

TB105 (Rev1) - Quick Start KOYO Tutorial

The required software for connecting to the KOYO PLC system can be purchased through www.automationdirect.com. Refer to the table below for part numbers.

Part No.	Description	Notes
D2-DSCBL	12 ft. programming cable	COM port to RJ12
PC-PGM-105-16	Programming software for DL05/DL105	For T15/T400 lathes (F1-130DR)
PC-PGM-205-16	Programming software for DL205	For M400 ATCs (six-slot DL205 base systems)

Listed below are the steps required to download and configure a KOYO PLC for M400 ATC operation.

1. Install the **DirectSoft** software, preferably on a laptop computer.
2. Connect the D2-DSCBL cable between a COM port and the port on the KOYO CPU module. For the DL205 systems, place the CPU mode switch to the TERMINAL position.
3. Start the **DirectSoft** software program.
4. Open the project for the particular program that is being downloaded. Although there are several files for each project, the necessary program will have a .prj filename extension. If the project was last saved with a valid communications link enabled and connected to the PLC, the program will load and a comparison between the program in the KOYO PLC and the one being loaded is made. Unless you are going to change the program, choose "Use PLC" to prevent an accidental overwrite of the current program. If this is a brand new CPU module you will want to select "Use Disk" to load the selected PLC program to the module.
5. If there are no communications with the PLC, choose PLC/Connect.. from the main menu. Now you must establish a "link" for the communications, which is generally a one-time setup procedure. Choosing the Select link.. dialog box will list all the links that are available. If a link is enabled, the Link Enabled check box will be checked and you can try it. Otherwise, click on the Add.. button and follow the wizard prompts, choosing the COM port you are connected to, ** Not sure ** for the PLC family, and K Sequence, Address 1 for the protocol. If all is well, the link will be established and then the project may be saved to retain this information.

If this is a brand new CPU module using a DL205 system, the Secondary Com Port must also be set to establish communications with the OPTIC232. **Forgetting to configure the secondary port is the number one cause of failing to establish communications between the Centroid CNC7 software and the KOYO PLC!**

1. Choose PLC/Setup/Setup Sec. COM Port. Configure for Secondary Address 1, parity NONE, protocol HEX, baud 9600.
2. Press **SHIFT+F9** to send the program to the KOYO PLC. If the CPU is in RUN mode, there will be a prompt informing you that you will be changing a program while one is running. Just choose YES. If the CPU is in Program mode, there will be no prompt. In this case, press **CTRL+SHIFT+R** to bring up a dialog box to change the mode to Run.

* Choose Tools/Compare Programs..

* Check the Another Program radio button, and Browse to find the ATC3 equivalent program.

Listed below is the output from such a comparison, with the loaded program being ATC6-20 and the other ATC3-20. A similar comparison could be made between ATC6-16 and ATC3-16. If the output does not appear

as below, do not send the ATC6 program to the KOYO because it will probably not work correctly.

ATC6-20	ATC3-20
Program Length: 414	Program Length: 408
128 STR C74	
129 OUT Y25	
130 STR C75	
131 OUT Y26	
326 RST C36	
375 SET C36	370 OUT C36
376 STRN C104	371 STRN C104
377 RST S30	372 RST S30
378 RST C36	

Close
Help
Copy To Output

Program sizes different!

Document History

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