

Cd / Sx MPHASE procedure: Sine-Encoder

From the Terminal Mode:

- 1) Type: '**DIS**', then Enter; this....Disables the drive.
- 2) Type: '**Izero 50**', then Enter; this sets percent of phase current....for high static friction systems you may go to 'Izero 80' (80%). [Contact factory before going higher than 80%.]
- 3) Type: '**Zero 1**', then Enter; this enables the zeroing mode and puts the drive in OPMODE = 2.
- 4) Type: '**EN**', then Enter; this enables the drive.
- 5) Query Mphase value by Typing: '**MPHASE**', then Enter; Drive will respond with a number (write it down).
- 6) Type: '**HSAVE**', then Enter; this save the variable to the encoder.
- 7) Type: '**DIS**', then Enter; this....Disables the drive.
- 8) Type: '**Zero 0**', then Enter; this disables the zeroing mode.
- 9) Type: '**SAVE**', then Enter; this saves the variables to the drive.
- 10) Cycle power; for 'CxXX260 models cycle logic power'.

Test Mphase setting:

- 11) Query Mphase value by Typing: '**MPHASE**', then Enter; Does it match what you wrote down at step: '5' above.
- 12) Type: '**DIS**', then Enter; this....Disables the drive.
- 13) Type: '**OPMODE 2**', then Enter; sets drive in 'Serial Torque mode'.

Read all of number: 12 before acting on it!

- 14) Type: '**EN**', then Enter; this enables the drive.
- 15) Type: '**T xx**', where **xx= very small number**; then Enter: Objective is to gradually increase the Torque such that a constant speed can be achieve without a runaway condition.
- 16) Query Velocity by Typing: '**V**', then Enter (write it down).

Now check the velocity in the opposite direction with the same Torque command.

- 17) Using the same value for the xx as above with the opposite sign.
Type: '**T -xx**', where **xx= same value with the opposite sign**; then Enter.
- 18) Query Velocity by Typing: '**V**', then Enter (write it down).
- 19) Type: '**DIS**', then Enter; this....Disables the drive.
- 20) Change the OPMODE back to the desired setting.

Absolute values of the Velocities should be very close!