

# Instruction Manual

SOFTWARE0200

Rev. 0201

## Flip & Rotation Step Motor Driver Programming For FTC 610 & 620



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## Programming of FTC-610/620

The Lynx Terminal program is a PC compatible, Windows based program that provides the ability to upload and download data between a PC and the FTC 610/620 running version 2.x or later software.

### Set up

The PC and the instrument must be connected with a straight through serial cable. (see Fig. 1)

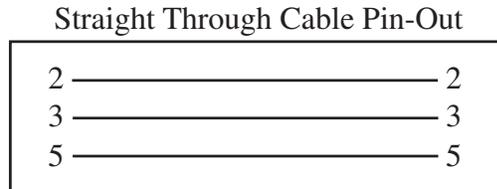


Fig. 1

To install the program on a hard drive, insert the FTC-620 CD into the CD-ROM drive on your computer. Open the folder labeled Lynx Terminal. Inside will be three folders, pick the one best suited to your computers setup. Double-Click on the installer. The installation program will guide you through the rest of the installation.

### Running the program

Before attempting to run the program be sure the serial cable is connected to the appropriate COM port on your computer and that the other end is connected to the Step Motor Driver control board inside the unit. (see Fig. 2) During this operation the instrument front panel will not respond and the display will be frozen.

***Note: In order to do this the instrument must be removed from the rack, the top panel (lid) be removed, and the unit turned on. By removing the top panel you are exposed to potentially lethal voltages. This should only be done by an experienced technician.***

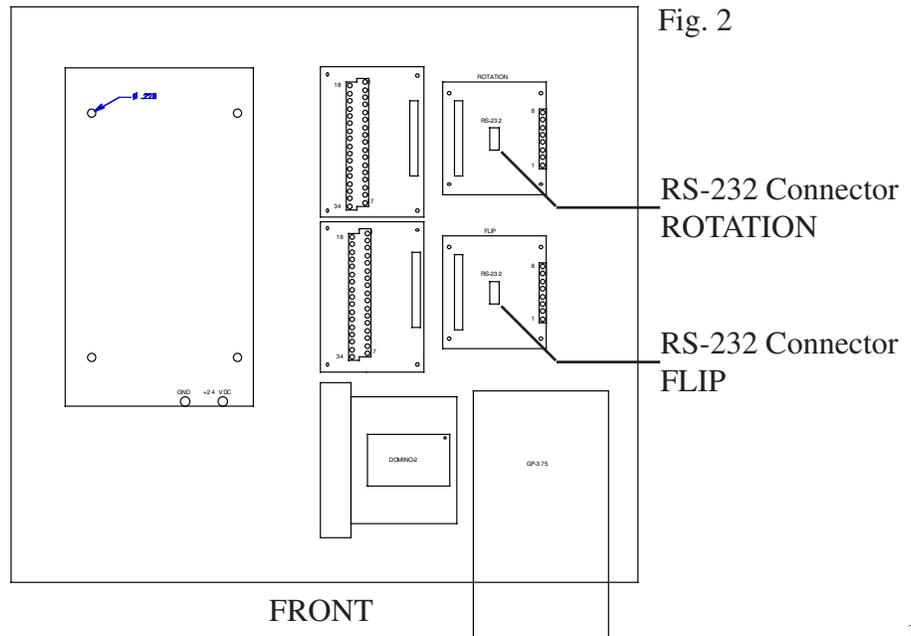


Fig. 2

To start the program go to START, PROGRAMS, IMS Lynx Terminal, and select IMS Lynx Terminal. You should get a screen similar to Fig. 3.

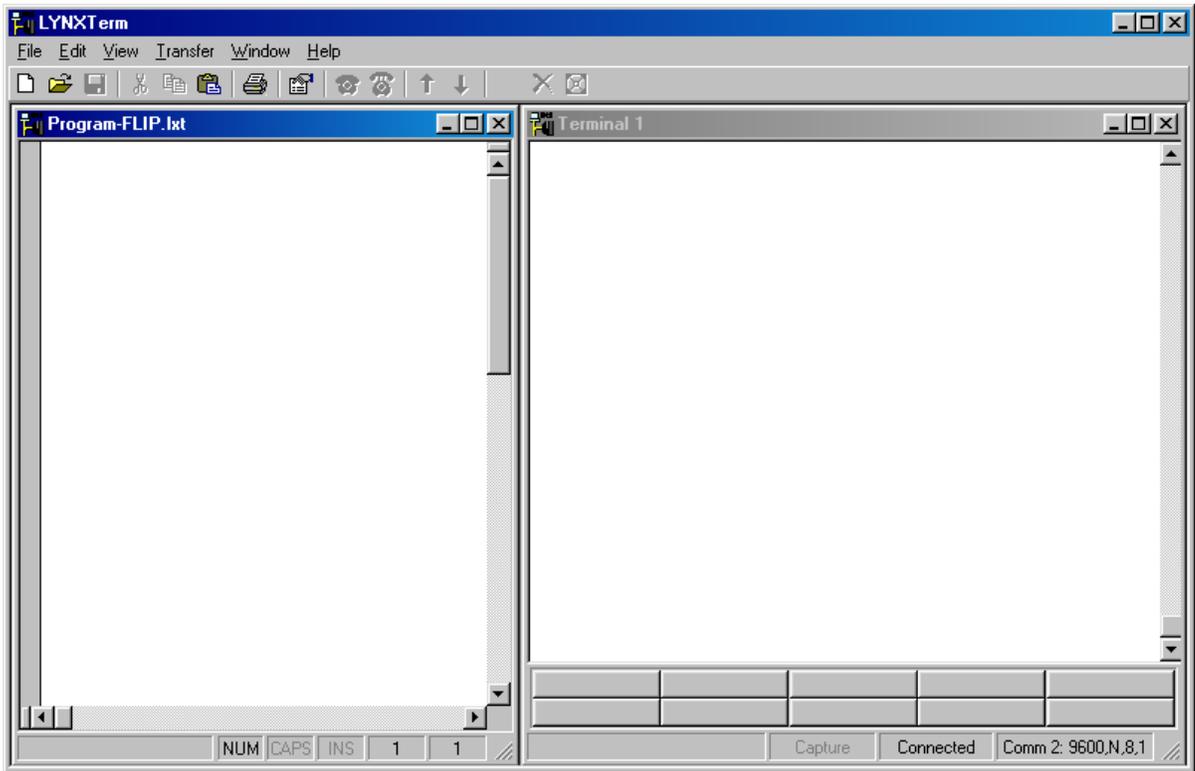


Fig. 3

#### Program Editor Format

The first thing you must do is make the Terminal window active and then go to EDIT in the Menu Bar and go down to PREFERENCES. You will now see a window like the one in Fig. 4. It should default to the Program Editor Format tab. These settings do not need to be changed. (see Fig. 4)

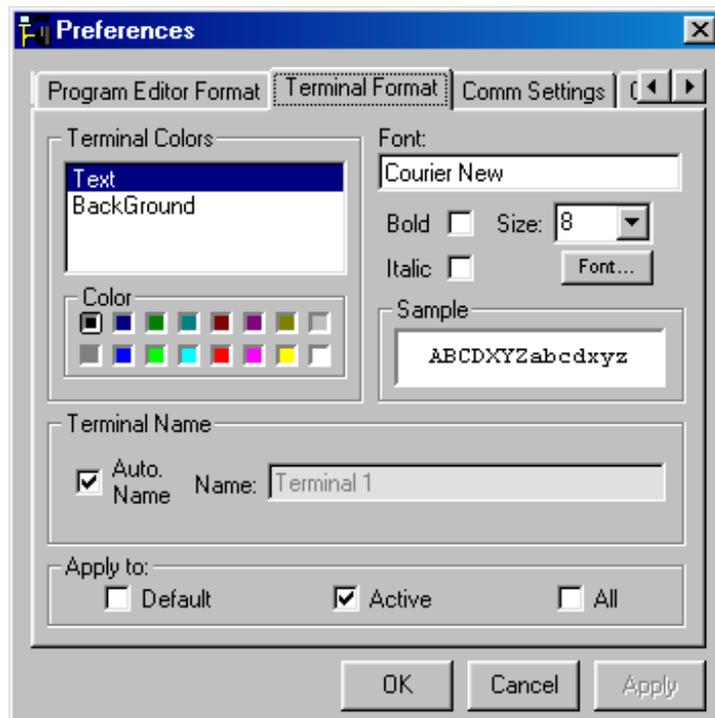


Fig. 4

## Comm Settings

In the Comm Settings window you will need to set the COM port to the one that you have connected the FTC-610/620 to your computer with. Set the Baud Rate to 9600. Character Delay should be 10 msec. Line Delay set to 200 msec. In the section called Device select 483I-1007I-Panther I. Everything else should be left at there default parameters. (see Fig. 5)

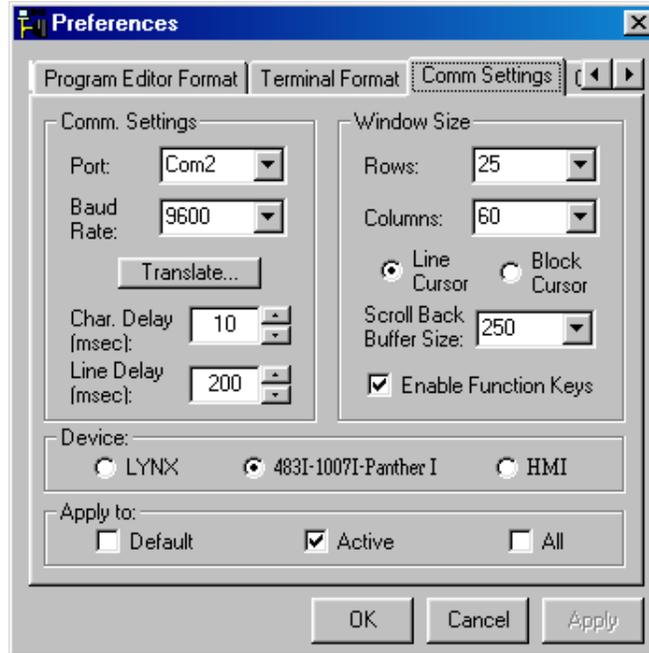


Fig. 5

## General

The General tab settings should be left as is. (see Fig. 6) Then you may click OK.

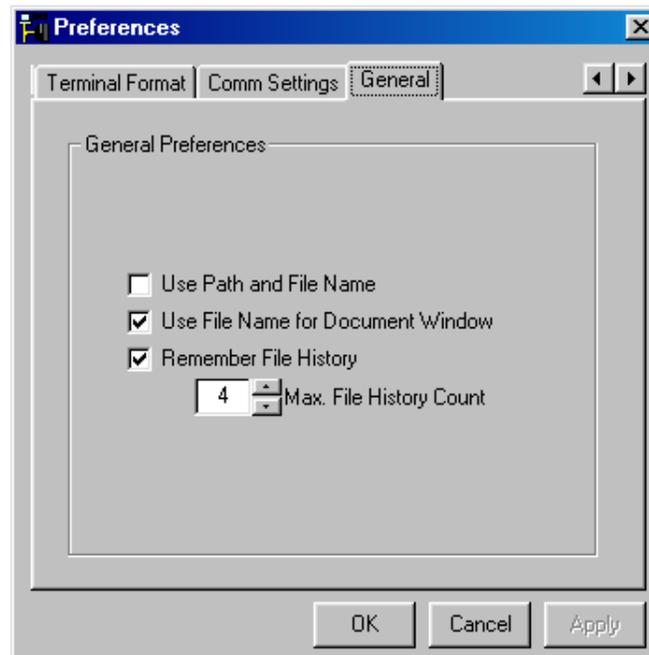


Fig. 6

## Downloading

To load the FLIP code or the ROTATE code we must first load one of the files so that it will show up in the left window. Click once in the left window and then go up and click on VIEW in the menu bar and select New Edit Window. You should get a window like the one in Fig. 7.

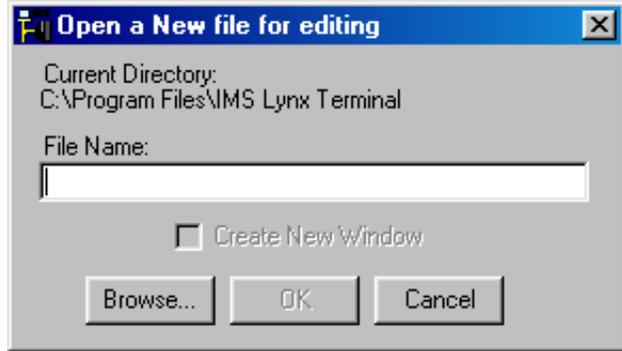


Fig. 7

Click on Browse. A dialog box like Fig. 8 will show up and will default to the IMS Lynx Terminal folder. (You must copy the files Program-FLIP.lxt and Program-ROTATE.lxt to the IMS Lynx Terminal folder on your Hard Drive, they are on the CD)

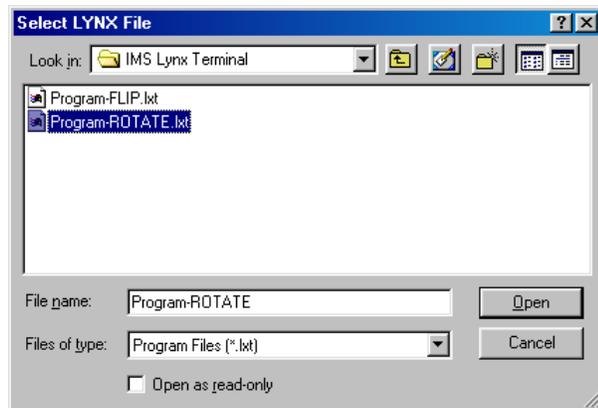
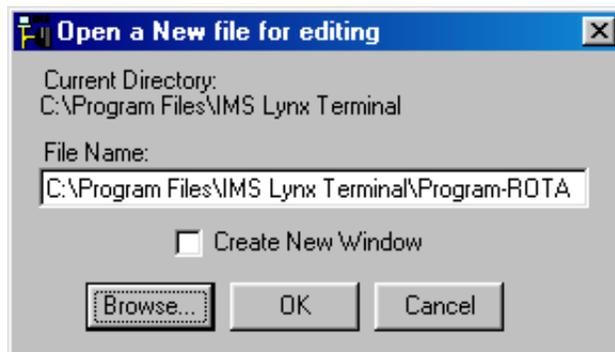


Fig. 8

Select one of the files and click Open.



Now select OK.

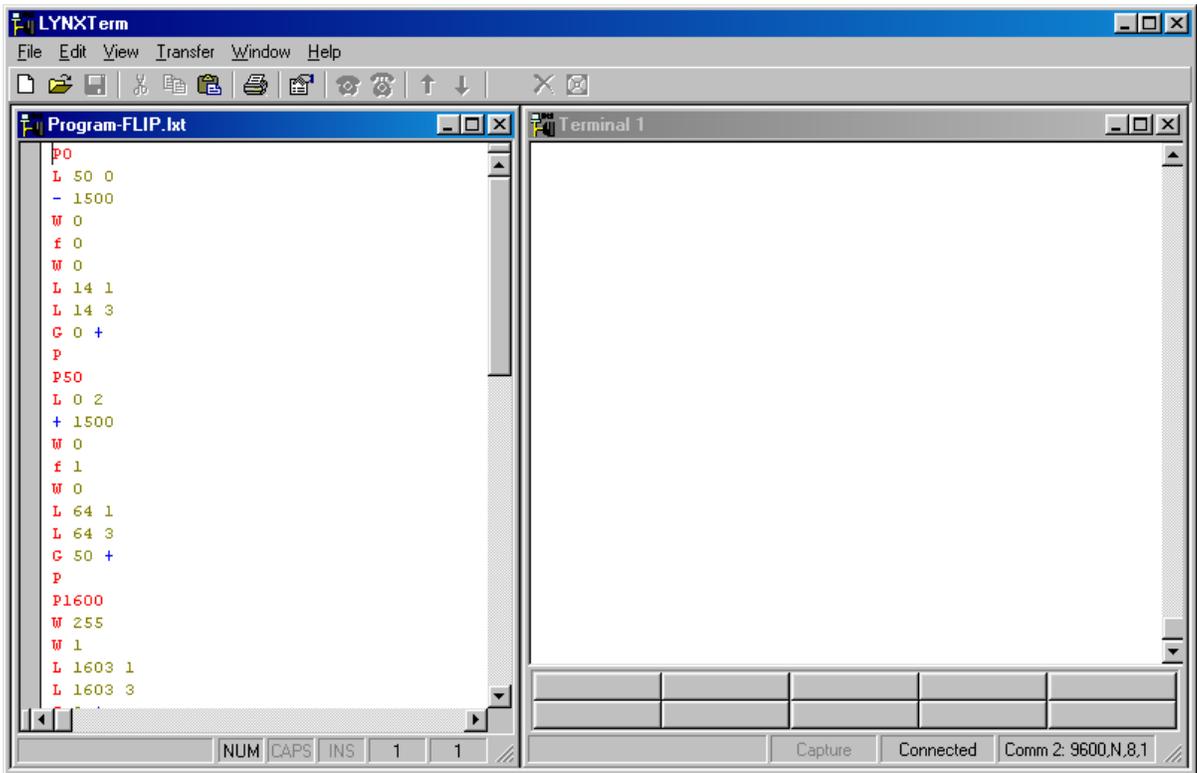


Fig. 9

Now you should see your program in the left window. (See Fig. 9) Make sure that the FTC is ON. Click once in the right window, the Terminal window. Now click on the fist telephone icon above to connect to the FTC.

To test that you are connected press the ESC key once. You should see a pound sign (#) in the Terminal widow. If so then press the Space Bar. Now you should read something like the following.

```
1342 4038 ADVANCED MICRO SYSTEMS, INC
MAX-2000 v1.15i
```

The unit is now ready to accept commands. Now go up to Transfer in the menu bar and select Download. In the dialog box, select Edit Window as seen in Fig. 10 and then click Download. The terminal window should show the program written out on the screen as it is sent to the FTC Unit. Your Done. Repeat to program other control board.

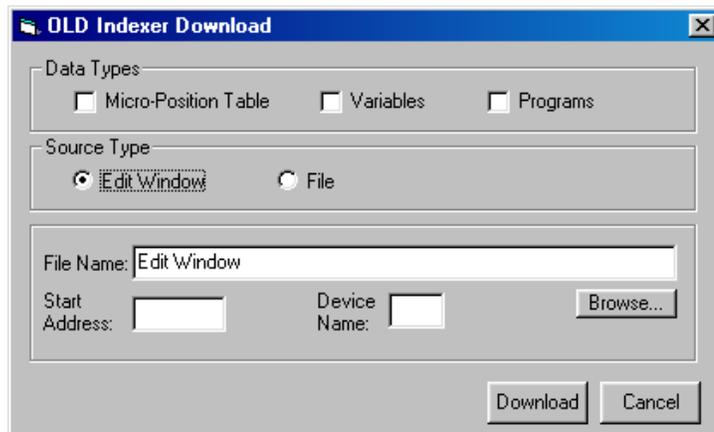


Fig. 10