

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

<u>Important Note:</u> If you have replaced the RAM battery on 5100, 5200 and 5300 controllers you <u>MUST</u> reenter the controller's IP Address before redownloading your program and NV registers unless DHCP is being used. This can be performed within CTCMonitor's Communications Setup menu shown below.

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:

Ports (COM & LPT)
Keyspan USB Serial Port (COM3)

Pull down the Configuration menu and select Change Configuration

CTC Monitor V3.4 - COMM1 Baud 9600			
File	Configuration Help		
	Change Configuration		
	Change DDE Setup	Inputs	Analog Ins
	Update Firmware		
	Set Real Time Clock	Outputs	Analog Outs

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

Communication Setu	P		
Communication Port:	СОММ 3		32001
Baud Rate Selected:	COMM 3 COMM 4	Target Node:	69
IP Host: 172.16.2.241	COMM 5 Comm 6	Timeout (ms):	500
<u>+ Change Controller Ne</u>	COMM 7 COMM 8	lick to Open)	
Number of Flags: Number of Inputs:	COMM 9 COMM 10	Analog Outs:	0





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	

🖾 CTC Monitor V3.4 - COMM1 Baud 9600			
File	Configuration Help		
	Change Configuration		
	Change DDE Setup	Inputs	Analog Ins
	Update Firmware		
	Set Real Time Clock	Outputs	Analog Outs

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.

🖾 Communication Setu	p		
Communication Port:	CtcTCP 💌	Host Node:	32001
Baud Rate Selected:	CtcTCP	Target Node:	69
IP Host: 172.16.2.241	COMM 2	Timeout (ms):	500
<u>+ Change Controller Net</u>	COMM 4 COMM 5	ick to Open) —	
Number of Flags: Number of Inputs:	COMM 6 COMM 7	Analog Outs: Prototype:	0

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



Downloading 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	Custom 1	Custom 2

Select Quickstep Program Download and locate the program's .DSO file.

🛱 Program Tra	ansfer Utility		×		
1 Quicks	step Program U step Program D	pload ownload	E <u>x</u> it	Ins)uts	
Select Quickste	ep Object File				? 🔀
Look in:	CTCBackups		-	+ 🗈 💣 🎟	
My Recent Documents Desktop My Documents My Computer	backup1234.DS	50			
My Network Places	File name:	backup1234.DSC)	•	Open
T Idees	Files of type:	DSP Binaries (*.D	SO)	•	Cancel

If there is a register file .TXT file under the program name you will be prompted to download the NV register, click Yes.



You will see the following message showing registers downloading.

🛱 Program Tr	ansfer Utility	×
Downloadi	ing Registers 501 to 1000	
	19%	
		r

Then you will see the following message during the download process.



Once complete you will see the following message.

CTCMon	N 1997
į)	C:\CTCBackups\backup1234.D50 downloaded. bytes : 23736 errors : 0