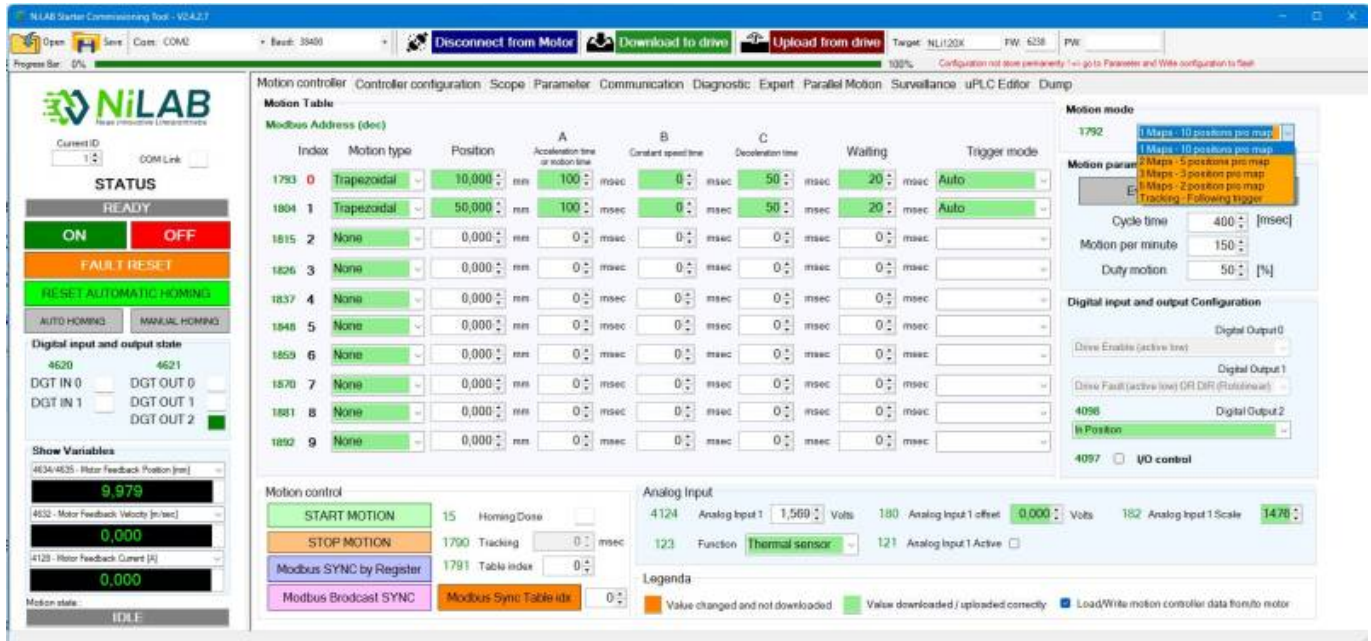


Motion modes

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.

MODBUS ADDRESS		Force [N] or						
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

From:
<https://dokuwiki.nilab.at/> - NiLAB GmbH
Knowledgebase

Permanent link:
https://dokuwiki.nilab.at/doku.php?id=en:nilab_starter:motion_modes

Last update: 2026/09/11 07:58

