

Parametrization

This page describes how to **parametrize** the Epulse50 servo drive. The drive is configured with the PC software, which sets the motor parameters, the control loop, and the application behaviour.

In order to configure the integrated motor drive, please use the PC software Motolab Starter:

https://www.nilab.at/download/motolab_starter_ver0-0-1-0/?wpdmdl=6631&refresh=635638e9ee1601666595049

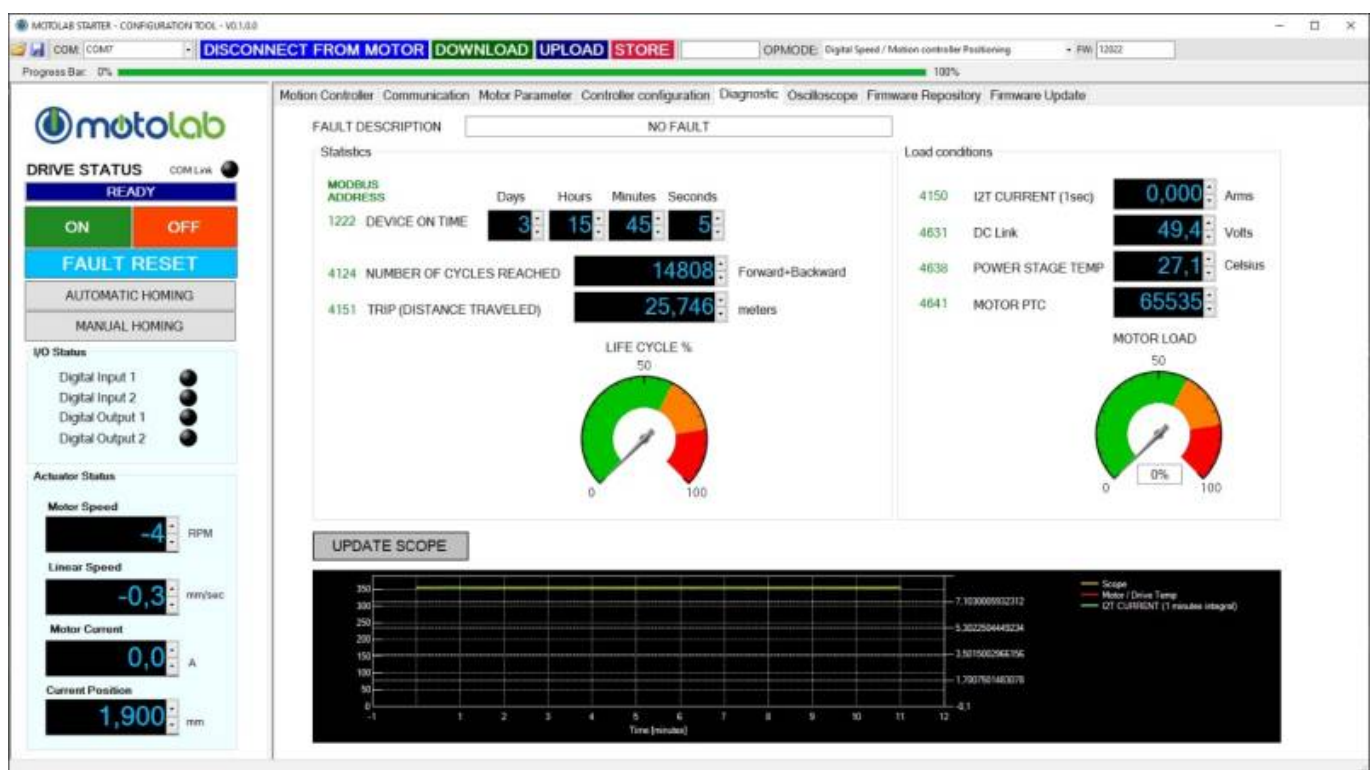
The screenshot shows the Motolab Starter Configuration Tool interface. On the left, the 'DRIVE STATUS' section shows 'READY' with 'ON' and 'OFF' buttons, a 'FAULT RESET' button, and 'AUTOMATIC HOMING' and 'MANUAL HOMING' options. Below this, 'I/O Status' shows digital inputs and outputs, and 'Actuator Status' shows Motor Speed (-1 RPM), Linear Speed (-0,1 mm/sec), Motor Current (0,0 A), and Current Position (1,897 mm). The main area displays the 'Motion Table' with columns for Index, Motion type, Position, A, B, C, Waiting, and Trigger mode. The table lists 10 motion profiles. Below the table, there are 'START MOTION' and 'STOP MOTION' buttons, and a 'Digital Outputs Setup' section with 'Digital Output 1 Setup' (154) and 'Digital Output 2 Setup' (427).

Index	Motion type	Position	A	B	C	Waiting	Trigger mode	
793	0	Polynomial	110,000 mm	800 msec	0 msec	300 msec	10 msec	DIG IN rise
804	1	Polynomial	190,000 mm	800 msec	0 msec	300 msec	10 msec	Auto
815	2	None	0,000 mm	0 msec	0 msec	0 msec	0 msec	Auto
826	3	None	0,000 mm	0 msec	0 msec	0 msec	0 msec	Auto
837	4	None	0,000 mm	0 msec	0 msec	0 msec	0 msec	Auto
848	5	None	0,000 mm	0 msec	0 msec	0 msec	0 msec	Auto
859	6	None	0,000 mm	0 msec	0 msec	0 msec	0 msec	Auto
870	7	None	0,000 mm	0 msec	0 msec	0 msec	0 msec	Auto
881	8	None	0,000 mm	0 msec	0 msec	0 msec	0 msec	Auto
892	9	None	0,000 mm	0 msec	0 msec	0 msec	0 msec	Auto

The screenshot shows the Motolab Starter Configuration Tool interface with the 'Diagnostic' tab selected. It displays a detailed control loop diagram for the motor drive, including the Position Loop, Speed Loop, and Current Loop. The diagram shows the flow of signals from the motion command through various control blocks (integrators, gain blocks, limiters) to the motor. Below the diagram, the 'Motion Command' section shows parameters for current and speed setpoints, acceleration, and deceleration times.

Motion Command

4128	Current setpoint	0,000 A	84	Acceleration time	2 msec
4134	Speed setpoint	0,000 RPM	85	Deceleration time	2 msec



Configuration steps

- Connect the drive to the PC with the USB programming cable.
- Start Motolab Starter and select the drive and the connected motor.
- Set the motor parameters (feedback type, pole count, current limits) according to the datasheet.
- Configure the control loop, the motion profile, and the fieldbus settings.
- Save the configuration to the drive and verify the motor operation.

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Knowledgebase

Permanent link:
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