



Software Selection Guide

Available Software Versions

PDE-10

This software version is a little bit out of date. The main disadvantages are that the parameters are more basic and therefore more difficult to adjust. The advantage of this software is, that it allows to connect a sensor and to travel specified distances.

PDE-20

This software version is used to make medium fine steps. For very fine steps use PDE-20b. For less noise use PDE-30.

PDE-20a

This version was intended for a special application, but is useful to demonstrate the high dynamic quality of the motor. The software waits for a start pulse on the forward button. Then it lets the motor move forward a programmable number of steps. The size of the steps and the pause between the steps can be adjusted. Then it pauses the motion. Afterwards it will move back a programmable number of steps with programmable size and pause. This software is very noisy, because it has a lot of high frequency modulation which was demanded by the original application. However it can be used to show how fast the motor can change direction and how repeatable the travelled distance can be in a good mechanical setup. This software is also good for applications where the Elliptec Motor needs to generate vibrations.

PDE-20b

This version is intended for very precise applications that have only one requirement: to make very small steps. The software allows programming the time and the power level that is sent to the motor. After this the program will switch the motor off for a programmable time. Single steps or repeated operations are possible. The motor will be switched on without power on ramp, so the motor will be noisy with this software.

PDE-30

This version allows full speed motion. It also allows a speed reduction by PWM. The PWM frequency is fixed to approximately 40Hz. This makes the motion less smooth than other software versions. A special feature of this version is that the PWM does not switch the motor on abruptly. For this reason the typical PWM noise is reduced and improved in sound.

PDE-42

This version combines the features of the PDE-20 and the PDE-30. It allows very small steps and full speed motion. Like in the PDE-30 speed reduction is allowed by PWM (duty cycle). In noiseless mode the motor is switched on and off smoothly by using special parameterized power-on and power-off ramps. In this version you can modify, e.g. the ramp length, the on-time and the periodic time. The periodic time can be adjusted in oscillation periods or 110µs-steps. For a quick start Elliptec stored 8 sets of typical motions to the EEPROM. They can easily perform the different motions and edit the parameters by the User-Interface-navigation.

There are more software versions coming up. If you have a specific need, please contact Elliptec AG.

Appendix

Trademarks

Elliptec™, Elliptec Motor™, Elliptec Minimotor™, Elliptec Actuator™, Elliptec Module™, Elliptec Controller™ are trademarks of Elliptec Resonant Actuator AG.

Attention

The preloaded software and hardware is not suitable for climate tests, please contact Elliptec when required.

For further information please visit our website at www.elliptec.com

Subject to change without notice.

Elliptec Resonant Actuator AG
Meinhardstrasse 3
44379 Dortmund
Germany

Tel. +49 (0) 2 31 / 29 27 02-0
Fax +49 (0) 2 31 / 29 27 02-50

info@elliptec.com