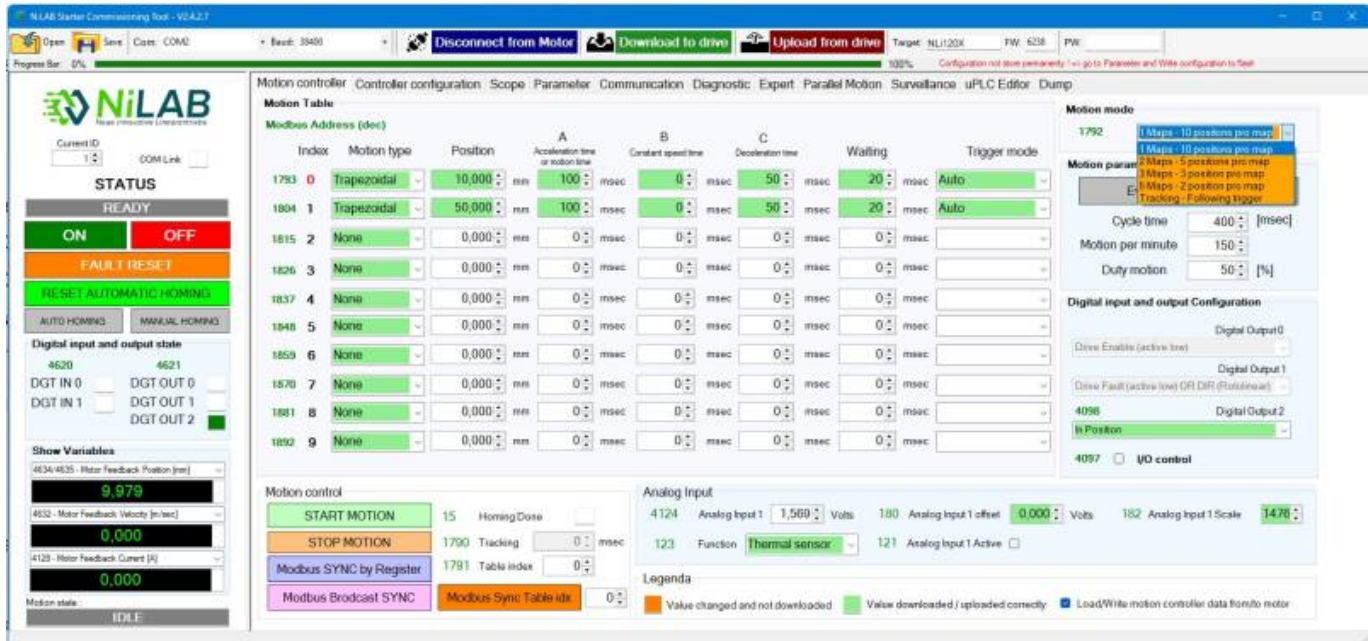


Motion modes

5 different motion modes are configurable in the motion controller window. The last option TRacking - Following trigger is documented

here: https://www.nilab.at/dokuwiki/doku.php?id=nilab_starter:tracking_time



Digital Input 1 is used to select the table index when the motor is disabled (Digital Input 0 low). Inside the table the sequence is a closed loop between the first and the last row of the table. In the example below, we have two table mode. The first table is executed from 0 to 4 row in a closed loop and the second table is executed from 5 to 9 row. In order to switch between the two table, the input 0 must be low and the input 1 must detect a rising edge.

Table 1

Table 2

MODBUS ADDRESS	Index	Motion type	Position [mm]	Acceleration time [msec]	Constant speed time [msec]	Deceleration time [msec]	Waiting time [msec]	Trigger mode
1793	0	Triangular	5,000	100	0	100	300	Auto
1804	1	Triangular	50,000	100	0	100	300	Auto
1815	2	None	0,000	0	0	0	0	Auto
1826	3	None	0,000	0	0	0	0	Auto
1837	4	None	0,000	0	0	0	0	Auto
1848	5	None	0,000	0	0	0	0	Auto
1859	6	None	0,000	0	0	0	0	Auto
1870	7	None	0,000	0	0	0	0	Auto
1881	8	None	0,000	0	0	0	0	Auto
1892	9	None	0,000	0	0	0	0	Auto

We have 4 combinations possible:

- Default with 1 Map and 10 positions/map
- 2 Maps with 5 positions/map
- 3 Maps with 3 positions/map

Motion Table								
MODBUS ADDRESS	Index	Motion type	Position [mm]	Acceleration time [msec]	Force [N] or Constant speed time [msec]	Deceleration time [msec]	Waiting time [msec]	Trigger mode
1793	0	Triangular	5,000	100	0	100	300	Auto
1804	1	Triangular	50,000	100	0	100	300	Auto
1815	2	None	0,000	0	0	0	0	Auto
1826	3	None	0,000	0	0	0	0	Auto
1837	4	None	0,000	0	0	0	0	Auto
1848	5	None	0,000	0	0	0	0	Auto
1859	6	None	0,000	0	0	0	0	Auto
1870	7	None	0,000	0	0	0	0	Auto
1881	8	None	0,000	0	0	0	0	Auto
1892	9	None	0,000	0	0	0	0	Auto

d. 5 Maps with 2 positions/map

Motion Table								
MODBUS ADDRESS	Index	Motion type	Position [mm]	Acceleration time [msec]	Force [N] or Constant speed time [msec]	Deceleration time [msec]	Waiting time [msec]	Trigger mode
1793	0	Triangular	5,000	100	0	100	300	Auto
1804	1	Triangular	50,000	100	0	100	300	Auto
1815	2	None	0,000	0	0	0	0	Auto
1826	3	None	0,000	0	0	0	0	Auto
1837	4	None	0,000	0	0	0	0	Auto
1848	5	None	0,000	0	0	0	0	Auto
1859	6	None	0,000	0	0	0	0	Auto
1870	7	None	0,000	0	0	0	0	Auto
1881	8	None	0,000	0	0	0	0	Auto
1892	9	None	0,000	0	0	0	0	Auto

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