

ENGINEERING PUBLICATION
MOTION CONTROL DIVISION

PRODUCT: MP9XX Motion
Controller

SUBJECT: Remote Service via
Telephone Line

CATEGORY: MW and MW+

ENGINEER: Mariusz Jamroz / Hiro Tsuda

DISTRIBUTION: Motion Users

Remote Service via Telephone Line

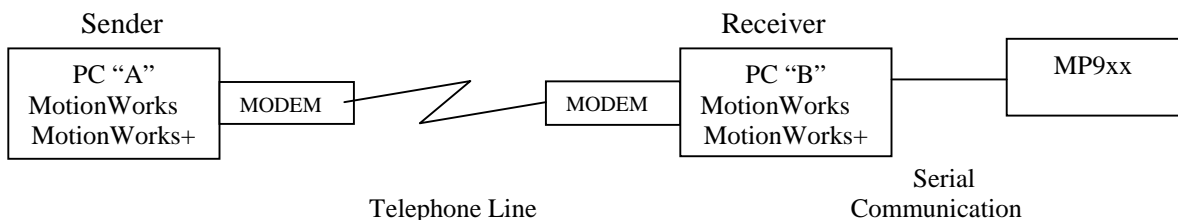
Remote service is available for the MotionWorks and MotionWorks + software, with remote service for the MotionWorks + software requiring different process communication settings. Unless stated otherwise, the following documentation is common for both types of software.

Note1: Windows 2000 and Windows NT are not compatible with remote service connection.

Note2: Some computer hardware may not be compatible with the Communication Process software.

MotionWorks and MotionWorks+

1. System Configuration and Connection



Cable connection using external modem:

- Connect Sender computer's serial port (e.g., COM 2) to the modem with the RS-232 serial cable. Connect the modem to an analog phone line.
- Connect Receiver computer's serial port (e.g., COM 2) to the modem with the RS-232 serial cable. Connect the modem to an analog phone line.
- Connect one end of the Yaskawa serial cable to the Receiver computer's COM port 1 and the other end to Port 1 of the MP9XX motion controller.

Cable connection using internal modem:

- Connect Sender computer’s modem port to an analog phone line.
- Connect Receiver computer’s modem port to an analog phone line.
- Connect one end of the Yaskawa serial cable to the Receiver computer’s COM port 1 and the other end to Port 1 of the MP9XX motion controller.

2. Communication Process Setting for Sender (PC “A”) Computer

2-1. Boot ‘Communication Manager’

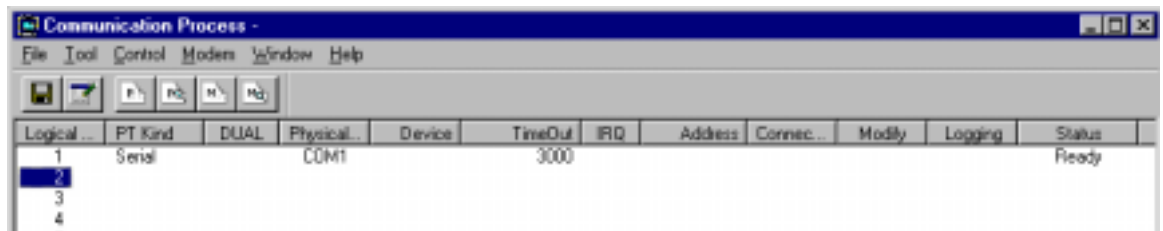
Double-click the Communication Manager icon.



MotionWorks

2-2a. Select Spare Logical Port

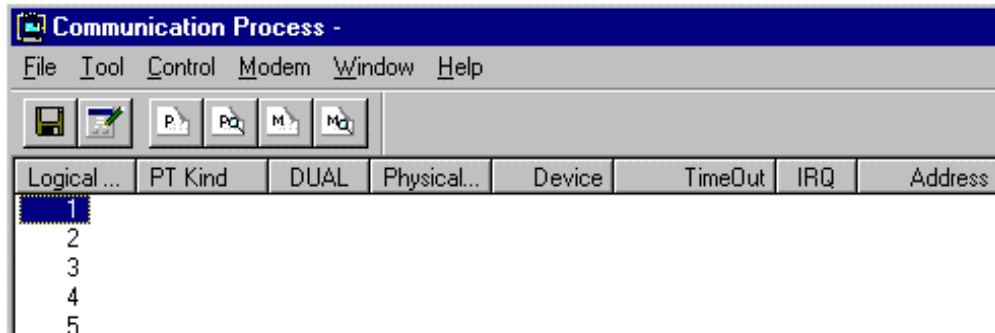
Double click the selected port number OR highlight the port number and click “File” then “Setting.”



MotionWorks +

2-2b. Change Logical Port 1

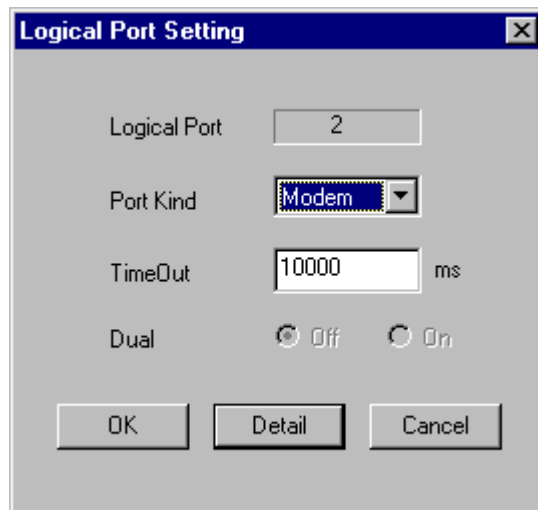
Double-click logical port 1 OR highlight port number 1 and click “File” then “Setting.”



MotionWorks and MotionWorks+

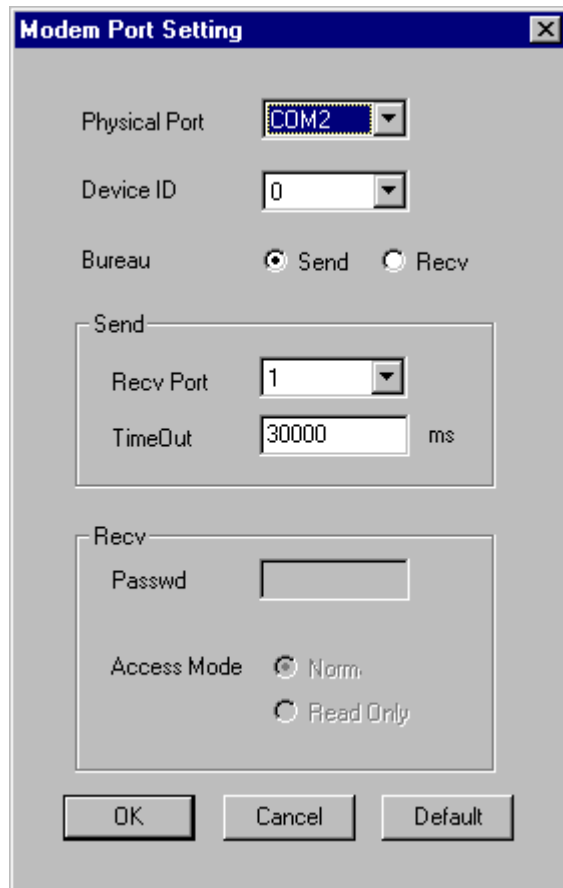
2-3. Select MODEM

Select "Modem" from the Port Kind menu.



2-4. Select Physical Port

Select Detail from the Logical Port Setting Screen.
Select the physical port to which the Modem is connected.
Select **Send** from the Bureau option.



2-5. Click twice to complete the setting

2-6. Save the setting
Click “File” then “Save.”

2-7. Close Communication Manager
The new setting will be activated with the next boot.

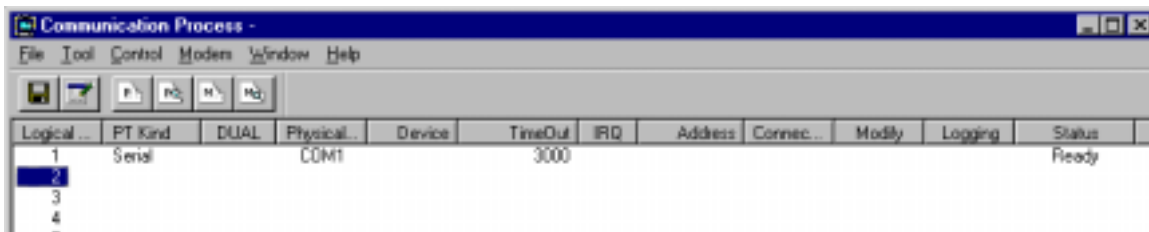
3. Communication Process Setting for the Receiver (PC “B”) Computer

3-1. Boot Communication Manager
Double-click the ‘Communication Manager’ icon.



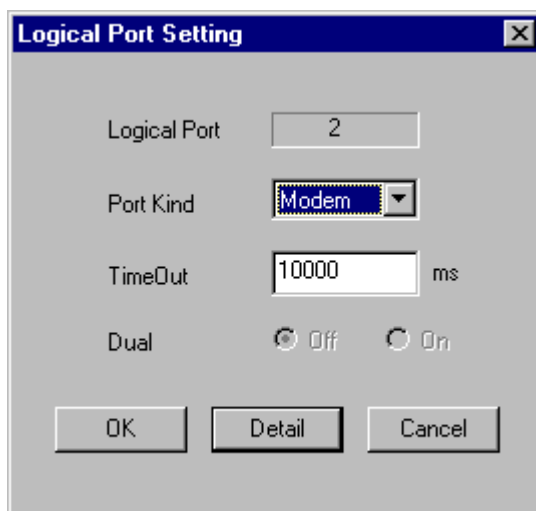
3-2. Select Spare Logical Port

Double-click the selected port number OR highlight the port number and click “File” then “Setting.”



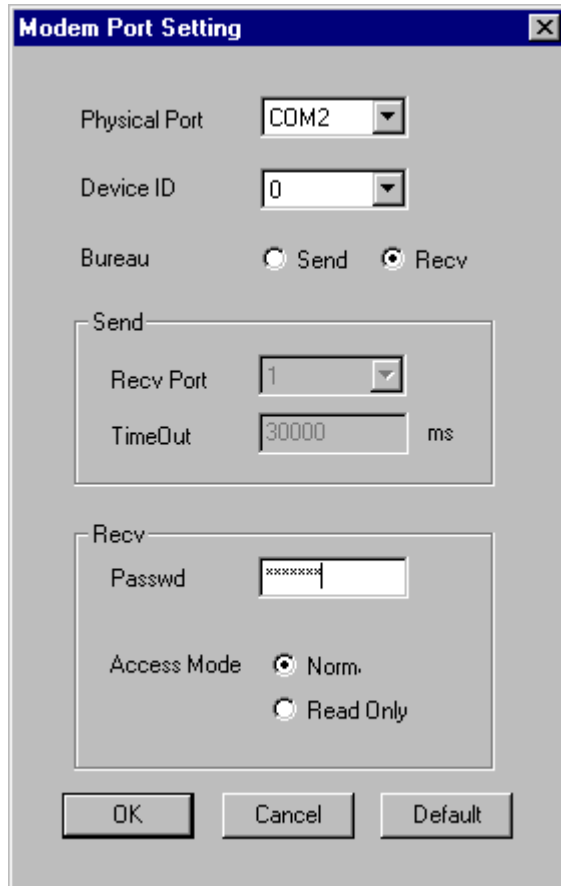
3-3. Select MODEM.

Select “Modem” from the Port Kind menu.



3-4. Select Physical Port

- Click in the Logical Port Setting Screen.
Select the physical port to which the Modem is installed.
Select **Recv** from the Bureau option.
Select a password (8 characters maximum). Note: The same password will also apply when dialing from the Sender (PC "A") computer.



- 3-5. Click twice to complete the setting
- 3-6. Save the setting
Click "File" then "Save."
- 3-7. Close Communication Manager
The new setting will be activated with the next boot.

4. Dial-up Operation

Prepare both computers for remote dialing.

4-1. Receiver (PC "B") Computer Operation

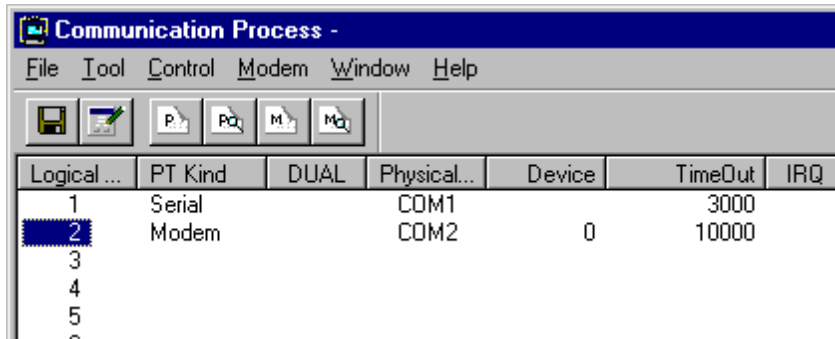
This computer has Communication Process running only. The MotionWorks or Motion

Works+ Program is not open.
 Double-click the 'Communication Manager' icon.

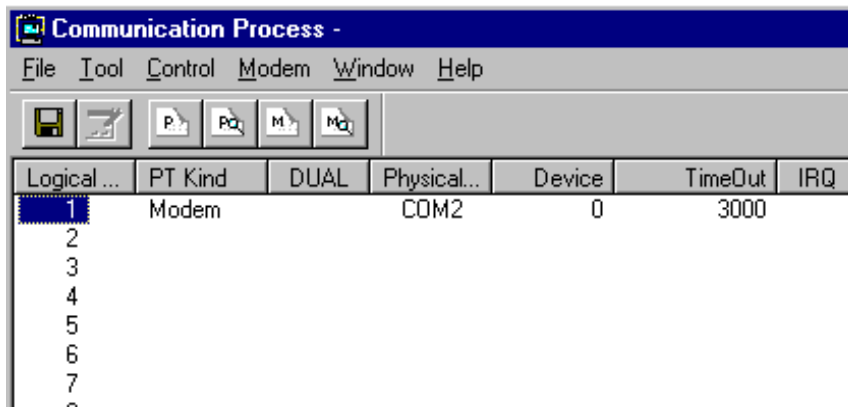


Communication Process Window Opens.

MotionWorks



MotionWorks+



MotionWorks and MotionWorks+

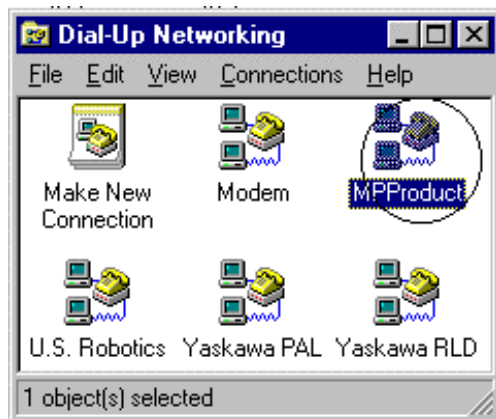
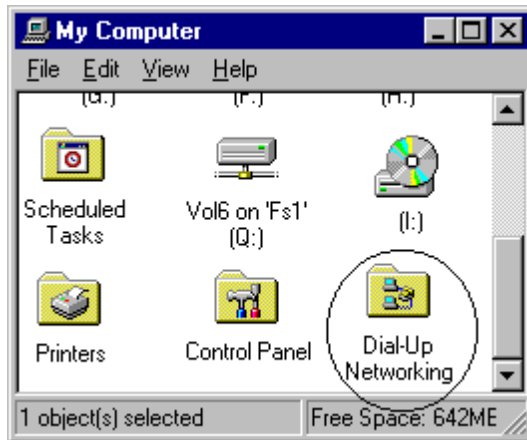
4-2. Sender (PC “A”) Computer Operation

4-2-1 Set the Dial Property of Windows.

If you need to dial “8” or “9” for an outside connection, assign it here.

Following is an example of the Dial-Up connection (MPPProduct):

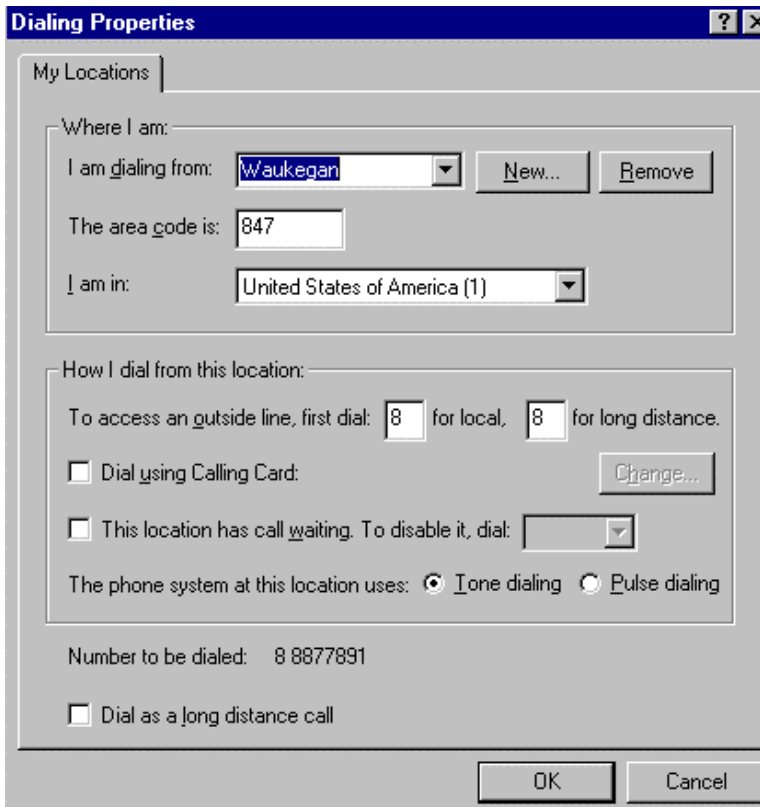
When the Dial-Up Networking is not available, use Hyper Terminal to apply the necessary settings.





The "Connect To" dialog box is titled "MPPProduct". It contains the following fields and controls:

- User name:** A text box containing "MPPProduct".
- Password:** An empty text box.
- Save password**
- Phone number:** A text box containing "8 8877891".
- Dialing from:** A dropdown menu showing "Waukegan".
- Dial Properties...**: A button next to the "Dialing from" dropdown, which is circled in red.
- Connect** and **Cancel**: Buttons at the bottom.



The "Dialing Properties" dialog box is titled "My Locations". It is divided into two sections:

Where I am:

- I am dialing from:** A dropdown menu showing "Waukegan", with "New..." and "Remove" buttons to its right.
- The area code is:** A text box containing "847".
- I am in:** A dropdown menu showing "United States of America (1)".

How I dial from this location:

- To access an outside line, first dial: for local, for long distance.
- Dial using Calling Card:** with a "Change..." button.
- This location has call waiting.** To disable it, dial: (dropdown).
- The phone system at this location uses: **Tone dialing** **Pulse dialing**
- Number to be dialed: 8 8877891
- Dial as a long distance call**

OK and **Cancel**: Buttons at the bottom.

4-2-2 Boot Communication Manager

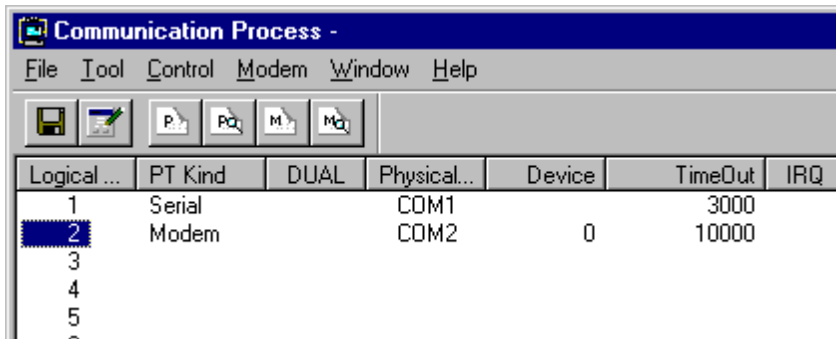
Double-click the 'Communication Manager' icon.



Communication Process Window Opens.

4-2-3 Highlight the logical Port to which the Modem is connected.

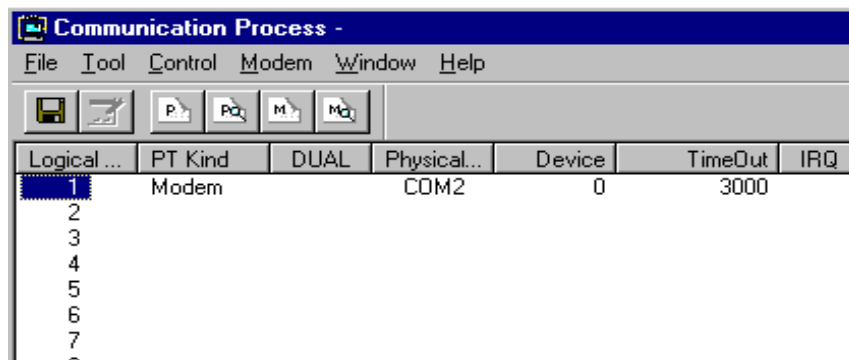
MotionWorks



The image shows the 'Communication Process' window in MotionWorks. The window title is 'Communication Process -'. The menu bar includes 'File Tool Control Modem Window Help'. The toolbar contains icons for Save, Print, and other functions. The main area is a table with the following data:

Logical ...	PT Kind	DUAL	Physical...	Device	TimeOut	IRQ
1	Serial		COM1		3000	
2	Modem		COM2	0	10000	
3						
4						
5						
6						
7						

MotionWorks+



The image shows the 'Communication Process' window in MotionWorks+. The window title is 'Communication Process -'. The menu bar includes 'File Tool Control Modem Window Help'. The toolbar contains icons for Save, Print, and other functions. The main area is a table with the following data:

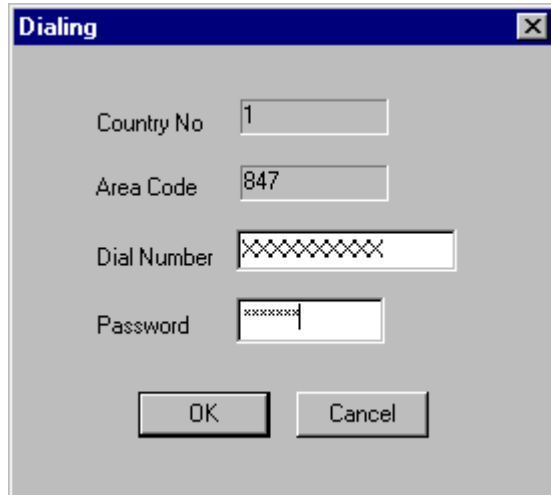
Logical ...	PT Kind	DUAL	Physical...	Device	TimeOut	IRQ
1	Modem		COM2	0	3000	
2						
3						
4						
5						
6						
7						

MotionWorks and MotionWorks+

4-2-4 Dialing

Click “Modem.”

Select “Connect.”



Shaded Country No. and Area Code are settings in ‘Dial Property.’

Input telephone number (no space) in order to make a regular call.

An outside connection number—8 or 9—is automatically placed when you enter in ‘Dial Property.’

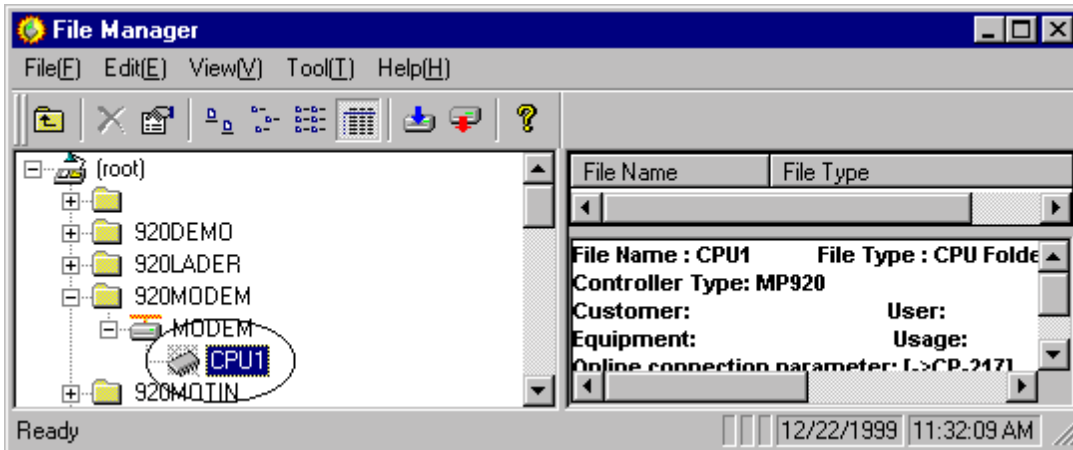
Click to start dialing.

Once communication is established, Sender (PC “A”) Computer status changes from “Proceed” to “Connected,” and Receiver (PC “B”) Computer status changes from “Accept” to “Connected.”

MotionWorks

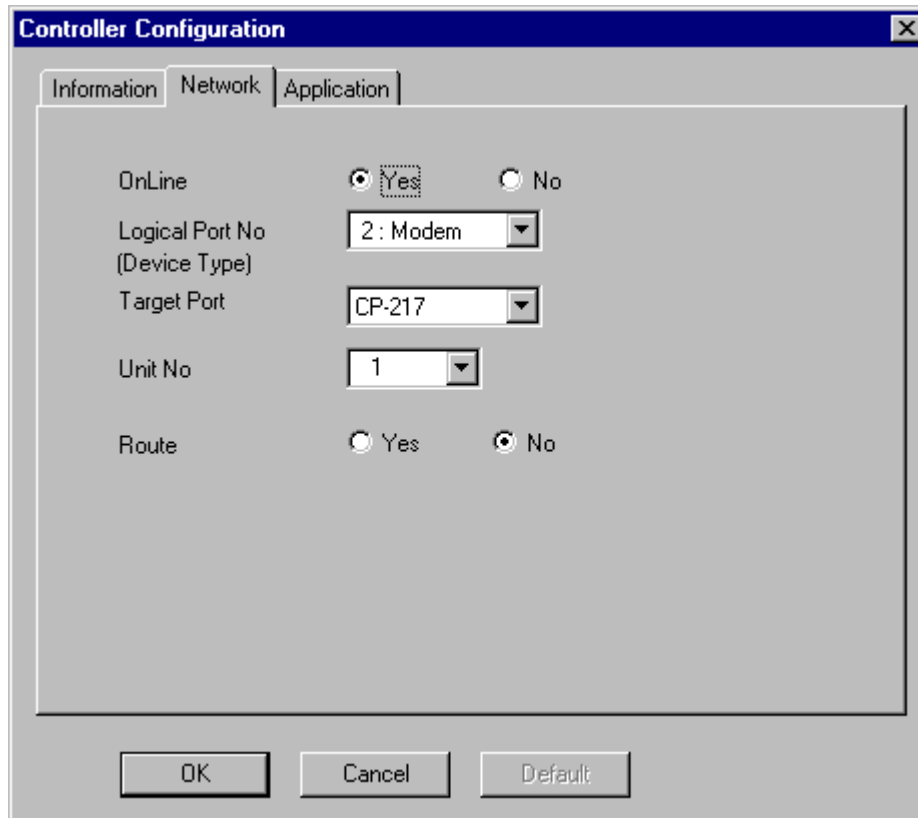
4-2-5a Boot MotionWorks

Highlight the CPU that you wish to operate.



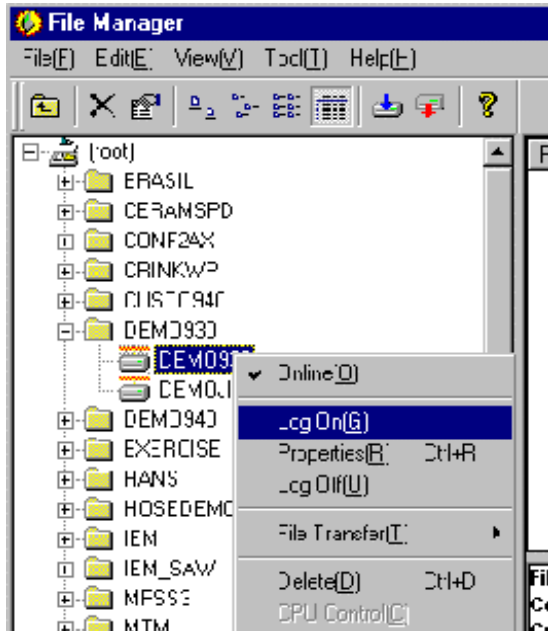
Click “File” then “Property.”
Click the “Network” tab.

Set “On-line” to “Yes.”
Select “Logical Port No” as the Modem you are communicating from.
Select “Target Port” as the communication between the Receiver (PC “B”) Computer and the MPXX controller (CP-217).



Click .

You are now ready to operate the MP9XX controller from the Sender (PC “A”) Computer through the Receiver (PC “B”) Computer.
 Continue with procedure for operating the MotionWorks program remotely. Select “Log On” then “On Line.” You can now program and monitor the MP9XX controller.

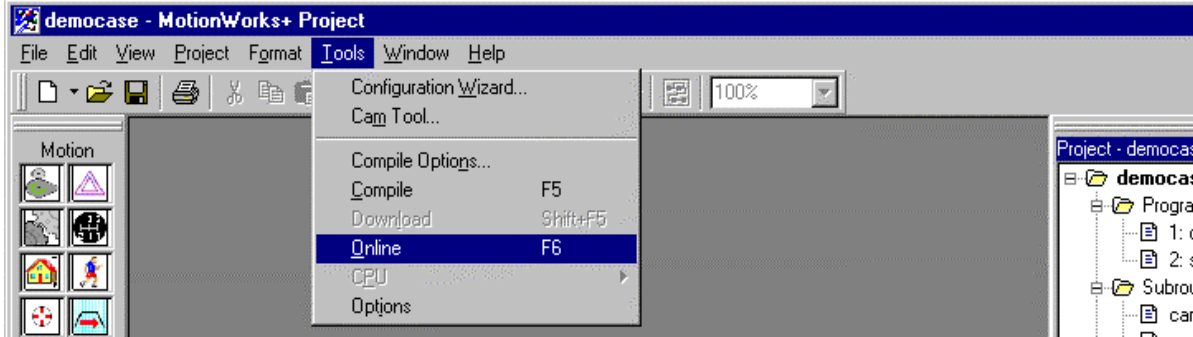


Warning! The remote program is On Line and the controller is live. The machine is not visible by the programmer. Changing states of the program bits or I/O, program logic or register value may cause the machine to move unexpectedly, potentially causing human injury or damage to the machine.

MotionWorks+

4-2-5b Boot MotionWorks +

You are now ready to operate the MP9XX controller from the Sender (PC “A”) Computer through the Receiver (PC “B”) Computer. Continue procedure for operating the MotionWorks+ program. Open the desired project file.
 Select “Online” from the “Tools” menu. You can now program and monitor MP9XX controller.



Warning! The remote program is On Line and the controller is live. The machine is not visible by the programmer. Changing the states of the program bits or I/O, the program logic or register value may cause the machine to move unexpectedly, potentially causing human injury or damage to the machine.

MotionWorks and MotionWorks+

5. Disconnection

5-1. Close MotionWorks or MotionWorks +

5-2. Open the Communication Process window

5-3. Click “Modem” then “Disconnect”

The status of the Sender (PC “A”) Computer and the Receiver (PC “B”) Computer changes from “Connected” to “Idle.”

5-4. Close the Sender (PC “A”) Computer and the Receiver (PC “B”) Computer Communication Manager

###