How to control MOR-200-90 by motion controller?

There're two steps to control the motorized rotation stage MOR-200-90 by our motion controller. One step is to calculate the pulse value depending on the formulas, and the other one step is to input the pulse value into the motion controller.

1. You have to understand these formulas:

a. Pulse equivalent = 360 / (integer step of per rotation of the step motor * subdivision * transmission ratio) = stepper angle / (subdivision * transmission ratio)

b. Pulse number =Actual rotation degree / pulse equivalent

If you want to move the rotary stage M degree, then the corresponding pulse number equals to M / pulse equivalent.

2. You have to get the parameters in the formulas from the specifications table from our website and then calculate the pulse value you need.

a. Get these two parameters from our website.

Stepper angle=1.8

Transmission ratio=180

You can easily get these two parameters from the specification of our product at:

http://www.optics-focus.com/motorized-rotary-stage-p-524.html

b. Get subdivision from the back panel of controller box.

Subdivision depends on the DIP switch on back panel of the controller. The default subdivision is 2. But please make sure it firstly. If you need high resolution, please change the subdivision to 8. More information about the subdivision, please refer to the subdivision table on the back panel of controller.

Let's suppose the subdivision is 8. Then we can calculate the pulse equivalent is 0.00125. This value is also the maximum resolution.

c. Get the pulse value you need to input into controller.

So if you need to make the rotation stage rotating 90 degrees, the corresponding pulse value is 72000. (90/0.00125)

Then please input pulse value 72000 into the controller. About the speed, you can try to set up one value less than 255. More operation methods please refer to the manual of controller.

If you need to rotate 180 degrees, the pulse value you need to input is 144000. (180/0.00125)

Any other questions, please contact us.