Summary

Correct behavior of axis motion when using Master/Slave mode requires that certain conventions are observed in code implementation of macros in the MCCL command language and function calls using the Motion Control API.

More Information

The primary commands for Master/Slave motion mode are

\[
\text{aSSn} \quad \text{axis a master/slave ratio = n} \\
\text{aSMn} \quad \text{slave axis a motion to axis n}
\]

Following is a typical macro to set up the mode and execute a move after configuring the motion parameters of the axes

1MN, 5MN, 5SS1, 5SM1, 1MR1000, 1WS

To terminate Master/Slave mode for these axes, the following command sequence is recommended:

5SS1, 5SM0, 5MN

These two command sequences illustrate the key aspects of entering and exiting this motion mode:

1. A Motor On (MN) command to an axis will reset it out of Master/Slave mode
2. The Slave Ratio command (SS) must always be followed by a SlaveMode (SM) command in order for the ratio to take affect for the subsequent move.
3. Predictable behavior is insured if the Master/Slave mode is terminated by resetting the slave axis to a ratio of 1 and passing a parameter of 0 to the mode command.