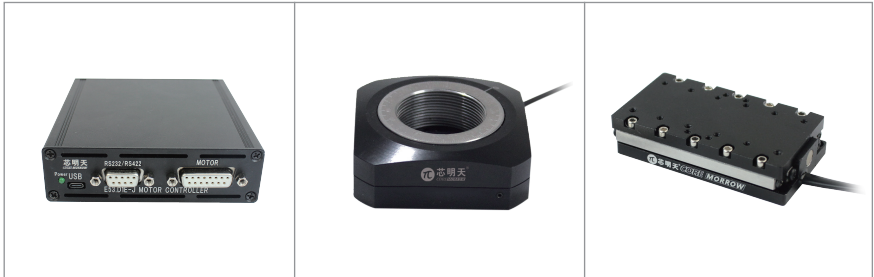# E53.D1E-J/E53.C1K-J
Piezo Motor Controller Software
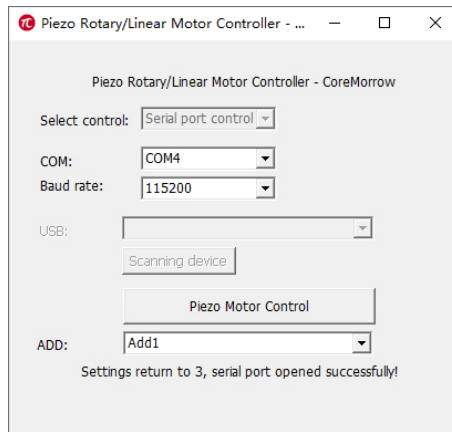## User Manual

Version: V1.0

1.Introduction

1. Select the control interface

The device needs to be powered on and self-test, etc., it is recommended to connect the hardware device after the controller is powered on for 5 seconds

(1) Serial control or RS422 control (USB transfer to RS422 control) or the controller USB transfer to serial control.


2. Click"Piezo Motor Control" button.
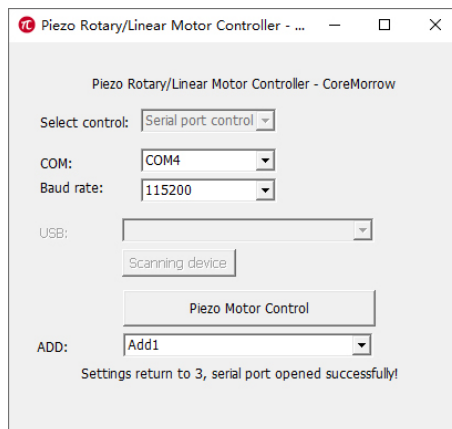
3. Absolute position

Take open-loop as an example, fill in 1000 in the following figure to control the forward operation of 1000 units of piezo rotary motor: 1000 units of the positive operation of piezo controller, and read the operation cycle number of the controller on the same day; Absolute position has three equal controls for rotary linear motor positioning use;

Similarly, the unit of control for a closed loop is the read value returned by the used closed-loop control; Rotation motor's unit is degree.
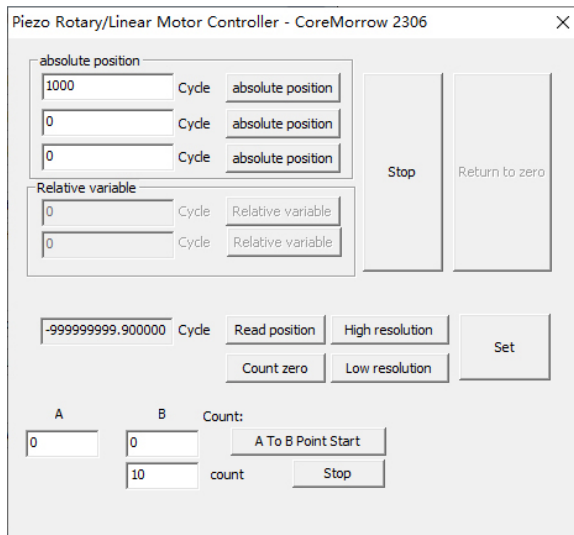
4. Read position

For open loop, the return position of the control unit sent by the current controller to control the motor, and the unit is the unit of the selection control.

For closed loop, the return position is the current actual physical position value, and the unit is the unit of the selection control.

5. Stop

Indicates to stop the current piezo motor operation. For example, when piezo motor is running, click "Stop" button to stop the running piezo motor, and the read position shows the number of cycles sent now or the actual physical position, which is related to the current open-closed loop state.

6. Return to zero

Return to the position of period number zero, closed loop version returns to absolute zero position.

7. Relative variable

It indicates that at the current position, run 500 control units in the negative direction.

"Relative variable" has two implements two relative variable control.

Only closed loop make sense;

Similarly, the unit of control for closed loop is the read value returned by the used closed-loop control unit, which is also the unit of control.

8. High resolution

It indicates that open-loop piezo motor will run slowly, but the resolution will be higher, and the counter cycle will be reset. If the customer edits the software by themselves, the counter should also be reset, because the counting mechanism of high and low resolution is different.

9. Low resolution

It indicates that open-loop piezo motor will run fast, but the resolution will be lower, and the counter cycle will be reset. If the customer edits the software by themselves, the counter should also be reset, because the counting mechanism of high and low resolution is different.

10. Piezo motor set

(1) Set open/closed loop

Select "Open loop" from drop down menu, click"Set" to complete open loop setup.

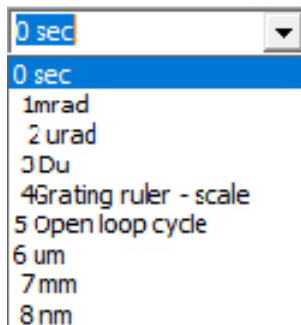Select "Closed loop" from drop down menu, click"Set" to complete closed loop setup.
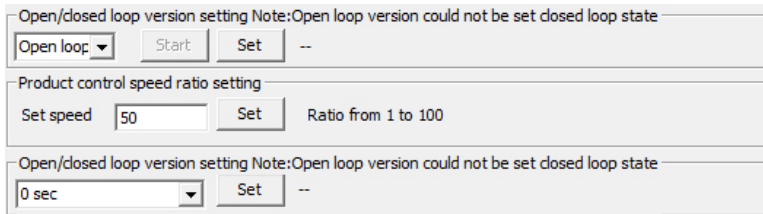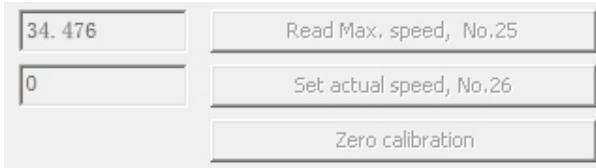

(2) Set speed ratio

The value is from 1 to 100.

(3) Set control unit (invalid for closed loop version)

Select the unit from drop down menu.

Click"Set" to complete closed loop setup.

(4) Set the speed value to be less than the maximum speed of the system. The figure shows that this piezo motor is less than 34.476.

34. 476	Read Max. speed, No.25
0	Set actual speed, No.26
	Zero calibration

(5) High limit position and low limit position will be applied in closed loop version of piezo linear motor; Open loop version and rotation angle greater than 360 degrees are not involved.

	Read low limit position
	Read high limit position

2.Contact us

Harbin Core Tomorrow Science & Technology Co., Ltd.

Tel: +86-451-86268790

Email: info@coremorrow.com

Website: www.coremorrow.com

Address: Building I2, No.191 Xuefu Road, Nangang District, Harbin, HLJ, China

CoreMorrow Official and CTO WeChat are below: