

[FTP SERVER SOFTWARE FOR ETHERNET CONNECTION ON FANUC 16i, 18i, F31i1](#)
[FANUC 16i & 18i Basic NC Ethernet Settings.....4](#)
[FANUC 16i & 18i EMBEDDED ETHERNET SETTING.....6](#)
[FANUC 31i Embedded Ethernet Settings.....11](#)
[FANUC 16i,18i DATA SERVER ETHERNET SETTING.....18](#)

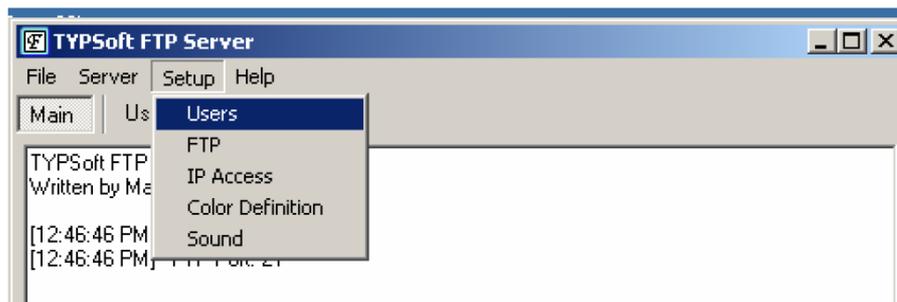
FTP SERVER SOFTWARE FOR ETHERNET CONNECTION ON FANUC 16i, 18i, F31i

- Copy the entire “FTP SERVER TYPESOFT” folder to your PC. You do NOT have to install any software on your PC since this software will run from the folder you copy it into.
- To start the software click on the blue FTPSERV file in the folder you copied to your PC. (After the initial setup you can have the software automatically launch on Windows startup if you choose)

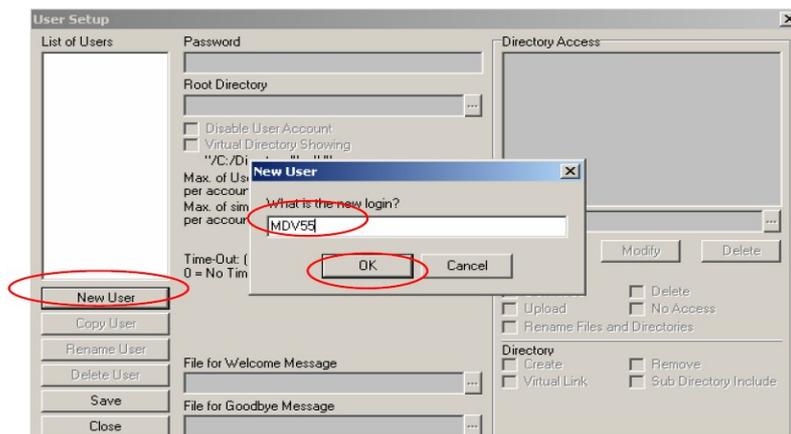


ftpserv.exe

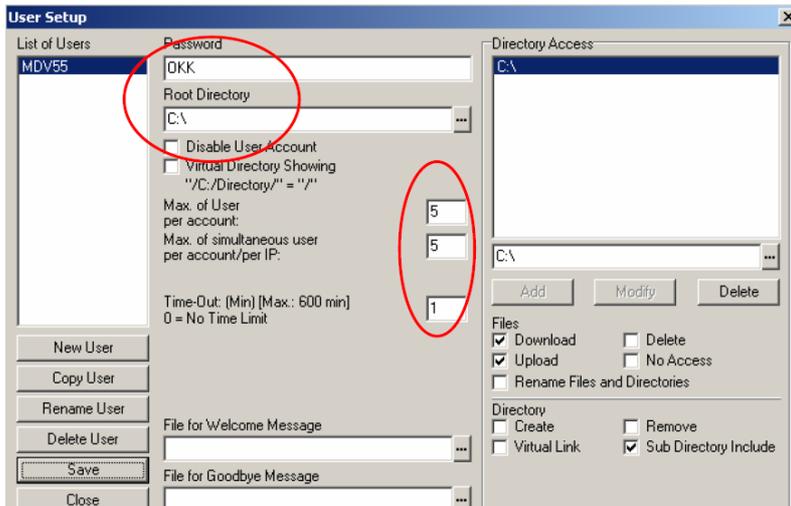
- Once the software has started select SETUP ⇒ USERS from the pull down menu as shown below.



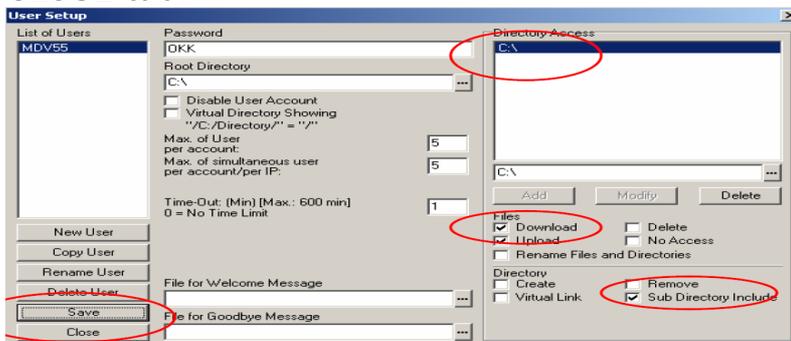
- Click on the NEW USER tab then type in user name (e.g. MDV55) and click OK



Make sure the new user name is selected in the List Of Users then type in the password (e.g. OKK), Set the Root directory (eg. C:\) and set all other items circled below.



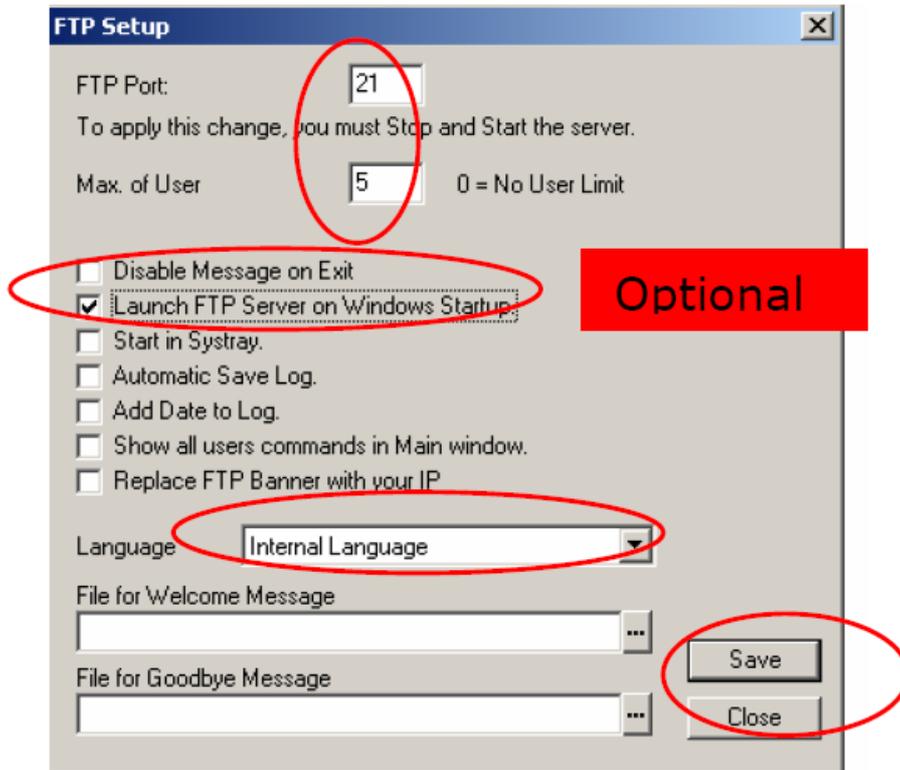
Next click on the Directory Access value (e.g. C:\) so it is highlighted then set all circled items listed below. When you are finished click on SAVE then CLOSE tab.



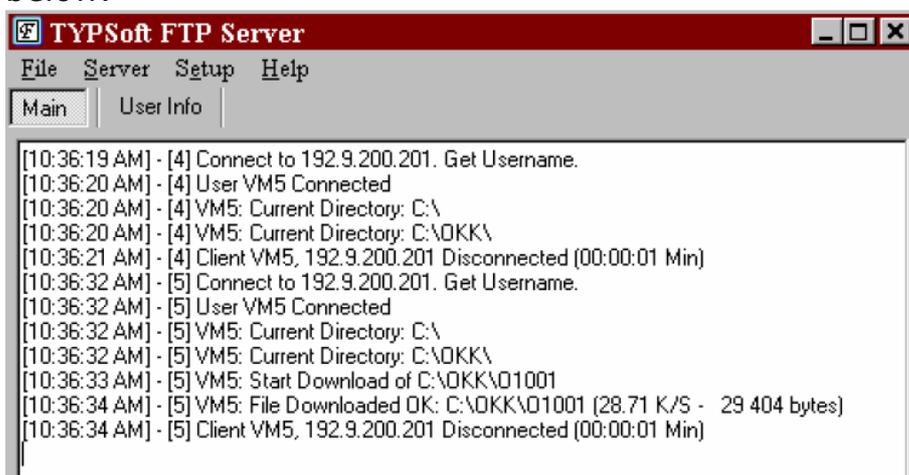
Select SETUP ⇨ FTP from the pull down menu as shown below.



Set the circled items as listed below then click SAVE and CLOSE tab.

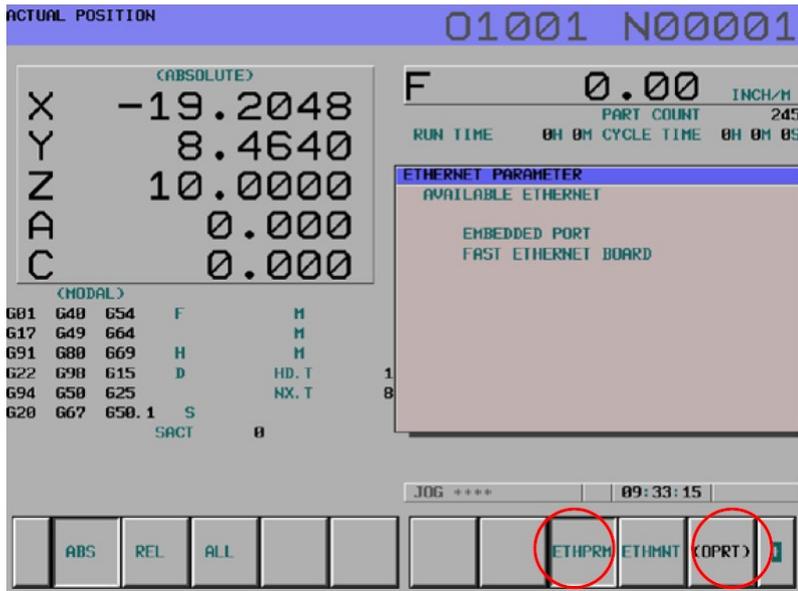


When you want to use the software for file transfer all you have to do is launch the program by clicking on the blue FTPSERV file or have the software automatically launch at Windows startup. When the NC tries to communicate with the PC you will see the communication log as shown below.

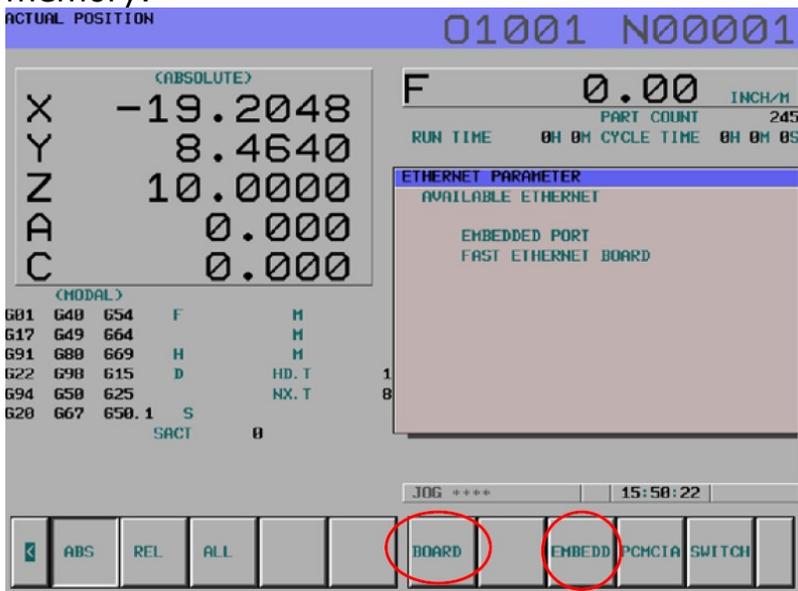


FANUC 16i & 18i Basic NC Ethernet Settings

Press the SYSTEM hard key then the ► soft key until you see ETHPRM soft key. Press the ETHPRM soft key then (OPRT) soft key.



Next you will have to press the (OPRT) soft key then select either EMBEDDED or BOARD soft key. Embedded Ethernet is for connecting to the NC memory and Board is for connecting to the OPTIONAL Data Server memory.



Select 1

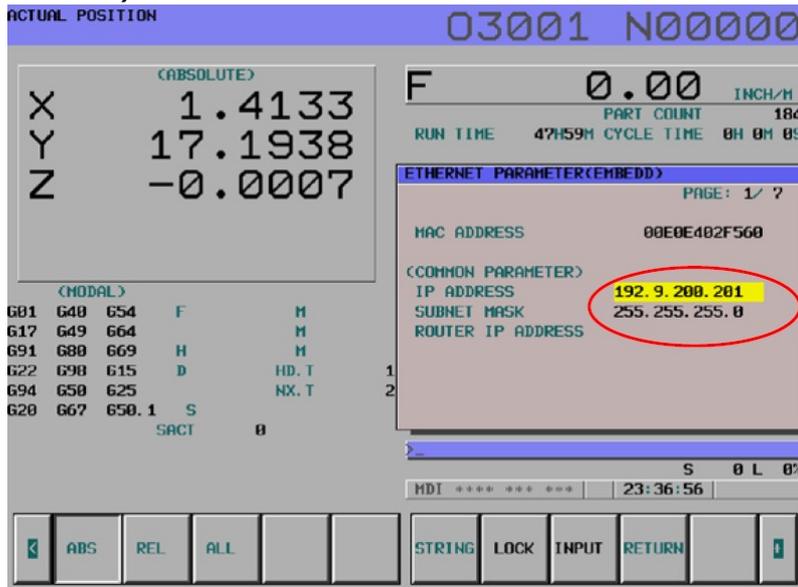
FANUC 16i & 18i EMBEDDED ETHERNET SETTING

Note: This information is to be used as a reference. Please refer to the FANUC Operation manual for more detail information.

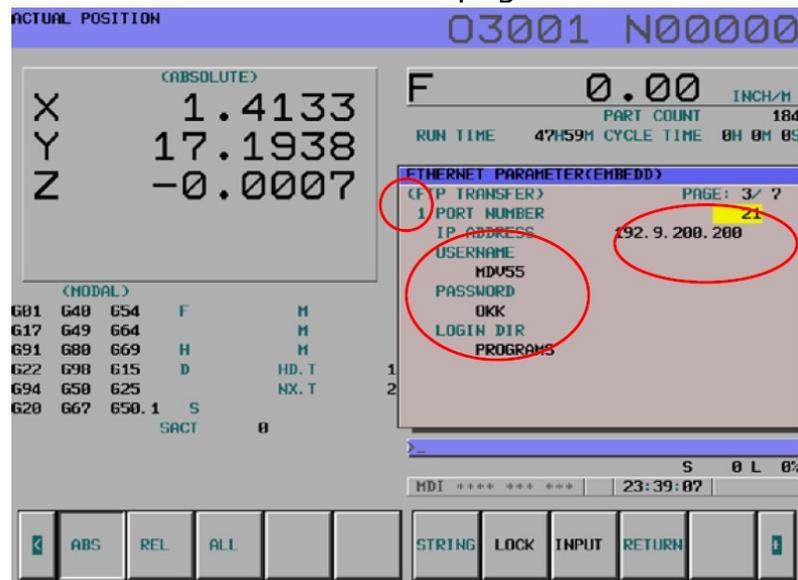
The NC I/O channel must be set to 9 to use the Embedded Ethernet function.

Page 1 of the Ethernet parameters you must set IP address and Sub net mask of NC control.

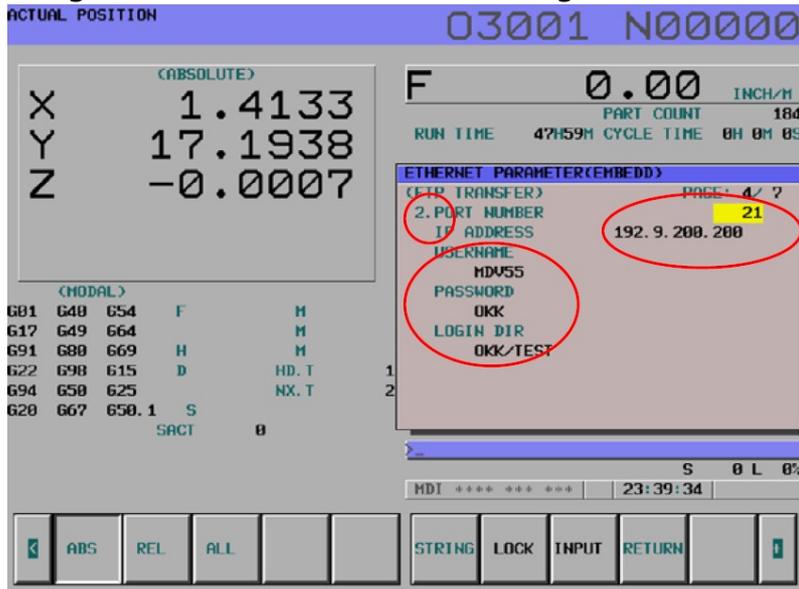
(Note: If these settings are changed power off the NC and restart the control)



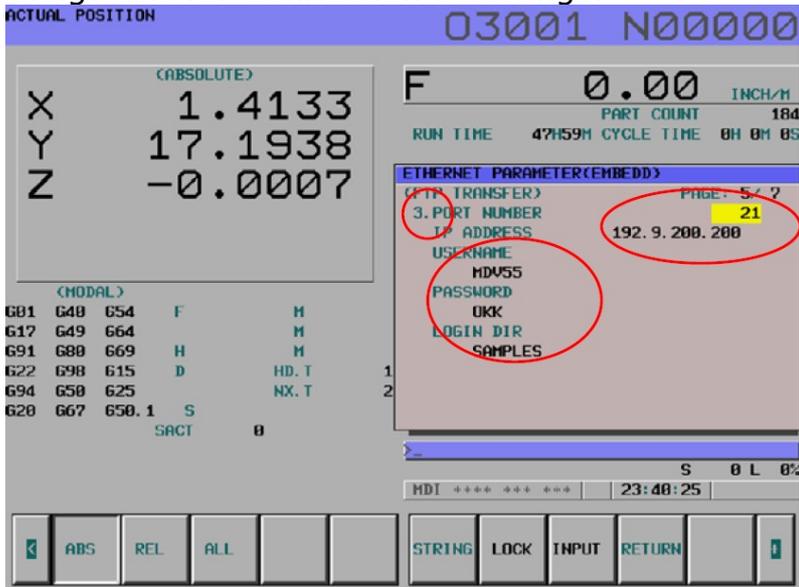
Page 3 of the Ethernet parameters you must set the Port number (21), IP address of PC, Username, Password, and Log in Directory the NC will use to communicate with PC. This page is for connection 1.



Page 4 is for Connection 2 settings.

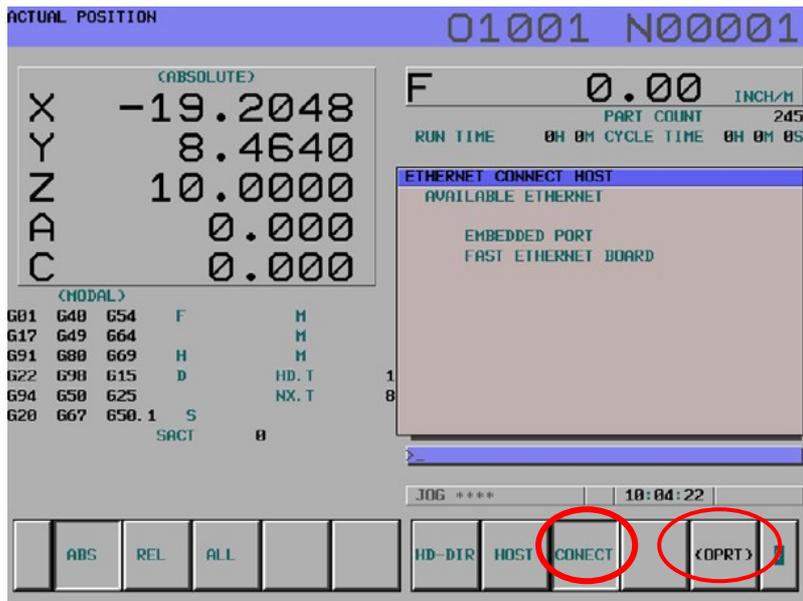


Page 5 is for Connection 3 settings.

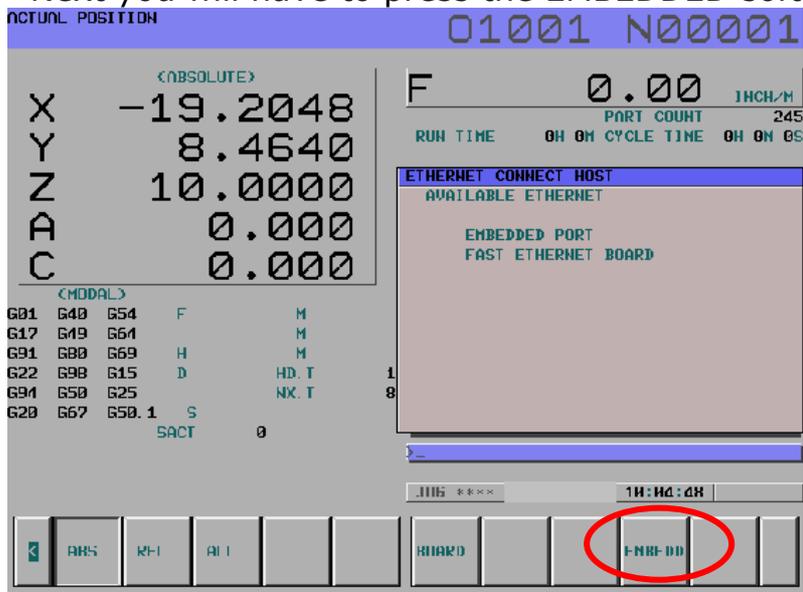


You can then select which Connection parameters you would like to use for communication by selecting Connect 1, 2, or 3 by using the following procedure.

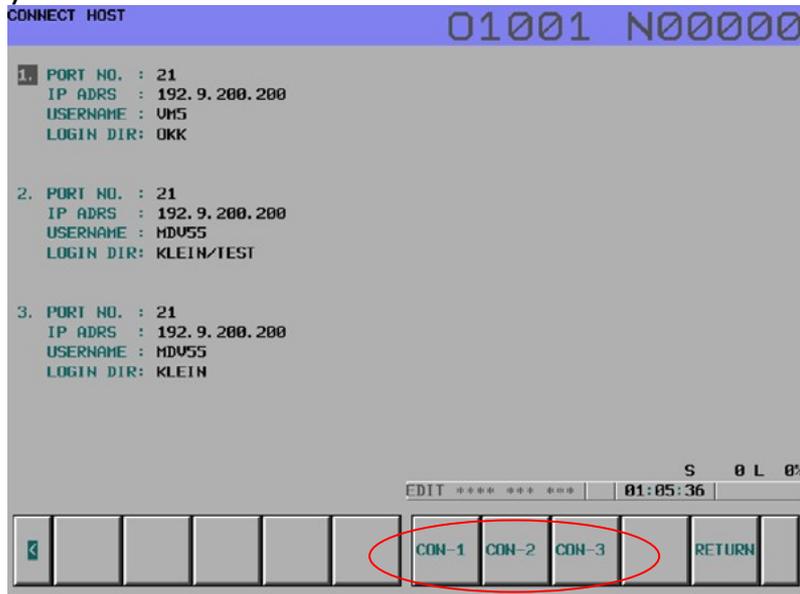
Press the Edit mode then the PROGRAM Hard key. Next press the soft key until you see CONNECT soft key. Press the CONNECT soft key then (OPRT) soft key.



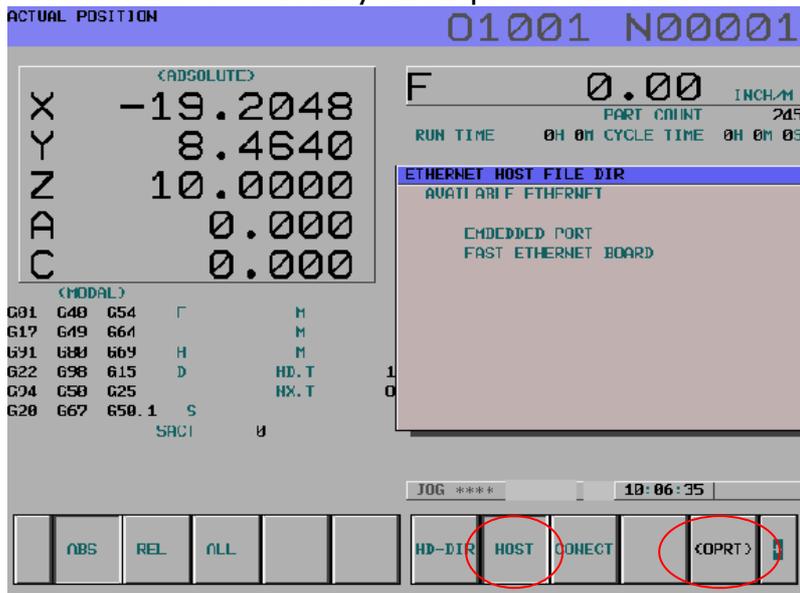
Next you will have to press the EMBEDDED soft key.



The Connect screen will then be displayed and you can choose which connection settings you would like to use by pressing Con-1, Con-2, or Con-3 soft key. The set values for that connection will then be used when you transfer files.



Press the ◀ soft key then press the HOST soft key and (OPRT) soft key.



Press the EMBEDDED soft key then the NC will connect with the PC and display the programs, which are in the folder you have designated.



If you press the **▶** soft key you will then see the READ and PUNCH soft keys. If you type 04500 and press the READ soft key, that program will be transferred to the NC memory. If you type a program number that is in the NC memory and press PUNCH it will be transferred to the PC.



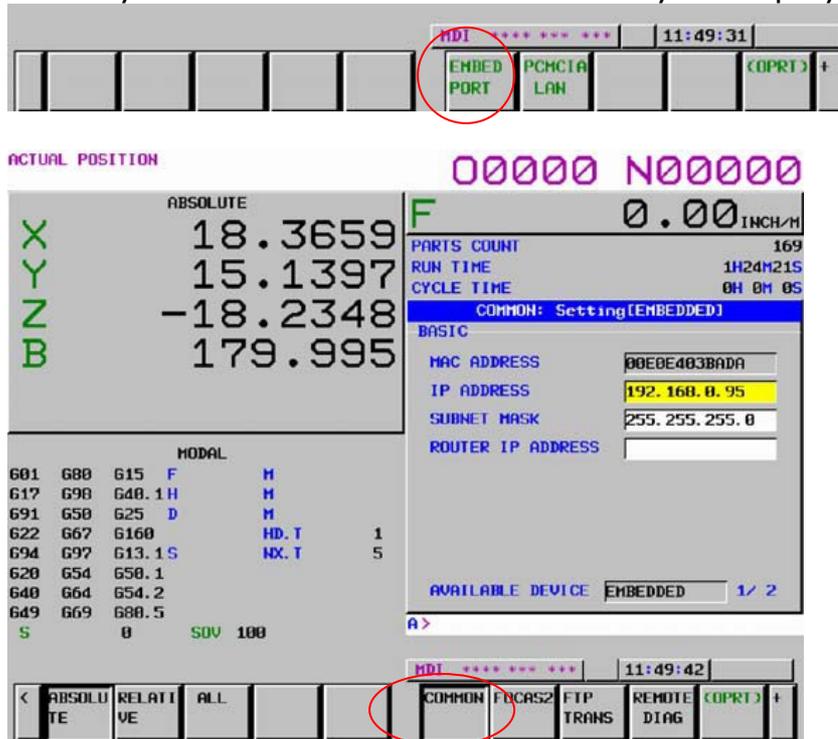
For more details on the operation of the EMBEDDED Ethernet function please refer to the FANUC operation manual.

FANUC 31i Embedded Ethernet Settings

Note: This information is to be used as a reference. Please refer to the FANUC Operation manual for more detail information.

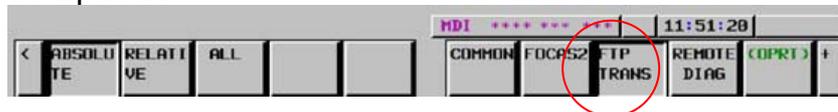
The NC I/O channel must be set to 9 to use the Embedded Ethernet function.

Press the SYSTEM hard key then the ► soft key until you see EMBED PORT soft key. Press the EMBED PORT soft key to display the screen below.



If the Common setting screen is not shown press the COMMON soft key so that the display matches the one shown above. On this page the IP address and Sub net mask of the NC control are set. (Note: If these settings are changed power off the NC and restart the control)

Press the FTP TRANS soft key to display the setting screen for the Host computer.



On pages 1 & 2 of the Ethernet parameters you must set the Port number (21), IP address of PC, Username, Password, and Log in Directory the NC will use to communicate with PC. These pages are for Connection 1.

ACTUAL POSITION 00000 N00000

X Y Z B	ABSOLUTE	18.3659	F	0.00 INCH/M
		15.1397	PARTS COUNT	169
		-18.2348	RUN TIME	1H24M21S
		179.995	CYCLE TIME	0H 0M 0S

MODAL

601	680	G15	F	M
617	690	G40.1	H	M
691	650	G25	D	M
622	667	G160		HD. T 1
694	697	G13.1	S	MX. T 5
620	654	G50.1		
640	664	G54.2		
649	669	G80.5		

S 0 SOV 100

FTP TRANS:Setting(EMBEDDED)

CONNECT1

HOST NAME(IP ADDRESS)
192.168.0.91

PORT NUMBER 21

USER NAME
OKK

PASSWORD

AVAILABLE DEVICE EMBEDDED 1/6

A>

HDI **** * 11:51:20

< ABSOLUTE RELATIVE ALL COMMON FOCAS2 FTP TRANS REMOTE DIAG (OPRT) +

ACTUAL POSITION 00000 N00000

X Y Z B	ABSOLUTE	18.3659	F	0.00 INCH/M
		15.1397	PARTS COUNT	169
		-18.2348	RUN TIME	1H24M21S
		179.995	CYCLE TIME	0H 0M 0S

MODAL

601	680	G15	F	M
617	690	G40.1	H	M
691	650	G25	D	M
622	667	G160		HD. T 1
694	697	G13.1	S	MX. T 5
620	654	G50.1		
640	664	G54.2		
649	669	G80.5		

S 0 SOV 100

FTP TRANS:Setting(EMBEDDED)

CONNECT1

LOGIN FOLDER

AVAILABLE DEVICE EMBEDDED 2/6

A>

HDI **** * 11:51:30

< ABSOLUTE RELATIVE ALL COMMON FOCAS2 FTP TRANS REMOTE DIAG (OPRT) +

Pages 3 & 4 are for Connection 2 settings.

ACTUAL POSITION

00000 N00000

ABSOLUTE		F		0.00 INCH/H	
X	18.3659	PARTS COUNT		169	
Y	15.1397	RUN TIME		1H24M21S	
Z	-18.2348	CYCLE TIME		0H 0M 0S	
B	179.995	FTP TRANS:Setting(EMBEDDED)			
CONNECT2					
HOST NAME(IP ADDRESS)					
192.168.0.98					
PORT NUMBER					
21					
USER NAME					
OKK					
PASSWORD					

AVAILABLE DEVICE EMBEDDED 3/ 6					
A>					
MDI **** * 11:51:37					
COMMON FOCAS2 FTP TRANS REMOTE (OPRT) +					

601	G80	G15	F	M	
617	G90	G40.1	H	M	
691	G50	G25	D	M	
622	G67	G160	HD.T		1
694	G97	G13.1	S	IX.T	5
620	G54	G50.1			
640	G64	G54.2			
649	G69	G80.5			
S	0	SOV	100		

ACTUAL POSITION

00000 N00000

ABSOLUTE		F		0.00 INCH/H	
X	18.3659	PARTS COUNT		169	
Y	15.1397	RUN TIME		1H24M21S	
Z	-18.2348	CYCLE TIME		0H 0M 0S	
B	179.995	FTP TRANS:Setting(EMBEDDED)			
CONNECT2					
LOGIN FOLDER					
/RICHARD/TEST					
AVAILABLE DEVICE EMBEDDED 4/ 6					
A>					
MDI **** * 11:51:43					
COMMON FOCAS2 FTP TRANS REMOTE (OPRT) +					

601	G80	G15	F	M	
617	G90	G40.1	H	M	
691	G50	G25	D	M	
622	G67	G160	HD.T		1
694	G97	G13.1	S	IX.T	5
620	G54	G50.1			
640	G64	G54.2			
649	G69	G80.5			
S	0	SOV	100		

Pages 5 & 6 are for Connection 3 settings.

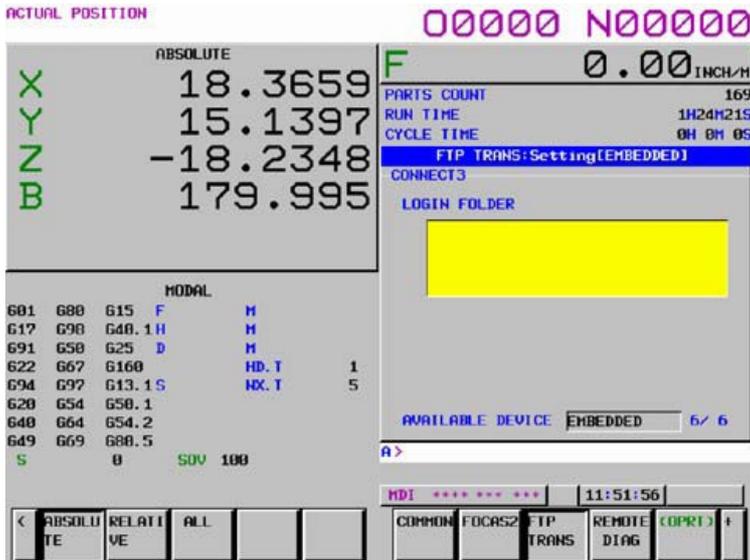
ACTUAL POSITION

00000 N00000

ABSOLUTE		F		0.00 INCH/H	
X	18.3659	PARTS COUNT		169	
Y	15.1397	RUN TIME		1H24M21S	
Z	-18.2348	CYCLE TIME		0H 0M 0S	
B	179.995	FTP TRANS:Setting(EMBEDDED)			
CONNECT3					
HOST NAME(IP ADDRESS)					
192.168.0.91					
PORT NUMBER					
21					
USER NAME					
OKK					
PASSWORD					

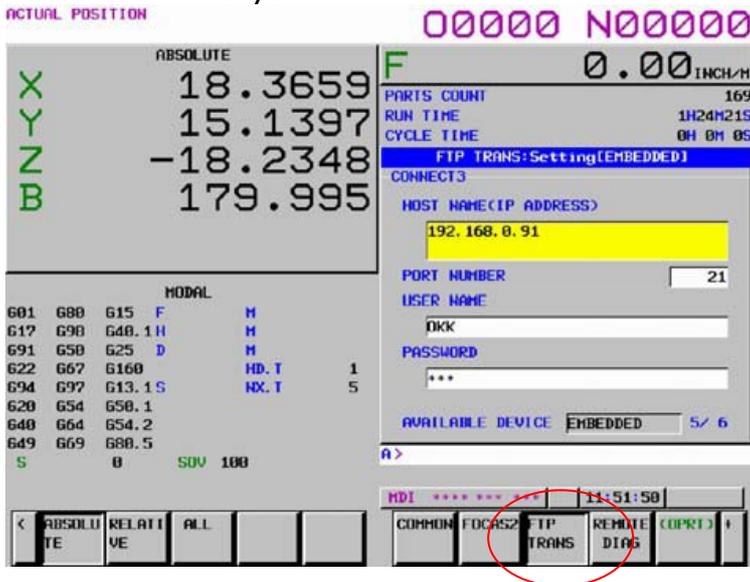
AVAILABLE DEVICE EMBEDDED 5/ 6					
A>					
MDI **** * 11:51:50					
COMMON FOCAS2 FTP TRANS REMOTE (OPRT) +					

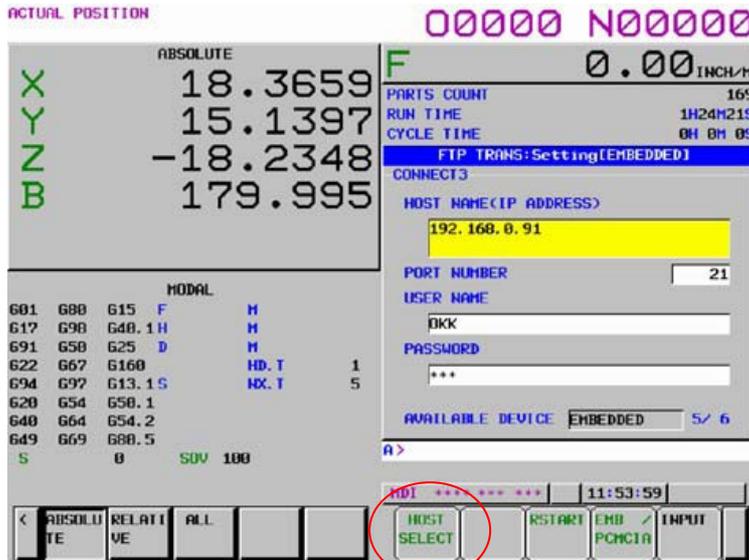
601	G80	G15	F	M	
617	G90	G40.1	H	M	
691	G50	G25	D	M	
622	G67	G160	HD.T		1
694	G97	G13.1	S	IX.T	5
620	G54	G50.1			
640	G64	G54.2			
649	G69	G80.5			
S	0	SOV	100		



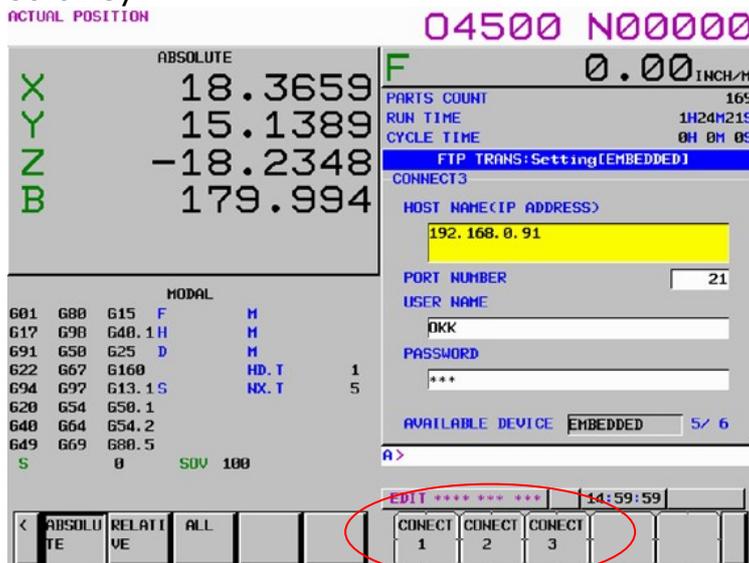
You can then select which Connection parameters you would like to use for communication by selecting Connect 1, 2, or 3 by using the following procedure.

While on the FTP TRANS screen press the OPRT soft key then the HOST SELECT soft key.





You can then select Connection 1, 2, or 3 by pressing the corresponding soft key.



Press the Edit mode then the PROGRAM Hard key. Next press the FOLDER soft key followed by the OPRT soft key.

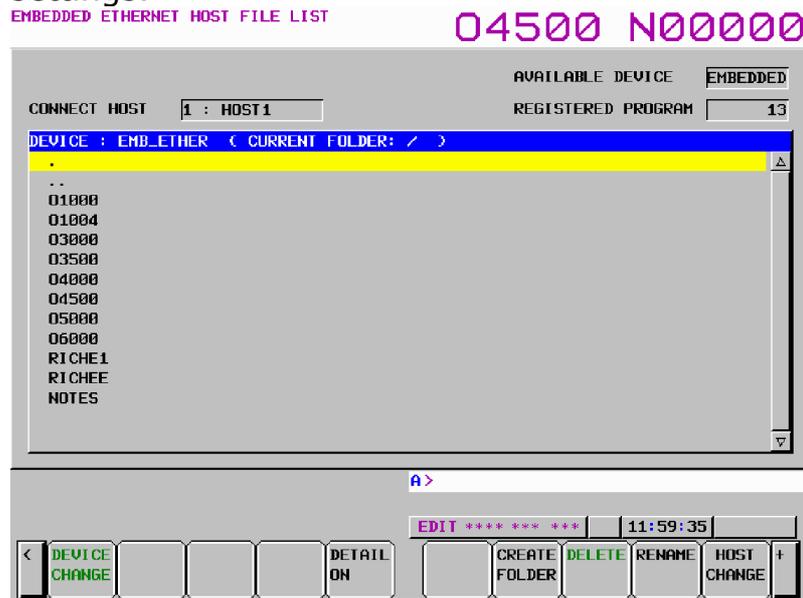


Press the DEVICE CHANGE soft key followed by the EMB ETHER soft key.



The NC will connect with the PC and display the programs, which are in the folder you have designated in the connection parameters. You can press the HOST CHANGE soft key to toggle thru connect 1, 2, & 3. Each time this is

pressed the screen will update a program list according to the connection settings.

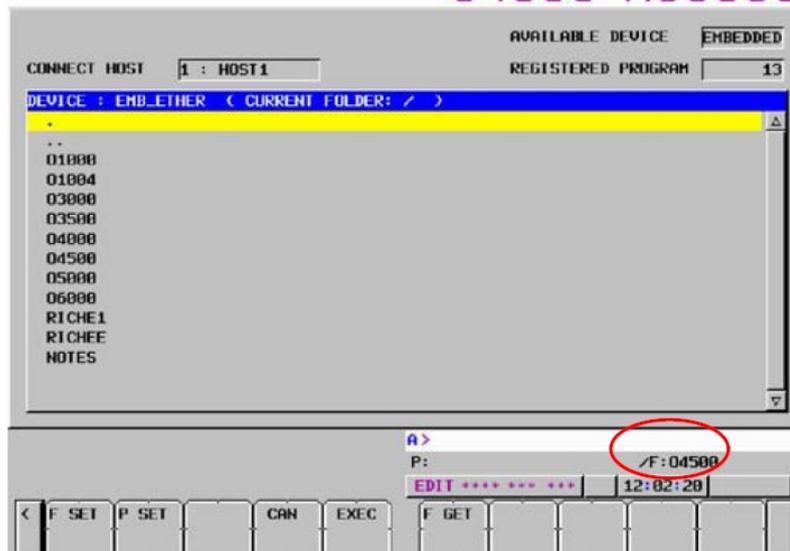
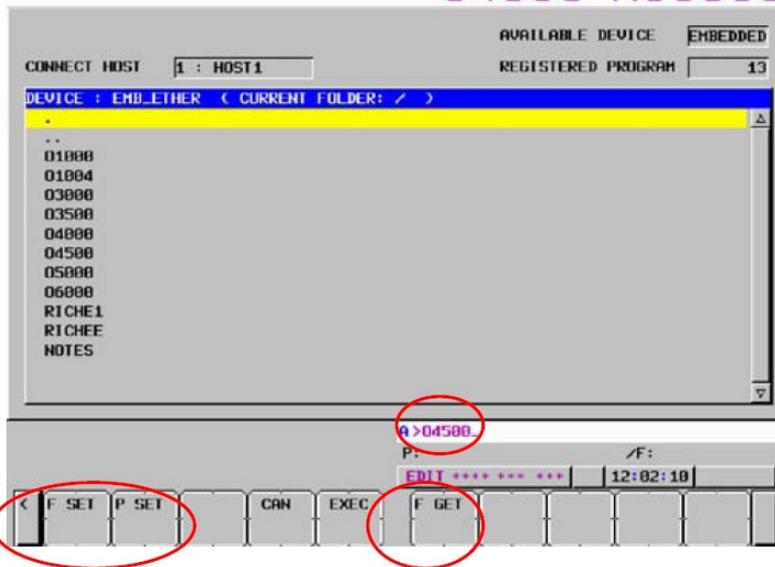


If you press the ► soft key you will then see the READ and PUNCH soft keys.



It is important to remember that when you use the Read /Punch function that the files will be transferred to and from the current path set as the Foreground folder.

To Read a file from the PC to the NC press the READ soft key. Then you can either type the file name to be transferred and press F SET soft key or move the cursor to select a program, press the F GET soft key then F SET soft key. Next type the program name to be used in the NC and press P SET. If no program name is specified for P SET the name in the program file will be used as the name in the NC.



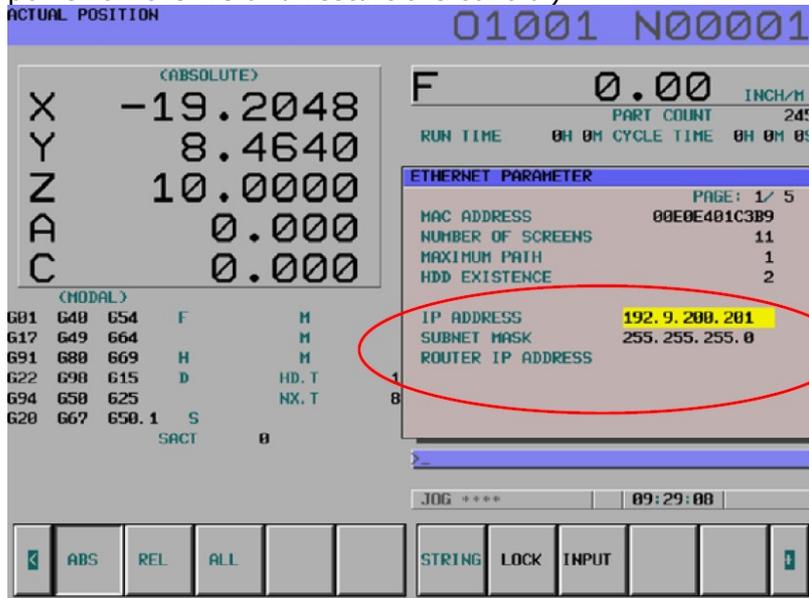
For the punch function the same basic operation is used but you will specify the program number to be punched by typing the number and using P SET. The F SET will be used if you would like to change the file name after it is transferred to the PC.

For more details on the operation of the EMBEDDED Ethernet function please refer to the FANUC operation manual.

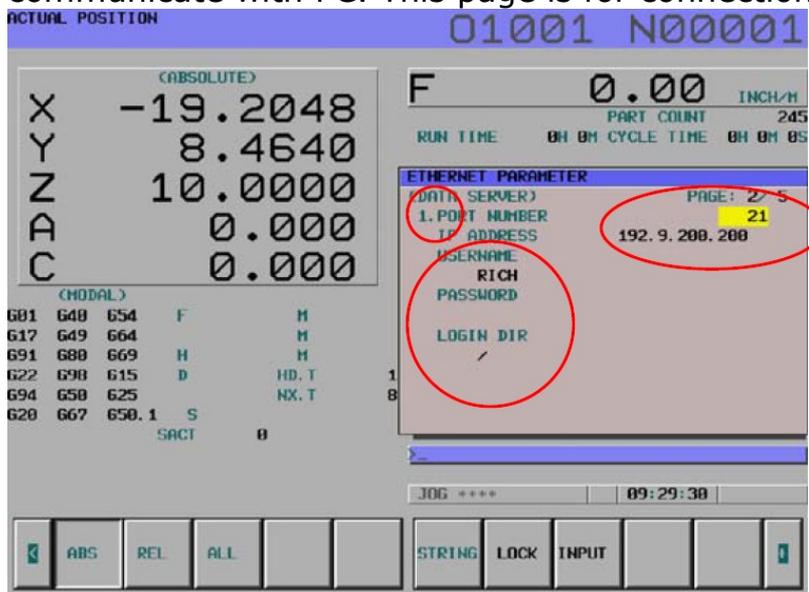
FANUC 16i,18i DATA SERVER ETHERNET SETTING

Note: This information is to be used as a reference. Please refer to the FANUC Operation manual for more detail information.

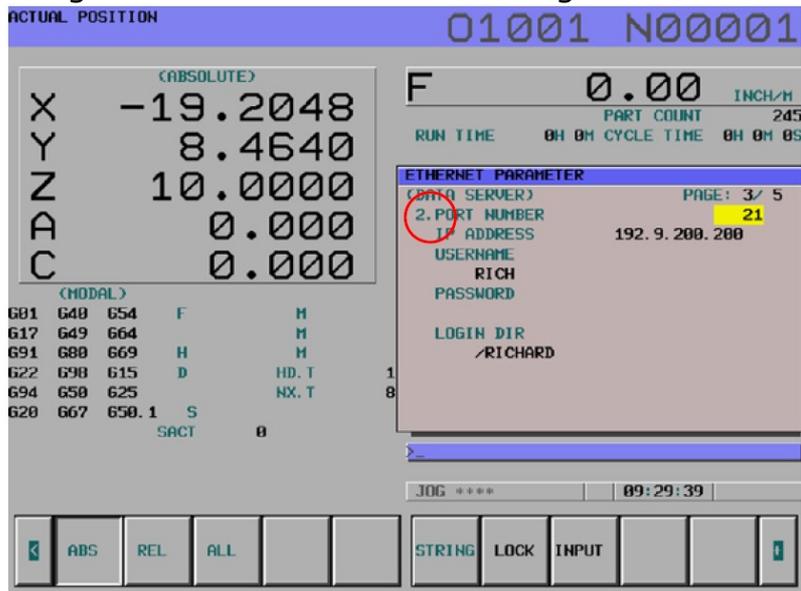
Page 1 of the Ethernet parameters you must set IP address, Sub net mask, and Router IP (If necessary) of NC control. (Note: If these settings are changed power off the NC and restart the control)



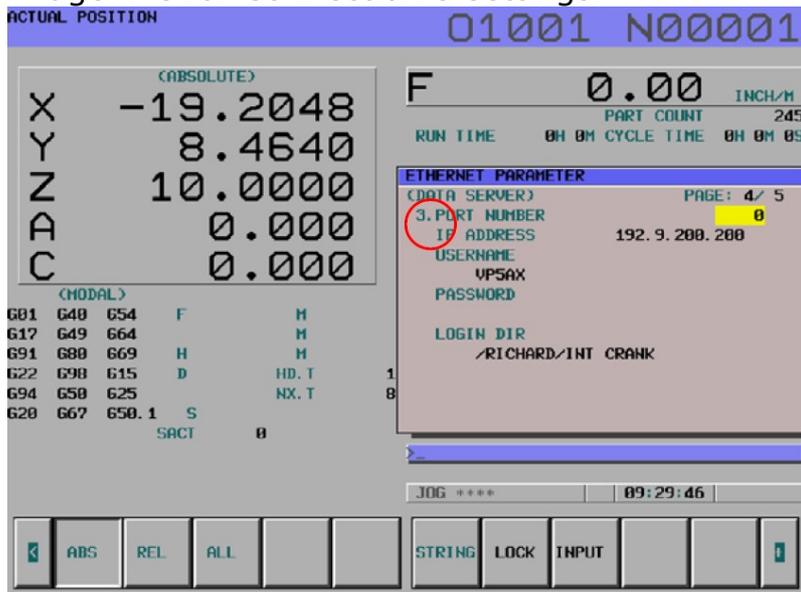
Page 2 of the Ethernet parameters you must set the Port number (21), IP address of PC, Username, Password, and Log in rectory the NC will use to communicate with PC. This page is for connection 1.



Page 3 is for Connection 2 settings.

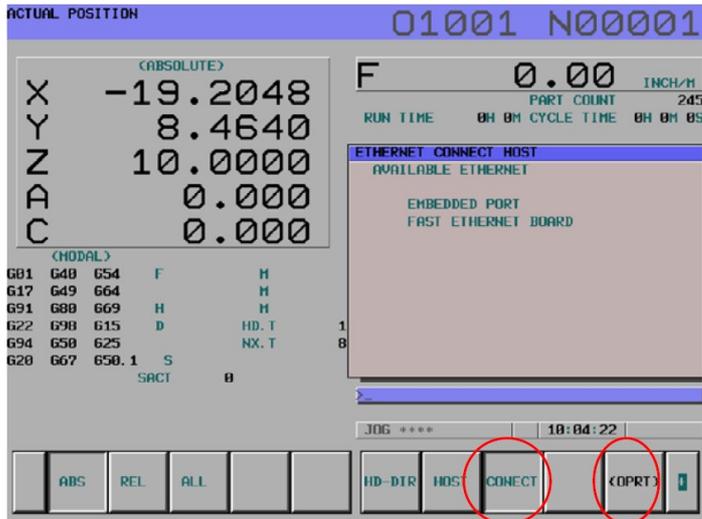


Page 4 is for Connection 3 settings.

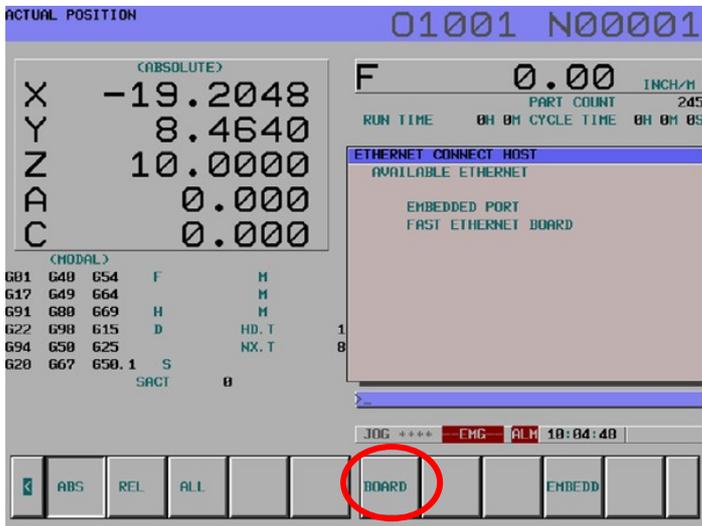


You can then select which Connection parameters you would like to use for communication by selecting Connect 1, 2, or 3 by using the following procedure.

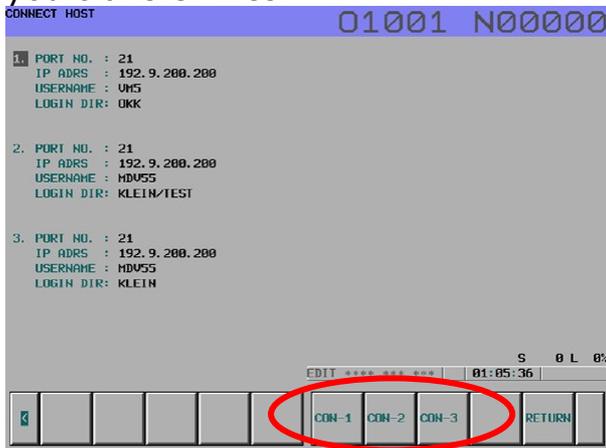
Press the Edit mode then the PROGRAM Hard key. Next press the ► soft key until you see CONNECT soft key. Press the CONNECT soft key then (OPRT) soft key.



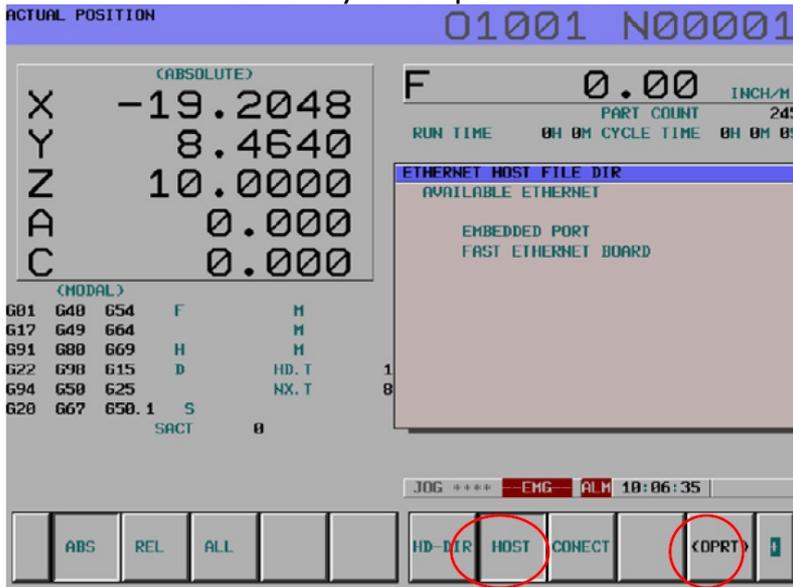
Next you will have to press the BOARD soft key.



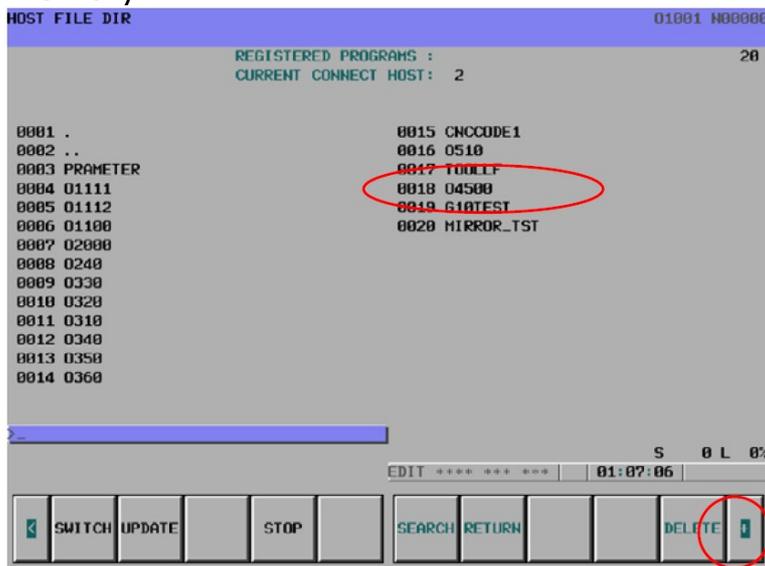
The Connect screen will then be displayed and you can choose which connection settings you would like to use by pressing Con-1, Con-2, or Con-3 soft key. The set values for that connection will then be used when you transfer files.



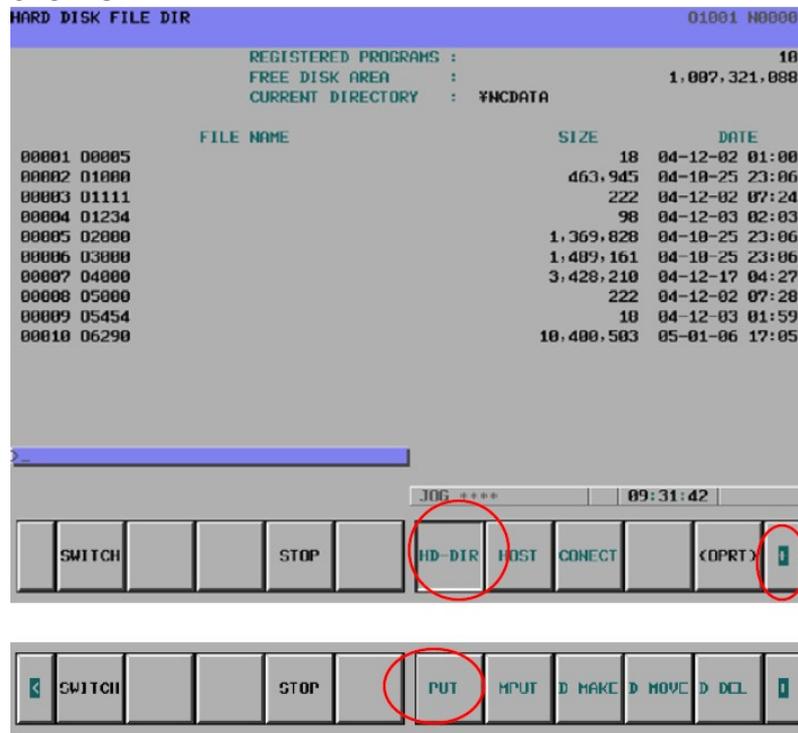
Press the ◀ soft key then press the HOST soft key and (OPRT) soft key.



If you press the ▶ soft key you will then see the GET soft key. If you type (File Number, Program Number to be listed on Data Server) 18,04500 and press the GET soft key, that program will be transferred to the Data Server memory.



If you press the HD-DIR soft key you will see a list of the programs currently stored on the Data Server memory. If you press the \blacktriangleright soft key then you will see the PUT soft key. If you type (the File number, Program Number) 1,00005 and press PUT soft key the program will be transferred to the PC.



For more details on the operation of the DATA SERVER and Ethernet function please refer to the FANUC operation manual.

Extreme care must be taken when connecting the Ethernet cables and while making the settings on your PC. Setting parameter conflicts can cause the entire network to fail.

The FTP software included with this information package is shareware. There is no charge for the use of this product.