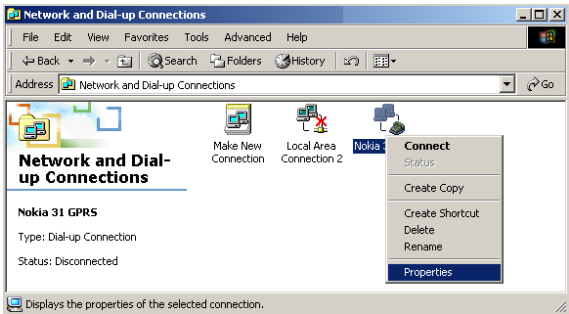
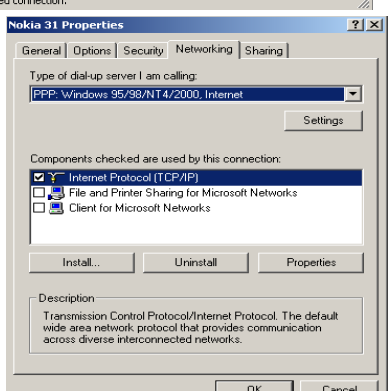
the menu.

3 Select **Properties** from the drop down menu.



Set properties

In the dial-up connection Properties (e.g. Nokia 31 Properties) window, select the **Networking** tab. Press **Settings**.



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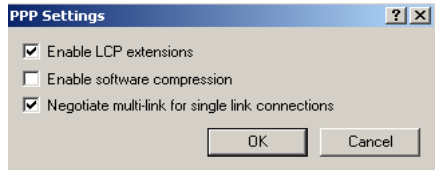
1 Make certain that the **Enable software compression** in the PPP Settings window is unchecked.

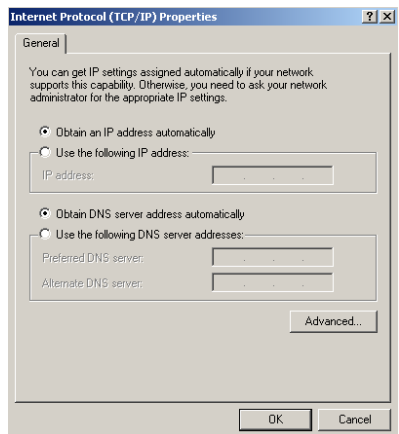
2 Press **OK**.



3 Back under the **Networking** tab, click on the Properties button for **Internet Protocol** (TCP/IP).I

4 Complete these fields with the information provided by your Internet service provider.

5 Click on the **Advanced** tab.



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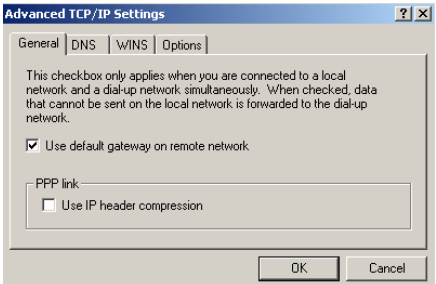
6 In the **Advanced TCP/IP Settings** window, make certain that the **Use IP header compression** box is not checked.

Note: Advanced TCP/IP Settings are Internet service provider dependent. For more information, please contact your Internet service provider.

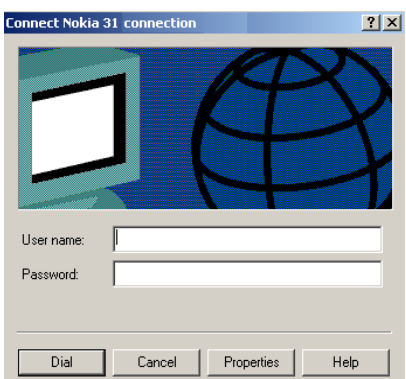


7 Press OK

8 In the Dial-up connection Properties (e.g. Nokia 31 Properties) Networking window press OK.

CONNECTING TO THE INTERNET

If properly configured, your Nokia 31 GSM Connectivity Terminal should now be ready to make an the Internet connection. Go to the **Taskbar** and select **Start**, **Settings** and **Control Panel**. Select **Network and Dial-up Connections**. Double-click the new connection icon (e.g. Nokia 31).



1 Enter your Internet access username and password. For more information, contact your Internet service provider.

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2 When you have successfully connected to the Internet, the **Connection Complete** window will appear into your PC screen.

UNINSTALLING MODEM SETUP FOR NOKIA 31

1 Click the **Start** button, point to **Settings**, and click **Control Panel**.

2 Double-click **Add/Remove Programs**.

3 In the Install/Uninstall tab, select **Modem Setup for Nokia 31** from the list of software that can be removed.

4 Click **Add/Remove**.

5 Follow the instructions on the screen until the program files are removed.

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6 Troubleshooting

If you are experiencing problems with the Nokia 31 terminal, check the following:

1. Confirm that the data cable is firmly connected to the Nokia 31 terminal and to the PC (or other compatible device).
2. Confirm that the power supply is firmly connected to the Nokia 31 terminal and to an AC wall outlet.
3. Disconnect the power supply from the AC wall outlet and verify that the SIM card is installed properly.

POOR RECEPTION

If there are problems with reception, for example, interruptions in the service, the signal may be too weak. The signal strength is indicated at startup by the LED indicators on the front of the Nokia 31 terminal (see Signal Strength, p. 17).

To check the strength using the HyperTerminal application, start the software and enter the AT command sequence: at+csq. The response is +csq: <rssi>, 99. The parameters for <rssi> are from 0 through 31 at 2 dBm intervals:

0 ... 6	-101 dBm or less -> Unacceptable coverage
7 ... 11	-100 dBm ... -91 dBm -> Weak coverage
12 ... 16	-90 dBm ... -81 dBm -> Moderate coverage

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17 ... 31	-80 dBm or greater -> Good coverage
99	Not known or not detectable

For example, the response +csq: 31, 99 means that the signal strength is excellent.

If the signal is weaker than -91 dBm (the <rssi> parameter is 11 or less), move the Nokia 31 terminal to another location. You may need to install an external antenna to improve the reception. (For more information on external antenna installation, please see www.americas.forum.nokia.com.)

BLOCKED PIN CODE

If you enter the wrong PIN code three times in a row, the code will be blocked (L.E.D. indicators 1 and 2 will blink red). To unblock the PIN code, you must enter your Personal Unblocking Key (PUK) code.

Unblock using HyperTerminal application

To do this in the HyperTerminal application:

1. Type the AT command at+cpin? and press Enter. If the PUK code is required, the response is +cpin: SIM PUK.
2. Enter the PUK code via the command at+cpin=PUK, PIN where PUK is your PUK code and PIN is your old or new PIN code. Press Enter.

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NO CONNECTION

If you do not get an OK response when you press Enter in the HyperTerminal connection window, verify that the port settings are correct.

Modem driver

Check that no other device uses the same COM port with your PC to which you have connected the Nokia 31 terminal.

If you wish to see the log file to check what the Nokia 31 terminal has responded to the AT commands, you can find the file named Modem_Nokia30.txt on your PC in the WINNT or Windows folder. If the log file is not found:

1 (In Windows 2000) Select Control Panel > Phone and Modem options > Modems > Nokia 31 > Properties > Diagnostics.

2 In the Logging section, select Append to Log.

If you are unable to to create the Internet connection

Check the Nokia Modem Options settings are correct.

Check New Dial-up Connection settings are correct.

Contact your Internet service provider.

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7 CARE AND MAINTENANCE

Your Nokia 31 terminal is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you fulfill your warranty obligations and allow you to enjoy this product for many years.

Keep the terminal and all its parts and accessories out of the reach of small children.

Keep the terminal dry. Precipitation, humidity and all types of liquids or moisture contain minerals that will corrode electronic circuits.

Do not use or store the terminal in dusty, dirty areas. Its moving parts can be damaged.

Do not store the terminal in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

Do not store the terminal in cold areas. When it warms up (to its normal temperature), moisture can form inside which could damage electronic circuit boards.

Do not attempt to open the terminal. Non-expert handling may damage it.

Do not drop, knock or shake the terminal. Rough handling can damage internal circuit boards.

Do not use harsh chemicals, cleaning solvents or strong detergents to clean the terminal.

Do not paint the terminal. Paint can clog the moving parts and prevent proper operation.

Use only an approved, optional external antenna. Unauthorized antennas, modifications or attachments could damage the terminal and may violate regulations governing radio devices.

Always disconnect the power supply from the terminal before you remove it from the data adapter.

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Do not install or remove the SIM card if the terminal's power supply is connected to an AC wall outlet.

If the terminal or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

All of these suggestions apply equally to the Nokia 31 terminal as well as all compatible Nokia accessories.

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8 IMPORTANT SAFETY INFORMATION

Power supply

The Nokia 31 terminal's power supply (ACW-5A) converts AC voltage to the proper DC.

Note: The power supply socket should be easily accessible and it must not be covered. The power supply is insulation class 2-covered.

Warning! Dangerous voltage. Do not attempt to open the casing of the AC converter. When you disconnect the power supply's AC power cord, grasp and pull the plug, not the cord.

Note: This power supply is for indoor use only! Do not expose the unit to water, rain or dust.

The power supply should be disconnected from the socket when the terminal is not in use for a prolonged period of time or when the power supply is not connected to the terminal.

Important! Use only the power supply approved by Nokia. The use of any non approved power supply will invalidate any warranty applying to the terminal and may be dangerous.

Operating environment

Remember to follow any special regulations and warnings in force in any area and always switch off the terminal whenever it is forbidden to use it. Otherwise, the use of the terminal could cause interference or danger.

Do not connect the Nokia 31 terminal's AC power supply whenever it is forbidden to use a wireless device, or when it may cause interference or danger.

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When connecting the terminal or any accessory to another device, read all applicable user guides for detailed safety instructions. Do not connect incompatible products.

Electronic devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your terminal.

PACEMAKERS

Pacemaker manufacturers recommend that a minimum separation of 6 inches (20 cm.) should be maintained between a wireless device and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and the recommendations of Wireless Technology Research.

Persons with pacemakers:

- should always keep the terminal more than 8 inches (20 cm.) from their pacemaker when the terminal is powered on;
- should stop using the terminal immediately if there is any reason to suspect that interference is occurring.

HEARING AIDS

Some digital wireless devices may interfere with some hearing aids. In the event of such interference, you may want to consult your service provider.

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OTHER MEDICAL DEVICES

Operation of any radio transmitting equipment, including wireless terminals, may interfere with the functionality of inadequately protected medical devices. Consult a physician or the manufacturer of the medical device to determine if they are adequately shielded from external RF energy or if you have any questions. Do not use your terminal in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

POSTED FACILITIES

Be certain not to connect the power to the terminal in any facility where there are posted warnings against using wireless devices.

Potentially explosive atmospheres

Do not use the Nokia 31 terminal in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Users are advised not to use the terminal while at a refuelling point (service station). Users also are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include below deck on boats; chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or particles, such as grain, dust or metal powders; and any other area where you would normally be advised to turn off your vehicle engine.

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9 TECHNICAL SPECIFICATIONS

Dimensions	84 x 53 x 26 mm 109 x 76 x 34 mm (with RS-232 adapter)
Weight	65 grams (without adapter) 70 grams (with cables; without adapter) 130 grams (with RS-232 adapter)
Power supply	ACW-5A
Charger type	Switched mode power supply
AC plug type	Europe, UK, US
Input voltage	90 – 264V AC
DC connector	3.2 mm DC plug
Volume	100 cm^3
Operating temperature range	-10º C to +55º C
Storage temperature range	-40º C to +85º C

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Relative humidity range for operation	20...75% non-condensing and for storage 5...95% non-condensing Caution: The Nokia 31 terminal is not water resistant and should be shielded against water and other liquids.

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