



# Panasonic<sup>®</sup>

## OPERATING INSTRUCTIONS

### Handheld Computer

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Model No. **CF-P2 Series**

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**TOUGHBOOK**

Please read this instructions manual carefully before using this product and save this manual for future use. Refer to the provided Safety Precautions regarding precautions for this computer.

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## Customer's Record

Model No.* _____	Dealer's Name _____
Serial No. _____ or _____	_____
Code No. _____	Dealer's Address _____
Date of Purchase _____	_____

\* For the Model No., insert the 12 digit number (for example, CF-P2T1FDF7E) located on the back of the computer.

## Introduction

Thank you for purchasing the Panasonic Handheld Computer. Read the operating instructions thoroughly for proper operation of your new computer.

## Illustrations and Terminology in this Manual

**NOTE:**

**CAUTION:**




- [Programs]:



:

**NOTE** provides a useful fact or helpful information.

**CAUTION** indicates a condition that may result in minor or moderate injury.

This illustration means to tap  at the top of the screen, then to tap [Programs].

Where to go for referred information.

- 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.

## Getting Started

What's in the Box? .....	4
Names and Functions of Parts .....	5
First-time Operation .....	9

## Operation

Starting Up/Shutting Down .....	12
LCD (Touchscreen) .....	17
Backlight Settings .....	19
Entering Information .....	21
Using T9® Text Input .....	21
Using the Input Panel .....	24
Using the Keyboard .....	25
Changing the Assignment of Program Buttons ....	26
Setting to Resume .....	26
Quick Menu .....	27
Battery Power .....	29
Remaining Battery .....	29
Setting for Auto Powering Off .....	29
Replacing the Battery Pack .....	30
SD Memory Card/SDIO Card/MultiMedia Card ....	31
Panasonic Backup .....	32
Pocket Internet Explorer .....	35
Connecting to Your Computer .....	36
Wireless Functions .....	39
Changing the Wireless Power Status .....	39
Setting Up the Remote Network for GPRS .....	40
Connecting to Wireless LAN .....	43
Connecting to Bluetooth Devices .....	49
Dialer and Telephony .....	53
Customizing the Computer .....	58

## Troubleshooting

Dealing with Problems .....	61
Resetting Your Computer .....	61
Troubleshooting .....	62
Diagnostic Tool .....	65

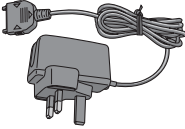

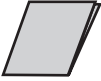
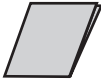

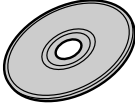
## Appendix

For Effective Use .....	67
Specifications .....	68

# What's in the Box?

Make sure the parts shown in the figure have been supplied. If any of these items is missing or is not working properly, contact Panasonic Technical Support.

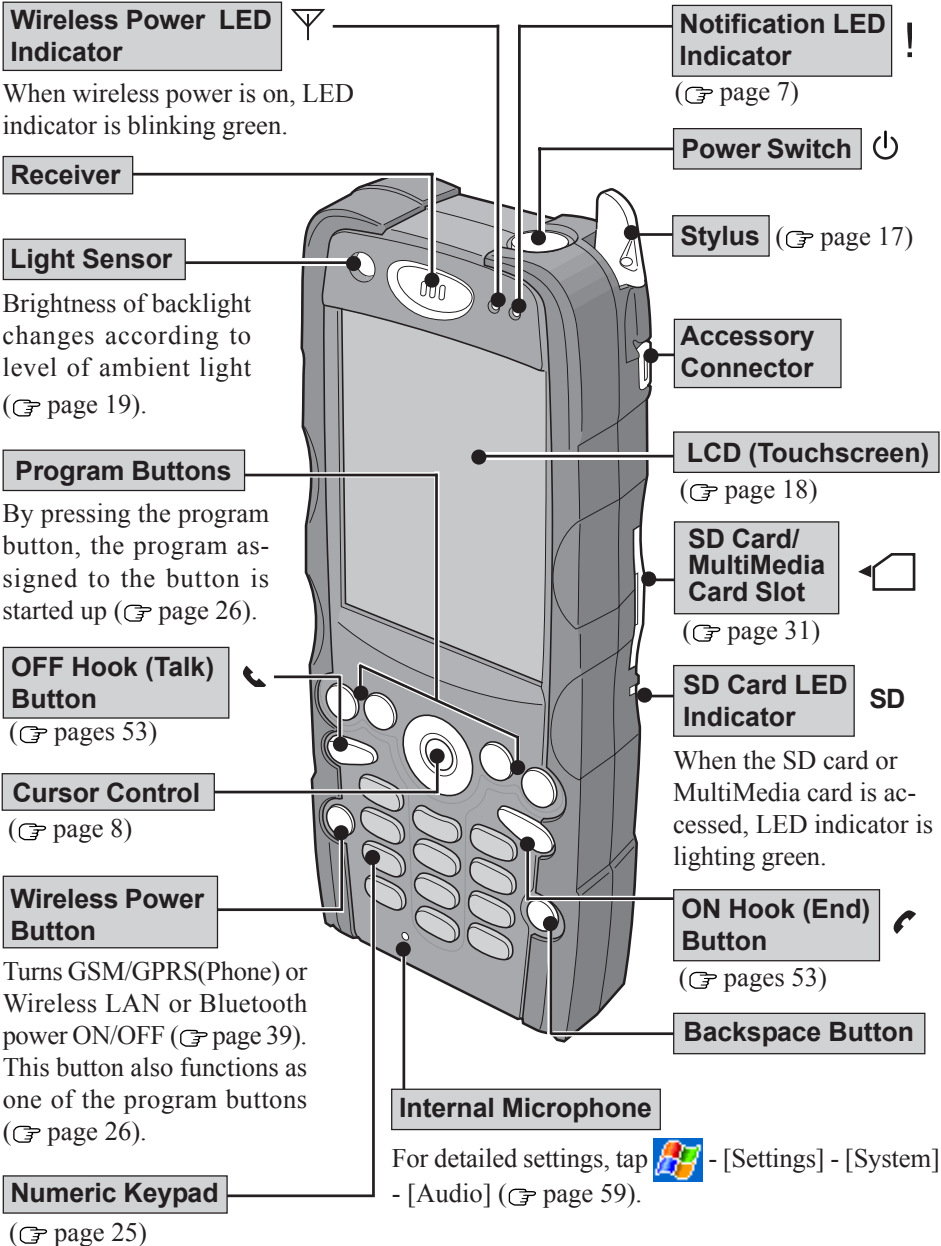
Make sure the provided stylus has been stored to the computer (☞ page 17).

<b>Fast Travel Charger ..... 1</b>	<b>Battery Pack ..... 1</b>
 <p>Model No: EB-CAD95UK</p>	 <p>Model No: CF-VZSU33</p>
<b>Safety Precautions ..... 1</b>	<b>License Agreement ..... 1</b>
	
<b>End User License Agreement ..... 1</b>	<b>Companion CD*1 ..... 1</b>
	

\*1 You can use the Companion CD to install various software, including Microsoft® ActiveSync® (☞ page 36).

# Names and Functions of Parts

The illustrations shown may differ from the actual physical appearances.



# Names and Functions of Parts

## GSM/GPRS Antenna Connector

Used for a car mounter (optional) connected to CF-P2.

## GSM/GPRS Antenna

(built-in)


## Bluetooth Antenna

(built-in)


## Wireless LAN Antenna

(built-in)

## Speaker

To adjust the volume, tap  on the navigation bar, or press the Volume Up/Down Buttons.

## Expansion Connector

You can connect CF-P2 directly to the Fast Travel Charger, or the computer using the proper cable ( pages 10, 38).

## Record Button



Can be recorded while pressing this button.

## Headset Jack

( page 8)

## Volume Up Button



## Volume Down Button



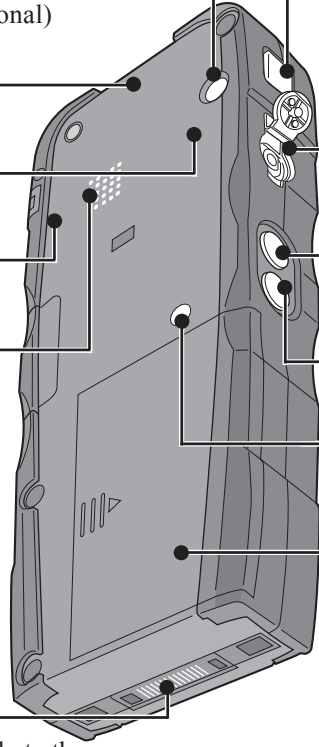
## Reset Switch

RESET

( page 61)

## Battery Pack

( pages 9, 30)




# Names and Functions of Parts

## ● Notification LED Indicator (📖 page 5)

Status	Notification	
	None	Given* <sup>1</sup>
Not connected to the Fast Travel Charger or unable to recharge outside the allowable temperature range.	Not lit	Blinking Green
Connected to the Fast Travel Charger (No charging)	Green	Blinking Green
<ul style="list-style-type: none"><li>• Connected to the Fast Travel Charger</li><li>• Connected to USB cable, and add a check mark for [Supply power from PC by using USB] (📖 page 29).</li></ul> (Charging in progress)	Orange	Blinking Orange

\*<sup>1</sup> Examples of notification are shown below.

- When the alarm is set in  - [Settings] - [System] tab - [Clock & Alarms] - [Alarms] tab and the alarm is ringing.
- When you miss phone calls, etc.

# Names and Functions of Parts

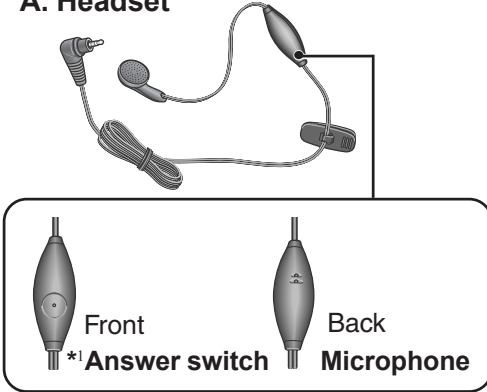
## ● Headset and 3.5 DIA plug adaptor

Only the CF-VHSP11W (sold separately) can connect to the headset jack.

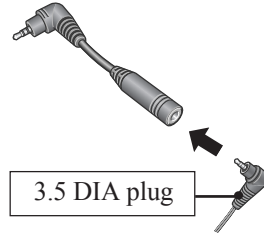
CF-VHSP11W includes A and B. When using a 3.5 DIA plug, B is required. This adaptor can be connected to stereo headphones.

Audio output from the internal speaker is disabled when the headset or the 3.5 DIA plug adaptor is connected.

### A. Headset



### B. 3.5 DIA plug adaptor



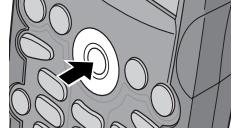
\*1 Press for about one second to answer/hang up voice calls. Function will not operate if the switch is not pressed long enough.

## ● Cursor Control

Using the cursor control, the following operations can be performed.

### “Press Center” Operation:

Executes a selected item from a menu, or a selected icon. For example, after an item within a menu is selected, center of the cursor control can be pressed to execute this selected item.




### “Press Up/Down Right/Left” Operations:

Performs the same function as the up/down right/left cursor control. For example, the “Press Up” operation can be performed to select an item towards the top within a menu.



## Changing the Cursor Control Settings

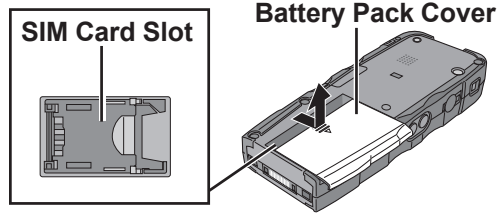
The cursor control settings allow you to adjust the interval between the waiting time until the repetition of an input begins (from the first input to the second input) if the cursor control is held down, and the repeat of the input (from the second input and on).

- 1 Tap  - [Settings] - [Personal] tab - [Buttons] - [Up/Down Control] tab.
- 2 Customize the way your cursor control repeats.
- 3 Tap [ok].



# First-time Operation

- 1 Turn your computer over and slide the battery pack cover to remove it.

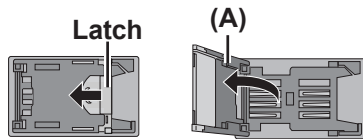


- 2 Install the SIM card.

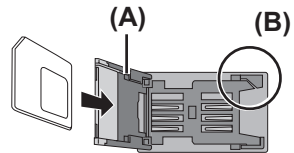
## CAUTION

The contacts of the SIM card slot are extremely sensitive to static electricity. When inserting or removing a SIM card, do not touch the contacts. Doing so has been known to cause damage or electric shock.

- (1) Unlock the Latch and open (A).



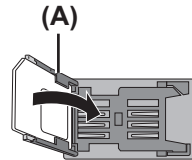
- (2) Insert the card all the way into (A). Make sure that the beveled corner of the SIM card matches up with (B).



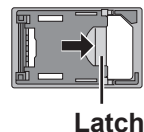
## CAUTION

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.

- (3) Snap (A) into place by pushing down on it.

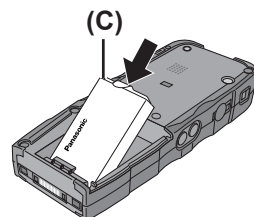


- (4) Slide the Latch in the direction of the arrow to lock.



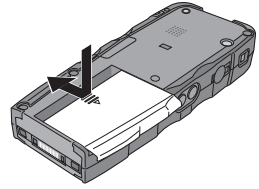
- 3 Install the battery pack.

- (1) Hold the battery pack so that the name "Panasonic" is facing upwards and the tab (C) is placed as shown at right, and put the battery pack into the computer so that the battery connector and the CF-P2 connector match up.



# First-time Operation

- (2) Set the cover in place and slide it in the direction indicated by the arrow to close.

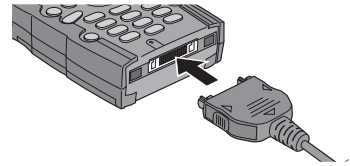


## CAUTION

After changing the SIM card and inserting the battery pack (except for first-time operation), reset the CF-P2.

## 4 Connect your computer to a power outlet.

Connect the Fast Travel Charger to CF-P2 with arrow marks facing up. Charging begins automatically.



**Charging Time:(Power Off) Approx. 4 hours**  
**(Power On) Varies depending on the usage conditions.**

This computer is equipped with a memory backup battery which automatically charges from the fully-charged lithium-ion battery (main battery). This backup battery retains data in memory when the lithium-ion battery is removed, and takes 24 hours to charge when you first use this computer.

## NOTE

- When the backup battery or main battery becomes low, some alert messages and icons will be displayed (☞ page 14).

## CAUTION

- Do not remove the main battery before the backup battery is fully charged. Otherwise, data in RAM will be lost.
- Take care to ensure that the remaining power in the main battery and the backup battery never discharges completely.

When any remaining power discharges completely, the computer will no longer function properly, and the computer powers off automatically. Connect the Fast Travel Charger and recharge the battery. If the computer is left for 72 hours or more without recharging, the computer may be fully reset. When the computer is fully reset, all user-added data except for Flash Storage will be lost. The computer will be returned to the condition at the time of purchase except for Flash Storage.

### Handling the Fast Travel Charger

- Do not twist or pull the Fast Travel Charger cord forcefully. Otherwise, the connections will be damaged.
- Use only the provided The Fast Travel Charger with your computer. Using a charger other than the one provided might damage the battery and the computer.

# First-time Operation

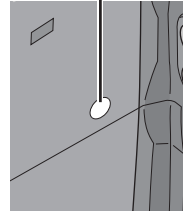
## 5 Turn your computer on

- (1) Using the provided stylus (☞ page 17), push the center of the reset switch straight in for 1 second while holding down on the power switch (☞ page 12).

### CAUTION

- When the battery pack is not fully charged, if the Fast Travel Charger is connected, CF-P2 may not turn on.
- Use only the provided stylus to push the reset switch. Do not push the reset switch with any other sharp-pointed objects, i.e. pencils, and ball point pens. The reset switch or other parts may become damaged.

### Reset Switch



- (2) Tap the screen to set up your Pocket PC.

The Windows\*<sup>1</sup> alignment screen is displayed.

\*<sup>1</sup> This computer uses Microsoft® Windows Mobile™ 2003 Second Edition Software for Pocket PC, Premium with Phone Edition.

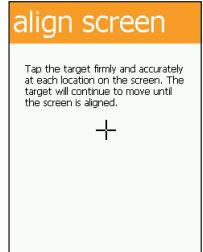
- (3) Align the touchscreen.

(For alignment, tapping operations are required. For information on tapping, refer to page 17.)

"+" is displayed in the center, upper left, lower left, lower right, and upper right portions of the touch screen, in that order. Each time the "+" mark is displayed, tap the center of the "+" mark with the stylus.


### NOTE

In this operation, the "+" mark may not move smoothly. This is not a malfunction. Continue the operation.



- (4) At [complete], tap the screen to begin using CF-P2.

## 6 Set the time and date

- (1) Tap  - [Settings] - [System] tab - [Clock & Alarms].
- (2) Set the time zone, time and date.
- (3) Tap [ok].

### NOTE

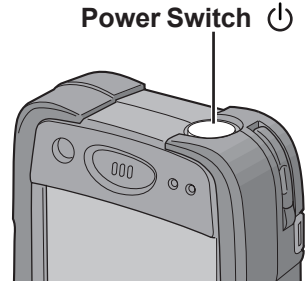
You can also set the date and time by tapping  on [Today] screen (☞ page 15).

**This concludes the first-time use operation guidelines.**

# Starting Up/Shutting Down

## Starting Up (from the second time)

Lightly press the power switch once.  
Programs and files that were previously displayed appear on your screen.



## Power Switch

- Lightly press the power switch (within 0.5 seconds) to turn on/off CF-P2.
- To turn the LCD backlight on/off:  
Turn on CF-P2, and press the power switch until the LCD backlight goes on/off and release the switch.  
At the time of purchase, the brightness of the LCD backlight and the keyboard backlight changes according to the level of ambient light. To change this setting, refer to page 19.  
If the CF-P2 powers off while the backlight is off, the backlight will remain off when the CF-P2 powers on again.

### NOTE

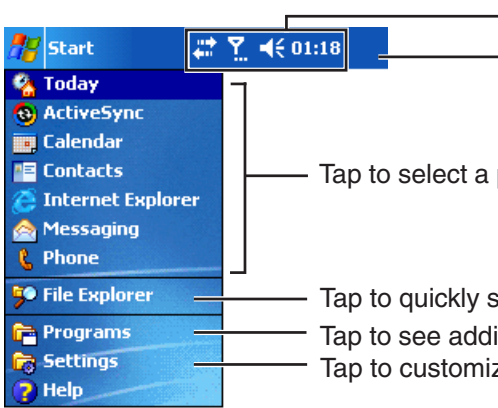
- When the backlight is on, more power is consumed, and the battery operating time is reduced.

# Starting Up/Shutting Down

## The Navigation Bar and Command Bar

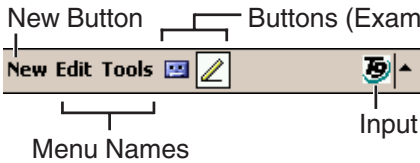
The navigation bar is located at the top of the screen. It displays the active program and current time, and allows you to switch to programs and close screens.

Use the command bar at the bottom of the screen to perform tasks in programs. The command bar includes menu names, buttons, and the input panel button.



The screenshot shows the navigation bar with the following elements and annotations:

- Status Icon** (☞ page 14): Points to the navigation bar area.
- ok or X** may be displayed depending on the program that is running: Points to the navigation bar area.
- Tap to select a program.**: Points to the list of programs (Today, ActiveSync, Calendar, Contacts, Internet Explorer, Messaging, Phone).
- Tap to quickly select a program you have recently used.**: Points to File Explorer.
- Tap to see additional programs.**: Points to Programs.
- Tap to customize CF-P2** (☞ pages 58-60): Points to Settings.

























The screenshot shows the command bar with the following elements and annotations:

- New Button**: Points to the 'New' menu name.
- Buttons (Example for [Notes])**: Points to the 'Edit' and 'Tools' menu names.
- Menu Names**: Points to the 'New', 'Edit', and 'Tools' menu names.
- Input Panel Button**: Points to the button with a stylized 'S' icon.


# Starting Up/Shutting Down

Following are some of the status icons you may see.

Status Icon & Meaning	
 Turn all sounds on and off	 GPRS available
 Backup battery is very low	 GPRS Connection in progress
 Main battery is charging	 Roaming
 Main battery is full	 Radio off
 Main battery is low	 Playing sound disable
 Main battery is very low	 Vibrate ON
 Notification that one or more instant messages were received	 Missed Call
 Notification that one or more e-mail messages were received	 Full Signal Strength
 More Notification icons need to be displayed. Tap the icon to view all.	 Wireless LAN data call
 Voice Call in progress	 Wireless LAN on
 ActiveSync®/CSD Connection in progress	 Wireless LAN Connection in progress

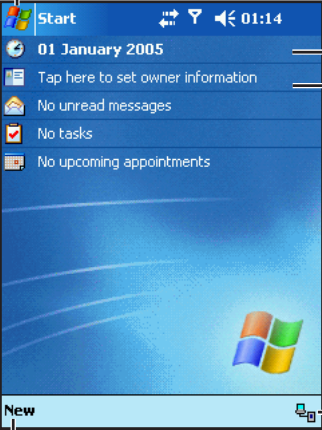
# Starting Up/Shutting Down

## Today Screen

You'll see the Today screen when you turn on the computer for the first time each day (or after 4 hours of inactivity\*<sup>1</sup>). The Today screen can be displayed by tapping  - [Today]. On the Today screen, you can see at a glance important information for the day.

\*<sup>1</sup> To change the setting, tap  - [Settings] - [Personal] tab - [Today] - [Items] tab.

Tap to switch to a program.



01 January 2005

Tap here to set owner information

No unread messages

No tasks

No upcoming appointments


New

Tap to change date and time.

Tap to open an item.

Your day at a glance.

Displayed when synchronizing with a host computer using Microsoft® ActiveSync®. Tap to view connection status.

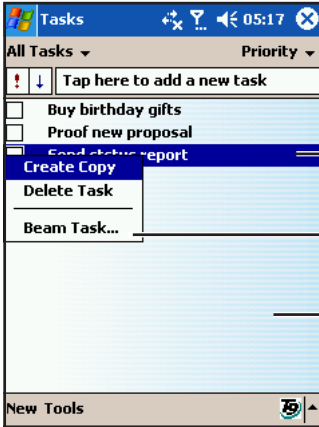
 is displayed when Panasonic Bluetooth has started.

The image shows a screenshot of the Windows Start screen. At the top, there is a status bar with the word 'Start', signal strength, Wi-Fi, and a clock showing 01:14. Below this is a date bar for '01 January 2005'. A list of items follows: 'Tap here to set owner information', 'No unread messages', 'No tasks', and 'No upcoming appointments'. At the bottom left is a 'New' button with a plus icon. A Bluetooth icon is visible in the bottom right corner. Lines connect these elements to descriptive text on the right.

# Starting Up/Shutting Down

## Pop-up Menus

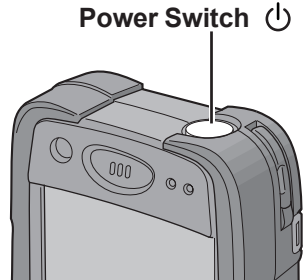
With pop-up menus, you can quickly choose an action for an item. For example, you can use the pop-up menu in the contact list to quickly delete a contact, make a copy of a contact, or send an e-mail message to a contact. The actions in the pop-up menu vary from program to program.



- (1) To access a pop-up menu:  
Tap and hold to display the pop-up menu.
- (2) Lift the stylus and tap the action you want to perform.
- Tap outside the menu to close it without performing an action.

## Shutting Down (power off)

Lightly press the power switch once (within 0.5 seconds). CF-P2 shutdown is the same as the standby state of a computer. (Standby state is a function allowing you to turn off the power without closing applications. The settings before the power was turned off are stored in the memory, so when the power is turned back on, the screen is the same as it was before the power was turned off (the same applications and files are opened) and you can start working immediately.)



### CAUTION

- Check to see the SD card LED indicator if the SD card/MultiMedia Card is not being accessed before turning off the power. If the power is turned off while the card is being accessed, the data stored on the card may be damaged and the computer may stop working properly.



# LCD (Touchscreen)

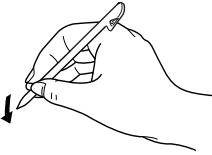
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## Using the Stylus

Use the provided stylus to perform operations on the touchscreen. The stylus is located in the stylus holder at the upper right of the computer, and can be held like a pen or a pencil. The following operations are possible on the touchscreen.

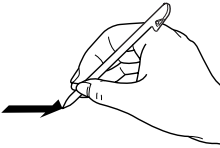


### Tapping



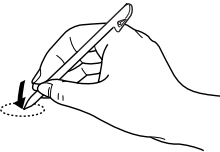
You can select an item on the screen by tapping it with the stylus. This operation is called a “tap”.

### Dragging



You can drag on an item on the screen by holding the stylus down over the item and then moving the stylus. This operation is called a “drag”.

### Tapping and Holding



You can tap and hold the stylus on an item to see a list of actions available for the item. On the pop-up menu that appears, tap the action you want to perform.

## Handling the Stylus

- Clean the stylus tip and screen prior to operation. Foreign particles can scratch the screen and impede the operation of the stylus.
- Use the provided stylus only on the screen or when pushing the reset switch. Using it for any other purpose may damage the stylus and scratch the screen.


# LCD (Touchscreen)


## Handling the Touchscreen

- Use the provided stylus with CF-P2. Do not use an implement other than the stylus provided with the computer.
- Do not place any object on the surface or press down forcefully with sharp-pointed objects (e.g., nails), or hard objects that may become damaged (e.g., pencils and ball point pens).
- Do not operate the computer when such things as dust are on the LCD. Do not allow substances such as oil to contact the LCD. The cursor may not work properly in such cases.

## Aligning the Touchscreen

Align the touchscreen if the cursor does not correctly move to the position where the stylus touches the touchscreen of the computer.

- 1** Tap  - [Settings] - [System] tab - [Screen] and tap [Align Screen].

You can also align the screen when  + center of the cursor control are pressed.

- 2** "+" is displayed in the center, upper left, lower left, lower right, and upper right portions of the touchscreen, in that order.

Each time the "+" mark is displayed, tap the center of the "+" mark with the stylus.

The alignment procedure is executed after the five "+" marks are touched.




### NOTE

- When performing a full reset, the "+" mark may not move smoothly in this operation. This is not a malfunction. Continue the operation.

# Backlight Settings

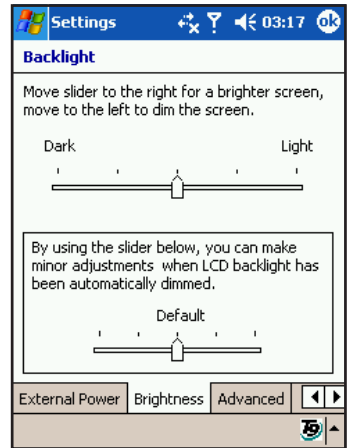
## Adjust the LCD Brightness

Screen brightness can be adjusted in accordance with the usage conditions.

- 1 Tap  - [Settings] - [System] tab - [Backlight].
- 2 Tap the [Brightness] tab and adjust the brightness with the slider.
- 3 Tap [ok].


### CAUTION

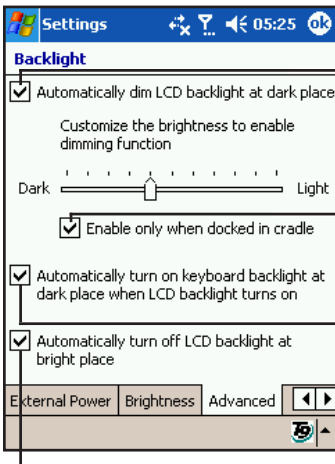
- If there are check marks at [Advanced] tab (see below), this function may not work. In such a case, remove those check marks and adjust the brightness with the slider.



## Settings of the Backlight Automatically

The backlight can be set automatically.

- 1 Tap  - [Settings] - [System] tab - [Backlight].
- 2 Tap the [Advanced] tab.



Add the check mark so that the sensor detects the amount of light, and the backlight automatically become dimmer so that the LCD screen is not too bright when using CF-P2 in a car or other dark places.

Add the check mark so that the dimming function is enabled only when CF-P2 is docked in its car mounter's cradle.

Add the check mark so that when LCD backlight turns on, keyboard backlight turns on automatically at dark place.

Add the check mark so that the sensor detects the amount of light, and the backlight automatically turn off at bright places.

- 3 Tap [ok].


# Backlight Settings

## LCD Backlight ON/OFF

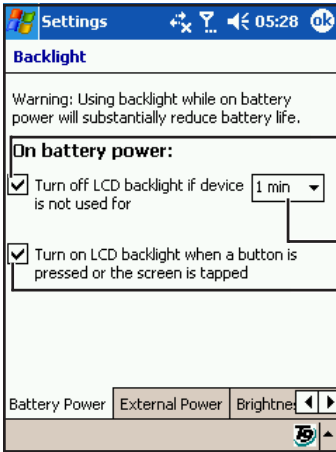
Turn on CF-P2, and press the power switch until the LCD backlight goes on/off and release the switch. (Depending on the setting under the [Advanced] tab, the LCD backlight may not be turned on.)

## Setting of the LCD Backlight

The LCD backlight can be set to turn off automatically (e.g., for conserve power) by setting the timeout function. Individual settings can be made for battery use and The Fast Travel Charger use.

**1** Tap  - [Settings] - [System] tab - [Backlight].

**2** Battery use setting: Tap the [Battery Power] tab.  
The Fast Travel Charger use setting: Tap the [External Power] tab.



Add a check mark so that when the device is not operated, the LCD backlight switches off automatically when the timeout expires.

Timeout

Add a check mark so that tapping the screen turns the LCD backlight on.

(Example for [Battery Power])

**3** Tap [ok].

# Entering Information

You can use the following options to enter information:

- Use the numeric keypad to input typed text by using T9 (☞ below) or the number shown on the key top.
- Use the input panel to input typed text, either by using the soft keyboard or other input method.
- Write directly on the screen.\*1
- Draw pictures on the screen.\*1
- Speak into the internal microphone to record a message.\*1
- Use Microsoft® ActiveSync® to synchronize or copy information from a host computer to CF-P2. For more information on Microsoft® ActiveSync®, see ActiveSync® Help on the host computer (☞ page 36).

\*1 For more information, tap  - [Help] - [Settings] - [Input].

## Using T9® Text Input

With T9® Text Input software, you can enter text easier and faster than with the “Multitap” method of text entry. Instead of pressing a key repeatedly to enter a letter, you press a key only once for each letter.

### ● Changing the text entry mode

(1) Tap the arrow (A) and tap [Alphabetic T9].

(2) Tap (B) and select a text entry mode.

The current mode is indicated at (B).

CF-P2 has four text entry modes:



(T9): Used to enter letters, numbers, and symbols.



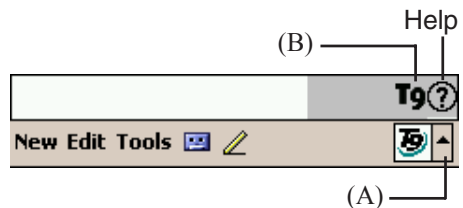
(ABC): Used to enter letters and numbers. You press keys repeatedly to cycle to the desired character.




(123): Used to enter numbers.



(Symbols): Used to enter symbols and punctuation marks.





To change the text entry mode, press  for more than one second or tap (B) repeatedly until the icon of the mode you want is displayed.

# Entering Information

## ● Entering Letters in T9 Mode




### Important T9 concepts:

- Type to the end of the word if it does not appear after you enter the first few letters.
- Don't be concerned about what appears on screen while entering a word.
- Press the up/down cursor control to scroll through word choices.
- You can enter words that contain capital letters (☞ page 23 “Changing the Shift State”).
- You can use the Smart Punctuation feature to quickly add punctuation to words (☞ page 23 “Entering Symbols”).

- (1) Press the corresponding number key one time. For example, to enter the letter c, press  once. Although each key represents several letters, T9 determines from the keys you press which letter you want.
- (2) If the word displayed is the one you want, press  to add a space and begin the next word.
- (3) Press center of the cursor control to enter the word.



The following section describes what to do if T9 doesn't display the word you want.



### When the Word You Want Isn't on Screen

Sometimes the word T9 displays isn't the one you want. For example, to enter “cat” you would press the keys   . For this key sequence, however, “act” is the most likely matching word. Although T9 displays “act”, it has prepared a list of all the words that match the key sequence.


To view the next matching words, press the up/down cursor control. Pressing this cursor control replaces the current word with the next matching word.

### When the Word Isn't in T9's List

Sometimes the word you want to enter isn't in T9's list of matching words. In this situation, you can switch to ABC mode by pressing  until  is displayed and enter the word.

Return to T9 mode by pressing  until  is displayed. T9 automatically also adds words input in ABC mode to its dictionary.\*<sup>1</sup>

### Entering Completed Words\*<sup>1</sup>

Sometimes T9 places in the selection list completed words. Completed words match the keys you've entered but contain additional characters. If the completed word isn't the one you want, just keep entering letters. T9 will remove the completed portion of the word for you automatically. If the completed word is the one you want, press  to add a space and begin the next word.


\*<sup>1</sup> This setting can be changed as follows.

- ① Tap the arrow on the command bar.
- ② Tap [Options] - [Input Method] tab - tap [Options].
- ③ Add/remove a check mark from each setting.
- ④ Tap [ok].

# Entering Information


---

## ● Entering Letters in ABC Mode

To enter a letter, press the corresponding number key repeatedly until you cycle around to the desired letter. For example, to enter an s, press  four times.

## Entering Predicted Words\*<sup>1</sup>

Sometimes T9 places in the selection list predicted words. Predicted words are words T9 thinks you may want to enter, based on text you've recently entered. Available in both T9 and ABC mode, predicted words are underlined.

If the predicted word you see isn't the one you want, press the up/down cursor control to view additional predicted words. When you find the one you want, press  to add a space and begin the next word.

If none of the predicted words in the selection list is the word you want, just keep entering letters. T9 will remove the predicted word for you automatically.


\*<sup>1</sup> This setting can be changed as follows.

- ① Tap the arrow on the command bar.
- ② Tap [Options] - [Input Method] tab - tap [Options].
- ③ Add/remove a check mark from each setting.
- ④ Tap [ok].


## Changing the Shift State

T9 has three shift states:

- Lowercase—letters are in lowercase.
- Single-character uppercase—the next letter you enter is in uppercase. T9 then automatically returns to lowercase.
- Uppercase—letters are in uppercase.

To switch from one shift state to the next, press  key:


You can see which mode is active by looking at the next to T9 mode indication. You may see one of these icons:








: Indicates single-character uppercase.



: Indicates uppercase.

If you do not see either icon, CF-P2 is in lowercase.

## ● Entering Symbols

There are two ways to enter symbols. If CF-P2 is in T9 mode, you can press  (also known as the Smart Punctuation key) to enter a symbol and then continue adding letters.

For example, to enter “I’ll”, press    . After you press  , the display reads I., but once you press , the display changes to “I’l”. If the displayed symbol isn't the one you want, press the up/down cursor control to see other choices.

You can also enter symbols by setting CF-P2 to Symbols mode (by pressing  until  is displayed). When CF-P2 is in Symbols mode, symbols appear in the selection list. If you see the symbol you want, select it using the cursor control, and the symbol will be added.

If you don't see the symbol you want, press the up/down cursor control to see the next page of symbols. After you enter a symbol, CF-P2 returns to the mode it was in before you set it to Symbols mode.

# Entering Information

## ● Entering Numbers

There are two ways to enter numbers. If CF-P2 is in ABC or T9 mode, you can enter a number by pressing the corresponding number key until a number is displayed. The number is entered, but CF-P2's text entry mode doesn't change.

You can also enter numbers by setting CF-P2 to 123 mode (by pressing **# 123** until **123** is displayed). Setting CF-P2 to 123 mode is useful if you want to enter more than one or two numbers—for example, street addresses or phone numbers. After setting CF-P2 to 123 mode, enter numbers by pressing the corresponding number keys. When you're finished, set CF-P2 back to previous mode (by pressing **\* 123** until previous mode is displayed).

## Moving the Cursor

You can move the cursor by pressing the right/left cursor control. However, the number of characters that the cursor moves can vary—within T9 mode it generally moves word by word and within ABC mode it moves letter by letter.

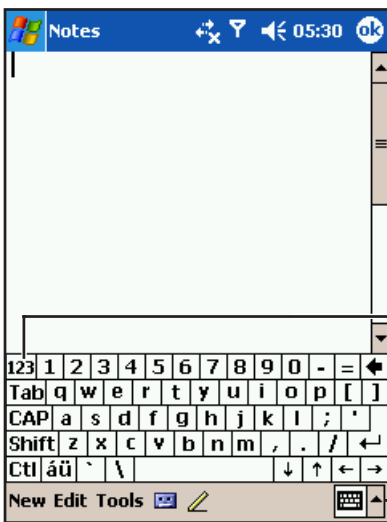
## Deleting Text

You can delete text by pressing **⬅**. Each key press deletes the character left of the cursor.

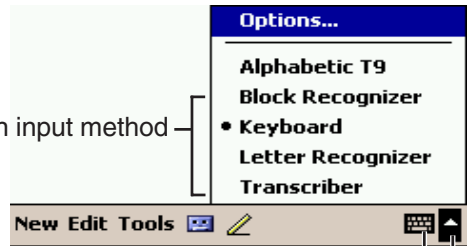
## Using the Input Panel

Use the input panel to enter information in any program on CF-P2. You can either type using the soft keyboard or write using Letter Recognizer, Block Recognizer, or Transcriber. In either case, the characters appear as typed text on the screen.

To show or hide the input panel, tap the input panel button. Tap the arrow next to the input panel button to see your choices.



Select an input method



Input Panel Button

Tap to see your choice

Tap [123] to allow the keyboard to input \$, {}, %, etc.

To type with the soft keyboard:

- (1) Tap here and then [Keyboard].
- (2) On the soft keyboard that is displayed, tap the keys with your stylus.

(Example for [Keyboard])



# Entering Information

## Using the Keyboard

Press a key to input the number shown on the key top.



**OFF Hook (Talk) Button:** ☞ page 53.

**ON Hook (End) Button:** ☞ page 53.

**Wireless Power Button\*1:** ☞ page 39.

**ok Button\*1:** This key works the same as the tapping [ok] on the screen.

**Cursor Control:** ☞ page 8.

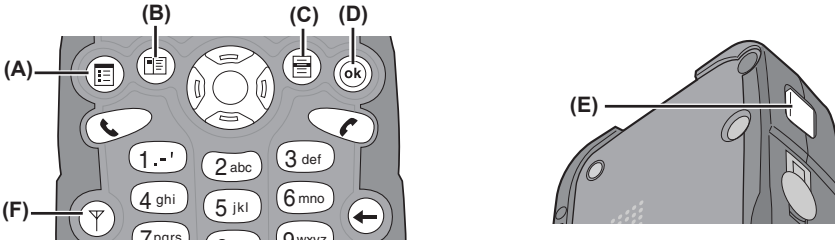
**Backspace Key:** This key works the same as the Backspace key of a computer.

**Numeric Keypad:** Use when making phone calls. Characters and numbers can also be input using T9 (☞ page 22).

\*1 These are the settings at the time of purchase. You can change the assignment of these program buttons (☞ page 26).


# Changing the Assignment of Program Buttons

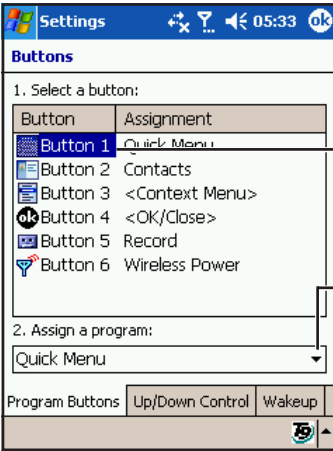
Programs are assigned to the buttons shown below at the time of purchase. If either of the buttons is pressed after the computer has started up, the program assigned for that button is started up. These buttons are called program buttons.



- (A) - Quick Menu (B) - Contacts (C) - Context Menu (D) - OK/Close
- (E) - Record (F) - Wireless Power

You can change the assignment of the program buttons following the procedure.

- 1 Tap  - [Settings] - [Personal] tab - [Buttons].
- 2 Choose each setting.




(1) Tap one button.

(2) Tap  under [Assign a program] and select a program from the list.

- 3 Tap [ok].

## Setting to Resume

You can resume the computer with the program buttons and OFF Hook (Talk)/ON Hook (End) Buttons.

- 1 Tap  - [Settings] - [Personal] tab - [Buttons] - [Wakeup] tab.
- 2 Add a check mark to resume when the program buttons and OFF Hook (Talk)/ON Hook (End) Buttons are pressed.
- 3 Tap [ok].

# Changing the Assignment of Program Buttons

## Quick Menu

Quick Menu tool allows you to launch the enrolled application quickly by pressing the program button, and check the battery status and date. When you press the program button that is assigned to the Quick Menu, the window indicated below is displayed.

The following programs are assigned to the menu item at the time of purchase.

**Item 1 - Messaging**

**Item 2 - Internet Explorer**

**Item 3 - Calendar**

You can change the assignment of Quick Menu

(☞ page 28).



- You can select an item from the Quick Menu in the following ways.
  - Press the number key corresponding to the item number.
  - Select the menu by using the cursor control to launch application.
  - Tap the item.

### CAUTION

- When starting the Quick Menu after the Fast Travel Charger is connected or disconnected, the battery condition may not be displayed correctly. The correct value will be displayed after a few moments.

# Changing the Assignment of Program Buttons

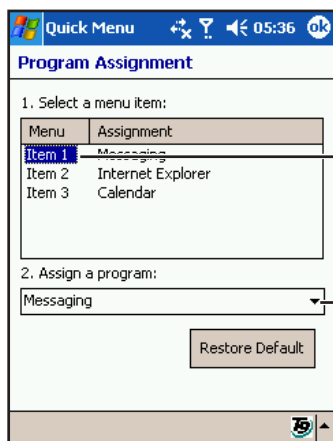
## ● Changing the Assignment of Quick Menu

**1** Press the program button that is assigned to the Quick Menu and tap [Assign].

[Program Assignment] will be displayed.

### NOTE

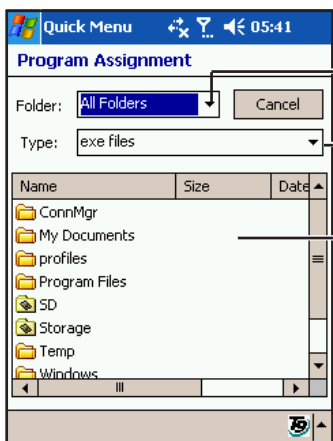
If the [Restore Default] is tapped, the assignments will return to the default settings.



(1) Tap one item.

(2) Tap ▾ under [Assign a program:] and select a program from the list.

- When selecting <None>, the menu assignment will be none.
- When selecting [(...Free command)], the following screen will be displayed.



① Tap ▾ and select a folder.

② Tap ▾ and select type of files.

③ Tap folders and select a program from the list.

**2** Tap [ok].

### CAUTION

- Do not delete or move assigned programs using the File Explorer or other function. An assigned program cannot be started up if it has been deleted or moved.

# Battery Power

## CAUTION

- Ensure that the backup battery is fully charged before replacing the battery pack and replace the battery pack within 30 minutes; otherwise the data in RAM will be lost.
- Do not touch the terminals of the battery pack. The battery pack may no longer function properly if the terminals are dirty or damaged.
- Do not expose the battery pack to water, or allow it to become wet.
- The battery pack is not charged when CF-P2 is first purchased. Be sure to charge it before using it for the first time. When the Fast Travel Charger is connected to CF-P2, charging begins automatically.
- Use only the specified battery pack (CF-VZSU33U) with CF-P2.
- Do not install or remove the battery pack while CF-P2 is on.

## Remaining Battery

Tap  - [Settings] - [System] tab - [Power] - [Battery] tab.

The recharging state is displayed.

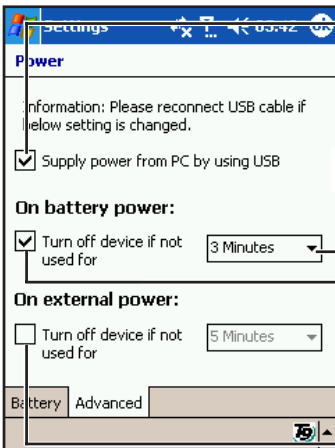
## When the Remaining Battery Charge Becomes Low

- Plug in the Fast Travel Charger, and fully charge your battery.
- Use a spare battery if you have one.
- If you have neither the Fast Travel Charger nor a spare battery, power off your computer.

## Setting for Auto Powering Off

You can set CF-P2 power to turn off automatically after a specified period of time.

Tap  - [Settings] - [System] tab - [Power] - [Advanced] tab.



Add a check mark to supply power from another computer via USB.

### NOTE

Power may not be supplied, depending on the condition of CF-P2 or the other computer.

Timeout

Add a check mark so that when CF-P2 is not operated, CF-P2 turns off automatically when the timeout expires.

Add a check mark so that when the Fast Travel Charger is connected, CF-P2 turns off automatically when the timeout expires.

# Battery Power


## Replacing the Battery Pack

When the charge provided by your battery pack is supplied for only a short period of time, even after full charging according to the instructions, it may be time to replace your battery pack. The battery pack is a consumable item and therefore requires replacement (CF-VZSU33U).

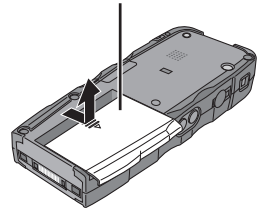
### Removing the battery pack

#### CAUTION

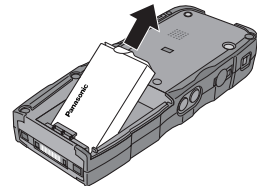
- Ensure that the Fast Travel Charger is removed when replacing the battery pack.

- (1) To turn off [Phone], lightly press the Wireless Power Button (within 0.5 seconds) to display [Wireless Power Status] screen. (For details,  page 39.)
- (2) Turn off your computer.
- (3) Turn your computer over and slide the battery pack cover to remove it.

Battery Pack Cover



- (4) Remove the battery pack in the direction shown in the figure.



### Installing the battery pack

- (1) Refer to page 9 about installing the battery pack.
- (2) Turn your computer on.\*<sup>1</sup>
- (3) Save the unsaved data and push the reset switch.

\*<sup>1</sup> When [Phone] is still on and the battery pack is replaced, the message [Phone function is disabled. Please reset] may appear.

# SD Memory Card/SDIO Card/MultiMedia Card

## About SD Memory Card/MultiMedia Card

An SD Memory Card/MultiMedia Card can be used for the following purposes.

- The exchange of data with various devices equipped with an SD card/MultiMedia Card slot, audio storage, and so on.

### NOTE

Software (e.g., drivers) required to exchange data with these devices. (Refer to the instructions manual provided with each SD compatible peripheral device.)

- Use as a memory card (e.g., use as a storage unit on which files can be written).

## About SDIO Card

Before using the SDIO card, the software attached to SDIO card has to be installed. For details, refer to the instructions manual provided with the SDIO card.

## Inserting/Removing a Card

### 1 Open the SD card\*/MultiMedia Card slot cover.

\*1 SD card includes an SD Memory Card and an SDIO card.

### 2 Inserting

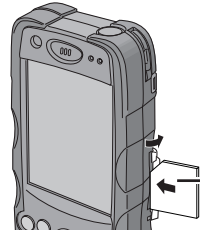
Slide the card in until it snaps into place as shown in the illustration.

- Make sure the labeled face of the SD card/MultiMedia Card is towards the front of the computer and then firmly insert the card. If you mistake the back side of the card with the top surface side, the card cannot be inserted all the way into the slot.
- Do not insert the card at an angle.

### Removing

- (1) Press the card. It will come out slightly.
- (2) Remove the card.

### 3 Close the SD card/MultiMedia Card slot cover.



SD card/MultiMedia Card Slot



### CAUTION

Before removing an SD card/MultiMedia Card or powering off CF-P2, check to see the SD card LED indicator whether CF-P2 is accessing the card. Such accesses are done intermittently for a short period of time. Be sure to remove the card or power off CF-P2 only after confirming that CF-P2 is not accessing the card. If the card is removed or CF-P2 is powered off during an access attempt, valuable data may be lost or CF-P2 may fail to work properly. With the SDIO card, in some cases access is not interrupted, so refer to the instructions manual provided with the SDIO card.

# Panasonic Backup

Using the backup function, you can back up data from the CF-P2 RAM to an SD Memory Card, MultiMedia Card, or Flash Storage, or restore data backed up on those storage area to the CF-P2 RAM.

## CAUTION



- The data in [Messaging] may not be backed up correctly. When you back up and restore data, some mail contents may be lost. If you need to save the mail data, leave it on the server.
- Do not do the following during the procedure:
  - Touching the power switch, any keyboard and touchscreen.
- Disable the connection with the host computer, for example by disconnecting the cable.
- Confirm that battery remaining is at least 50%, disable all power management, and stop any other programs that may be running.
- When backing up to an SD Memory Card, be sure to insert the SD Memory Card first, and wait for a moment, then start [Panasonic Backup]. (See below)

## NOTE

- Backup processing cannot be executed manually during Auto Backup or Auto Restore.
- We recommend that each media be formatted as shown below when backing up.

Media	Recommended Format
SD Memory Card	SD Format (use SD Formatter)
MultiMedia Card	FAT16
Flash storage	Not required.

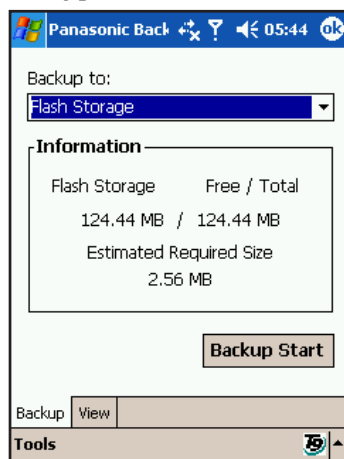
## Manual Backup

- 1 Reset CF-P2** (☞ page 61).
- 2 When backing up to an SD Memory Card, insert the SD Memory Card.**
- 3 Tap  - [Programs] - [Panasonic Backup] - [Backup] tab.**
- 4 Tap  to select the storage area to back up the data.**
- 5 Tap [Backup Start].**

If the warning message is displayed, select [YES] to confirm after carefully reading the message.
- 6 Input the Backup file name.**

Add a check mark for [Set Password] and set a password if required.
- 7 Tap [ok].**

Follow the on-screen instructions.  
The progress screen will be displayed. To stop the operation, tap [Abort].  
“Backup successful” will be displayed when the backup is complete. Tap [ok].






# Panasonic Backup

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## Auto Backup

**1** Tap  - [Programs] - [Panasonic Backup].

**2** Tap [Tools] on the command bar and select [Auto Backup Settings].

A warning message will be displayed. Tap [ok].

**3** Tap [File] tab.

(1) Tap  to choose the storage area for Auto Backup.

(2) Change the settings in [Settings].

### CAUTION

- If there is a check mark in [Stop other application before backup], some applications currently being executed may or may not save their active files, and may not shut down properly.

**4** Make a setting for Auto Backup.

- When making a setting at the time and day\*<sup>1</sup>:

(1) Tap [Schedule] tab.

(2) Add a check mark for [Scheduling backup].

(3) Set the time and day to back up at [Backup Schedule].

- When making a setting to start Auto Backup when the remaining battery power is low\*<sup>1</sup>:

(1) Tap [Battery] tab.

(2) Add a check mark for [Backup when battery is low].

(3) Set the threshold.

### NOTE

- If power is off, the amount of battery power remaining cannot be checked so that this function cannot work.

\*<sup>1</sup> [Scheduling backup] and [Battery] can be set simultaneously.

- When setting a password for backup files:

(1) Tap [Password] tab.

(2) Add a check mark for [Set Password].

(3) Set password for backup files.

**5** Tap [ok].

# Panasonic Backup

## Auto Restore

### 1 Full reset CF-P2 (☞ page 61 step (1) - (4)).

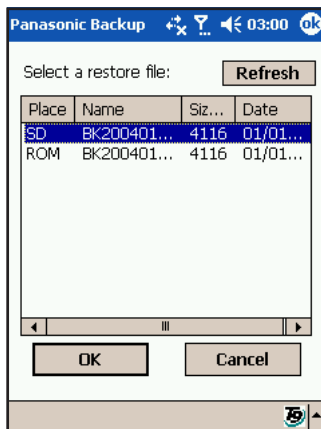
[Panasonic Backup] screen will be displayed.

### 2 Select a file for restore, and tap [OK].

If a password has been set, a message will be displayed.

Enter the password and press [OK]. Restore will start.

The progress screen will be displayed. When the restore is complete, CF-P2 resets automatically.




# Pocket Internet Explorer

You can connect to Internet service provider (ISP), and use the connection to send and receive e-mail messages and view Web or WAP pages.

## Getting Connected

The settings will vary for different network environments. Ask your system administrator or the person in charge of the network and make settings using the followings.

- 1 Tap  - [Settings] - [Connections] tab - [Connections] in order.
- 2 Set up or change connection information
  - On the [Tasks] tab:
    - (1) Tap one of the followings:
      - Add a new modem connection (My ISP)
      - Add a new modem connection (My Work Network)
      - Add a new VPN server connection (My Work Network)
      - Set up my proxy server (My Work Network)
    - (2) Enter the necessary information.
  - On the [Advanced] tab:
    - Tap [Select Networks], [Dialing Rules] or [Exceptions] and set up if required.

For details, tap  - [Help].

## To run Pocket Internet Explorer

Tap  - [Internet Explorer].



- Refresh Button
- Home Button
- Favorites Button

# Connecting to Your Computer

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Use Microsoft® ActiveSync® to synchronize a host computer and CF-P2 information, to transfer files between a host computer and CF-P2, or to backup and restore data.

## CAUTION

- To ensure that synchronization functions properly, install Microsoft® ActiveSync® 3.7 from companion CD into the host computer before connecting CF-P2 and the host computer for the first time.

## NOTE

- When Windows XP SP2 is installed in the host computer, when ActiveSync® is performed by USB connection or Bluetooth connection for the first time, a security warning message may be displayed. In this case, refer to Security Center Help. Some functions may be limited depending on the Firewall setting in the Security Center.
- If the opening screen of the companion CD is not displayed correctly, connect to the Internet and restart the companion CD.  
If the message to install the Macromedia Flash Player is displayed, follow the on-screen instructions to install it.

The USB cable can be used to connect the CF-P2 with a host computer.

## Installing ActiveSync®

---

### **1 Set the Companion CD into the host computer.**

The opening screen is displayed automatically.

- When the opening screen is not automatically displayed.

In [Start] - [Run], input [x:\setup] and select [OK].

(“x” is the drive letter. You can change the letter to suit your preference.)

### **2 Select [Start Here].**

### **3 Select [Install ActiveSync] and read the on-screen instructions and select [Install].**

### **4 At [Installation Message], select [OK].**

[File Download] will be displayed. This screen varies depending on the host computer’s software (e.g. Internet Explorer version).

- When [Run] is displayed on [File Download], select [Run]. If the confirmation message is displayed, select [Run] again.
- When [Open] is displayed on [File Download], select [Open].
- When [Run this program from its current location] is displayed on [File Download], select it and then select [OK].


### **5 At [Microsoft ActiveSync], select [Next].**

### **6 At [Select Installation Folder], select [Next].**

# Connecting to Your Computer


## 7 At [Get Connected], read the on-screen instructions and connect the CF-P2 with a host computer.

(Refer to page 38 to connect the CF-P2 with a host computer.)


- Change the setting for the host computer or CF-P2, depending on the connection to the host computer. For details, refer to the ActiveSync® Help of CF-P2, and also refer to Help displayed on the host computer during the installation.
- At the time of purchase, when the USB cable is connected, power is supplied to CF-P2 from the host computer. If you do not want power to be supplied, remove the check mark from [Supply power from PC by using USB] in  - [Settings] - [System] tab - [Power] - [Advanced] tab (☞ page 29).

## 8 At [Set up a Partnership], select the partnership and follow the on-screen instructions.

### NOTE

- To change the synchronization settings, tap, in order,  - [ActiveSync] - [Tools] - [Options]. Be sure to disconnect the cable when changing the synchronization settings.
- Disconnect and connect the cable again if communications do not start.
- For information about the Microsoft® ActiveSync®, refer to the Microsoft® ActiveSync® Help.

### CAUTION

- While performing communications, avoid the following:
  - Connect/disconnect the cable.
  - Turn on/off the CF-P2 and the host computer.
- When adding a check mark for [Use mobile schedule to sync with this PC] in  - [ActiveSync] - [Tools] - [Options] - [PC] tab of CF-P2, be sure to check that Microsoft® ActiveSync® can be connected (for example, when the host computer's power is on). If Microsoft® ActiveSync® can not be connected, a situation may arise whereby even when the CF-P2's power is switched off, only the power to the LCD turns off, but the power to the main unit remains on (input from the keyboard is still possible). In this case, enable the Microsoft® ActiveSync® connection, and synchronize with the host computer again. If this situation occurs frequently, remove the check mark from [Use mobile schedule to sync with this PC].

# Connecting to Your Computer

## Backup/Restore data using ActiveSync®

### Backup

- (1) At [Microsoft ActiveSync] on the host computer, select [Tools] - [Backup/Restore] - [Backup] tab.
- (2) Select [Full backup] or [Incremental backup] and then select [Back Up Now].
- (3) At [Backup Complete], select [OK].

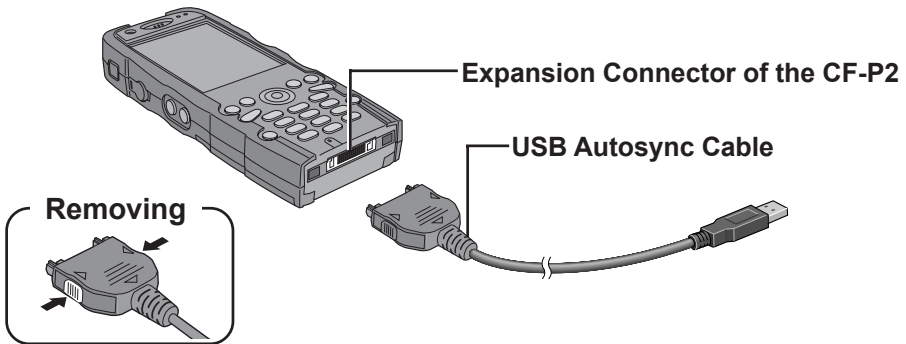
### Restore

- (1) After Backup procedure, at [Microsoft ActiveSync] on the host computer, select [Tools] - [Backup/Restore] - [Restore] tab, and select [Restore Now].
- (2) Follow the on-screen instructions and restore data.

## When Connecting the CF-P2 Directly with a Computer

### CAUTION

- To ensure that synchronization functions properly, install Microsoft® ActiveSync® 3.7 before connecting CF-P2 and the host computer for the first time.
- Turn off the CF-P2, the connected computer, and all connected peripherals before connecting or disconnecting the cable.



# Wireless Functions


The following wireless functions are in CF-P2.


- GSM/GPRS(Phone) (☞ page 40)
- Wireless LAN (☞ page 43)
- Bluetooth (☞ page 49)

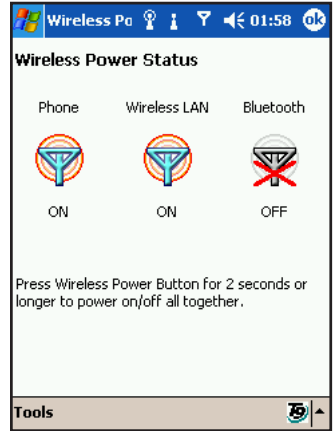
## Changing the Wireless Power Status

Display the screen on the right, and confirm the switching and status of the GSM/GPRS(Phone), Wireless LAN and Bluetooth power supply.

- 1 Turn on CF-P2.**
- 2 Lightly press the Wireless Power Button (within 0.5 seconds) to display [Wireless Power Status] screen.**

When also tapping  - [Programs] - [Wireless Power], [Wireless Power Status] is displayed.

If you change the program button assignment in  - [Settings] - [Personal] tab - [Buttons], [Wireless Power Status] screen cannot be displayed.



- 3 Tap the icon for the function that you want to turn ON/OFF. The icon will change as follows.**

 Power is on.

 Power is off.

### NOTE

- The wireless power status may not be able to change immediately after the computer resumes operations.
  - When turning a wireless function on/off, the wireless power status cannot be changed even if you press the Wireless Power Button for two seconds or more.
- How to turn the Wireless power on/off using the Wireless Power Button**

Display [Wireless Power Status] screen, and press the Wireless Power Button (☞ page 5) more than 2 seconds.

    - When there are wireless functions turned on, if you press the Wireless Power Button for two seconds or more, all the wireless functions turned on will switch off. After that, pressing the Wireless Power Button again for two seconds or more will turn on any wireless function that were previously turned off. In this operation, only wireless functions that were originally turned on will be returned to the “on” status.


# Wireless Functions

## Setting Up the Remote Network for GPRS

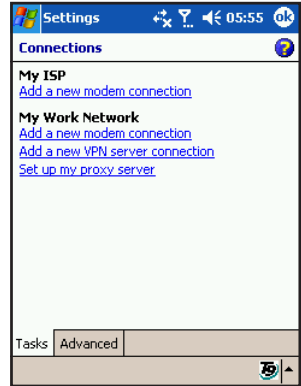
The settings may vary with the local service provider. This information has to be requested from the local provider. (The following sample screenshots illustrate the setup procedure.)

**1 Turn your computer on** (☞ page 11).

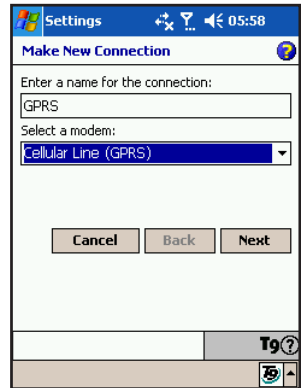
### 2 Set up the Remote Network.

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

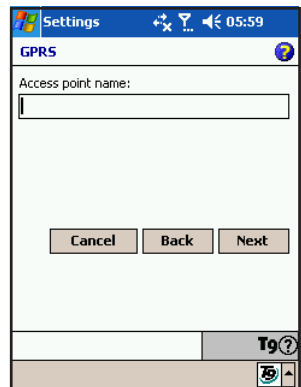
(2) Tap [Add a new modem connection] at [My ISP].



(3) Enter the suitable connection name and then select [Cellular Line (GPRS)] at [Select a modem:], then tap [Next].



(4) Enter Access point name.

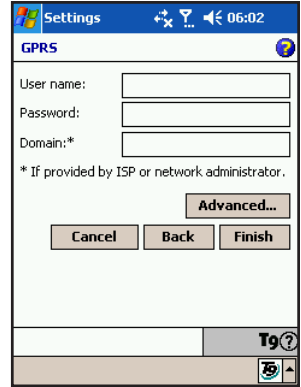


(5) Tap [Next].




# Wireless Functions

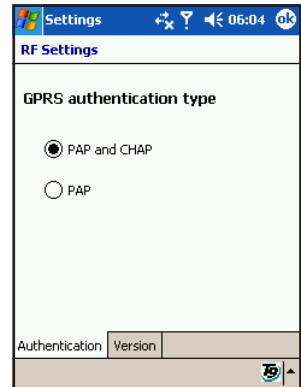
- (6) Enter the user name and password, and enter domain if provided by ISP or network administrator.  
(Check with your network manager or the operator for the SIM you are using to confirm the information to be requested).



- (7) Tap [Finish].

## 3 Set up the authentication type.

- (1) Tap  - [Settings] - [Connections] tab - [RF Settings].
- (2) Tap [Authentication] tab.  
Select [PAP and CHAP] or [PAP].



- (3) Tap [ok].

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

- Select [Cellular Line] instead of [Cellular Line (GPRS)].
- Set the number.
- Set the user name, password and the domain for the requested ISP.

# Wireless Functions

## 4 Connect /Disconnect to GPRS network

### ● Connecting

Make sure that one of the five icons (📶, 📶, 📶, 📶, 📶) is displayed on the navigation bar.

Tap **G** to display the Connectivity bubble (A).

Make sure that the name of the setting in step 2 (3) (☞ page 40) is displayed and tap [Connect GPRS].

The connection will start.

### ● Disconnecting

Tap **G** to display the Connectivity bubble and tap [Disconnect].



### NOTE

- When pressing the ON Hook (End) Button, the GPRS network is also disconnected.

- 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.

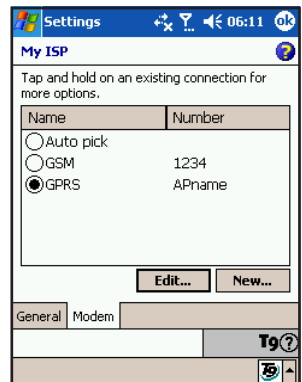
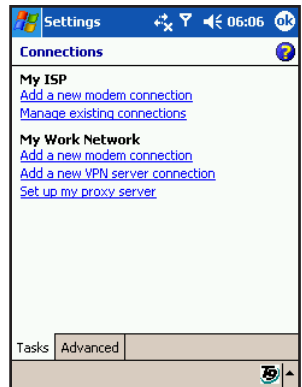
(1) Tap **G** or **+** on the navigation bar then tap [Settings] - [Connections] tab - [Connections] to display [Connections] screen\*1.

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

(2) Tap [Manage existing connections]\*2 at [My ISP].

\*2 This appears after setting the remote network (☞ page 40-41).

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



# Wireless Functions

## Connecting to Wireless LAN

### NOTE

- Wireless LAN communications are done via an antenna. Do not shield this antenna with the hand, etc. This will negatively effect the performance of your wireless LAN communications.

After finishing the first-time operation, make a connection setting for Wireless LAN using the following procedure.

### ● Automatic network detection

A connection manager periodically scans wireless networks for available connections. If any networks are detected and no networks are connected yet, the connection manager will try to connect with a more favorable network first. If such a network cannot be used or the connection manager cannot connect with any suitable network due to an invalid WEP key, the connectivity bubble (A) is displayed for manual network connection. (☞ below)

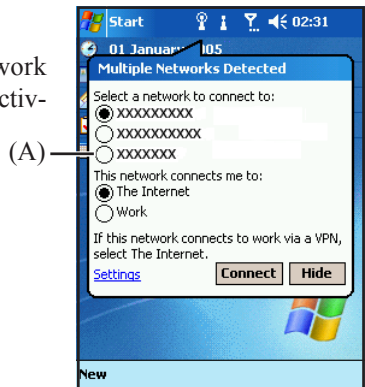
If you don't see the suitable network, tap [Settings] (☞ page 44, step (3)) to display the detailed configuration window.

### NOTE

- If the connection manager is able to connect to a network automatically, the connectivity bubble (☞ below) will not appear, and you can follow the steps described in page 44 step (3) to access the connection manager.

### ● Connect to a Wireless LAN


- (1) Select a network to connect to and what the network will connect to, then tap [Connect] from the connectivity bubble.

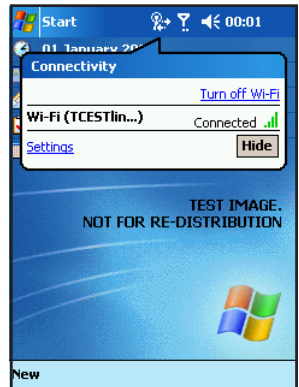


# Wireless Functions

- (2) If the connectivity bubble pops up as shown at right, enter the WEP key, then tap [Connect].

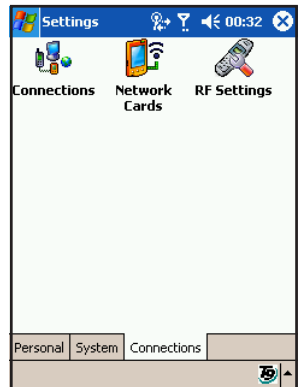


- (3) Tap  to display the connectivity bubble.



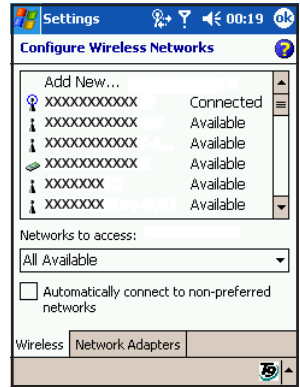
- (4) Tap [Settings] - [Network Cards]\*1.

\*1 You can also tap  - [Settings] - [Connections] tab - [Network Cards].

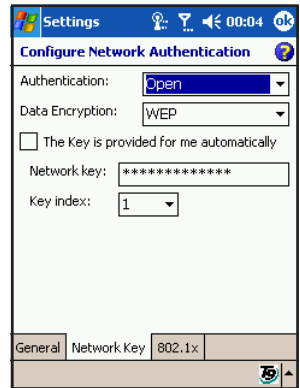


# Wireless Functions

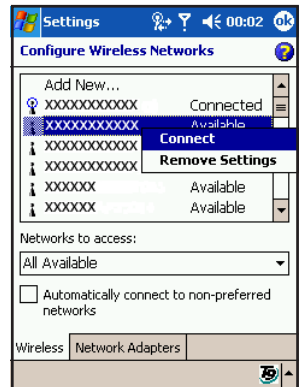
- (5) At [Networks to access], select [All Available] or [Only access points].
- (6) Tap on the access point you want to connect to from the list.  
[Configure Wireless Network] screen will appear.



- (7) Tap [Network Key] tab and select [Authentication].  
If WEP is enabled:  
Select [WEP] at [Data Encryption].  
Enter the key string in [Network key] and select [Key index], then tap [ok].  
If WEP is not enabled:  
Tap [ok] to return to the previous screen.

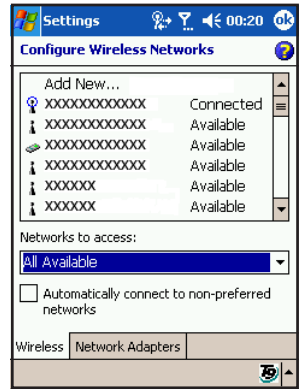



- (8) Tap and hold on the access point you want to connect to, and tap [Connect] on the popup menu.



# Wireless Functions

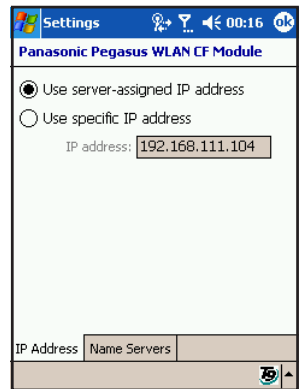
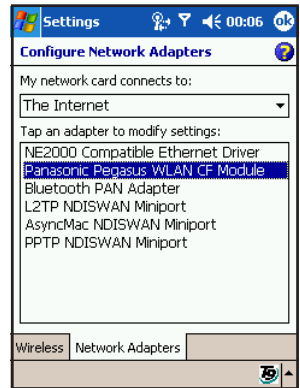
(9) The screen will be updated to show the new connection.



(10) If the CF-P2 is not connected with a host computer via a sync cable, then  on the navigation bar normally indicates the Wireless LAN connection is properly established.

You can also check on [Network Adapters] tab to check if the IP address obtained from DHCP is correct.

(11) Tap [Panasonic Pegasus WLAN CF Module] to see the IP address information.

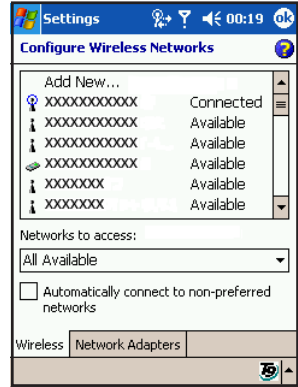


# Wireless Functions

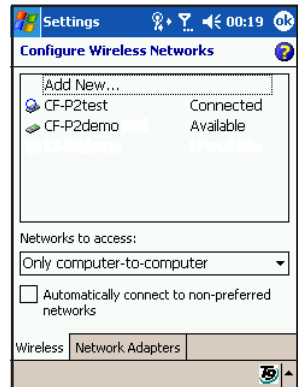
## ● Peer to peer mode

The Peer-to-peer mode is also known as the “Ad-Hoc” mode. There are two ways to connect CF-P2 with other devices in the peer-to-peer mode. The first way is to create an Ad-Hoc network on CF-P2, then allow other devices to connect to CF-P2 by joining the network. The second way is simply by connecting CF-P2 to an existing ad-hoc network if the peer device has already created such a network.

- (1) Display [Configure Wireless Networks] screen (☞ page 44 step (4)). At [Networks to access], select [Only computer-to-computer].

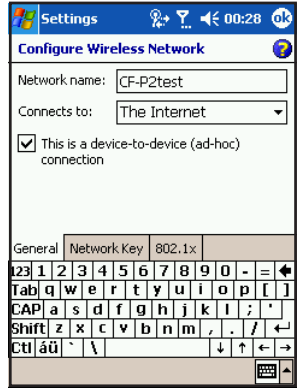


- (2) Select [Add New... ] from the list.



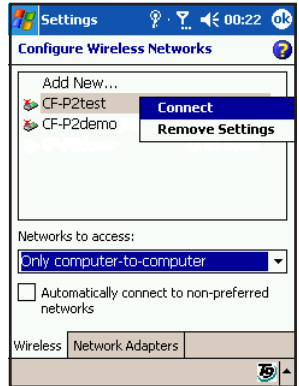
# Wireless Functions

- (3) Type in the network name in [Network name] (CF-P2test, for example). Then add a checkmark for [This is a device-to-device (ad-hoc) connection]. Ad-hoc channel is assigned automatically.

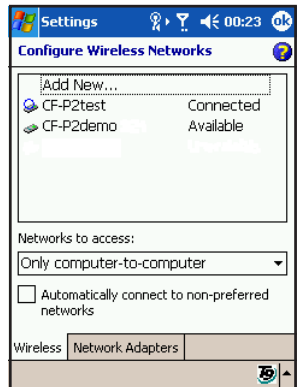


- (4) Tap [ok] to return to the previous screen.

- (5) Tap and hold the network name and tap [connect].



- (6) Now the new ad-hoc network has been created, and it is visible to other Wireless LAN devices. CF-P2 is connected to the ad-hoc network.





# Wireless Functions

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## Connecting to Bluetooth Devices

---

Bluetooth is a technology which enables wireless communication. With Bluetooth, you can access internet or exchange data with other Bluetooth devices (e.g., computer, mobile phone, access point) without connecting cables.

### Bluetooth Specification

- Bluetooth Specification V1.2 Compliant
- Power class: Class 1
- Point to point connection

### Bluetooth Services

- Serial Port Profile (Client and Server)
- Object Push Profile (Client and Server)
- File Transfer Profile (Client and Server)
- Headset Profile (AG and HS)
- Dial-up Networking Profile (Client)
- LAN Access Profile (Client)
- Personal Area Network Profile (User)
- Hands free Profile (AG)

### CAUTION

- Communications are conducted via a Bluetooth antenna (☞ page 6). Do not do anything to block the radio waves, for example by obstructing the antenna segment with your hand.

### NOTE






- Communication speeds and distances may vary depending on surrounding conditions, such as the other device sending or receiving communications and the installation environment.
- It is a characteristic of radio waves that communication speeds will tend to decrease as the communication distance increases. We recommend that communications between Bluetooth devices be conducted in as close proximity as possible.
- Communication speeds may decrease if a microwave oven is being used nearby.

## ● Serial Port Type ActiveSync®

### ● Setting with the host computer

- (1) Conduct steps **1** to **7** to install ActiveSync® (☰ page 36).  
After step **7**, at [Set up a Partnership], select [Guest partnership] and follow the on-screen instructions.
- (2) After completing installation of ActiveSync®, disconnect the cable.
- (3) On the ActiveSync® screen, select [File] - [Connection Settings].
- (4) Add a check mark for [Allow serial cable or infrared connection to this COM port:].
- (5) Select the same number for the COM port displayed as the following procedure.  
Select [start] - [All Programs] - [My Bluetooth Places], then select [Bluetooth] (displayed under the title bar) - [Advanced Configuration] - [Local Services] - [Bluetooth Serial Port].
- (6) Restart the computer.

### ● Setting with the CF-P2

- (1) Make sure that Bluetooth is powered on.
- (2) Tap  - [Programs] - [Panasonic Bluetooth] - [My Device] - [My Services].  
Be sure to remove the check mark from [Network Type ActiveSync], and add a check mark for [Serial Port Type ActiveSync], then tap [OK].
- (3) Tap  on the command bar to return to the previous screen.
- (4) Tap  (Refresh Button) on the command bar to search for devices within range.
- (5) Tap on the host computer that is going to be connected.
- (6) Tap and hold [Bluetooth Serial Port] and tap [Use to connect for ActiveSync].  
If you use ActiveSync® via a USB Autosync cable, tap  or  - [Disconnect] on the command bar to disconnect the Bluetooth connection.
- (7) Enter the PIN code.  
After entering the passkey in CF-P2, a message will appear in the host computer, indicating that Bluetooth PIN code is required. Follow the on-screen instructions in the message and enter the same code in the host computer.

#### NOTE

##### **PIN Code (= passkey)**



A PIN Code is a password for which you can set up to 16 alphanumeric characters. When establishing security settings, the PIN Code for the device to be connected (slave) must be the same as the PIN Code for the device where the connection originates (master).

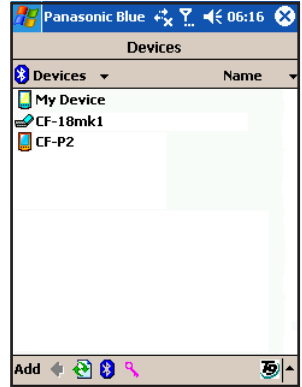
- (8) Synchronization will start in ActiveSync®.


# Wireless Functions

## ● Establishing the Bluetooth Connection by Opening the COM Port



Use this setting when using Bluetooth intermittently (i.e. Printer application).

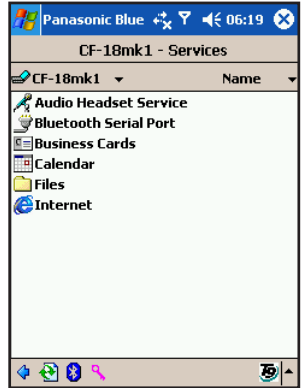
- (1) Make sure that Bluetooth is powered on.
- (2) Tap, in order,  - [Programs] - [Panasonic Bluetooth].
- (3) Tap  (Refresh Button) on the command bar to search for devices within range.
- (4) Tap the target device from a device list.




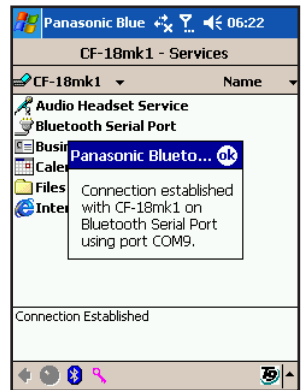
- (5) Tap  (This icon indicates a serial port) from a service list to connect the target device via the serial port.

### NOTE

If  (ActiveSync® icon) is displayed at [Bluetooth Serial Port], tap and hold [Bluetooth Serial Port] and then tap [Do not use to Connect to ActiveSync] to display .



- (6) This message at right will be displayed.  
Tap [ok] and tap  on the command bar to disconnect the Bluetooth connection.
- (7) Start an appropriate software. (i.e. printer application)
- (8) Set the COM port to COM9 (default).
- (9) Open the COM port using the software.  
The Bluetooth connection with the target device will be automatically established.




### NOTE

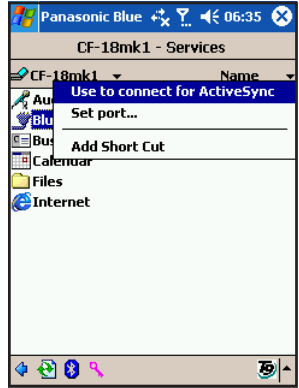
CF-P2 can be connected to the device from next time without the need to set steps (1) to (6) again.

# Wireless Functions

## ● Establishing the Bluetooth Connection by setting 'Auto Connection'

Use this setting when using Bluetooth continuously after starting up CF-P2 (i.e. GPS application).

- (1) Refer to page 51 and conduct steps (1) to (4).
- (2) Tap and hold  (This icon indicates a serial port) from a service list.
- (3) Tap [Add Short Cut] to set a short cut.



- (4) Tap  on the command bar and then, tap [Auto Connection].




- (5) Tap the target device.  
After starting up Panasonic Bluetooth next time, the Bluetooth connection with the target device will be automatically established.




# Dialer and Telephony

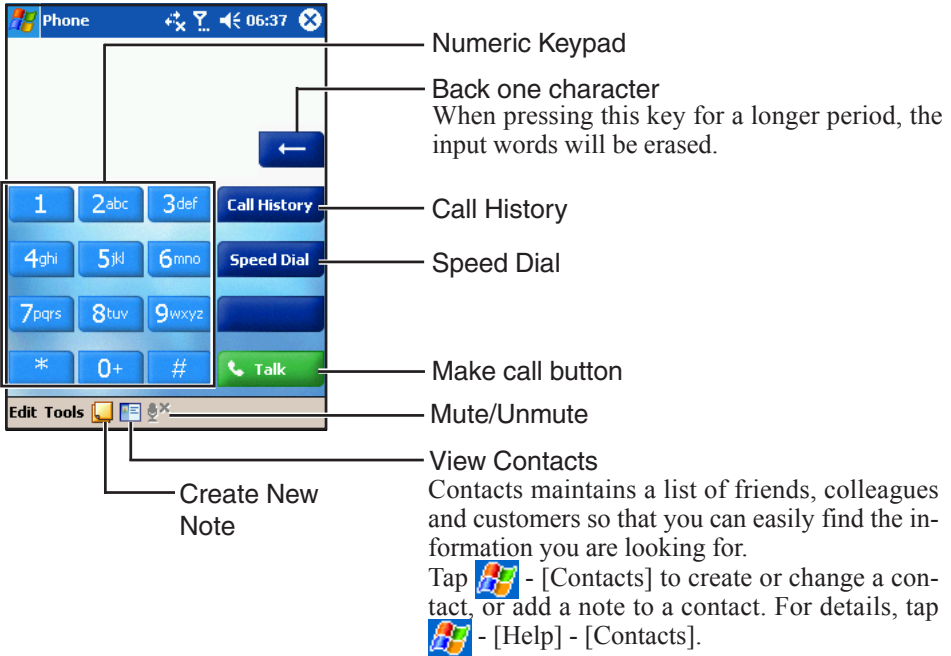
You can send and receive phone calls or messages using CF-P2. This section explains Messaging, phone settings, and how to make and receive phone calls.

For details, tap  - [Help] - [Phone].

 (Off Hook (Talk) Button) : If pressed when the [Phone] screen is not displayed, the [Phone] screen will be displayed. If pressed when the [Phone] screen is displayed, you can send a call.

 (On Hook (End) Button) : When pressed during the call, the call is hung up. When using this in other cases, [Today] screen is displayed.

Press  or tap  - [Phone] to display the [Phone] screen shown below.



## NOTE

If you cannot adjust the volume by tapping  on the navigation bar when making and receiving calls, press the Volume Up/Down Buttons.

# Dialer and Telephony

---

## Setting of the phone

---

Tap  - [Settings] - [Personal] tab - [Phone].

- [Phone] tab: Select the type and tone of ring or vibration you want to receive for an incoming call. Choose to hear touch tones or beeps when you press the keyboard.  
You can also protect your phone from unauthorized use. For security, add a check mark for [Require PIN when phone is used].
  - When inputting the PIN code, if the [Cancel] button is tapped, the Phone function cannot be used. To use the Phone function, perform the following.
    - Press the Wireless Power Button to display [Wireless Power Status] and tap [Phone] to turn the power off. Tap [Phone] again to turn the power on.
- [Service] tab: Set for Call Barring, Caller ID, Call Forwarding, Call Waiting, Voice Mail and SMS.
- [Network] tab: Select [Automatic] to seek out available networks or select [Manual] to select them yourself.
- [More] tab: Select time before answering incoming calls automatically. (Only use when connected to a headset or car kit.) Also, set whether system sounds will be muted during phone calls.

# Dialer and Telephony

## Making calls




You can make phone calls using any of the following four methods.

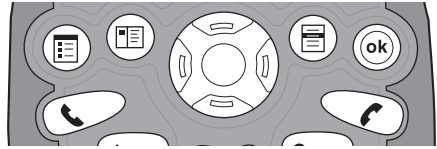
- Using the keyboard
- Using Speed Dial
- From Call History
- From Contacts

For details, tap  - [Help] - [Phone].


The phone function starts when you press a number key if the [Today] screen is displayed.

### ● Using the keyboard



- 1 Press  to display [Phone] screen ( page 53).
- 2 Enter a phone number using the numeric keypad.
- 3 Press .





### ● Using Speed Dial

You need to add Speed dial before using this function ( page 57).



#### • Using a keyboard

- 1 Press  to display [Phone] screen ( page 53).
- 2 Press the registered number for more than one second.

#### • Using cursor control


- 1 Press  to display [Phone] screen ( page 53).
- 2 Press the down cursor control to display [Speed Dial], and select a phone number using up/down cursor control.
- 3 Press center of the cursor control.



### ● From Call History

- 1 Press  to display [Phone] screen ( page 53).
- 2 Press the up cursor control to display [Call History], and select a phone number using up/down cursor control.
- 3 Press center of the cursor control.

# Dialer and Telephony

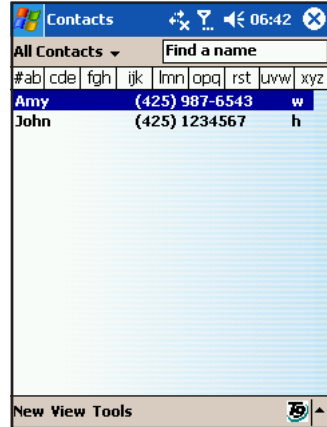
## ● From Contacts

Tap  - [Contacts] (👉 page 53).

You can also display Contacts by pressing  and tap .

Tap and hold on the person you want to call, and tap the field from work, home or mobile phone number you want to call. (depending on which fields have been filled in.)


Tap on the person you want to call; you can then select a number from among those displayed, and tap on the number you want to call.

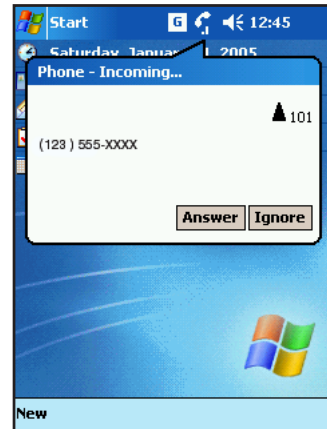


## Receiving calls

When receiving a call, the phone will ring and/or vibrate as configured, and a notification bubble will pop up with caller-ID information.

When you answer the phone, press  or tap [Answer].

When you ignore the phone, press  or tap [Ignore].



## Messaging


You can receive Internet e-mail messages and text messages in Messaging. Internet e-mail messages are sent by using an address you receive from your Internet service provider (ISP) or your employer. Text messages are sent and received through your wireless phone service provider by using a phone number as the message address.

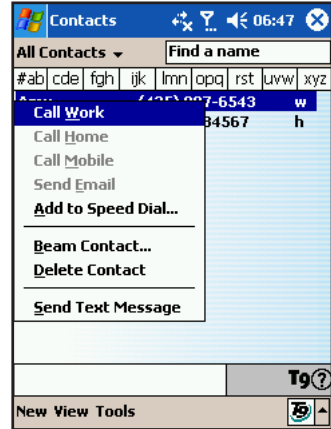


# Dialer and Telephony

## To add Speed Dial

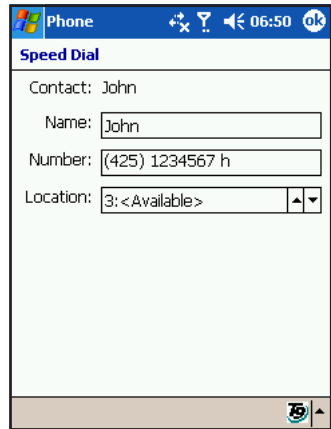
### ● From Contacts

- (1) Tap  - [Contacts], and tap and hold the contact who you want to add.
- (2) Tap [Add to Speed Dial...].  
Change the settings if required, and tap [ok].







### ● From Phone

- (1) On the [Phone] screen, tap [Speed Dial] - [New].
- (2) Tap one of the contacts who you want to add.  
Change the settings if required, and tap [ok].



## Speaker Phone


If  is pressed down for more than 2 seconds during a phone call, it becomes a speaker phone. To return to previous setting, press  more than 2 seconds again.\*<sup>1</sup>

- When the speakerphone is on,  will appear on the navigation bar and the message [Speaker phone is on] will appear.
- When a speakerphone is off,  will disappear from the navigation bar and the message [Speakerphone is off] will appear.

\*<sup>1</sup> When connected to such an external audio device as a Bluetooth headset, car kit, etc., the speakerphone will not work.

# Customizing the Computer

---

If you want information on the various individual settings of the computer, tap  - [Settings] and then tap the item (icon) you want to check.

(For details, tap  - [Help] - [Settings].)

## Personal

---



### Buttons

#### Buttons

Program buttons and the cursor control settings.



### Input

#### Input

Input panel (soft keyboard or letter recognizer, etc.) settings.



### Menus

#### Menus

Select programs to be displayed in , or items to be displayed in [New] in the Today screen.



### Owner Information

#### Owner Information

Registration (or changing) of the user's (owner's) personal information. You can choose to display the registered owner information on the screen when CF-P2 is turned on.



### Password

#### Password

Password enable/disable, and a password hint setting.

If a password is set, it has to be input in order to open the password screen. When the wrong password is input four times, the set hint is displayed. At times certain characters, such as á and ü, cannot be input from the numeric keypad. Use the soft keyboard.



### Phone

#### Phone

Customize phone settings, such as the ring type and ring tone to be used for incoming calls, and the numeric keypad tone to be used when entering phone numbers. You can also protect your phone from unauthorized use.



### Sounds & Notifications

#### Sounds & Notifications

Operation sound setting.

Specific sound settings to be generated in a wide range of situations.



### Today

#### Today

Desktop display setting.

# Customizing the Computer

---

## System



### About

#### About

Display of release version and copyrights, and device ID setting.



### Audio

#### Audio

Mute car audio when playing sound\*<sup>1</sup>. Select the check box to use Headset/Headphone\*<sup>2</sup>, using built-in microphone. On [Record] tab, select [Use ALC] radio button when you use Automatic Level Control (ALC), or select [Manual] radio button and move the slider to select the record gain level.

\*<sup>1</sup> Use this setting when installed to the car kit (sold separately).

\*<sup>2</sup> This setting does not apply to Bluetooth headset.



### Backlight

#### Backlight

LCD backlight timeout function, tap-induced backlight on and LCD brightness adjustment manually or automatically.



### Certificates

#### Certificates

Add and delete personal certificates and root certificates.



### ClearType Tuner

#### ClearType Tuner

Make a text clear by moving the slider.



### Clock & Alarms

#### Clock & Alarms

Time/date settings and alarm settings.



### Memory

#### Memory

Computer memory assignment possible (assignment of memory for data memory and memory for program execution). Display of total storage card memory if it is installed. Activate or stop the running programs.



### Power

#### Power

Current battery charge status and automatic power off time setting, and set the power supply from PC by USB cable when using ActiveSync®.



### Regional Settings

#### Regional Settings

Display methods of the region, number system, currency, time, and date.

# Customizing the Computer

---



## Remove Programs

### Remove Programs

Remove programs in storage memory.



## Screen

### Screen

Screen orientation. Touchscreen alignment (☞ page 18), ClearType and text size settings.

## Connections

---



## Connections

### Connections

Internet connection and Intranet connection settings (☞ page 35).



## Network Cards

### Network Cards

Set up a wireless network.



## RF Settings

### RF Settings

Select a radio button for GPRS authentication with [Authentication] tab. You can confirm the radio driver version and stack version with the [Version] tab.

## NOTE

CF-P2 does not support IrDA. For example, the connection will not work even if you select [Beam File...] from the Context menu.

# Dealing with Problems

## Resetting Your Computer

When the computer fails to respond to an operation, reset your computer. There are two methods for resetting the computer.

### CAUTION

Use only the provided stylus to push in the reset switch.

Do not push the reset switch with any other sharp-pointed objects, i.e. pencils, and ball point pens. The reset switch or other parts may become damaged.

### NOTE

- After resetting CF-P2, it takes maximum 30 seconds until CF-P2 can be used again.

### Performing a Reset

This selection saves all stored records and entries and then restarts the computer.

Unsaved data in open windows may be lost.

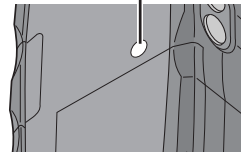
If possible, turn off the computer and push the center of the reset switch straight in.

Push the reset switch within 1 second using the stylus.

Resetting the computer may cause the clock to malfunction.

After resetting the computer, check the time and correct the clock settings if necessary.

Reset Switch



### Performing a Full Reset


This selection erases all stored records except for Flash storage and entries and then restarts the computer.

Therefore, never perform a full reset unless a reset does not solve your problem.

- (1) Using the provided stylus (☞ page 17), push the center of the reset switch straight in for 1 second while holding down on the power switch (☞ page 12).
- (2) Tap the screen to set up your Pocket PC.  
The Windows alignment screen is displayed.
- (3) Align the touchscreen (☞ page 18 step 2).
- (4) At [complete], tap the screen to begin using CF-P2.

If the [Panasonic Backup] screen is displayed, follow the on-screen instructions.

- (5) Set the time and date.

Tap  - [Settings] - [System] tab - [Clock & Alarms] to set the time and date, and tap [ok].

# Dealing with Problems

---

## Troubleshooting

---


### Starting Up

---

**CF-P2 does not turn on. Or, there is no display when CF-P2 is turned on.**

- Check to see if a fully charged battery pack is properly installed.
  - The power does not go on unless the Fast Travel Charger is connected:  
The battery level is too low. Charge the battery with the Fast Travel Charger. (Make sure that the battery never discharges completely and that it is charged periodically.)
  - Push the reset switch to restart CF-P2.
  - If the power does not turn on when the above operations are performed, the battery pack must be replaced.
- 


**The date and time are incorrect.**

- You can set the date and time through [Clock & Alarms] in  - [Settings] - [System] tab.  
If you continue to experience problems, the backup battery maintaining the clock may need to be replaced. Contact Panasonic Technical Support.
  - This computer will not correctly recognize the date and time starting from the year 2085 A.D.
- 

**CF-P2 shuts down automatically.**

- The battery level may be too low. If the battery level goes below a certain threshold, CF-P2 automatically shuts down. In such cases, connect the Fast Travel Charger and charge the battery. (After the Fast Travel Charger is connected to CF-P2, it may take a maximum of 20 minutes before CF-P2 can be turned on.)
  - The computer may have entered a locked state. If this is the case, connect the Fast Travel Charger and push the reset switch. Check the remaining battery level and make sure that multiple applications are not running simultaneously. Close all applications that are not being used.
- 

**The data cannot be copied.**

- The computer may be turned off automatically when using File Explorer. To prevent this, change the time setting to a longer time in  - [Settings] - [System] tab - [Power] - [Advanced] tab.
- 

### Application Software

---

**The computer locks up during the execution of an application, or the execution speed becomes noticeably slower.**

- Connect the Fast Travel Charger and push the reset switch. Check the remaining battery level and make sure that multiple applications are not running simultaneously. Close all applications that are not being used.
-


# Dealing with Problems

---

## Display

---

**It is hard to view the LCD.**

- The LCD backlight may have automatically turned off due to the power-saving function. Turn on the LCD backlight by holding down the power switch until the backlight goes on.
  - Adjust the backlight brightness.
    - 1 Tap  - [Settings] - [System] tab - [Backlight].
    - 2 Tap the [Brightness] tab and adjust the brightness with the slider.

Move the upper slider to select the LCD backlight brightness level. By using the lower slider, you can make minor adjustments when LCD backlight has been automatically dimmed.

You can not adjust the brightness while automatic backlight settings are used. Remove the check marks from [Advanced] tab and adjust the brightness with the slider.
  - When the CF-P2 is operated under battery power, if the remaining battery power is low, the backlight will dim. At that time, connect the Fast Travel Charger and recharge the battery.
- 


**The cursor cannot be controlled.**

- Push the reset switch to restart.
- 

**The cursor does not properly correspond to a stylus tap.**

- Align the screen ( page 18).
- 

**Even when the CF-P2's power is switched off, only the power to the LCD turns off, but the power to the main unit remains on (input from the keyboard is still possible).**

- Enable the Microsoft® ActiveSync® connection, and synchronize CF-P2 with the host computer. If this situation occurs frequently, tap  - [ActiveSync] - [Tools] - [Options] - [PC] tab to remove the check mark from [Use mobile schedule to sync with this PC] and reset.
- 

## Connecting a Host PC

---

**A host computer does not recognize CF-P2.**

- Confirm that Microsoft® ActiveSync® 3.7 (or a later version) has been installed in the host computer.
  - Check to see if a fully charged battery pack is properly installed to CF-P2.
  - Confirm that CF-P2's power is on.
  - Push the reset switch to restart.
  - If a cable is being used for the connection, recheck the connection to the host computer.
-

# Dealing with Problems

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## Connecting Peripherals

---

- Peripheral is not recognized even after driver is installed.**
- Remove cards or other peripherals, and push the reset switch.
- 

## Network

---

- Cannot connect to the network.**
- Check the server information and network settings.
- 

## Sounds

---


- Quality of recorded sound is poor.**
- Tap  - [Settings] - [Personal] tab - [Input] - [Options] tab - [Voice recording format], and select a higher frequency.
- 

- Noise in recording or playback sound.**
- If a load is applied during recording or playback, for example when the SD Memory Card is disconnected or connected, then noise in the recording or playback will result. In this event, stop the recording or playback, and restart after closing other applications.
- 

- A music file cannot play back.**
- Some music files may not be able to play back.
- 

## Program Buttons

---

- The program assigned to the button does not start.**
- When the program display of a start menu is changed after assigning a program, if you press a button, that program may not start. In that case, tap  - [Settings] - [Personal] tab - [Buttons] - [Program Buttons] tab, and re-assign the program.
- 

## Phone

---

- Phone function is disabled automatically.**
- When the remaining power in the battery discharges, the Phone function may turn off suddenly. (In this case, “Phone function is disabled. Please re-charge the battery.” is displayed.)
- 

- The phone ringer stops.**
- If the Volume Up/Down Button is pressed while the phone is ringing, the phone ringer will stop.
- 

## Bluetooth

---

- When connection or communication with Bluetooth is not smooth.**
- Turn the Bluetooth function off and then turn it on again. If this function still does not work properly, reset the CF-P2 and turn the Bluetooth on.
-




# Dealing with Problems

## Diagnostic Tool

You can use the Diagnostic Tool to check the CF-P2's usage status, and use this information when calling your technical support office for advice.

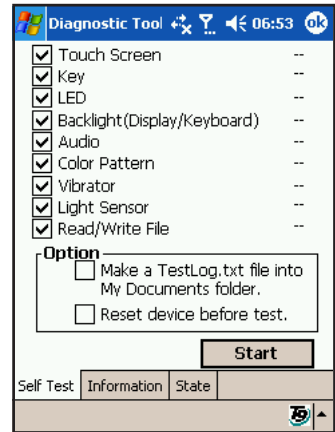
### 1 Start the Diagnostic Tool.

Tap  - [Programs] - [Diagnostic Tool] - [Self Test] tab.

The screen shown at the right will be displayed.

### 2 Add the check mark for the item you want to check.

[Option]: If you add the check mark for [Make a TestLog.txt file into My Documents folder], the check result is output to the file. If you add the check mark for [Reset device before test], CF-P2 will reset before starting the check.



### The following items will be checked.

#### • Touch Screen

No deviation between display coordinates and stylus coordinates.

#### • Key

Hardware buttons are functioning properly. Numeric keypad is functioning properly.

#### • LED

Three LEDs are flashing or lit (confirm each LED).

#### • Backlight

LCD backlight and keyboard backlight control.

#### • Audio

System alarm sounds correctly. Sound is recorded correctly from the microphone, and played back from the receiver or speaker.

#### • Color Pattern

Color patterns are displayed correctly.

#### • Vibrator

Vibrator operates correctly.

#### • Light Sensor

Light sensor operates correctly.

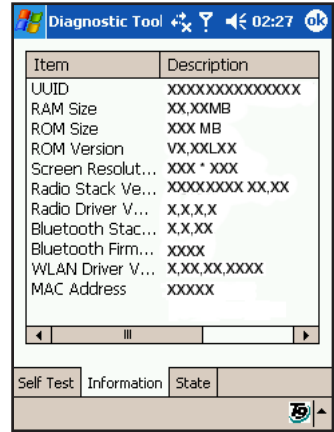
#### • Read/Write File

Files are read and written correctly (RAM/SD/Flash).

# Dealing with Problems

- Tap [Information] tab.

The device information is displayed.

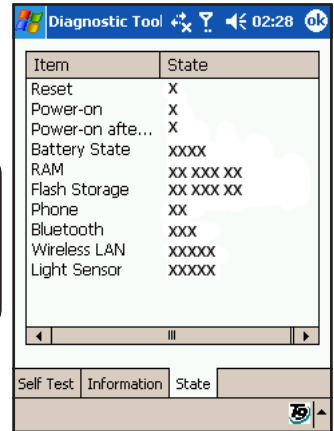


- Tap [State] tab.

Information indicating the CF-P2's usage status is displayed.

**NOTE**

- Status information is given before the Diagnostic Tool starts. If the status has been changed since the Diagnostic Tool was turned on, the change will not be displayed.

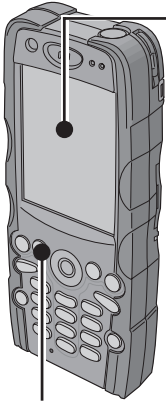


### 3 Tap [Self Test] tab - [Start].

Each item is checked in order; when the check is complete, CF-P2 is automatically reset.

# For Effective Use

## Maintenance



### LCD

Do not use water when cleaning the panel. Ingredients included in water may leave residue and reduce readability of the screen.

<When cleaning dust/dirt>

Avoid rubbing off dust/dirt with cloth since it may leave scratch on the screen.

Sweep dust/dirt with fine brush, then wipe it with “dry” soft cloth used for cleaning glasses.

<When cleaning oily surface>

Apply camera lens cleaner on a soft gauze and clean it with gentle force. Then, wipe with dry soft cloth used for cleaning glasses.

### Areas excluding the LCD

Wipe these areas with a soft cloth, after applying water or detergent diluted with water to the soft cloth and firmly wringing out excess water.

### CAUTION

- Do not use benzene, thinner, or rubbing alcohol. Doing so may adversely affect the surface, e.g., discoloration. In addition, do not use commercially-available household cleaners and cosmetics, as they may contain components harmful to the surface.
- Do not directly add or spray water or detergent. If liquid enters the inside of the computer, it may cause the computer to work improperly or be damaged.

# Specifications

## ● Main Specifications

<b>Model No.</b>		CF-P2T1FDF7E	
<b>CPU</b>		Intel® PXA270, 312 MHz Instruction Cache Memory: 32 KB Data Cache Memory: 32 KB	
<b>Memory (RAM/ROM)</b>		64 MB / 128 MB (Flash)	
<b>Video Memory</b>		150 KB	
<b>LCD</b>	<b>Type</b>	2.83 QVGA type (Transflective color TFT with backlight)	
	<b>Displayed Colors</b>	65536 colors (240 x 320 dots)	
<b>Keyboard</b>		20-key numeric keypad	
<b>Pointing Device</b>		Touchscreen, Cursor Control	
<b>Slots</b>	<b>SD Card Slot</b>	SD Memory Card/SDIO card/MultiMedia Card	
<b>Interface</b>	<b>Headset Jack</b>	Miniature jack, 2.5 DIA	
	<b>USB Host</b>	USB 1.1, 12Mbps	
<b>Speaker</b>		Monaural Speaker	
<b>Microphone/Receiver</b>		Built-in for supporting as Mobile Phone	
<b>Sound</b>		16-bit Stereo ADC/DAC, Sample Rate 48 kHz (When using a stereo headset)	
<b>Battery</b>	<b>Battery Pack</b>	Li-ion 3.6 V, 1.95 Ah	
		Operating Time* <sup>1</sup>	Approx. 8 hours - 12 hours
		Talk Time* <sup>1</sup>	Approx. 4 hours (Backlight Off)
		Charging Time* <sup>1</sup>	(Power Off) Approx. 4 hours (Power On) Varies depending on the usage conditions.
	<b>Sub-Battery</b>	Ni-MH Rechargeable Backup Battery	
<b>Fast Travel Charger</b>	<b>Input</b>	100 V - 240 V AC, 50 Hz/60 Hz	
	<b>Output</b>	5.8 V DC, 0.7A	
<b>Power Consumption*<sup>2</sup></b>		Approx. 3.7 W* <sup>3</sup> / Approx. 5 W (maximum when re-charging in the ON state)	
<b>Operating System</b>		Microsoft® Windows Mobile™ 2003 Second Edition software for Pocket PC, Premium with Phone Edition	
<b>Environment</b>		<b>Operation</b>	Temperature 5 °C to 35 °C {41 °F to 95 °F} Humidity 30 % to 80 %RH (No condensation)
		<b>Storage</b>	Temperature -20 °C to 60 °C {-4 °F to 140 °F} Humidity 30 % to 90 %RH (No condensation)

\*<sup>1</sup> Varies depending on the usage conditions, backlight on/off, etc.

\*<sup>2</sup> Approx. 0.3 W when the battery pack is fully charged (or not being charged) and the computer is off.

\*<sup>3</sup> Rated power consumption.

# Specifications

## ● Main Specifications

<b>Physical Dimension (W x H x D)</b>	58 mm x 20 mm x 145 mm {2.4" x 0.9 " x 5.8 "}
<b>Weight</b>	Approx. 199 g {Approx. 0.4 lb.}

## ● GSM/GPRS

<b>Type</b>		Compliant with ETSI GSM phase 2/2+ standard
<b>Class</b>		EGSM850 Class 4 (2 W) / DCS1900 Class 1 (1 W)
<b>SIM</b>		Internal SIM card (3 V only)
<b>RF Specification</b>	<b>Transmit</b>	EGSM850 (824 MHz to 849 MHz) / DCS1900 (1850 MHz to 1910 MHz)
	<b>Receive</b>	EGSM850 (869 MHz to 894 MHz) / DCS1900 (1950 MHz to 1990 MHz)
<b>Data Features</b>	<b>Data</b>	Non-transparent 2400 bps/ 4800 bps / 9600 bps / 14400 bps
	<b>Fax</b>	Facsimile group 3, Class 2
	<b>SMS</b>	MT/PP (Mobile Terminating Short Message Service, Point to Point) MO/PP (Mobile Originating Short Message Service, Point to Point) CB (Cell Broadcast Short Message Service)
<b>Voice Feature</b>		HR (Half rate) FR (Full rate) EFR (Enhanced full rate)
<b>Interface</b>		AT Commands (GSM 07.07)
<b>GPRS</b>	<b>Multi-Slot</b>	Class 10
	<b>Mobile Station</b>	Class B
<b>SAR (Specific Absorption Rate)</b>		900 MHz : TBD W/kg
		1800 MHz : TBD W/kg

## ● Bluetooth

<b>Bluetooth Version</b>	1.2
<b>Transmission Method</b>	FHSS system
<b>Wireless Channels Used</b>	Channels 1 to 79
<b>RF Frequency Band</b>	2.402-2.48 GHz

# Specifications

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## ● Wireless LAN

<b>Standards Compliance</b>	IEEE802.11b compliant, Frequency 2.4 GHz band
<b>Communication Protocol</b>	Direct Sequence Spread Spectrum (DS-SS), Half Duplex
<b>Frequency Range</b>	2.412-2.462 GHz (1-11ch)
<b>Transmission Rate</b>	1, 2, 5.5, 11 Mbps
<b>Media Access Protocol</b>	CSMA/CA
<b>Access Mode</b>	Infrastructure mode, Ad-Hoc
<b>Security</b>	128/64 Bit WEP and WPA support
<b>802.1x Authentication</b>	EAP-PEAP, EAP-TLS

# Specifications

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- Microsoft® ActiveSync® 3.7 System Requirements

Microsoft® Windows® XP, Microsoft® Windows® 2000, Microsoft® Windows® Millennium Edition, Microsoft® Windows NT® Workstation 4.0 with SP6 or later, or Microsoft® Windows® 98

Microsoft® Outlook® 98 or later required for synchronization to the desktop or portable computer of e-mail, calendar, contacts, tasks, and notes. (Microsoft® Outlook® 2002 recommended)

Microsoft® Internet Explorer 4.01 SP1 or later

Hard-disk drive with 12 to 65 MB of available hard-disk space (actual requirements will vary based on selection of features and user's current system configuration)

Available USB port (available for Windows® 98, Windows® Millennium Edition, Windows® 2000, and Windows® XP only)

One CD-ROM drive

VGA graphics card or compatible video graphics adapter at 256 color or higher

Keyboard

Microsoft® Mouse or compatible input device

- Options for Windows® XP, Windows® 2000, Windows® Millennium Edition, Windows NT® Workstation 4.0, or Windows® 98

Audio card/Speakers for sound

Microsoft® Office 97, Microsoft® Office 2000, or Microsoft® Office XP

Modem for remote synchronization

Ethernet LAN connection for remote synchronization

RAM requirements depend on the operating system used:

Windows® 98, or Windows® 98 Second Edition

24 MB of RAM plus an additional 8 MB of RAM for each Office program running simultaneously  
Windows® Millennium Edition, or Microsoft® Windows NT®

32 MB of RAM plus an additional 8 MB of RAM for each Office program running simultaneously  
Windows® 2000 Professional

64 MB of RAM plus an additional 8 MB of RAM for each Office program running simultaneously

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