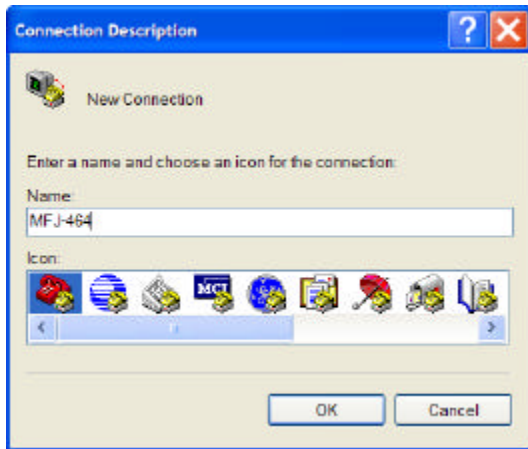


Using HyperTerminal With MFJ Keyers/Readers

HyperTerminal is a terminal software that comes with Microsoft Windows. You can use this software to interface with most MFJ Keyers and Readers, such as the MFJ-461, MFJ-464, MFJ-493 and MFJ-495. Perform the following steps:

1. Click **Start**, point to **Programs**, point to **Accessories**, point to **Communications**, and then click **HyperTerminal**.
2. **Connection Description** window appears, type a name such as MFJ-464, choose an icon, and click **OK**.



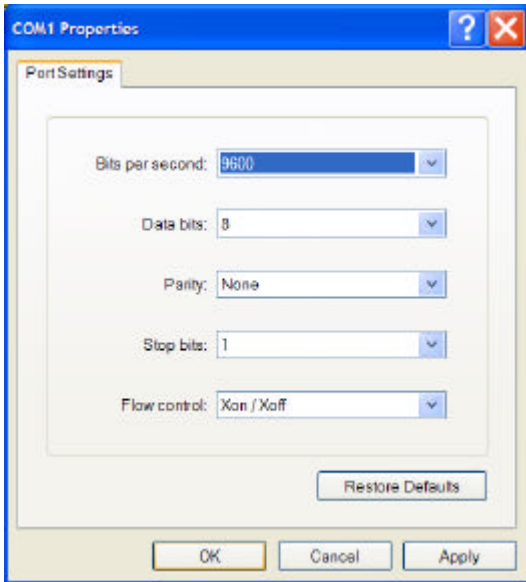
3. **Connect To** window appears, in the **Connect using** field, select the COM port that you will connect your Keyer or Reader to. Ignore the other fields, and make sure this COM port is not used by another application or device. Click **OK**.



4. **COM Properties** window appears, set the port settings as follow and click **OK**.

	Bits Per Second	Data Bits	Parity	Stop Bits	Flow Control
MFJ-461	19200	8	None	1	None
MFJ-464	9600	8	None	1	Xon / Xoff
MFJ-493	1200	8	None	1	None
MFJ-495	1200	8	None	1	Xon / Xoff

For example, to interface with the MFJ-464, select 9600 bits per second, 8 data bits, no parity, 1 stop bit and Xon / Xoff flow control as shown below.



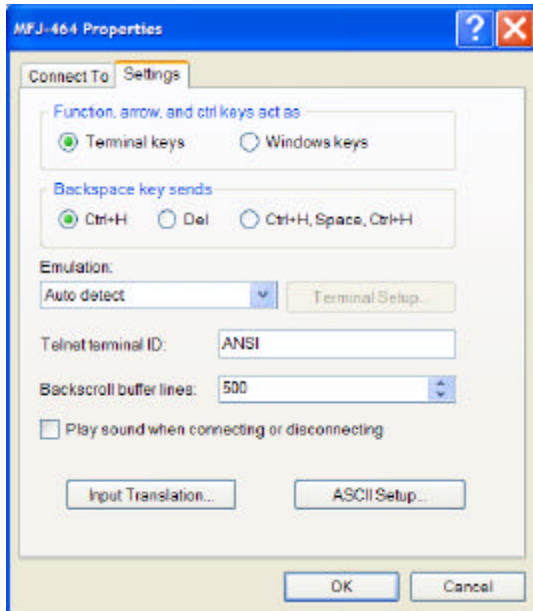
5. On the **HyperTerminal** window, click **File** and then click **Save**. Next time when you want to use HyperTerminal with these settings, click **Start**, point to **Programs**, point to **Accessories**, point to **Communications**, point to **HyperTerminal**, and then click **MFJ-464.ht** (or whatever name you entered in Step 2). You can also create a shortcut on your Windows desktop for easy access.
6. Connect the Keyer or Reader to your computer serial port using a RS-232 serial cable. If there is problem, check your serial cable connection and make sure the COM port is not used by another application or device. If HyperTerminal window shows garbage such as [][][][@#\$\$%^@, then you most likely have set the wrong bits-per-second in Step 4.

A special 3.5mm-to-DB9 RS-232 serial cable is used to interface with the MFJ-461 and MFJ-464 (DB9-to-DB25 adapter is required if your computer has the older 25-pin serial port). This serial cable, the MFJ-5161, is available from MFJ Enterprises, Inc. or you can make your own.

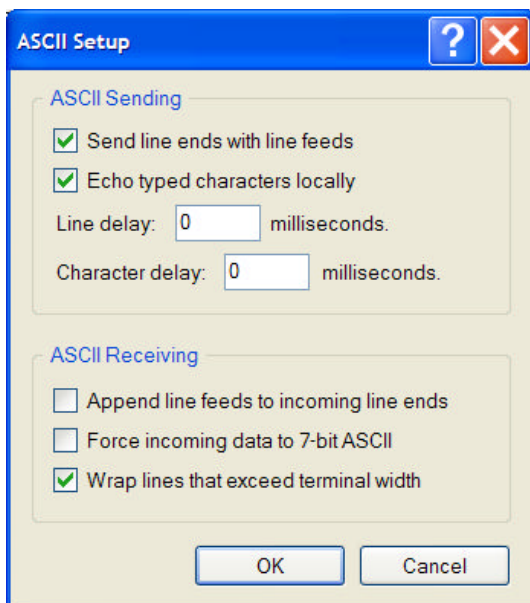
Connect 3.5 mm Stereo Plug	To DB9 (female)	To DB25 (female)
Tip (TxD)	Pin 2	Pin 3
Ring (RxD)	Pin 3	Pin 2
Sleeve (GND)	Pin 5	Pin 7

For the MFJ-464, MFJ-493 and MFJ-495 you might want the characters you typed on the computer to appear on the terminal window. To enable this, set up HyperTerminal as follow.

1. On the **HyperTerminal** window, click **File** and then click **Properties**.
2. **Properties** window appears, select the **Settings** tab and then click **ASCII Setup...**



3. **ASCII Setup** window appears, make sure “**Send line ends with line feeds**” and “**Echo typed characters locally**” are checked. Click **OK** and click **OK** again.



4. Click **File** and then click **Save** to save these settings for use next time.