i-Logic Software Data Sheet

Okuma DNC-DT Set-up and Operation for OSP-U100M

Feature:

The machine has either a 100MB or 500MB hard drive. You can load a large program megabytes in size to the machine from the PC and run it.

Initial Setup

We will be connecting the machine to one laptop PC, Windows 10. Install the Filezilla FTP server on the laptop.

Hardware:

On the side of the machine there is a 9-pin plug labeled "TCP/IP"

This requires a "10BASE-T to AUI Transceiver" like this:

This plugs into the 9-pin connector on the machine. This is a common product sold in many brands. Mainly it is going to convert the 9-pin AUP connection to a regular RJ-45 connection. Then you can use a regular network cable from there to the PC. You can leave it on there permanently if you want. There is a sliding metal clip on the port on the machine that holds it on.

Setting the parameters at the machine.

1. Press the Parameters button

2. Enter PEDT on the command line > Write. This brings you to the parameters pages for the DNC-DT.

3. How to change the parameter: Use the up-down arrow keys and page keys to navigate. Press the "SET" softkey and then the text you want to change the parameter to. Then press >Write to accept it. As you arrow up and down the screen displays a hint about what the parameter is for.

(this is the IP Address of the machine)
My-IP Address = 169.254.166.250
Netmask = 255.255.255.0
Broadcast = 0.0.0.0
Gateway = 0.0.0.0

(this is the IP address of the laptop)
Remote Host = 169.254.166.249

(this is the computer name of the laptop. You can find this in the laptop Windows system info)
Host-Name =
Username = anonymous
(we dont care about password because we are going to set the FTP server to work without a password)
Password =
HOST-OS = UNIX

When you made all the changes, press the "SAVE" softkey. If you dont do this you lose all your changes when you leave.
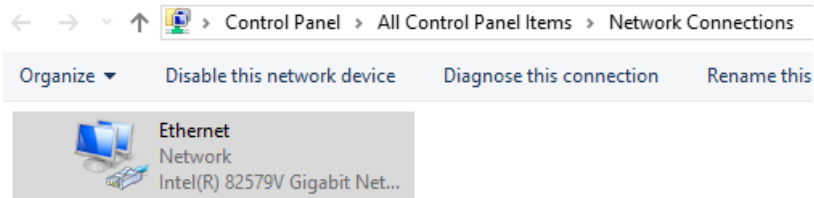
The Laptop:

Use standard network cable from the 10BASE-T to AUI Transceiver to the network connection on the laptop. If you dont have a network plug on the laptop, get one of those USB to Ethernet converters.
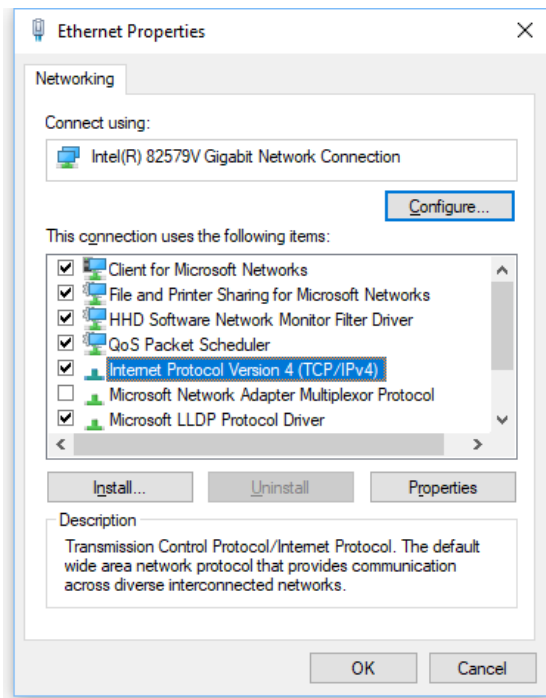
Turn off any Wi-Fi Ethernet. You can't use both at the same time.
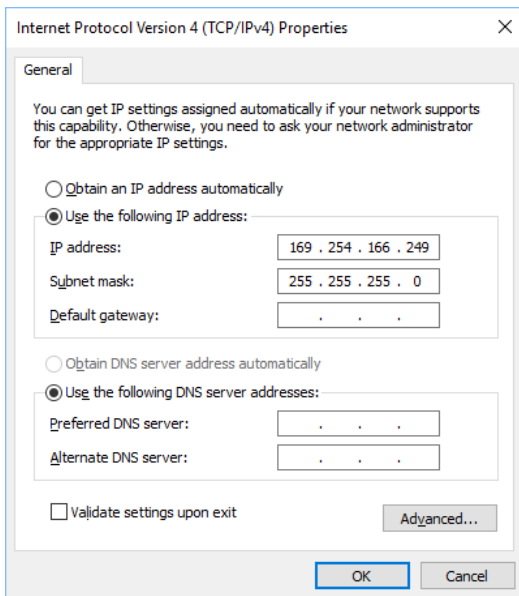
Set the IP address of the laptop.

Find the Settings-Network-Ethernet page.

Right click on this and go to Properties.

Highlight Internet Protocol Version 4 (TCP/IPv4) and press Properties.

All you need is IP Address and Subnet mask. >OK.

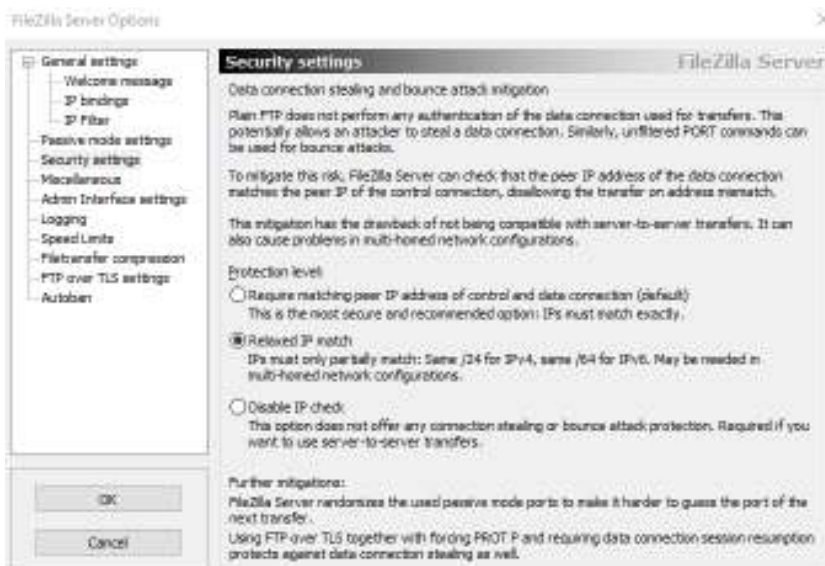After this, with the cables connected you should be able to Ping the machine from the laptop.
(You can check whether your AUI Transceiver needs a "crossover" cable or a regular patch cable. Mine was automatic adjusting so it didn't matter what kind of cable I used)

Install Filezilla FTP server (not the client) available for free download at the Filezilla website.

Settings in Filezilla FTP Server:

After installed, start the Filezilla Server Interface. Main Menu - Edit - Settings.
On Security Settings page, check Relaxed IP match.

Go to Main Menu - Edit - Users

Make a new user. The user name has to be the same as what we put in the DNC-DT parameters username. Uncheck Password so we won't be bothered with needing one.

On the Shared Folders page Add a "Home" folder that is on the laptop where all our programs are. There can be subfolders in this folder. It doesn't matter what folder it is, but all the programs we need have to be in here to show up on the Okuma directory display.

Warning:
The Okuma directory wont recognize just any kind of filename or directory name. You can't have spaces in the names. Lots of odd characters wont display. Best to keep you folder and filenames short and simple.

Firewall

You need to make an allowance in the Windows firewall for FTP traffic. If it doesnt atumatically create a firewall exception when Filezilla first starts up, Type Firewall into the Windows search bar and open the Widows Firewall app. Go to Advanced setting. Make new **Inbound** rule and new **outbound** rule.

Rule type - Port
All local ports (or port 21 for FTP)
Allow the connection
for Domain, Private, Public

At the machine:

In order to communicate with the laptop and put programs on the hard drive, you have to have the "Communication" switch on the side of the machine turned on.

In Auto mode, press Program Select softkey. press TC: softkey. Will display home directory of laptop.

Big programs:

In order to use the hard drive like a big buffer for your large programs, you have to have the "Buffer" switch on the side of the machine turned on.

For a program larger than local machine memory, when the "Buffer" switch is turned on, the program loads on to the hard drive and apparently erases every other file on the hard drive when it does that. So DNC-DT is really ment to only have one file on the hard drive at once.

DNC-T

The other possible mode you can use is the DNC-T mode. This is just like a place to store your many programs on the hard drive and be able to call them up when you want to load them into normal local MD1: memory. It is not for large programs. It doesn't run the program from the hard drive, it just transfers the program from the hard drive to the local memory.

You get there by going into Edit mode and [Extend] softkey a couple times, and you see the DNC-T softkey. You can get directories of MD1: and TC: and transfer between them. This is the only place you can see the contents of the hard drive. Use the DI HD0: command.