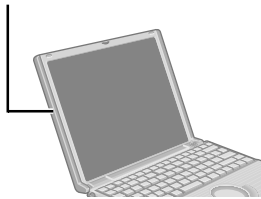# Panasonic®

Personal Computer
Supplementary Instructions

CF-R1/CF-T1 Series with Wireless LAN

Wireless LAN Antenna

This Supplementary Instructions manual explains how to get started with a wireless LAN and point out cases where the operation of the computer will differ from that in the Operating Instructions and the Reference Manuals.

CAUTION

Communication is performed through the wireless LAN antenna. Do not block the antenna area with your hand or otherwise interfere with the passage of the radio signals.

NOTE

● The communication speeds and distances differ depending on the devices that support the wireless LAN, the installation environment and other ambient conditions.
● One characteristic of radio waves is that their transmission rate tends to drop as the communication distance increases. It is recommended that the devices supporting the wireless LAN be used in close vicinity to each other.
● The rate may drop while a microwave oven is being used.

Illustrations in this Manual

Windows 2000 : Information for Microsoft® Windows® 2000 Professional users.
Windows XP : Information for Microsoft® Windows® XP Professional users.

Information to the User

This product and your Health

This product, like other radio devices, emits radio frequency electromagnetic energy. The level of energy emitted by this product however is far much less than the electromagnetic energy emitted by wireless devices like for example mobile phones.

Because this product operates within the guidelines found in radio frequency safety standards and recommendations, we believe this product is safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of this product may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

● Using this product on board of airplanes, or
● In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies on the use of wireless devices in a specific organization or environment (e.g. airports), you are encouraged to ask for authorization to use this product prior to turning on the product.

Regulatory Information

We are not responsible for any radio or television interference caused by unauthorized modification of this product. The correction of interference caused by such unauthorized modification will be the responsibility of the user. We and its authorized resellers or distributors are not liable for damage or violation of government regulations that may arise from failing to comply with these guidelines.

Supplementary Instructions

For U.S.A.

Add the following.

Federal Communications Commission Radio Frequency Interference Statement

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the Panasonic Service Center or an experienced radio/TV technician for help.

Warning

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

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

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

FCC RF Exposure Warning:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.
This equipment must be installed and operated in accordance with provided instructions and minimum 2.5 cm spacing must be provided between antenna and all person's body (excluding extremities of hands, wrist and feet) during wireless modes of operation.
This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. This computer is provided with a PC Card slot that could be used with wireless transmitter(s), which will be specifically recommended, when they become available. Other third-party wireless transmitter(s) have not been RF exposure evaluated for use with this computer and may not comply with FCC RF exposure requirements.

For Canada

Add the following.

Industry Canada
This product complies with RSS210 Industry Canada.
Operation is subject to the following two conditions;
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Precautions

Do not use wireless LAN on airplanes, in hospitals, or in other locations where wireless LAN signals may affect the operation of devices in the vicinity

If you intend to use the computer in the environments described above, turn the wireless LAN off using the following procedure:

1 `Windows 2000`
Select [Start] - [Settings] - [Control Panel] - [System] - [Hardware] - [Device Manager] - [Network adapters].
`Windows XP`
Select [start] - [Control Panel] - [Performance and Maintenance] - [System] - [Hardware] - [Device Manager] - [Network adapters].

2 Select the network adaptor name (wireless LAN) you are using.

3 Select [Do not use this device (disable)] in [Device usage] to disable the wireless LAN function.

● **LAN**

LAN

LAN

Settings

`Windows 2000`

At the time of purchase, the profile for the wireless LAN has not been set. Set the profile using the following procedure.
The settings will vary for different network environments depending on the network system being used. For more details, ask your system administrator or the person in charge of the network.

CAUTION

Set profiles after logging on with the administrator authority.
Be sure to set profiles using the following procedure. Do not use any other methods.

1 **Select [Start] - [Settings] - [Control Panel] - [Wireless Network]**

2 **Select [Add]**
[Profile Name]
Input the optical profile name.
[Network Type]
Select [Access Point] or [Peer-to-Peer Group].

3 Select [Next]

[Network Name]

When [Access Point] has been selected, set the name of the network that has been set as the access point.

When [Peer-to-Peer Group] has been selected, set the name of the network that will act as the receiving party in communications.

4 Select [Next]

[Enable Data Security]

When making security settings, add the check mark here, and then set the security key using either 13 alphanumeric characters or 26 alphanumeric characters representing hexadecimal digits.

We recommend the use of security functions to prevent unauthorized access to the network. (The use of security functions does not guarantee that such access will be completely prevented.)

5 Select [Next]

6 Select [Next]

[Renew IP Address when selecting this profile]

If you want to use the DHCP server to update the IP address when switching networks, add the check mark here.

7 Select [Finish]

8 Select [OK]

Windows XP

Some additional settings may have to be made depending on the usage conditions. We recommend asking your system administrator or the person in charge of the network.

1 Select [start] - [All Programs] - [Accessories] - [Communications] - [Network Connections]

2 Select [Wireless Network Connections] that you are using with the right button, select [Properties] from the menu, and select [Wireless Networks]

1 From [Available Networks], select the access point which is to be connected.

If you are using a recommended wireless LAN access point, the name of the access point will appear as "Wired MAC address + GROUP" with the initial setting.

If the name of the access point to be connected is not displayed, select [Refresh].

2 **<With a connection to an existing network>**

Select [Configure].

<With a first-time connection to a network>

Select [Add].

3 Perform the necessary settings, and select [OK]

For use in a network environment that uses the IEEE 802.1X standard, add the check mark for [Enable IEEE 802.1x authentification for this network] on [Authentification] screen. Check the network environment carefully.

[Network name (SSID)]
<With a connection to an existing network>
The name selected in step *2* is displayed.
<With a first-time connection to a network>
Input the network name.

[Data encryption (WEB enabled)]
To enable encryption (WEP), add the check mark here.

[Network Authentification (Shared mode)]
To use the shared key, add the check mark here.

[Network key/Confirm network key]
If the cipher key has been set for the equipment to be connected, input the cipher key.
"40 bits (5 characters)", "104 bits (13 characters)" for ASCII characters
"40 bits (10 digits)", "104 bits (26 digits)" for hexadecimal notation

[Key index (advanced)]
Select 1, 2, 3 or 4 for the index.
Normally "1" is selected.

[The key is provided for me automatically]
In an environment where the network key is provided, add the check mark here.

[This is a computer- to computer (ad hoc) network; wireless access points are not used]
When connecting one computer to another, add the check mark here.

4 Check that the device name selected in [Preferred networks] under [Wireless Network Connection Properties] screen has been added

5 After selecting the IP address for TCP/IP and performing all other necessary protocol settings in [General] - [Internet Protocol (TCP/IP)] - [Properties], select [OK] on [Wireless Network Connection Properties] screen

In a few moments, the "Wireless connection available" message appears at the bottom right of the screen.

6 Set the IP address of the access point, etc

The setting procedure differs depending on the access point used. Refer to the operation manual of the access point.

Supplementary Instructions

If the function fails to operate correctly Windows XP

● The access point fails to be displayed in [Usable Networks]

[Computer-to-computer (ad hoc) network only] in [Wireless Network Connection Properties] - [Wireless Networks] - [Advanced] may have been selected. In this case, select [Any available network (access point preferred)].

● The access point cannot be accessed

- ● The network key setting may not conform to the access point.
  Check the network key setting of the access point and, if necessary, set it again correctly.
- ● The computer's protocol setting may be incorrect.
  Select [Wireless Network Connection Properties] - [General] - [Internet Protocol (TCP/IP)] and, if necessary, set the IP address and other protocol settings again correctly.
- ● Depending on the access point and settings, access may not be accepted unless the computer's MAC address is registered beforehand. In this case, check the computer's MAC address and register it according to the operation manual of the access point using the following procedure.
  1 Select [start] - [Run].
  2 Input [cmd], and select [OK].
  3 Input [ipconfig/all], and press ⦅Enter⦆.
  4 Make a note of the 12 alphanumeric characters displayed on "Physical Address" line on the wireless LAN side. Then input [exit], and press ⦅Enter⦆.

● The IP address of the access point is wrong

Following the operation manual of the access point, set the IP address of the access point again correctly.

Check the communication status

Windows 2000

Select ▲ on the taskbar, and then refer to "Wireless Client Manager".

Windows XP

Select 🖥* on the taskbar.

* If the cursor is over 🖥, a box appears displaying "Wireless Network Connections".

Setup Utility   "REFERENCE MANUAL"

Replace "Advanced" menu for the following.

Modem:	[Enable]
LAN:	[Enable]
Boot up from LAN:	[Enable]
Wireless LAN:	[Enable]
Legacy USB Support:	[Enable]
Video Power Saving Mode:	[Battery Optimized]

Parameters

Modem	Disable	
	Enable	
LAN	Disable	
	Enable	
Boot up from LAN*¹	Disable	
	Enable	
Wireless LAN*²	Disable	
	Enable	
Legacy USB Support*³	Disable	
	Enable	
Video Power Saving Mode	Battery Optimized	
	Max Performance	

*¹ This can be set only when [LAN] is set to [Enable]. This does not work for a LAN card.

*² <Only for internal wireless LAN models>
This can be set only an internal wireless LAN. This does not work for a LAN card.

*³ Only works for devices connected to the USB port on the left side.

Dealing with Problems (Advanced) "REFERENCE MANUAL"

Add the following.

● Network

Unable to use wireless LAN	● Confirm that [Wireless LAN] is set to [Enable] in the Setup Utility. ● Confirm the setting of the IP address for the access point, following the operating instructions for that access point.

Unable to set "Enable" or "Disable" for wireless LAN	● Did you log on with the administrator authority?
	● On the network setting screen*, if the wireless LAN "Enable" and "Disable" settings are changed repeatedly, these settings may function properly. If this happens, restart the computer.
	  * Windows 2000
	    [Start] - [Settings] - [Control Panel] - [Network and Dial-up Connections]
	  Windows XP
	    [start] - [Control Panel] - [Network and Internet Connections] - [Network Connections]

Specifications "OPERATING INSTRUCTIONS"

Add the following.

Interface	Wireless LAN	IEEE 802.11b compliant Frequency 2.4 GHz band

Replace "Battery Pack" in "Main Specifications" for the following.

Battery Pack		Li-ion 7.4 V, 4.4 Ah
	Operating Time*⁷	Approx. 4.5 hours
	Charging Time*⁷	Approx. 3 hours
	Clock Battery	Coin type lithium battery 3.0 V

*⁷ Varies depending on the usage conditions, CPU speed, etc.

About specifications except described above, refer to the Operating Instructions of each model.

model	the model of the Operating Instructions that should be referred to
CF-R1N62ZWGH ➜	CF-R1N62ZVGH
CF-T1R64ZWGH ➜	CF-R1R64ZZGH
CF-T1R64ZWDM ➜	CF-T1R64ZZDM
CF-T1R64ZWKM ➜	CF-T1R64ZZKM

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