

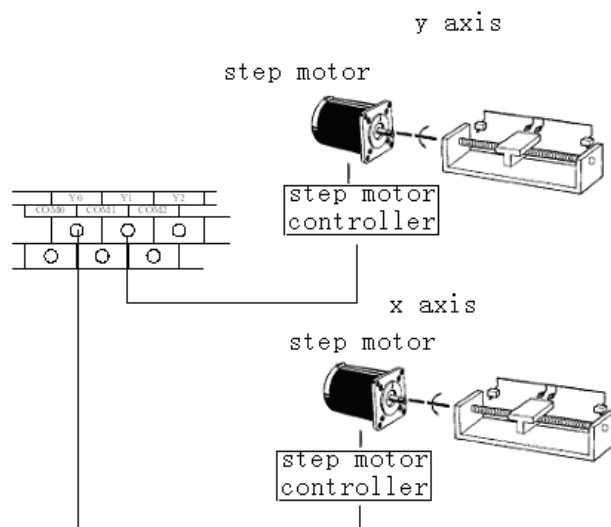
Two channels pulse output

Summary

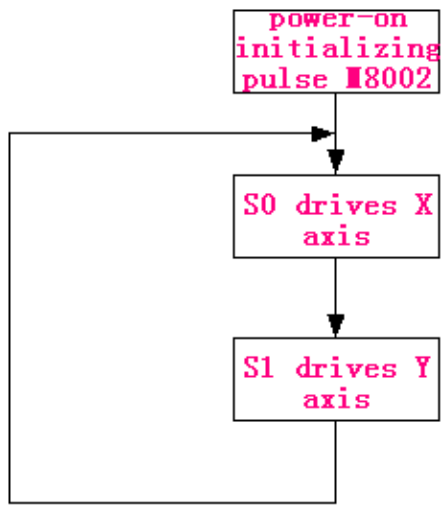
Generally, XC3 and XC5 series PLC's support 2 (two) channels pulse outputs. In order to use pulse outputs, please choose PLC with transistor outputs. Via using different instructions, you can realize not only one-direction pulse outputs without speed-up/speed-down, one-direction pulse outputs with speed-up/speed-down, but also multi-segment, positive/negative direction outputs etc. The output frequency can reach 400KHz.

In this sample, we use single-segment, one direction pulse output, Y0 controls X axis step motor, Y1 controls Y axis step motor. Control the two axis to drive alternatively via flow.

Graph:



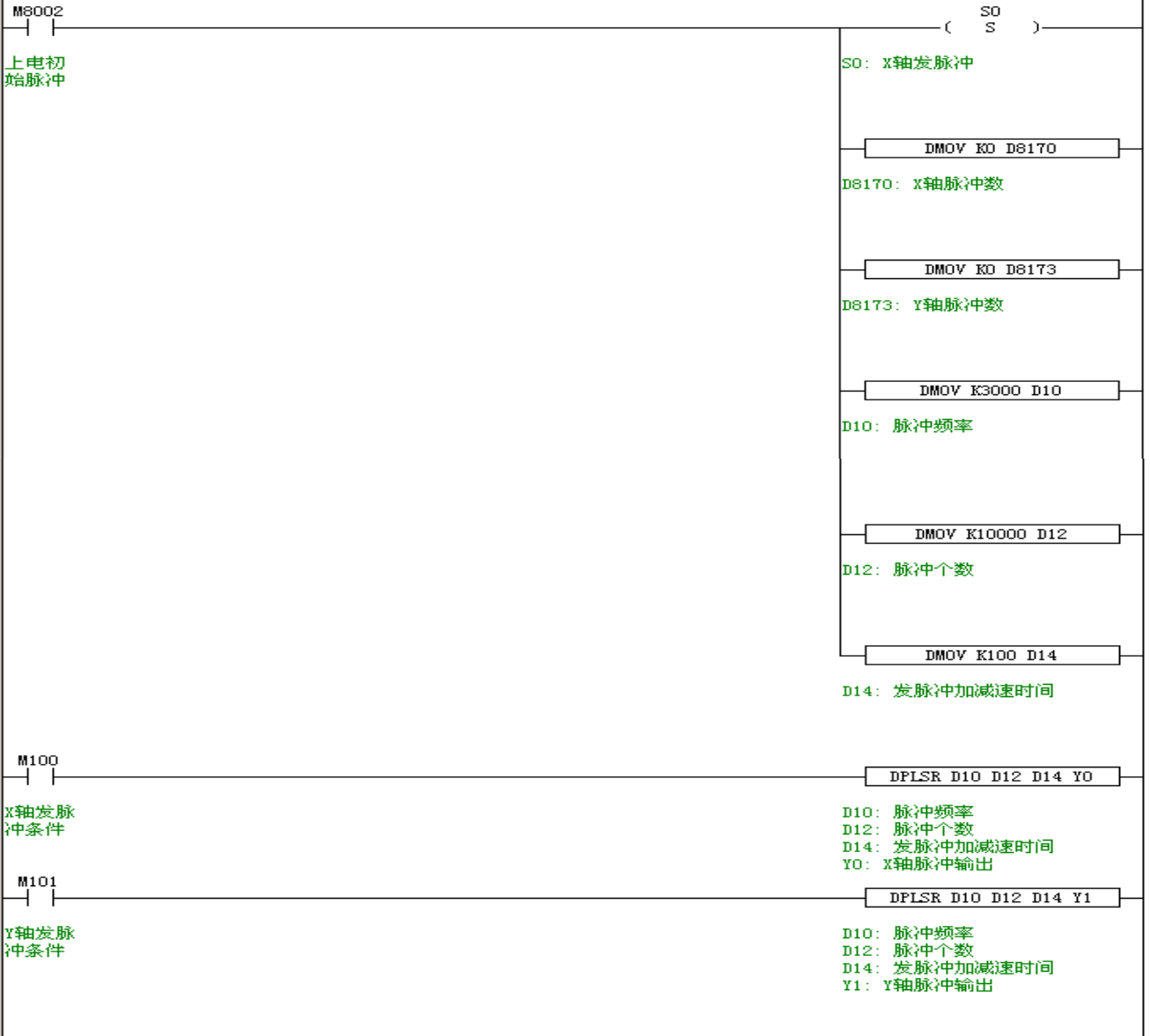
Flow Chart:



Program:

// Y0: X轴脉冲 Y1: Y轴脉冲 M8170/M8173: 发脉冲标志 D8170/D8173: 当前脉冲数

// 上电初始脉冲对X轴、Y轴脉冲数清零，对脉冲频率、个数以及加减速时间赋值，进入流程S0



// 把X轴和Y轴当前脉冲数传送到D20、D22中

M8000

PLC运行
中

DMOV D8170 D20

D8170: X轴脉冲数
D20: X轴累计脉冲

DMOV D8173 D22

D8173: Y轴脉冲数
D22: Y轴累计脉冲

STL
S0

X轴发脉
冲

S0
↑

X轴发脉
冲

M100

(S)

M100: X轴发脉冲条件

// X轴脉冲发送完毕，X轴发脉冲条件复位，进入流程S1

M8170

X轴脉冲
发送中

M100

(R)

M100: X轴发脉冲条件

S1

(S)

S1: Y轴发脉冲

STLE

STL
S1

Y轴发脉
冲

S1
↑

Y轴发脉
冲

M101

(S)

M101: Y轴发脉冲条件

// Y轴脉冲发送完毕，Y轴发脉冲条件复位，进入流程S0

M8173
↓↓

Y轴脉冲
发送中

M101
(R)

M101: Y轴发脉冲条件

S0
(S)

S0: X轴发脉冲

STLE

END