

Supplementary Instructions for HSDPA/UMTS Modem

Model No. CF-18/CF-29 Series

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 the HSDPA/UMTS modem enabling you to communicate using radio frequencies.

Contents

Precautions	2
Names and Functions of Parts	6
Installing/Removing a SIM Card	9
Installing the Software	
Appendix	
Specifications	

Illustrations and Terminology in this Manual

NOTE: CAUTION:	NOTE provides a useful fact or helpful information. CAUTION indicates a condition that may result in minor or moder-		
	ate injury.		
(Enter):	This illustration means to press the [Enter] key.		
[start] - [Run]:	This illustration means to click [start], then to click [Run].		
	(For some applications, you may need to double-click.)		
(] :	Where to go for referred information.		
Reference . Manual	This illustration means to refer to the Reference Manual, which is		
	available on your computer.		
• Some of the illustrations in this manual may differ slightly in shape from the actual			
items in order to make the explanation easier to understand.			
• The "CD/DVD drive" is a description about drives, such as CD-ROM, DVD-ROM &			
CD-R/RW and DVD MULTI drives			

• About the abbreviations in this manual, refer to the table on page 18.

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 HSDPA/UMTS 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 HSDPA/UMTS 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 HSDPA/UMTS 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 HSDPA/UMTS modem away from the pacemaker, while it is on.



Switch off Personal Computer or Handheld Computer incorporating HSDPA/UMTS 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 HSDPA/ UMTS 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 HSDPA/UMTS 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 HSDPA/UMTS modem wherever forbidden, or when you suspect that it may cause interference or danger.

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Road safety comes first! Do not use a Personal Computer or Handheld Computer incorporating HSDPA/UMTS modem while driving a vehicle. Do not place the computer with HSDPA/UMTS 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 HSDPA/UMTS 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 HSDPA/UMTS modem is placed in the air bag deployment area may be propelled with great force and cause serious injury to occupants of the vehicle.

Precautions

For U.S.A.

<CF-18 Series>

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 of f 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.

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 RF Exposure Warning:

- This equipment is provided with PC Card slot that could be used with wireless transmitters, which will be specifically recommended when they become available. Other third-party wireless transmitters have not been RF exposure evaluated for use with this computer and may not comply with FCC RF exposure requirements.
- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.
- This equipment has been approved for portable operation, and unless otherwise advised in separate supplemental instructions for individual wireless transmitter(s), requires minimum 1.5 cm spacing be provided between antenna(s) and all person's body (excluding extremities of hands, wrist and feet) during wireless modes of operation.
- This equipment may use multiple installed transmitters, which may be capable of simultaneous transmission.
- This equipment is provided with external antenna connector(s) for connection to optional Car Mounter or Port Replicator for mobile external mounted antenna(s). External antenna(s) must be professionally installed and cannot exceed recommended maximum antenna gain as described in individual provided supplement instructions for wireless transmitters. Also, user must maintain minimum 20 cm spacing between external antenna(s) and all person's body (excluding extremities of hands, wrist and feet) during wireless modes of operation.

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: Panasonic Corporation of North America One Panasonic Way Secaucus, NJ 07094 Tel No:1-800-LAPTOP5 (1-800-527-8675)

<CF-29 Series>

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 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.

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Names and Functions of Parts

Except the followings, refer to the Operating Instructions for the computer.



(Appearance may differ depending on specifications.)

<CF-29 Series>



(Appearance may differ depending on specifications.)

HSDPA/UMTS Modem Switch



You can use this switch to power on and off the HSDPA/UMTS modem independently from the computer, regardless of the computer power status.

This function depends on the setting of the Setup Utility.



• The HSDPA/UMTS Modem Switch will not operate for approximately 5 seconds after the HSDPA/UMTS modem is turned on or off.

If the HSDPA/UMTS Modem Switch is pressed and does not

operate, wait for more than 5 seconds and press the switch again.

 In the Setup Utility, you can also set the HSDPA/UMTS modem to power on and off when the computer is powered on and off.

LED Description



Power On Indication:

A green LED will be used to signal when the HSDPA/UMTS modem has been powered on.



Ring Indication:

This LED remains dark.



Status Indication:

The LED lights while the HSDPA/UMTS modem is running.

Installing/Removing a SIM Card

Before using the HSDPA/UMTS modem, set a SIM card to the SIM card slot.

CAUTION

• Do not install/remove the SIM card when the HSDPA/UMTS modem's power is on.



1 Power off your computer and HSDPA/ UMTS modem.

2 Installing a SIM card

(1) Insert the SIM card into the SIM card slot with the contact side facing downward and with the cut corner oriented as shown in the illustration.

CAUTION

- Do not insert the SIM card upside down.
- (2) Close the cover.

If the cover is not closed, the SIM card may jump out when the computer falls.

<CF-29 Series>



Installing/Removing a SIM Card

<CF-18 Series>





Removing a SIM card

1 Push the card.

It will come out of the slot a little bit.

(2) Pull the card all the way out.

<CF-29 Series>



Installing the Software

<Only for CF-29L*****/CF-29M*****/CF-29N*****/CF-29P***** series> Updating the BIOS and Embedded Controller

To use the HSDPA/UMTS modem, before installing the software, be sure to update the BIOS and Embedded Controller if your computer's BIOS version and Embedded Controller version are as follows.

- BIOS version: V4.00L11, V4.00L12, or V5.00L11
- Embedded Controller version: V4.00L10, V4.00L11, V4.00L12 or V4.00L13
- To check the BIOS version and Embedded controller version:
 - (1) Turn on your computer and run the Setup Utility by pressing **F2** while [Panasonic] boot screen is displayed.

If [Enter the password] is displayed, input your Supervisor Password or User Password.

- (2) Confirm the versions by checking the following items in the [Information] menu.
 - [BIOS]
 - [Embedded Controller]
- NOTE
- You need to know the Supervisor Password or the User Password of the Setup Utility if it is set. Furthermore, you need to know the logon password of Windows administrator to update the BIOS and Embedded Controller.
- A CD/DVD drive is necessary for updating the BIOS and Embedded Controller.

Before Updating the BIOS and Embedded Controller

Before updating the BIOS and Embedded Controller, perform the following steps.

- 1 Turn off the computer and insert the CD/DVD drive into the multimedia pocket. (Multimedia Pocket")
- **2** Turn on the computer and log on to Windows with the administrator authority.
- **3** Set the Wireless WAN (HSDPA/UMTS) Software CD-ROM in the CD/DVD drive.

Installing the Software

4 <For CF-29L*****/CF-29M***** series>
Input [x:*1\29LM\bios_29_4_r060067a_ec_29_4_m060043.exe]
in [start] - [Run] and select [OK].

<For CF-29N*****/CF-29P***** series> Input [x:^{*1}\29NP\bios_29_5_r060068a_ec_29_4_m060043.exe] in [start] - [Run] and select [OK].

*1 "x:" is the drive letter of the CD/DVD drive. Change this to match the drive letter on your own computer.

5 Read "License Agreement" carefully, and select [Yes].

If you select [No], the utility will be aborted.

6 Input the destination folder, and select [OK].

Files will be extracted to the folder. (Default folder is "c:\upbiosec")

7 The message "Unpacking of files completed." will be displayed, and select [OK].

8 Remove the CD-ROM.

9 Make a BIOS update floppy disk.

- Remove the CD/DVD drive and insert the floppy disk drive into the Multimedia Pocket. (Manual "Multimedia Pocket")
- (2) Insert a new 2HD floppy disk in the floppy disk drive.
- (3) Format the floppy disk using the following procedure. (Be sure to make it bootable.)

Select [start] - [My Computer], right-click on [3 1/2 Floppy (A:)] and select [Format].

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Add a check mark for [Create an MS-DOS startup disk], and select [Start]. \downarrow

Follow the on-screen instructions.

(4) Show hidden files on a floppy disk using the following procedure.
 Double-click [3 1/2 Floppy (A:)] and select [tool] - [Folder Options] - [View].
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Add a check mark for [Show hidden files and folders] in [Hidden files and folders].

Remove a check mark from [Hide protected operating system files (Recommended)]. \downarrow

Select [OK].

- (5) Delete all files except for the following: AUTOEXEC.BAT, COMMAND.COM, CONFIG.SYS, IO.SYS, MSDOS.SYS
- 6 Copy all the files you extracted to the [bios] folder in step **6** to the floppy disk.
- 7 Remove the floppy disk.

10 Make an Embedded Controller update floppy disk.

- (1) Repeat (2) to (5) from step $\boldsymbol{9}$ to prepare a second new floppy disk.
- (2) Copy all the files you extracted to the [ec] folder in step **6** to floppy disk.
- ③ Remove the floppy disk.

11 Save SETUP data.

(1) Turn on or restart the computer and run the Setup Utility by pressing **F2** while [Panasonic] boot screen is displayed.

If [Enter the password] is displayed, input the Supervisor Password.

- 2 Disable the Supervisor password if it's registered.
- Write down all of the contents of the Setup Utility and then press F9.
 At the confirmation message, select [Yes] and press Enter. (The Setup Utility settings will return to their default values.)

CAUTION

 <Only for CF-29N*****/CF-29P***** series> Be sure to write down the TPM settings on the [Security] menu. (Windows may become unstable if you do not restore the TPM settings to their previous values after updating the BIOS.)

Updating the BIOS and Embedded Controller

CAUTION

- Before updating BIOS and Embedded Controller, connect AC adaptor, insert battery pack and floppy disk drive correctly, and confirm any peripherals (e.g. PC card) except floppy disk drive is NOT connected.
- 1 Insert the Embedded Controller update floppy disk (page 13 step 10), and restart or turn on the computer.
 The computer heats from the floppy disk

The computer boots from the floppy disk.

- **2** Input [pec29b4 29440160.ROM] and press Enter).
- **3** Follow the on-screen instructions.

The computer will turn off after Embedded Controller has been updated.

4 Insert the BIOS update floppy disk (page 12 step 9), and turn on the computer.

The computer boots from the floppy disk.

5 <For CF-29L*****/CF-29M***** series> Input [BU294L14] and press Enter). <For CF-29N*****/CF-29P***** series> Input [BU295L13] and press Enter).

6 Follow the on-screen instructions.

The computer will turn off after BIOS has been updated.

7 Restore SETUP data.

- Turn on the computer and run the Setup Utility by pressing F2 while [Panasonic] boot screen is displayed.
- 2 Press **F9**.

At the confirmation message, select [Yes] and press **Enter**. (The Setup Utility settings will return to their default values.)

(3) Restore all the data saved in step 11 of "Before Updating the BIOS and Embedded Controller" ((→ Page 13).

CAUTION

 <Only for CF-29N*****/CF-29P***** series> Be sure to restore the settings of TPM in [Security] menu. Windows may become unstable if you do not restore the TPM settings to their previous values after updating the BIOS.

- (4) Input current date and time.
- Select [Exit] menu and then select [Save Current Values], then press Enter.
 At the confirmation message, select [Yes] and press Enter.
- (6) Turn the computer off by sliding the power switch.

Installing the Software

Installing the Software

- 1 <For CF-18 series> Connect the CD/DVD drive to the USB port. <For CF-29 series> Insert the CD/DVD drive into the Multimedia Pocket. (Reference Manual "Multimedia Pocket")
- **2** Turn on or restart the computer, and run the Setup Utility by pressing **F2** while [Panasonic] screen is displayed. If [Enter Password] is displayed, input the Supervisor Password.
- Select the [Advanced] menu and confirm the following.
 [On & Off] is selected at [Power SYNC with PC]. If [On & Off] is not set, confirm the power to the HSDPA/UMTS modem is on.
- **4** Save the settings and exit the Setup Utility.
- **5** Log on to Windows with the administrator authority.
- **6** Turn off the HSDPA/UMTS modem.
- 7 Set the Wireless WAN (HSDPA/UMTS) Software CD-ROM into the CD/DVD drive.
- Input [x:*1\setup.bat] in [start] [Run] and select [OK].
 *1 "x:" is the drive letter of the CD/DVD drive. Change this to match the drive letter on your own computer.
- **9** Follow the on-screen instructions, and install the software.
- **10** When the installation completes, turn on the HSDPA/UMTS modem. Wait until the HSDPA/UMTS modem is recognized.
- **11** Remove the CD-ROM.

Running MobiLink

You can run MobiLink using either of the following procedures.

• Double-click



on the desktop.

MobiLink
 Select [start]- [All Programs] - [Novatel Wireless] - [MobiLink].

CAUTION

• Do not power the HSDPA/UMTS modem on or off while MobiLink is running.

How to access the Online Manual

• Select "?" of the MobiLink control panel.

Uninstalling the software

• Select [start] - [Control Panel] - [Add or Remove Programs] - [Mobilink], and then select [Remove] to remove the program.

Appendix

Setup Utility

The parameters for [Wireless Modem] have been added in [Advanced] menu of the Setup Utility.

Abbreviations

EDGE	Enhanced Data rates for Global Evolution
GPRS	General Packet Radio Service
HSDPA	High Speed Downlink Packet Access
SIM	Subscriber Identity Module
UMTS	Universal Mobile Telecommunications System

Specifications

Frequency Band &	HSDPA/UMTS	850/1900 MHz Class 4 (+21dBm)
Power Class	EDGE	850 MHz Class E2 (+27dBm) 1900 MHz Class E2 (+26dBm)
	GPRS	850 MHz Class 4 (+33dBm) 1900 MHz Class 1 (+30dBm)
Data Communication	HSDPA	Category 12
	UMTS	3GPP Release 5
	EDGE/GPRS	MultiSlot Class 10
Other Features	SMS	Mobile Originated SMS (MO-SMS) Mobile Terminated SMS (MT-SMS)
	FAX	No Support
	Voice	No Support
SIM		1.8/3V SIM Support

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