Logic Banks

Version: 1.0.0

Cool Muscle logic banks are analogous to ladder logic. Logic banks run concurrently with program banks, allowing complete control in monitoring the changing states of the motor. Logic banks are typically used to monitor states such as position, speed, torque, and input status. Math and branch operations allow for further manipulation and monitoring of states, values, and motion parameters.

Usage – Why and When

In most standard motion applications, a program bank will be enough to accomplish the required functions. Logic banks are typically used when multiple states or inputs need to be monitored, such as performing a specific action when a certain torque or position is reached. These can be run concurrent with a program bank, so while a program bank can be executing motion commands and some other simple functions, the logic bank can be continuously scanning inputs or motor states and executing a command based on that information. A good example of this would be if you have a program bank executing a motion, and a logic bank running which monitors the motor torque and stops or reverses the motion when the torque reaches a certain limit.

Another unique feature of logic banks is that they can be programmed to run as soon as the motor starts up (see *K85*). In this way you can begin scanning the motor state as soon as the motor powers up, or this can even be used to begin execution of a program bank at a certain time without input from a user.

Contrary to program banks, a logic bank will continue to run over and over unless there is a jump to another logic bank, or the stop command is sent.

- Logic Bank Commands