

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:

Item

Motion type: trapezoidal, triangular, polinomial, sinusoidal or force

Target position

Acceleration, deceleration and constant speed time depending on the motion profile used

Waiting time

Trigger mode: automatic, rising edge, falling edge, high and low level of trigger input (Digital input 1)

The screenshot displays the NiLAB Motion Controller software interface. The main window is titled "Motion controller" and contains a "Motion Table" section. The table lists 10 rows of motion tasks, each with a unique index and a Modbus Address (dec). The columns for each row are: Index, Motion type, Position, Acceleration time or motion time (A), Constant speed time (B), Deceleration time (C), Waiting time, and Trigger mode. The first two rows are highlighted in green, indicating they are active or selected.

Index	Motion type	Position	A	B	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 interface also includes a "Motion mode" section on the right, which allows selecting a motion mode (e.g., "1 Maps - 10 positions per map") and a "Motion parameter" section for configuring cycle time, motion per minute, and duty motion. A "Digital input and output Configuration" section is also present, showing the status of various digital inputs and outputs. The bottom of the interface features a "Motion control" section with buttons for "START MOTION", "STOP MOTION", and "Modbus SYNC by Register", along with a "Modbus Broadcast SYNC" button. The "Analog Input" section shows the status of analog inputs and a "Legenda" section for interpreting the status of the motion control data.

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

Write configuration to flash

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