Position table

The position table for profile position mode is managed in the same way as in the integrated drive NLi motors. It is organized and mapped as in the NILAB Starter. The position table inside the integrated drive NLi motors can be changed using the SDO 0x8001-0x800A in every Gateway mode: Can or MODBUS RTU.

16#8001:16#00	POS_TABLE_ROW1			---
16#8002:16#00	POS_TABLE_ROW2			---
16#8003:16#00	POS_TABLE_ROW3			
16#8004:16#00	POS_TABLE_ROW4			
16#8005:16#00	POS_TABLE_ROW5			
16#8006:16#00	POS_TABLE_ROW6			
16#8007:16#00	POS_TABLE_ROW7			
16#8008:16#00	POS_TABLE_ROW8			
16#8009:16#00	POS_TABLE_ROW9			
16#800A:16#00	POS_TABLE_ROW10			

Every Row contains the same parameter as reported by NILAB Starter software on Windows.
Motion type: (1→Trapezoidal, 2→Triangular, 3→Polynomial, 4→Sinusoidal, 5→Force).
Target position (in microns), A_TIME (acceleration time), B_TIME (constant velocity time), C_TIME (deceleration time).
WAIT_TIME (waiting time) and TRIGGER_MODE (1→Digital Input rising edge, 2→ Digital Input falling edge, 3→ Digital Input High level, 4→Digital Input low level, 5→ CAN sync)

16#8001:16#00	POS_TABLE_ROW1			---
:16#01	MOTION_TYPE	RW	UINT	3
:16#02	TARGET_POS	RW	UDINT	15000
:16#03	A_TIME	RW	UDINT	150000
:16#04	B_TIME	RW	UDINT	0
:16#05	C_TIME	RW	UDINT	0
:16#06	WAIT_TIME	RW	UINT	10
:16#07	TRIGGER_MODE	RW	UINT	1
16#8002:16#00	POS_TABLE_ROW2			---
:16#01	MOTION_TYPE	RW	UINT	3
:16#02	TARGET_POS	RW	UDINT	50000
:16#03	A_TIME	RW	UDINT	150000
:16#04	B_TIME	RW	UDINT	0
:16#05	C_TIME	RW	UDINT	0
:16#06	WAIT_TIME	RW	UINT	10
:16#07	TRIGGER_MODE	RW	UINT	1

In order to select the current slave ID to read and write, the SLAVE_ID PDO (0x7001) is used. Every time this value is changed the POS_TABLE data are updated.
Every SDO write on these registers generates a write sequence to the NLi motor on the current slave id (0x6001).

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