P6 start: | 58.4562 | end: | 64.5251 | delta: | 6.0689 |
| P7 start: | 69.5234 | end: | 76.1761 | delta: | 6.6527 |
| P8 start: | 80.7947 | end: | 87.7553 | delta: | 6.9606 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 2.48823e-07 | H21: 4.14705e-08 | H21f: 1.97479e-09 |
| H5: -4.97646e-08 | H23: 6.49103e-08 | H23f: 2.82219e-09 |
| H7: -1.77731e-08 | H25: 3.98117e-08 | H25f: 1.59247e-09 |
| H9: 1.38235e-08 | H27: 9.21567e-09 | H27f: 3.41321e-10 |
| H11: -5.65507e-08 | H29: -2.74563e-07 | H29f: -9.4677e-09 |
| H13: -6.69908e-08 | H31: 0.653848 | H31f: 0.0210919 |
| H15: 1.07823e-07 | H33: -0.531258 | H33f: -0.0160987 |
| H17: 7.31832e-09 | H35: -0.23004 | H35f: -0.00657259 |
| H19: -1.24411e-07 | H37: -0.0237508 | H37f: -0.000641913 |

| |
|-----------------|
| c2sd = 0.0118 |
| c2ed = -0.1013 |
| c3sd = -0.3148 |
| c3ed = -0.4612 |
| c4sd = -0.5014 |
| c4ed = -0.6472 |
| c5sd = -0.5987 |
| c5ed = -0.7086 |
| varx = 2.6534%. |

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 62/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.62 |
| Actual Amplitude: | 0.62 |
| Actual Power: | 0.3844 |
| Distortion 2H-30H: | 4.98905e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.3895 | end: | 7.076 | delta: | 0.6866 |
| P2 start: | 16.098 | end: | 18.0512 | delta: | 1.9532 |
| P3 start: | 26.3791 | end: | 29.5688 | delta: | 3.1897 |
| P4 start: | 36.8661 | end: | 41.1992 | delta: | 4.3331 |
| P5 start: | 47.5304 | end: | 52.8717 | delta: | 5.3413 |
| P6 start: | 58.387 | end: | 64.5561 | delta: | 6.169 |
| P7 start: | 69.453 | end: | 76.2188 | delta: | 6.7658 |
| P8 start: | 80.7293 | end: | 87.8106 | delta: | 7.0813 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 0.0 | H21: 1.74864e-07 | H21f: 8.32686e-09 |
| H5: -4.89619e-08 | H23: -1.27727e-07 | H23f: -5.55334e-09 |
| H7: -2.09837e-07 | H25: 3.52526e-07 | H25f: 1.4101e-08 |
| H9: -2.72011e-08 | H27: 0.0 | H27f: 0.0 |
| H11: -1.11277e-07 | H29: 8.44171e-09 | H29f: 2.91094e-10 |
| H13: -4.70788e-08 | H31: 0.644998 | H31f: 0.0208064 |
| H15: 8.97635e-08 | H33: -0.516099 | H33f: -0.0156394 |
| H17: -2.88011e-08 | H35: -0.235156 | H35f: -0.00671873 |
| H19: 8.37507e-08 | H37: -0.0257827 | H37f: -0.000696829 |

| |
|-----------------|
| c2sd = -0.0007 |
| c2ed = -0.1 |
| c3sd = -0.3395 |
| c3ed = -0.4626 |
| c4sd = -0.5361 |
| c4ed = -0.6486 |
| c5sd = -0.6408 |
| c5ed = -0.7071 |
| varx = 2.6029%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 63/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.63 |
| Actual Amplitude: | 0.63 |
| Actual Power: | 0.396899 |
| Distortion 2H-30H: | 4.22937e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.3598 | end: | 7.0555 | delta: | 0.6957 |
| P2 start: | 16.063 | end: | 18.0452 | delta: | 1.9822 |
| P3 start: | 26.3329 | end: | 29.5707 | delta: | 3.2378 |
| P4 start: | 36.8083 | end: | 41.2081 | delta: | 4.3998 |
| P5 start: | 47.4632 | end: | 52.8889 | delta: | 5.4257 |
| P6 start: | 58.3143 | end: | 64.584 | delta: | 6.2697 |
| P7 start: | 69.3801 | end: | 76.2599 | delta: | 6.8798 |
| P8 start: | 80.6626 | end: | 87.8657 | delta: | 7.2032 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 2.0077e-07 | H21: 5.73628e-09 | H21f: 2.73156e-10 |
| H5: -1.44554e-07 | H23: 2.40924e-07 | H23f: 1.0475e-08 |
| H7: -1.5488e-07 | H25: -4.81848e-08 | H25f: -1.92739e-09 |
| H9: -5.35387e-08 | H27: 2.67693e-08 | H27f: 9.91457e-10 |
| H11: 6.57065e-08 | H29: -4.98463e-08 | H29f: -1.71884e-09 |
| H13: -5.55978e-08 | H31: 0.637755 | H31f: 0.0205728 |
| H15: -3.21232e-08 | H33: -0.49873 | H33f: -0.015113 |
| H17: 9.2118e-08 | H35: -0.240054 | H35f: -0.00685868 |
| H19: -1.01442e-07 | H37: -0.0284723 | H37f: -0.00076952 |

| |
|-----------------|
| c2sd = -0.0087 |
| c2ed = -0.133 |
| c3sd = -0.3422 |
| c3ed = -0.5043 |
| c4sd = -0.5354 |
| c4ed = -0.6981 |
| c5sd = -0.6369 |
| c5ed = -0.761 |
| varx = 2.5527%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 64/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.64
Actual Amplitude: 0.64
Actual Power: 0.4096
Distortion 2H-30H: 6.31749e-05%
First strong harmonics: 31 and 33
Pulses per sine cycle: 32
Total switching events: 64
Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.4385 | end: 7.1488 | delta: 0.7103 |
| P2 start: 16.0819 | end: 18.093 | delta: 2.0111 |
| P3 start: 26.3191 | end: 29.604 | delta: 3.2849 |
| P4 start: 36.7723 | end: 41.2372 | delta: 4.4649 |
| P5 start: 47.4109 | end: 52.9192 | delta: 5.5083 |
| P6 start: 58.2514 | end: 64.6199 | delta: 6.3685 |
| P7 start: 69.3131 | end: 76.305 | delta: 6.992 |
| P8 start: 80.5983 | end: 87.9215 | delta: 7.3232 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 1.1858e-07 | H21: -2.25866e-08 | H21f: -1.07555e-09 |
| H5: -1.89727e-07 | H23: -6.18677e-08 | H23f: -2.6899e-09 |
| H7: 1.694e-07 | H25: 9.48637e-08 | H25f: 3.79455e-09 |
| H9: -1.44931e-07 | H27: -2.37159e-07 | H27f: -8.78368e-09 |
| H11: -2.37159e-07 | H29: -1.63558e-08 | H29f: -5.63994e-10 |
| H13: 2.91888e-07 | H31: 0.624146 | H31f: 0.0201337 |
| H15: -2.68781e-07 | H33: -0.488916 | H33f: -0.0148156 |
| H17: -4.18517e-08 | H35: -0.245331 | H35f: -0.00700947 |
| H19: 1.1858e-07 | H37: -0.0291521 | H37f: -0.000787894 |

c2sd = 0.023
c2ed = -0.0981
c3sd = -0.3353
c3ed = -0.4916
c4sd = -0.5437
c4ed = -0.6968
c5sd = -0.6555
c5ed = -0.7644
varx = 2.4997%.

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 65/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.65 |
| Actual Amplitude: | 0.65 |
| Actual Power: | 0.4225 |
| Distortion 2H-30H: | 6.26939e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total locking events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.5426 | end: | 7.2695 | delta: | 0.7268 |
| P2 start: | 16.1155 | end: | 18.1554 | delta: | 2.04 |
| P3 start: | 26.3143 | end: | 29.6458 | delta: | 3.3315 |
| P4 start: | 36.7421 | end: | 41.2715 | delta: | 4.5295 |
| P5 start: | 47.3624 | end: | 52.9526 | delta: | 5.5903 |
| P6 start: | 58.1908 | end: | 64.6574 | delta: | 6.4666 |
| P7 start: | 69.2472 | end: | 76.3509 | delta: | 7.1037 |
| P8 start: | 80.5344 | end: | 87.9775 | delta: | 7.4431 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 3.89185e-08 | H21: -7.22771e-08 | H21f: -3.44177e-09 |
| H5: 9.34043e-08 | H23: -1.11679e-07 | H23f: -4.85561e-09 |
| H7: 1.66793e-07 | H25: -2.42851e-07 | H25f: -9.71405e-09 |
| H9: 1.42701e-07 | H27: -3.28645e-07 | H27f: -1.2172e-08 |
| H11: -1.2737e-07 | H29: 5.63647e-08 | H29f: 1.94361e-09 |
| H13: 2.96379e-07 | H31: 0.608861 | H31f: 0.0196407 |
| H15: -9.34043e-08 | H33: -0.480975 | H33f: -0.014575 |
| H17: 0.0 | H35: -0.250574 | H35f: -0.00715925 |
| H19: -1.84351e-07 | H37: -0.0291602 | H37f: -0.000788114 |

| |
|-----------------|
| c2sd = 0.0471 |
| c2ed = -0.0262 |
| c3sd = -0.3553 |
| c3ed = -0.4345 |
| c4sd = -0.5944 |
| c4ed = -0.642 |
| c5sd = -0.7289 |
| c5ed = -0.7061 |
| varx = 2.4458%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 66/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.66 |
| Actual Amplitude: | 0.66 |
| Actual Power: | 0.4356 |
| Distortion 2H-30H: | 0.000160478% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total locking events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.6885 | end: | 7.4355 | delta: | 0.7469 |
| P2 start: | 16.1747 | end: | 18.2437 | delta: | 2.069 |
| P3 start: | 26.3256 | end: | 29.7031 | delta: | 3.3776 |
| P4 start: | 36.7226 | end: | 41.3157 | delta: | 4.5931 |
| P5 start: | 47.3211 | end: | 52.9922 | delta: | 5.6711 |
| P6 start: | 58.1349 | end: | 64.6986 | delta: | 6.5637 |
| P7 start: | 69.184 | end: | 76.3985 | delta: | 7.2146 |
| P8 start: | 80.4715 | end: | 88.0339 | delta: | 7.5623 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -2.68301e-07 | H21: 4.38043e-07 | H21f: 2.08592e-08 |
| H5: -9.19891e-08 | H23: 6.99917e-07 | H23f: 3.04312e-08 |
| H7: -6.57065e-07 | H25: -6.43924e-08 | H25f: -2.57569e-09 |
| H9: 8.94338e-08 | H27: 9.19891e-07 | H27f: 3.407e-08 |
| H11: -2.40426e-07 | H29: 5.39246e-07 | H29f: 1.85947e-08 |
| H13: -2.65353e-08 | H31: 0.590715 | H31f: 0.0190553 |
| H15: 1.68647e-07 | H33: -0.476329 | H33f: -0.0144342 |
| H17: 3.24667e-07 | H35: -0.255657 | H35f: -0.00730449 |
| H19: 1.99713e-07 | H37: -0.0277699 | H37f: -0.000750539 |

| |
|-----------------|
| c2sd = 0.1461 |
| c2ed = 0.0223 |
| c3sd = -0.2799 |
| c3ed = -0.4414 |
| c4sd = -0.5277 |
| c4ed = -0.6839 |
| c5sd = -0.6654 |
| c5ed = -0.7713 |
| varx = 2.3905%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.67
 Actual Amplitude: 0.67
 Actual Power: 0.4489
 Distortion 2H-30H: 6.25727e-05%
 First strong harmonics: 31 and 33
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.7494 | end: 7.5115 | delta: 0.7621 |
| P2 start: 16.1891 | end: 18.2868 | delta: 2.0977 |
| P3 start: 26.3091 | end: 29.7331 | delta: 3.424 |
| P4 start: 36.6841 | end: 41.3415 | delta: 4.6574 |
| P5 start: 47.2662 | end: 53.0192 | delta: 5.753 |
| P6 start: 58.0691 | end: 64.7315 | delta: 6.6623 |
| P7 start: 69.1142 | end: 76.4418 | delta: 7.3275 |
| P8 start: 80.4056 | end: 88.0896 | delta: 7.6841 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -7.55134e-08 | H21: -2.58903e-07 | H21f: -1.23287e-08 |
| H5: 4.53081e-08 | H23: -2.95487e-07 | H23f: -1.28473e-08 |
| H7: 1.77996e-07 | H25: -2.53725e-07 | H25f: -1.0149e-08 |
| H9: -1.25856e-08 | H27: 0.0 | H27f: 0.0 |
| H11: 2.05946e-08 | H29: -3.20281e-07 | H29f: -1.10442e-08 |
| H13: -9.5844e-08 | H31: 0.577672 | H31f: 0.0186346 |
| H15: 7.55134e-08 | H33: -0.465336 | H33f: -0.0141011 |
| H17: -3.33147e-08 | H35: -0.260508 | H35f: -0.00744308 |
| H19: -1.19232e-07 | H37: -0.0284991 | H37f: -0.000770246 |

c2sd = 0.1526
 c2ed = 0.0733
 c3sd = -0.3091
 c3ed = -0.3987
 c4sd = -0.5833
 c4ed = -0.6411
 c5sd = -0.741
 c5ed = -0.7236
 varx = 2.3369%.

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 68/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.68
Actual Amplitude: 0.68
Actual Power: 0.4624
Distortion 2H-30H: 6.60847e-05%
First strong harmonics: 31 and 33
Pulses per sine cycle: 32
Total switching events: 64
Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.6721 | end: 7.4397 | delta: 0.7675 |
| P2 start: 16.1249 | end: 18.2506 | delta: 2.1257 |
| P3 start: 26.2434 | end: 29.7147 | delta: 3.4713 |
| P4 start: 36.6116 | end: 41.335 | delta: 4.7234 |
| P5 start: 47.1869 | end: 53.0241 | delta: 5.8372 |
| P6 start: 57.9862 | end: 64.7502 | delta: 6.764 |
| P7 start: 69.0334 | end: 76.4777 | delta: 7.4443 |
| P8 start: 80.3343 | end: 88.1445 | delta: 7.8102 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 1.86007e-07 | H21: 6.37739e-08 | H21f: 3.03685e-09 |
| H5: -1.78567e-07 | H23: 3.29961e-07 | H23f: 1.43461e-08 |
| H7: 7.97174e-08 | H25: -5.35701e-08 | H25f: -2.1428e-09 |
| H9: -2.4801e-07 | H27: 3.88549e-07 | H27f: 1.43907e-08 |
| H11: -1.31896e-07 | H29: 0.0 | H29f: 0.0 |
| H13: 1.28774e-07 | H31: 0.573255 | H31f: 0.0184921 |
| H15: -2.97612e-08 | H33: -0.443613 | H33f: -0.0134428 |
| H17: 2.62599e-08 | H35: -0.2652 | H35f: -0.00757714 |
| H19: -5.87392e-09 | H37: -0.0334019 | H37f: -0.000902754 |

c2sd = 0.0934
c2ed = 0.032
c3sd = -0.3667
c3ed = -0.4252
c4sd = -0.6449
c4ed = -0.6585
c5sd = -0.807
c5ed = -0.7319
varx = 2.2862%.

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 69/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.69 |
| Actual Amplitude: | 0.69 |
| Actual Power: | 0.4761 |
| Distortion 2H-30H: | 3.99013e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.6775 | end: 7.4562 | delta: 0.7787 |
| P2 start: 16.1074 | end: 18.2612 | delta: 2.1538 |
| P3 start: 26.2066 | end: 29.7243 | delta: 3.5177 |
| P4 start: 36.5586 | end: 41.3465 | delta: 4.7879 |
| P5 start: 47.121 | end: 53.0406 | delta: 5.9196 |
| P6 start: 57.912 | end: 64.7757 | delta: 6.8637 |
| P7 start: 68.9576 | end: 76.5169 | delta: 7.5593 |
| P8 start: 80.2651 | end: 88.2 | delta: 7.9349 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -1.46649e-07 | H21: 1.04749e-07 | H21f: 4.98807e-09 |
| H5: 4.39948e-08 | H23: -7.65127e-08 | H23f: -3.32664e-09 |
| H7: 9.42745e-08 | H25: -1.23185e-07 | H25f: -4.92742e-09 |
| H9: -1.22208e-07 | H27: -6.51775e-08 | H27f: -2.41398e-09 |
| H11: 1.09987e-07 | H29: -1.51706e-08 | H29f: -5.23125e-10 |
| H13: -9.30659e-08 | H31: 0.56353 | H31f: 0.0181784 |
| H15: -4.39948e-08 | H33: -0.428151 | H33f: -0.0129743 |
| H17: 1.35866e-07 | H35: -0.269794 | H35f: -0.0077084 |
| H19: -1.85241e-07 | H37: -0.0360026 | H37f: -0.000973044 |

| |
|-----------------|
| c2sd = 0.0888 |
| c2ed = 0.0297 |
| c3sd = -0.3827 |
| c3ed = -0.4365 |
| c4sd = -0.67 |
| c4ed = -0.675 |
| c5sd = -0.839 |
| c5ed = -0.7495 |
| varx = 2.2334%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 70/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.7 |
| Actual Amplitude: | 0.7 |
| Actual Power: | 0.49 |
| Distortion 2H-30H: | 4.55368e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.7479 | end: | 7.5427 | delta: | 0.7948 |
| P2 start: | 16.1272 | end: | 18.3094 | delta: | 2.1821 |
| P3 start: | 26.1929 | end: | 29.7561 | delta: | 3.5633 |
| P4 start: | 36.521 | end: | 41.3722 | delta: | 4.8512 |
| P5 start: | 47.0656 | end: | 53.0661 | delta: | 6.0005 |
| P6 start: | 57.8447 | end: | 64.8066 | delta: | 6.9618 |
| P7 start: | 68.8857 | end: | 76.5587 | delta: | 7.673 |
| P8 start: | 80.1974 | end: | 88.256 | delta: | 8.0585 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 0.0 | H21: 4.13012e-08 | H21f: 1.96673e-09 |
| H5: 4.33663e-08 | H23: 2.63969e-07 | H23f: 1.14769e-08 |
| H7: -2.01343e-07 | H25: -2.60198e-08 | H25f: -1.04079e-09 |
| H9: -4.81848e-08 | H27: 2.08801e-07 | H27f: 7.73336e-09 |
| H11: -1.57696e-07 | H29: 9.72003e-08 | H29f: 3.35173e-09 |
| H13: 6.67174e-08 | H31: 0.549725 | H31f: 0.0177331 |
| H15: 1.44554e-08 | H33: -0.417637 | H33f: -0.0126557 |
| H17: 5.73966e-08 | H35: -0.274449 | H35f: -0.0078414 |
| H19: 6.84731e-08 | H37: -0.036797 | H37f: -0.000994514 |

| |
|-----------------|
| c2sd = 0.1327 |
| c2ed = 0.0539 |
| c3sd = -0.3575 |
| c3ed = -0.4434 |
| c4sd = -0.6555 |
| c4ed = -0.7014 |
| c5sd = -0.831 |
| c5ed = -0.7874 |
| varx = 2.1786%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 71/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.71 |
| Actual Amplitude: | 0.71 |
| Actual Power: | 0.504099 |
| Distortion 2H-30H: | 6.71947e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.7815 | end: | 7.5898 | delta: | 0.8083 |
| P2 start: | 16.1264 | end: | 18.3366 | delta: | 2.2101 |
| P3 start: | 26.1661 | end: | 29.775 | delta: | 3.6089 |
| P4 start: | 36.4742 | end: | 41.3887 | delta: | 4.9146 |
| P5 start: | 47.0032 | end: | 53.0849 | delta: | 6.0817 |
| P6 start: | 57.7721 | end: | 64.8328 | delta: | 7.0607 |
| P7 start: | 68.81 | end: | 76.5979 | delta: | 7.7879 |
| P8 start: | 80.1277 | end: | 88.3117 | delta: | 8.1839 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -1.78148e-07 | H21: -8.14391e-08 | H21f: -3.87805e-09 |
| H5: -1.06889e-07 | H23: 1.85894e-07 | H23f: 8.08233e-09 |
| H7: 0.0 | H25: 2.99289e-07 | H25f: 1.19715e-08 |
| H9: -2.85037e-07 | H27: -7.91769e-09 | H27f: -2.93248e-10 |
| H11: 3.10949e-07 | H29: 1.62176e-07 | H29f: 5.59228e-09 |
| H13: -1.80889e-07 | H31: 0.538102 | H31f: 0.0173581 |
| H15: 1.06889e-07 | H33: -0.404241 | H33f: -0.0122497 |
| H17: 8.80261e-08 | H35: -0.278902 | H35f: -0.00796863 |
| H19: 1.46269e-07 | H37: -0.038732 | H37f: -0.00104681 |

| |
|-----------------|
| c2sd = 0.1142 |
| c2ed = 0.0988 |
| c3sd = -0.4129 |
| c3ed = -0.396 |
| c4sd = -0.7406 |
| c4ed = -0.6464 |
| c5sd = -0.9401 |
| c5ed = -0.7218 |
| varx = 2.1245%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 72/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.72 |
| Actual Amplitude: | 0.72 |
| Actual Power: | 0.5184 |
| Distortion 2H-30H: | 6.80338e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 6.8476 | end: | 7.6723 | delta: | 0.8247 |
| P2 start: | 16.1456 | end: | 18.3838 | delta: | 2.2383 |
| P3 start: | 26.1518 | end: | 29.8057 | delta: | 3.6539 |
| P4 start: | 36.4356 | end: | 41.4127 | delta: | 4.9771 |
| P5 start: | 46.9463 | end: | 53.1081 | delta: | 6.1618 |
| P6 start: | 57.7027 | end: | 64.8612 | delta: | 7.1585 |
| P7 start: | 68.7359 | end: | 76.6381 | delta: | 7.9022 |
| P8 start: | 80.0585 | end: | 88.3677 | delta: | 8.3092 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -3.51347e-08 | H21: 7.02694e-08 | H21f: 3.34616e-09 |
| H5: 1.26485e-07 | H23: -2.19974e-07 | H23f: -9.56408e-09 |
| H7: 1.20462e-07 | H25: -5.0594e-08 | H25f: -2.02376e-09 |
| H9: -2.34231e-08 | H27: -3.12309e-07 | H27f: -1.1567e-08 |
| H11: 1.91644e-07 | H29: -3.63463e-08 | H29f: -1.25332e-09 |
| H13: -2.59456e-07 | H31: 0.524357 | H31f: 0.0169147 |
| H15: 2.81078e-08 | H33: -0.393393 | H33f: -0.011921 |
| H17: -4.9602e-08 | H35: -0.283304 | H35f: -0.0080944 |
| H19: -4.10521e-07 | H37: -0.0396505 | H37f: -0.00107163 |

| |
|-----------------|
| c2sd = 0.1284 |
| c2ed = 0.151 |
| c3sd = -0.4352 |
| c3ed = -0.3573 |
| c4sd = -0.7899 |
| c4ed = -0.6118 |
| c5sd = -1.01 |
| c5ed = -0.6856 |
| varx = 2.0693%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 73/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.73
Actual Amplitude: 0.73
Actual Power: 0.532899
Distortion 2H-30H: 3.14051e-05%
First strong harmonics: 31 and 33
Pulses per sine cycle: 32
Total switching events: 64
Delta Friendly: No

| | | |
|-------------------|--------------|---------------|
| P1 start: 6.968 | end: 7.8146 | delta: 0.8466 |
| P2 start: 16.2005 | end: 18.4674 | delta: 2.2669 |
| P3 start: 26.1604 | end: 29.8586 | delta: 3.6981 |
| P4 start: 36.4126 | end: 41.4508 | delta: 5.0382 |
| P5 start: 46.8999 | end: 53.1402 | delta: 6.2403 |
| P6 start: 57.6401 | end: 64.8947 | delta: 7.2546 |
| P7 start: 68.6656 | end: 76.6806 | delta: 8.015 |
| P8 start: 79.9906 | end: 88.424 | delta: 8.4334 |

| | | |
|-------------------|------------------|-------------------|
| H3: 1.0396e-07 | H21: 6.93069e-08 | H21f: 3.30033e-09 |
| H5: -6.23762e-08 | H23: 4.52001e-08 | H23f: 1.96522e-09 |
| H7: -4.45544e-08 | H25: 5.82178e-08 | H25f: 2.32871e-09 |
| H9: -8.0858e-08 | H27: 6.93069e-08 | H27f: 2.56692e-09 |
| H11: 1.89019e-08 | H29: 7.16968e-08 | H29f: 2.4723e-09 |
| H13: 4.79817e-08 | H31: 0.50695 | H31f: 0.0163532 |
| H15: 2.14851e-07 | H33: -0.387073 | H33f: -0.0117295 |
| H17: -3.66919e-08 | H35: -0.287564 | H35f: -0.00821612 |
| H19: 7.11307e-08 | H37: -0.0384383 | H37f: -0.00103887 |

c2sd = 0.2139
c2ed = 0.204
c3sd = -0.3773
c3ed = -0.3537
c4sd = -0.7468
c4ed = -0.6398
c5sd = -0.976
c5ed = -0.734
varx = 2.0125%.

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 74/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.74 |
| Actual Amplitude: | 0.74 |
| Actual Power: | 0.5476 |
| Distortion 2H-30H: | 4.78145e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 7.0708 | end: | 7.9387 | delta: | 0.868 |
| P2 start: | 16.2478 | end: | 18.5433 | delta: | 2.2955 |
| P3 start: | 26.1646 | end: | 29.9068 | delta: | 3.7422 |
| P4 start: | 36.3863 | end: | 41.4853 | delta: | 5.0991 |
| P5 start: | 46.8507 | end: | 53.1692 | delta: | 6.3185 |
| P6 start: | 57.575 | end: | 64.9258 | delta: | 7.3507 |
| P7 start: | 68.5931 | end: | 76.7216 | delta: | 8.1285 |
| P8 start: | 79.9214 | end: | 88.4803 | delta: | 8.5589 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -3.41851e-08 | H21: -9.76718e-08 | H21f: -4.65104e-09 |
| H5: -6.15332e-08 | H23: 1.42686e-07 | H23f: 6.20373e-09 |
| H7: -2.93015e-08 | H25: -1.39475e-07 | H25f: -5.57901e-09 |
| H9: 4.55802e-08 | H27: 2.81078e-07 | H27f: 1.04103e-08 |
| H11: -3.72929e-08 | H29: -2.05111e-07 | H29f: -7.07279e-09 |
| H13: 8.67776e-08 | H31: 0.490412 | H31f: 0.0158198 |
| H15: -7.52073e-08 | H33: -0.379536 | H33f: -0.0115011 |
| H17: -6.03267e-09 | H35: -0.291539 | H35f: -0.00832968 |
| H19: 1.88918e-07 | H37: -0.0375028 | H37f: -0.00101359 |

| |
|-----------------|
| c2sd = 0.2956 |
| c2ed = 0.2456 |
| c3sd = -0.3177 |
| c3ed = -0.361 |
| c4sd = -0.6987 |
| c4ed = -0.6797 |
| c5sd = -0.9346 |
| c5ed = -0.7955 |
| varx = 1.9559%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 75/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.75 |
| Actual Amplitude: | 0.75 |
| Actual Power: | 0.5625 |
| Distortion 2H-30H: | 4.95896e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 7.037 | end: | 7.9129 | delta: | 0.8758 |
| P2 start: | 16.2049 | end: | 18.5271 | delta: | 2.3222 |
| P3 start: | 26.1098 | end: | 29.8969 | delta: | 3.787 |
| P4 start: | 36.3187 | end: | 41.4806 | delta: | 5.1619 |
| P5 start: | 46.7718 | end: | 53.1713 | delta: | 6.3995 |
| P6 start: | 57.4885 | end: | 64.9391 | delta: | 7.4506 |
| P7 start: | 68.5063 | end: | 76.7533 | delta: | 8.247 |
| P8 start: | 79.8451 | end: | 88.5358 | delta: | 8.6906 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -3.37293e-08 | H21: 3.37293e-07 | H21f: 1.60616e-08 |
| H5: 2.02376e-08 | H23: -1.75979e-08 | H23f: -7.65127e-10 |
| H7: 1.44554e-07 | H25: 6.47603e-08 | H25f: 2.59041e-09 |
| H9: -2.02376e-07 | H27: 7.49541e-08 | H27f: 2.77608e-09 |
| H11: 1.6558e-07 | H29: -9.07203e-08 | H29f: -3.12829e-09 |
| H13: -7.78369e-08 | H31: 0.482986 | H31f: 0.0155802 |
| H15: 6.74587e-08 | H33: -0.360353 | H33f: -0.0109198 |
| H17: -7.73791e-08 | H35: -0.295631 | H35f: -0.00844659 |
| H19: -7.98853e-08 | H37: -0.0424832 | H37f: -0.00114819 |

| |
|-----------------|
| c2sd = 0.2485 |
| c2ed = 0.2334 |
| c3sd = -0.379 |
| c3ed = -0.3643 |
| c4sd = -0.7751 |
| c4ed = -0.6756 |
| c5sd = -1.0243 |
| c5ed = -0.7827 |
| varx = 1.9026%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 76/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.76 |
| Actual Amplitude: | 0.76 |
| Actual Power: | 0.5776 |
| Distortion 2H-30H: | 3.70555e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 7.2396 | end: | 8.1491 | delta: | 0.9094 |
| P2 start: | 16.3257 | end: | 18.6783 | delta: | 2.3527 |
| P3 start: | 26.1627 | end: | 29.9924 | delta: | 3.8297 |
| P4 start: | 36.3258 | end: | 41.5456 | delta: | 5.2198 |
| P5 start: | 46.7455 | end: | 53.2194 | delta: | 6.4739 |
| P6 start: | 57.4382 | end: | 64.9809 | delta: | 7.5427 |
| P7 start: | 68.442 | end: | 76.7991 | delta: | 8.3571 |
| P8 start: | 79.7789 | end: | 88.5928 | delta: | 8.8139 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 0.0 | H21: -1.90203e-08 | H21f: -9.05729e-10 |
| H5: -9.98566e-08 | H23: 1.82347e-07 | H23f: 7.92812e-09 |
| H7: -1.28387e-07 | H25: 3.99426e-08 | H25f: 1.59771e-09 |
| H9: 5.54759e-08 | H27: 1.47936e-08 | H27f: 5.4791e-10 |
| H11: -9.07787e-08 | H29: -7.57533e-08 | H29f: -2.61218e-09 |
| H13: 1.53626e-07 | H31: 0.459228 | H31f: 0.0148138 |
| H15: -9.31995e-08 | H33: -0.361801 | H33f: -0.0109637 |
| H17: 1.52722e-07 | H35: -0.298865 | H35f: -0.00853899 |
| H19: -5.25561e-08 | H37: -0.0364537 | H37f: -0.000985236 |

| |
|----------------|
| c2sd = 0.3811 |
| c2ed = 0.3729 |
| c3sd = -0.3071 |
| c3ed = -0.2878 |
| c4sd = -0.7424 |
| c4ed = -0.6361 |
| c5sd = -1.0194 |
| c5ed = -0.7656 |
| varx = 1.843%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 77/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.77 |
| Actual Amplitude: | 0.77 |
| Actual Power: | 0.5929 |
| Distortion 2H-30H: | 5.53809e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 7.3174 | end: | 8.2479 | delta: | 0.9305 |
| P2 start: | 16.3633 | end: | 18.7446 | delta: | 2.3813 |
| P3 start: | 26.1613 | end: | 30.0343 | delta: | 3.873 |
| P4 start: | 36.2948 | end: | 41.5743 | delta: | 5.2795 |
| P5 start: | 46.6916 | end: | 53.2423 | delta: | 6.5508 |
| P6 start: | 57.3678 | end: | 65.0059 | delta: | 7.6381 |
| P7 start: | 68.364 | end: | 76.836 | delta: | 8.4719 |
| P8 start: | 79.7059 | end: | 88.6491 | delta: | 8.9432 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -3.28532e-08 | H21: -2.62826e-07 | H21f: -1.25155e-08 |
| H5: 2.36543e-08 | H23: -5.14225e-08 | H23f: -2.23576e-09 |
| H7: -9.85597e-08 | H25: -1.57696e-08 | H25f: -6.30782e-10 |
| H9: 2.73777e-07 | H27: -7.30072e-08 | H27f: -2.70397e-09 |
| H11: -1.792e-07 | H29: 6.79722e-09 | H29f: 2.34387e-10 |
| H13: -1.74375e-07 | H31: 0.443845 | H31f: 0.0143176 |
| H15: 7.22771e-08 | H33: -0.352544 | H33f: -0.0106832 |
| H17: 7.53692e-08 | H35: -0.302221 | H35f: -0.00863488 |
| H19: 1.19309e-07 | H37: -0.0359419 | H37f: -0.000971403 |

| |
|-----------------|
| c2sd = 0.4337 |
| c2ed = 0.4242 |
| c3sd = -0.2843 |
| c3ed = -0.2701 |
| c4sd = -0.741 |
| c4ed = -0.6398 |
| c5sd = -1.034 |
| c5ed = -0.7821 |
| varx = 1.7864%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 78/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.78 |
| Actual Amplitude: | 0.78 |
| Actual Power: | 0.6084 |
| Distortion 2H-30H: | 3.45156e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|---------------|
| P1 start: 7.5243 | end: 8.4943 | delta: 0.97 |
| P2 start: 16.507 | end: 18.9213 | delta: 2.4143 |
| P3 start: 26.2336 | end: 30.1488 | delta: 3.9152 |
| P4 start: 36.316 | end: 41.6516 | delta: 5.3356 |
| P5 start: 46.6747 | end: 53.2974 | delta: 6.6226 |
| P6 start: 57.3228 | end: 65.0504 | delta: 7.7276 |
| P7 start: 68.3016 | end: 76.8822 | delta: 8.5806 |
| P8 start: 79.6396 | end: 88.7064 | delta: 9.0668 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: 3.24321e-08 | H21: 1.11196e-07 | H21f: 5.29503e-09 |
| H5: 0.0 | H23: -8.46054e-09 | H23f: -3.67849e-10 |
| H7: -5.55978e-08 | H25: -2.1016e-07 | H25f: -8.40639e-09 |
| H9: -7.56748e-08 | H27: 1.65764e-07 | H27f: 6.1394e-09 |
| H11: -8.84511e-09 | H29: -1.40912e-07 | H29f: -4.85902e-09 |
| H13: -2.99373e-08 | H31: 0.41811 | H31f: 0.0134874 |
| H15: -5.83777e-08 | H33: -0.355979 | H33f: -0.0107873 |
| H17: 2.28932e-08 | H35: -0.303502 | H35f: -0.00867149 |
| H19: 2.04834e-08 | H37: -0.0265552 | H37f: -0.000717707 |

| |
|-----------------|
| c2sd = 0.5433 |
| c2ed = 0.635 |
| c3sd = -0.267 |
| c3ed = -0.1006 |
| c4sd = -0.7936 |
| c4ed = -0.4887 |
| c5sd = -1.1406 |
| c5ed = -0.6373 |
| varx = 1.7271%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 79/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.79 |
| Actual Amplitude: | 0.79 |
| Actual Power: | 0.6241 |
| Distortion 2H-30H: | 3.28852e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|---------------|
| P1 start: 7.6729 | end: 8.6773 | delta: 1.0044 |
| P2 start: 16.615 | end: 19.0622 | delta: 2.4473 |
| P3 start: 26.2841 | end: 30.2418 | delta: 3.9577 |
| P4 start: 36.3221 | end: 41.7143 | delta: 5.3922 |
| P5 start: 46.6467 | end: 53.3417 | delta: 6.695 |
| P6 start: 57.2693 | end: 65.0873 | delta: 7.818 |
| P7 start: 68.2328 | end: 76.9241 | delta: 8.6912 |
| P8 start: 79.5698 | end: 88.7635 | delta: 9.1937 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 1.28086e-07 | H21: -3.6596e-08 | H21f: -1.74267e-09 |
| H5: -1.92129e-08 | H23: 0.0 | H23f: 0.0 |
| H7: -8.23411e-08 | H25: 8.45368e-08 | H25f: 3.38147e-09 |
| H9: -6.4043e-08 | H27: 6.4043e-08 | H27f: 2.37196e-09 |
| H11: 1.13531e-07 | H29: -1.39128e-07 | H29f: -4.79752e-09 |
| H13: -7.38958e-08 | H31: 0.395999 | H31f: 0.0127741 |
| H15: 5.76387e-08 | H33: -0.354659 | H33f: -0.0107472 |
| H17: -6.21594e-08 | H35: -0.304372 | H35f: -0.00869635 |
| H19: 1.51681e-07 | H37: -0.0191554 | H37f: -0.000517712 |

| |
|-----------------|
| c2sd = 0.6894 |
| c2ed = 0.7378 |
| c3sd = -0.155 |
| c3ed = -0.069 |
| c4sd = -0.705 |
| c4ed = -0.5086 |
| c5sd = -1.0682 |
| c5ed = -0.6933 |
| varx = 1.6694%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 80/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.8 |
| Actual Amplitude: | 0.8 |
| Actual Power: | 0.64 |
| Distortion 2H-30H: | 4.48475e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|---------------|
| P1 start: 7.543 | end: 8.5403 | delta: 0.9973 |
| P2 start: 16.4843 | end: 18.9526 | delta: 2.4682 |
| P3 start: 26.1644 | end: 30.1652 | delta: 4.0008 |
| P4 start: 36.2053 | end: 41.6599 | delta: 5.4546 |
| P5 start: 46.5288 | end: 53.3056 | delta: 6.7768 |
| P6 start: 57.1512 | end: 65.0721 | delta: 7.9209 |
| P7 start: 68.1214 | end: 76.9391 | delta: 8.8177 |
| P8 start: 79.4788 | end: 88.8182 | delta: 9.3394 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 3.16212e-08 | H21: -3.61386e-08 | H21f: -1.72088e-09 |
| H5: 5.69182e-08 | H23: 2.22724e-07 | H23f: 9.68363e-09 |
| H7: 5.42079e-08 | H25: -1.51782e-08 | H25f: -6.07128e-10 |
| H9: -8.43233e-08 | H27: -1.26485e-07 | H27f: -4.68463e-09 |
| H11: 1.03488e-07 | H29: 1.50474e-07 | H29f: 5.18874e-09 |
| H13: -1.45944e-08 | H31: 0.397232 | H31f: 0.0128139 |
| H15: 9.48637e-08 | H33: -0.324924 | H33f: -0.00984619 |
| H17: -2.4553e-07 | H35: -0.310887 | H35f: -0.00888249 |
| H19: 1.29814e-07 | H37: -0.0335535 | H37f: -0.000906852 |

| |
|----------------|
| c2sd = 0.5562 |
| c2ed = 0.6307 |
| c3sd = -0.279 |
| c3ed = -0.1414 |
| c4sd = -0.8275 |
| c4ed = -0.5573 |
| c5sd = -1.1931 |
| c5ed = -0.7226 |
| varx = 1.616%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 81/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.81 |
| Actual Amplitude: | 0.81 |
| Actual Power: | 0.6561 |
| Distortion 2H-30H: | 5.81721e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|---------------|
| P1 start: 7.7696 | end: 8.8153 | delta: 1.0457 |
| P2 start: 16.666 | end: 19.1716 | delta: 2.5056 |
| P3 start: 26.2689 | end: 30.3115 | delta: 4.0426 |
| P4 start: 36.25 | end: 41.7579 | delta: 5.5078 |
| P5 start: 46.5277 | end: 53.3719 | delta: 6.8443 |
| P6 start: 57.1149 | end: 65.1207 | delta: 8.0058 |
| P7 start: 68.0617 | end: 76.9855 | delta: 8.9238 |
| P8 start: 79.4119 | end: 88.876 | delta: 9.4641 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -9.36926e-08 | H21: 1.07077e-07 | H21f: 5.09892e-09 |
| H5: 1.3117e-07 | H23: -2.36268e-07 | H23f: -1.02725e-08 |
| H7: -9.36926e-08 | H25: -8.99449e-08 | H25f: -3.59779e-09 |
| H9: 5.20514e-08 | H27: -6.94019e-08 | H27f: -2.57044e-09 |
| H11: -4.00323e-07 | H29: -7.10771e-08 | H29f: -2.45094e-09 |
| H13: 7.20712e-08 | H31: 0.368276 | H31f: 0.0118799 |
| H15: -8.74464e-08 | H33: -0.332042 | H33f: -0.0100619 |
| H17: 6.06246e-08 | H35: -0.309709 | H35f: -0.00884883 |
| H19: -1.97248e-07 | H37: -0.0192811 | H37f: -0.000521111 |

| |
|-----------------|
| c2sd = 0.7574 |
| c2ed = 0.8301 |
| c3sd = -0.1428 |
| c3ed = -0.0267 |
| c4sd = -0.7403 |
| c4ed = -0.5018 |
| c5sd = -1.1425 |
| c5ed = -0.7079 |
| varx = 1.5568%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 82/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.82 |
| Actual Amplitude: | 0.82 |
| Actual Power: | 0.6724 |
| Distortion 2H-30H: | 4.56116e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 7.9207 | end: | 9.0062 | delta: | 1.0854 |
| P2 start: | 16.7939 | end: | 19.3361 | delta: | 2.5422 |
| P3 start: | 26.3391 | end: | 30.424 | delta: | 4.0849 |
| P4 start: | 36.2709 | end: | 41.8328 | delta: | 5.5618 |
| P5 start: | 46.509 | end: | 53.4217 | delta: | 6.9128 |
| P6 start: | 57.0654 | end: | 65.1576 | delta: | 8.0923 |
| P7 start: | 67.9922 | end: | 77.0252 | delta: | 9.033 |
| P8 start: | 79.3394 | end: | 88.9333 | delta: | 9.5939 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -2.1595e-07 | H21: -1.851e-07 | H21f: -8.81429e-09 |
| H5: 1.851e-08 | H23: -1.60957e-08 | H23f: -6.99811e-10 |
| H7: 1.32214e-08 | H25: -1.33272e-07 | H25f: -5.33088e-09 |
| H9: 3.085e-08 | H27: 1.64533e-07 | H27f: 6.09383e-09 |
| H11: -2.52409e-08 | H29: -8.93586e-08 | H29f: -3.08133e-09 |
| H13: -7.11923e-08 | H31: 0.344513 | H31f: 0.0111133 |
| H15: -2.468e-08 | H33: -0.332386 | H33f: -0.0100723 |
| H17: -2.34097e-07 | H35: -0.308434 | H35f: -0.00881239 |
| H19: 1.07163e-07 | H37: -0.00872285 | H37f: -0.000235753 |

| |
|-----------------|
| c2sd = 0.9092 |
| c2ed = 0.9708 |
| c3sd = -0.0342 |
| c3ed = 0.0473 |
| c4sd = -0.6678 |
| c4ed = -0.4785 |
| c5sd = -1.0985 |
| c5ed = -0.7208 |
| varx = 1.4999%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 83/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.83 |
| Actual Amplitude: | 0.83 |
| Actual Power: | 0.6889 |
| Distortion 2H-30H: | 4.85525e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 8.0426 | end: | 9.1648 | delta: | 1.1223 |
| P2 start: | 16.9023 | end: | 19.4813 | delta: | 2.579 |
| P3 start: | 26.3979 | end: | 30.5254 | delta: | 4.1274 |
| P4 start: | 36.2841 | end: | 41.8999 | delta: | 5.6157 |
| P5 start: | 46.4843 | end: | 53.4652 | delta: | 6.9809 |
| P6 start: | 57.0106 | end: | 65.1891 | delta: | 8.1785 |
| P7 start: | 67.9181 | end: | 77.0613 | delta: | 9.1432 |
| P8 start: | 79.2636 | end: | 88.9904 | delta: | 9.7269 |

| | | |
|-------------------|-----------------------|-------------------------|
| H3: -3.04783e-08 | H21: -3.04783e-07 | H21f: -1.45135e-08 |
| H5: 5.4861e-08 | H23: 2.22624e-07 | H23f: 9.67931e-09 |
| H7: 0.0 | H25: -1.90185e-07 | H25f: -7.60739e-09 |
| H9: 0.0 | H27: -2.03189e-07 | H27f: -7.52551e-09 |
| H11: -3.32491e-08 | H29: 3.78352e-08 | H29f: 1.30466e-09 |
| H13: 8.44015e-08 | H31: 0.322697 | H31f: 0.0104096 |
| H15: -3.04783e-08 | H33: -0.330189 | H33f: -0.0100057 |
| H17: -2.15141e-08 | H35: -0.306902 | H35f: -0.00876863 |
| H19: -2.88742e-08 | H37: 0.000604303 | H37f: 1.63325e-05 |

| |
|-----------------|
| c2sd = 1.035 |
| c2ed = 1.0986 |
| c3sd = 0.0528 |
| c3ed = 0.1205 |
| c4sd = -0.6168 |
| c4ed = -0.4492 |
| c5sd = -1.0771 |
| c5ed = -0.7233 |
| varx = 1.4439%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 84/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.84 |
| Actual Amplitude: | 0.84 |
| Actual Power: | 0.7056 |
| Distortion 2H-30H: | 4.10945e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 8.1078 | end: | 9.2572 | delta: | 1.1495 |
| P2 start: | 16.9563 | end: | 19.5684 | delta: | 2.6121 |
| P3 start: | 26.4158 | end: | 30.5853 | delta: | 4.1694 |
| P4 start: | 36.2668 | end: | 41.9371 | delta: | 5.6703 |
| P5 start: | 46.4363 | end: | 53.4868 | delta: | 7.0505 |
| P6 start: | 56.9379 | end: | 65.2049 | delta: | 8.267 |
| P7 start: | 67.8306 | end: | 77.0882 | delta: | 9.2576 |
| P8 start: | 79.1801 | end: | 89.0471 | delta: | 9.867 |

| | | |
|-------------------|-----------------------|--------------------------|
| H3: -1.80693e-07 | H21: 6.88354e-08 | H21f: 3.27788e-09 |
| H5: 0.0 | H23: -6.28497e-08 | H23f: -2.7326e-09 |
| H7: 2.96853e-07 | H25: -2.89109e-08 | H25f: -1.15643e-09 |
| H9: -1.00385e-07 | H27: 1.1377e-07 | H27f: 4.21369e-09 |
| H11: 8.21331e-08 | H29: 1.24616e-08 | H29f: 4.2971e-10 |
| H13: -4.86481e-08 | H31: 0.3063 | H31f: 0.00988064 |
| H15: 7.22771e-08 | H33: -0.321681 | H33f: -0.00974792 |
| H17: 2.65725e-08 | H35: -0.307394 | H35f: -0.00878268 |
| H19: -1.90203e-08 | H37: 0.00406869 | H37f: 0.000109965 |

| |
|----------------|
| c2sd = 1.1184 |
| c2ed = 1.1563 |
| c3sd = 0.1182 |
| c3ed = 0.1329 |
| c4sd = -0.5705 |
| c4ed = -0.4757 |
| c5sd = -1.0477 |
| c5ed = -0.7792 |
| varx = 1.388%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 85/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.85 |
| Actual Amplitude: | 0.85 |
| Actual Power: | 0.7225 |
| Distortion 2H-30H: | 8.06056e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|--------|
| P1 start: | 8.1379 | end: | 9.3079 | delta: | 1.17 |
| P2 start: | 16.9735 | end: | 19.6155 | delta: | 2.642 |
| P3 start: | 26.4045 | end: | 30.6151 | delta: | 4.2105 |
| P4 start: | 36.2268 | end: | 41.9518 | delta: | 5.7249 |
| P5 start: | 46.3706 | end: | 53.4912 | delta: | 7.1206 |
| P6 start: | 56.851 | end: | 65.2078 | delta: | 8.3568 |
| P7 start: | 67.732 | end: | 77.1072 | delta: | 9.3752 |
| P8 start: | 79.0895 | end: | 89.1035 | delta: | 10.014 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -1.19045e-07 | H21: -7.65287e-08 | H21f: -3.64423e-09 |
| H5: 2.85707e-07 | H23: -2.63969e-07 | H23f: -1.14769e-08 |
| H7: -2.55096e-08 | H25: -2.35708e-07 | H25f: -9.42834e-09 |
| H9: -2.67851e-07 | H27: -1.12431e-07 | H27f: -4.16411e-09 |
| H11: 1.86684e-07 | H29: -5.54174e-08 | H29f: -1.91094e-09 |
| H13: -2.88454e-07 | H31: 0.293552 | H31f: 0.00946941 |
| H15: -3.09516e-07 | H33: -0.30897 | H33f: -0.00936272 |
| H17: -3.41378e-07 | H35: -0.309552 | H35f: -0.00884435 |
| H19: -6.57879e-08 | H37: 0.00310656 | H37f: 8.39611e-05 |

| |
|-----------------|
| c2sd = 1.1459 |
| c2ed = 1.1931 |
| c3sd = 0.1235 |
| c3ed = 0.1462 |
| c4sd = -0.5882 |
| c4ed = -0.4832 |
| c5sd = -1.0864 |
| c5ed = -0.8018 |
| varx = 1.3317%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 86/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.86 |
| Actual Amplitude: | 0.86 |
| Actual Power: | 0.739601 |
| Distortion 2H-30H: | 7.03869e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|---------|
| P1 start: | 8.3286 | end: | 9.556 | delta: | 1.2274 |
| P2 start: | 17.1821 | end: | 19.8761 | delta: | 2.694 |
| P3 start: | 26.5559 | end: | 30.8125 | delta: | 4.2566 |
| P4 start: | 36.3139 | end: | 42.0883 | delta: | 5.7744 |
| P5 start: | 46.4004 | end: | 53.5796 | delta: | 7.1791 |
| P6 start: | 56.8323 | end: | 65.2627 | delta: | 8.4304 |
| P7 start: | 67.6766 | end: | 77.1509 | delta: | 9.4743 |
| P8 start: | 79.0187 | end: | 89.1618 | delta: | 10.1431 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -3.52981e-07 | H21: 4.20216e-08 | H21f: 2.00103e-09 |
| H5: 7.05962e-08 | H23: -2.30205e-07 | H23f: -1.00089e-08 |
| H7: -7.56388e-08 | H25: 0.0 | H25f: 0.0 |
| H9: -1.27465e-07 | H27: 1.69954e-07 | H27f: 6.29459e-09 |
| H11: -1.84513e-07 | H29: -3.83411e-07 | H29f: -1.32211e-08 |
| H13: 5.43048e-08 | H31: 0.261891 | H31f: 0.00844811 |
| H15: -2.29438e-07 | H33: -0.317328 | H33f: -0.00961601 |
| H17: 1.03818e-08 | H35: -0.300008 | H35f: -0.00857165 |
| H19: -1.53268e-07 | H37: 0.0267132 | H37f: 0.000721977 |

| |
|----------------|
| c2sd = 1.3354 |
| c2ed = 1.4728 |
| c3sd = 0.244 |
| c3ed = 0.3744 |
| c4sd = -0.5424 |
| c4ed = -0.3053 |
| c5sd = -1.1068 |
| c5ed = -0.6632 |
| varx = 1.28%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 87/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.87 |
| Actual Amplitude: | 0.87 |
| Actual Power: | 0.756899 |
| Distortion 2H-30H: | 2.90181e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|---------|
| P1 start: | 8.3491 | end: | 9.5964 | delta: | 1.2474 |
| P2 start: | 17.1929 | end: | 19.9172 | delta: | 2.7243 |
| P3 start: | 26.5413 | end: | 30.8385 | delta: | 4.2972 |
| P4 start: | 36.2712 | end: | 42.0986 | delta: | 5.8274 |
| P5 start: | 46.3309 | end: | 53.5775 | delta: | 7.2466 |
| P6 start: | 56.7395 | end: | 65.2567 | delta: | 8.5171 |
| P7 start: | 67.5696 | end: | 77.1616 | delta: | 9.592 |
| P8 start: | 78.9201 | end: | 89.2182 | delta: | 10.2981 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -8.72311e-08 | H21: -8.30772e-08 | H21f: -3.95606e-09 |
| H5: 6.97849e-08 | H23: 7.58531e-09 | H23f: 3.29796e-10 |
| H7: 2.49232e-08 | H25: 8.37418e-08 | H25f: 3.34967e-09 |
| H9: -2.9077e-08 | H27: -1.09847e-07 | H27f: -4.06839e-09 |
| H11: 6.34408e-08 | H29: 1.38367e-07 | H29f: 4.77126e-09 |
| H13: -2.68403e-08 | H31: 0.249997 | H31f: 0.00806441 |
| H15: -9.88619e-08 | H33: -0.30376 | H33f: -0.00920484 |
| H17: 7.18373e-08 | H35: -0.302271 | H35f: -0.00863631 |
| H19: -7.34577e-08 | H37: 0.0249663 | H37f: 0.000674764 |

| |
|-----------------|
| c2sd = 1.4174 |
| c2ed = 1.4428 |
| c3sd = 0.3443 |
| c3ed = 0.2855 |
| c4sd = -0.431 |
| c4ed = -0.4492 |
| c5sd = -0.9888 |
| c5ed = -0.8529 |
| varx = 1.2238%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 88/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.88 |
| Actual Amplitude: | 0.88 |
| Actual Power: | 0.7744 |
| Distortion 2H-30H: | 0.000140868% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|---------|
| P1 start: | 8.494 | end: | 9.7932 | delta: | 1.2992 |
| P2 start: | 17.3668 | end: | 20.145 | delta: | 2.7782 |
| P3 start: | 26.6754 | end: | 31.0208 | delta: | 4.3454 |
| P4 start: | 36.3493 | end: | 42.2261 | delta: | 5.8768 |
| P5 start: | 46.3543 | end: | 53.6572 | delta: | 7.3029 |
| P6 start: | 56.7138 | end: | 65.3012 | delta: | 8.5875 |
| P7 start: | 67.5049 | end: | 77.1956 | delta: | 9.6907 |
| P8 start: | 78.8402 | end: | 89.2763 | delta: | 10.4361 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -4.59945e-07 | H21: -2.38186e-07 | H21f: -1.13422e-08 |
| H5: 5.17439e-08 | H23: -4.64945e-07 | H23f: -2.0215e-08 |
| H7: -6.15998e-08 | H25: -5.9333e-07 | H25f: -2.37332e-08 |
| H9: -3.83288e-08 | H27: -1.78868e-07 | H27f: -6.62473e-09 |
| H11: -1.568e-07 | H29: -1.90322e-07 | H29f: -6.56284e-09 |
| H13: -5.30706e-07 | H31: 0.221516 | H31f: 0.00714567 |
| H15: -6.89918e-07 | H33: -0.307837 | H33f: -0.00932841 |
| H17: -3.70324e-07 | H35: -0.291859 | H35f: -0.00833883 |
| H19: -3.90348e-07 | H37: 0.0463805 | H37f: 0.00125353 |

| |
|-----------------|
| c2sd = 1.5579 |
| c2ed = 1.7039 |
| c3sd = 0.4245 |
| c3ed = 0.5216 |
| c4sd = -0.4251 |
| c4ed = -0.2494 |
| c5sd = -1.0533 |
| c5ed = -0.6852 |
| varx = 1.1751%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 89/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.89 |
| Actual Amplitude: | 0.89 |
| Actual Power: | 0.7921 |
| Distortion 2H-30H: | 4.55648e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|----------------|
| P1 start: 8.4904 | end: 9.8045 | delta: 1.3141 |
| P2 start: 17.3489 | end: 20.154 | delta: 2.8051 |
| P3 start: 26.6357 | end: 31.0197 | delta: 4.384 |
| P4 start: 36.2853 | end: 42.2134 | delta: 5.9281 |
| P5 start: 46.2659 | end: 53.6343 | delta: 7.3684 |
| P6 start: 56.603 | end: 65.2751 | delta: 8.6722 |
| P7 start: 67.3797 | end: 77.1902 | delta: 9.8105 |
| P8 start: 78.7264 | end: 89.3326 | delta: 10.6062 |

| | | |
|-------------------|-------------------|-------------------|
| H3: -1.13694e-07 | H21: 1.38057e-07 | H21f: 6.57417e-09 |
| H5: -3.41083e-08 | H23: 9.63931e-08 | H23f: 4.191e-09 |
| H7: -1.21815e-08 | H25: -1.02325e-07 | H25f: -4.093e-09 |
| H9: -1.51593e-07 | H27: 7.57963e-08 | H27f: 2.80727e-09 |
| H11: 1.2403e-07 | H29: -2.23468e-07 | H29f: -7.7058e-09 |
| H13: 2.62372e-08 | H31: 0.212725 | H31f: 0.0068621 |
| H15: -7.95861e-08 | H33: -0.291036 | H33f: -0.00881927 |
| H17: -1.20382e-07 | H35: -0.296292 | H35f: -0.00846549 |
| H19: -1.97469e-07 | H37: 0.0402419 | H37f: 0.00108762 |

| |
|-----------------|
| c2sd = 1.5706 |
| c2ed = 1.6823 |
| c3sd = 0.4341 |
| c3ed = 0.4712 |
| c4sd = -0.4229 |
| c4ed = -0.3283 |
| c5sd = -1.0612 |
| c5ed = -0.7886 |
| varx = 1.1174%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 90/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.9 |
| Actual Amplitude: | 0.9 |
| Actual Power: | 0.81 |
| Distortion 2H-30H: | 9.58963e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|----------------|
| P1 start: 8.6227 | end: 9.9893 | delta: 1.3666 |
| P2 start: 17.5213 | end: 20.3854 | delta: 2.8641 |
| P3 start: 26.7794 | end: 31.215 | delta: 4.4356 |
| P4 start: 36.3762 | end: 42.353 | delta: 5.9769 |
| P5 start: 46.2995 | end: 53.7197 | delta: 7.4202 |
| P6 start: 56.5816 | end: 65.3168 | delta: 8.7352 |
| P7 start: 67.3117 | end: 77.2157 | delta: 9.9041 |
| P8 start: 78.6379 | end: 89.3909 | delta: 10.7529 |

| | | |
|-------------------|-----------------------|--------------------------|
| H3: -2.24862e-07 | H21: -1.92739e-07 | H21f: -9.17805e-09 |
| H5: 2.69835e-07 | H23: -2.78634e-07 | H23f: -1.21145e-08 |
| H7: -1.32508e-07 | H25: -5.39669e-07 | H25f: -2.15868e-08 |
| H9: -9.36926e-08 | H27: -3.7477e-08 | H27f: -1.38804e-09 |
| H11: 1.45649e-07 | H29: -7.56002e-08 | H29f: -2.6069e-09 |
| H13: -3.63239e-07 | H31: 0.184172 | H31f: 0.00594103 |
| H15: -3.54158e-07 | H33: -0.294677 | H33f: -0.00892961 |
| H17: -1.09124e-07 | H35: -0.283541 | H35f: -0.00810117 |
| H19: -2.57408e-07 | H37: 0.0632067 | H37f: 0.00170829 |

| |
|-----------------|
| c2sd = 1.7603 |
| c2ed = 1.8963 |
| c3sd = 0.6059 |
| c3ed = 0.6386 |
| c4sd = -0.2945 |
| c4ed = -0.2263 |
| c5sd = -0.9819 |
| c5ed = -0.749 |
| varx = 1.0725%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 91/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.91 |
| Actual Amplitude: | 0.91 |
| Actual Power: | 0.8281 |
| Distortion 2H-30H: | 9.90624e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|---------|
| P1 start: | 8.7156 | end: | 10.1261 | delta: | 1.4105 |
| P2 start: | 17.6477 | end: | 20.5667 | delta: | 2.9191 |
| P3 start: | 26.8867 | end: | 31.3739 | delta: | 4.4872 |
| P4 start: | 36.4403 | end: | 42.4666 | delta: | 6.0264 |
| P5 start: | 46.3128 | end: | 53.785 | delta: | 7.4722 |
| P6 start: | 56.5435 | end: | 65.341 | delta: | 8.7975 |
| P7 start: | 67.2284 | end: | 77.2273 | delta: | 9.9989 |
| P8 start: | 78.5367 | end: | 89.4488 | delta: | 10.9121 |

| | | |
|-------------------|-----------------------|--------------------------|
| H3: -1.94592e-07 | H21: -3.25644e-07 | H21f: -1.55069e-08 |
| H5: -3.33587e-08 | H23: -7.97708e-08 | H23f: -3.46829e-09 |
| H7: -4.40811e-07 | H25: -4.80365e-07 | H25f: -1.92146e-08 |
| H9: 1.85326e-08 | H27: 2.16214e-07 | H27f: 8.00791e-09 |
| H11: -1.74375e-07 | H29: -2.76072e-07 | H29f: -9.51972e-09 |
| H13: -2.3736e-07 | H31: 0.160052 | H31f: 0.00516298 |
| H15: -1.83473e-07 | H33: -0.293189 | H33f: -0.00888453 |
| H17: -3.13964e-07 | H35: -0.272956 | H35f: -0.00779873 |
| H19: -2.5019e-07 | H37: 0.0803172 | H37f: 0.00217073 |

| |
|-----------------|
| c2sd = 1.9102 |
| c2ed = 2.0542 |
| c3sd = 0.7511 |
| c3ed = 0.7595 |
| c4sd = -0.1795 |
| c4ed = -0.1636 |
| c5sd = -0.9067 |
| c5ed = -0.7455 |
| varx = 1.0276%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 92/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.92 |
| Actual Amplitude: | 0.92 |
| Actual Power: | 0.8464 |
| Distortion 2H-30H: | 0.000273611% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|----------------|
| P1 start: 8.7849 | end: 10.2338 | delta: 1.4489 |
| P2 start: 17.7445 | end: 20.7155 | delta: 2.971 |
| P3 start: 26.9695 | end: 31.5078 | delta: 4.5383 |
| P4 start: 36.4858 | end: 42.5616 | delta: 6.0758 |
| P5 start: 46.3113 | end: 53.8345 | delta: 7.5232 |
| P6 start: 56.492 | end: 65.3496 | delta: 8.8575 |
| P7 start: 67.131 | end: 77.2241 | delta: 10.0932 |
| P8 start: 78.4215 | end: 89.5066 | delta: 11.0851 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -9.34889e-07 | H21: -1.10773e-06 | H21f: -5.27488e-08 |
| H5: 1.31984e-07 | H23: -3.65826e-07 | H23f: -1.59055e-08 |
| H7: -6.59922e-07 | H25: -8.31501e-07 | H25f: -3.32601e-08 |
| H9: 5.49935e-08 | H27: -2.16919e-07 | H27f: -8.03403e-09 |
| H11: -8.62398e-07 | H29: -6.65611e-07 | H29f: -2.29521e-08 |
| H13: -3.1727e-07 | H31: 0.138938 | H31f: 0.00448188 |
| H15: -1.00638e-06 | H33: -0.288446 | H33f: -0.00874079 |
| H17: -1.31984e-06 | H35: -0.264282 | H35f: -0.00755092 |
| H19: -1.21565e-07 | H37: 0.0932698 | H37f: 0.00252081 |

| |
|-----------------|
| c2sd = 2.0537 |
| c2ed = 2.1562 |
| c3sd = 0.9093 |
| c3ed = 0.818 |
| c4sd = -0.0329 |
| c4ed = -0.1698 |
| c5sd = -0.7851 |
| c5ed = -0.8191 |
| varx = 0.9823%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 93/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.93 |
| Actual Amplitude: | 0.93 |
| Actual Power: | 0.8649 |
| Distortion 2H-30H: | 0.000114355% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|----------------|
| P1 start: 8.8683 | end: 10.3617 | delta: 1.4934 |
| P2 start: 17.8697 | end: 20.9019 | delta: 3.0322 |
| P3 start: 27.0894 | end: 31.686 | delta: 4.5967 |
| P4 start: 36.5697 | end: 42.6966 | delta: 6.1269 |
| P5 start: 46.3434 | end: 53.9131 | delta: 7.5698 |
| P6 start: 56.4649 | end: 65.372 | delta: 8.9071 |
| P7 start: 67.0449 | end: 77.2196 | delta: 10.1747 |
| P8 start: 78.3039 | end: 89.5648 | delta: 11.2609 |

| | | |
|-------------------|-----------------------|--------------------------|
| H3: -2.72011e-07 | H21: -4.97391e-07 | H21f: -2.36853e-08 |
| H5: 1.14245e-07 | H23: -1.34823e-07 | H23f: -5.86186e-09 |
| H7: -2.68125e-07 | H25: -6.20184e-07 | H25f: -2.48074e-08 |
| H9: -6.34692e-08 | H27: -2.23653e-07 | H27f: -8.28345e-09 |
| H11: -2.4481e-07 | H29: -2.27926e-07 | H29f: -7.85953e-09 |
| H13: -3.13859e-07 | H31: 0.11426 | H31f: 0.00368581 |
| H15: -3.97136e-07 | H33: -0.286559 | H33f: -0.00868362 |
| H17: -2.68811e-07 | H35: -0.250331 | H35f: -0.00715233 |
| H19: -6.44236e-08 | H37: 0.111991 | H37f: 0.00302678 |

| |
|-----------------|
| c2sd = 2.1944 |
| c2ed = 2.3271 |
| c3sd = 1.0541 |
| c3ed = 0.9713 |
| c4sd = 0.0846 |
| c4ed = -0.0683 |
| c5sd = -0.7123 |
| c5ed = -0.7813 |
| varx = 0.9433%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 94/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.94 |
| Actual Amplitude: | 0.94 |
| Actual Power: | 0.8836 |
| Distortion 2H-30H: | 6.07716e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|----------------|
| P1 start: 8.9423 | end: 10.4787 | delta: 1.5364 |
| P2 start: 17.9858 | end: 21.0806 | delta: 3.0948 |
| P3 start: 27.2069 | end: 31.8652 | delta: 4.6583 |
| P4 start: 36.657 | end: 42.8368 | delta: 6.1798 |
| P5 start: 46.3807 | end: 53.9947 | delta: 7.614 |
| P6 start: 56.4401 | end: 65.3894 | delta: 8.9493 |
| P7 start: 66.9538 | end: 77.2004 | delta: 10.2467 |
| P8 start: 78.1718 | end: 89.6231 | delta: 11.4512 |

H3: -5.38234e-08
H5: -1.6147e-08
H7: -2.30672e-08
H9: -1.97352e-07
H11: -1.32112e-07
H13: -1.73891e-07
H15: -1.77617e-07
H17: -9.97316e-08
H19: -2.97445e-08

H21: -2.92184e-07
H23: 3.51022e-08
H25: -2.13141e-07
H27: 1.49509e-07
H29: -2.86749e-07
H31: 0.0901501
H33: -0.283554
H35: -0.235512
H37: 0.129958

H21f: -1.39135e-08
H23f: 1.52618e-09
H25f: -8.52563e-09
H27f: 5.53739e-09
H29f: -9.88789e-09
H31f: 0.00290807
H33f: -0.00859254
H35f: -0.0067289
H37f: 0.00351237

c2sd = 2.3347
c2ed = 2.4817
c3sd = 1.2107
c3ed = 1.1114
c4sd = 0.2244
c4ed = 0.0195
c5sd = -0.6112
c5ed = -0.7635
varx = 0.9071%.

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 95/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.95 |
| Actual Amplitude: | 0.95 |
| Actual Power: | 0.9025 |
| Distortion 2H-30H: | 0.000111069% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total weighting events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|---------|
| P1 start: | 8.9641 | end: | 10.5266 | delta: | 1.5625 |
| P2 start: | 18.0161 | end: | 21.1528 | delta: | 3.1368 |
| P3 start: | 27.227 | end: | 31.9324 | delta: | 4.7054 |
| P4 start: | 36.65 | end: | 42.8762 | delta: | 6.2262 |
| P5 start: | 46.3335 | end: | 53.9914 | delta: | 7.6579 |
| P6 start: | 56.3426 | end: | 65.3367 | delta: | 8.9941 |
| P7 start: | 66.7999 | end: | 77.125 | delta: | 10.3251 |
| P8 start: | 77.9873 | end: | 89.6805 | delta: | 11.6932 |

| | | |
|-------------------|-------------------|--------------------|
| H3: -1.06514e-07 | H21: -5.17352e-07 | H21f: -2.46358e-08 |
| H5: 2.55633e-07 | H23: 1.25038e-07 | H23f: 5.43643e-09 |
| H7: -3.99426e-07 | H25: -5.36829e-07 | H25f: -2.14732e-08 |
| H9: 5.32568e-08 | H27: 1.65688e-07 | H27f: 6.13659e-09 |
| H11: -3.99426e-07 | H29: -3.33314e-07 | H29f: -1.14936e-08 |
| H13: -1.3519e-07 | H31: 0.0763996 | H31f: 0.0024645 |
| H15: -3.19541e-08 | H33: -0.27152 | H33f: -0.00822787 |
| H17: -2.44355e-07 | H35: -0.233732 | H35f: -0.00667806 |
| H19: 2.14429e-07 | H37: 0.131882 | H37f: 0.00356438 |

| |
|-----------------|
| c2sd = 2.4128 |
| c2ed = 2.5061 |
| c3sd = 1.308 |
| c3ed = 1.1014 |
| c4sd = 0.3209 |
| c4ed = -0.0446 |
| c5sd = -0.5324 |
| c5ed = -0.8927 |
| varx = 0.8589%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 96/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.96 |
| Actual Amplitude: | 0.96 |
| Actual Power: | 0.9216 |
| Distortion 2H-30H: | 0.000129788% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|---------|
| P1 start: | 9.0808 | end: | 10.7044 | delta: | 1.6236 |
| P2 start: | 18.2182 | end: | 21.4494 | delta: | 3.2313 |
| P3 start: | 27.4663 | end: | 32.2659 | delta: | 4.7995 |
| P4 start: | 36.8777 | end: | 43.1747 | delta: | 6.2971 |
| P5 start: | 46.5079 | end: | 54.2035 | delta: | 7.6956 |
| P6 start: | 56.4299 | end: | 65.4295 | delta: | 8.9995 |
| P7 start: | 66.7734 | end: | 77.1061 | delta: | 10.3327 |
| P8 start: | 77.8512 | end: | 89.7403 | delta: | 11.8891 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 7.90531e-08 | H21: 3.61386e-07 | H21f: 1.72088e-08 |
| H5: -4.58508e-07 | H23: -5.84306e-07 | H23f: -2.54046e-08 |
| H7: 3.16212e-07 | H25: 4.99616e-07 | H25f: 1.99846e-08 |
| H9: -3.68915e-07 | H27: -1.28827e-07 | H27f: -4.77138e-09 |
| H11: 2.44346e-07 | H29: -1.88092e-07 | H29f: -6.48593e-09 |
| H13: 1.33782e-07 | H31: 0.0400126 | H31f: 0.00129073 |
| H15: -3.16212e-07 | H33: -0.276825 | H33f: -0.00838864 |
| H17: 3.11562e-07 | H35: -0.198452 | H35f: -0.00567005 |
| H19: -4.28551e-07 | H37: 0.168038 | H37f: 0.00454157 |

| |
|-----------------|
| c2sd = 2.6225 |
| c2ed = 2.7951 |
| c3sd = 1.5595 |
| c3ed = 1.42226 |
| c4sd = 0.565 |
| c4ed = 0.2374 |
| c5sd = -0.338 |
| c5ed = -0.7006 |
| varx = 0.8487%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.97 |
| Actual Amplitude: | 0.97 |
| Actual Power: | 0.940899 |
| Distortion 2H-30H: | 0.000101821% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|----------------|
| P1 start: 9.1436 | end: 10.8105 | delta: 1.6669 |
| P2 start: 18.33 | end: 21.6339 | delta: 3.3039 |
| P3 start: 27.603 | end: 32.4831 | delta: 4.8801 |
| P4 start: 37.0087 | end: 43.3736 | delta: 6.3649 |
| P5 start: 46.6002 | end: 54.3352 | delta: 7.735 |
| P6 start: 56.4488 | end: 65.4512 | delta: 9.0024 |
| P7 start: 66.683 | end: 77.008 | delta: 10.325 |
| P8 start: 77.64 | end: 89.7993 | delta: 12.1593 |

| | | |
|-------------------|-----------------------|--------------------------|
| H3: -3.39032e-07 | H21: -3.87465e-07 | H21f: -1.84507e-08 |
| H5: 2.34714e-07 | H23: 1.15656e-07 | H23f: 5.02854e-09 |
| H7: -3.91191e-07 | H25: -4.22486e-07 | H25f: -1.68994e-08 |
| H9: -8.69313e-09 | H27: 7.24427e-08 | H27f: 2.68306e-09 |
| H11: -3.62741e-07 | H29: -3.45327e-07 | H29f: -1.19078e-08 |
| H13: -2.64806e-07 | H31: 0.0142949 | H31f: 0.000461126 |
| H15: -2.08635e-08 | H33: -0.272432 | H33f: -0.00825553 |
| H17: -2.11703e-07 | H35: -0.176446 | H35f: -0.00504132 |
| H19: 1.23534e-08 | H37: 0.186826 | H37f: 0.00504935 |

| |
|-----------------|
| c2sd = 2.7713 |
| c2ed = 2.9426 |
| c3sd = 1.7558 |
| c3ed = 1.5802 |
| c4sd = 0.776 |
| c4ed = 0.3563 |
| c5sd = -0.1484 |
| c5ed = -0.6662 |
| varx = 0.8268%. |

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 98/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

Desired Amplitude: 0.98
Actual Amplitude: 0.98
Actual Power: 0.9604
Distortion 2H-30H: 9.82531e-05%
First strong harmonics: 31 and 33
Pulses per sine cycle: 32
Total switching events: 64
Delta Friendly: No

| | | |
|-------------------|--------------|----------------|
| P1 start: 9.179 | end: 10.8796 | delta: 1.7007 |
| P2 start: 18.3934 | end: 21.7564 | delta: 3.363 |
| P3 start: 27.6799 | end: 32.6293 | delta: 4.9495 |
| P4 start: 37.0778 | end: 43.5038 | delta: 6.4259 |
| P5 start: 46.6335 | end: 54.4019 | delta: 7.7684 |
| P6 start: 56.4102 | end: 65.4002 | delta: 8.9901 |
| P7 start: 66.5252 | end: 76.7975 | delta: 10.2723 |
| P8 start: 77.3202 | end: 89.858 | delta: 12.5378 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 1.80693e-07 | H21: 3.09759e-07 | H21f: 1.47504e-08 |
| H5: -2.47807e-07 | H23: -3.33328e-07 | H23f: -1.44925e-08 |
| H7: 2.54445e-07 | H25: -7.43422e-08 | H25f: -2.97369e-09 |
| H9: -5.50683e-07 | H27: -1.06121e-07 | H27f: -3.93041e-09 |
| H11: 1.76e-07 | H29: -2.43001e-07 | H29f: -8.37934e-09 |
| H13: -2.44233e-07 | H31: -0.00499468 | H31f: -0.000161119 |
| H15: 9.80904e-08 | H33: -0.262867 | H33f: -0.00796566 |
| H17: -2.18654e-07 | H35: -0.164277 | H35f: -0.00469362 |
| H19: -2.69001e-07 | H37: 0.195914 | H37f: 0.00529498 |

c2sd = 2.8996
c2ed = 3.0001
c3sd = 1.9376
c3ed = 1.6216
c4sd = 0.9859
c4ed = 0.3457
c5sd = 0.0562
c5ed = -0.7707
varx = 0.7967%.

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE

ANXC32 - 99/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 0.99 |
| Actual Amplitude: | 0.99 |
| Actual Power: | 0.9801 |
| Distortion 2H-30H: | 9.50285e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | | | | |
|-----------|---------|------|---------|--------|---------|
| P1 start: | 9.1471 | end: | 10.8553 | delta: | 1.7081 |
| P2 start: | 18.3279 | end: | 21.7043 | delta: | 3.3764 |
| P3 start: | 27.5768 | end: | 32.5424 | delta: | 4.9656 |
| P4 start: | 36.9301 | end: | 43.3689 | delta: | 6.4388 |
| P5 start: | 46.4289 | end: | 54.1961 | delta: | 7.7672 |
| P6 start: | 56.1266 | end: | 65.0789 | delta: | 8.9523 |
| P7 start: | 66.1185 | end: | 76.2746 | delta: | 10.1561 |
| P8 start: | 76.7007 | end: | 89.9159 | delta: | 13.2152 |

| | | |
|-------------------|-------------------|--------------------|
| H3: 1.27763e-07 | H21: 1.53315e-07 | H21f: 7.30072e-09 |
| H5: 9.19891e-08 | H23: -2.59969e-07 | H23f: -1.1303e-08 |
| H7: 2.84728e-07 | H25: -5.51935e-08 | H25f: -2.20774e-09 |
| H9: -5.02533e-07 | H27: 2.7256e-07 | H27f: 1.00948e-08 |
| H11: 1.88159e-07 | H29: -1.66532e-07 | H29f: -5.74248e-09 |
| H13: -1.71005e-07 | H31: -0.00587322 | H31f: -0.000189459 |
| H15: -1.32873e-07 | H33: -0.238996 | H33f: -0.00724231 |
| H17: 2.88593e-07 | H35: -0.185731 | H35f: -0.00530659 |
| H19: -4.27669e-07 | H37: 0.176934 | H37f: 0.004782 |

| |
|-----------------|
| c2sd = 2.9974 |
| c2ed = 2.7848 |
| c3sd = 2.098 |
| c3ed = 1.2712 |
| c4sd = 1.1917 |
| c4ed = -0.1427 |
| c5sd = 0.2816 |
| c5ed = -1.4066 |
| varx = 0.7245%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html

STEP-LOCKED MAGIC SINEWAVE ANXC32 - 100/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is not delta friendly. Harmonics 2 through 30 are virtually zero. The first major harmonics are 31st and 33rd. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree or better timing accuracy is required.

| | |
|-------------------------|--------------|
| Desired Amplitude: | 1.0 |
| Actual Amplitude: | 0.999999 |
| Actual Power: | 0.999998 |
| Distortion 2H-30H: | 6.59869e-05% |
| First strong harmonics: | 31 and 33 |
| Pulses per sine cycle: | 32 |
| Total switching events: | 64 |
| Delta Friendly: | No |

| | | |
|-------------------|--------------|----------------|
| P1 start: 9.012 | end: 10.6863 | delta: 1.6743 |
| P2 start: 18.0636 | end: 21.3811 | delta: 3.3175 |
| P3 start: 27.1938 | end: 32.0891 | delta: 4.8953 |
| P4 start: 36.4405 | end: 42.8097 | delta: 6.3692 |
| P5 start: 45.841 | end: 53.539 | delta: 7.698 |
| P6 start: 55.4339 | end: 64.2826 | delta: 8.8486 |
| P7 start: 65.27 | end: 75.126 | delta: 9.856 |
| P8 start: 75.478 | end: 89.9748 | delta: 14.4968 |

| | | |
|-------------------|-----------------------|--------------------------|
| H3: 2.02376e-07 | H21: 1.26485e-07 | H21f: 6.0231e-09 |
| H5: -1.36604e-07 | H23: -2.47471e-07 | H23f: -1.07596e-08 |
| H7: 1.51782e-07 | H25: -1.00176e-07 | H25f: -4.00705e-09 |
| H9: -2.02376e-07 | H27: -1.7989e-07 | H27f: -6.66259e-09 |
| H11: 1.51782e-07 | H29: -1.30847e-08 | H29f: -4.51195e-10 |
| H13: -1.63458e-07 | H31: 0.0130769 | H31f: 0.000421834 |
| H15: -1.77079e-07 | H33: -0.184024 | H33f: -0.00557647 |
| H17: 9.37478e-08 | H35: -0.243439 | H35f: -0.0069554 |
| H19: -3.19541e-07 | H37: 0.0997967 | H37f: 0.00269721 |

| |
|-----------------|
| c2sd = 3.0245 |
| c2ed = 2.1702 |
| c3sd = 2.1853 |
| c3ed = 0.3476 |
| c4sd = 1.3332 |
| c4ed = -1.333 |
| c5sd = 0.4613 |
| c5ed = -2.8313 |
| varx = 0.5592%. |

Copyright c 1994, 2000 by Don Lancaster & Synergetics Box 809 Thatcher AZ, 85552. (520) 428-4073. All commercial and media rights ~fully~ reserved. Sourcecode and development assistance available via don@tinaja.com or www.tinaja.com/magsn01.html