Panasonic®

Supplementary Instructions for GSM/GPRS

This manual contains supplementary instructions regarding the use of the computer. It explains the cases where the operation of the computer differs from that in the Operating Instructions.

Your computer is equipped with GSM/GPRS enabling you to communicate using radio frequencies.

About the abbreviations in this manual, refer to the table on page 5.

Contents

Precautions

Safety Precautions

The following safety precautions must be observed during all phases of the operation, usage, service or repair of any Personal Computer or Handheld Computer incorporating GSM/GPRS modem. Manufacturers of the cellular terminal are advised to convey the following safety information to users and operating personnel and to incorporate these guidelines into all manuals supplied with the product. Failure to comply with these precautions violates safety standards of design, manufacture and intended use of the product. Panasonic assumes no liability for customer failure to comply with these precautions.

When in a hospital or other health care facility, observe the restrictions on the use of mobiles. Switch Personal Computer or Handheld Computer incorporating GSM/GPRS modem off, if instructed to do so by the guidelines posted in sensitive areas. Medical equipment may be sensitive to RF energy.

The operation of cardiac pacemakers, other implanted medical equipment and hearing aids can be affected by interference from Personal Computer or Handheld Computer incorporating GSM/GPRS modem placed close to the device. If in doubt about potential danger, contact the physician or the manufacturer of the device to verify that the equipment is properly shielded. Pacemaker patients are advised to keep their Personal Computer or Handheld Computer incorporating GSM/GPRS modem away from the pacemaker, while it is on.

Switch off Personal Computer or Handheld Computer incorporating GSM/GPRS modem before boarding an aircraft. Make sure it cannot be switched on inadvertently. The operation of wireless appliances in an aircraft is forbidden to prevent interference with communications systems. Failure to observe these instructions may lead to the suspension or denial of cellular services to the offender, legal action, or both.

Do not operate Personal Computer or Handheld Computer incorporating GSM/GPRS modem in the presence of flammable gases or fumes. Switch off the cellular terminal when you are near petrol stations, fuel depots, chemical plants or where blasting operations are in progress. Operation of any electrical equipment in potentially explosive atmospheres can constitute a safety hazard.

Your Personal Computer or Handheld Computer incorporating GSM/GPRS modem receives and transmits radio frequency energy while switched on. Remember that interference can occur if it is used close to TV sets, radios, computers or inadequately shielded equipment. Follow any special regulations and always switch off Personal Computer or Handheld Computer incorporating GSM/GPRS modem wherever forbidden, or when you suspect that it may cause interference or danger.

Road safety comes first! Do not use a Personal Computer or Handheld Computer incorporating GSM/GPRS modem while driving a vehicle. Do not place the computer with GSM/GPRS modem in an area where it could cause personal injury to the driver or passengers. It is recommended to stow the unit in the boot or secure stowage area while driving.

Do not place the computer with GSM/GPRS modem in an area over an air bag or in the vicinity where an air bag may deploy.

Air bags inflate with great force and if the computer with GSM/GPRS modem is placed in the air bag deployment area may be propelled with great force and cause serious injury to occupants of the vehicle.

| SOS | IMPORTANT!
Personal Computer or Handheld Computer incorporating GSM/GPRS modem operate using radio signals and cellular networks cannot be guaranteed to connect in all conditions. Therefore, you should never rely solely upon any wireless device for essential communications, for example emergency calls.

Remember, in order to make or receive calls, Personal Computer or Handheld Computer incorporating GSM/GPRS modem must be switched on and in a service area with adequate cellular signal strength.

Some networks do not allow for emergency calls if certain network services or phone features are in use (e.g. lock functions, fixed dialing etc.). You may need to deactivate those features before you can make an emergency call.

Some networks require that a valid SIM card be properly inserted in Personal Computer or Handheld Computer incorporating GSM/GPRS modem.

For U.S.A.

Federal Communications Commission Radio Frequency Interference Statement
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 Panasonic Service Center or an experienced radio/TV technician for help.
Safety Notice
● Do not touch or move antenna while the unit is transmitting or receiving.
● Do not hold any component containing the radio such that the antenna is very close or touching any exposed parts of the body, especially the face or eyes, while transmitting.
● Do not operate a portable transmitter near unshielded blasting caps or in an explosive environment unless it is type especially qualified for such use.

Precautions

Warning

To assure continued compliance, use only shielded interface cables when connecting to a computer or peripheral. Also, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

FCC Radiation Exposure Statement:
• This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.
• This equipment must be installed and operated in accordance with provided instructions and minimum 1inch (2.5 cm) spacing must be maintained between the equipment and your face during your GSM voice call.
• This equipment may use multiple installed transmitters, which may be capable of simultaneous transmission.

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.

Responsible Party: Matsushita Electric Corporation of America
      One Panasonic Way
      Secaucus, NJ 07094
      Tel No:1-800-LAPTOP-5 (1-800-527-8675)

Names and Functions of Parts

Except the followings, refer to the Operating Instructions.

Antenna
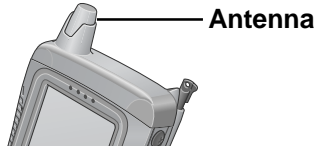
LED Description

Status Indicator:
A green LED will light while communicating.

Mode	Function
Off	GSM/GPRS modem is off or running in SLEEP or Alarm.
600 ms On/ 600 ms Off	No SIM card inserted or no PIN entered, or network search in progress, or ongoing user authentication, or network login in progress.
75 ms On/3 s Off	Logged to network (monitoring control channels and user interactions). No call in progress.
75 ms On/75 ms Off/ 75 ms On/3 s Off	One or more GSM/GPRS contexts activated.
Flashing	Indicates GSM/GPRS data transfer: When a GSM/GPRS transfer is in progress, the LED goes on within 1 second after data packets were exchanged. Flash duration is approximately 0.5 s.
On	Depending on type of call: Voice call: Connected to remote party. Data call: Connected to remote party or exchange of parameters while setting up or disconnecting a call.

Abbreviations

APN	Access Point Name	PIN	Personal Identification Number
CID	Context Identity	PLMN	Public Land Mobile Network
GPRS	General Packet Radio Service	QOS	Quality of Service
GSM	Global System of Mobile Communication	SIM	Subscriber Identity Module
IP	Internet Protocol	TCP	Transmission Control Protocol

Using GSM/GPRS

Inserting/Removing a SIM Card

A SIM card has been installed into the back of the CF-P1 underneath the battery. When replacing the SIM card, follow the instruction below.

CAUTION

Do not insert/remove the SIM card when the GSM/GPRS power is on.

1 Power off the GSM/GPRS modem using the CheckNet Window (☞page13).

2 Power off the CF-P1 and remove the battery pack. (☞ *Operating Instructions* "First-time Operation")

3 **Inserting a SIM Card**

(1) Hold the CF-P1 in a vertical position where the antenna is on your right hand side. Slide the SIM card into the slot, with the metal connectors facing down.

Make sure the SIM card goes under A.

(2) Insert the card all the way into the slot as shown in the illustration. Ensure that the beveled corner is positioned in the bottom left corner.
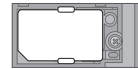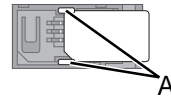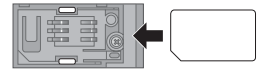
CAUTION

Insert with care, because if the SIM card is not inserted correctly, the computer will not operate, and the SIM card may be damaged by contact with the battery.

Removing a SIM Card

Slide the SIM card out in the direction of the arrow while pushing B with the provided stylus or a finger.
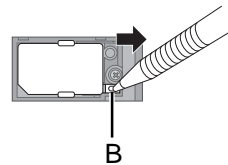
4 **Insert the battery pack and set the cover.**

(☞ *Operating Instructions* "First-time Operation").

NOTE

● If the card is inserted and removed repeatedly, the printing on the card surface may rub off and create a powder residue. This powder may become affixed to the terminals causing poor contact. If you notice that the terminals have become soiled due to repeated insertion and removal, wipe the terminals lightly with a clean cloth.

Setting Up the Remote Network for GPRS

The settings may vary with the local service provider. This information has to be requested from the local provider. (The following sample screenshots illustrate the setup procedure.)

1 Turn on your computer. (☞ *Operating Instructions*)

2 Set up the Remote Network.

(1) Tap, in order, - [Settings] - [Connections] tab - [Connections].

(2) Tap [Add a new modem connection] at [My ISP].

(3) Enter the suitable connection name and then select [Panasonic RF Modem] at [Select a modem:], then tap [Next].

Using GSM/GPRS

(4) Enter [*99***1#] for telephone number in the box. The 1 before the # corresponds to the CID number of the APN setting for step **3** (3) (☞page9). When setting the connection to CID2, the telephone number is [*99***2#].

(5) Tap [Next].

(6) Enter the user name and password, and enter domain if provided by ISPor network administrator.
(Check with your network manager or the operator for the SIM you are using to confirm the information to be requested).

(7) Tap [Advanced...].

(8) Select [57600]at [Baud rate], and then tap [TCP/IP]tab.

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(9) Remove check marks for [Use software compression] and [Use IP header compression], then tap [ok].

(10)Tap [Finish].

3 Set up the access point name.

(1) Tap and hold 🔋📶 on the navigation bar and tap [Options] - [RAS] tab.

(2) Select RAS authentication method if necessary for a different authentication method other than the [RAP and CHAP], and tap [APN].

(3) Enter the access point name that connects to the GPRS network.
(Check with your network manager or the operator for the SIM you are using to confirm the setting information.)
When selecting the CID tab number here, select the same number as the number before the # in the telephone number in step *2* (4) (☞page 8).

(4) Tap [ok].

The settings for the GSM are the same as the GPRS, except for the following:

• No need to set the access point name

• Set the number, user name, password, and the domain for the requested ISP.

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Using GSM/GPRS

4 Connect /Disconnect to GPRS network

(1) Connecting

Tap ⊞ to display the connectivity bubble (A). (A)

Make sure that the name of the setting in step **2**(3) (☞ page 7) is displayed and tap the telephone number.

The connection will start.

Disconnecting

Tap ⊞ to display the connectivity bubble and tap [Disconnect].

● When multiple connection settings have been created, the desired setting may not be selected using only the operations described above. In this case, use the following settings.

(1) Tap ⊞ on the navigation bar then tap [Settings] to display [Connections] screen*1.

  *1You can also tap 🏁 - [Settings] - [Connections]tab - [Connections].

(2) Tap [Manage existing connections] at [My ISP]*2.
  *2This appears after setting the remote network (☞ page 7-9).

(3) Change the setting from [Auto pick] to a desired setting (in this case, select GPRS).

(4) Tap [ok].

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Using CheckNet

CheckNet is software that is used during voice calls or data communications via a GSM/GPRS modem installed in the CF-P1. To conduct communications using this product, a SIM card (sold separately) is required. GPRS communications can only be conducted when using a SIM card for an operator that supports GPRS communications.

Using the CheckNet utility, you can use the following functions.
● Network information indication
● RF signal level indication
● GSM/GPRS modem power control
● RAS (Dial-up network) control
● SMS (Short Message Service)
● Voice call

Running

When the power is switched on, 📶 will be displayed on the navigation bar. The followings show the variation of the icon and its meanings.

These icons flash during initialization or when the battery power is low.

● **Navigation bar icon**

Icon	Description
📶:	Initializing the GSM/GPRS modem
📵:	GSM/GPRS modem is powered off.
⊗:	GPRS modem error
📶:	SIM card error
📥:	Unread message
📶:	Out of coverage
📶 📶 📶 📶:	GSM service is available (the number of bars indicates the signal strength) (☞ page 13)
📶 📶 📶 📶:	GSM/GPRS service is available (the number of bars indicates the signal strength) (☞ page 13)

CAUTION

Do not turn off the CF-P1 by the power switch while 📶 is displayed on the navigation bar.

NOTE

● Tap the icon to display text information indicating the modem or network status.
● Tap and hold the icon to display the pop-up menu.
● If 🏁 - [Programs] - [CheckNet] is tapped when CheckNet has already been started up, the [Voice] screen will be displayed.

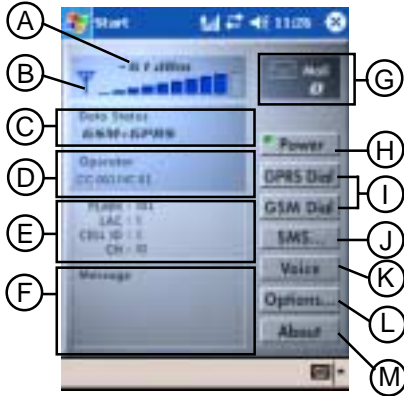
Using CheckNet

Using CheckNet

You can select the menu from the CheckNet window. With the CheckNet window, detailed information can be seen graphically.
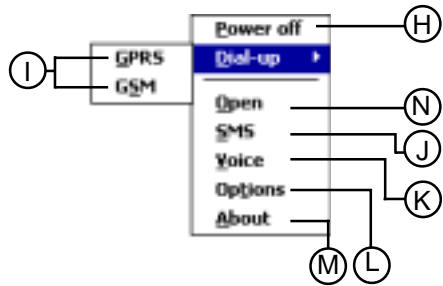
● **To open the CheckNet window**

Tap and hold 📶 on the navigation bar and tap [Open] from the popup menu (shown below).

● **To close the CheckNet window**

Tap the 🔀 button on the navigation bar. (You cannot exit the CheckNet.)

<CheckNet window>

<Popup menu>

Ⓐ Signal Strength Value: This indicates the signal strength by value.

Ⓑ Signal Strength Meter: This indicates the signal strength by the bar graph. (☞ page 13)

Ⓒ Communication Mode: Display available network service.
  GSM: Only GSM is available
  GSM + GPRS: GSM and GPRS are available

Ⓓ An operator name with which GSM/GPRS modem is currently registered

Ⓔ Cell information which GPRS modem is currently using
  PLMN: Public Land Mobile Network ID Code
  LAC: Location Area Code [Hex]
  CELL ID: Cell ID [Hex]
  CH: ARFCN (Absolute Frequency Channel Number) of the BCCH carrier

Ⓕ Status of the CheckNet

Ⓖ Number of unread SMS (☞ page 14)

(H) Power on/off the GSM/GPRS modem
(I) Start RAS (Dial-up network) from CheckNet (available only when in area of signal coverage,), and stop if connected.
(J) Display [SMS] screen ()

(K) Display [Voice] screen ()
(L) Display [Options] screen ()
(M) Display GSM/GPRS modem / SIM card information ()
(N) Open the CheckNet window

NOTE

● When tapped the [Power] or [About], functions may not work properly. In this case, reset the computer.

RF signal level indication

● **Navigation bar icon**

GSM	GSM+GPRS	Signal level
		Out of coverage
		– -96 dBm
		-95dBm – -84 dBm
		-85 dBm – -74 dBm
		-75 dBm –

● **Signal Strength Value and Signal Strength Meter on the CheckNet window**

Level 1   **Level 10**

Level-1	– -100 dBm
Level-2	-99 dBm – -95 dBm
Level-3	-94 dBm – -90 dBm
Level-4	-89 dBm – -85 dBm
Level-5	-84dBm – -80 dBm
Level-6	-79 dBm – -75 dBm
Level-7	-74 dBm – -70 dBm
Level-8	-69 dBm – -65 dBm
Level-9	-64 dBm – -60 dBm
Level-10	-59 dBm –

Using CheckNet

SMS

SMS messages can be sent or read with the CheckNet. SMS links to the Contacts; therefore, you can input the phone number from the Contacts.

Tap [SMS] from the CheckNet window to display the [SMS] screen.

(A) Display S(Send) or R(Receive)
(B) Receiver's / Sender's number
(C) Date of Sending or Receiving
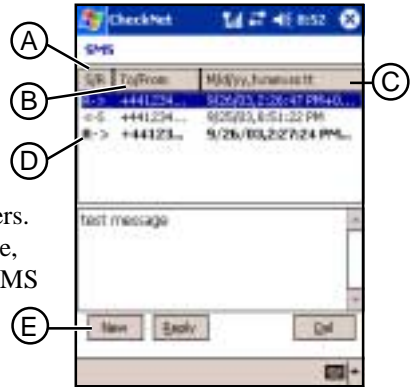   Set the display format using by following
    🎵 - [Settings] - [System] tab- [Regional Settings] - [Date]
(D) Unread messages are displayed in bold characters.
(E) If you close the screen before sending a message, this will change to [Restore] when the next SMS screen is opened.

● **To send new SMS**
    1 In the [SMS] screen, tap [New].
        [SMS Send/Reply] screen is displayed.
    2 Write destination phone number or tap [To] to show the Contacts and select the destination (page 16).
    3 Write a message and tap [Send].

● **To reply to SMS**
    1 In the [SMS] screen, select the message and tap [Reply].
    2 Write a message and tap [Send].

● **To receive SMS**
    SMS messages sent to this computer are automatically received and displayed on this screen. When an SMS message is received, the user is notified by an icon and a Notification LED (page 11 and *"Operating Instructions"*). This function can be disabled using the appropriate settings (page 17 [General] tab).

NOTE

About the characters used in SMS
● Up to 160 characters can be received or sent.
    Note, however, that since some characters are treated as 2-byte characters, the number that can be received or sent becomes less than 160 if these characters are used.

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Voice

You can make a voice call.

Tap [Voice] from the CheckNet window to display [Voice] screen.

(A) [Mic] :To adjust the microphone volume
(B) [Phone] :To adjust the speaker volume
(C) [Mic Mute] :If you add the check mark after connecting, the sound from the microphone will not be transmitted to the person you are speaking to.

● **To make a voice call**
   Input the destination phone number and select [Call].
   You can also tap [To] to display the Contacts to select the destination (☞ page 16).

● **When you receive a telephone call**
   The [Voice] screen will be displayed.
   Answer the phone using the one of the following.
   • Tap [Answer]*[1]on the [Voice] screen.
   • Press the headset's answer switch*[2] when a headset.

● **To end the telephone call**
   Hang up the phone using the one of the following.
   • Tap [Hang up]*[1]on the [Voice] screen.
   • Press the headset's answer switch*[2] to hang up when a headset.

*[2] Press for one second. Function will not operate if the switch is not pressed long enough.

● **To receive voice calls and messages when the computer is powered off**
   Even when the computer's power is off, it is possible to start up the computer and receive voice calls using the following settings.

   1 Tap 🎚 - [Settings] - [System]tab - [Option Devices] - [RF serial]tab.

   2 Add a checkmark at the [Supply power to the RF module when the unit is suspended] and at the [Enable resume when RI signal is detected].

   3 Tap [ok].
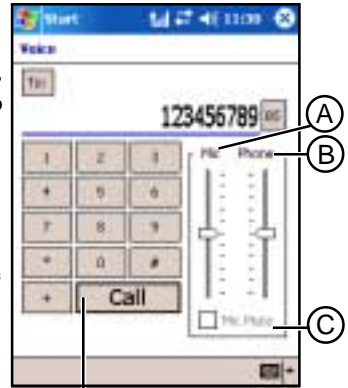
*[1] This button will change to [Answer] or [Hang up].

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Using CheckNet

A telephone function can be used by using one of the followings. (☞ *Operating Instructions* "Names and Functions of Parts")

- • Handset
- - The internal microphone with the receiver
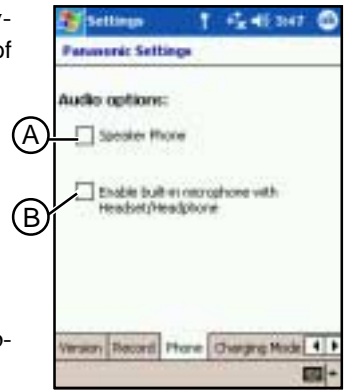- • Speaker phone
- - The internal microphone with the speaker
- • Headset
- - The headset (model No. CF-VHSP11W)
- • Headphone
- - The internal microphone with stereo headphones (the adaptor included with CF-VHSP11W is required).

To change this setting, tap 🎴 - [Settings] - [System] tab-[Panasonic Settings] - [Phone] tab.

	Ⓐ	Ⓑ	Headset/Headphone
Handset	Uncheck	Uncheck	No use
Speaker phone	Check	Uncheck	No use
Headset	Uncheck	Uncheck	Use headset
Headphone	Uncheck	Check	Use headphone

NOTE

● If you try to initiate a dial-up using the GSM/GPRS modem during a voice call, the voice call will be terminated.

Contacts

Contacts maintains a list of friends, colleagues and customers so that you can easily find the information you are looking for.

● Tap 🎴 - [Contacts].

You can create or change a contact, or add a note to a contact.

● You can send messages or make a voice call by specifying a receiver from Contacts.

Tap and hold the desired receiver, and tap [Voice Call] or [Send SMS].

If there is more than one phone numbers for the desired receiver, a screen will appear for selecting the appropriate number.

For details, tap 🎴 - [Help] - [Contacts].
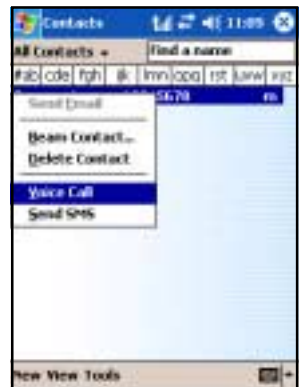
Options

Tap [Options...] from the CheckNet window to display the [Options] screen.

● [General] tab

(A) If checked, the main window is shown when this application is started.

(B) If checked, the power is suppressed when this application is started.

(C) If checked, notification LED does not light even when there is an unread message or while a message is being received.

(D) If checked, sound is not generated when the first unread message is received.

(E) If checked, ringer sound is not generated when a voice phone call is received.

(F) Select the Navigation Bar icon. When the [Network] is selected, the mail icon is displayed only for a few seconds after the unread SMS is received. When the [SMS] is selected, the mail icon will be displayed while there is an unread SMS.
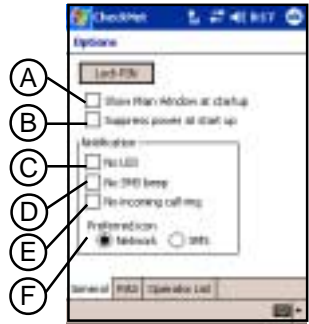
● To enable PIN lock
Tap [Lock PIN] and enter the PIN code (4digits), then tap [OK].
([Lock PIN] will change to [Unlock PIN].)
Next time when GPRS modem is turned on, the PIN code will be requested.

● To disable PIN lock
Tap [Unlock PIN] and enter PIN code (4digits), then tap [OK].
([Unlock PIN] will change to [Lock PIN].)

CAUTION

If an incorrect PIN code is input repeatedly (number of times depends on SIM), the PUK screen on the right will be displayed. If an incorrect PUK code is input repeatedly in this screen as well, the SIM will be locked, and can no longer be used.

Using CheckNet

● **[RAS] tab**

Ⓐ [GSM]: Select dial-up network setting for GSM.

Ⓑ [GPRS]: Select dial-up network setting for GPRS.

Ⓒ [Save ID]: If checked, the last valid user ID and password are used as default user ID and password.

Ⓓ [Skip ID Dialog Box]: If checked, skip to show the dialog box to enter user ID and password if valid ID/password are saved.

Ⓔ [Check ELC before dial]: If checked, the signal strength is checked before the dial-up network connection is started.

● Since the network connection can be established using the operation method explained in step **4** on page 9, there is no need for settings Ⓐ - Ⓔ. If CheckNet settings are required, use the following settings.

**1** Tap 🔳 - [Settings] - [Connections] - [Connections] - [Advanced]tab - [Select Networks].

2 Select the same setting in the [Network Management] screen ⓐ .

In this case, the [Network Card] will be displayed in the connectivity bubble.

Ⓕ [Authentication Method]: Select RAS authentication method.

Ⓖ [APN]: If tapped, the [APN Settings] screen is displayed. Input the name of the access point that mediates communications between the GPRS network and the Internet. There are two APN settings (CID1and CID2). The APN used corresponds to the "n" in the dialup phone number *99***n# (⇒ page 8).

[Access Point Name]: Specify the access point name(APN).

Check with your network manager or the operator for the SIM you are using to confirm the name of the access point to be set. As a rule, there is no need to change the QOS (Quality of Service) setting. Change this only if you are instructed to do so by your network manager.
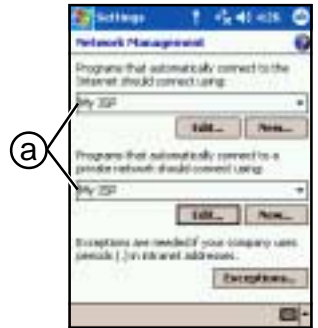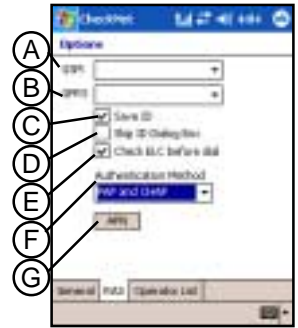
● **[Operator List] tab**

Since the operator is usually selected automatically, it is not necessary to change it.
To change the settings manually, perform the following procedures.

1 Make the settings at [Mode].

Auto: The operator is selected automatically

Manual: Keep trying to connect the operator selected manually

Preferred: Try to connect the operator selected manually. If it fails, try to connect automatically.

2 When you tap [Manual] or [Preferred], tap [Scan] and select operator from the scanned list, then tap [Register].

CAUTION

Do not turn off the computer while this function is running.

NOTE

Since these settings are saved even after the GSM/GPRS modem is turned off, the next time the power is turned on the GSM/GPRS modem will try to connect using the previous settings.

We recommend that you change the mode to [Auto] when moving out the selected operator's range.

About

Select [About] to confirm GPRS modem / SIM card information.
The information is displayed only when the GSM/GPRS modem's power is on.

[Wireless Module]

Model: Module name

Rev: Firmware version number

IMEI: International Mobile station Equipment Identity

[SIM card information]

IMSI: International Mobile subscriber Identity

ICC ID: Card identification number

My number: Display the telephone number if it is stored in the SIM.

Specifications

All items other than the following specifications are the same as the CF-P1P series.
(☞ Operating Instructions)