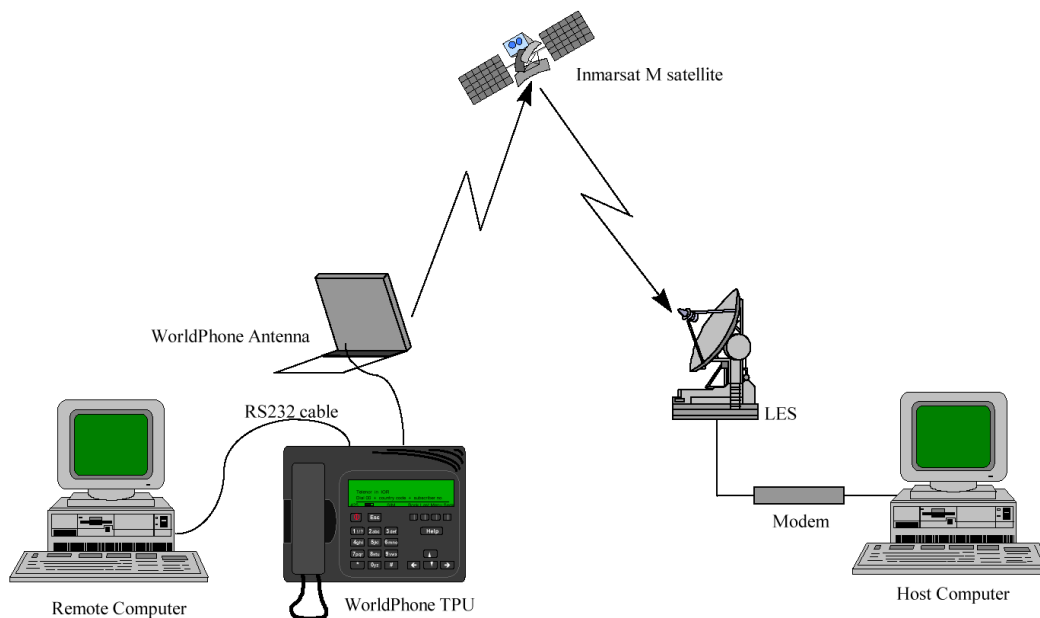


Nera WorldPhone portable office Win9X

Introduction

The WorldPhone Data Service operates at 2400bps and provides an easy and straightforward way of transferring data. With the Data Service it's possible to conduct file transfer using the most popular terminal programs including the Windows'95 / 98 HyperTerminal. It's also fairly simple to connect to terrestrial networks (e.g. your office LAN) using the Dial-up Network utility of Win'95 / 98. In this manner you're able to stay in touch with your home office without using local landlines in your current location. The best part is that installing a Worldphone modem driver on your Windows'95 / 98 PC is almost as easy as installing an ordinary modem. When the modem driver is installed the Worldphone behaves just like any other modem and you are free to use your favorite applications for Email, Web browsing and file transfer.



Typical Remote Access with WorldPhone Office.

Basic concepts

The Worldphone Data Service complies with the communication protocol defined by the Inmarsat Mini-M system. This means that the maximum transmission data rates are determined by the satellite link rather than the Worldphone terminal. When a data rate other than 2400bps is used between the Worldphone and a terminal (PC) on MES side and the terrestrial link on the LES side, the data format over the satellite link remains unchanged. The maximum transfer rate of 2400bps for the Worldphone terminal is in other words inherent to the Inmarsat Mini-M system.

When connecting a PC to your Worldphone terminal you are free to choose any serial port data rate up to 38400 bps (default 9600bps) which is the maximum data rate that the DTE communication port on the Worldphone terminal handles. The important issue here is to configure the DTE port and the PC COM port to the same data rate. It's advisable to choose a data rate higher than the data rate of the satellite link. This allows the Worldphone to buffer up the data before transmission, exploits the satellite link and thereby boosts performance.

Using Worldphone with a Windows'95 / 98 PC.

In order to use Worldphone terminal with Windows'95 / 98 you must do as follows:

- Enable the Worldphone DTE Port for data.
- Configure a PC modem driver for the Worldphone terminal using the "Mdmnera.inf" file supplied by Nera.

Then you can:

- Set up a HyperTerminal connection for BBS access.
- Set up a Dial-up Network connection for Email, Internet and LAN access.

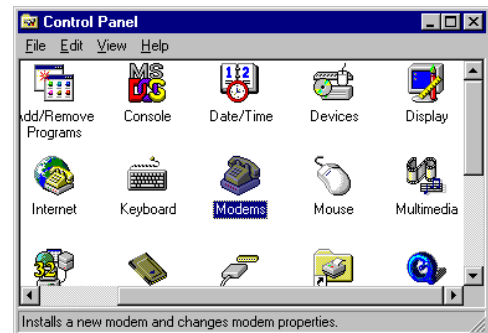
PC configuration

Prior to the configuration make sure that the "Communications" component is installed. This component installs HyperTerminal and Dial-up Networking, both of which is described in this application note. If you can't find either two programs in your computer, refer to the Windows 95 / 98 manual and install the "Communications" component.

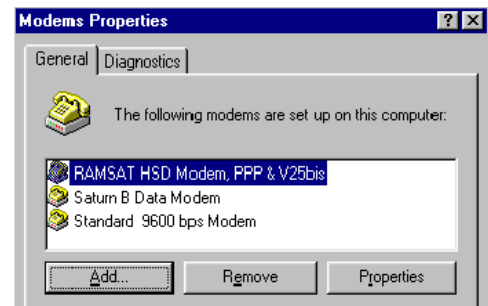
Modem set up.

This file can be downloaded from Internet:
www.satcom.nera.no

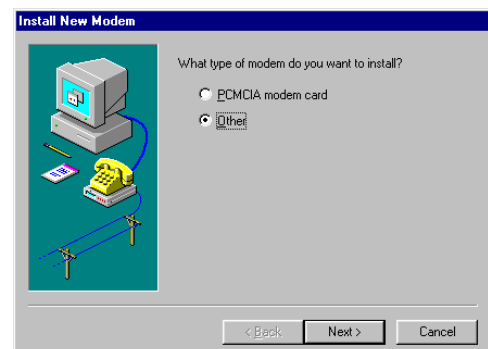
1. Open the **Control Panel** and choose **Modems**.



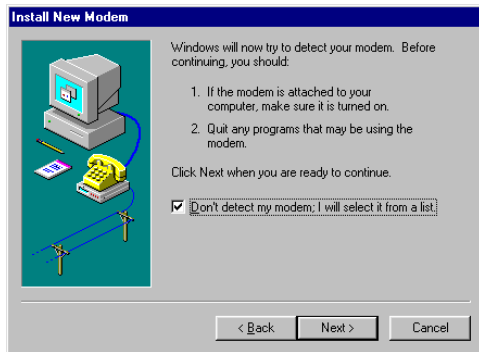
2. Click Add to install a new modem.



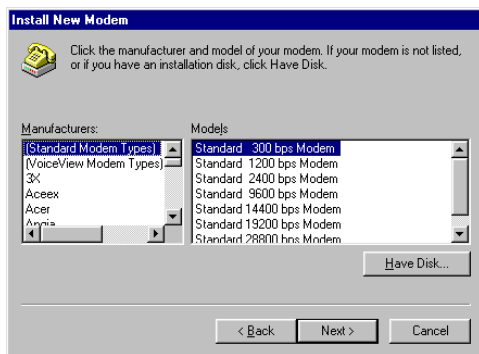
3. If you're installing on a Notebook PC choose "Other" (not "PCMCIA modem card"). This option is not presented if you're installing from a stationary PC and click Next.



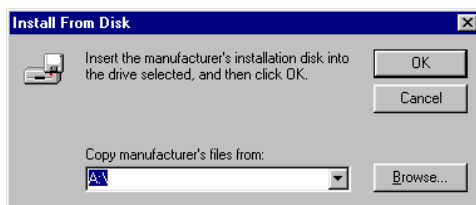
4. Check “Don’t detect my modem....” to prevent Win’95 / 98 from scanning your hardware. And click Next



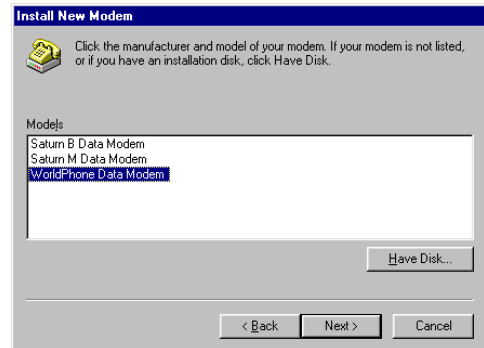
5. Select “Have Disk”, click Next.



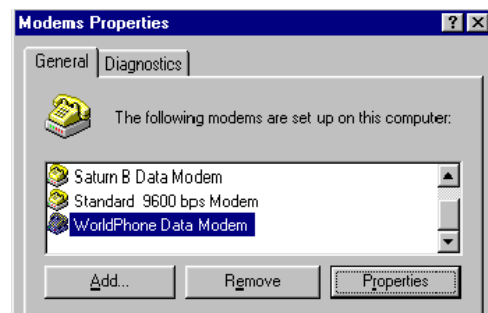
6. Browse to the location of the “Mdmnera.inf” file and click Ok.



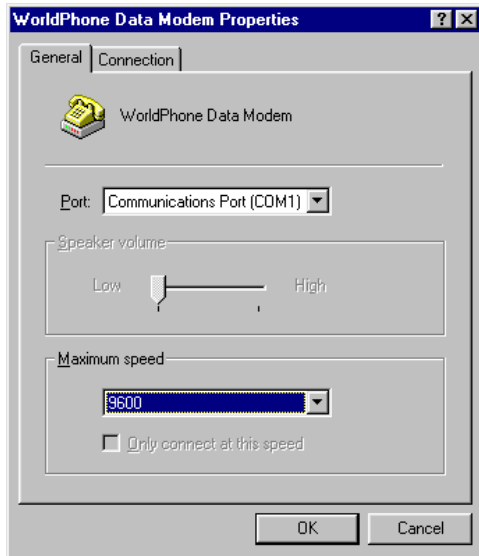
7. Choose “Worldphone Data Modem” in the Models box and click Next.



8. Select “Communications Port Com1” in the “Select the port to use...” box.
9. Click Next. Windows installs the new modem and prompts you to finish the installation.
10. Verify the modem settings by selecting the “Worldphone Data modem” modem from the list of installed modems.



Click the “Properties” button and make sure the “Maximum speed” is set to “9600”.



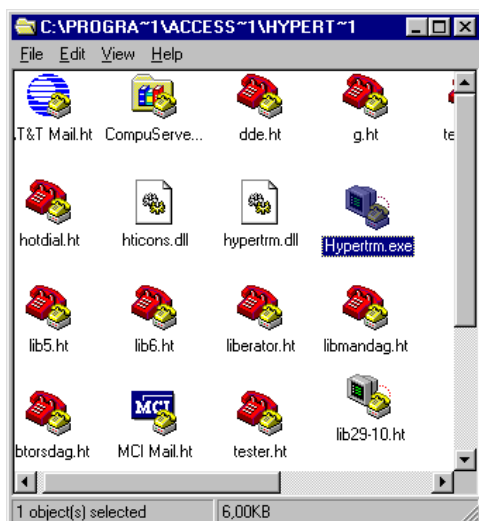
3. Choose a name (e.g. “Worldphone”) and icon for your new connection and click OK.



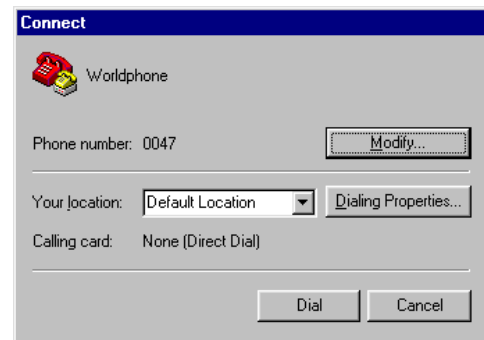
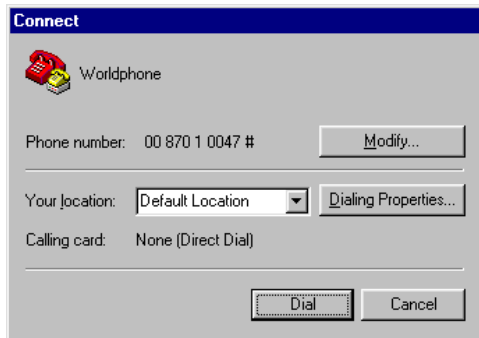
4. Enter phone number and your modem connection (“Worldphone Data Modem”), your destination’s country code and area code if any (this is not necessary). (Make sure that “Use country/region... ..” is not marked if you use Windows NT). Click “OK”

Set up a Windows’95 / 98 Hyper terminal connection.

1. Open the Hyper terminal from Start/Programs/Accessories.
2. Double click the icon “Hypertrm.exe”.



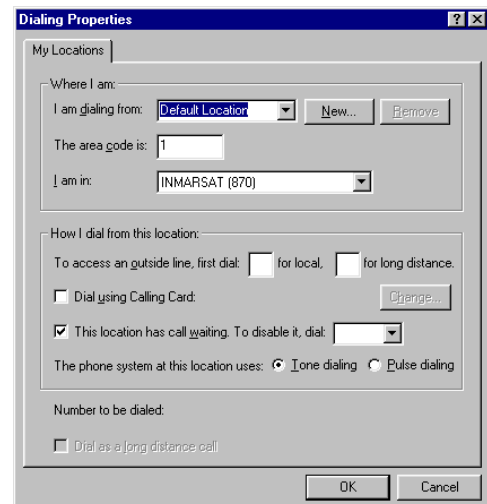
5. The “Connect” window pops up and you’re ready to dial. Check that the complete phone no. string is correct. In our example it is wrong



6. Click “Modify” if you want to change the settings of your *destination*.
UnMark “Use country code and area code”



7. Click “Dialing Properties” if you want to change the settings of your *location*. Click Ok.



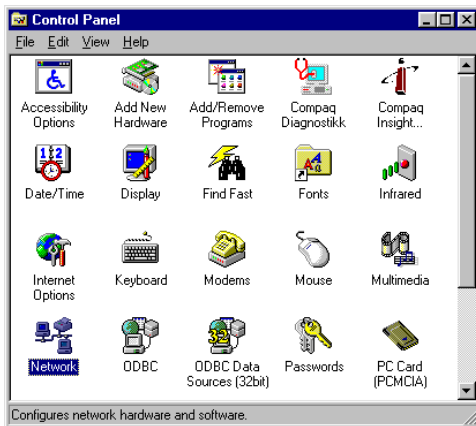
And click Ok.

Application Note

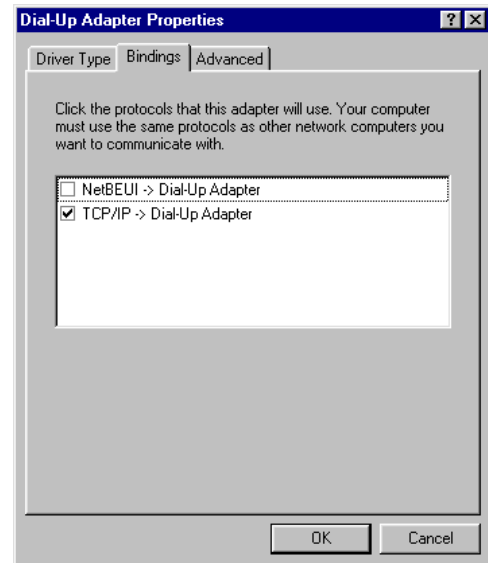


Configure the “Dial-up Adapter”
(These settings are normally default,
but check them anyway)

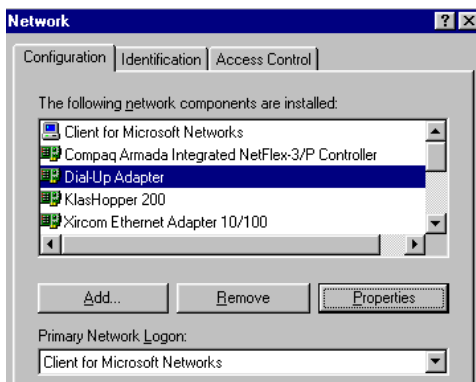
1. Open the Control Panel and choose Network.



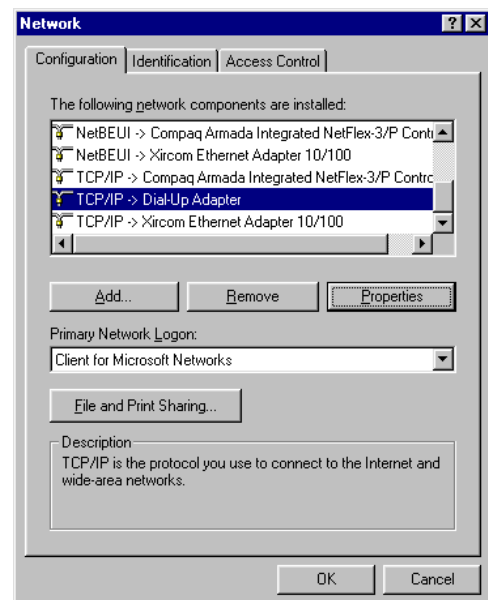
and “TCP/IP → Dial-up Adapter” and click “OK”.



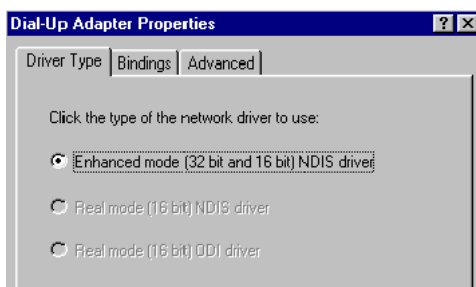
2. Select “Dial-up Adapter” and click the “Properties” button.



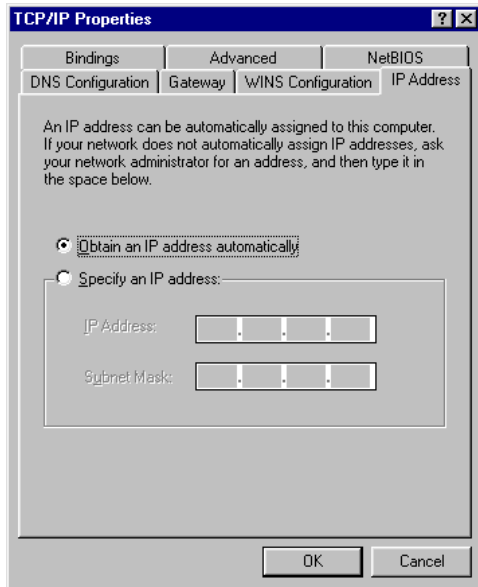
4. Select “TCP/IP → Dial-up Adapter” and “Properties”



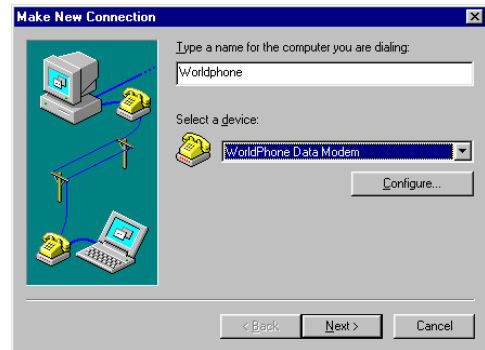
3. Select “Bindings”



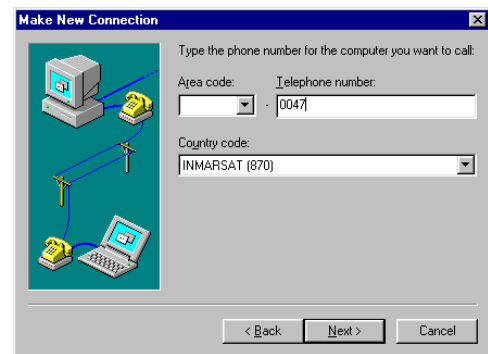
and select "Obtain an IP address automatically".
Click "OK".



3. Enter a name for the computer you want to dial up. Choose the "Worldphone Data Modem" installed above. Click "Next".

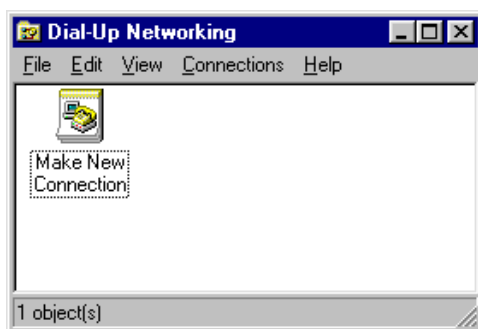


4. Enter the telephone number and country code to your ISP's modem (area code can be left).



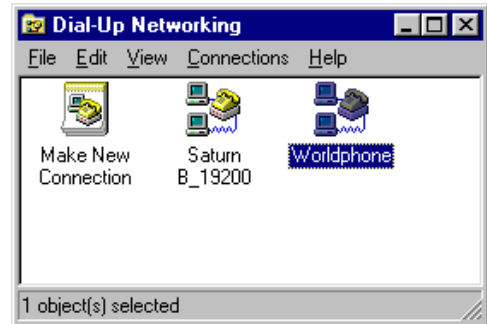
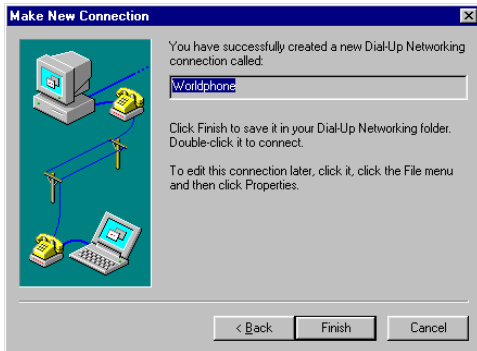
Set up a Dial-up Network connection.

1. Open Start/Programs/Accessories/Dial-up Networking.
2. Double-click "Make New Connection".



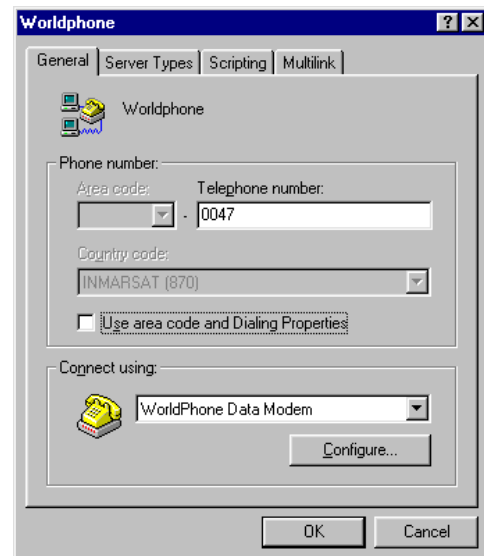
Click "Next".

5. Click “Finish” and you’re ready to dial up.



and unmark “Use area code and..”
Click “Ok”

6. When you double click your new Icon, observe the “Phone number” area: This is not correct!



9. You should now be able to make a connection to Internet through your ISP’s modem by double click your prepared “Dial-Up Networking” Icon.



7. Click “Cancel”

8. Click “File” and “Properties”



10. Fill in “User Name” and “Password” and click “Connect.”



. If you want to browse the Internet you can use either “Netscape” or “MS Internet explorer”. If you want to use Email you would have to install and configure an Email program like “Eudora”, “MS Internet mail” or use “Netscape mail”. These applications are provided by your ISP.

Note:

The purpose of Nera’s application notes is to present ideas of the use of our products and to outline how to incorporate our products in larger communication systems. The notes describe tests that we have conducted in our lab. The application notes do not imply that Nera offers technical support for the peripheral units described in the application notes unless other is specified. Nera does not guarantee that applications described will work properly in environments different from our.