成都福誉科技有限公司

FUYU TECHNOLOGY CO.,LTD

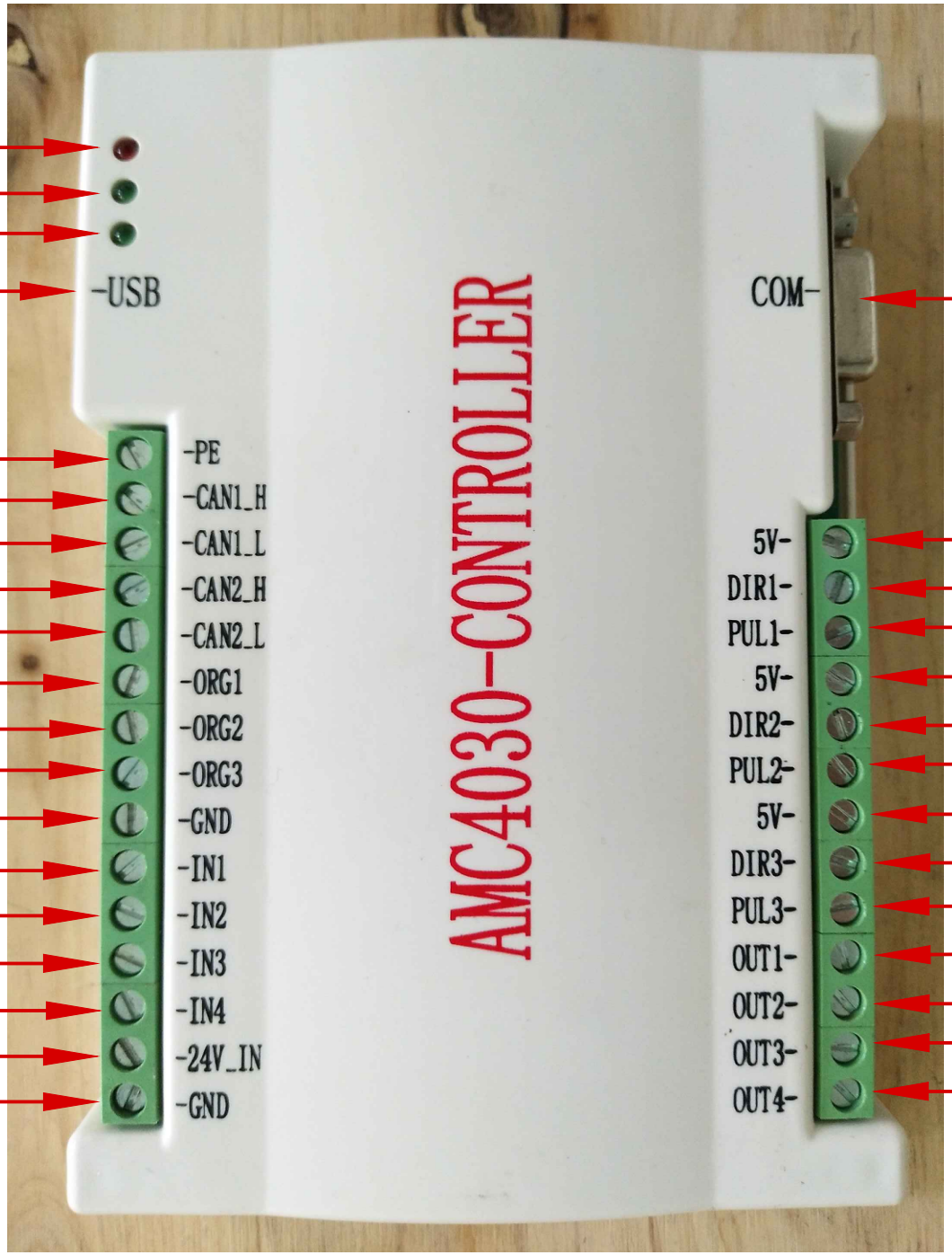
AMC4030-3 axis controller

Program Using Handbook

Edition: V3.0.0.3

notes: the program only available in win7 or win10!

Appearance & Ports



power

USB connection status

controller connection status

USB connector

DB9

master computor ports
do not open to use

origin pors(xyz axis)
Can connect limit switch

COM
user-defined input ports
(can set function by user needs)

power supply: DC20-28V

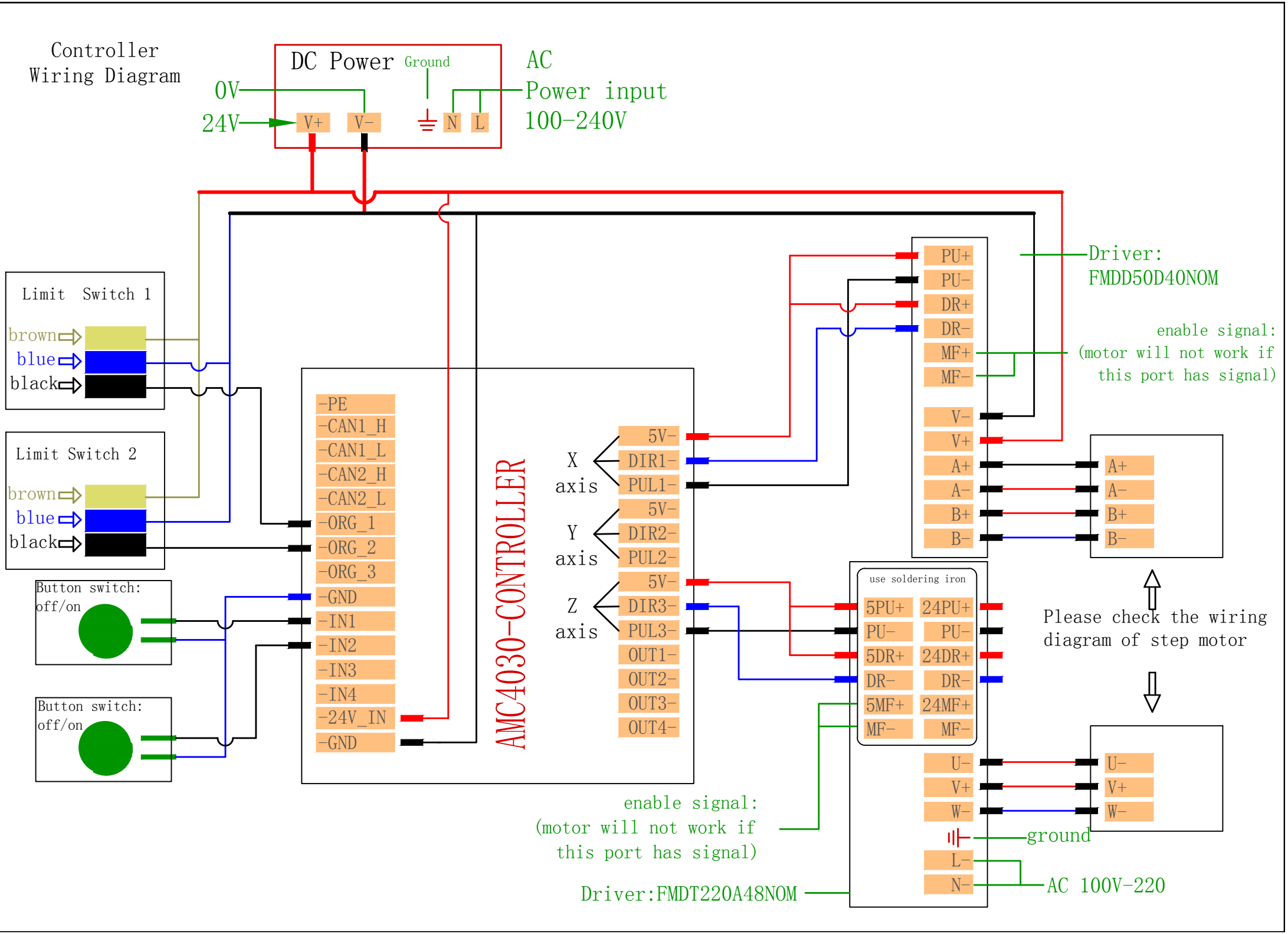
GND(0V)

X axis pulses and direction

Y axis pulses and direction

Z axis pulses and direction

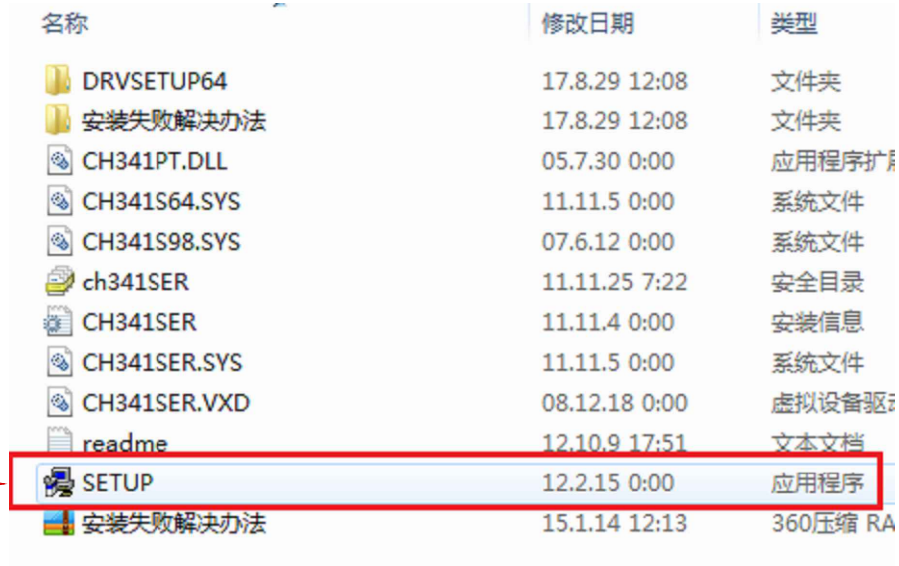
user-defined output ports (can set function by user needs)


Controller
Wiring Diagram
DC Power
Ground
0V
24V
V+
V-
N
L
AC
Power input
100-240V
Limit Switch 1
brown
blue
black
Limit Switch 2
brown
blue
black
Button switch:
off/on
Button switch:
off/on
-PE
-CAN1_H
-CAN1_L
-CAN2_H
-CAN2_L
-ORG_1
-ORG_2
-ORG_3
-GND
-IN1
-IN2
-IN3
-IN4
-24V_IN
-GND
AMC4030-CONTROLLER
X axis
Y axis
Z axis
5V-
DIR1-
PUL1-
5V-
DIR2-
PUL2-
5V-
DIR3-
PUL3-
OUT1-
OUT2-
OUT3-
OUT4-
PU+
PU-
DR+
DR-
MF+
MF-
V-
V+
A+
A-
B+
B-
Driver:
FMDD50D40NOM
enable signal:
(motor will not work if
this port has signal)
A+
A-
B+
B-
Please check the wiring
diagram of step motor
use soldering iron
5PU+
PU-
5DR+
DR-
5MF+
MF-
24PU+
PU-
24DR+
DR-
24MF+
MF-
U-
V+
W-
ground
L-
N-
AC 100V-220
U-
V+
W-
enable signal:
(motor will not work if
this port has signal)
Driver:FMDT220A48NOM

AMC4030-3 axis controller

USB driver set up

Step1



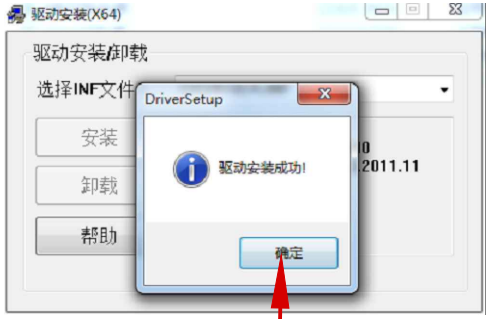
Click SETUP

After install success, right click "cumputer" then click "administer" you can find the USB connect as shown in front.

Step2

Click Install

Step3



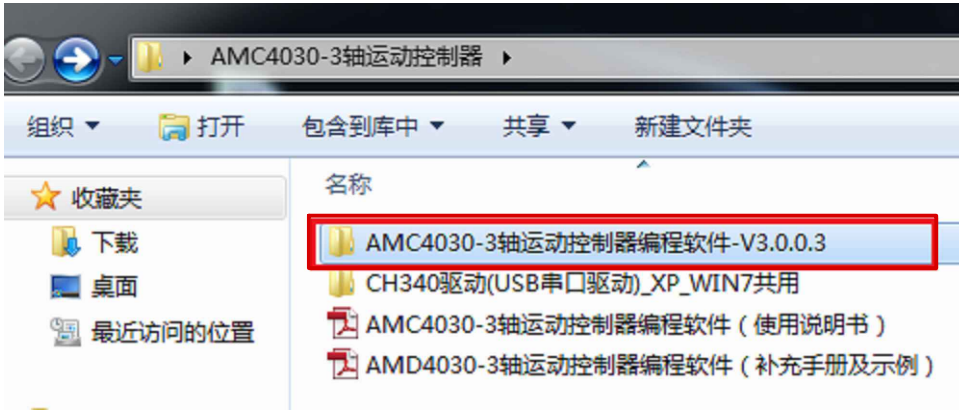
If install success while the USB still not working.Please copy the two file: "serenum.sys" and "serial.sys" in C:\Windows\System32\drivers floder and try again

Set up success

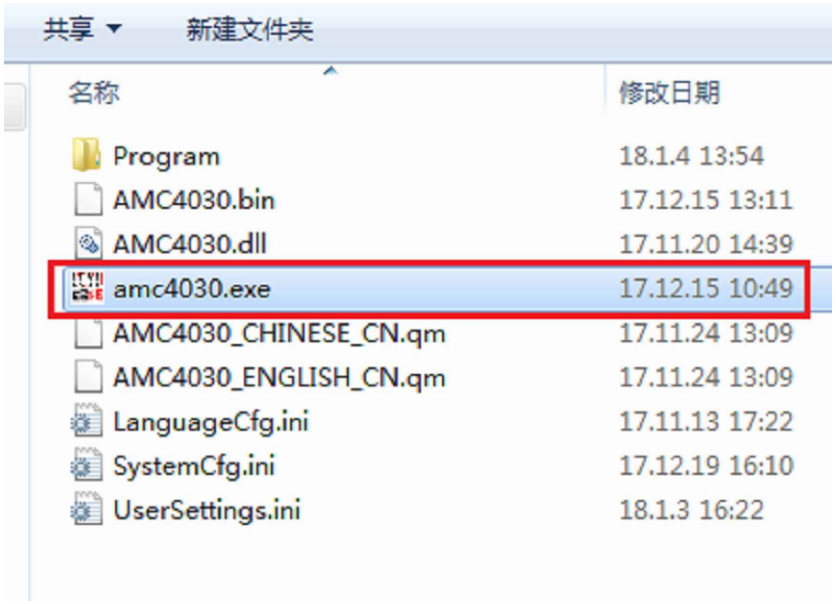
AMC4030-3 axis controller program

open program

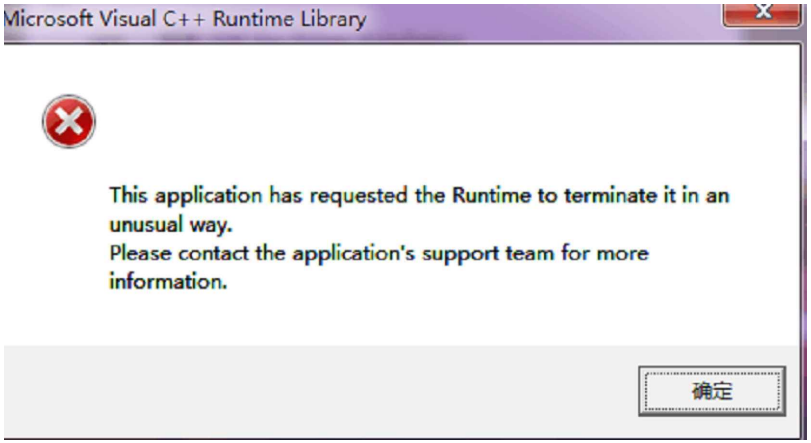
step1.open the folder as shown bellow



step2.open program “AMC4030.exe”



note: When these errors appear please download suitable system patch



effective length of linear guide base on the origin point

choose the home direction

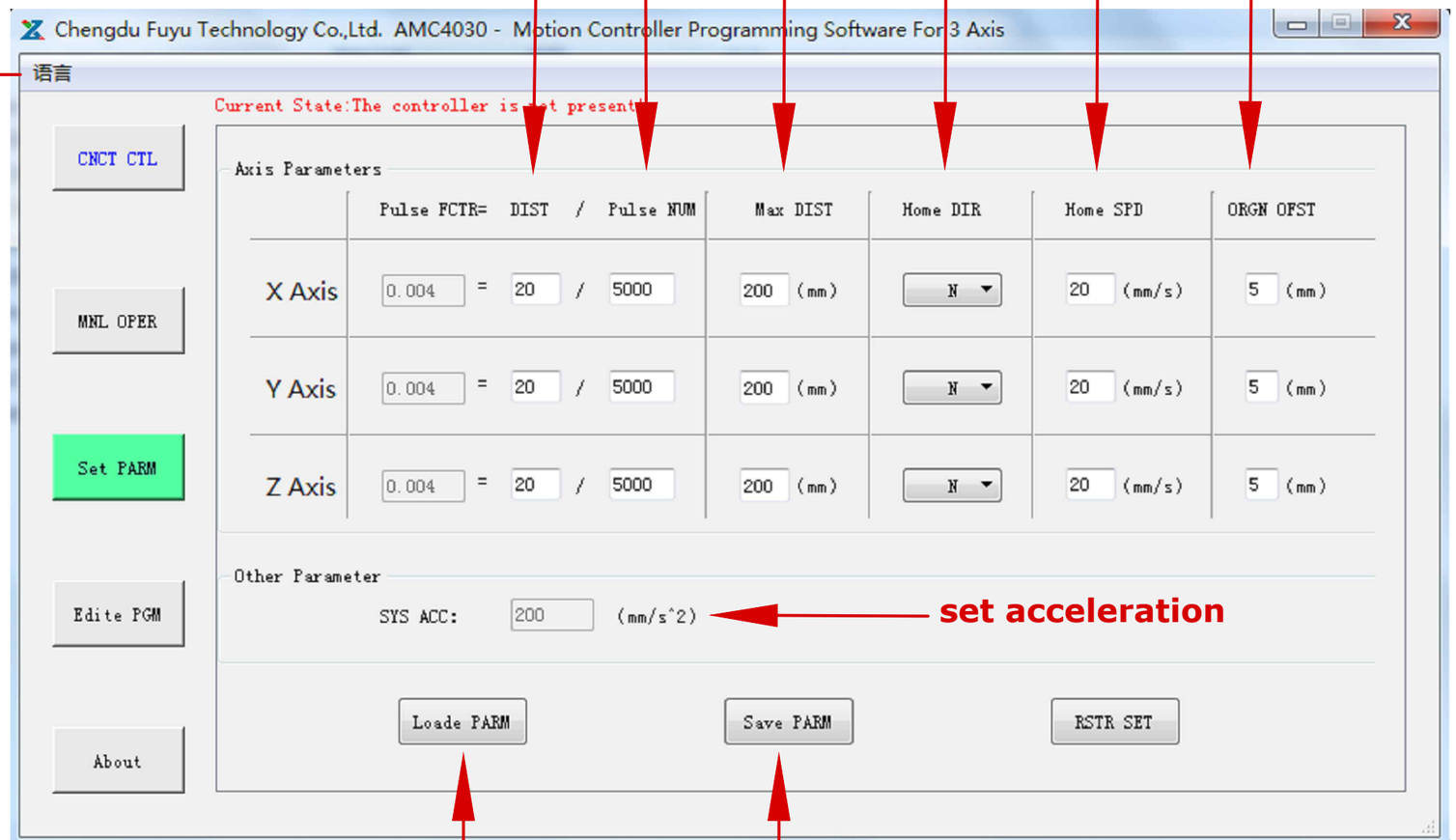
set home back speed (a high speed will decrease the accuracy)

set subdivision impulses need for one cycle

origin offset

moving distance that motor run one cycle

choose language

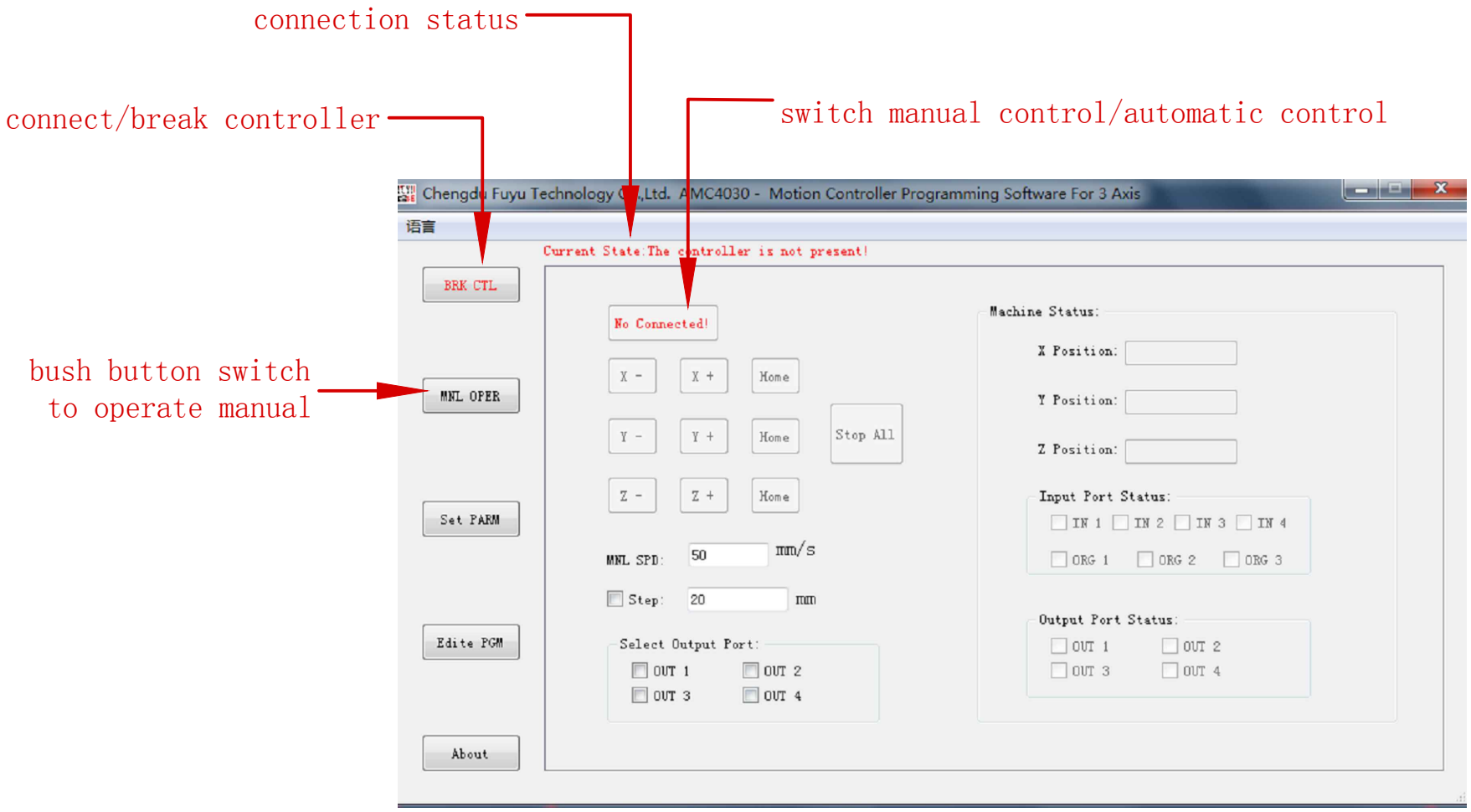


set acceleration

download the existing parameter in controller

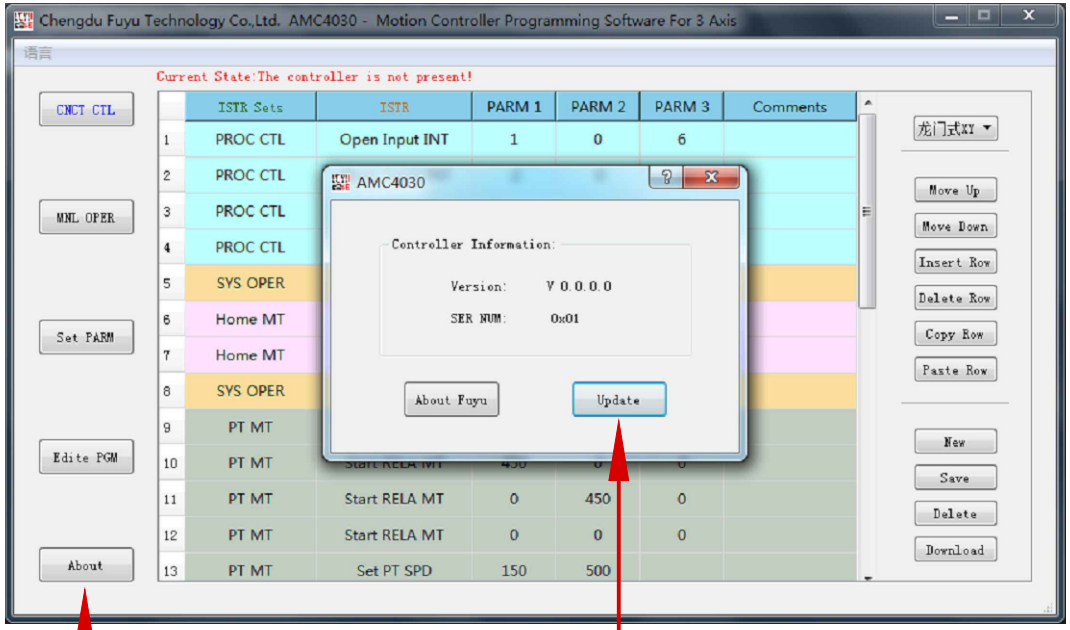
save the new parameter

AMC4030-3 axis controller program operate manual interface



AMC4030-3 axis controller program program update

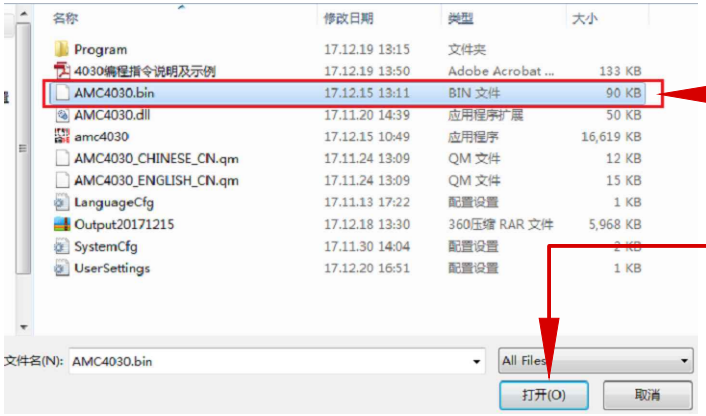
step1



click about

click update

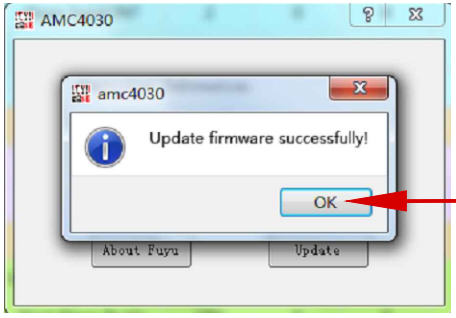
step2



choose the update file

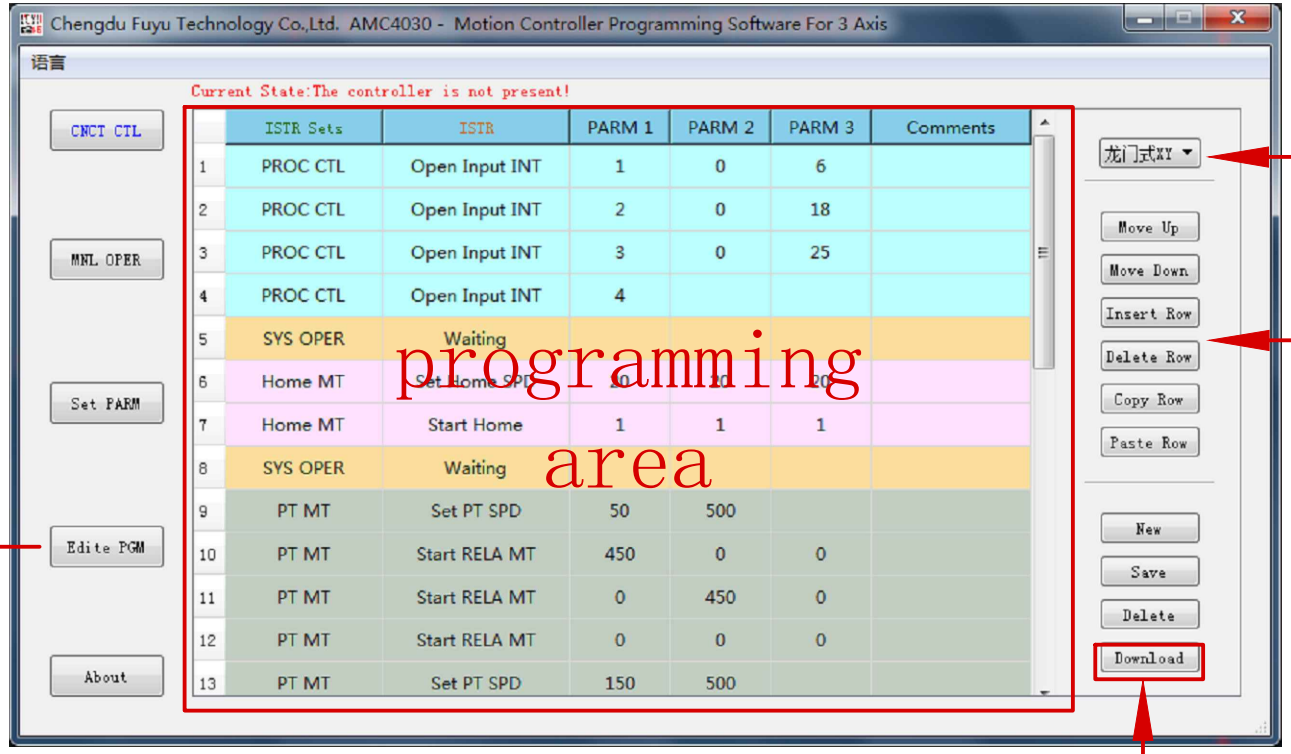
click open

step3



update success

AMC4030-3 axis controller program
programming interface



choose cases

edition instruction

push button switch to programming area

write the program in controller

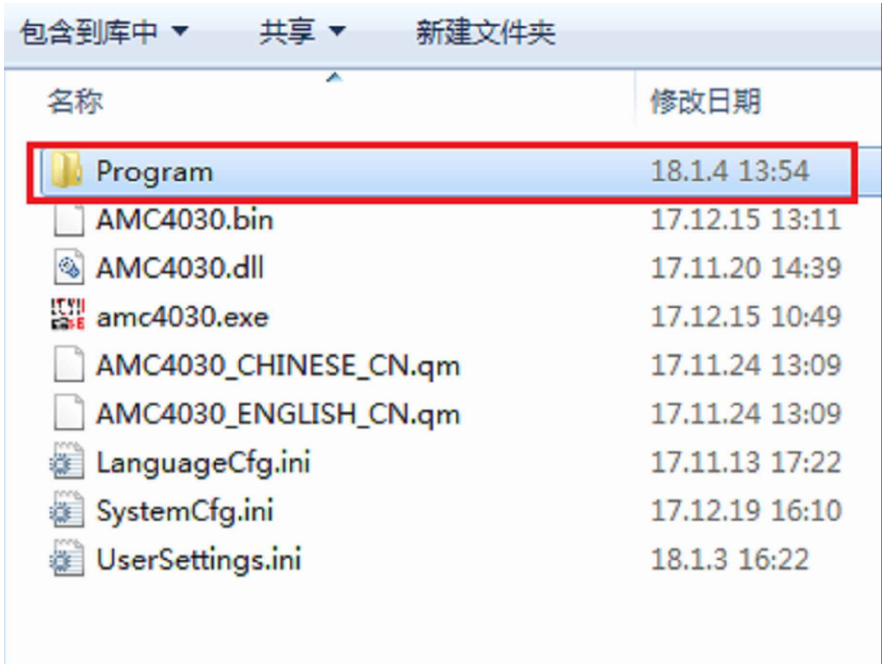
notes:1. After editing a new program pleas connect the controller and write the program in controller

2. Controller process base on the order in programming area step by step

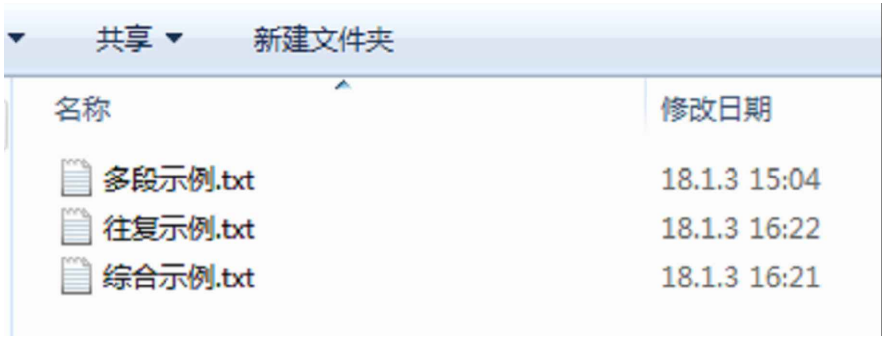
3. When the controller running to the blank order or the "stop all" order controller will end the automatic process cannot jump to other line. customer can set a "waiting" order to keep the program running

AMC4030-3 axis controller program

program save location



when customer edit a new program the the information will be saved in the folder "program"



paste the suitable format document in "program"folder can also add the edition program in "amc4030.exe"

Instruction Explaination Table SJ1.2									
order	ISTR Set	INSTR	PARM1	PARM1 notes	PARM2	PARM2 notes	PARM3	PARM3 notes	INSTR Notes
1	SYS OPER	Stop All	×	×	×	×	×	×	System over,clear all of the data. Cannot running anyother instrucion,unless power off and restart the controller
2		Delay time	Integer	unit:ms	×	×	×	×	System waiting (max:20 days)
3		Waiting	×	×	×	×	×	×	stop the system. Only "Open input INT" available
4	PROC CTL	Program Jump	Integer		×	×	×	×	Can Jump any line
5		Program Loop	Integer	jump line	NUM	Loop time	×	×	After program jump to front line loop time will -1
6		Input Jump	1/2/3/4	IN1/IN2/IN3/IN4	0/1	0(low level)/ 1(high level)	NUM	Jump line	When program running this line and input port is setting condition, program jump to wanted line
7		Open Input INT	1/2/3/4		0/1	0(from 24 to 0V) 1(from 0 to 24V)	NUM	Jump line	During the program process. When input port condition happened,jump to wanted line
8		Close Input INT	1/2/3/4		0/1		×	×	During the program process. When input port condition happened,close the "Open Input INT" Which have set before
9	Output OPER	Set Output	1/2/3/4	OUT1～OUT4	0/1	0(low level)/1(high level)	×	×	Set the output port voltage(0V or 24V)
10	Home MT	Set Home SPD	Positive NNM	for X axis	Positive NUM	for Y axis	Positive Num	for z axis	Speed Unit:mm/s, Acceleration is "SYS ACC" in "Set PARM".
11	PT MT	Set PT SPD	Positive NUM	Velocity mm/s	Positive NUM	Acceleration mm/s^2	×	×	velocity and acceleration are vector.Direction from first point to next point
12		Start RELA MT	NUM	moving distance for X axis (mm)	NUM	moving distance for Y axis (mm)	NUM	moving distance for Z axis (mm)	The location of final point is relative to current point.
13		All Axis MT	Positive NUM	X-Coordinate	Positive NUM	Y-Coordinate	Positive NUM	Z-Coordinate	1.For this command program must do a back home before(provide a origin position) 2.After the command process finish.program jump to the following step

1.When controller connect with power supply or use pc controll switch to automatic in "CNCT CTL",program will run automaticly.
2.Program running from the first line and step by step
3.Set "Waiting" and "Open Input INT" in the beginning is an useful method to control the system start
4."Stop All" will stop the system, Do not set this order if your want reuse some function

1 . Words Abbreviation

AC	Automatic Control	自动控制
ACC	Acceleration	加速度
BRK	Broken	断开
CLR	Clear	清除
CNCT	Concatenate	连接
CTL	Control	控制
CUR	Current	当前的
DIR	Direction	方向
DIST	Distance	距离
EQV	Equivalent	当量
FCTR	Factory	工厂
INT	Interrupt	中断
ISTR	Instruct	指令
MC	Manual Control	手动控制
MNL	Manual	手动
MT	Movement	运动
NUM	Number	号码
OFST	Offset	回退
OPER	Operate	操作
ORGN	Origin	原点
PARM	Parameter	参数
PGM	Program	程序
PROC	Process	流程
PT	Position	点位
RELA	Relative	相对的
RSTR	Restoration	恢复
RVRS	Reverse	相反的
SER	Serial	序列
SET	Setting	设置
SPD	Speed	速度
STAT	Status	状态
SUCC	Successful	成功
SYS	System	系统