User Manual about "MotorControl_v1.exe" (Pulse motor Control)

Abstract

This program can control pulse motor at each Experimental Hutch (EH). It contains function which read initial file (Inifile), so you can use your setup.   When you turn off this program normally, various values are recorded on Inifile, so, you can use it every time.

About Inifile

- Inifile is divided into every user and managed. Don't change it of other user's.
- You can add the Inifile if you need.
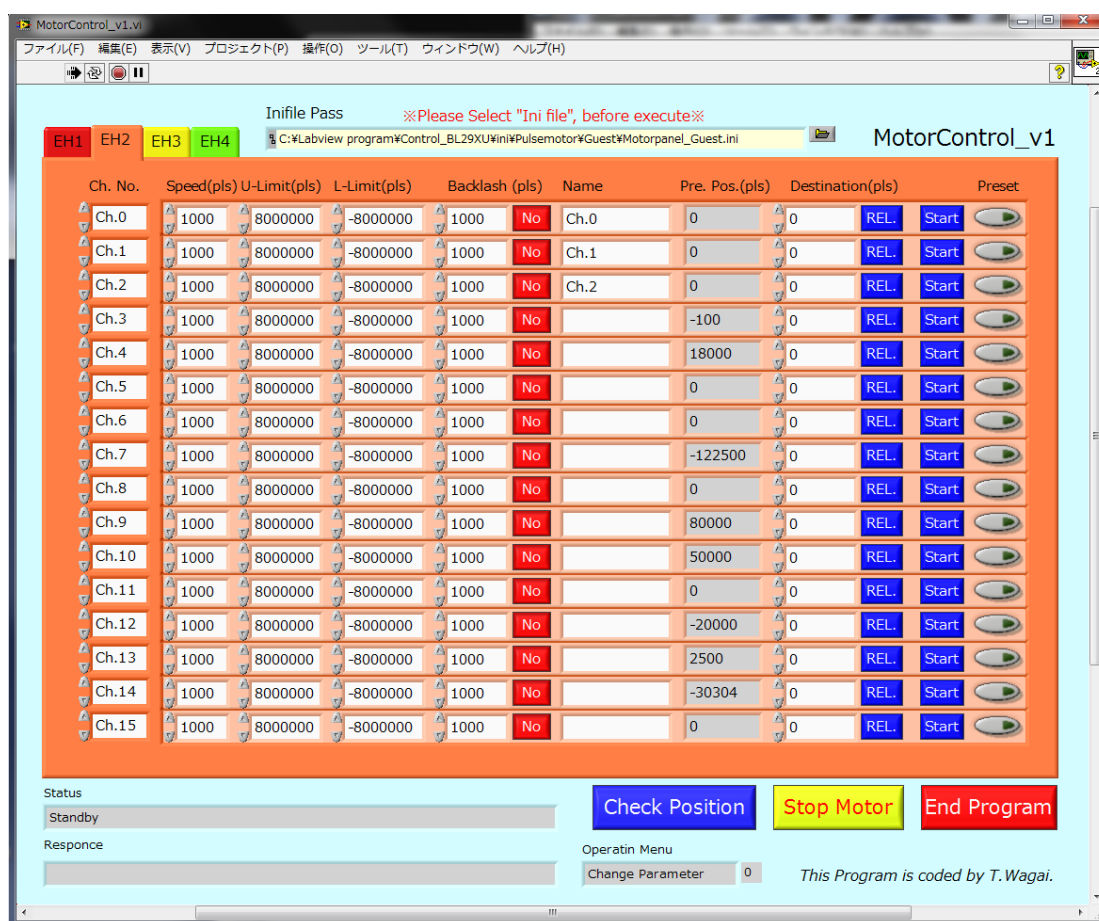- Your folder is not exist, please create new one. (P.2, Chapter1)

Fig.1 MotorControl_v1.exe

Fundamental Information

- Operation panel is divided into four panels.

  You can monitor 16-Channel at the same time.

- You push "Check Status" button, present position which EH of display now is updated.
- If "Stop Motor" is pushed during operation, operation will stop.
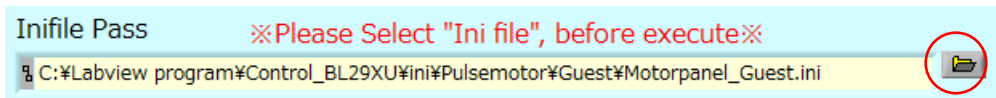
Operation

1. Setup of Inifile

Fig.2 File Pass of Inifile

- Operation

You should select the Inifile before run program.　You push ○button, you will select the Inifile. Default directory is as following.

　　　　　/ C:¥Labview program¥Control_BL29XU¥ini¥Pulsemotor /

Default Directory is some user's folder. The Inifile exists in these folders. If your folder isn't exist, please copy "Guest" folder, and regive the name of folder.

2. Run Program

You push "⇐" button, this program is run. After that, it reads various values from Inifile, and update present position of all motor. If displayed on "Status" as "Standby", you can operate it.

If can't find Inifile, Error is displayed. In this case, you should turn off this program, and select Inifile, and restart.

- If displayed as "Error 56"

This case is that can't communicate to MADOCA. So, you should restart X-terminal.

http://beamline.harima.riken.jp/bl29xu/TroubleShooting/BLWShungup_eng.html

3. Operation of Control Panel

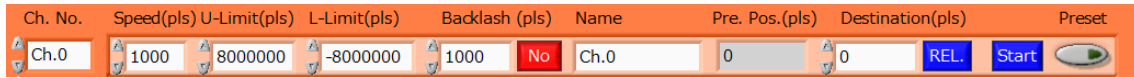| Ch. No.	Speed(pls)	U-Limit(pls)	L-Limit(pls)	Backlash (pls)		Name	Pre. Pos.(pls)	Destination(pls)			Preset
Ch.0	1000	8000000	-8000000	1000	No	Ch.0	0	0	REL.	Start	

Fig.3 Control Panel

There is existed 16-Control panel as Fig.3 each in the operation panel of EH.

Various values of each control panel are changed according to selected "Ch. No.".

Setting Parameter

- Ch. No. ------ Select Motor No.
- Speed (pls) ------ The speed of drive (pulse / sec)
- U-Limit (pls) ------ Upper limit pulse
- L-Limit (pls) ------ Lower limit pulse
- Backlash (pls) ------ Backlash pulse (from 0 to 5000)
  Next to switch ------ [ON / OFF] control of Backlash
- Name ------ Please input favorite name.
- Pre. Pos. (pls) ------ Display Present position
- Destination (pls) ------ The amount of drive
  Next to switch ------ Change of drive mode (Relative or Absolute)
- Start ------ Start button to drive
- Preset・・・Present position is changed into value of Destination.

3-1 Change of various values

If you change a value, this program recorded it temporary. And you can change operation panel freely. When turn off this program, using "stop button", the changed value into Inifile is saved.

3-2 Drive motor

You push "Start" button, you can drive a motor which you select "Ch. No.".

It is a case Backlash button is "Yes" and drive to CCW that Backlash becomes effective.

4. Turn off this program

You push "End Program" button, this program turn off. And, various values are saved to Inifile.