

Hardware Connection

Connecting an HFB Machine Control to the PC

Connecting an HFE (HFT) Machine Control to the PC

Connecting an Ex or LD Machine Control to the PC

Connecting an FS Machine Control to the PC

Connecting a Blanking Machine Control to the PC

Connecting an HFB Machine Control to the PC

Materials Required

Machine Control Connection

PC Serial Port Connection

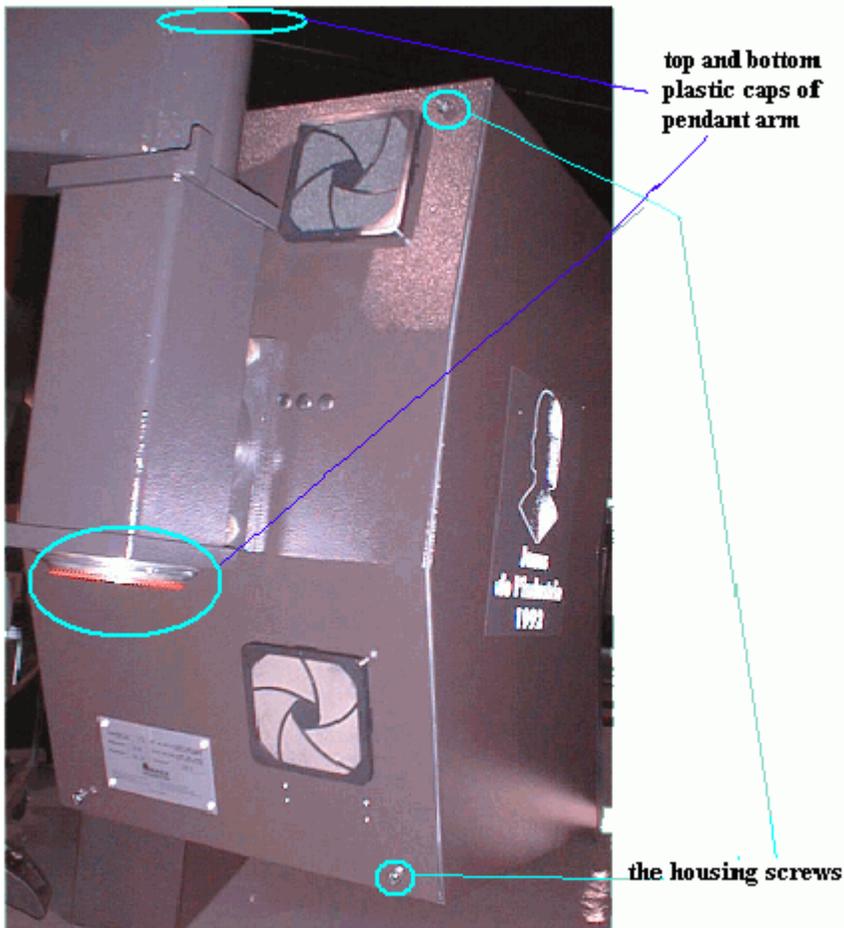
Materials Required

The following materials are required to connect an HFB machine to the PC:

1. A 12-foot configured HFB serial cable.
2. A straight-through extension serial cable with RS-232 connectors. The cable gauge is dependent on the distance between the computer and the machine control:
 - a. If the distance is less than 100 feet, use a 24 gauge cable.
 - b. If the distance is between 100 and 500 feet, use a 22 gauge cable;
 - c. If the distance is greater than 500 feet, use a 20 gauge cable.

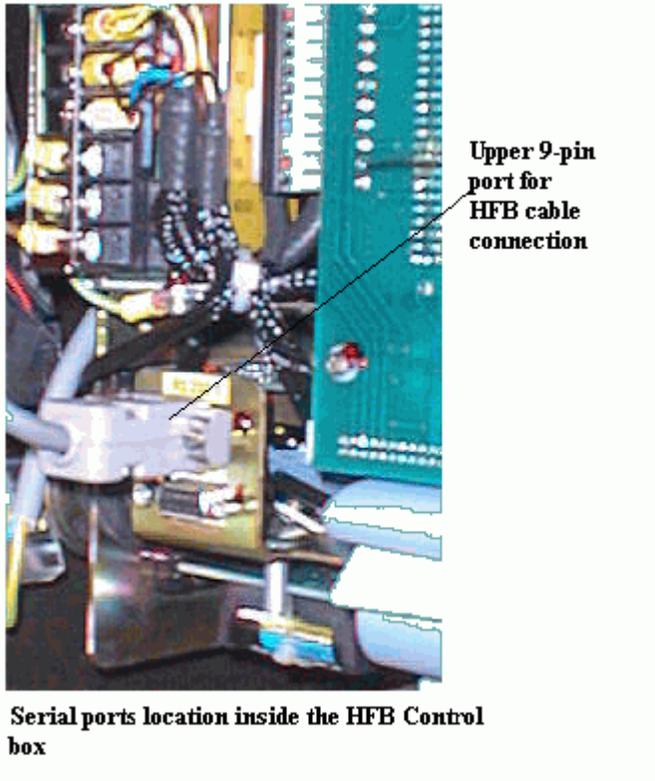
Machine Control Connection

1. Remove the housing screws at the rear side of the control box to gain access to the control.

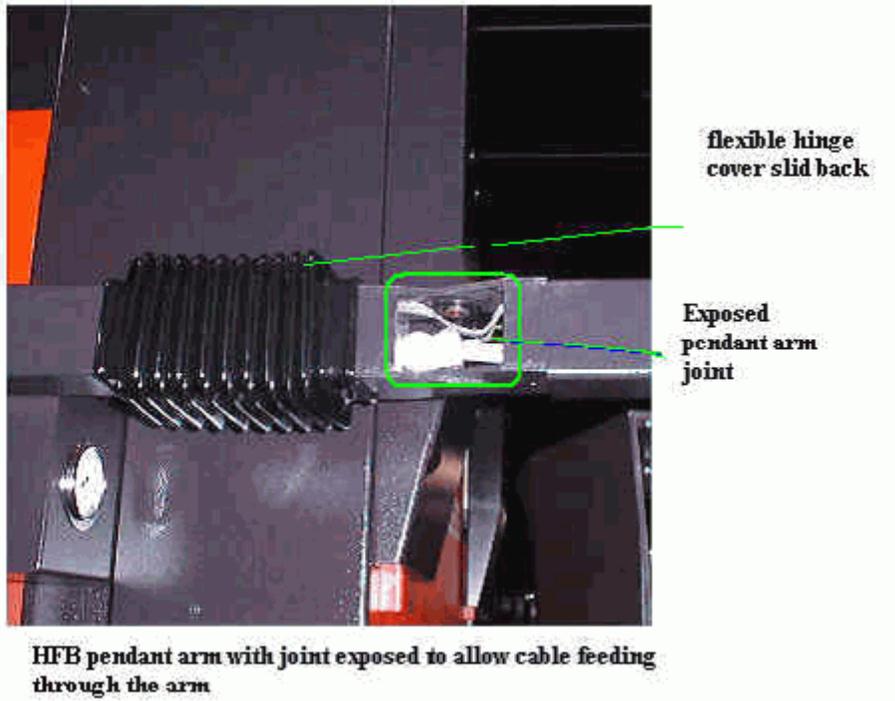


HFB Control box, from the rear view

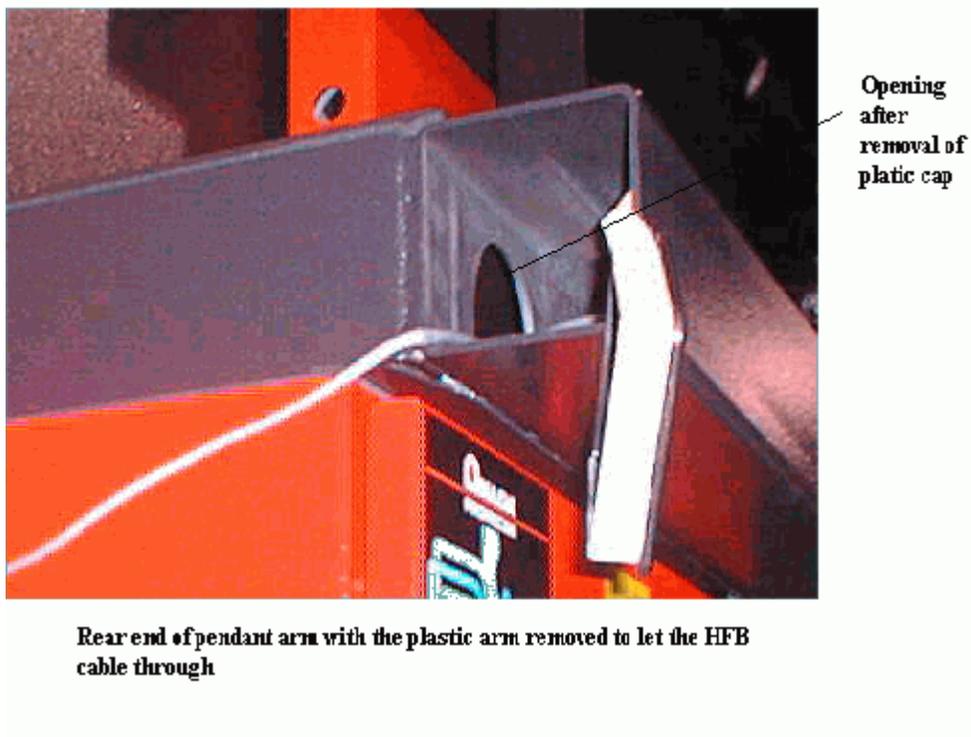
2. Locate the two 9-pin serial ports in the control and connect one end of the HFB cable to the upper port.



3. Remove the top and bottom plastic caps on the pendant arm hinge to provide access to the cable.
4. Feed the cable behind the CRT and into the pendant arm.
5. Slide back the flexible hinge sleeve to expose the joint; this should allow you to feed the cable more easily into the main length of the pendant arm.



6. At the back of the machine, remove the plastic end cap of the pendant arm, snake the HFB cable out through the backside and connect it to one end of the extension cable.

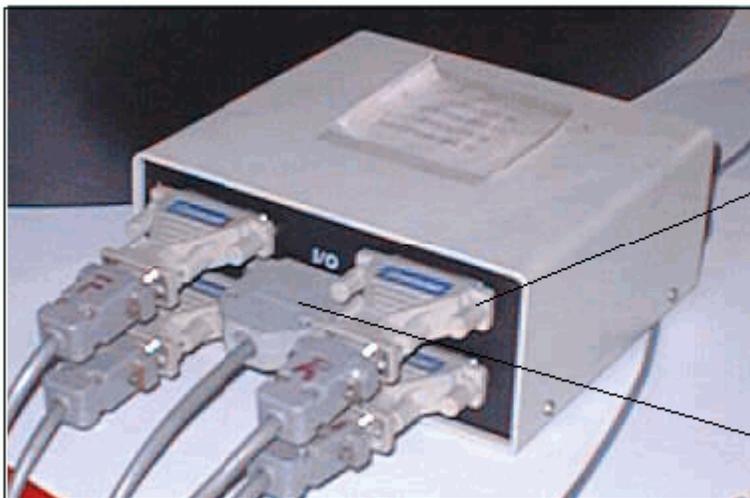


7. Follow [PC Serial Port Connection](#) for connecting the other end of the extension cable to the

PC.



The front view of a Belkin Data Switch box showing the switch dial for the four machines supported



Connection for cable from one of the supported machines

Switch box cable connection

The rear view of a Belkin Data Switch Unit with support for 4 different machines

8. Follow [PC Serial Port Connection](#) for connecting the switch box to the PC.

PC Serial Port Connection

1. Locate the serial port that you want to use for connection at the back of the PC.
2. In the case of a single machine connection, connect the other end of the cable to the PC serial port.

Note: If your connection is set up to allow for more than a single machine connection to your PC by means of a switch box, connect the switch box cable to the PC serial port.



**25-pin serial
port connection
at the back of
the PC**

Location of PC serial port

Connecting an HFE (HFT) Machine Control to the PC

Materials Required

Machine Control Connection

PC Serial Port Connection

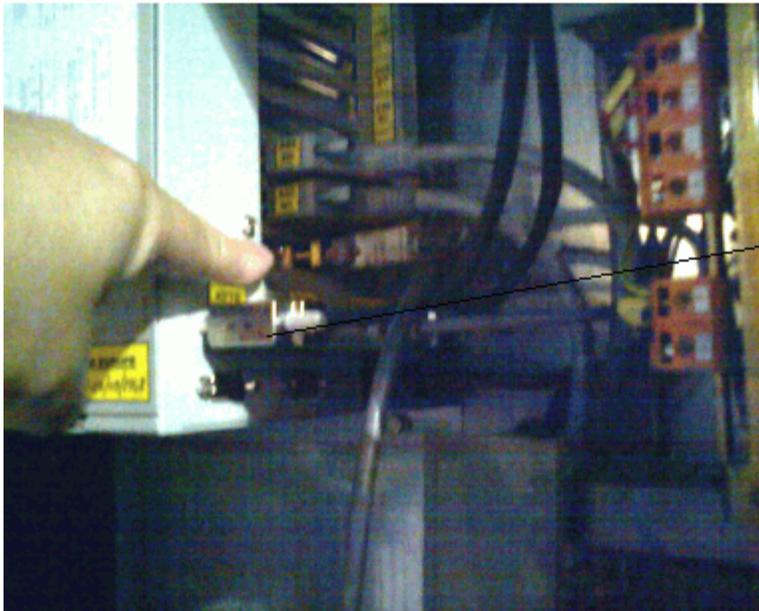
Materials Required

The following materials are required to connect an HFE machine to the PC:

1. A 12-foot configured HFE (HFT) serial cable.
2. A straight-through extension serial cable with RS-232 connectors. The cable gauge is dependent on the distance between the computer and the machine control:
 - a. If the distance is less than 100 feet, use a 24 gauge cable.
 - b. If the distance is between 100 and 500 feet, use a 22 gauge cable;
 - c. If the distance is greater than 500 feet, use a 20 gauge cable.

Machine Control Connection

1. Locate the communication port at the backside of the control unit, and connect one end of the HFE (HFT) control cable to the port.



HFE (HFT) cable
connected to HFE
(HFT) control
serial Port

Rear view of an HFE (HFT) control box showing the
HFE (HFT) cable connection

2. Connect the other end of the HFE (HFT) control cable to the straight-through cable.
3. Follow PC Serial Port Connection for connecting the other end of the cable to the PC.

Note: If your connection is set up to allow for more than a single machine connection to your PC by means of a switch box, instead of connecting the extension cable directly to the PC serial port, connect it to the particular outlet on the switch box that has been assigned to the current machine.



The front view of a Belkin Data Switch box showing the switch
dial for the four machines supported



Connection
for cable from
one of the
supported
machines

Switch box
cable
connection

The rear view of a Belkin Data Switch Unit with support for 4 different machines

See PC Serial Port Connection for connecting the switch box to the PC

PC Serial Port Connection

1. Locate the serial port that you want to use for connection at the back of the PC.
2. In the case of a single machine connection, connect the other end of the cable to the PC serial port.

Note: If your connection is set up to allow for more than a single machine connection to your PC by means of a switch box, connect the switch box cable to the PC serial port.



25-pin serial port connection at the back of the PC

Location of PC serial port

Connecting an Ex or LD Machine Control to the PC

Materials Required

Machine Control Connection

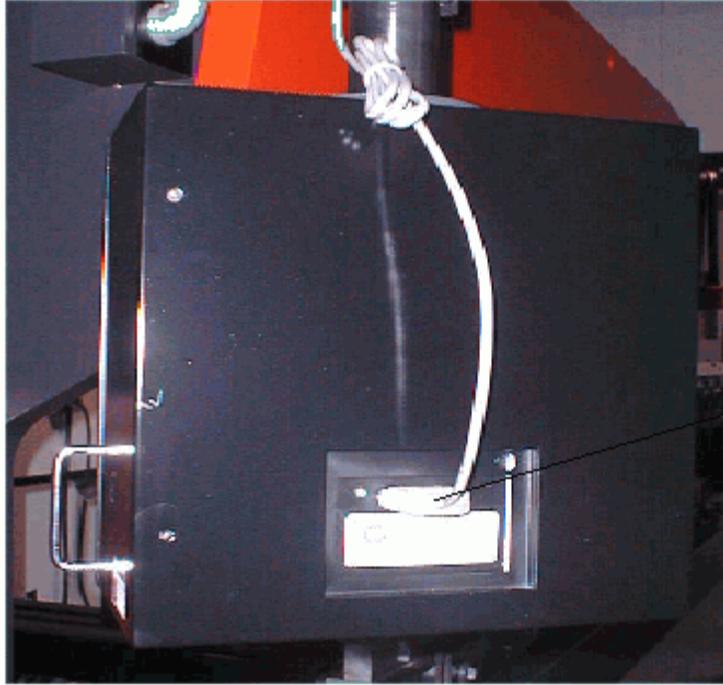
PC Serial Port Connection

Materials Required

1. A 12-foot configured Ex serial cable.
2. A straight-through extension serial cable with RS-232 connectors. The cable gauge is dependent on the distance between the computer and the machine control:
 - a. If the distance is less than 100 feet, then use a 24 gauge cable.
 - b. If the distance is between 100 and 500 feet, use a 22 gauge cable;
 - c. If the distance is greater than 500 feet, use a 20 gauge cable.

Machine Control Connection

1. Locate the communication port at the backside of the control unit, and connect one end of the EX control cable to the port.



**Ex cable
connected
to Ex
Control
serial port**

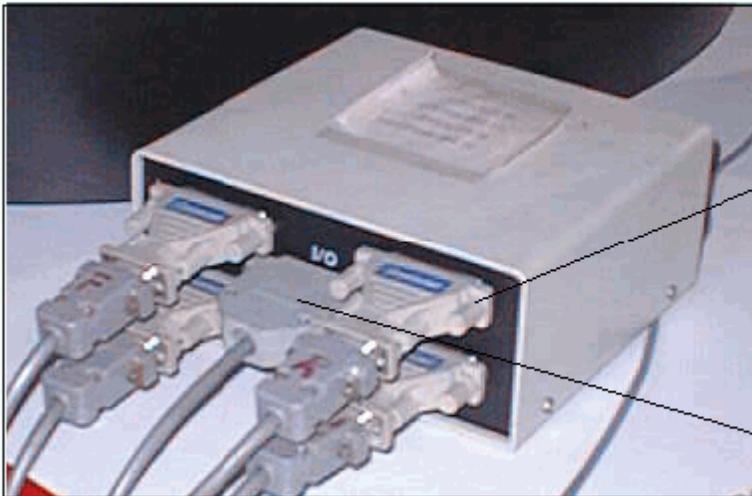
Rear view of an EX control box, showing the Ex cable connection

2. Connect the other end of the Ex control cable to the straight-through cable.
3. Follow [PC Serial Port Connection](#) for connecting the other end of the cable to the PC.

Note: If your connection is set up to allow for more than a single machine connection to your PC by means of a switch box, instead of connecting the extension cable directly to the PC serial port, connect it to the particular outlet on the switch box that has been assigned to the current machine.



The front view of a Belkin Data Switch box showing the switch dial for the four machines supported



Connection for cable from one of the supported machines

Switch box cable connection

The rear view of a Belkin Data Switch Unit with support for 4 different machines

See [PC Serial Port Connection](#) for connecting the switch box to the PC

PC Serial Port Connection

1. Locate the serial port that you want to use for the connection at the back of the PC.
2. In the case of connection to a single machine, connect the cable to the PC serial port.

Note: If your connection is set up to allow for more than a single machine connection to your PC by means of a switch box, connect the switch box cable to the PC serial port.



**25-pin serial
port connection
at the back of
the PC**

Location of PC serial port

Connecting an FS Machine Control to the PC

Materials Required

Machine Control Connection

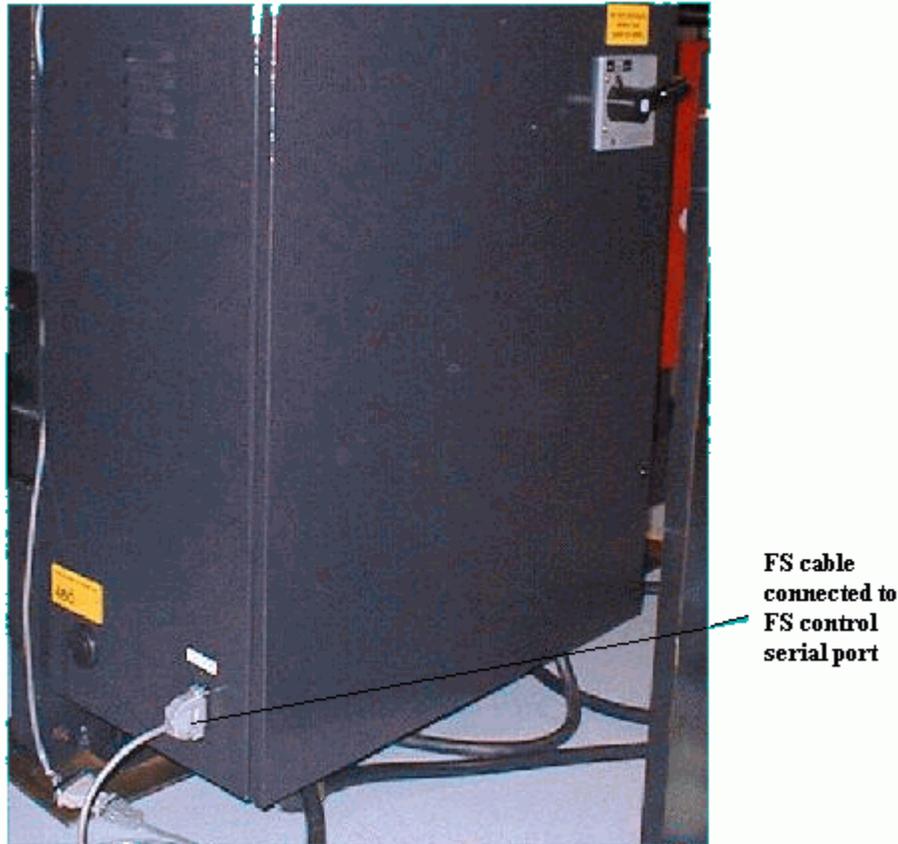
PC Serial Port Connection

Materials Required

1. A 12-foot configured FS serial cable.
2. A straight-through extension serial cable with RS-232 connectors. The cable gauge is dependent on the distance between the computer and the machine control:
 - a. If the distance is less than 100 feet, then use a 24 gauge cable.
 - b. If the distance is between 100 and 500 feet, use a 22 gauge cable;
 - c. If the distance is greater than 500 feet, use a 20 gauge cable.

Machine Control Connection

1. Locate the communication port at the backside of the control unit, and connect one end of the FS control cable to the port.



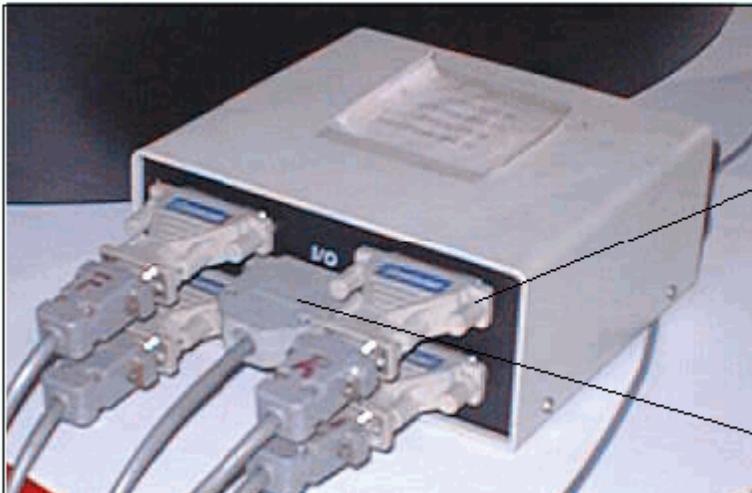
Rear view of an FS control box showing the FS cable connection

2. Connect the other end of the control cable to the straight-through cable.
3. Follow the [PC Serial Port Connection](#) for connecting the other end of the cable to the PC.

Note: If your connection is set up to allow for more than a single machine connection to your PC by means of a switch box, instead of connecting the extension cable directly to the PC serial port, connect it to the particular outlet on the switch box that has been assigned to the current machine.



The front view of a Belkin Data Switch box showing the switch dial for the four machines supported



Connection for cable from one of the supported machines

Switch box cable connection

The rear view of a Belkin Data Switch Unit with support for 4 different machines

Finally, follow the [PC Serial Port Connection](#) for connecting the switch box cable to the PC serial port.

PC Serial Port Connection

1. Locate the serial port, which you want to use for the connection at the back of the PC.
2. In the case of connection to a single machine, connect the cable to the PC serial port.

Note: If your connection is set up to allow for more than a single machine connection to your PC by means of a switch box, connect the switch box cable to the PC serial port.



**25-pin serial
port connection
at the back of
the PC**

Location of PC serial port

Connecting a Blanking Machine Control to the PC

Connecting an Amada 3000C Machine Control

Connecting a 5PL-A Machine Control

Connecting an Amada Fanuc 16-L Control

Connecting an Amada-Fanuc 18-P Series

Connecting an Amada-Fanuc 6M Series

Connecting an Amada-Fanuc OP

Connecting an Amada-O3P

Connecting an Amada-Fanuc O4P-A

Connecting an Amada-Fanuc O4P-C

Connecting a GE 2000

Connecting a Micro Tape BTR

Connecting to PAL510T

Connecting a Macintosh Control

Connecting a Finn-Power Fanuc 16P

Connecting a HECC80-3

Connecting the Teletype 42-43 TPunch Control

Connecting a Bosch CC200 and CC300

Connecting the GN6 Control

Connecting an Amada 3000C Machine Control

For the Camstore module to work with FabriTALK, the Camstore requires a special EPROM from Rybett made specifically for Amada DNC communication products. Contact Rybett if you do not have the EPROM. See the Camstore User Manual for proper switch setting. To ensure reliable transmission, set the baud rate of the Camstore module to 1200 bauds.

1. Sending an NC File to the Amada 3000C via the Camstore 2 Module

To send an NC file to the Amada 3000C equipped with the Camstore 2 module, you must set the control ready to receive data and then send the NC file from the host computer. The following instructions will show you how to set your control ready and then how to start the transmission from the host computer.

2. Setting the Amada 3000C Ready to Receive

To set the control ready to receive:

1. Set the Camstore 2 operating mode to its remote mode by turning the switch on the control box to "REMOTE".



2. Press both red "RESET" buttons on the control box at the same time.



3.The Amada-3000C is now set to receive data from the host computer.

Note: After the host computer completes the transmission, the operator light on the control box will light if the transmission was successful. However, if there was an error during the transmission, the red indicator light will flash. If this occurs, repeat steps 1 and 2 and then send the data from the host computer again.

3. Sending Data from the Host Computer to the Amada 3000C Control

To send an NC program from the host computer:

- 1.At FabriTALK main window, select the "Camstore 2" in the "Node list" box of Blanking tab. Click on the NC file you want to send in the "File List" box.
- 2.Click on the "Send File" button to begin sending.
- 3.When the transmission is complete, check the control to make sure it has received the NC program.
- 4.If the transmission has been successful, the red light on the control box will light. If the red light flashes, an error has occurred during the transmission. Reset the Camstore's control box and try again.

Connecting a 5PL-A Machine Control

The following instructions will help you set all the necessary DNC parameters for communication between your control and FabriTALK.

1. Setting the Parameters

Note: Make sure to note the current settings on your control before you change any parameters or switches. Write down the current settings for future reference.

To set the parameters, follow these steps:

1. Turn on the control power and depress MDI mode selection key to select MDI mode.



2. Turn the "EDIT PROTECTION" key lock to its "OFF" position
3. Hold down the SELECT key and depress the "SET" key.



4. Use the scroll down key to scroll to the SETTING (SET DATA) screen shown in the picture below.



5. Type "P1" and then press the "INPUT" key.

6.As you press the parameter set is enabled, the "ALM" message will flash. This is normal.

7.On the same screen, use the cursor key to scroll to the screen shown on the top right, where you can find the PUNCH CODE parameter.



8.Use the cursor key to move the cursor to the "PUNCH CODE" parameter.

9.Type "P0" and then press the "INPUT" key to set the punch code to 0.

10.In the same manner, set the "INPUT DEVICE" parameter's value to 1.

11.Set the "OUTPUT DEVICE" parameter to 1.

12.Hold down the SELECT key and then press the "ALARM" key.



13.Cursor to parameter #002.

14.Type "10110000" and then press the "INPUT" key.

15.Use the down cursor key to find parameter #311.

16.When you find parameter #311, place the cursor on the parameter and type "00011010" and then press the "INPUT" key.

17.Hold down the "SELECT" key and press the SET key.



18. Find the SETTING (SET DATA) screen (found in step #4) where the "PARAMETER SET" parameter is found.



19. Use the cursor to select the "PARAMETER SET" parameter, type "P1", and then press the "INPUT" key to disable parameter set option.

20. Press the "RESET" key.

The control is set to communicate with FabriTALK. Make sure the DNC cable is securely connected between the control and the PC. If the configuration of the DNC cable is not correct, FabriTALK will not work.

2. Sending Programs to the Amada-O5PL-A Control

This section outlines the procedure for sending an NC program from your host computer to your control. To send an NC program to the control, you need to set your control ready to receive data and then to start the transmission from the host computer.

Setting the Amada-O5PL-A Control Ready to Receive

To set the control ready to receive:

1. Select the EDIT mode by pressing on the EDIT key.



2. Hold down the SELECT key and press the PROGRAM key.



3. Note the control screen. Find the READ soft key directly below the word READ on the screen and press it.



The control is now ready to receive and will wait for data from the host computer.

Sending Data from the Host Computer

To send an NC program from the host computer:

1. At FabriTALK main window, click on the " AMADA O5PL-A " in the "Node List" box of Blanking tab.
2. Click on the NC file you want to send in the "File List" box.
3. Click on the "Send File" button to begin sending.

When the transmission is complete, check the control to make sure it has received the NC program.

3. Receiving NC Programs from the Amada-O5PL-A Control

To receive an NC program from the Amada O5PL-A control, you need to set the host computer ready to receive data and then to send the NC program from the control.

Setting the Host Computer Ready to Receive

To set the host computer:

1. At FabriTALK main window, click on the " AMADA O5PL-A " node in the "Node List" box of Blanking tab.
2. Click on the NC file to hold the data you are about to send from the control in the "File List".
3. Click on the "Rec. File" button to set the host computer ready. Transmit the data from the control. See Transmitting Data from the Amada-O5PL-A.

Transmitting Data from the Amada-O5PL-A

To start a transmission from the Amada-O5PL-A control:

1. Select the EDIT mode by pressing on the EDIT key.



2. Hold down the SELECT key and press the PROGRAM key.



3. Notice the control screen. Find the PUNCH soft key directly below the word "PUNCH" on the screen and press it.



4. Press the "EXEC" soft key to begin sending data to the host computer.

When the transmission is complete, check your host computer to make sure the transmission has been successful.

Connecting an Amada Fanuc 16-L Control

The following instructions will help you set all the necessary parameters for DNC communication between your control and FabriTALK. You may want to review the Amada-Fanuc 16-L control panel and make sure that the DNC cable connections are firmly connected.

1. Setting the Parameters

Note: Make sure to note the current settings on your control before you change any parameters or switches. Write down the current settings for future reference.

To set the parameters:

1. Turn on the control panel.



The MDI mode is used when changing the DNC communication parameters.
The EDIT mode is used when sending or receiving NC programs.

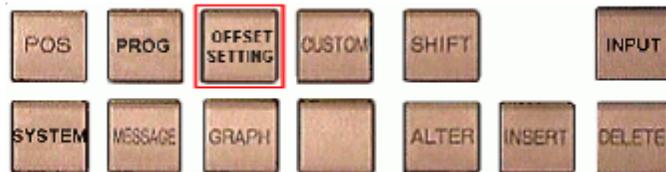
2. Turn the PROGRAM PROTECTION key lock to its "OFF" position.



3. Depress the MDI key to select MDI mode.



4. Press on the OFFSET SETTING selection key and the SETTING (HANDY) screen will appear.





- If the "SETTING (HANDY)" does not appear on the screen, press the "OFFSET SETTING" key again.
- Use the cursor keys to select "PARAMETER WRITE", and then type "1" and press the "INPUT" key.



Note: As the value of "PARAMETER WRITE" parameter changes to 1, a red "ALM" message will flash. This is normal.

- Use the cursor key to select the "PUNCH CODE" parameter. Type "1" and press the "INPUT" key.
- The value of the parameter should change to 1, enabling the system to send or receive NC programs in ISO codes.

9. Press the SYSTEM selection key.



10. Page down key to find parameter 20.

11. Select parameter #20 and type "2" then press the "INPUT" key. The parameter value should change to "2".

12. Use the page down key to find parameter 121.

13. Use the up or down cursor key to highlight parameter 121.

14. As parameter 121 is highlighted, use the right cursor key to highlight the "ASI" column. Type "0" and press the "INPUT" key.

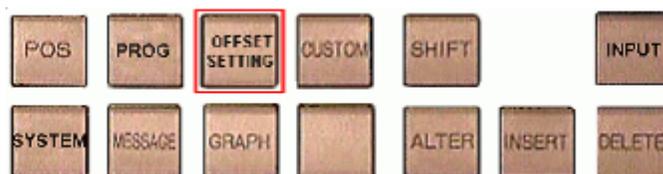


15. Use the cursor keys to select parameter 122. Type "0" and press the "INPUT" key.

16. Use the cursor keys to select parameter 123. Type "11" and press the "INPUT" key.

Note: Step 15 will set the transmission speed to 9600 baud. You may use a higher baud rate, but the baud rates at the control and at the FabriTALK host computer must match.

17. Press on the OFFSET SETTING selection key.



18. Use the cursor keys to select the "PARAMETER WRITE" parameter. Type "0" and then press the "INPUT" key.
19. As soon as you change the "PARAMETER WRITE" value to 0, the red "ALM" message will cease.

You have completed setting the communication parameters for the Amada-Fanuc-16-L. Make sure that the DNC cable is connected and tightly secured to the RS232 communication port on the left side of the control panel.



Note: FabriTALK will not work if the DNC cable is configured incorrectly. Make sure that the DNC cable is connected and tightly secured at both the control and the host computer. Keep the cable away from lighting fixtures, power supplies, or other devices that generate strong electromagnetic fields.

All necessary software has been installed for your Amada Fanuc 16-L control. Your control and FabriTALK are now ready for use.

2. Sending an NC Program to the Amada Fanuc 16-L

The following section will help you to send an NC program from the host computer to the control. To send an NC program to the control, you need to set your control ready to receive data and then to start the transmission from the host computer.

Setting the Control Ready to Receive

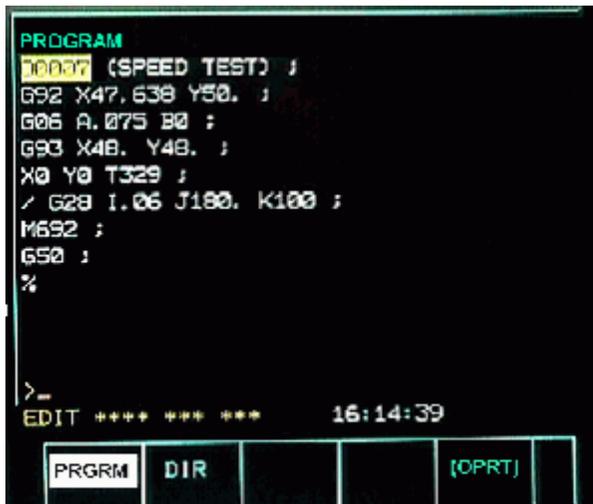
To send an NC program from the host computer:

1. Turn on the power at the control.
2. Turn the PROGRAM PROTECT key to the "OFF" position.



3. Depress the "Edit" mode key on the control panel.

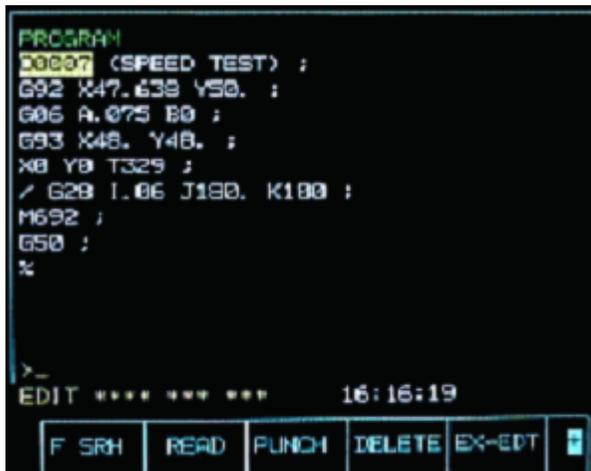
4. Press the PROG soft key. When you press on the "PROG" key, the screen below (partially shown) will appear.



5. Press the OPRT soft key at the lower right corner.



6. Press the + soft key.



7. Press the READ soft key.



8. Press the "EXEC" key.

The control is now waiting for a transmission from the host computer.

Sending an NC Program from the host Computer

To send an NC program from the host computer:

1. At FabriTALK main window, click on the "AMADA FANUC 16-L" node in the "Node List" box of Blanking tab.
2. Click on the NC file you want to send.
3. Click on the "Send File" button to start the transmission.

When the transmission is complete, check the control to make sure it has received the NC program.

3. Receiving NC Programs from the Amada Fanuc 16-L

The following section will help you set your computer ready receive data and then how to start the transmission from the control.

Setting the Host Computer Ready to Receive

To set the host to receive data:

1. At FabriTALK main window, click on the "AMADA FANUC 16-L" node in the "Node List" box of Blanking tab.
2. Click on the NC file to hold the data you are about to send from the control in the "File List".
3. Click on the "Rec. Files" button to set the host computer ready to receive. The host computer will respond to the control as soon as you start sending data from the control.

Sending an NC Program from the Control

To send data from the control:

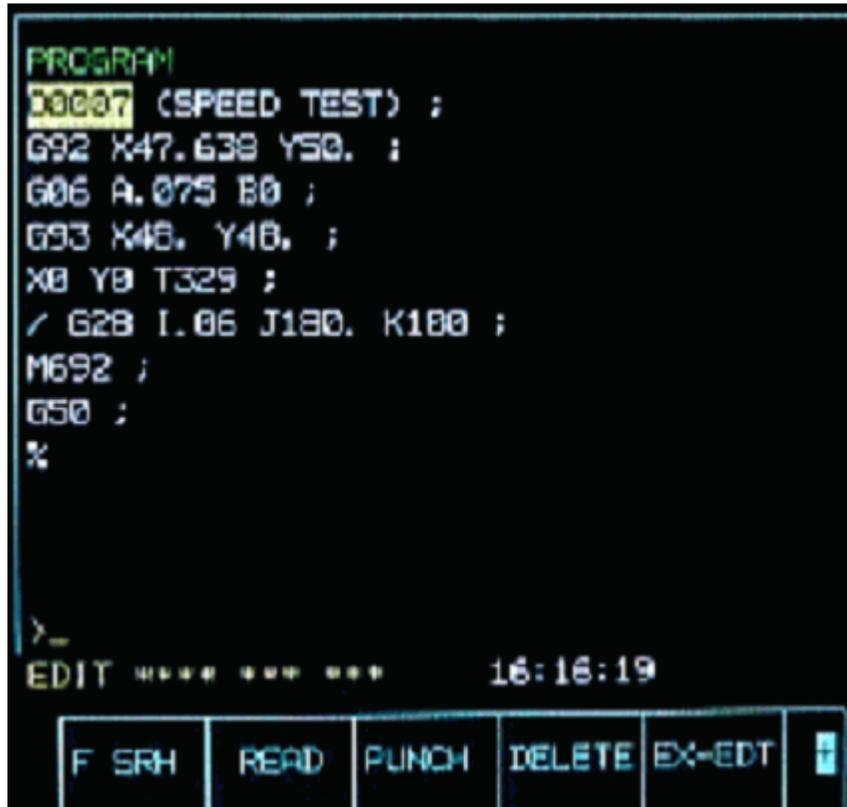
1. Turn the power on at the control.
2. Depress the "Edit" mode key on the control panel.
3. Press the PROG soft key. When you press on the "PROG" key, the screen below (partially shown) will appear.



4. Press the OPRT soft key at the lower right corner.



5. Press the + soft key.



6. Press the PUNCH soft key



7. Type in the program number you want to send. Example: 00250.

8. Press the "EXEC" soft key. The control will start sending data to the host computer.

When the transmission is complete, check the host computer to make sure the transmission has been successful.

Connecting an Amada-Fanuc 18-P Series

The following instructions will help you to set all the necessary DNC parameters for communication between your control and FabriTALK.

Setting the Parameters

Note: Make sure to note the current settings on your Amada-Fanuc 18-P control, before you change any parameters or switches. Write down the current settings for future reference.



1. Turn on the control and depress the MDI selection key.



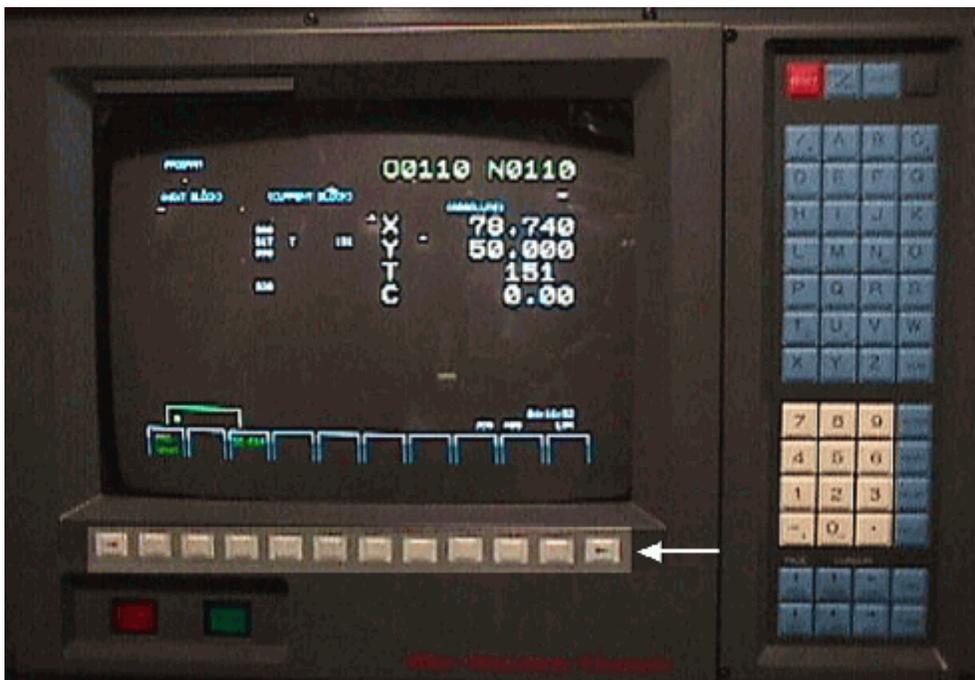
2. Turn EDIT PROTECT key lock to its "OFF" position.



3. Press the OFFSET SETTING key.



4. Press the "SETTING" soft key. (What is a soft key?)



5. Press the PAGE UP or the PAGE DOWN keys to scroll to the SETTING (HANDY) screen.



6. Use the cursor keys to move the cursor to the "PARAMETER WRITE" parameter on the screen.



7.Type “1” and then press the “INPUT” key to change the value to 1.

Note: As soon as you change the value to “1”, an alarm message will flash. This is normal. The alarm message indicates that the write parameter is enabled.

8.Now, press the “OFFSET SETTING” key.

9.Cursor to the PUNCH CODE parameter and change its value to 1.



10.Cursor to the I/O CHANNEL parameter and change its value to 1.



Note: Channel 1 is hard-wired to use the RS-232 interface. It is configured to always use the RS-232 interface.

11. Press the SYSTEM function key. The PARAMETER (SETTING) screen appears.



12. Press the PARAM soft key.



13. Use either the PAGE UP key or the PAGE DOWN key to find the PARAMETER (RS232C INTERFACE) page.



14. Use the cursor keys to select parameter 0100.





15. Set the parameter value to 00100000. Use the cursor keys RIGHT or LEFT to highlight each individual parameter bit. Once you have an individual bit or number highlighted, type the appropriate value and then press the "INPUT" key. Do this for every individual number in the row so that the row has the value of 00100000.
16. Press the "INPUT" key. Follow the same procedure and make sure that the parameter 0111 has the value of 10000001.
17. Use the PAGE key to cursor to parameter 0121.
18. Set the parameter 0121 to value 00000000. (Use similar procedure in Step 15.)



19. Use the cursor key to cursor to parameter 0112.
20. Set parameter 0112's value to 0 by typing "0" and then press the "INPUT" key.
21. Cursor to parameter 0113.
22. Set the value of parameter 0113 to 11 by typing "11" and then press the "INPUT" key.
23. Now, press the "OFFSET SETTING" key.
24. Press the "SETTING" soft key.
25. Use either the PAGE UP key or the PAGE DOWN key to scroll to the "SETTING (HANDY)" screen.
26. Select the "PARAMETER WRITE" parameter.
27. Type "0" and then press the "INPUT" key.
28. Press the RESET key.
29. Turn the FD\EXTERNAL switch to the right to select the RS-232 communication interface.



Note: Make sure your DNC cable is correctly connected to the RS232 communication port on the left side of the control panel. Keep the cable away from lighting fixtures, power transformers and high-voltage lines.



All necessary software has been installed for the CNC control you have selected. The CNC control and FabriTALK are now ready for use.

2. Sending NC Programs to the Amada-Fanuc 18-P

The following section will help you to send an NC program from your host computer to your control. To send an NC program to the control, you need to set your control ready for receiving data and then start the transmission from the host computer.

Setting the Control Ready for Receiving Data

To set the control ready for receiving data:

1. Make sure the FD\EXTERNAL switch turn to its “EXTERNAL” position.



2. Turn the “EDIT PROTECT” key to its “OFF” position.
3. Select the edit mode by depressing the EDIT mode key on the control console.



4. Press the PROG key.



5. Press the OPRT soft key.



6. Press the + soft key.

```

PROGRAM
00007 (SPEED TEST) ;
G92 X47.638 Y50. ;
G06 A.075 B0 ;
G93 X48. Y48. ;
X0 Y0 T329 ;
/ G28 I.06 J180. K100 ;
M692 ;
G50 ;
%

>_
EDIT **** * * * * 16:15:56

```

BG-EDT	0	SRH	SRH ↓	SRH ↑	REWIND	+
--------	---	-----	-------	-------	--------	---

7. Press the READ soft key.

```

PROGRAM
00007 (SPEED TEST) ;
G92 X47.638 Y50. ;
G06 A.075 B0 ;
G93 X48. Y48. ;
X0 Y0 T329 ;
/ G28 I.06 J180. K100 ;
M692 ;
G50 ;
%

>_
EDIT **** * * * * 16:16:19

```

F	SRH	READ	PUNCH	DELETE	EX-EDT	+
---	-----	------	-------	--------	--------	---

8. Press the "EXEC" soft key. The transmission will start within a few seconds.

The control is on standby and is ready to receive data from the host computer.

Sending Data from the Host Computer

To send an NC program from the host computer:

1. At FabriTALK main window, click on the "AMADA FANUC 18-P" node in the "Node List" box of Blanking tab.
2. Click on the NC file you want to send in the "File List" box.
3. Click on the "Send File" button to begin sending data to the control.

When the transmission is complete, FabriTALK will notify you with a message.

3. Receiving NC Programs from the Amada-Fanuc 18-P

To receive an NC program from the control, you need to set the host computer ready for receiving data and then to send the NC program from the control.

Setting the Host Computer Ready for Receiving Data

To set the host computer:

1. At FabriTALK main menu, click on the "AMADA FANUC 18-P" node in the "Node List" box of Blanking tab.
2. Click on the NC file to hold the data you are about to send from the control in the "File List".
3. Click on the "Rec. File" button to set the host computer ready for receiving data.

The host computer is now on standby. When the control begins sending data, the host computer will record and save the data to the file you named in Step 3.

Sending NC Programs from the Control

To start a transmission from the control:

1. Make sure the FD\EXTERNAL switch is turned to its "EXTERNAL" position.



2. Turn the “EDIT PROTECT” key to its “OFF” position.

3. Select the edit mode by depressing the EDIT mode key on the control console.



4. Press the PROG key.



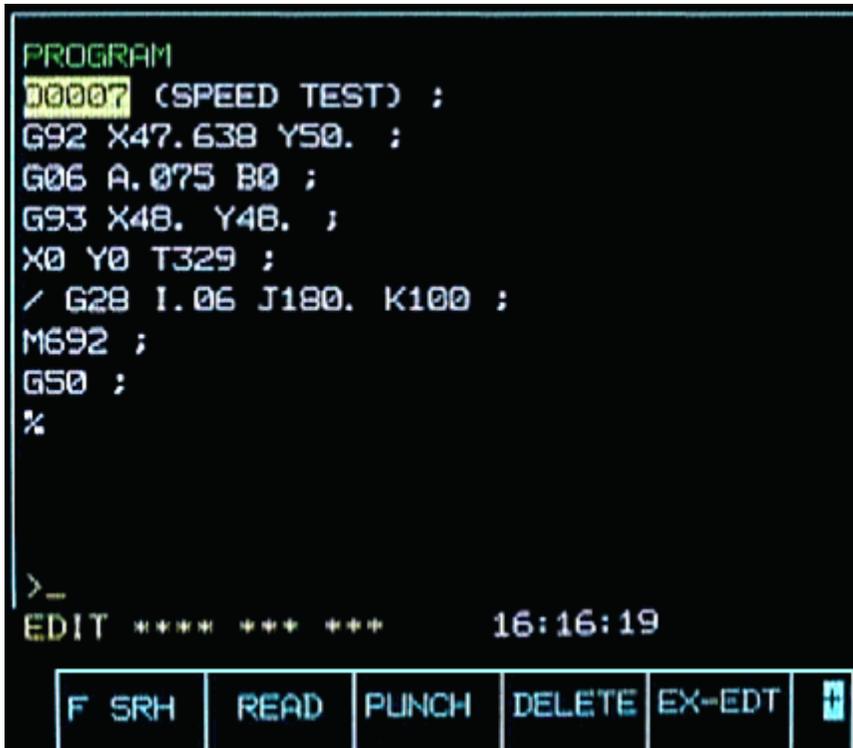
5. Press the OPRT soft key.



6. Press the + soft key.



7. Press the PUNCH soft key.



- 8.Type a program number that you want to send and then press the “INPUT” key.
- 9.Press the “EXEC” soft key. The control starts sending data to the host computer.

Connecting an Amada-Fanuc 6M Series

The following instructions will help you to set all necessary parameters for DNC communication between your Amada-Fanuc 6M series control panel and FabriTALK.



The MDI mode is used when changing the DNC communication parameters.
The EDIT mode is used when sending or receiving NC programs.

1.Setting the DNC Parameters

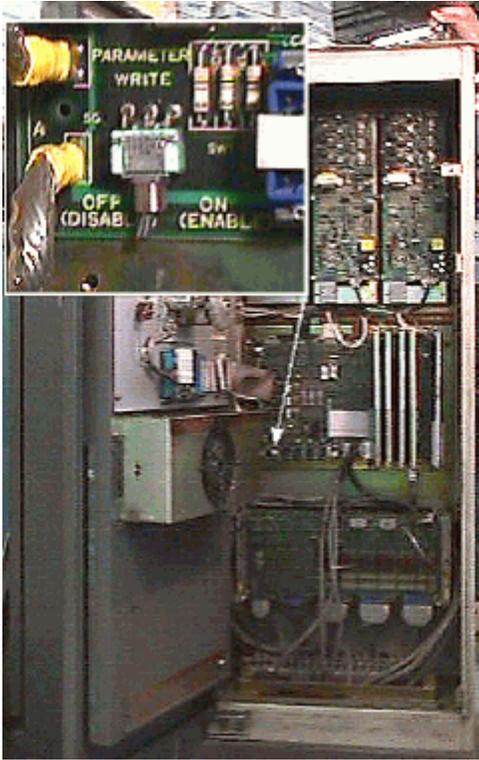
Notes:

- 1.Make sure to note the current settings on your control before you change any parameters or switches. Write down the current settings for future reference.
- 2.Make sure the program protection key is turned to its "ON" position.
- 3.Make sure the CNC machine is turned off before you open the front panel door.

CAUTION!

Electrical components will be exposed. Make sure the CNC machine is turned off.

- 1.The PARAMETER WRITE switch is at the lower left corner of the PC board. Turn the "PARAMETER WRITE" switch to its "ON" position. Then close the front panel door.



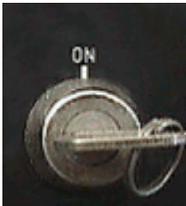
2. Turn on the control panel.

Note: An alarm message will appear when the “Parameter Write” switch is set to the “ON” position. This is normal. Please disregard this alarm message.

3. Turn the mode selection dial at the center of the control panel to its “MDI” position to select the MDI mode.



4. Turn the Prog. Protection key lock to its “OFF” position.



5. Depress the SET selection key. The display screen shows the SETTING DATA page.



6. Use the cursor keys to move the cursor to "INPUT DEVICE 1" parameter.

7. Type "P1" and then press the "INPUT" key. The value of the "INPUT DEVICE 1" parameter should now be 1.

8. Move the cursor to "INPUT DEVICE 2".

9. Type "P1" and then press "INPUT". The value of the "INPUT DEVICE 2" parameter should now be 1.

10. Depress the PARAM selection key. The screen displays parameters in the same format as illustrated here.



11. Cursor to parameter 002.

12. Type "P10100001" and then press the "INPUT" key.

13. Page down to find parameter 311. Move the over to parameter 311.

14. Type "P00100111" and then press the "INPUT" key.

15. Page down to find parameter 340. Cursor to the parameter.

- 16.Type “P2” and then press the “INPUT” key.
- 17.Move the cursor to parameter 341.
- 18.Type “P2” and then press the “INPUT” key.
- 19.Now, turn the “Prog. Protection” key lock to the “ON” position and turn off the CNC machine.
CAUTION: Electrical components will be exposed. Make sure the CNC machine is turned off. You are about to open the front panel door of the control.
- 20.Open the front panel and set the “PARAMETER WRITE” switch to its “OFF” or “DISABLE” position and then close the front panel.
- 21.Turn on the power at the control.
- 22.Use the mode selection dial to select the “EDIT” mode.



- 23.Turn the “Prog. Protection” key lock to its “OFF” position.

The Fanuc 6M control is now set. Make sure the DNC cable is connected to the RS-232 communication port.



Notes:

- 1.FabriTALK will not work if the DNC cable is not correctly configured. Make sure that the DNC cable is firmly connected at both ends.
- 2.Keep the cable away from lighting fixtures, power supplies, or devices that generate strong electromagnetic fields.
- 3.All necessary software has been installed for your O4P-C control. The control and FabriTALK are now ready for use.

2. Sending NC Programs to the Amada Fanuc 6M Control

The following section will help you to send an NC program from your host computer to your control. To send an NC program to the control, you need to set your control ready to receive data and then to start the transmission from the host computer.

Setting the Fanuc 6M Control Ready to Receive

To set the control ready to receive data:

1. Turn on the control panel. Turn the Prog. Protect key lock to its "OFF" position.



2. Turn the mode selection dial to select the "Edit" mode.



3. Press the RESET key.



4. Press the PRGRM key.



5. Type the block number under which the program will be saved then press the "INPUT" key.
6. Press the READ key.



The messages “EDIT” (flashing) and “LSK” appear to indicate that the control is ready to receive a transmission from the host computer.

Sending Data from the Host Computer

To send an NC program from the host computer:

1. At FabriTALK main window, click on the “FANUC 6M ISO” node in the “Node List” box of Blanking tab.
2. Click on the NC file you want to send in the “File List” box.
3. Click on the “Send File” button to begin sending.

When the transmission is complete, check the control to make sure it has received the NC program.

3. Receiving NC Programs from an Amada Fanuc 6M Control

To receive an NC program from the Fanuc 6M control, you need to set the host computer ready to receive data and then to send the NC program from the control.

Setting the Host Computer Ready to Receive

To set the host computer to receive data:

1. At FabriTALK main window, click on the “FANUC 6M ISO” node in the “Node List” box of Blanking tab.
2. Click on the NC file to hold the data you are about to send from the control in the “File List”.
3. Click on the “Rec. Files” button to set the host computer ready for receiving data.

The host computer will respond as soon as you start sending data from the control.

Sending an NC Program from the Control

To send data from the Fanuc 6M control:

1. Turn the mode selection dial to its "EDIT" position.



2. Press the RESET key.



3. Press the PRGRM key.



4. Type the name of the NC program (or block name) you want to send to the host computer.
5. Press the PUNCH key.



When the transmission is complete, check the host computer to make sure it has received the NC program.

Connecting an Amada-Fanuc OP

The Strippit control is essentially a Macintosh computer running a special application that controls a Strippit CNC machine. The setup of the DNC communication parameters is fairly simple. The Strippit 1000R and Strippit 630R machines have similar RS-232 DNC communication systems. Therefore the information here is applicable to both models. The instructions will note the differences.



Function Keys

The function keys give access to a variety of functions and menus.



Memory Protect



The "Memory Protect" lock protects existing data stored in the control. Changing DNC parameters or sending data to the control are not allowed when the lock is turned to its "on" position. The memory protect must be turned off in order to change DNC setting or download data.

Mode Selection



Use the dial to select a mode. Select the MDI mode for changing DNC parameters. Select the EDIT mode when you want to download or upload NC programs.

Soft Keys



The soft keys are a row of white keys just below the display screen. The description of each key is shown on the display directly above it. The function of a soft key changes from menu to menu.

1. Setting DNC Parameters

1. Turn the "Memory Protection" lock to its OFF position.
2. Use the mode dial to select the MDI mode.
3. Press the SET function key.
4. Press the page down key once to find the PARAMETER ENBL parameter. Use the cursor keys to select the parameter.

SETTING (HANDY)		05533 N5333		
PARAMETER ENBL = 1 (0: OFF 1: ON)				
PART TOTAL =				
PART REQUIRED =				
PART COUNT =				
		CLOCK 99/02/25		
P1		10:28:41		
10:40:36		MDI	ABS	LSK
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

5. Change the parameter setting to "1".

The following steps tell you how to change a parameter setting:

- a. Use the cursor key to select a parameter.
- b. Use the keypad to type the new value. Type "P" and then the value.

Example: To change the PARAMETER WRITE parameter, you type "P1".

SETTING (HANDY)		05533 N5333		
PARAMETER ENBL = 1 (0: OFF 1: ON)				
PART TOTAL =				
PART REQUIRED =				
PART COUNT =				
		CLOCK 99/02/25		
P1		10:28:41		
10:40:36		MDI	ABS	LSK
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

c. Then press the INPUT key. As you press the key, the parameter setting changes.

6. Press the SET function key.

7. Use the cursor keys to find the SETTING (HANDY) page where input and output parameters are.

SETTING (HANDY)		05533 N5333		
PARAMETER ENBL = 1 (0: OFF 1: ON)				
PART TOTAL =				
PART REQUIRED =				
PART COUNT =				
			CLOCK 99/02/25	
			10:28:41	
P1				
10:40:36			MDI	ABS
		LSK		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

8. Change the PUNCH code to **ISO**.

9. Change both the INPUT and OUTPUT devices settings to "3".

10. Press the PARAM function key.

11. Use the cursor keys to find parameter 002 and set the setting to **00110000**.

12. Find parameter 311 and change its value to **00001010**.

13. Press the SET function key and then page down once to find the PARAMETER ENBL parameter.

SETTING (HANDY)		05533 N5333		
PARAMETER ENBL = 1 (0: OFF 1: ON)				
PART TOTAL =				
PART REQUIRED =				
PART COUNT =				
			CLOCK 99/02/25	
P1			10:28:41	
10:40:36		MDI	ABS	LSK
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

14. Set the parameter to **0**.

15. Turn the MEMORY PROTECTION lock to its ON position.

You have completed the DNC communication setup procedure for you GE Fanuc OP control. It is now ready to communicate with FabriTALK. Make sure the DNC cable is firmly connected at both ends.

2. Receiving NC Programs

Similar to the sending process, receiving NC programs from the GE Fanuc OP control is just as easy. First you set the host computer ready for receiving data. Then you transmit data from the control.

Preparing the Host Computer for Receiving Data

To configure the host computer to receive data:

1. At FabriTALK main window, click on the "GE Fanuc OP" node in the "Node List" box of Blanking tab.
2. Click on the NC file to hold the data you are about to send from the control in the "File List".

Note: You may want to use a consistent file naming convention. It is recommended that you use *.NC for you NC filename extension. For example, "filename.nc".

3. Click the "Rec. File" button. The host computer is now ready to receive data from the control.

Transmitting Data from the Control

1. Use the Mode dial to select the EDIT mode.
2. Press the PRGRM function key.



3. Type the block name of the file you want to send and then press the INPUT key.

Example: O1211

4. Press the PUNCH key to begin transmitting data to the host computer.

When the transmission is complete, check the host computer to make sure the transmission was successful.

3. Sending NC Files

Sending NC files to the GE Fanuc control is a straightforward process. You configure the control to receive data and then you transmit the data from the host computer.

Preparing the Control for Receiving Data

To configure the control to receive data:

1. Make sure the MEMORY PROTECT lock is turned to its OFF position.



2. Use the Mode dial to select the EDIT mode.
3. Press the RESET key.
4. Press the PRGRM function key.
5. Press the READ key. The "LSK" message flashes to indicate that the control is ready for an incoming transmission.

Transmitting Data from the Host Computer

To send data from the host computer:

1. At FabriTALK main window, click on the "GE Fanuc OP" node in the "Node List" box of Blanking tab.
2. Click on the name of the NC file you want to send.
3. Click on the SEND FILE button to begin transmitting data to the control.

Connecting an Amada-O3P

The following instructions will help you set all necessary parameters for DNC communication between your control and FabriTALK.

1. Setting the Parameters

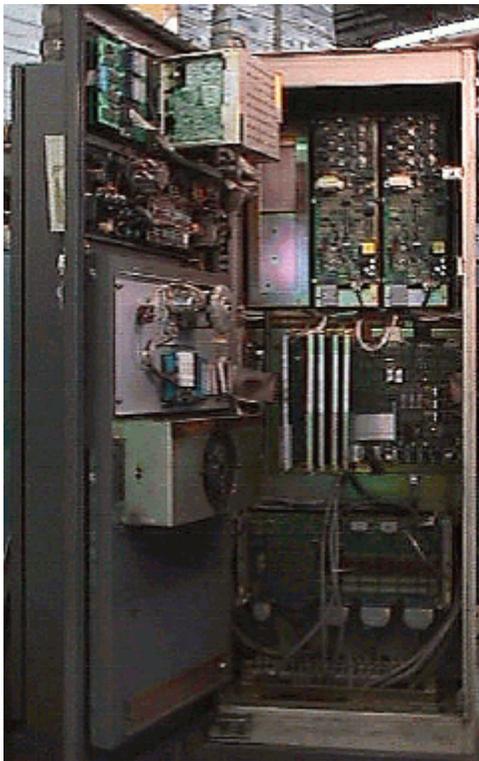
Note: Make sure to note the current settings on your control before you change any parameters, or dip-switches. Write down the current settings for future reference.

CAUTION!

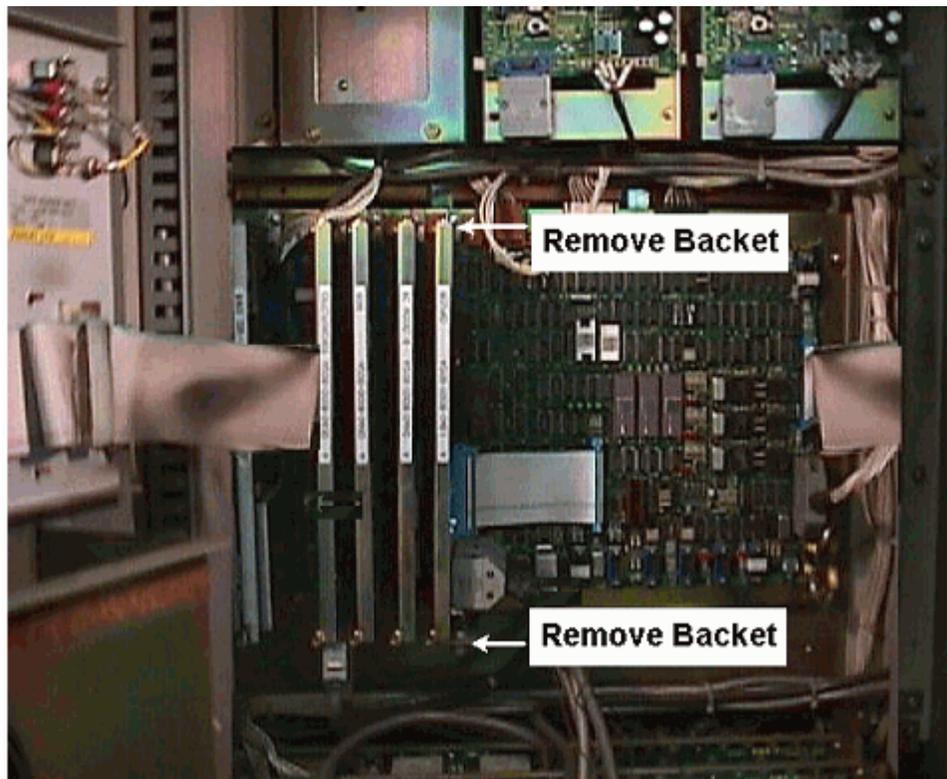
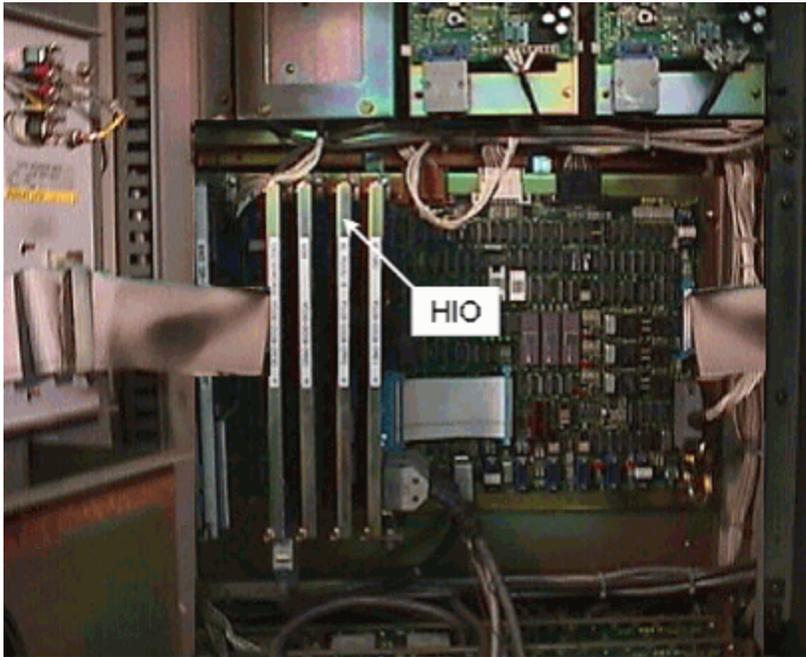
- 1.You will be making dip-switch settings to a modular board inside the machine control. Make sure to switch off all power to the machine to prevent electrical shock!**
- 2.Make sure the connections on the modular board are not disconnected while you remove the modular board.**
- 3.Take notes on the existing dip-switch settings before you make any changes.**

To set the parameters:

- 1.Turn off the power to the CNC machine! Beware of electrical shock!**
- 2.Open the door panel of the CNC machine.



3. Locate the modular board labeled "HIO" and remove the top and bottom brackets that fasten the modular board onto the main board in the background.

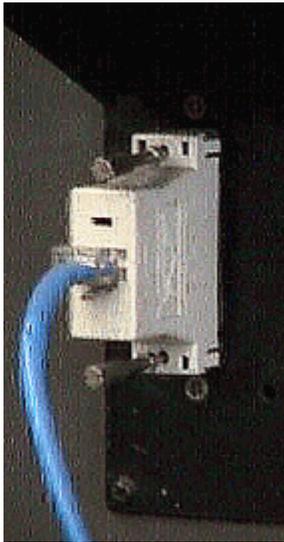


4. Carefully remove the modular board from the main PC board.

5. On the modular board, you will find two groups of dip-switches. **Take notes on the existing dip-switch settings before you make any changes.** Set the **Group 1** and **Group 2** switches as indicated below:

Group 1		Group 2	
Dip-Switch	Set Value	Dip-Switch	Set Value
CSLI =	OFF	A =	0
EPE =	OFF	B =	0
PI =	OFF		
SBC =	ON		

6. Re-install the "HIO" modular onto the main PC board.
7. When the modular board is firmly in place, re-install the brackets and fasten them.
8. Close the door panel and lock it.
9. Turn on the CNC machine and its control panel. It will take a few seconds before the control is ready.
10. Your Amada 04PC control is now set to communicate with FabriTALK.
11. Make sure your DNC cable is correctly connected to the RS232 DNC port on the CNC machine.



Note: Make sure the DNC cable is connected and tightly secured at the control and host computer. Keep the cable away from lighting fixtures, power supplies or other devices that generate strong electromagnetic fields.

2. Sending NC Files to the Amada-O3P Control

The following section will help you to send an NC program from your host computer to your control. To send an NC program to the control, you need to

set your control ready to receive data and then to start the transmission from the host computer.

Setting the Amada O3P Ready to Receive

To set the control ready to receive data:

1. Turn on the control panel and then press the "EDIT" key to select the Edit mode.
2. At the Amada O3P-A control, press the "PRGRM I/O" key. The screen will display a menu.
3. Use the cursor keys to select option 1 "READ (---> TO MEMORY".
4. Type a name for the program the control is about to receive and press the "INPUT" key. The name of the program should not exceed eight characters.

Note: You may not want to press the "INPUT" key after typing the program name until FabriTALK is ready to send. You may not have enough time to set the host computer after you press the "INPUT" key and send data before the control times out and cancels the data transmission from the host computer.

The Amada O4P-A control is now ready to receive data from FabriTALK.

Sending an NC File from the Host Computer

To send an NC program from the host computer:

1. At FabriTALK main window, click on the "Amada O3P" node in the "Node List" box of Blanking tab.
2. Click on the NC file you want to send.
3. Click on the "Send File" button to begin sending data to the control. The "Display" window shows the content of the transmission as it is being sent.

3. Receiving an NC File from an Amada-O3P Control

To receive an NC program from the Amada O3P control, you need to set the host computer ready to receive data and then to send the NC program from the control.

Setting the Host Computer Ready to Receive

To set the host computer:

1. At FabriTALK main window, click on the "AMADA O3P" node in the "Node List" box of Blanking tab.

2. Click on the NC file to hold the data you are about to send from the control in the "File List".

3. Then click on the "Rec. File" button to set the host computer ready to receive data.

Now your host computer is ready to receive data from the O4P-A control.

Sending an NC Program from the Control

To send an NC program from the control:

1. Press on the "PRGRM I/O" button at the control panel. A menu will appear on the display.

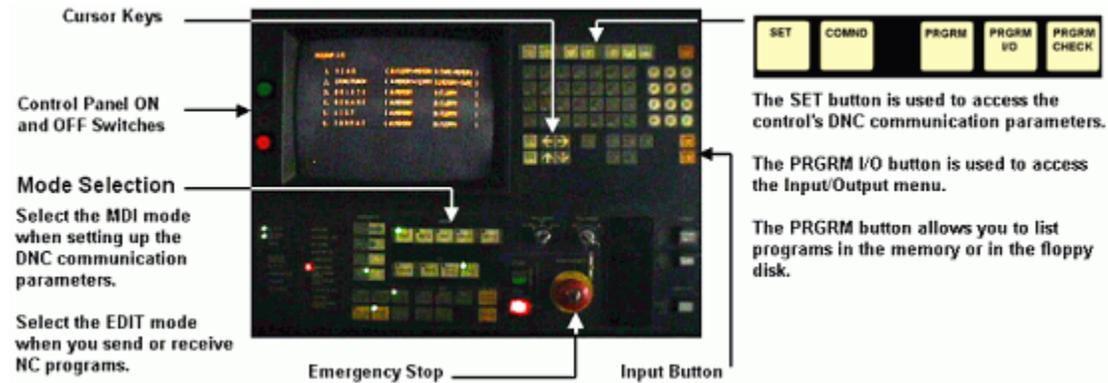
2. Use the cursor keys to select "2. STORE/PUNCH B: MEMORY --> TAPE" option and then press on the "INPUT" key.

3. A list of available files stored in memory will appear on the screen. Use the cursor keys to select the one you want to send. Then press the "INPUT" key to begin the transmission.

When the control is done transmitting the program, check the host computer to verify that the transmission was successful.

Connecting an Amada-Fanuc O4P-A

The following instructions will guide you step by step on how to set all necessary DNC parameter for communication between your Amada-Fanuc O4P-A and FabriTALK. Before you start, you may want to review the major features of this control panel.



1. Setting the Parameters

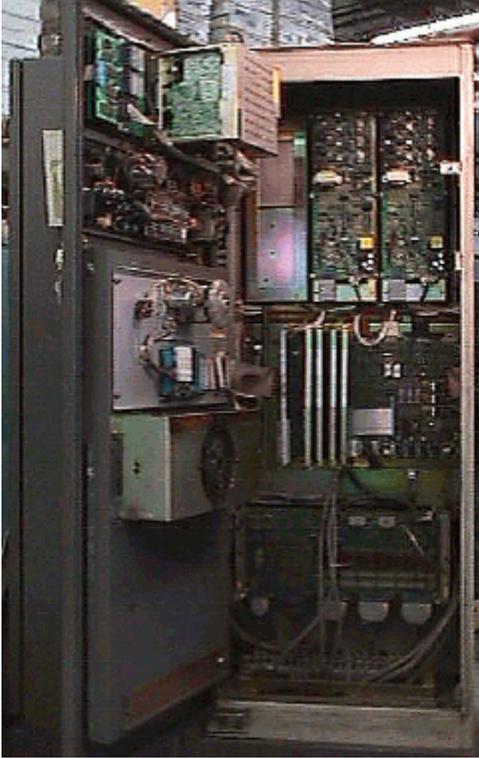
Note: Make sure to note the current settings on your control before you change any parameters or switches. Write down the current settings for future reference.

CAUTION!

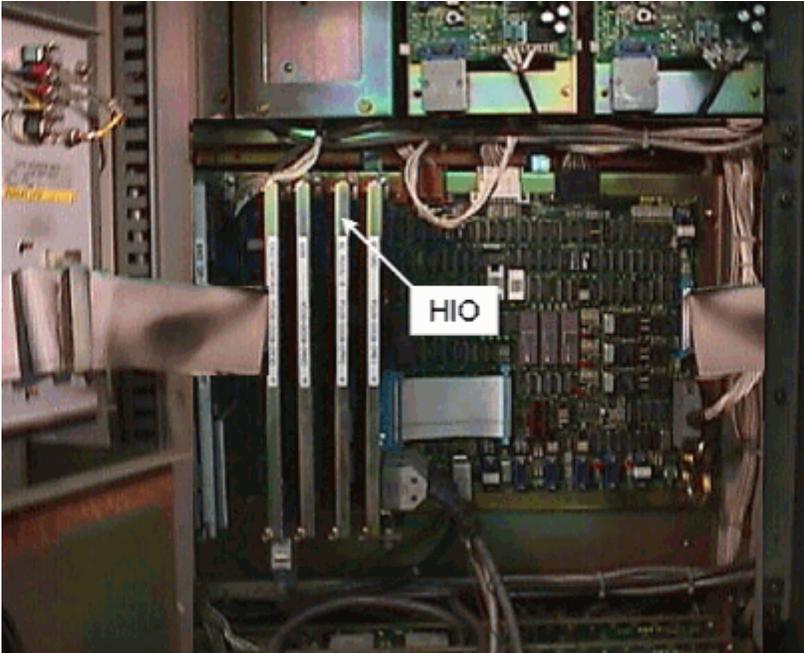
- 1. You will be making dip-switch settings to a modular board inside the machine control. Make sure to switch off all power to the machine to prevent electrical shock!**
- 2. Make sure the connections on the modular board are not disconnected while you remove the modular board.**
- 3. Take notes on the existing dip-switch settings before you make any changes.**

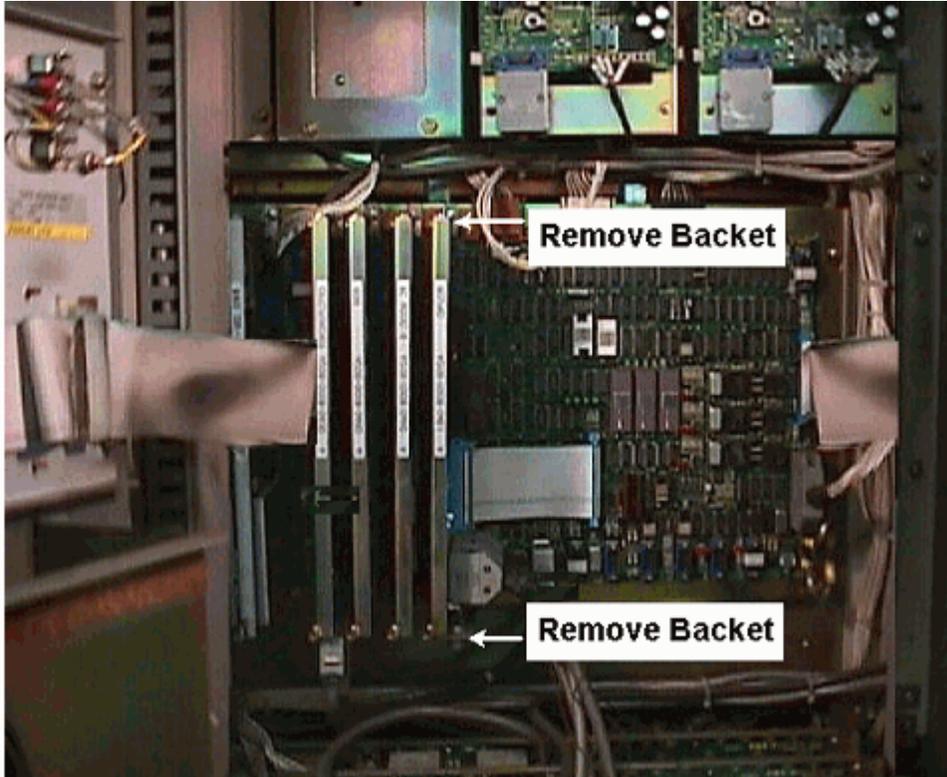
To set the parameters, follow these steps:

1. Turn off the power to the CNC machine.
2. Open the front door panel.



3. Locate the modular board labeled HIO and remove the top and bottom brackets that fasten the modular board onto the main PC board in the background.

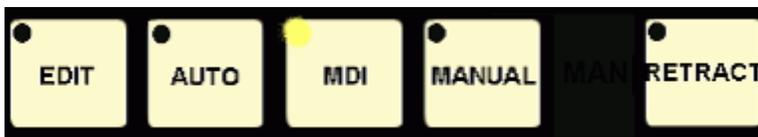


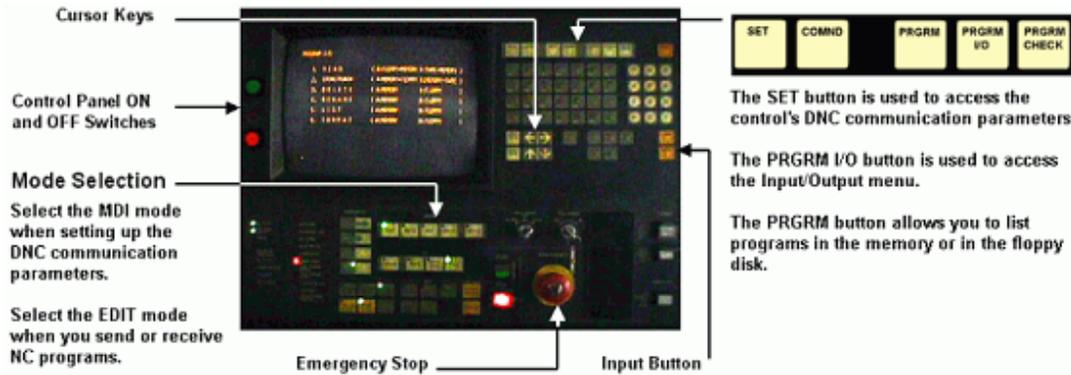


4. Carefully remove the modular board from the main PC board.
5. On the modular board, you will find two groups of dip-switches **Take notes on the existing dip-switch settings before you make any changes.** Set the **Group 1** and **Group 2** to the values indicated below:

Dip-Switch	Group 1 Set Value	Dip-Switch	Group 2 Set Value
CSLI=	OFF	A =	0
EPE =	OFF	B =	0
PI =	OFF		
SBC =	ON		

6. Re-install the "HIO" modular board onto the main PC board.
7. When the modular board is firmly in place, re-install the brackets and fasten them.
8. Close the door panel and lock it.
9. Turn on the CNC machine and its control panel. It will take a few seconds before the control is ready.
10. Press on the MDI mode key on the control panel to select the MDI mode.

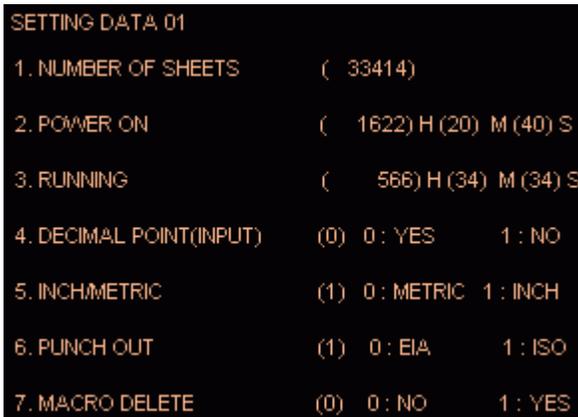




11. Press the SET key.



12. Use the cursor keys to select PUNCH OUT.



13. Type "1" and then press the "INPUT" key. (This sets the control to use the ISO codes.)

14. Both the Amada O4P-A control and the FabriTALK software are now ready for use.

2. Sending NC Programs to the Amada-O4P-A Control

The following sections will help you set your control ready to receive and then how to send data from your host computer.

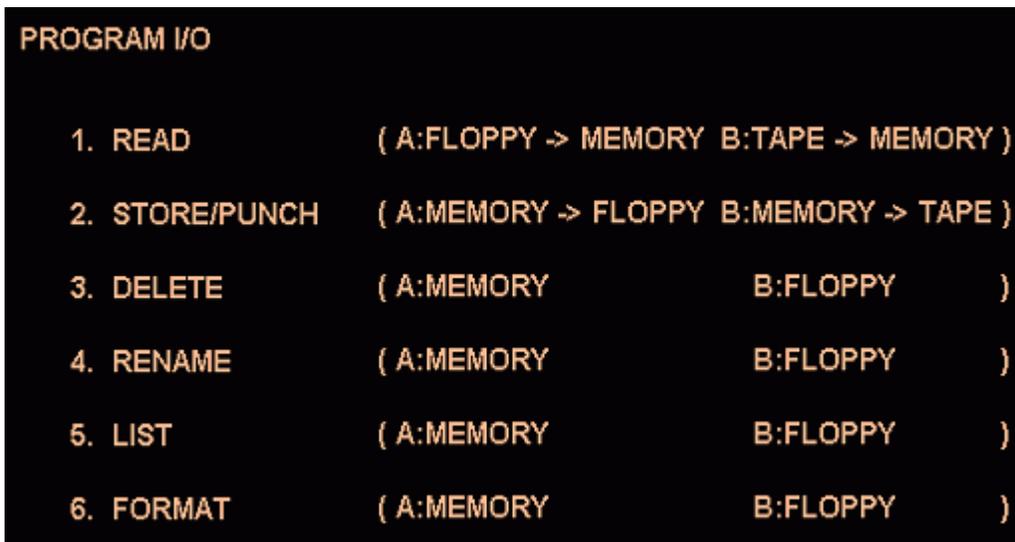
Note: Make sure the DNC cable is securely connected at the control and host computer.

Setting the Amada O4P-A Ready to Receive

1. Press the PRGRM I/O key at the Amada O4P-A control. The screen will display a menu.



2. Use the cursor keys to select READ B: TAPE -> TO MEMORY and then press the "INPUT" key.



3. Type in a name for the program the control is about to receive then press the "INPUT" key. (See Example.)



Note: You should see the word “RUNNING” flashing after you press the “INPUT” key. The Amada O4P-A control is now ready to receive data from FabriTALK.

Starting the Transmission from the Host Computer

1. At FabriTALK main window, click on the “Amada O4P-A” node in the “Node List” box of Blanking tab.
2. Click on the NC file you want to send.
3. Click on the “Send File” button to begin sending data to the control.

When the transmission is complete, check the control to make sure it has received the NC program.

3. Receiving NC Programs from the Amada O4P-A Control

The following instructions will show you how to set the host computer to receive data and how to send data from the control. The following instructions will guide you through the procedure step by step.

Setting the Host Computer Ready to Receive

To set the host computer:

1. At FabriTALK main window, click on the “AMADA O4P-A” node in the “Node List” box of Blanking tab.
2. Click on the NC file to hold the data you are about to send from the control in the “File List”.
3. Then click on the “Rec. File” button to set the host computer ready to receive data.

Now your host computer is ready to receive data from the O4P-A control.

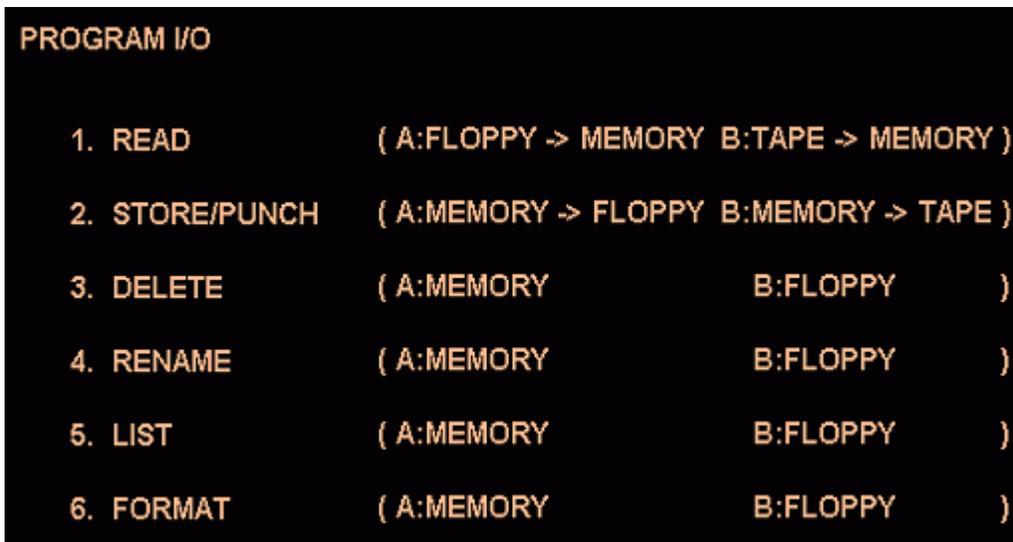
Sending an NC Program from the O4P-A Control

To start a transmission from the Amada O4P-A control:

1. At the control panel, press on the PRGRM I/O button. A menu will appear on the display.



2. Use the cursor keys to select 2. STORE/PUNCH B: MEMORY -> TAPE option and then press on the "INPUT" key.



3. A list of available files stored in memory will appear on the screen. Use the cursor keys to select the one you want to send. Then press the "INPUT" key to begin the transmission.

When the transmission is complete, check your host computer to make sure the transmission has been successful.

Connecting an Amada-Fanuc O4P-C

The following instructions will guide you step by step on how to set all necessary parameters for DNC communication between your control and FabriTALK.

1. Setting the Parameters

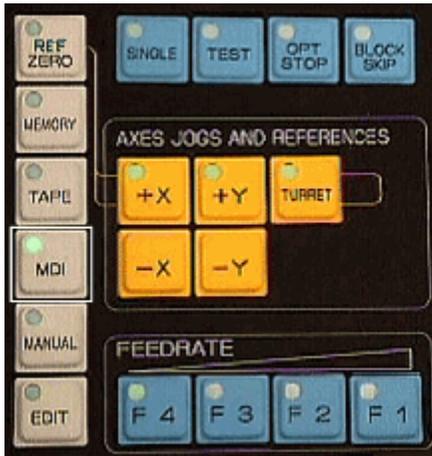
Note: Make sure to note the current settings on your control before you change any parameters or switches. Write down the current settings for future reference.

To set the parameters:

1. Turn on the control power and then turn the "EDIT PROTECT" keylock to its "OFF" position.

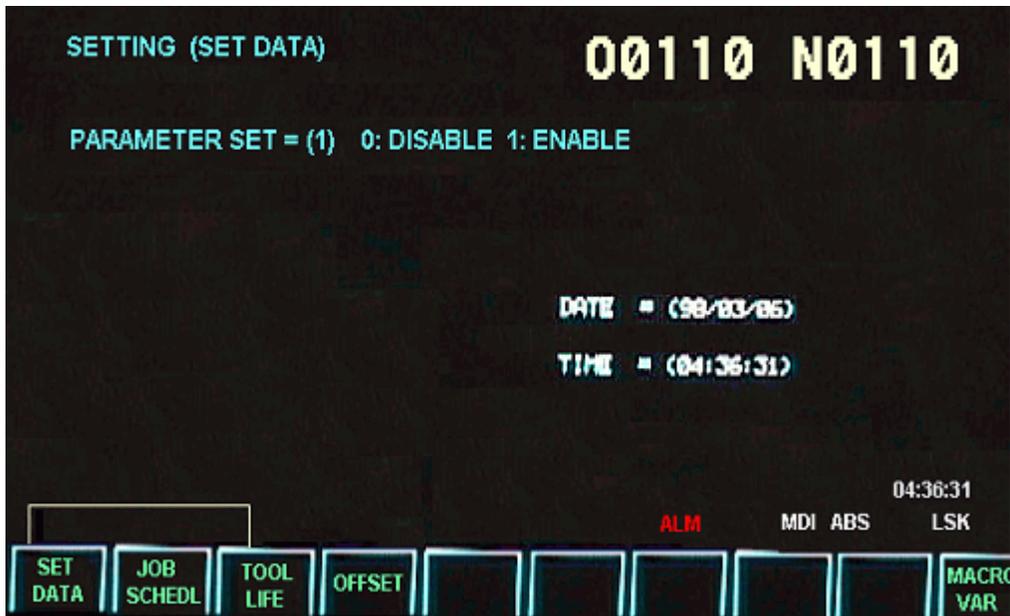


2. Depress the "MDI" key to select the MDI mode.

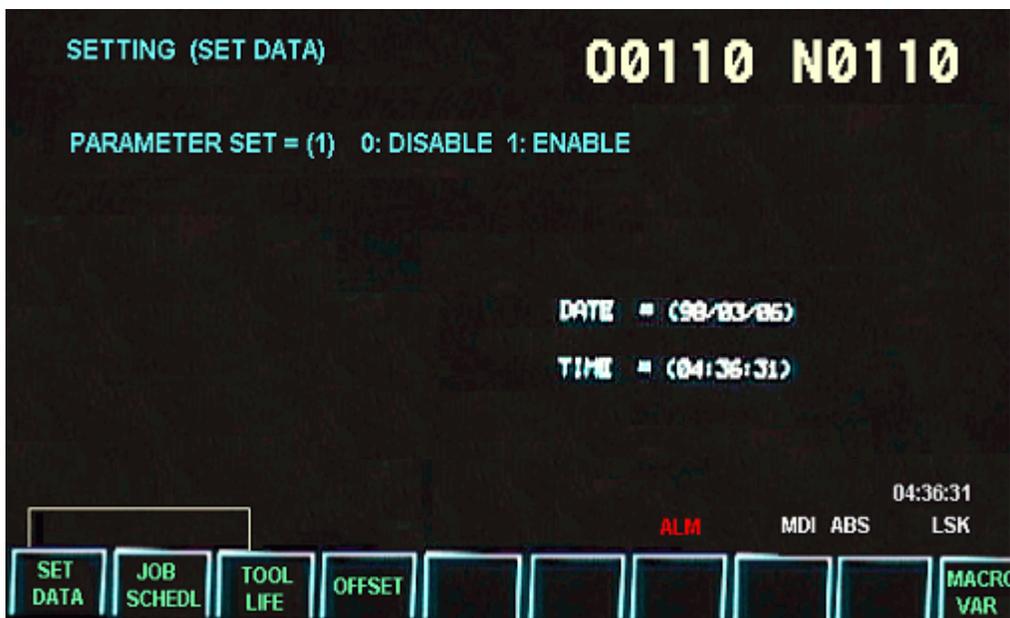


3. Hold down the "FUNC" key while depressing the "SET" key and the "SETTING (SET DATA)" screen appears.





4. Use the page down arrow key to scroll to the "SETTING (SET DATA)" screen.



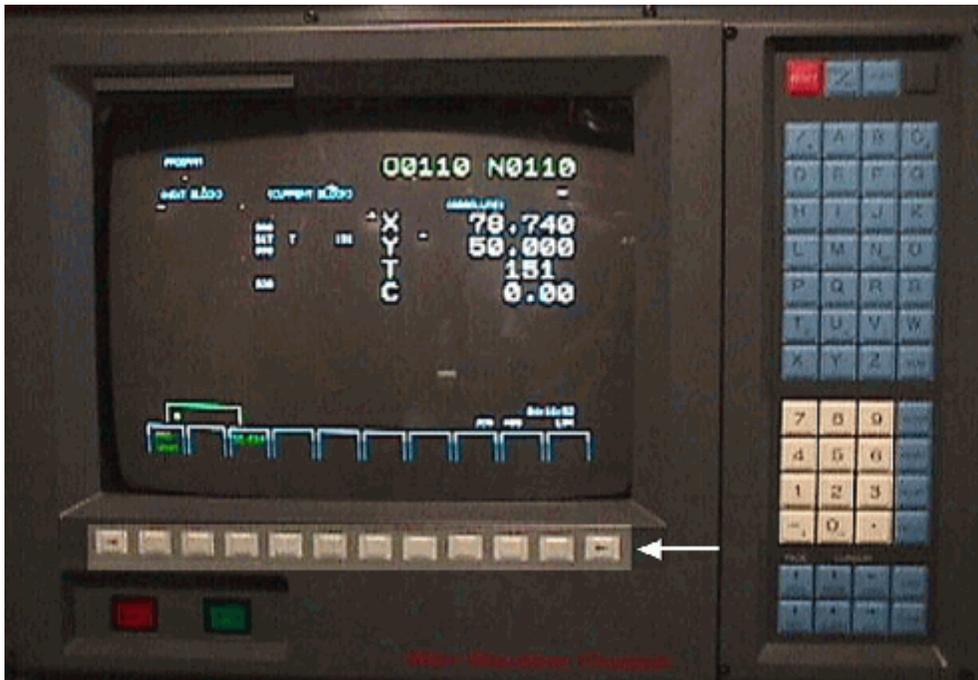
5. Use the keypad to type "P1" and then press the "INPUT" key. While you type "P1" the screen does not show you what you type; however, the value of "PARAMETER SET" should change to 1 when you press the "INPUT" key.

Note: The "ALM" message flashes as you change the "PARAMETER SET" parameter to 1. This is normal.

6. Hold down the "FUNC" key then press the "ALARM" key.



7. Press the "PARAMETER" soft key. Press on the soft key that is directly below the word "PARAMETER" on the screen.

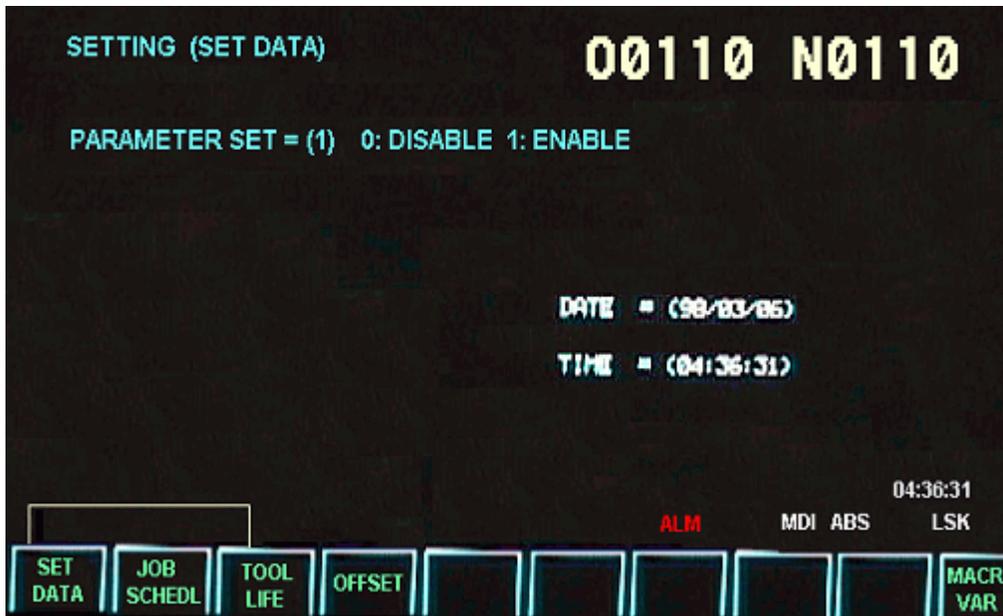


8. Cursor to parameter 0002. Type "P10110000" and then depress the "INPUT" key.



9. After you depress the "INPUT" key, always check the screen to make sure the value of the parameter is correct.
10. Page down to the screen with parameter number 0340 and 0341. Cursor to setting number 0340. Enter "P2" and depress the "INPUT" key. Repeat the latter step for setting number 0341.
11. Page up to the screen with parameter number 0311. Cursor to setting number 0311. Type "P00100111" and then depress the "INPUT" key.
12. Hold down the "FUNC" key while pressing the "SET" key. This will return the screen to the "SETTING (SET DATA)" menu.

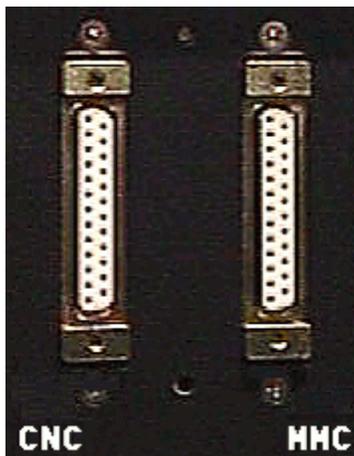




13. Type "P0" and depress the "INPUT" key.

14. Depress the red "RESET" button at the top of the panel to clear the "ALM" message.

Your Amada 04PC control is now set to communicate with FabriTALK. Make sure your DNC cable is correctly connected to the CNC port on the CNC machine. FabriTALK will not work if the DNC cable is not correctly configured. Make sure the DNC cable is connected and tightly secured at the control and host computer. Keep the cable away from lighting fixtures, power supplies, or other devices that generate strong electromagnetic fields.



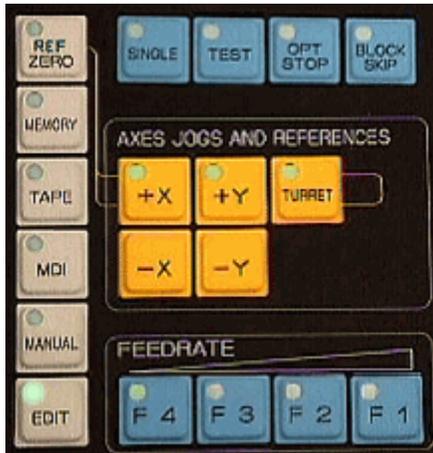
2. Sending an NC File to the Amada Fanuc O4P-C Control

The following section will show you how to send an NC program from your host computer to your control. To send an NC program to the control, you need to set your control ready to receive data and then to start the transmission from the host computer.

Setting the Amada Fanuc O4P-C Control Ready to Receive

To set the control ready to receive data:

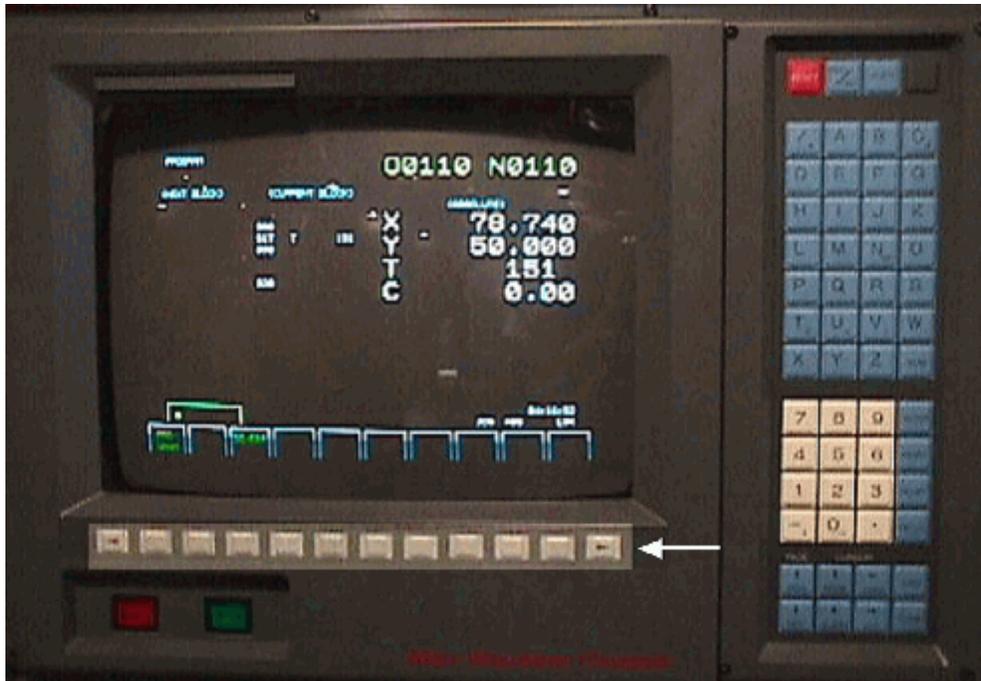
1. Make sure the "EDIT PROTECT" key lock is turned to its "OFF" position.
2. Turn on control. When it is ready, depress the "EDIT" key on the control console to select the edit mode.



3. Depress and hold down the "FUNC" key then press the "PRGRM" key.



4. Press the "READ" soft key below the screen. The "READ" message should start flashing, indicating that the O4PC control is ready to receive.



Select and Send NC Files from the Host Computer

To send an NC program from the host computer:

1. At FabriTALK window, click on the "AMADA FANUC 04PC ISO" node in the "Node List" of Blanking tab and then click on the NC file you want to send.

Note: Make sure the NC program you selected contains the name of the program on the first line.

2. Click on the "Send File" button to begin sending.

When the transmission is complete, check the control to make sure it has received the NC program.

3. Receiving an NC File from the Amada Fanuc O4P-C Control

To receive an NC program from the Amada Fanuc O4P-C control, you need to set the host computer ready to receive data and then to send the NC program from the control.

Setting the Host Computer to Receive

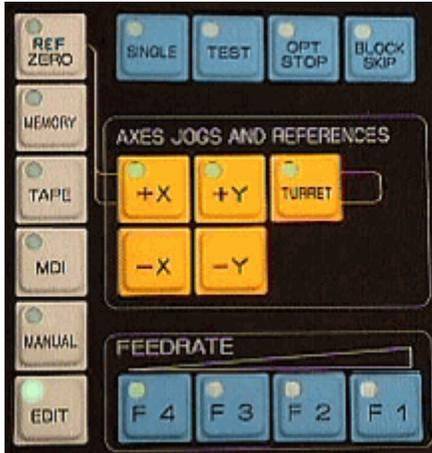
To set the host to receive data:

1. At FabriTALK Main window, click on the "Amada Fanuc O4P-C" node in the "Node List" box of Blanking tab.
2. Click on the NC file to hold the data you are about to send from the control in the "File List".
3. Click on the "Rec. Files" button to set the host computer ready to receive.

Sending an NC File from the Amada Fanuc O4P-C Control

To send data from an Amada Fanuc O4P-C:

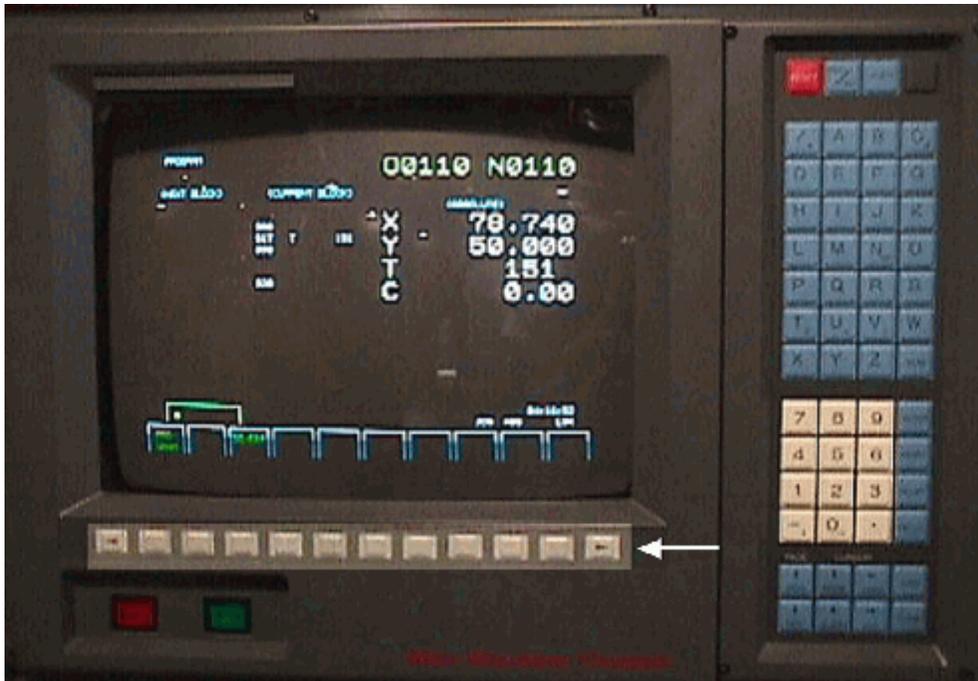
1. Turn on the control panel and press the "EDIT" mode selection key when the control is ready.



2. Hold down the "FUNC" key and depress the "PRGRM" key.



3. Type a program number that you want to send.
4. Press the "PUNCH" soft key to starting transmitting data to the host computer.



When the transmission is complete, check the host computer to make sure the transmission has been successful.

Connecting a GE 2000

These instructions will guide you step by step on how to set all necessary DNC parameters on your GE 2000 (Amada Mark Century 2000) control.

1. Setting the Parameters

Note: Make sure to note the current settings on your Amada Mark Century 2000 PA control before you change any parameters or switches. Write down the current settings for future reference.



To set the DNC parameters:

1. Turn on the control panel.
2. Turn the EDIT key lock to its "ON" position.



3. Press the TERM key.



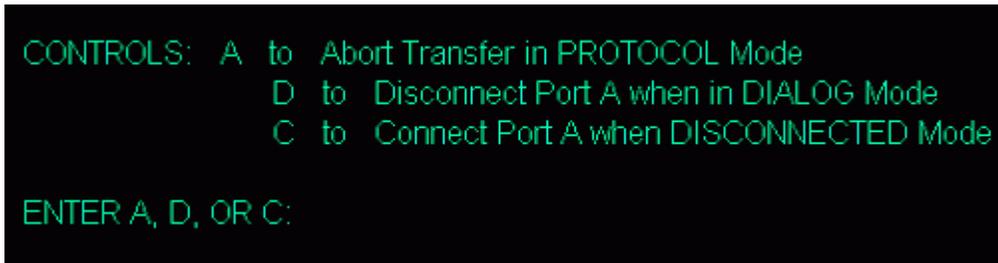
4. Press the PAGE < key until you see the DNC Control option.



5. Use the cursor keys to select the DNC Control option and then press the "Enter" key.



6.The options appear on the screen.



7.Type "C" and then press the "Enter" key.

8.Select the Change Privilege menu and then press the "ENTER" key.



9.Change the privilege level to 4.

10.Press the "HELP" key.

11.Use the "PAGE<" button to find the MSD edit screen.

12.Use the cursor to the following parameters and change set the appropriate values:

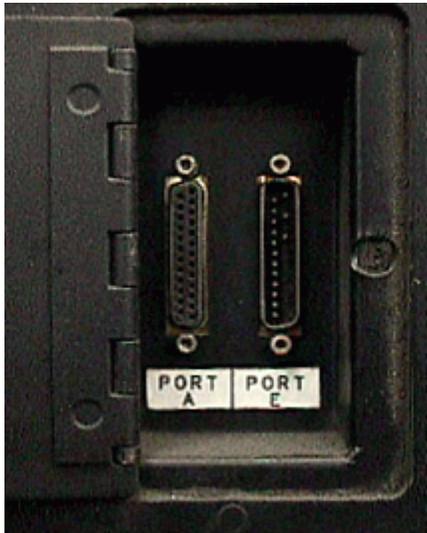
- INT0072 = 4 (Sets input baud rate to 1200)
- INT0073 = 4 (Sets output baud rate to 1200)
- INT0074 = 2 (Use 7 data bits, even, for receiving)
- INT0075 = 2 (Use 7 data bits, even, for output)
- INT0015 = A (Use port A for receiving)
- INT0016 = A (Use port A for sending)

13. Turn off the control panel.

14. Make sure the DNC cable is connected to port "A". Then turn on to reset the Amada Mark Century 2000 PA control.

You have completed setting the Amada Mark Century 2000 PA0's DNC parameters.

Note: Make sure that the DNC cable is connected and tightly secured to the A port. Keep the DNC cable away from lighting fixtures, power supplies, or other devices that generate strong electromagnetic fields.



All necessary software has been installed for your control. Your Amada Mark Century 2000 PA control and FabriTALK are now ready for use.

2. Sending Data to the Amada Mark Century 2000 PA Control (GE 2000)

The following section will show you how to send an NC program from your host computer to your control. To send an NC program to the control, you need to set your control ready to receive data and then to start sending data from the host computer.

Setting the Amada Mark Century 2000 PA Control to Receive

To set the control ready to receive data:

1. Press the INDEX key.



2. Press the LOAD key.



3. When you see "Ready for Input (Y/N/M)," press the "Y" key to set the control ready to receive data. It now waits for data from the host computer.

Note: You may not want to press the "Y" key immediately because the control will time out after a short period.

Sending Data from the Host Computer

To send a NC file from the host computer:

1. At FabriTALK Main window, click on the "GE 2000" node in the "Node List" box of Blanking tab.
2. Click on the NC file you want to send.
3. Click on the "Send File" button to begin sending.

Now your control is set to communicate with FabriTALK. Make sure the DNC cable is securely connected at both ends. All necessary software has been installed for your control. Both the control and FabriTALK are now ready for use. When the transmission is completed, check the control to make sure it has received the NC program.

3. Receiving Data from the Amada Mark Century 2000 PA Control (GE 2000)

To receive an NC program from the Amada Mark Century 2000 PA (GE 2000) control, you need to set the host computer ready to receive data and then send the NC program the control.

Setting the Host Computer To Receive

Note: make sure the DNC cable is connected to the correct port at each end.

To set the DNC parameters at the control:

1. At FabriTALK main window, click on the "GE 2000" node in the "Node List" box of Blanking tab.
2. Click on the NC file to hold the data you are about to send from the control in the "File List".
3. Click on the "Rec. Files" button to set the host computer ready to receive.
4. The host computer will respond to the control as soon as you start sending data from the control.

Sending an NC File From the Amada Mark Century 2000 PA

To send an NC program from the Amada Mark Century 2000 PA control:

1. Press the INDEX key.



2. Use the cursor keys to select an NC program.
3. Press the OUT key.



When the transmission is complete, check the host computer to make sure it has received the NC program.

Connecting a Micro Tape BTR

The B.R.O.T. Micro Tape's Behind Tape Reader (BTR) can only receive DNC data from another DNC device. It cannot transmit data.

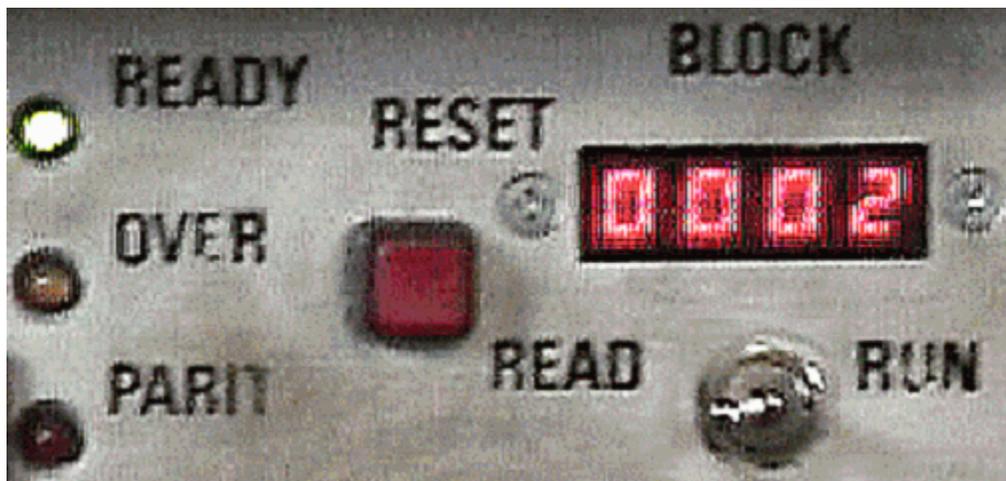
The DNC setting is hardwired to a specific configuration. The FabriTALK communication node is set to match the control's setting. There is no need to modify any communication parameter. Make sure the DNC cable is firmly connected at both ends.

The procedure for sending data to a control equipped with a B.R.O.T. BTR consists of two steps. You set the control or BTR ready to receive data and then you send an NC program from the host computer.

Note: Make sure to note the current settings on your control before you change any parameters or switches. Write down the current settings for future reference.

1. Setting the BTR Ready for Receiving Data

1. Turn the READ/RUN switch to its "READ" position.



2. Press the RESET button.



3. The BTR is now ready to receive data from the host computer.

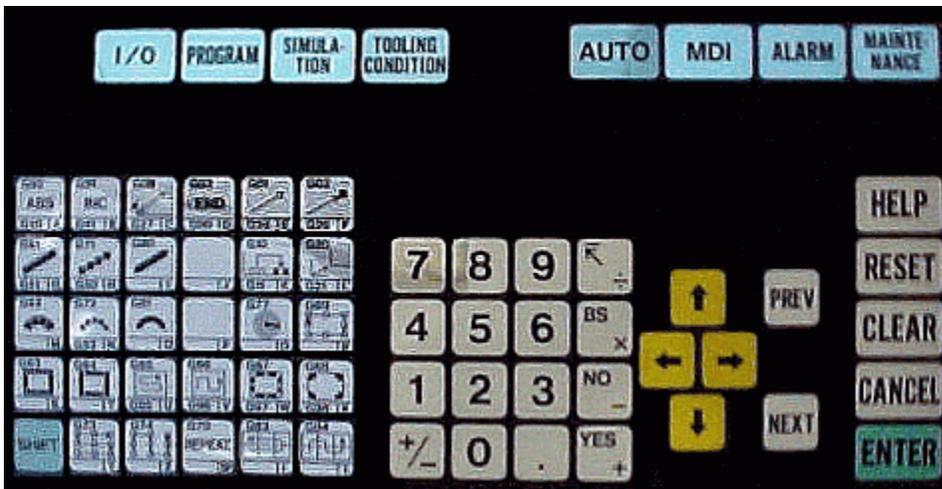
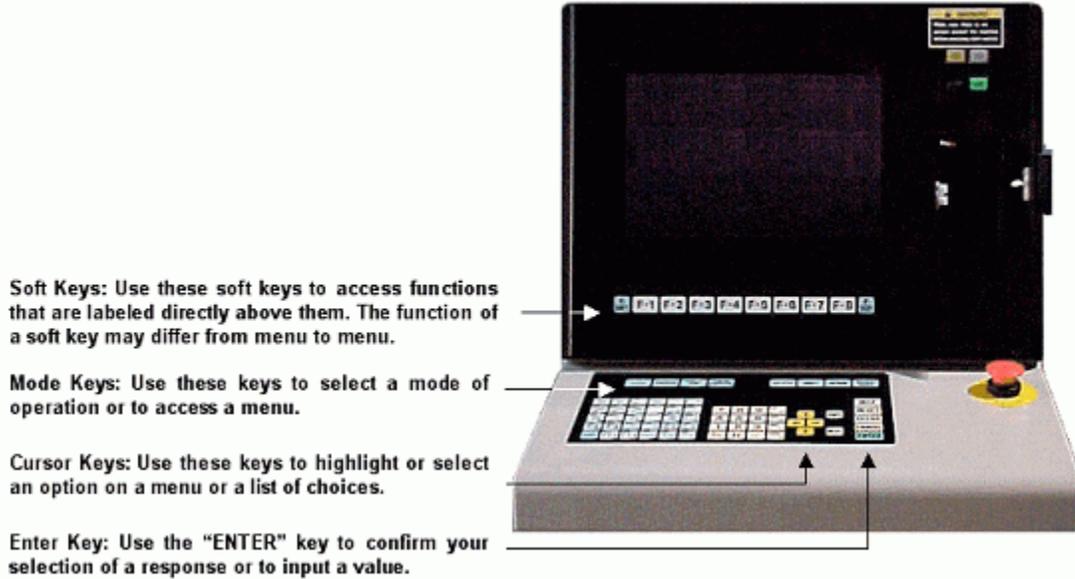
2. Sending an NC Program From the Host Computer

- 1.Run the FabriTALK application.
- 2.At FabriTALK main window, you will select the node and NC file you want to send.
- 3.Click on the "B.R.O.T. Micro Tape BTR" node in the "Node List" box of Blanking tab.
- 4.Select an NC file from the "Files" box by clicking on its name.
- 5.Make sure the control is ready to receive. Then click on the "Send File" button and the host computer begins sending the queued NC program.

When the transmission is complete, check the control to make sure the transmission was successful.

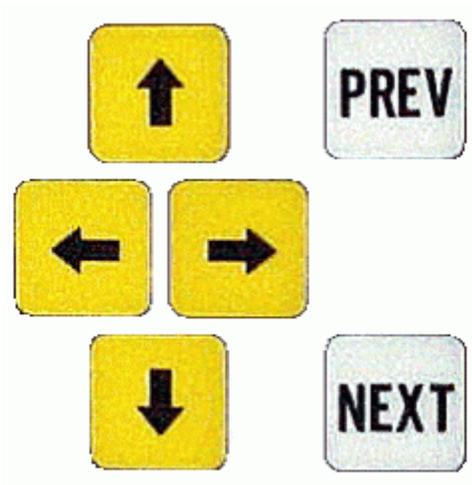
Connecting to PAL510T

Note: Make sure to note the current settings on your control before you change any parameters or switches. Write down the current settings for future reference.



Remember these features: soft keys, mode keys, cursor keys, the "ENTER" key, and the "YES" and "NO" keys. These keys are used throughout the DNC set up instructions.





1. Set the Communication Parameters at the DNC Control

The following instructions outline how to set the DNC communication parameters for the Nisshinbo PAL510T control so that it can communicate with FabriTALK via the RS 232 communication port.

Note: The Nisshinbo PAL510T and PALVISION controls share the same setup procedure. While this document makes reference to the PAL510T control, the instructions are also applicable to the PALVISION.

To set the parameters:

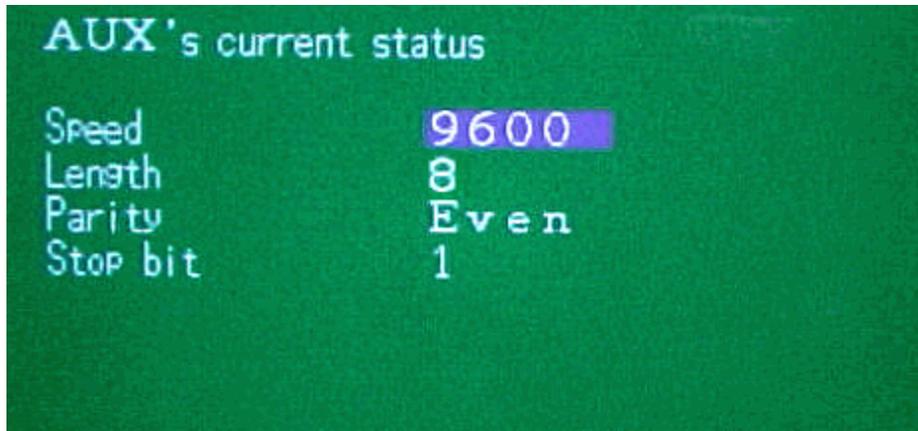
1. Press the blue "I/O" mode key.



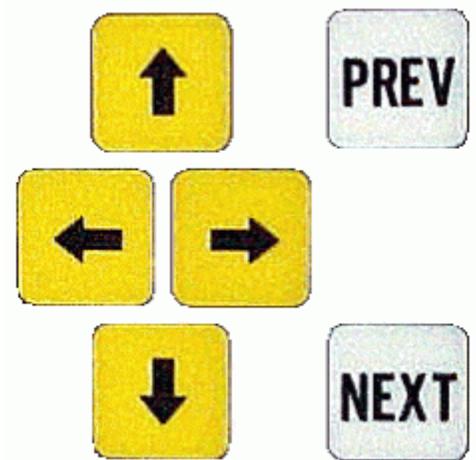
2. Press the blue "F SELECT" soft key at the bottom of the screen until you see the "SET UP" label appear directly above the "F7" soft key (The "F7" soft key is labeled by the description above it. In this case the "F7" soft key is labeled as "SET UP", therefore, it is also called the "SET UP" soft key.)



3. Press the "SET UP" soft key. As you press the "SET UP" soft key, the AUX Current Status menu appears.



4. To highlight or select a parameter, use the up or down cursor keys. Then use the left or right key to change a parameter's setting. When you are done press the "ENTER" key.



Configure the communication parameters as follows:

Speed: 9600
Length: 8
Parity Even
Stop Bit: 1

You have completed the DNC setup for your control. It is now ready for DNC communication via an RS-232 communication port. FabriTALK is already installed to your computer. It is also configured to work with you control.

2. Sending NC Files to the Control

Once you configure the control and host computer to communicate using their RS-232 communication ports, you can send an NC program from the host computer to the Nisshinbo control. You must set the control so that it is ready to receive data and then send data from the host computer.

The Nisshinbo PAL510T and PALVISION controls are capable of receiving multiple NC files simultaneously. However, you need to set the control to receive a single NC file at a time or multiple NC files at a time. See **Set the Control Ready for Receiving a Single Program** or **Set the Control Ready for Receiving Multiple Programs**.

Set the Control Ready for Receiving a Single Program

To set the control to receive a single program:

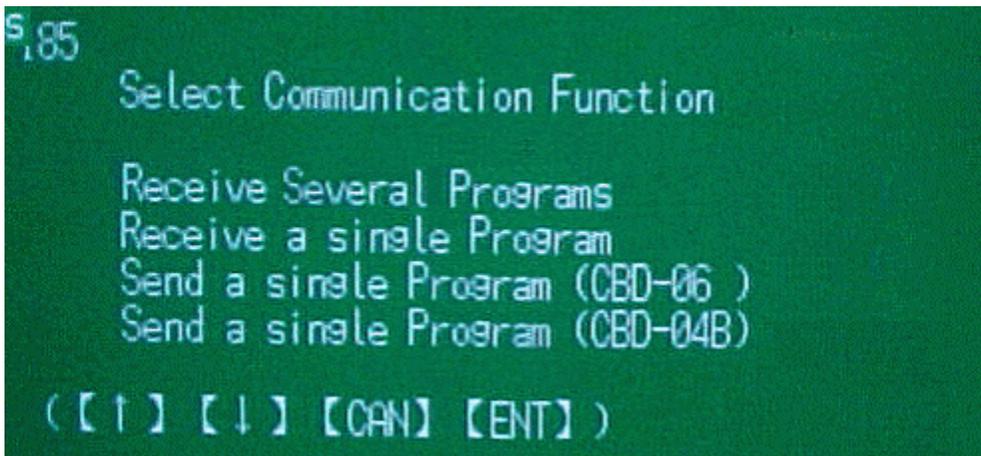
1. Press the blue "I/O" mode key.



2. Press the blue "F SELECT" key until you see the label "RS232C" label appear directly above the "F8" soft key. (When this happens, the "F8" soft key becomes the "RS232C" soft key.)



3. Press the "RS232C" soft key.
4. As you press the "RS232C" soft key, the communication function menu appears.



5. Use the up or down cursor key to highlight the "Receive a single Program" option and then press the "ENTER" key.



6. Press the "YES" key. The control is now ready to receive data.
You may begin transmitting data from the host computer.

Note: the control uses memory space number 1 for receiving one NC program at a time (also known as a single reception).

Set the Control Ready for Receiving Multiple Programs

To set the control to receive multiple programs:

1. Press the blue "I/O" mode key.

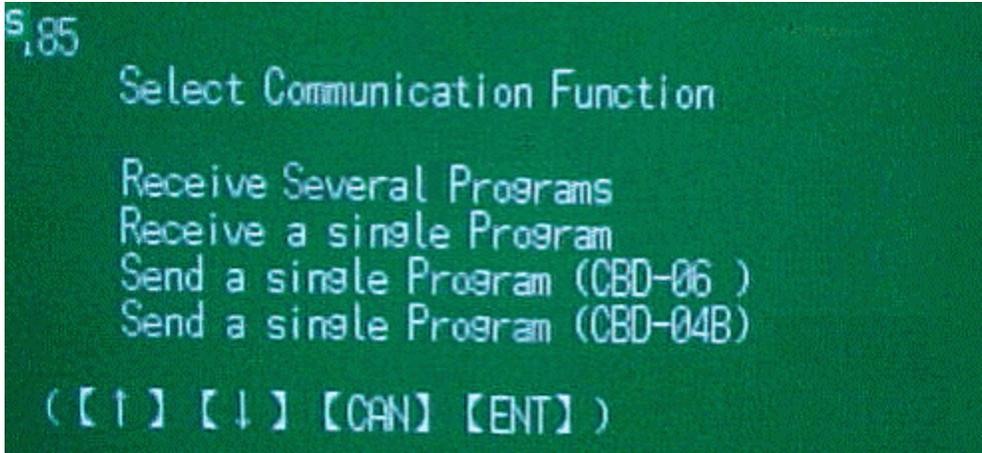


2. Press the blue "F SELECT" soft key until you see the label "RS232C" label appear directly above the "F8" soft key. (When this happens, the "F8" soft key becomes the "RS232C" soft key.)

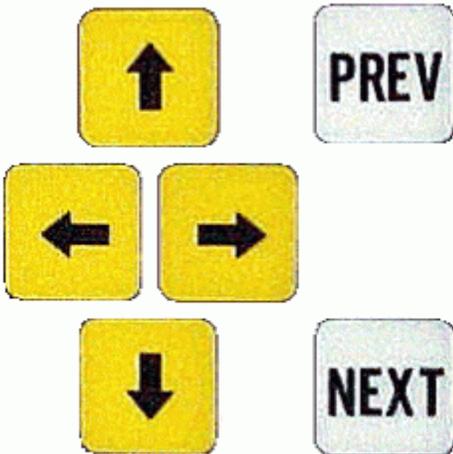


3. Press the "RS232C" soft key.

4. As you press the "RS232C" soft key, the communication function menu appears.



5. Use the up or down cursor key to highlight the "Receive Several Programs" and then press the "ENTER" key.



Note: The programs that the control will receive will be saved in either memory space starting from space number 2 or memory space following the memory space last used. This is dependent on your response in Step 5.

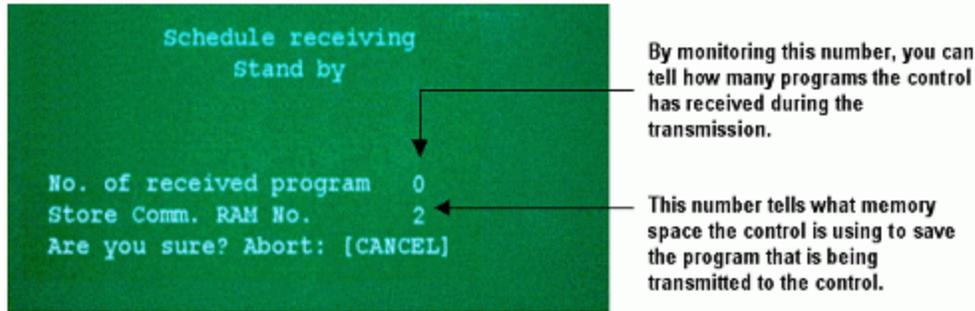
6. The control will ask you if you want to store the NC programs from the first of the buffers that are used for receiving multiple NC programs.

Press the "YES" key to store program starting from memory space 2.

Press the "NO" key to store programs starting from the memory space last used.

Press the "CANCEL" key to cancel the receiving of data altogether.

The control is now ready for receiving data from the host computer. As the control is ready the Schedule Receiving Stand By screen appears. When you see this you may start the transmission from the host computer.



When the host computer finishes transmitting data, press the "CANCEL" key to terminate the reception of the transmission.

Send Data from the Host Computer

To send data from the host computer:

1. At FabriTALK main window, you will select the "NISSHINBO PAL510T" node and NC file you want to send.

Note: If you have installed the "NISSHINBO PALVISION" node instead of the "NISSHINBO PAL510T", click the "PALVISION" node.

2. Click on the "NISSHINBO PAL510T" node in the "Nodes" box.
3. To select an NC file, click on the name of the NC file in "Files" box.

Note: If you have configured the control to accept multiple files, and you want to send more than one file, continue to double-click the names of the files you want to send. The NC files will appear in the "Sending Queue" list box. FabriTALK will send all the NC files that appear in the "Sending Queue".

4. Make sure the control is ready to receive.
5. Click the "Send File" button. FabriTALK begins to send data to the control.

When the transmission is complete, check the control to make sure the transmission was successful.

3. Receive NC Programs from the Control

You may send one NC program at a time from the control to the host computer. You will need to set the computer ready for receiving data and then start transmitting data from the control.

Set the Host Computer Ready for Receiving Data

To set the host computer ready to receive:

1. At FabriTALK main window, click on the "NISSHINBO PAL510T" node in the "Node List" box of blanking.
2. Click on the NC file to hold the data you are about to send from the control in the "File List".
3. Click on the "Rec. File" button.

Your host computer is now ready for receiving data from the control.

Transmit Data from the Control

You may send a program from either program buffer 1 or program buffer 2. To send data from the control via the RS-232 communication port:

1. Press the blue PROGRAM key and make sure the desired program is being displayed.



2. Use the "F2" soft key to select either program buffer 1 or program buffer 2.



3. Press the blue "F SELECT" soft key. Keep pressing it until you see the "DEVICE" label appear above the "F4" soft key.
4. Press the "DEVICE" soft key (F4 soft key). A menu appears.
5. Use the up or down cursor key to highlight the "Communication RAM" option and then press the "ENTER" key.
6. If necessary, use the up or down cursor key to highlight slot Num. 1.
7. Press the "WRITE" soft key (F2 soft key).
8. Press the "YES" key to confirm your choice.
9. Press the blue "F SELECT" soft key. Keep pressing it until you see the "RS232C" label appears above the F8 soft key.
10. Press the "RS232C" soft key (F8 key).
11. Use the up or down cursor key to highlight the "Send a Single Program (CSD06)" option and then press the "ENTER" key.
12. Make sure the host computer is ready for receiving data because you are about to start transmitting data from the control.
13. Press the "YES" key to start the transmission.

When the transmission is complete, check the host computer to make sure that the NC program was successfully received.

Connecting a Macintosh Control

The Strippit control is basically a Macintosh computer running a special application that controls a Strippit CNC machine. Configuring the DNC communication parameters of the control is fairly simple. The Strippit 1000R and Strippit 630R machines have similar RS-232 DNC communication system. Therefore the information here is applicable to both models. The instructions will note the differences.



1. DNC Parameters Setup

The communication parameters of the control have the following default configuration:

Code: ASCII

Data bit: 7

Stop bit: 1

Parity: Even

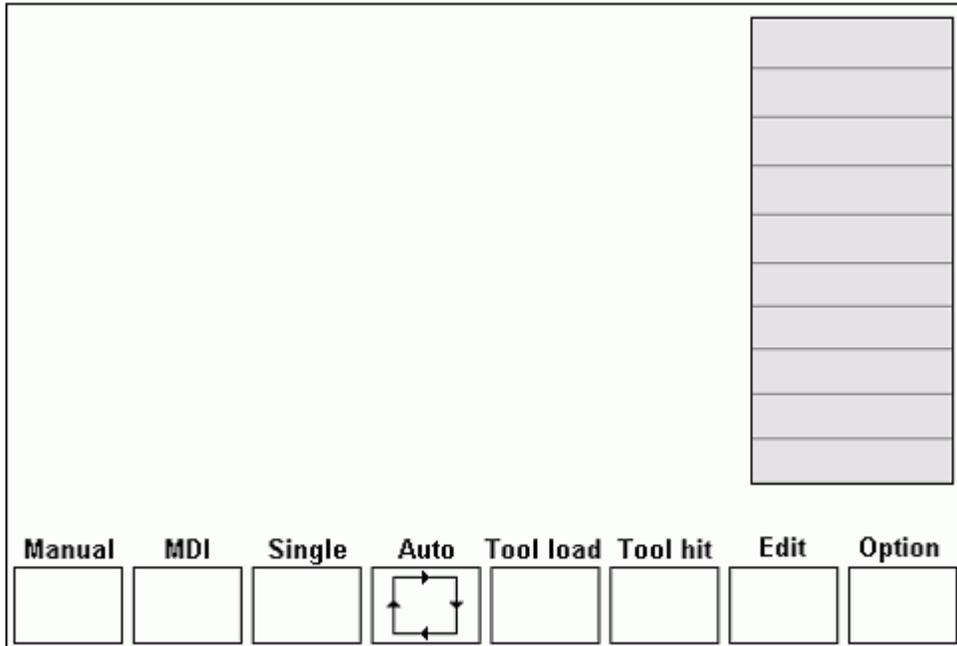
Handshaking: Xon/Xoff

The configuration above is fixed and you cannot change it. FabriTALK has a communication node that matches that of the Strippit Macintosh control fixed configuration. You do not have to set FabriTALK configuration. However, there are two parameters that you need to set on your Strippit control. You need to tell the control where to store NC programs and what speed (baud rate) to use.

2. Setting Communication Parameters

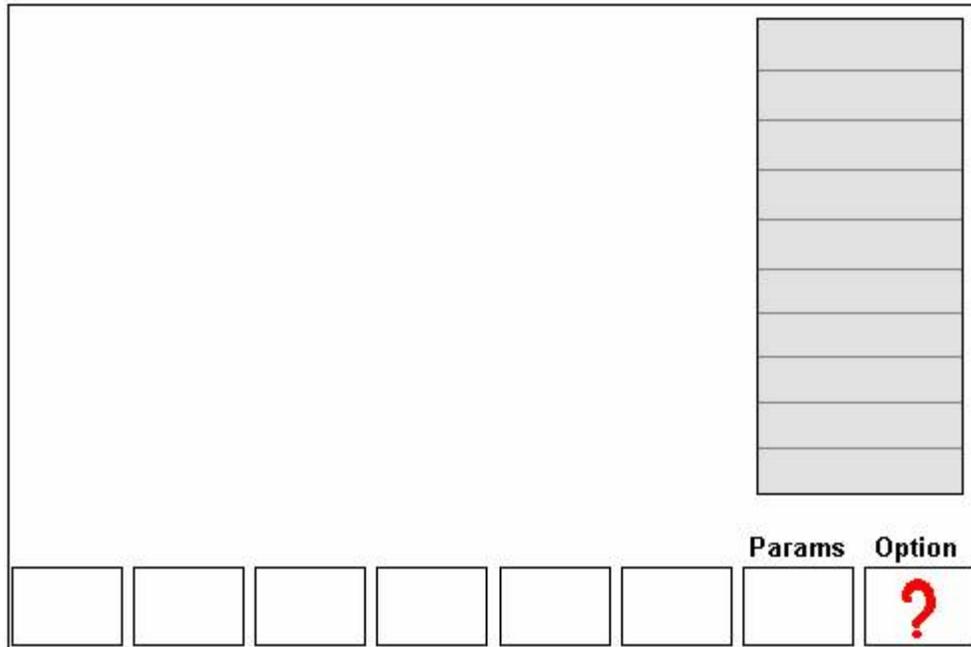
The following instructions tell you how to set your control NC directory and communication speed.

1. Turn on the control and wait until it is ready. The control is ready when it displays the home screen.



As you turn on the control, the Macintosh computer starts itself and will load appropriate applications. It then will then display this screen when the control is ready. Press F5 or click the "Auto" button to set the control on auto mode. The flowing arrows indicate that the control is in its auto mode.

2. Use the mouse to click the Option button until you see the Params button appears next to the "Option" button.



Click on the "Option" button until the "Params" button appears. Click on the "Params" button to access communication parameters. Use the up or down cursor key to select a parameter.

3. Click the "Params" button. You should see parameter "P30". If not, use the cursor key on the keyboard to find it.

Note: The Strippit 630R control does not allow you to change the P30 parameter. You will not find this parameter on the 630R control. If necessary, skip Step 3 and go to Step 8. The default directory is the "CNC" folder off of the root directory of the hard drive.

4. Select parameter "P30".

5. This parameter instructs the control where to store NC programs.

6. Click the "Change" button.

7. Use the keyboard to type ":CNC:" and then press the "ENTER" (Return) key on your keyboard. This will store the NC programs in the "CNC" folder off of the root directory of the control's hard drive.

8. You may create a subfolder within the "CNC" folder. However, make sure you create the subfolder before you change parameter P30. For example, you may type ":CNC:DNC:" to tell the control to use the "DNC" subfolder within the "CNC" folder.

9. Click the "Yes" button.

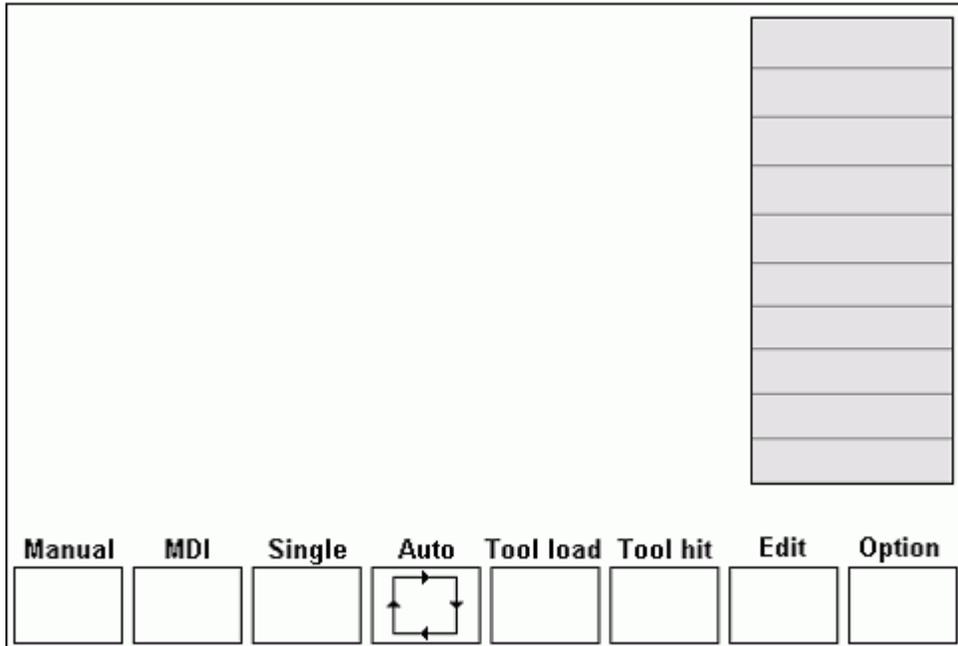
10. Use the cursor key to scroll down to the end of the list of parameters to find the "P200 baud rate" parameter.

11. Click the "Change" button.

12. Use the keyboard to type "9600" and press the enter key.

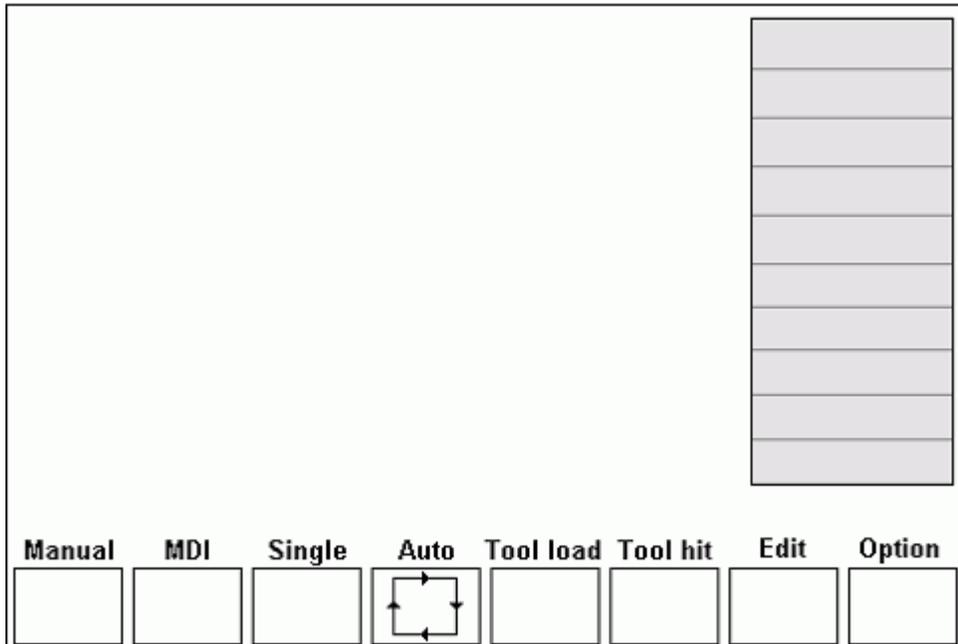
13. Click the "Yes" button to confirm the change.

14. Click the "Option" button to return to the home screen.



As you turn on the control, the Macintosh computer starts itself and load appropriate applications. It will then display this screen when the control is ready. Press F5 or click the "Auto" button to set the control on auto mode. The flowing arrows indicate that the control is in its auto mode.

15. Turn the control off and then turn it on. When the control displays the home screen it is ready to communication with FabriTALK.



As you turn on the control, the Macintosh computer starts itself and will load the appropriate applications. It will then display this screen when the control is ready. Press F5 or click on the "Auto" button to set the control on auto mode. The flowing arrows indicate that the control is in its auto mode.

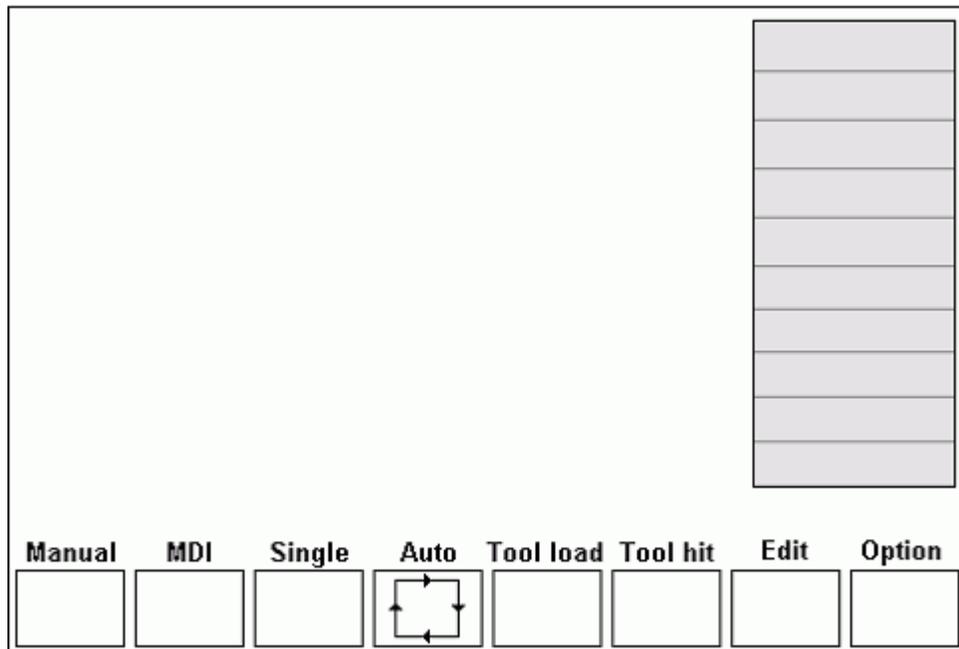
3. Sending NC Files

The control and host computer are ready to communicate to each other via their RS-232 communication ports. You need to set the control ready for receiving data, and then you send data from the host computer. The following instructions will guide you step-by-step.

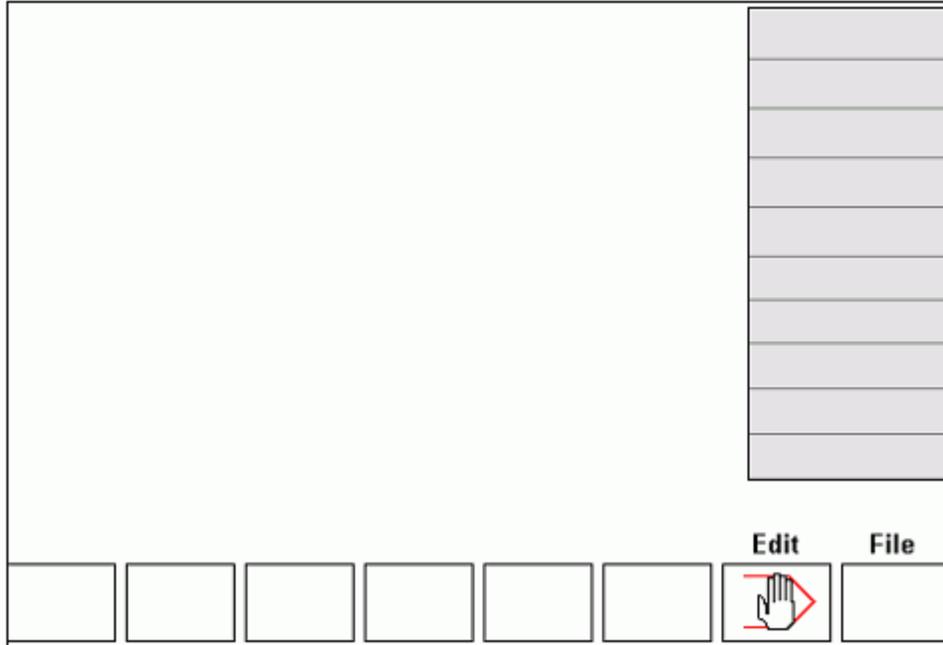
Configuring the Control Ready to Receiving Data

The Strippit Macintosh control is always ready to receive data from FabriTALK. However, you need to make sure that the control is running in "Auto" mode:

1. Turn on the machine.
2. When the control displays home screen, click the "Auto" button.



The control is now ready to receive data. It receives and stores data in a buffer as the data is sent from FabriTALK. As soon as you click the Edit button the control saves all data in the buffer to the hard disk.



Sending Data from the Host Computer

To send data from the host computer:

1. At FabriTALK main window, click on the "STRIPPIT MACINTOSH" node in the "Node List" box of Blanking tab.
2. Click on the NC file you want to send in the "File List" box.
3. Make sure the control is ready to receive and then click the "Send File" button.

When the transmission is complete, check the control to make sure the transmission was successful.

3. Receiving NC Programs

You may send only one NC program at a time from your Strippit Macintosh control. You must first set the computer ready for receiving data before you transmit data from the control.

Configuring the Host Computer Ready to Receive Data

To set the host computer to receive data:

1. At FabriTALK main window, click on the "STRIPPIT MACINTOSH" node in the "Node List" box.
2. Click on the NC file to hold the data you are about to send from the control in the "File List".

Note: Use a consistent filename extension convention for your NC files. You may want to use the "*.NC" file name extension.
3. Click the "Rec. File" button.

Your host computer is now waiting for a transmission from the control. Read on to find out how to

send data from your control.

Transmitting Data from the Control

To transmit data from the control:

1. Turn on the control and wait for the home screen.
2. Make sure "Auto" mode is active. If necessary, click the "Auto" button. The flowing arrows indicate that the control is running in Auto mode.
3. Click the Edit button.
4. Click the File button.
5. Use the mouse to select a file and then click the "Open" button.
6. Click the "Exit" button to return to the home screen.
7. Press the "Punch" key on the keyboard to transmit the data.

As the control transmits data, the screen displays the progress at the top left corner of the screen. Check the host computer to ensure it successfully saved the transmitted data.

Connecting a Finn-Power Fanuc 16P

The following instructions will help you to set all necessary parameters for DNC communication between your control and FabriTALK. You may want to review the FINN-POWER FANUC 16P control panel and make sure that the DNC cable connections are firmly connected.



1. Set the Fanuc 16P to Write Enable Mode

1. Set Mode dial to MDI
2. Press the System Key and then press the Setting "SOFT KEY".
3. Change Write Enable from 0 to 1, press Input key. You will get an alarm. This is normal.

Setting the Parameters

Before you change any parameters or switches on the control, note the current settings and write them down for future reference.

1. Set Mode dial to Edit.
2. Press parameter key.
3. Press soft key parameters.
4. Using cursor keys page down to Parameters 20
I/O Channel = 0

100 = 00000000

101 = 10001001

102 = 3

103 = 10 = baud

2. Set the Fanuc 16P to Write Disable Mode

1. Set Mode dial to MDI.
2. Press System Key, then press the Setting "SOFT KEY".
3. Change Write Enable from 1 to 0, press Input key.

3. Sending NC Program to the FINN-POWER FANUC 16P

The following section will explain how to send an NC program from your host computer to your control. To send an NC program to the control, you need to set your control ready to receive data and then to start the transmission from the host computer.

Setting the Control Ready to Receive

Press punch/read key, (0prt) soft key, + soft key, read soft key, Oxxxx (address), and then press exec soft key.

Sending an NC Program from the Host Computer

1. At FabriTALK main menu, click on the "FINN-POWER FANUC 16P" node in the "Node List" box of Blanking tab.
2. Click on the NC file you want to send.
3. Click on the "Send File" button to start the transmission.

When the transmission is complete, check the control to make sure it has received the NC program.

4. Receiving an NC File from an FINN-POWER FANUC 16P Control

To receive an NC program from the FANUC 16P control, you need to set the host computer ready to receive data and then to send the NC program from the control.

Setting the Host Computer Ready to Receive

To set the host computer ready to receive:

1. At FabriTALK main window, Click on the "FINN-POWER FANUC 16P" node in the "Nodes" box.
2. Click on the NC file to hold the data you are about to send from the control in the "File List".

3. Then click on the "Receive File" button to set the host computer ready to receive data.

Sending an NC Program from the Control

Press punch/read key, (Oprt) soft key, + soft key, punch soft key, Oxxxx (address), and then press exec soft key

When the control is finished transmitting the program, check the host computer to verify that the transmission was successful.

Connecting a HECC80-3

The following instructions will guide you step by step on how to set all necessary DNC parameters for DNC communication between your control and FabriTALK. You may want to review the HECC80-3 control panel and make sure that the DNC cable connections are firmly connected.





1. Setting the Parameters

Before you change any parameters or switches on the control, note the current settings and write them down for future reference.

To be able to communicate with the HECC80-3, you need to set the baud rate dial switch behind the control door to 1200 baud rate.

2. Sending NC Program to the HECC80-3

The following section will explain how to send an NC program from your host computer to your control. To send an NC program to the control, you need to set your control ready to receive data and then to start the transmission from the host computer.

Set the Control Ready to Receive

1. Press the [return] button at the HECC80-3 control.
2. Select "program" option at the HECC80-3 control.
3. Enter a program name and press [return] button.
4. Select the "-ETC-" option.
5. Select the [EDIT] button Wait until the edit screen appears.
6. Select the "STORE" option.

Sending an NC Program from the Host Computer

1. At FabriTALK main window, click on the "HECC80-3" node in the "Node List" box.
2. Click on the NC file you want to send.
3. Click on the "Send File" button to start the transmission

When the transmission is complete, check the control to make sure it has received the NC program.

3. Receiving an NC File from an HECC80-3 Control

To receive an NC program from the HECC80-3 control, you need to set the host computer ready to receive data and then to send the NC program from the control.

Setting the Host Computer Ready to Receive

To set the host computer ready to receive:

1. At FabriTALK main window, click on the "HECC80-3" node in the "Node List" box of Blanking tab.
2. Click on the NC file to hold the data you are about to send from the control in the "File List".
3. Then click on the "Receive File" button to set the host computer ready to receive data.

Sending an NC Program from the Control

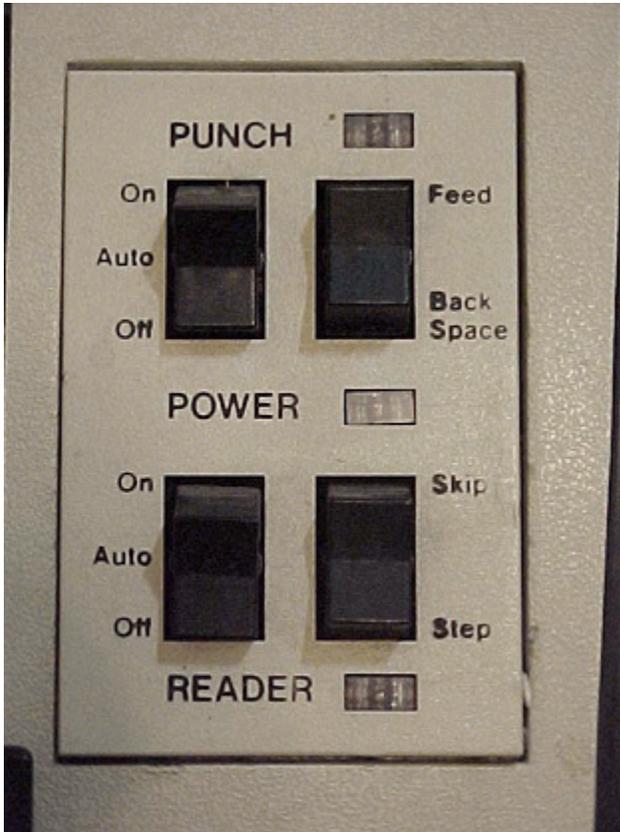
To send an NC program from the control:

1. Load the program you would like to send to the computer.
2. Bring the cursor to the beginning of the program at the HECC80-3.
3. Select the "-ETC-" option at the HECC80-3 control.
4. Select the "OUTPUT" option at the HECC80-3 control.

When the control is done transmitting the program, check the host computer to verify that the transmission was successful.

Connecting the Teletype 42-43 T-punch Control

The following instructions will explain how to set all necessary parameters for DNC communication between the control and FabriTALK. You may want to review the Teletype 42-43 T-punch control panel and make sure that the DNC cable connections are firmly connected.





1.Setting the Parameters

Note: Make sure to note the current settings on your control before you change any parameters or switches. Write down the current settings for future reference.

To interface the TELETYPE 42-43 Tape Punch to FabriTALK, the following switches must be set at the TELETYPE tape punch. Set the switches to the position indicated by the arrows:

Top Switches	PUNCH	READ
	ON	ON
	AUTO < ===	AUTO < ===
	OFF	OFF

Note: If a leader is not punched at the end of tape, or the last line in the program is missing, turn the punch switch to the "ON" position.



Back Switches PTR N CPS
OFF == >O
/ == >R 10== >30
LOC M



Internal Switches

- #1 OFF
- #2 OFF
- #3 OFF
- #4 ON

The TELETYPE 42-43 TAPE P/R is now ready for operation. Make sure the cable is attached from the computers serial port to the RS-232 port at the tape punch.

2. Punching Tapes

The following section will explain how to send an NC program from your host computer to your control. To send an NC program to the control, you need to set your control ready to receive data and then to start the transmission from the host computer.

Setting the Control Ready to Punch

Make sure the tape punch is turned on.

Sending an NC Program from the Host Computer

1. At FabriTALK main window, click on the "TELETYPE 42-43 TPUNCH" node in the "Node List" box of Blanking tab.
2. Click on the NC file you want to send.

3. Click on the "Send File" button to start the transmission.

Note: If you need extra leader at the end of the tape, wait until the punching stops then turn the PUNCH option to the "ON" position and press the Feed button until you receive the leader you require.

3. Reading Tapes

To receive an NC program from the TELETYPE 42-43 TPUNCH control, you need to set the host computer ready to receive data and then to send the NC program from the control.

Sending an NC Program from the Control

Load the tape on the reader. Make sure the tape is underneath the tab guide. This will ensure proper tape flow while reading.

Setting the Host Computer to Receive

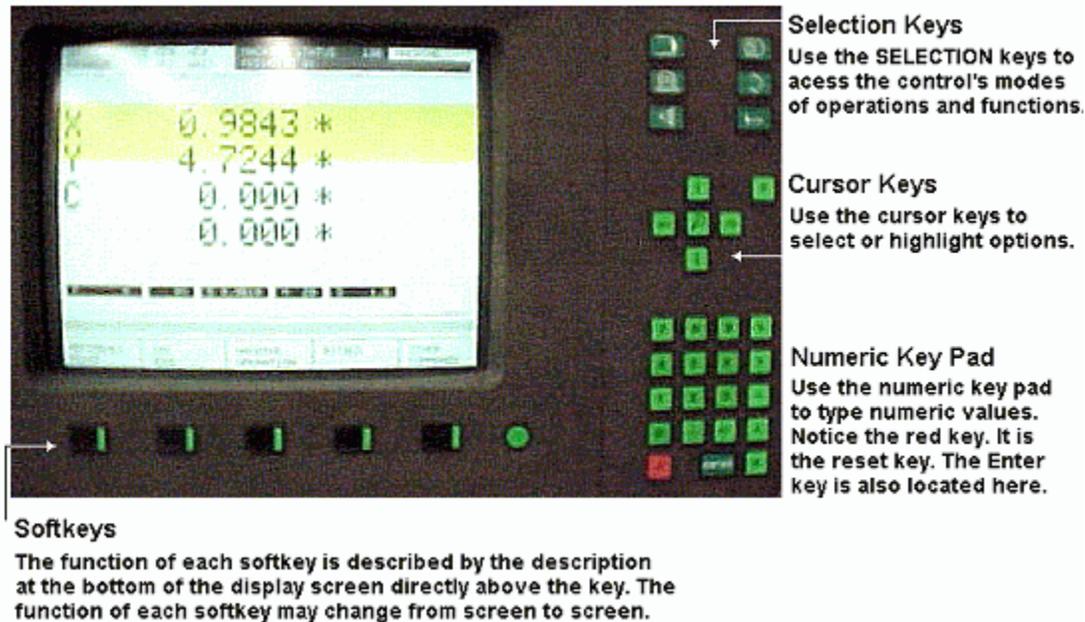
To set the host computer to receive:

1. At FabriTALK main window, click on the "TELETYPE 42-43 TPUNCH" node in the "Nodes" box.
2. Click on the NC file to hold the data you are about to send from the control in the "File List".
3. Then click on the "Receive File" button to set the host computer ready to receive data.

Connecting a Bosch CC200 and CC300

1. Getting Familiar with the Control Panel

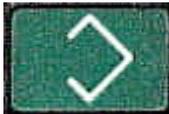
Remember these features and keys as they are often used in the step-by-step instructions for setting up the control.



2: Setting the DNC Parameters of the Bosch Control

The following instructions explain how to set DNC communication parameter for use with FabriTALK.

1. Turn on the control panel.
2. Press the Data I/O key to access to the DNC parameters.



3. Press the RESET key.



4. Locate and press the "CLEAR ALL LOGIC" soft key.

Note: As you press the soft key, the screen will become black or blank out. This will clear all the ROM memory, allowing new parameters to be loaded.

5. Press the following key.

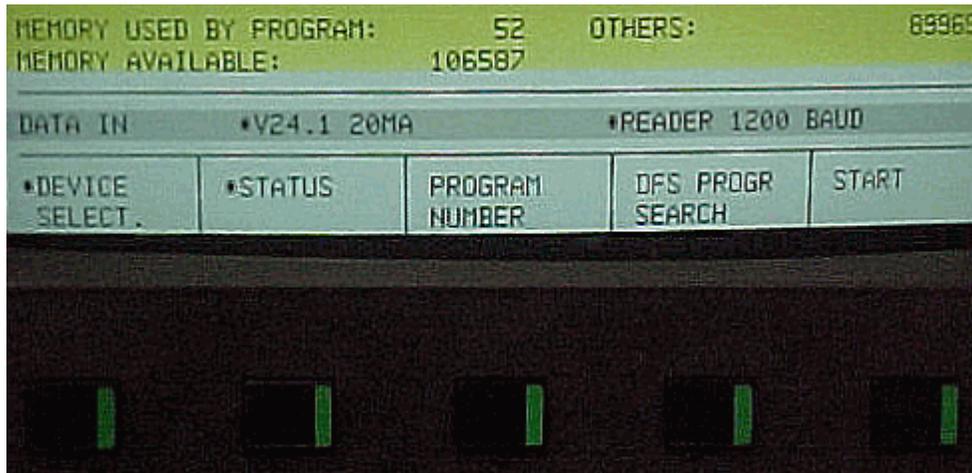


6. Press the "SERVICE FUNCTION" soft key. If the control prompts for a password, type "303" and press the ENTER key. The "SET-UP MENU" appears.

Note: If you see the "INCORRECT PASSWORD" warning message, skip this section. Legacy controls do not allow users to modify the baud rate. If this is the case, you must use either 600 or 4800 baud rate. Continue with the instructions; however substitute any occurrence of 1200 baud rate with 600 baud rate for the rest of this document.

7. Press the START soft key. A list of options appears and one of them is highlighted.

START Soft key



The START soft key allows the user to begin either sending or receiving NC programs.

8. Type "4" and then press the ENTER key.
9. Press the "SPECIAL COMMANDS" soft key.
10. Press the "SEARCH" soft key **twice**. You will see the parameter menu.
11. Type "5501" and press the "FINISHED" soft key. (You type in "5501" because you want to look for that parameter.)
12. You will see TEST ALLOCATION OF SOFT KEYS (1-4) options. Use the cursor to navigate to option #4 and delete any existing characters.
13. Delete any existing characters and then type "174". (You type "174" because you want to set the parameter value to 174.)
14. Press the "ACTIVATE" soft key to save changes.

Parameter 5502 should look like this: 5502 (4) 174

Steps 6 through 15 are used to change parameter 5501 value. For each of the six following parameters go, through these steps to change its value as shown below:

5502 (4) 1200

5503 (4) 1

5504 (4) 10

5505 (4) YES

5506 [NC] 1 [NC2]4

5507 [IN] NC [OUT] NC

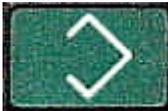
You have completed setting your Bosch control for communication with FabriTALK. Read on for more information on how to download and upload NC programs.

3: Sending NC Programs to the Control

The instructions below will show you how to setup your Bosch control and then send an NC program from the host computer to the control.

Set the Control to Receive Data

1. Turn on the control panel.
2. Press the Data I/O key.



3. Press the EDIT soft key.

Data I/O Screen

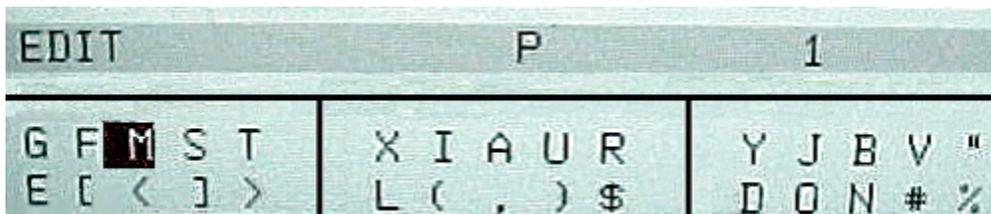


Use the DATA IN soft key to set the control ready to receive data.

Use the Data Out soft key to set the control ready to send data.

4. Type a program number for the NC program that the control is about to receive. Then press the ENTER key.
5. Now use the cursor to highlight the M option on your screen.

Option M



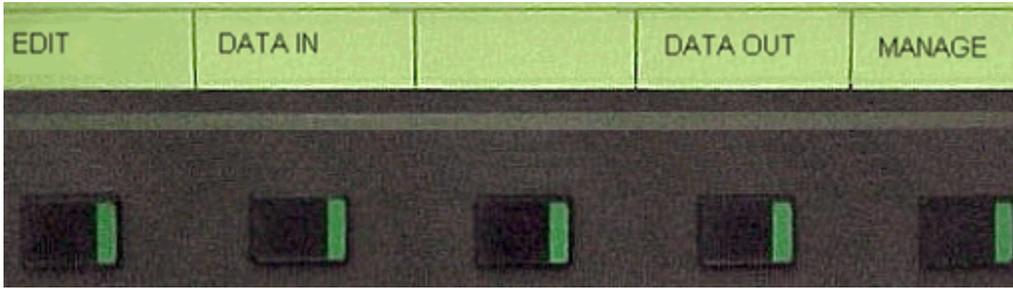
Use the cursor keys to highlight the "M" option.

6.Type "30" and then press the Data I/O key.



7.Press the Data In soft key.

Data I/O Screen



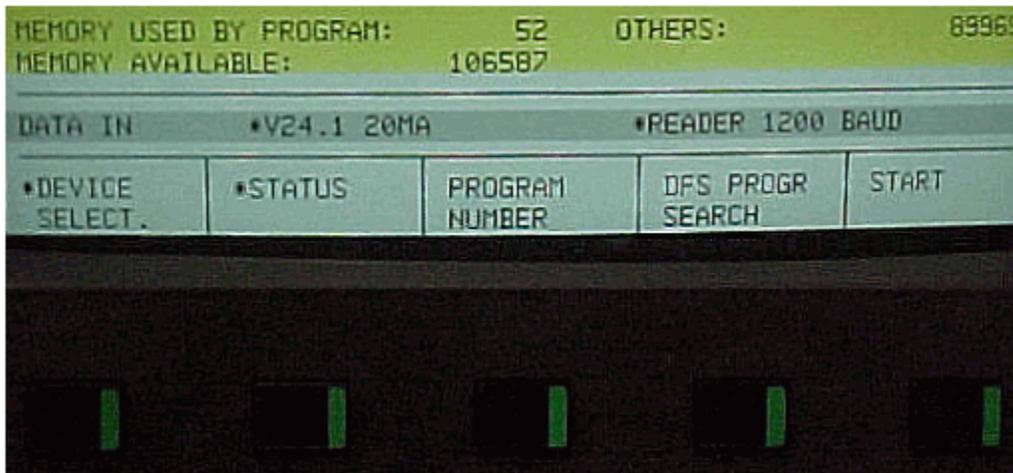
Use the DATA IN soft key to set the control ready to receive data.

Use the Data Out soft key to set the control ready to send data.

8.Type a program number you want to use to receive the NC program and then press the ENTER key.

9.Press the START soft key.

START Soft key



The START soft key allows the user to begin either sending or receiving NC programs.

Send NC Programs from the Host Computer

- 1.At FabriTALK main window, you will select the node and NC file you want to send.
- 2.Click on the "GN6" node in the "Node List" box of Blanking tab. Click on the NC file you want to send in the "File List" box.

Make sure the control is ready to receive and then click the "Send File" button. FabriTALK begins to send data to the control. When the transmission is complete, check the control to make sure the transmission was successful.

4: Receive NC Programs from the Control

Set Host Computer Ready to Receive

1. At the FabriTALK main menu, click the "Receive NC File" button.
2. Click the "BOSCH CC200&cc300" node in the "Nodes" box. Click the NC file to hold the data you are about to send from the control in the "File List".

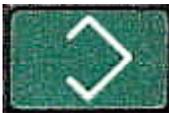
Note: You may want to keep the extension of your filenames consistent. It is a good idea to use ".NC" for your NC filename extension.

EXAMPLE: You may want to name your file "MXPEG-LEFT.NC"

3. Click the "Rec. File" button. Your host computer is now ready to receive data from the control.

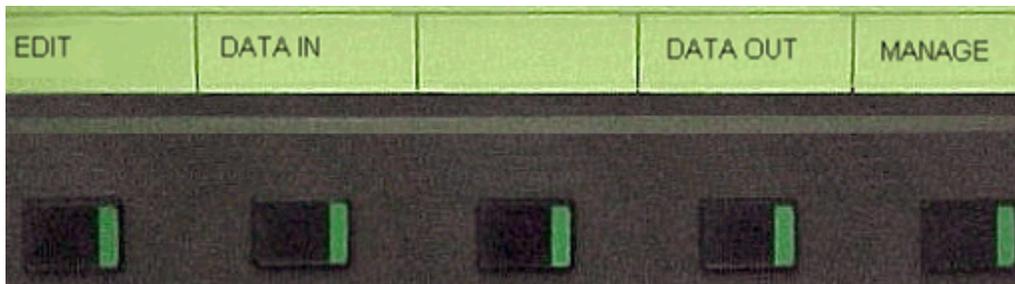
Send an NC Program from the Control

1. Turn on the control panel.
2. Press the Data I/O key.



3. Press the EDIT soft key.

Data I/O Screen

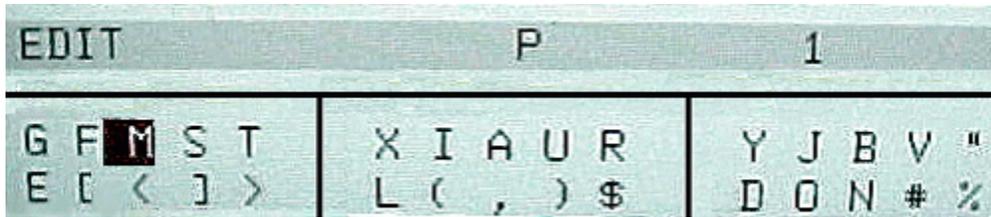


Use the DATA IN soft key to set the control ready to receive data.

Use the Data Out soft key to set the control ready to send data.

4. Type a program number for the NC program the control is about to receive and then press the ENTER key.
5. Use the cursor to highlight the M option on your screen.

Option M



Use the cursor keys to highlight the "M" option.

6.Type "30" and then press the Data I/O key.



7.Press the Data Out soft key

Data I/O Screen



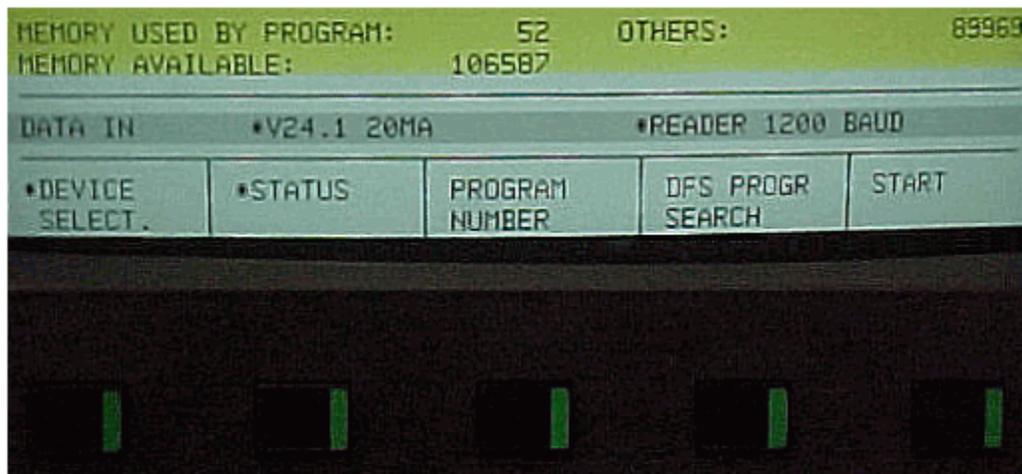
Use the DATA IN soft key to set the control ready to receive data.

Use the Data Out soft key to set the control ready to send data.

8.Type a program number you want to use to receive the NC program and then press the ENTER key.

9.Press the START soft key.

START Soft key

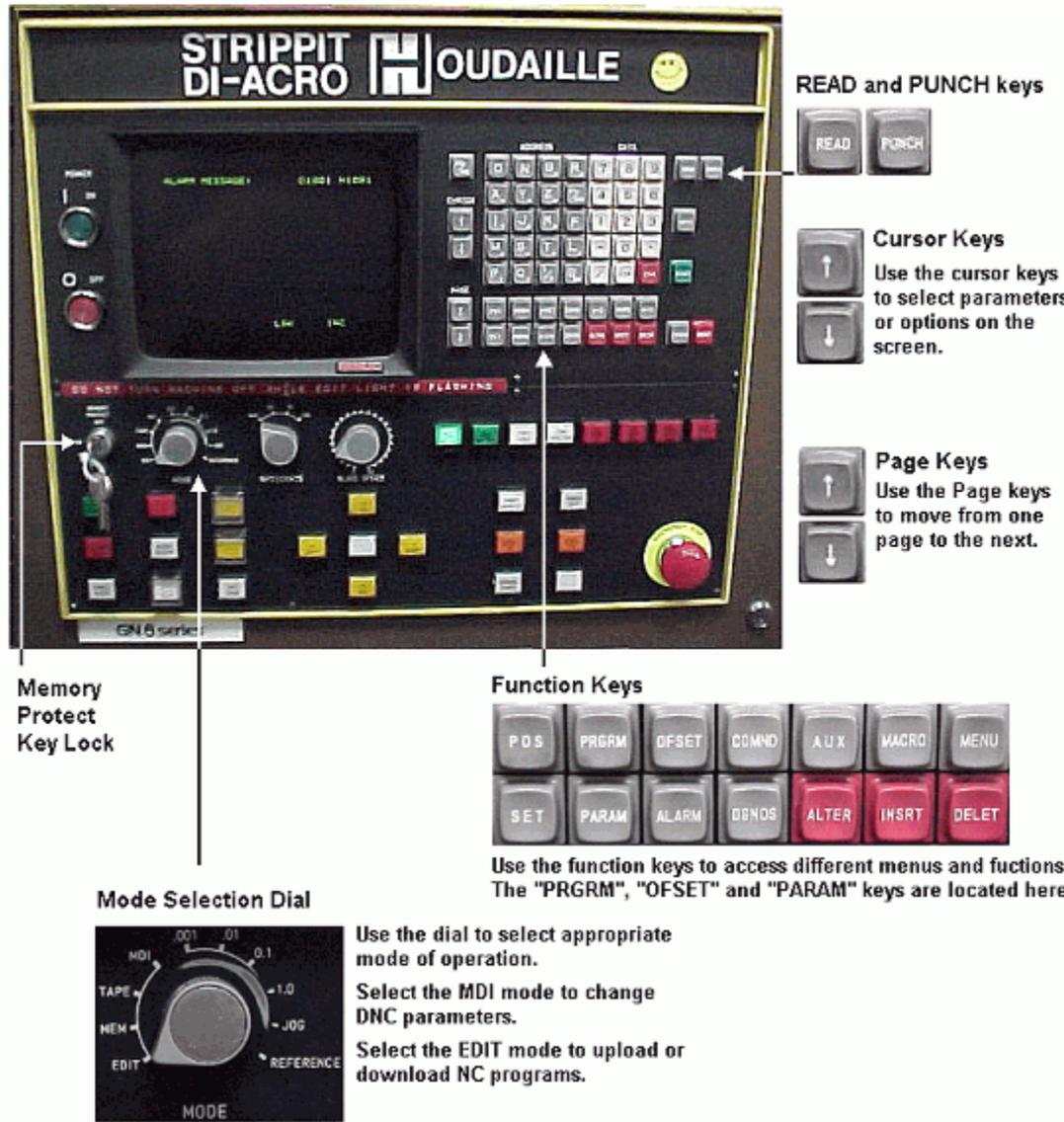


The START soft key allows you to begin either sending or receiving NC programs.

Connecting the GN6 Control

1. The Control Panel

You may want to review the features of the GNG control panel before you attempt to configure the DNC parameters. References will be made to the keys and features in the setup instructions for the DNC communication parameters.



2. Setting the DNC Parameters for the GN6

The following instructions explain the process of configuring the DNC parameters for the GN6 control.

Note: Make sure the DNC cable is firmly connected between the ports at each end.

To configure the control:

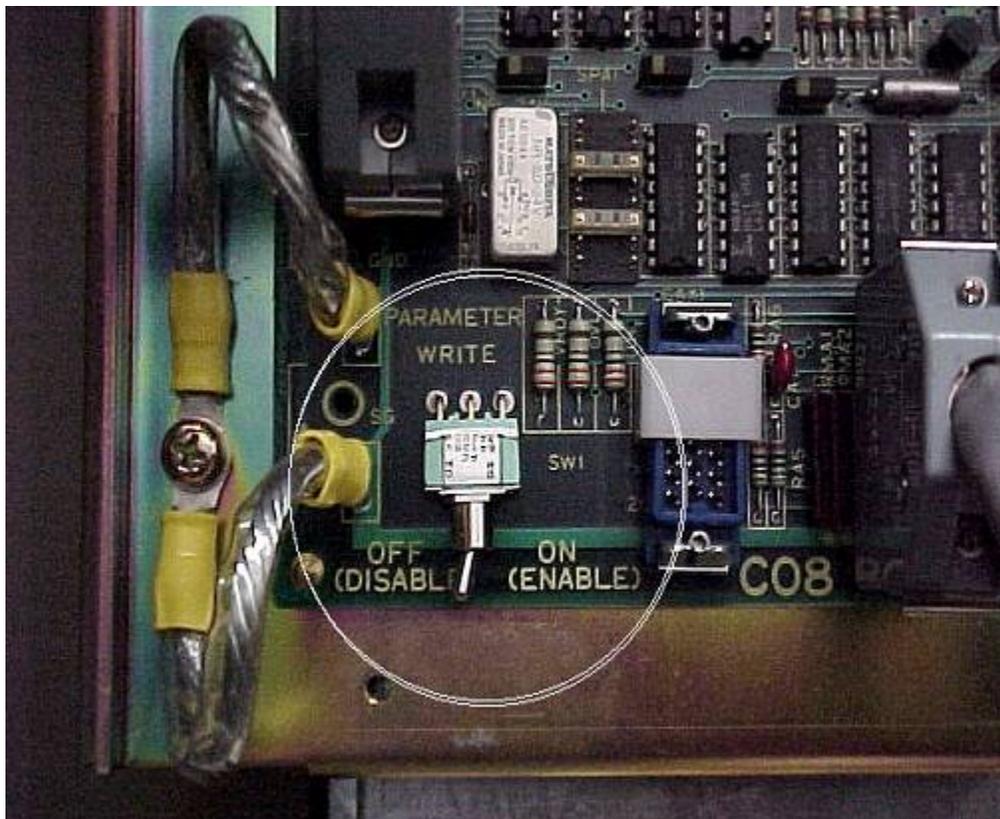
1. Turn the MEMORY PROTECT key lock to its **ON** position.



2. Turn off the power to the CNC machine. Disconnect all power to the CNC machine.

CAUTION: You are about to open the front panel door of the machine. Make sure to disconnect all electrical power to the machine to avoid the risk of electric shock.

3. Open the front panel door.
4. Locate the PARAMETER WRITE toggle switch at the lower left corner of the main circuit board.



5. Turn the PARAMETER WRITE toggle switch to its "ON" or "ENABLE" position then close the front door panel.
6. Return power to the CNC machine and then turn on the control panel.
7. Rotate the MODE dial to its **MDI** position.



8. Turn the MEMORY PROTECT key lock to its "OFF" position.



9. Press the SET function key.



10. Use the cursor keys to select "INPUT DEVICE #1". Then type "P1" and press the "INPUT" key.

11. Use the cursor keys to select INPUT DEVICE #2. Type "P1" and then press the INPUT key.

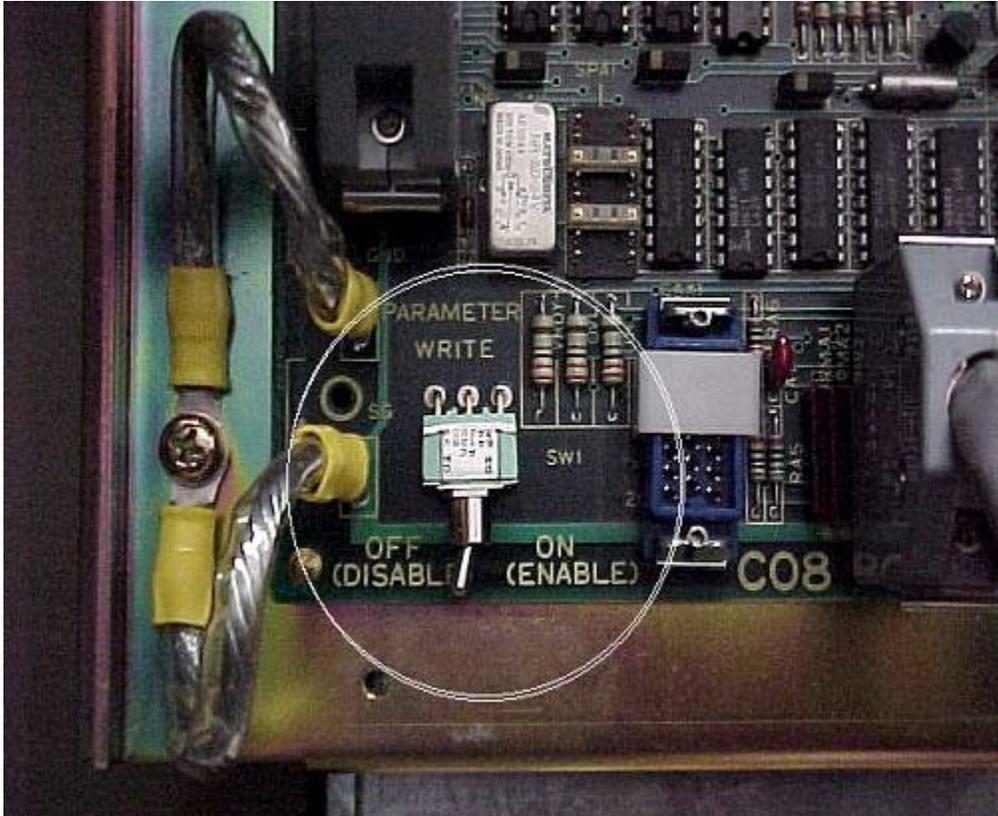
12. Press the PARAM function key.



13. Use the down key to find parameter number 340 and 341.
14. Use the cursor keys to select parameter number 340 and type "P2" and then press the INPUT key. The display should show that the value of parameter 340 is now 2.
15. Use the cursor keys to select parameter number 341 and type "P2" and then press the INPUT key. Check the display screen that the value for parameter number 341 is 2.
16. Use the PAGE keys to find parameter number 2.
17. Use the cursor to select parameter number 2. Then type "1010001". Press the INPUT key. The display screen should show the change.
18. Use the PAGE keys to find parameter number 311.
19. Use the cursor to select parameter number 311. Type "00100111" then press the INPUT key.
20. Turn the MEMORY PROTECT key lock to its ON position.



21. Turn off your control panel and then turn off the POWER to your CNC machine as well.
22. Open the front panel and turn the PARAMETER WRITE switch to its OFF position.
23. Close the front panel and restore power to the CNC machine and turn on the control panel.



24. Rotate to MODE dial to its **EDIT** position.



You have completed the setup procedure. Your Fanuc GN6 control is now ready to communicate with FabriTALK.

3. Send NC Programs

Once you have completed the setup of the control you can send NC programs. You need to set the control ready to receive data. You then send the NC program from the host computer.

Setting the Control Ready to Receive Data

1. Press the RESET key at the control.



2. Press the PRGRM function key.



3. Type the block name of the NC program you are about to send to the control. For example: "O0224". The format consists of the letter "O", followed by four numbers.
4. Press the READ key. The control is now on standby, waiting to receive data from the host computer.



Sending an NC Program from the Host Computer

1. At FabriTALK main window, you will select the node and NC file you want to send.
2. Click on the "GN6" node in the "Node List" box of Blanking tab. Click on the NC file you want to send in the "File List" box.

Make sure the control is ready to receive. Then click on the "Send File" button. FabriTALK begins to send data to the control. When the transmission is complete, check the control to make sure the transmission was successful.

4. Receive NC Programs

To receive NC programs from the control, you will need to set the host computer ready to receive.

Set the Host Computer Ready to Receive

1. At FabriTALK main window, click on the "GN6" node in the "Node List" box of Blanking tab. Click on the NC file to hold the data you are about to send from the control in the "File List".
2. Click the "Rec. File" button. Your host computer is now ready to receive data from the control.

Send an NC Program from the Fanuc GN6 Control

To send an NC program from your control to the host computer:

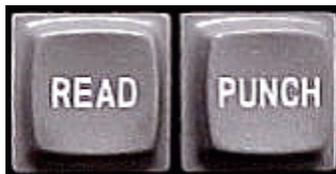
1. Press the RESET key.



2. Press the PRGRM function key.



3. Type the block name (NC program name) that you want to send to the host computer.
4. Press the PUNCH key to begin the transmission.



5. Check the host computer to ensure that the transmission was successful.