

Application Note

#5403

Sept 28, 2000

*Dial-Up Networking for
Windows 98*

Intro: This application note is for people interested in setting up a connection to a server, or the internet on a server using our FreeWave modems. This is a step by step procedure that will guide you in connecting to a server from an outside location.

1. Install Dial-up Networking, if it is not already installed.

In control Panel, select *Add/Remove Programs* icon. In the Windows Setup tab select *Communications*, then click on the *Details* button, select *Dial-Up Networking*, Click *OK*, *Apply*, *OK*.

2. Select and configure a modem.

In *Control Panel* select *Modems*. If you already have a modem installed, click on the *Add* button to add an additional modem. Check the *Don't detect my modem box, I will select it from a list*, click *Next*. Select Under manufacture *Standard Modem type* for the model type select *Standard 28800bps modem*, click *Next*, Select the *Com Port* that you will be using, Click *Next*, Click *Finish*. The *Modem Properties* screen should pop-up automatically. On this screen highlight the *standard 28800 bps* modem. Click on the *Dialing properties* button. Fill in the *area code* field and then click *OK*. On the same *modem properties* window click on the *properties* button. Under *Maximum speed* select 115200, under the *Connection tab*, select *Advanced*. Make sure the *Hardware (RTS, CTS)* and *Use flow control* boxes are checked. Click *OK*, Click *OK*, Click *Close*

3. Select proper Protocol. For TCP/IP or PPP protocol.

In Control Panel select *Network*, click *Add*, click *Protocol*, click *Add*, click *Microsoft*, click *TCP/IP*, click *OK*, *OK*. Click on *Yes* when it prompts you to restart your computer.

4. Set up Dial-Up Networking

In *My Computer* select the *Dial-Up Networking* folder. Now click on the *Make a new connection* folder. Now you will need to type in a name for your new connections, Click *OK*, Click *Next*. Leave the area code blank. In the *Telephone number* box enter the call book entry number of the modem that you would like to call (0 -9). Click *Next*, and then the *Finish* button.

5. Set up Network Configuration Information.

Open up the *My Computer* icon, click on the *Dial-Up Networking* folder, **Right click** on the connection that you just made. Select *properties*. In the *general* tab go down and uncheck the box that says *use area code and dialing properties*. From here you will click on the *Server Type* tab. Under type select *PPP: Internet Windows NT Server, Windows 98*. Under the *Advanced options*, check the *Log on to Network* and *Enable software compression*. **(Do not check Require encrypted**



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password) Under *Allowed Network Protocols* select only the **TCP/IP** selection, Uncheck NetBEUI and IPX/SPX compatible (Unless you need them for other applications). Now click on the **TCP/IP**

Settings button. You will need to check to see what your server supports but most support DHCP so make sure the *Server Assigned IP Address* is marked. If you have a specific IP address you must click on the button that says *specify an IP address* and then enter the IP address. If you have a specific DNS you must enter it by clicking on *specify name server address*. This should be supplied by your ISP or through your Network Administrator. Be sure to check *Use IP header compression* and *Use default gateway on remote network*. Click OK, Click OK.

6. Configure FreeWave Modem.

Connect the FreeWave modem to a terminal program set to 19.2 KB and press the setup button on the modem. Select *Operation Mode (0)* then select *point to point master/slave switchable (6)*. This sets the radio as a slave until a connection in dial-up networking raises DTR. This switches the radio to a master and it will begin calling for the slave radio. **(Make sure the radio you are connected to is set up as a point to point slave or point to point master/slave switchable.)** Also make sure to check that the baud rate and the call book are set up properly.

7. Connecting to your network or ISP.

Under *Dial-Up Networking* select the new connection that you just made. Type in your username and password and then click on *Connect*. The modem should connect and the CD light turns solid green. You should now be connected.

