

TB030 (Rev2) - RS232 / Connecting PC to Centroid Control

Purpose:

This document describes how to set up your Centroid control to be able to send files from a PC via the RS-232(Serial) port. This does not drip-feed the program line by line. This will send the entire program from the offline PC to the Centroid control.

Requirements:

- PC that will be connected to Centroid control for program transfer
- Null modem RS232 cable

CNC7(DOS):

Overview:

The DOS-based programs *Interlink.exe* and *Intersvr.exe* (**Note: Interlink and Intersvr only work with Windows 95,98 and ME**) enable the transfer of files from one computer to another by using a NULL MODEM RS232 CABLE that connects the serial port of the control to a second computer (PC) serial port. In order to establish a connection, you must first designate the PC as the "server". The control is already configured as the "client" upon boot-up. While the PC (server) is running *Intersvr.exe*, no other functions will be able to be performed until the connection is terminated by pressing Alt+F4 on the PC. Once the connections are established between the PC and the control, the PC (server) will display information about the redirected drives and printer ports that the control (client) has access to.

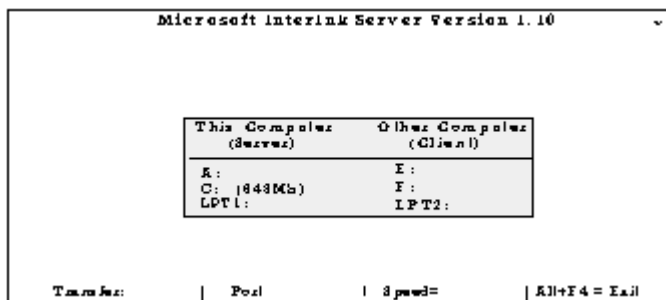
Step 1:

At the root directory (C:> prompt) of the PC, type the following: C:> **cd\dos** C:>DOS> **intersvr**

Note: If "file not found" error occurs, you will need to copy the intersvr program from the Centroid Control to a 3 1/2" floppy as described below and from the floppy to your computer. For Windows 95 users, this program can be placed on the desktop.

- 1. From the main screen of the control; Press CTRL+ALT+X to exit CNC7.
- 2. Type the following: **copy c:\dos\intersvr.exe a:\intersvr.exe** and press ENTER.
- 3. You can run the program from the floppy disk or copy it to the hard drive.

*Your PC



Step 2:

From the main screen on the Centroid control, press **F2(Load)->F3(Remote)**. You are now reading from the hard drive on your PC server and are able to load the files created on the offline PC. The PC will display the redirected drive information as shown here. Terminate the connection by pressing **Alt+F4** at your PC.

Use the chart below to make your own RS232 Null Modem Cable.

<u>9 pin</u>	<u>25 pin</u>	<u>25 pin</u>	<u>9 pin</u>	
2	3	2	3	RX - TX
3	2	3	2	TX - RX
4	20	6	6	DTR - DSR
5	7	7	5	GND - GND
6	6	20	4	DSR - DTR
7	4	5	8	RTS - CTS
8	5	4	7	CTS - RTS

The path that the control uses is E:\cnc7\ncfiles by default. You can change the path that the control uses in the Control Configuration menu, which you can get to by pressing **F1(Setup)->F3(Config)->default** password is 137-> **F1(Cntrl)** from the main screen.

Another option for CNC7 systems running version 8.23 and below is to purchase CNC7DNC software. Please contact Centroid Tech Support for the software.

CNC10(Linux):

Overview

Linux-based controls running software version 1.20 and above have serial file transfer built into the **F2(Load)** menu. Setting the serial communication COM Port parameter, 180, will enable and display either **F6(Dnload)** and **F7(Upload)** buttons or **[Dnload]** and **[Upload]** directories in the Load Menu. If you do not see the **F6(Dnload)** and **F7(Upload)** buttons, set parameter 4 to 5. To get the Parameters menu from the main screen press **F1(Setup)->F3(Config)->default** password is 137-> **F3(Params)**. A more detailed description of the parameters listed in the table below can be found in your operator's manual.

Parameter	Description	Default Value
4	File Options	5
180	File transfer COM Port	0
181	File transfer baud rate*	19.2
182	File transfer data, stop and parity bits*: 1's digit = stop bit; - 1 or 2 stop bits 10's digit = parity ; 0 none, 1 even 2 odd 100's digit = data bits; 5-8 bits accepted	801
183	File transfer flow control*: 0 = no flow control 1 = software flow control (XON/XOFF) 2= Hardware flow control (CTS/RTS)	0
184	File transfer time out (6-600sec)	10sec
185	File Transfer option Bit 0: Ignore CR on download 1- yes, 0- no Bit 1: Translate NL to CR on upload 2- yes , 0-no	0

***WARNING:** Parameters 181 -183 must match the COM port settings for the software being used on the offline computer.

Loading a file from the offline PC to the Centroid control:

1. Press **F2(Load)**->**F6(Dnload)** or select **[Dnload]** and press ENTER.
2. Start the file transfer from the offline PC. You have the time given in parameter 184 to start the file transfer.

Loading a file from the Centroid control to the offline PC:

1. Start the serial communications software on the offline PC.
2. Press **F2(Load)**->**F7(Upload)** or select **[Upload]** and press ENTER.

NOTE: If using Fanuc based programs, remove the "O" from the start of the file name or it won't work with the Centroid control.

Document History

Rev2 Created on 2014-04-10 by #270

Rev1 Created on 1999-08-24 by #000