

# Motion controller

## Position table

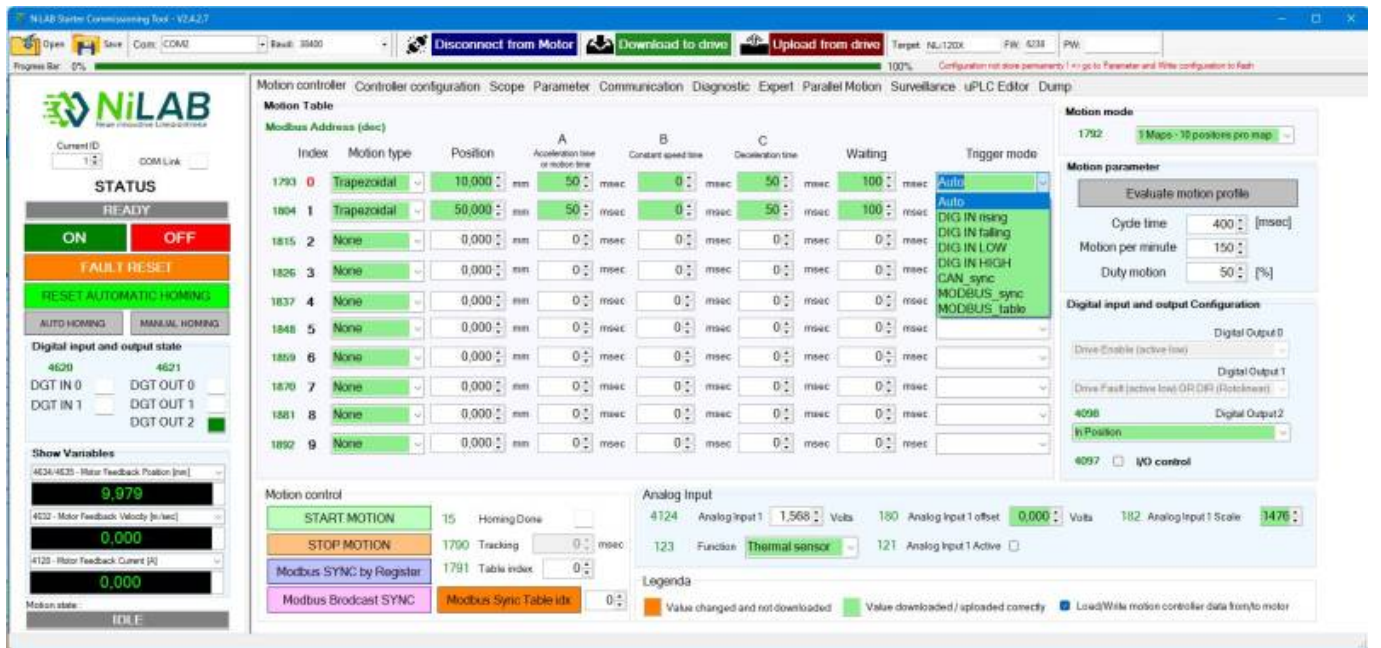
The motion controller window is used to specify the motion sequences. It is based on 10 row tables. Every row configures the motion task with these parameters:

1. Motion type: trapezoidal, triangular, polinomial, sinusoidal or force
2. Target position
3. Acceleration, deceleration and constant speed time depending on the motion profile used
4. Waiting time
5. Trigger mode: automatic, rising edge, falling edge, high and low level of trigger input (Digital input 1)

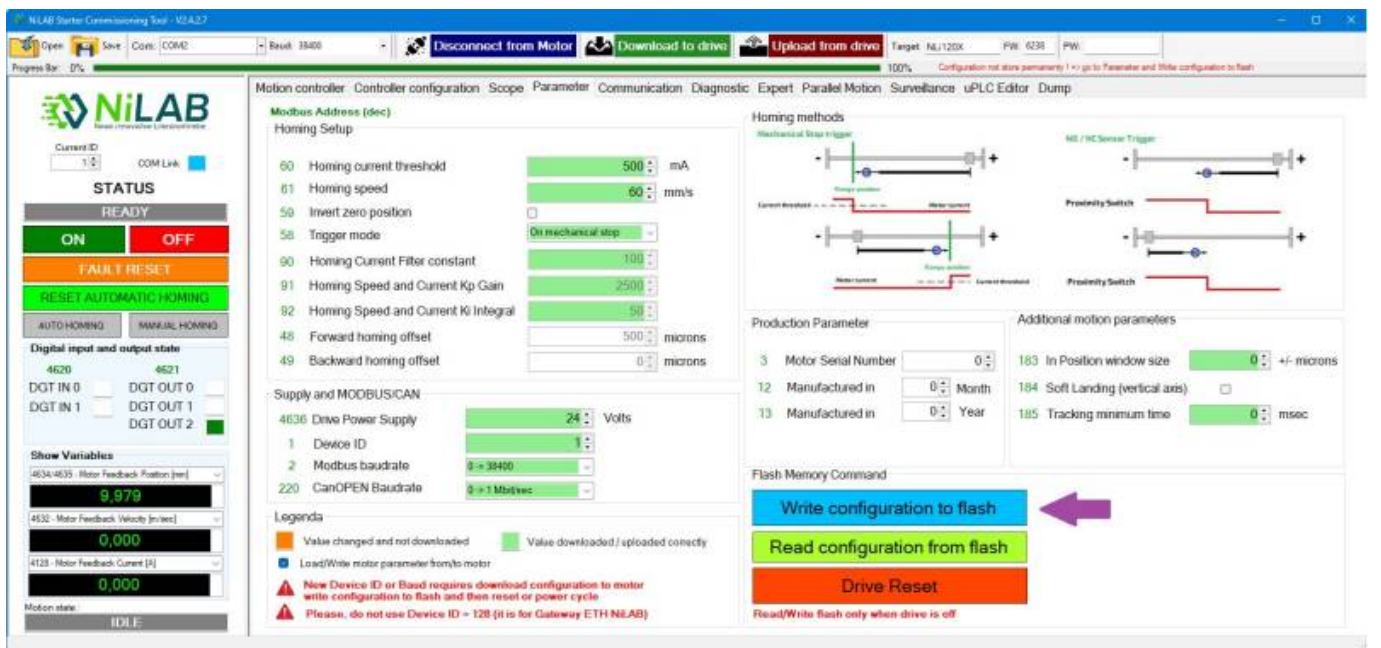
The screenshots show the NiLAB Motion Controller software interface. The main window displays a 'Motion Table' with 10 rows of configuration. The columns include Index, Motion type, Position, Acceleration time (A), Constant speed time (B), Deceleration time (C), Waiting, and Trigger mode. The status bar at the top indicates 'READY' and 'ON'.

Index	Motion type	Position	Acceleration time (A)	Constant speed time (B)	Deceleration time (C)	Waiting	Trigger mode
1793 0	Trapezoidal	10,000	50	0	50	100	Auto
1804 1	Trapezoidal	50,000	50	0	50	100	Auto
1815 2	None	0,000	0	0	0	0	
1826 3	None	0,000	0	0	0	0	
1837 4	None	0,000	0	0	0	0	
1848 5	None	0,000	0	0	0	0	
1859 6	None	0,000	0	0	0	0	
1870 7	None	0,000	0	0	0	0	
1881 8	None	0,000	0	0	0	0	
1892 9	None	0,000	0	0	0	0	

The bottom screenshot shows the same interface, but the motion type for row 1793 is changed to 'Triangular'. The 'Motion mode' panel on the right shows '1 Maps - 10 positions per map' and 'Motion parameter' settings like 'Cycle time: 400 [msec]' and 'Motion per minute: 150'.



**PLEASE IN ORDER TO STORE PERMANENTLY THE CONFIGURATION - PRESS THE WRITE CONFIGURATION TO FLASH**



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