

Making the physical connections:

Serial: A standard USB Serial adapter can be used on PCs without physical serial ports CTC 2881 modular-jack cable (\$19) and 2880B 9-Pin adapter (\$44).



OR you can make your own:

Wiring Diagram:

Pin Mappings for COM port (on controller)	Pin Mappings for DB-9 Connector (on cable to Computer)	
1 .		
2. TxD Outbound (Comm0) goes to:	Pin 2: (RxD) Inbound	
3. Common goes to:	Pin 5: (Signal Ground)	
4. Common		
5. RxD Inbound (Comm0) goes to:	Pin 3: (TxD) Outbound	
6.		

Copyright © 2018 Control Technology Corp. All Rights Reserved.

Ethernet:

Ethernet crossover cable is recommended. Or you can use a standard Ethernet cable if an Ethernet Switch or Hub is used. 5300 controllers can accept either type of Ethernet cable.

Software Tool:

Download and install CTCMonitor V3.6 from CTC's website. Yes, it runs under Windows 7, 10 and 11 32-bit and 64-bit platforms

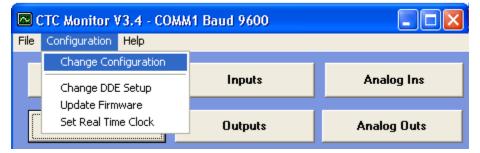
http://support.ctc-control.com/customer/downloads/ctcmon/CTCMON36-Install.zip

Connecting to your CTC controller via serial port:

Connect your CTC2880B and 2881 to your PC, note the port number. If a USB adapter is used you will need to determine the port number it was assigned to by Windows. Go to Control Panel and view *Device Manager*. You should see the port assignment similar to below:



Pull down the *Configuration* menu and select *Change Configuration*



📧 Communication Setu		
Communication Port:	COMM 3 View Host Node:	32001
Baud Rate Selected:	COMM 3 A Target Node:	69
IP Host: 172.16.2.241	COMM 5 Timeout (ms): COMM 6	500
<u>+ Change Controller Ne</u>	COMM 7 <u>lick to Open</u> COMM 8	
Number of Flags: Number of Inputs: Number of Outputs:	COMM 9 COMM 10 TU4 Number of Prototype:	0

Select the PC's port connected to the CTC 2880B / 2881 and press Exit.

You should then see a successful connection to your CTC Controller.

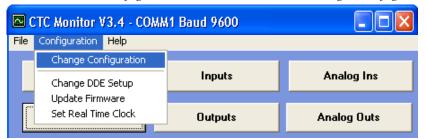


Connecting to your CTC controller via Ethernet:

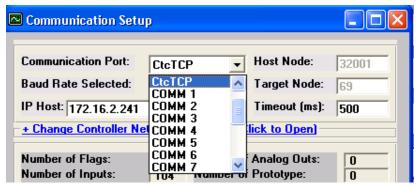
Connect your Ethernet cable to your PC. Verify your PC is on the same address network as your CTC controller. Typically, pinging the controller is the best way to validate this.

Command Prompt
:\Users\tom.CTC>ping 172.16.2.241
Pinging 172.16.2.241 with 32 bytes of data: Reply from 172.16.2.241: bytes=32 time<1ms TTL=128 Reply from 172.16.2.241: bytes=32 time<1ms TTL=128 Reply from 172.16.2.241: bytes=32 time<1ms TTL=128 Reply from 172.16.2.241: bytes=32 time<1ms TTL=128
Ping statistics for 172.16.2.241: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 0ms, Maximum = 0ms, Average = 0ms

Pull down the Configuration menu and select Change Configuration



Select CtcTCP and enter the Controller's IP address into the IP Host field. Then press Exit.



You should then see a successful connection to your CTC Controller.

Upper NVHegisters	nesei		
Suspend Monitoring			
Connected to TCP/IP 172.16.2.2	241		

Uploading your Quickstep program and register file:

To upload programs from 2000 and 5100/5200 series Controllers (and 5300 controllers programmed in Quickstep) pull down the *File* menu and select *Program Transfer* (*Quickstep Based*)

File Configuration Help			
Open Symbol File			
Open Register File	nputs	Analog Ins	
Upload Register File			
Download Register File	utputs	Analog Outs	
Program Transfer (Quickstep Based)			
Exit			
Comos	ustom 1	Custom 2	

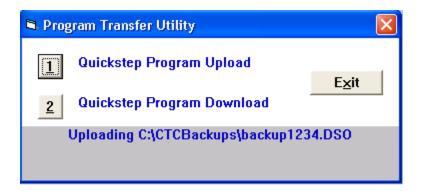
Select *Quickstep Program Upload* and enter a name for the program.

	🛱 Program Tra	nsfer Utility		
		tep Program Upload tep Program Download	E <u>x</u> it	
Enter Quickste	ep Object File			? 🔀
Save in:	CTCBackups	_	+ 🗈 💣 🎟+	
My Recent Documents Desktop My Documents My Computer				
My Network	File name:	backup1234.DSO	•	Save
Places	Save as type:	DSP Binaries (*.DSO)	•	Cancel

When prompted to Upload Controller Register Values, click Yes.

🛱 Progra	m Transfer Utility			×
1 Quickstep Program Upload				
E <u>x</u> it				
2 Quickstep Program Download				
	CTCMon			
	Upload Controller Register Values?			
	Yes No			

You will see the following message during the upload process.



Once complete you will see the following message.

	Program Transfer Utility	×	
	1 Quickstep Program Upload		
	2 Quickstep Program Download		
L	2 Quickstep Program Download		
Ц	Program uploaded to C:\CTCBackups\backup1234.DSO		
	ОК		

Your program is the .DSO file. It is a compiled program and cannot be viewed within Quickstep until it is uncompiled and.DSP, .FIG, .SYM and .TAB files are created using the 'Ctcutils' utility. The register data from your controller is in the .TXT file, which is an ASCII file that can be read within a text editor, like Notepad.