

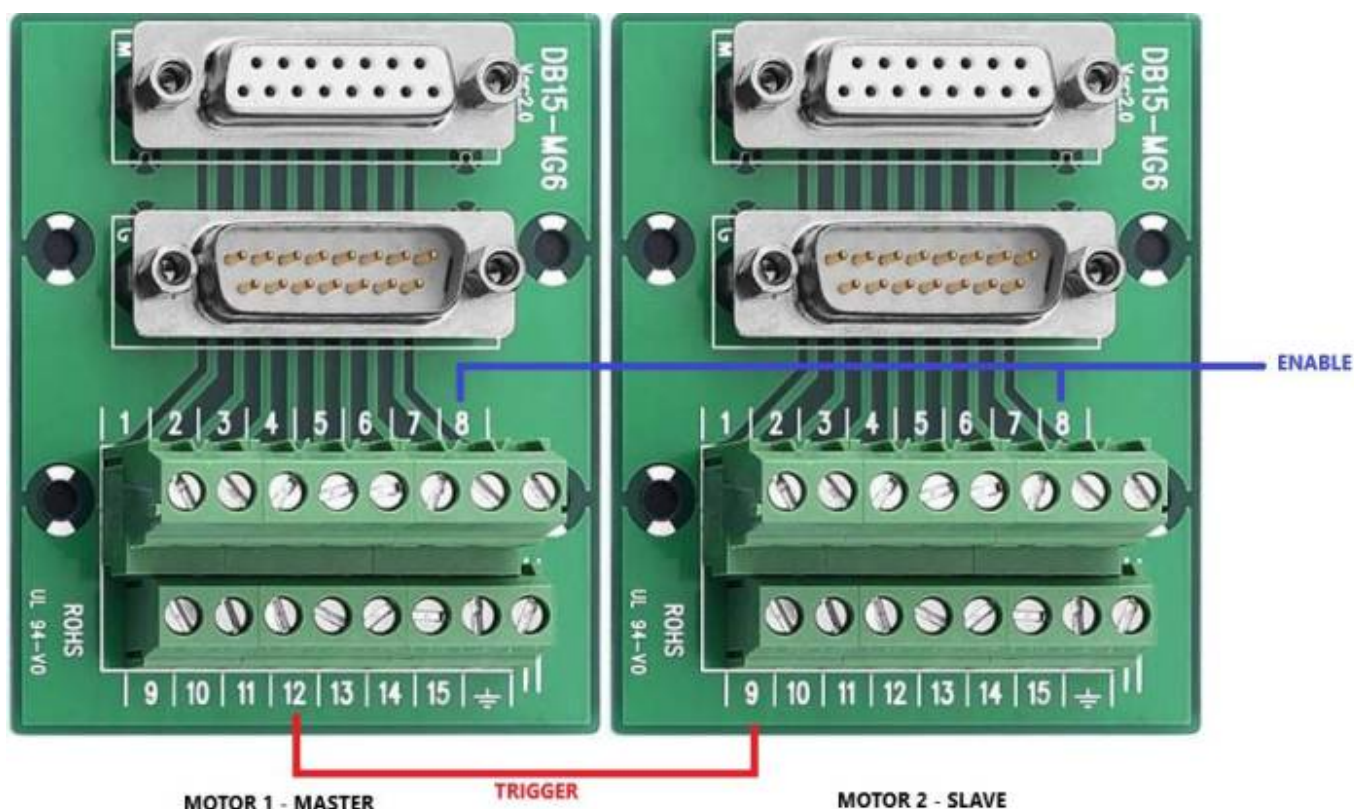
Master and slave mode

when two or more axis must be synchronized without PLC that send a trigger signal on digital input 1, one NLI motor can be used as a master to synchronized the others.

Connection between the two motors

Pin 12 (Digital output 2) of the master motor must be connected to Pin 9 (Digital Input 1) of slave motor

Pin 8 (Digital input 0) must be set to 24VDC to start the motion.



Example of configuration of the two axis

The waiting time of the master and slave must be set to a waiting time of 5 msec (1). On the master motor, the parameter 4098 Digital Output2 must be select to Master synch (2).

As regards the homing speed, please specify low speed (for example 10mm/sec) in the master motor and medium speed (for example 50mm/sec) in the slave motor. This to guarantee that the automatic homing of the slave is completed before the master motor starts the motion.

Master configuration

The screenshot shows the 'Master configuration' interface. The 'Motion Table' is the central element, displaying 10 rows of motion parameters. The first row (Index 0) is highlighted in green, indicating it is selected. The 'Waiting' column for Index 0 is set to 5 msec, and the 'Trigger mode' is set to 'Auto'. A red circled '1' is placed above the 'Waiting' column for Index 0. To the right, the 'Motion mode' is set to '1 Maps - 10 positions pro map'. The 'Motion parameter' section shows 'Cycle time' at 1156 msec, 'Motion per minute' at 52, and 'Duty motion' at 96%. The 'Digital input and output Configuration' section shows 'Digital Output 2' set to 'Master Synch', with a red circled '2' next to it. The 'I/O control' section shows '4097' with a checked 'I/O control' button.

Index	Motion type	Position	A	B	C	Waiting	Trigger mode
1793 0	Triangular	5,000	100	0	100	5	Auto
1804 1	Triangular	45,000	100	0	100	5	Auto
1815 2	None	65,000	100	0	0	20	Auto
1826 3	None	0,000	0	0	0	0	
1837 4	None	0,000	0	0	0	0	
1848 5	None	41,500	140	0	190	10	DIG IN HIC
1859 6	None	35,000	140	0	140	10	DIG IN LOV
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	

Slave configuration

Trigger mode of the index 0 (first row) must be set to DIG IN falling edge (1) with a waiting time of 3msec and the parameter 4098 Digital output2 must be set to In position (2)

The screenshot shows the 'Slave configuration' interface. The 'Motion Table' is the central element, displaying 10 rows of motion parameters. The first row (Index 0) is highlighted in green. The 'Waiting' column for Index 0 is set to 3 msec, and the 'Trigger mode' is set to 'DIG IN falli'. A red circled '1' is placed above the 'Trigger mode' for Index 0. To the right, the 'Motion mode' is set to '1 Maps - 10 positions pro map'. The 'Motion parameter' section shows 'Cycle time' at 1156 msec, 'Motion per minute' at 52, and 'Duty motion' at 96%. The 'Digital input and output Configuration' section shows 'Digital Output 2' set to 'In Position', with a red circled '2' next to it. The 'I/O control' section shows '4097' with a checked 'I/O control' button.

Index	Motion type	Position	A	B	C	Waiting	Trigger mode
1793 0	Triangular	5,000	100	0	100	3	DIG IN falli
1804 1	Triangular	45,000	100	0	100	3	Auto
1815 2	None	65,000	100	0	0	20	Auto
1826 3	None	0,000	0	0	0	0	
1837 4	None	0,000	0	0	0	0	
1848 5	None	41,500	140	0	190	10	DIG IN HIC
1859 6	None	35,000	140	0	140	10	DIG IN LOV
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	

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