CMCS

GSM/GPRS CompactFlash Card

User Guide

Copyright Statement

Disclaimer

Important Safety Precautions

When using this product, the safety precautions below must be taken against possible legal issues and damages.

SAFETY IN AIRCRAFT
The interference would be caused by this product to an aircraft's navigation system and its network. In most countries, using this product on board an airplane is against the law.

SAFETY FOR ENVIRONMENTS
Do not use this product in gas stations. Also the use of this product is prohibited in fuel storehouse, chemical plants and locations containing explosives.

SAFETY ON THE ROAD
Vehicle drivers in motion are not permitted to use telephony services with the handheld device, except in the case of emergency. In some countries, using hand-free devices as an alternative is allowed.

SAFETY ABOUT RADIATION
This product should be operated in the suggested normal condition only to ensure the radiative performance and safety of the interference. When using the product, keep a distance of 5 mm from your body to eliminate possible electromagnetic effects.
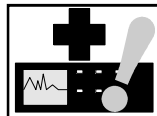
SAFETY FOR MEDICAL EQUIPMENTS
This product may cause malfunctions of medical equipments. In most hospital or medical centers, the use of this product is forbidden.

Attention

Handle the product with care. Do not drop, bend or apply strong forces to the product. Otherwise, unrecoverable damages will occur in its internal components.

There are no user serviceable parts inside this product. If this product appears to be broken, call a qualified service personnel or send this product to your original dealer. Do not attempt to disassemble or repair this product as it may result in electric shock or unrecoverable damage to the product itself.

Keep this product out of reach of small children.

Remove this product from your handheld device when not in use. Store this product in its protective case in a cool dry place.

The antenna of this product is non-removable. Do not try to detach the antenna from the product.

Avoid touching the antenna while in use, otherwise it may cause adverse effect to signal reception.

This product does not provide water proof feature. Avoid using this produnt in the rain or place the product near a cup or glass filled with water or other liquid.

Tips When Using

- Avoid using the product near metal structures (for example, large metal furniture or steel frames of a building). The transmission and reception of signal can be effected by these objects.

- Avoid using the product near strong electromagnetic sources, such as microwave ovens, sound speakers, TV and radio.

- Avoid using the product right after dramatic change of temperature.

- Make sure that the signal strength is in good condition before sending or receiving important data.

- This product runs on the power of your handheld device or portable PC. Check the power regularly. If the power is low, the transmission or reception will become unstable.

- Avoid transmitting a large file at a time. Try splitting it into several smaller files and send them separately.

FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Statement according FCC part 15.21

Modifications not expressly approved by CMCS could void the user's authority to operate the equipment.

Statement according FCC part 15.105

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RF exposure

Tests for SAR are conducted using standard operating positions specified by the FCC with the GSM Compact Flash Card transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the GSM Compact Flash Card while operation can be well below the maximum value. This is because the GSM Compact Flash Card is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a GSM Compact Flash Card model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. (Body-worn measurements may differ among GSM Compact Flash Card models, depending upon available accessories and FCC requirements). While there may be differences between the SAR levels of various GSM Compact Flash Cards and at various positions, they all meet the government requirement for safe exposure.

For body worn operation, to maintain compliance with FCC RF exposure guidelines, use only CMCS approved accessories. When carrying the GSM Compact Flash Card while it is on, use the specific CMCS-supplied or approved carrying case, holster, or other body-worn accessory.

Use of non-CMCS-approved accessories may violate FCC RF exposure guidelines and should be avoided.

Health and Safety Information
EXPOSURE TO RADIO FREQUENCY (RF) SIGNALS

Your wireless GSM Compact Flash Card is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on the safety standards previously set by both U.S. and international standards bodies:

* American National Standards Institute (ANSI) IEEE. C95.1-1992

* National Council on Radiation Protection and Measurement (NCRP). Report 86. 1986

* International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1996

* Ministry of Health (Canada), Safety Code 6. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mobile GSM Compact Flash Cards employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg *.

* In the U.S. and Canada, the SAR limit for mobile GSM Compact Flash Cards used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in.

For body worn operation, this GSM Compact Flash Card has to be tested and meets the FCC RF exposure guidelines when used with an accessory that contains no metal and that position the antenna of the GSM Compact Flash Card a minimum of 5 mm from the body. Use of other accessories may not ensure compliance with the FCC RF exposure guidelines.

Table of Contents

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Overview

Welcome

Congratulations on your purchase of the GSM/GPRS CompactFlash card!

With the GSM/GPRS CompactFlash card, you can instantly turn your Pocket PC or notebook computer into a wireless communication device so you can perform voice/data communication anytime and anywhere. You can not only enjoy high quality voice communication but rapid and stable GPRS data transmission. You can finally get rid of the tiny little screen of your mobile phone and access various on-line information comfortably.

This document will help you to better understand your GSM/GPRS CompactFlash card as well as familiarize yourself quickly with how to use it. Please follow us step-by-step and get the most out of your GSM/GPRS CompactFlash card.

Package Contents

Check the contents in the package. The following items should be included. If there is any item damaged or missing, please contact your dealer immediately.
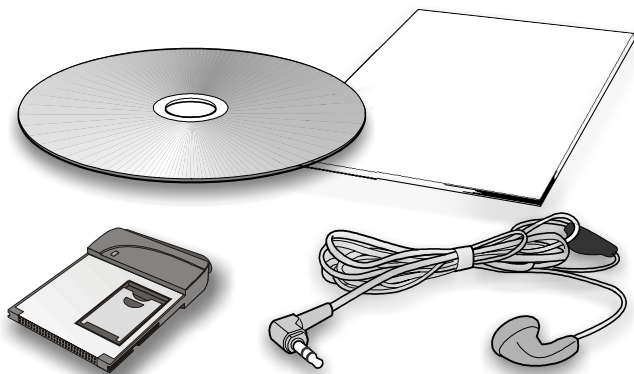
Description	Quantity
The GSM/GPRS CompactFlash Card	1
Earphone (with remote controller)	1
Software CD-ROM	1
This User Guide	1

Appearance

The CompactFlash card

Status indicator —

Antenna

SIM card socket

Move the antenna upward while in use.

Earphone jack
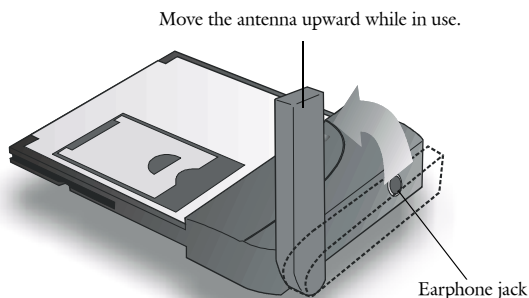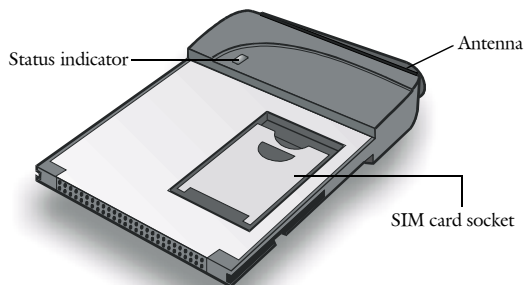
Note: The headset can be plugged into the headset jack for making a call or answering incoming calls.
Do not remove the antenna from the CompactFlash card.

The status indicator

The working status of the CompactFlash card is shown by the status indicator. Please refer to the table below for the blinking patterns of the indicator and the status they represent.

Color	Pattern	Status
Amber	Blinking every second	No service.
Amber	Blinking slowly	GSM network connected.
Amber	Blinking fast	Searching for network.
Green	Blinking slowly	GSM/GPRS network in use. Voice/data call in progress.
Green	Blinking fast	There is an incoming call.

The remote controller

A remote controller is attached on the headset cable for easy and convenient control over certain functions.

Control button

Remote controller
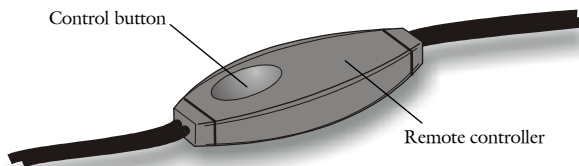
Please refer to the table below for how to use it.

When...	Press the control button...	To...
There is an incoming call	Once	Answer the call.
There is an incoming call	Two times in a row	Reject the call.
You are on a call	Two times in a row	End the call.
You are on a call	Continuously	Cycle headset volume from soft to loud and vise versa. Release the button when you find the desired volume level.

Installing and Configuring the CompactFlash Card

System Requirements

Check your hardware and software and see if they satisfy the requirements below. If you are not sure, please consult your dealer or operator.

Hardware & software requirements

- A valid SIM card.
- A Type I CompactFlash Card slot or a Type I PCMCIA (PC Card) slot and a PCMCIA-to-CompactFlash adapter card)

For Pocket PC:
- A Pocket PC 2000 or 2002 with ActiveSync installed on the host system.

For PC:
- A PC running Windows 98/Me/2000/XP.

Network requirements

To use certain network dependent features, you need to subscribe them to your operator. Please consult your dealer for details.

Installing the CompactFlash Card

Inserting the SIM card

Follow the steps below to insert the SIM card into the SIM card socket of the CompactFlash card.

1   Open the SIM card socket flip as illustrated.
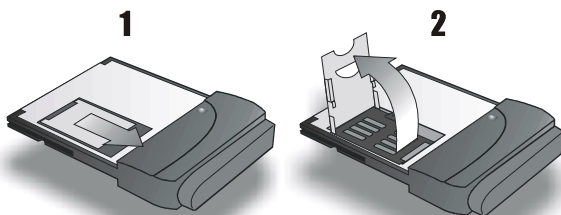
2

Insert the SIM card into the SIM card socket flip. Pay attention to the direction of the SIM card and the metal contact when you insert.

The beveled corner

Metal contact
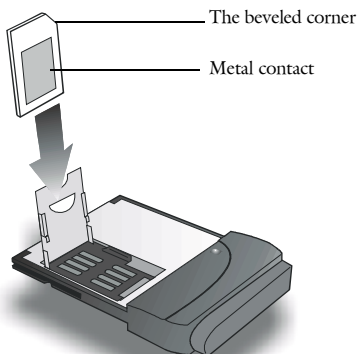
3

Close the SIM card socket flip and slide it into place.

1

2
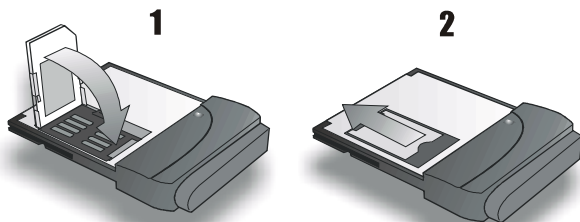
Install the CompactFlash card to a Pocket PC

1 Turn off the Pocket PC. Follow the illustration below to install the CompactFlash card to a Pocket PC.
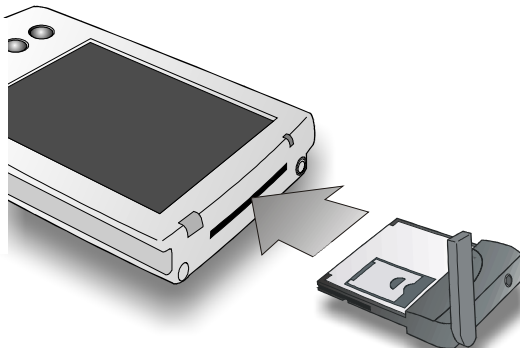
Note: The configuration below is for reference only. Please consult your operator for detailed configuration parameters.

2 Turn the power on and tap **Start**, **Settings**.

3 Tap the **Connections** tab.
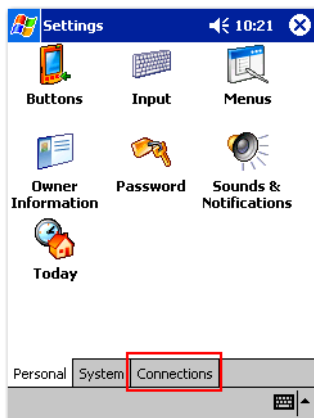
4 Tap the **Connections** icon.
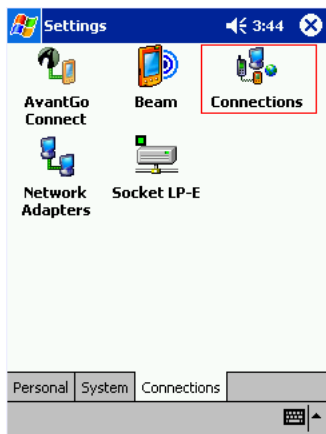
5   Tap to select **Internet Settings**.
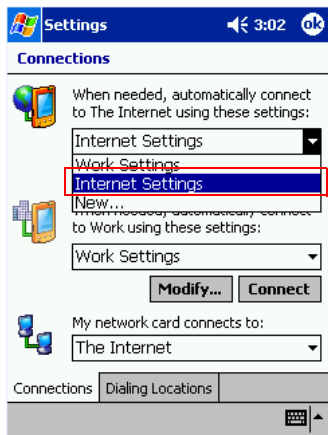
6   Tap **Modify**.
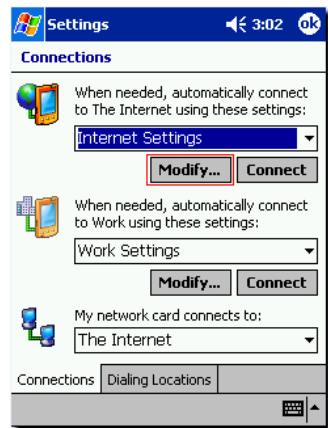
7 Tap **New...**.
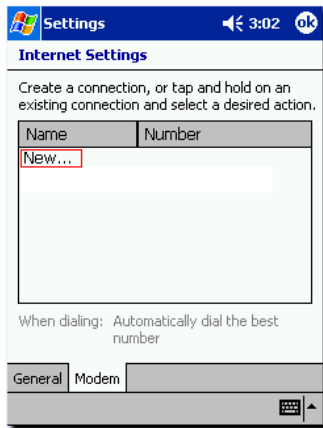
8 Enter the name of the connection; select the modem **GPRS Modem** and set baud rate to **115200**. Tap **Advanced...** to continue.

9 Tap **TCP/IP** tab. Make sure that **Use server-assigned IP addresses** is selected. Uncheck **Use software compression** and **Use IP header compression** checkboxes. Tap **Name Servers** tab to continue.
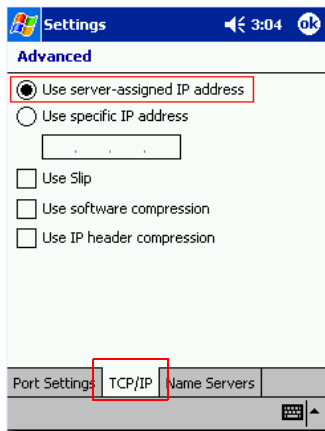
10 Make sure that **Use server-assigned addresses** is selected and tap **ok**.
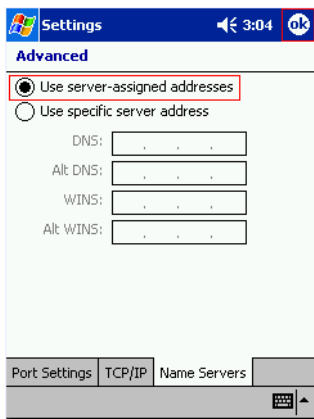
11 Tap **Next**.
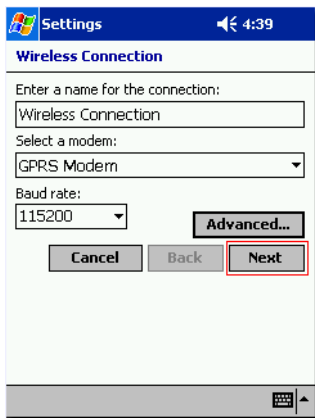
12 Enter ***99#** in the **Phone number** field and leave the **Country code** and **Area code** fields empty. Tap Next.
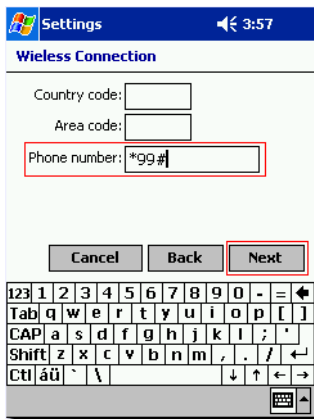
13

Enter **+cpin="****";+cgdcont=1,"ip","APN"** (where ****=your PIN code, APN=the Access Point Name of your operator) in the **Extra dial-string modem commands:** field. If the PIN code of your SIM card is not enabled, just enter **+cgdcont=1,"ip","APN"**. Tap **Finish**.

For example,

If your PIN code is 1234, and the APN of your operator is "internet", enter the following:

+cpin="1234";+cgdcont=1,"ip","internet"

14 Tap **ok**.

Installing and Configuring the CompactFlash Card   15
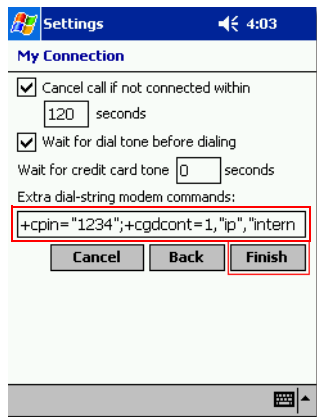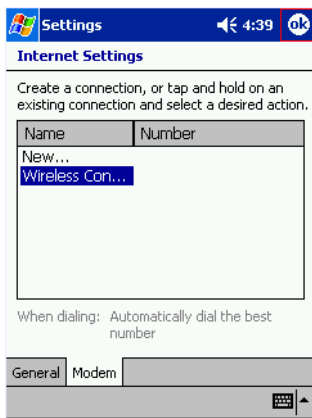
15   Tap **Dialing Locations** tab.
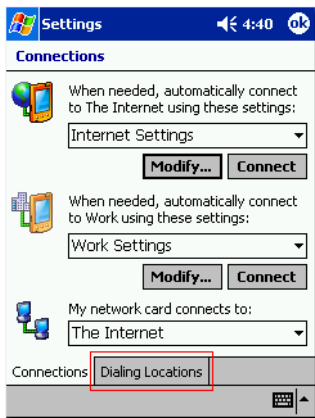
16   Tap **Dialing Patterns...**

17   Enter **G** in all fields and tap **ok**.

18   Tap **ok**. The configuration is complete.

Install the CompactFlash card to a PC

Follow the procedures below to install the CompactFlash card to a PC:

1 Use a PCMCIA-to-CompactFlash adapter to install the CompactFlash card in the PCMCIA (PC Card) slot of PC.
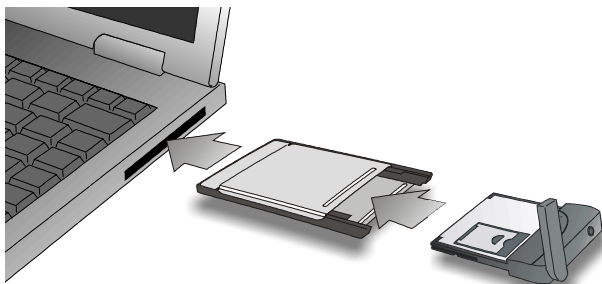

Note: The way to insert the CompactFlash and PCMCIA card may differ from the illustration above. Please refer to the documentation of your PC for details.

The following procedures are illustrated according to the installation in Windows 98 Second Edition. If you are using other Windows operating systems, please follow similar steps to install.

The configuration procedure is for reference only. Please consult your operator for detailed configuration parameters.

2

After the CompactFlash card is inserted, it will be detected by Windows automatically. The following dialogue box will appear in a few seconds. Click **Display a list of all the drivers in a specific location, so you can select the driver you want**, then **Next**.
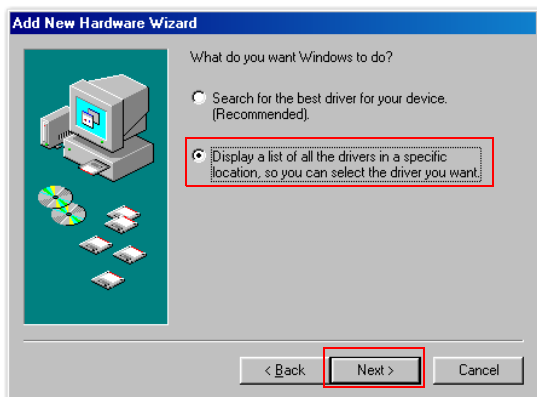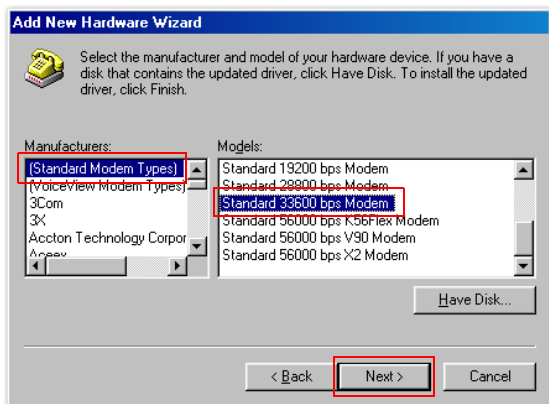

3
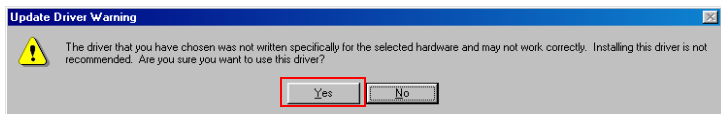
Click **Modem**, then **Next**.
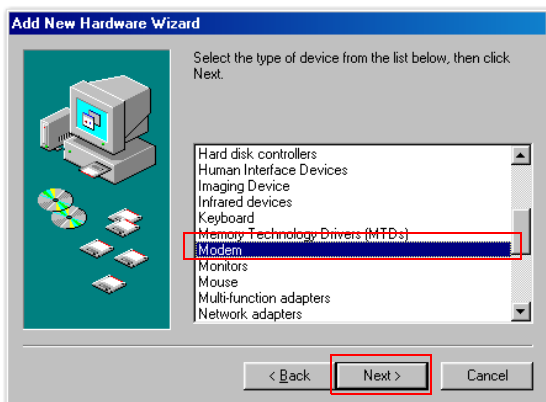
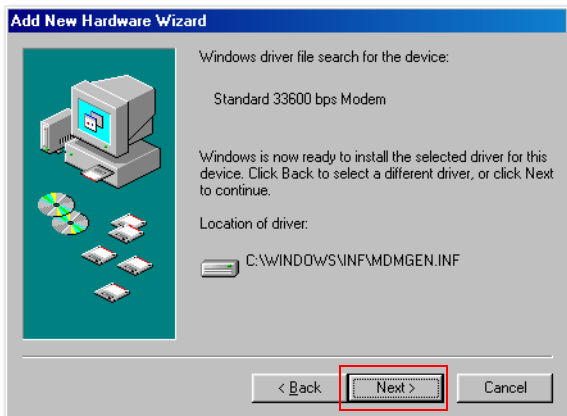**4** Click **Standard Modem Types** and **Standard 33600 bps Modem**, then **Next**.
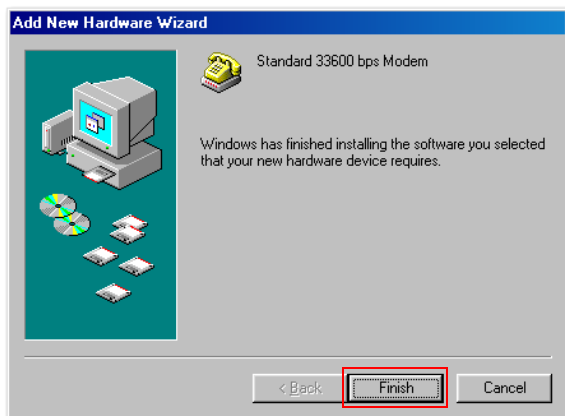

5 The following message may appear. Click **Yes**.
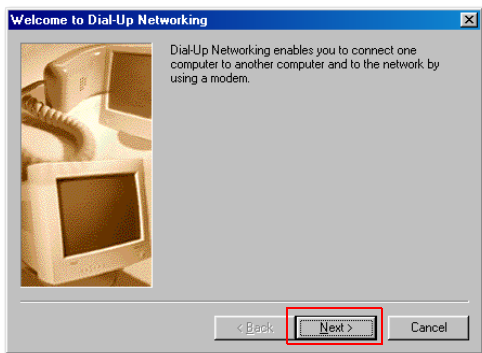
6 Click **Next**.

7 Click **Finish**.

8 Go to **Dial-Up Networking** in **My Computer** and double-click the **Make New Connection** icon to establish a new dial-up connection.
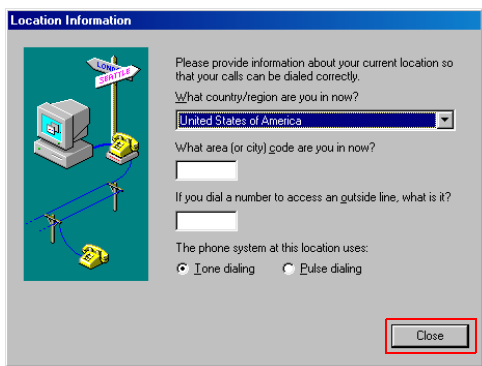

Make New Connection
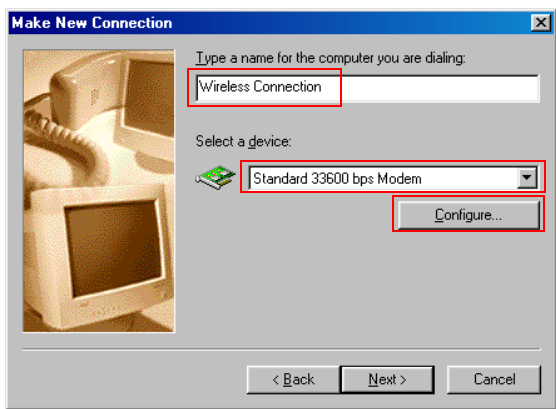
9 Click **Next**.

10 If your location has not been specified yet, specify a location and click **Close**.
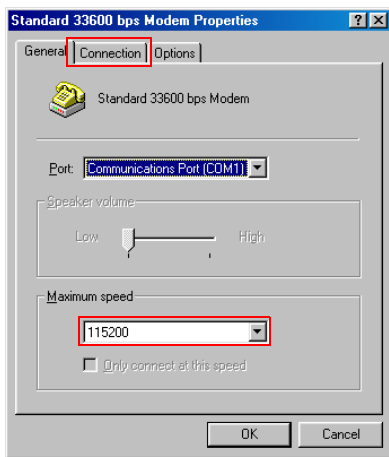
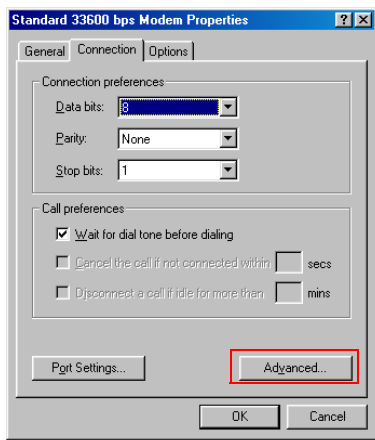**11** Specify the name of your computer and select **Standard 33600 bps modem**. Click **Configure...**.

12 On the **General** tab, select **115200** in the **Maximum speed** drop-down listbox. Click the **Connection** tab to continue.
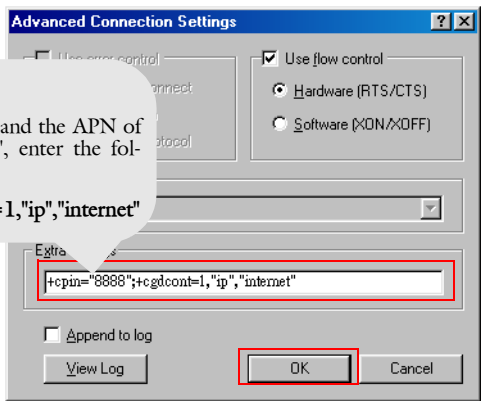
13 Click **Advanced...**

Standard 33600 bps Modem Properties

General | Connection | Options

Connection preferences

Data bits: 8

Parity: None

Stop bits: 1

Call preferences

☑ Wait for dial tone before dialing

☐ Cancel the call if not connected within [   ] secs

☐ Disconnect a call if idle for more than [   ] mins

Port Settings...   Advanced...

OK   Cancel

14 Enter **+cpin="****";+cgdcont=1,"ip","APN"** (where ****=your PIN code, APN=the Access Point Name of your operator) in the **Extra settings** field. If the PIN code of your SIM card is not enabled, just enter **+cgdcont=1,"ip","APN"**. Tap **OK**.
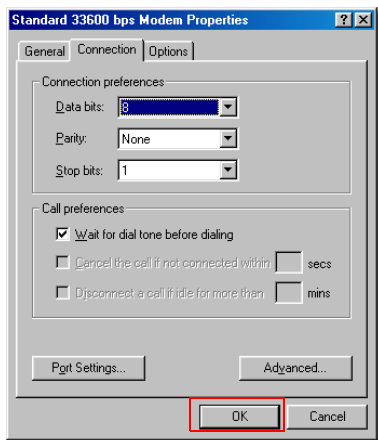

For example,

If your PIN code is 1234, and the APN of your operator is "internet", enter the following:
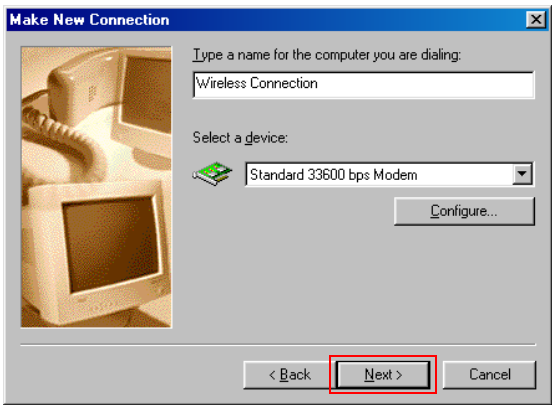
+cpin="1234";+cgdcont=1,"ip","internet"

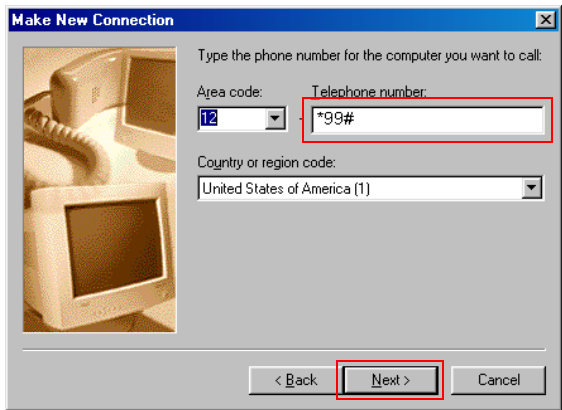Advanced Connection Settings

☑ Use flow control

● Hardware (RTS/CTS)

○ Software (XON/XOFF)

Extra settings

+cpin="8888";+cgdcont=1,"ip","internet"

☐ Append to log

View Log   OK   Cancel

15 Click **OK**.

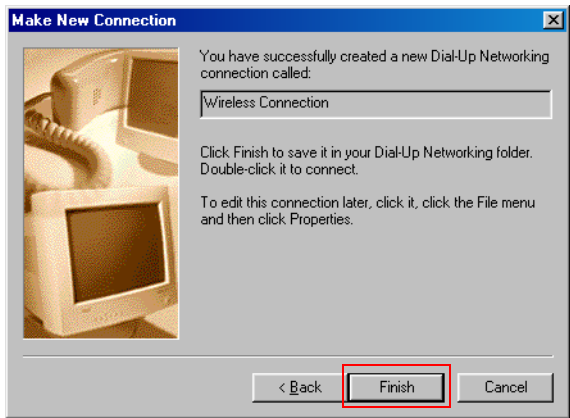**16** Click **Next**.

CMCS

17 Enter ***99#** in the **Telephone number** field and click **Next**.
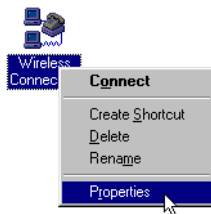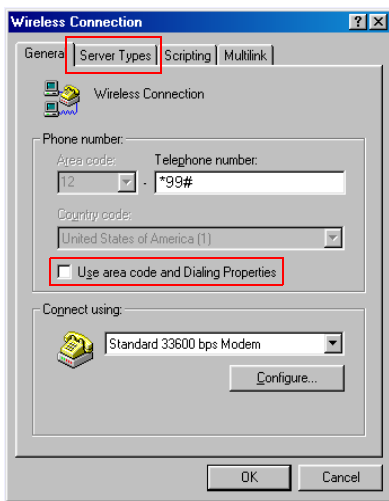

18 Click **Finish**.

19

Return to the **Dial-Up Networking** window, right-click on the connection established and select **Properties** in the menu that appears.

Wireless
Connec...

| Connect |
| Create Shortcut |
| Delete |
| Rename |
| Properties |

20

Uncheck the **Use area code and Dialing properties** check box and click the **Server Types** tab.

Wireless Connection ?|X|

General | Server Types | Scripting | Multilink |

Wireless Connection

Phone number:

Area code: Telephone number:
12   - *99#

Country code:
United States of America (1)

☐ Use area code and Dialing Properties

Connect using:

Standard 33600 bps Modem

Configure...

OK   Cancel

![CMCS logo]

21 Uncheck **Log on to network**, **Enable software compression**, NetBEUI and **IPX/SPX Compatible** checkboxes and click **TCP/IP Settings....**
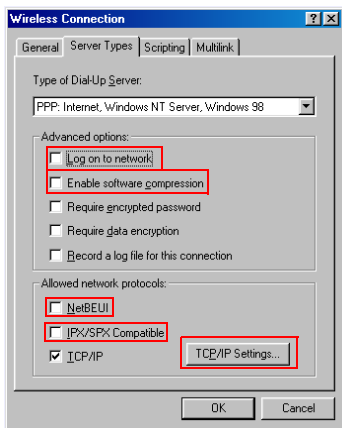
22 Make sure **Server assigned IP address** and **Server assigned name server addresses** are selected. Uncheck the **Use IP header compression** checkbox and click **OK**. The configuration of the CompactFlash card is complete.
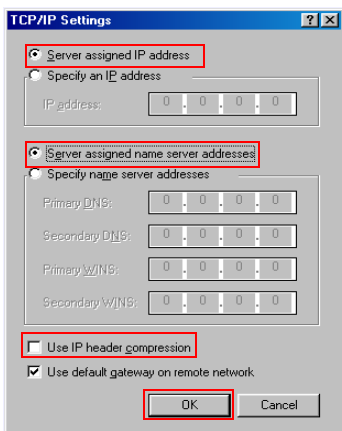
Using the CompactFlash Card

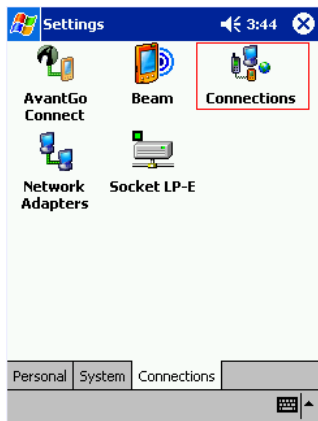## Using Wireless Data Connection on Pocket PC

1 Tap **Start**, **Settings**.

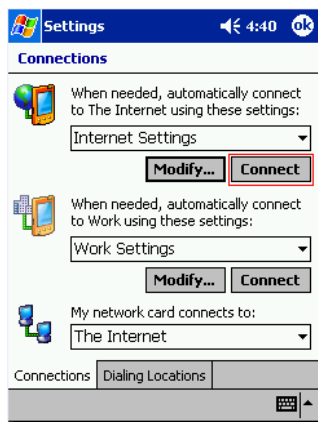**2** Tap the **Connections** tab.
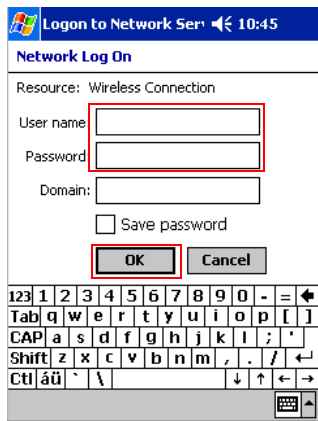
3
Tap the **Connections** icon.

4
Tap **Connect**.

5 Enter the user name and password supplied by your operator. Tap **OK**.
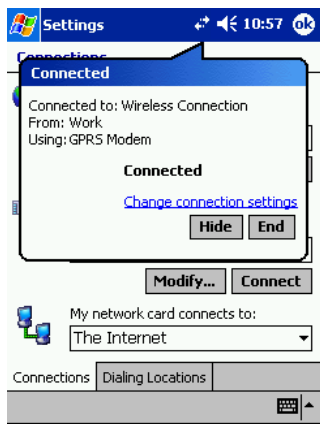

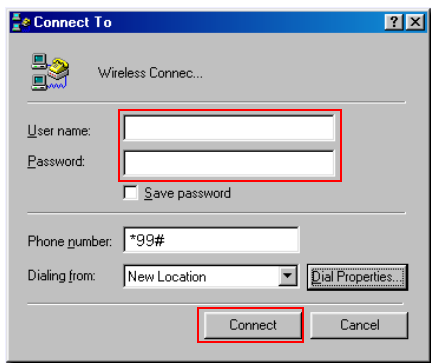**6** The **Connecting...** dialogue box pops up.

7 If connection is established successfully, a **Connected** dialogue box will appear. Now you are ready to surf the Internet using Pocket Internet Explorer or other applications.

Using Wireless Data Connection on PC

1 Double-click the icon of the new dial-up connection, and the following dialogue box appears. Enter your user name and password supplied by your operator. Click **Connect**.

2 The **Connecting...** dialogue box will pop up on the screen.

3 If connection is established successfully, a **Connected** dialogue box will appear. Now you are ready to use the connection with your favorite applications.

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