L-03E

ISSUE DATE: '12.X

NAME:

PHONE NUMBER:

MAIL ADDRESS:

INSTRUCTION MANUAL

docomo

This Device is not intended for the sale in U.S.A

Part 15.21 statement

" Change or Modifications that are not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Part 15.105 statement

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 or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:-Reorient or relocate the receiving antenna.-Increase the separation between the equipment and receiver.-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.-Consult the dealer or an experienced radio/TV technician for help.

FCC Part 15 Class B Compliance

This device and its accessories comply with part 15 of FCC rules and ICES-003 Class B digital apparatus requirements for Industry Canada. Operation is subject to the following two conditions:(1) This device and its accessories may not cause harmful interference, and (2) this device and its accessories must accept any interference received, including interference that may cause undesired operation.

Body-worn Operation

This device was tested for typical body-worn operations with the Wireless Router kept 0.39 inches(1.0cm) between the user's body and the Wireless Router.

To comply with FCC RF exposure requirements, a minimum separation distance of 0.39 inches(1.0cm) must be maintained between the user's body and the Wireless Router.

Third-party belt-clips, holsters and similar accessories containing metallic components should not be used. Body-worn accessories that cannot maintain 0.39 inches(1.0cm) separation distance between the user's body and the Wireless Router, and have not been tested for typical body-Worn operations may not comply with FCC RF exposure Limits and should be avoided.

Before Using this Terminal

Names of Parts and Functions

❶

❷

❸

❹

❺

❶ LED indicator
Lights in red: charging this terminal
Lights in green: charging this terminal is completed
Lights in blue: charging mobile device

❷ Display

❸ Jog dial
Works in different way according to the pressing direction and time.

❹ Power switch
Hold down the switch for over 2 seconds to turn on or off the terminal. Press lightly to change the on/off-screen.

❺ External terminal
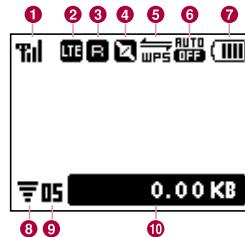Connect the supplied AC adaptor L04 or USB cable.

Display Overview

The signs (icons) that appear on the display indicate these states (press the power button to display the icons):

❶ **Levels of radio wave reception**

Strong ⟵⟶ Weak

📶 ▮ 📶

圏外 : Out of service area or where radio waves do not reach

❷ **Types of networks available during connection**

LTE : LTE

3G : 3G (HSDPA/HSUPA, W-CDMA)

Internet connection is unavailable when an icon shows not connected appears on the display of this terminal.

❻ **Xi antenna:**
Network communication antenna is built in.

❼ **Back cover:**
Removing the back cover, the miniUIM slot guide is under the battery pack.

❽/❾ **Sub-antenna:**
Sub-antenna is for improving the communication quality by using plural antennas. This antenna is built in.

❿ **Wi-Fi antenna:**
Wireless LAN antenna is built in.

Note

- When this terminal is put on the metal objects such as a steel desk or table, the performance of the antenna is affected and the communication speed may become lower.

Top menu of L-03E Connection Manager ▶ click "ネットワーク設定 (NETWORK)" ▶ "プロファイル (Profile)", confirm that the settings are correct.

❸ Public wireless LAN receiving level

❹ States of network connection

🔲 : Connecting

🔲 : Not connected

❺ Software update available

❻ USB tethering or charging

❼ Number of connecting terminals to wireless LAN

❽ Battery level

High ◄————————► Low

▥▥▥▥   ▭

Blinking : The battery is almost exhausted. Charge the battery.

❾ Animation/text

❿ WPS function available (→XX)

⓫ Network data usage

The amount of data communication is displayed. Data communication in overseas is not be added to this amount. Also, the amount of data communication within the international roaming area is not displayed.

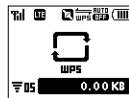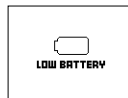⓬ Wireless LAN auto off function set (→XX)

■ Indicators

The display shows the charging state of battery pack, wireless LAN states, name of the connecting network, etc. (Examples are shown below.)
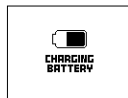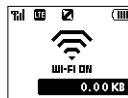

Charging

Activating WPS function

Battery is exhausted

Activating Wi-Fi

Disconnecting Wi-Fi

Name of the connecting network
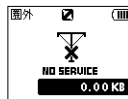
Outside the network service area

Hide Network data usage display

Using miniUIM

A miniUIM is an IC card that stores personal information such as your phone number. Without the miniUIM installed in this terminal, you cannot use data communication. For details on handling the miniUIM, refer to the miniUIM manual.

Only the miniUIM can be used in this terminal. If you have the UIM card or the FOMA card, exchange it at a docomo Shop.

Inserting the miniUIM

When inserting the miniUIM, hold this terminal with both hands.

- Turn the power off and remove the battery pack before attaching the miniUIM (→P27 "Attaching and Detaching the Battery Pack").

1 With the IC chip side down, insert a miniUIM under the miniUIM slot guide in the direction of arrow.

Removing the miniUIM

When removing the miniUIM, hold this terminal with both hands.

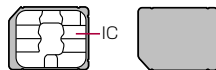- Turn the power off and remove the battery pack before removing the miniUIM (→P27 "Attaching and Detaching the Battery Pack").

1 Slide the miniUIM in the direction of arrow to remove.

Security Codes

A miniUIM has PIN1 (Personal Identification Number) code.
The default setting for the PIN1 code is [0000]. The PIN1 code is a 4 to 8-digit security code to be entered every time this terminal is turned on for user verification to prevent any unauthorized use by others.

If your miniUIM is set to require a PIN1 code, data communication cannot be performed until the PIN1 code is entered.

Use the miniUIM before verifying the PIN1 code, or set the miniUIM not to verify the PIN1 code (→P64) in advance.

■ Changing PIN1 Code
You can change the PIN1 code to any number. To prevent any unauthorized use by third parties, change it to your original number.
If you improperly enter the PIN1 code for 3 times in a row, further entry is locked automatically (PIN1 Lock), so be sure to keep a separate note of the numbers you set.
• "Changing the Security Code"(→P65)

■ Unblocking PIN Code
The unblocking PIN code is the number in 8 digits used to unblock the PIN1 code. Details are written in the application of the contract (a duplicate copy) during the subscription. You cannot change the unblocking PIN code. If you improperly enter the unblocking PIN code for 10 times in a row, the miniUIM locks automatically.

Caution

• Do not set PIN1 code to numbers that can be easily guessed, such as "birth date", "part of your phone number", "numbers from address or room number", "1111", "1234", etc. Also, make a note of your PIN1 code and keep it well.

• Keep your PIN1 code away from being known by other people. DOCOMO assumes no responsibility for the loss of any of your data results from abuse of PIN1 code.

• If you forget your PIN1 code, you (if you are the subscriber) are required to bring your ID (driver's license, etc.) and miniUIM to a docomo Shop. For details, please contact "General Inquiries" on the back of this manual.

• Unblocking PIN code is written on the proposal form handed in at time of contract in docomo Shop. The subscribers who signed the contract other than docomo Shop are required to bring your ID (driver's license, etc.) and miniUIM to a docomo Shop, or contact "General Inquiries" on the back of this manual.

```
┌─────────────────────────────────────┐
│ Logging-in to L-03E Connection Manager │
│ PIN1 code Verification screen appears │
└─────────────────────────────────────┘
              ⬇
┌─────────────────────────────────────┐
│           Enter PIN1 Code            │
└─────────────────────────────────────┘
      Incorrect entry 3 times in a row
              ⬇
┌─────────────────────────────────────┐
│        Enter Unblocking PIN Code     │
└─────────────────────────────────────┘
      OK              Incorrect entry 10
                         times in a row
      ⬇                   ⬇
┌──────────────┐    ┌──────────────┐
│ Available to │    │ Contact a    │
│ set a new    │    │ docomo Shop  │
│ PIN1 code    │    │              │
└──────────────┘    └──────────────┘
```

Attaching and Detaching the Battery Pack

Use the Battery Pack L17 for this terminal.

Note

- Always turn off this terminal before removing the battery pack. If the battery pack is removed while the power is on, this terminal may not work correctly.

Attaching the Battery Pack

When attaching the battery pack, hold this terminal with both hands.

1 Insert a fingernail into the groove at the bottom of this terminal, and pull up in the direction of arrow ❷ while pressing in the direction of arrow ❶ to remove the back cover.

not remove the back cover as described below.

⊘ **Don't**	Do not remove the back cover by inserting a fingernail into a part other than the groove.

⊘ **Don't**	Do not slide the back cover.
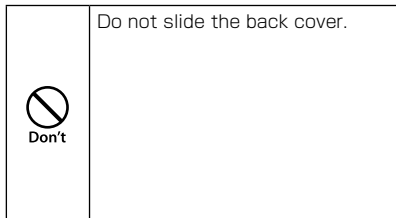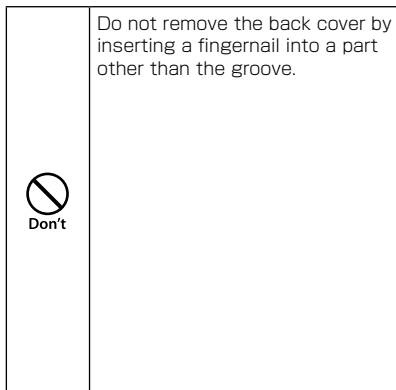
1 With the " ♻ " side of the battery pack up, align the metal contacts of both the battery pack and this terminal, attach the battery pack in the direction ❶, and then push it down in the direction ❷.

Fit the depressions of the battery pack into the projections of this terminal.

2 Check the direction of the back cover and attach it to the terminal. Press each tab to close it firmly.

Detaching the Battery Pack

When attaching the battery pack, hold this terminal with both hands.

1 Insert a fingernail into the groove at the bottom of this terminal, and pull up in the direction of arrow ❷ while pressing in the direction of arrow ❶ to remove the back cover.

2 Put your fingertip at the concave part of this terminal, press in the direction ❶, lift it in the direction ❷, and then remove it in the direction ❸.

3 Check the direction of the back cover and attach it to the terminal. Press each tab to close it firmly.

Charging

■ **Battery pack life**
- The battery pack is a consumable item. The usable time decreases every time the battery pack is recharged.
- When the usable time after each recharging shortens by approximately half compared to a new battery pack, it is recommended that the battery pack be replaced with a new one as soon as possible. The battery pack may swell as the battery life is near its end depending on the battery pack condition, but it is not a malfunction.
- If you make communication while the battery pack is being charged, the battery life may be shortened.

Li-ion00

■ **Charging**
- For details, see the instruction manual for the AC Adapter 03 (optional).
- AC Adapter 03 can be used for 100V to 240V AC.
- The plug shape of AC Adapter 03 is for 100V AC (for domestic use). To use an AC adapter overseas, the compatible conversion plug adapter is required. Do not charge the battery pack with a transformer designed for overseas trips.
- To charge the battery pack with the AC or DC adapter, make sure that the battery pack is inserted into this terminal.

- Plug or unplug the connector slowly and securely avoiding excessive force.
- If you start charging the fully drained battery pack, this terminal may not be turned on for a while.
- If you make communication while charging, the inside of this terminal may become hot and charging may stop. In this case, end the functions in use and wait until this terminal becomes cool down, and then try charging again.
- Depending on the usage condition, charging may stop before the battery level becomes 100%. In this case, remove the battery pack and attach it again to continue charging.
- Do not remove the battery pack while charging. If the battery pack is removed, the power does not correctly turn on or the battery is not correctly charged. In that case, remove the battery pack and all cables from this terminal, and reconnect them.

■ **Do not charge the battery pack for a long time (several days) with this terminal power on.**
- If this terminal is left with the power on for long periods of time during charging, you may not be able to use this terminal for long duration as expected, because this terminal receives the power from the battery pack after charging completes. In this case, recharge the battery pack properly. Before recharging the battery pack, disconnect the AC adapter or DC adapter from this terminal and reconnect it.

■ **Approximate battery pack usage & charging time**
The usage time may vary depending on the operating environment and the battery pack deterioration.

Continuous communication time	LTE	Approx. XX hours
	3G (HSDPA/HSUPA, W-CDMA)	Approx. XX hours
Continuous stand-by time	LTE	Approx. XX hours
	3G (HSDPA/HSUPA, W-CDMA)	Approx. XX hours
Battery pack charging time	AC Adapter L04	Approx. XX minutes
	USB	Approx. XX minutes

- Continuous communication time is the approximate usage time when you can normally send and receive radio waves.
- Continuous stand-by time is approximate usage time when moving with normal radio wave reception level.
- Communication time or operating time may be reduced by half depending on the battery level, set functions, operating environment such as ambient temperature, or radio wave reception level (poor or weak radio wave reception level).

- Depending on network conditions in the country you stay, usage time may become shorter than the described values.
- The estimated charging time is the duration of time to charge a fully drained battery pack with this terminal turned off.
  The charging time becomes longer with this terminal turned on.

Charging with AC Adapter

The charging procedure using optional AC Adapter 03 is described here.

1 Insert the USB connector of the microUSB Connection Cable to the AC Adapter, and insert the microUSB connector straight to the external connector of this terminal with the inscribed B side up.

2 Insert the power plug of AC Adapter to an outlet.

Battery level is displayed, and charging starts. When charging completes, the battery level icon displays full charge.

After charging completes, pull AC Adapter connector straight out.

- Make sure to insert/pull out AC Adapter connector straight with the correct side up. Forcibly removing the adapter may cause malfunction.

Charging with a PC

Connect this terminal to a PC with microUSB Connection Cable, and this terminal can be charged with the PC.

- For details on connecting to a PC, see "Attaching and Detaching this Terminal to/from a PC" (→P37).

Turning Power On/Off

Turning Power On

1 When this terminal is turned off, hold down the power button for over 2 seconds.

When turning power on, network search for Xi area and FOMA area etc. starts. When this terminal is connected to the network, the network name appears on the display.
Also, connection to a wireless LAN terminal is available.

Turning Power Off

1 When this terminal is turned on, hold down the power button for over 2 seconds.
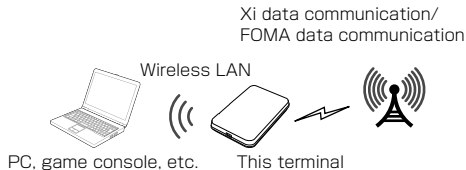
Available Communications

Basic Usage

You can perform data communication at a speed of up to 75Mbps* for receiving data and up to 25Mbps* for sending data by connecting up to 10 PCs or game consoles compatible with wireless LAN function.

    * Available only in a part of Xi area.
*1 For detailed areas that supports Xi, refer to NTT DOCOMO website.
*2 Communication speed is theoretical values when sending and receiving data which does not show the actual ones. The actual communication speed depends on communication environment and network congestion.

Xi data communication/
FOMA data communication

Wireless LAN

PC, game console, etc.   This terminal

Wireless LAN

You can connect up to 10 PCs or game consoles compatible with wireless LAN (IEEE 802.11 b/g/n) simultaneously.

• This terminal supports WPS function. When your wireless LAN terminal supports WPS function, you can set up the wireless LAN connection easily (→P48 "Connecting to WPS Compatible wireless LAN Terminal").
• This terminal cannot connect to a wireless LAN access point.

Xi Data Communication/FOMA Data Communication

Fees for these communication methods are based on the amount of exchanged data. You can perform data communication at a speed of up to 75Mbps* for receiving data and up to 25Mbps* for sending data by using a connection that allows Xi data communication (LTE) or FOMA data communication (3G) such as "mopera U", one of DOCOMO's Internet connection services.

    * Available only in a part of Xi area.
*1 For detailed areas that supports Xi, refer to NTT DOCOMO website.

*2 Communication speed is theoretical values when sending and receiving data which does not show the actual ones. The actual communication speed depends on communication environment and network congestion.

- Depending on bandwidth, communication speed for receiving is theoretically 100/100/75/37.5Mbps (with bandwidth of [20/15/10/5MHz]), and for sending is 50/37.5/25/12.5Mbps (with bandwidth of [20/15/10/5MHz]).

- For the FOMA HIGH-SPEED areas outside Xi area, the maximum speed for receiving data is 14Mbps and for sending is 5.7Mbps.

- Sending and receiving data become 384kbps in FOMA area out of Xi area and FOMA HIGH-SPEED area.

- The communication speed varies depending on the access point and radio wave status.

- The communication speed varies depending on the overseas carrier or network when using overseas.

Note

- Note that high communication fees are charged when performing communications with large amount of data such as browsing websites with many graphics or downloading data.

- Data communication may take more time or become difficult to connect depending on the network congestion. For customers who use a large amount of data communication (Approximate 1GByte data or more is used within the last three days including the current day), it may have difficulties in sending and receiving data on time. Also, data communication may get disconnected when a large amount of data communication occurs at a time or within a certain period of time, when being connected for a long time or when connecting several times in a row within a certain period of time.

- This terminal does not support 64K data communication.

- This terminal does not support Remote Wakeup.

- This terminal does not support FAX communication.

Usage Notes

■ **Internet service provider (ISP) fees**
Fees to an ISP may be required to connect to the Internet. These fees are added to the Xi service fees and are paid to your ISP directly. For details on connection fees, contact your ISP.
You can subscribe to such as "mopera U", one of DOCOMO's Internet connection services.
Charge for subscribing "mopera U" is required.
For service and connection settings of "mopera U", visit the "mopera U" website.
http://www.mopera.net/

■ **User authentication to access networks**
The ID and password will be provided by the network administrator of your ISP or the access point. For details, contact your provider or access point network administrator.

Internet connection is unavailable when "Not connected" icon appears on the display of this terminal.
Top menu of L-03E Connection Manager
▶ Click "ネットワーク設定 (NETWORK)" ▶
"プロファイル (Profile)", confirm that the settings are correct.

■ **Requirements for communication**
The following conditions must be met to perform communications using this terminal. However, a connection may not be established if traffic is heavy at the base station or if radio waves are weak.
・ This terminal must be in Xi network, FOMA network or DOCOMO's roaming service area.
・ The access point corresponds to the Xi data communication or FOMA data communication.

Attaching and Detaching this Terminal to/from a PC

Attach this terminal to a PC to charge this terminal with microUSB Connection Cable.

Attaching to a PC

1 Turn on a PC.

2 With the inscribed B side up, insert the microUSB connector of the microUSB Connection Cable straight to the external connector of this terminal.

3 Insert the other connector of microUSB Connection Cable to the USB port of the PC.

- For the first time connection after purchasing, the L-03E driver setup screen appears by zero-install function only for Windows version. Follow the onscreen instructions to install the driver.*
  The driver is necessary only when updating software. After installation, the shortcut of L-03E Connection Manager is created on the desktop screen.
  Depending on the OS settings, "自動再生 (Auto start)" screen may appear. When the screen appears, select "docomo_L03E_ModemDriver_WHQL_Ver_X.X_All.exe の 実行(Execution of the docomo_L03E_ModemDriver_WHQL_Ver_X.X_All.exe)" and click "はい (Yes)" or "続行 (continue)".

Battery level is displayed, and charging starts.
When charging completes, the battery level icon displays full charge.

Depending on the OS settings, "自動再生 (Auto start)" screen may appear. When the screen appears, select "フォルダーを開いてファイルを表示 (Open the folder and display files)".

* Do not cancel the driver installation halfway or remove this terminal. Without the driver, Software update (→P86) cannot be performed.

Detaching from a PC

Remove microUSB Connection Cable.

Setting Up

Setting Up

Before using this terminal, make settings to connect your wireless LAN terminal to this terminal's wireless LAN.
You can also change the wireless LAN and other settings according to your environment.

Operating Environments

Use this terminal under the following operating environments.

Item	Requirement
PC Main Unit	PC/AT compatible computer and Mac More than 800 × 600 dots for display resolution and High Color 16 bits are recommended
OS[*1]	Windows XP SP3 (Japanese version) Windows Vista SP2 (Japanese version) Windows 7 SP1 (Japanese version) Mac OS X 10.6.8/10.7.3 (Japanese version)[*3]

Item	Requirement
Required Memory[*2]	Windows XP: 256MB or more Windows Vista: 512MB or more Windows 7: 1GB or more (32bit), 2GB or more (64bit) Mac OS X 10.6.8: 1GB or more Mac OS X 10.7.3: 2GB or more
Hard Disk Space[*2]	100MB or more free disk space

*1   DOCOMO does not guarantee the operation under the environment of OS which is upgraded, added or modified.
*2   Required memory or available hard disk space may vary depending on the system environment of a PC.
*3   This is only for Mac with Intel CPU.

For latest information of operating environment, visit DOCOMO's website.

> #### Note
>
> • The software may not work depending on your operating system environment and type of device. DOCOMO does not guarantee any inquiry or operation other than the operation environment described in this manual.

Flow of Setup

Setup is made in the following procedure.

Connect your wireless LAN terminal to this terminal's wireless LAN (→P40)

Setting the Internet connection (→P50)
- For mopera U, this setting is not necessary.
- For setting procedures, see "Registering the Access Point Settings (Profile)" (→P63).

Note

- To change this terminal's setting, connect this terminal to a PC, change the setting, and then connect the other wireless LAN terminal.
  * You can change this terminal's setting with the console other than a PC, which is equipped with a browser. However, some menus and some browser types may be unavailable.

Connecting to a Wireless LAN Terminal

Setting procedures vary depending on the wireless LAN you use. The procedures for the following terminals are described here.

- Windows PC (For Windows 7/ Windows Vista) (→P41)
- Windows PC (For Windows XP) (→P43)
- Mac (→P44)
- iPad (→P45)
- iPod touch (→P46)
- Nintendo DS (→P46)
- PSP (→P47)
- WPS compatible wireless LAN terminal (→P48)

Note

- Make one of these settings when you connect this terminal to each terminal for the first time. Once you have set, the terminal connects to it automatically only by turning power on.
- To connect to a wireless LAN without WPS function, entering SSID and Security key (WPA2 shared key) set to this terminal is required (→P41). Confirm it in advance.

- This terminal can connect up to 10 wireless LAN terminals simultaneously.
- For Windows PC and Mac, you need to login with the user account which has administrative right beforehand.

■ **SSID and Security key (WPA2 shared key) printed area**

Check SSID and Security key (WPA2 shared key) on the included "Wireless LAN Initialization Sticker". Also, SSID and Security key (WPA2 shared key) is printed on the sticker inside of this terminal. Remove the battery pack to see it (→P27 "Attaching and Detaching the Battery Pack").

Connecting to Windows PC

The setting procedure when security mode of this terminal is set to "WPA2-PSK/AES" is described here.

For Windows 7/ Windows Vista

1 **Hold down the power button of this terminal for over 2 seconds.**
This terminal turns on, and the wireless LAN function turns on.

2 **Turn on the wireless LAN function of a PC.**

3 **(Start) ▶ Click "コントロールパネル (Control panel)" ▶ "ネットワークとインターネット (Network and Internet)" ▶ "ネットワークと共有センター (Network and sharing center)".**
"ネットワークと共有センター (Network and sharing center)" window appears.

4 Click "ネットワークに接続 (Connect to a network)".

5 Click the item which shows SSID (Default: "LO3E_XXXXXXXX", →P41) set to this terminal, and click "接続 (Connect)".

6 In "セキュリティキーまたはパスフレーズ (Security key or pass phrase)", enter Security key (WPA2 shared key) (→P41) set to this terminal, and click "OK".

Click "接続 (Connect)" for Windows Vista.

7 Select "このネットワークを保存します (Save this network)" and "この接続を自動的に開始します (Start this connection automatically)", and then click "閉じる (Close)".

For Windows 7, skip procedure 7.

For Windows XP

1 Hold down the power button of this terminal for over 2 seconds.

This terminal turns on, and the wireless LAN function turns on.

2 Turn on the wireless LAN function of a PC.

3 Click スタート (Start) ▶ "コントロールパネル (Control panel)" ▶ "ネットワークとインターネット接続 (Network and Internet)" ▶ "ネットワーク接続 (Network connection)".

4 Double-click "ワイヤレス ネットワーク接続 (Wireless network connection)".

"ワイヤレス ネットワーク接続 (Wireless network connection)" window appears.

5 Click the item which shows SSID (Default: "LO3E_XXXXXXXX", →P41) set to this terminal, and click "接続 (Connect)".

6 In "ネットワークキー (Network key)" and "ネットワークキーの確認入力 (Confirmation of Network key)", enter Security key (WPA2 shared key) (→P41) set to this terminal, and click "接続 (Connect)".

Connecting to Mac

The setting procedure for Mac OS X 10.7 when security mode of this terminal is set to "WPA2-PSK/AES" is described here.

1 Hold down the power button of this terminal for over 2 seconds.

This terminal turns on, and the wireless LAN function turns on.

2 In the Apple menu, click "システム環境設定…(System environment setting…)" ▶ "ネットワーク (Network)".

3 Select "Wi-Fi", and click "Wi-Fiを入にする (Turn Wi-Fi on)".

The wireless LAN function of Mac turns on.

Note

- When the message "すべての優先するネットワークを利用できません (All preferred networks cannot be used)" appears, click "キャンセル (Cancel)", and click "新しいネットワークに接続することを確認 (Confirm to connect to a new network)" to cancel the selection.

4 Click "ネットワーク名 (Network name)" and select the item which shows SSID (Default: "L03E_XXXXXXXX", →P41) set to this terminal.

5 In "パスワード (Password)", enter Security key (WPA2 shared key) (→P41) set to this terminal, select "このネットワークを記憶 (Remember this network)" and click "接続 (Connect)".

Connecting to iPad

The setting procedure for iPad when security mode of this terminal is set to "WPA2-PSK/AES" is described here.

1 Hold down the power button of this terminal for over 2 seconds.
This terminal turns on, and the wireless LAN function turns on.

2 On the iPad Home screen, tap "設定 (Settings)".

3 Tap "Wi-Fi" to set Wi-Fi to "ON".

4 Tap the item which shows SSID (Default: "L03E_XXXXXXXX", →P41) set to this terminal.

5 Enter Security key (WPA2 shared key) (→P41) set to this terminal, and tap "Join (接続)".

Connecting to iPod touch

The setting procedure for iPod touch when security mode of this terminal is set to "WPA2-PSK/AES" is described here.

1 Hold down the power button of this terminal for over 2 seconds.

This terminal turns on, and the wireless LAN function turns on.

2 On the iPod touch Home screen, tap "設定 (Settings)".

3 Tap "Wi-Fi" to set Wi-Fi to "ON".

4 Tap the item which shows SSID (Default: "LO3E_XXXXXXXX", →P41) set to this terminal.

5 Enter Security key (WPA2 shared key) (→P41) set to this terminal, and tap "Join (接続)".

Connecting to Nintendo DS

The setting procedure for Nintendo DSi when security mode of this terminal is set to "WPA2-PSK/AES" is described here.

1 Hold down the power button of this terminal for over 2 seconds.

This terminal turns on, and the wireless LAN function turns on.

2 In DSi menu of Nintendo DSi, touch "本体設定 (Unit settings)".

3 Touch "インターネット (Internet)" ▶ "接続設定 (Connection settings)".

4 "上級者設定 (Advanced settings)" ▶ Touch one of the access points which shows "未設定 (No setting)".

5 Touch "アクセスポイントを検索 (Search an access point)".

6 Touch the item which shows SSID (Default: "LO3E_XXXXXXXX", →P41) set to this terminal.

7 Enter Security key (WPA2 shared key) (→P41) set to this terminal, and touch "OK".

8 Touch "OK".
The setting is saved.

9 Touch "はい (Yes)".
The connection test starts.

Connecting to PSP

The setting procedure for PSP-3000 when security mode of this terminal is set to "WEP" is described here.

Note

・ This terminal cannot connect to the network with the default security mode "WPA2-PSK/AES". Change the security mode (→P57) before using this terminal.

1 Hold down the power button of this terminal for over 2 seconds.
This terminal turns on, and the wireless LAN function turns on.

2 Turn on the wireless LAN switch of PSP.

3 From the Home screen, select "設定 (Settings)" ▶ "ネットワーク設定 (Network settings)", and press "○" button.

4 Select "インフラストラクチャーモード (Infrastructure mode)" and press "○" button.

5 Select "新しい接続の作成 (Create a new connection)" and press "○" button.

6 Select "検索する (Search)" and press "▷" of direction buttons.

7 Select the item which shows SSID (Default: "L03E_XXXXXXXX", →P41) set to this terminal, and press "○" button.

8 Confirm the displayed SSID, and press "▷" of direction buttons.

9 Select "WEP", and press "▷" of direction buttons.

10 Press "○" button.

11 Enter WEP key (→P57) set to this terminal, and press "▷" of direction buttons.

12 Confirm the displayed access point name, and press "▷" of direction buttons.

13 Confirm the displayed settings, and press "▷" of direction buttons.

14 Press "○" button.
The setting is saved.

15 Press "○" button.
The connection test starts.

Connecting to WPS Compatible Wireless LAN Terminal

Note

- Setting procedures vary depending on the wireless LAN terminal. Refer to the instruction manual of your wireless LAN terminal.
- When the PIN code of WPS function is specified to your wireless LAN terminal, you need to select "WPS PIN" (→P59) in "WPS type" (→P59), and set the specified PIN code to "WPS PIN" in advance.
- When the security mode of this terminal is set to "WEP", WPS function is not available.
- When "SSID Broadcast" is "Disable", the WPS function is not activated.

■ When "WPS type" is "Push button"

1 Hold down the power button of this terminal for over 2 seconds.
This terminal turns on, and the wireless LAN function turns on.

2 Set the wireless LAN function of the target terminal to ON, and make the WPS function setting as required.
The operation varies depending on the terminal.

3 Perform the connecting operation of the WPS function on the target terminal.

The operation varies depending on the terminal.

4 Press the WPS button of this terminal for over 2 seconds.

5 Follow the onscreen instructions of the target terminal to on.

The operation varies depending on the terminal.

■ When "WPS type" is "WPS PIN"

1 Hold down the power button of this terminal for over 2 seconds.

This terminal turns on, and the wireless LAN function turns on.

2 Start the web browser on PC which is connected with the wireless LAN, and login to the setting page (L-03E Connection Manager).

3 Set the wireless LAN function of the target terminal to ON, and select "WPS-PIN" access.

Enter the 8-digit WPS PIN on the wireless LAN terminal.

4 Enter the 8-digit WPS PIN displayed on the wireless LAN terminal in WPS PIN field of WPS setting page on L-03E Connection Manager setting page, and click [Apply].

When "WPS OK" is displayed, you could access to WPS.

Making Other Settings

You can change the settings of this terminal according to your environment by starting Web browser on the PC connected via wireless LAN and displaying the setting page of this terminal.

* You can change this terminal's setting with the console other than a PC, which is equipped with a browser. However, some menus and some browser types may be unavailable.

For details, see "Settings" (→P51).

■ Setting Wireless LAN

You can change the settings of wireless LAN and the basic settings of LAN.

■ Setting Network

You can change the settings of access point and miniUIM.

■ Setting Security Functions

You can set the firewall function of this terminal.

■ Managing the system

You can use management functions of this terminal, such as saving the settings, confirmation of firmware version, etc.

Connecting to the Internet

Internet Connection

To connect to the Internet with this terminal, the subscription to the Internet service provider (mopera U, etc.) compatible with the service and data communication is required. For details, visit DOCOMO's website.

Register the settings for connection with the Internet service provider to Profile of this terminal.
For details on the setting method, refer to "Registering the Access Point Settings (Profile)" (→P63).

- Up to 10 profiles can be registered.
- When connecting this terminal to mopera U, this setting is not necessary.

Connecting to the Internet

You can use the Internet by turning on this terminal to connect automatically to the access point set to the Profile. Check if your wireless LAN terminal is connected to the Internet.
For selection method of access point when multiple Profiles are registered, refer to "Searching network" (→P62).

Settings

Logging-in to L-03E Connection Manager

You can make various settings by starting Web browser on a PC connected via wireless LAN and displaying the setting page (L-03E Connection Manager).

> Note
>
> - You can change this terminal's setting with the console other than a PC, which is equipped with a browser. However, some menus and some browser types may be unavailable.
> - The setting page of this terminal supports the following Web browsers.
>   Windows: Microsoft Internet Explorer 6, 7, 8, 9, Firefox, Google Chrome, Opera
>   Mac OS X: Safari 5.0
>   * Depending on the browser, some screens and items may not be displayed.
>   * Enable cookies on your browser (save and accept).

1 Hold down the power button of this terminal for over 2 seconds.

This terminal turns on, and the wireless LAN function turns on.

2 Turn on a PC and the wireless LAN function.

This terminal is connected to the PC via wireless LAN.
- When connecting for the first time, wireless LAN setup is required. For setting up, refer to "Connecting to a Wireless LAN Terminal" (→P40).

3 Double click the shortcut of L-03E Connection Manager on the desktop screen, or start a Web browser and enter "http://192.168.2.1/" in the address entry field, then press Enter key.

"Login" screen appears.
- "192.168.2.1" is the default setting of the private IP address of this terminal. When the setting has been changed, enter the private IP address you set (→P60 "Setting DHCP Function (DHCP)").

4 Enter "Admin" in [Username] field, enter the log-in password (default: "1234") in [Password] field, and then click [Login].

- In [Language] field, you can select a language on the setting page.

When PIN1 code is set, "PIN1 code verification" screen appears.

5 When "PIN1 code verification" screen appears, enter PIN1 code in [PIN1 code] field, and then click [Apply].

For details on PIN1 code, see "Security Codes" (→P26).

Click [OK] when a message of PIN1 unlock appears.
"Status" screen appears.
If there is latest version, a message from web page is displayed on "Status" screen. For updating procedure, see "Updating Software" (→P88).

Note

- For your security, it is recommended to change the default setting of log-in password. For details, see "Changing Login Password (Modify password)" (→P68).

The Setting Page Screen
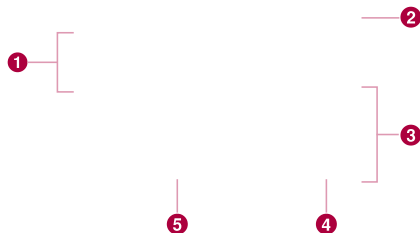
❶ Top menu
Click a menu item to switch the setting page. You can select the following items.
- STATUS (→P54)
- WLAN (→P55)
- NETWORK (→P62)
- SECURITY (→P67)
- SYSTEM (→P68)

The submenu appears for some items, and you can switch the setting screen.

❷ [Logout]
Click to log out from the setting page.

❸ Setting screen
The setting items for the function selected from the menu items appear.

4

Click to edit the setting.

5

Click to refresh the information on the "Status" screen.

Confirming Connection/Setting Conditions of this Terminal

1 **Click [STATUS] in the top menu.**

"Status" screen appears.

• Click [Refresh] to refresh the information.

Network selection*	: The connecting band is displayed.
Network name*	: The connecting network name is displayed.
FOMA/Xi signal strength*	: The current level of radio wave reception is displayed.
Wi-Fi status	: The status of the wireless LAN function is displayed.
Connected clients	: The number of currently connected terminals via wireless LAN is displayed.
Wi-Fi auto off	: The setting status of the Wi-Fi auto off function is displayed.
WPS	: The operating status of the WPS function is displayed.
UIM card	: Phone number of miniUIM is displayed.
Network data usage*	: The current amount of data communication is displayed. Data communication in overseas is not be added to this amount.

* When the miniUIM is not inserted, the items do not appear.
On the "Status" screen, "DOCOMO UIM card has not been inserted properly or is invalid" appears.

Setting Wireless LAN

Note

- When using wireless LAN overseas, check the available frequency band, laws, regulations or other conditions of the country beforehand.

Setting Basic Functions of Wireless LAN

1 In the top menu, click [WLAN].

2 In the submenu, click [Basic Setting].

3 On the setting screen, set the required items.

SSID (Default: L03E_XXXXXXXX)

Set the network name (SSID) of the wireless LAN. You can enter up to 32 letters with one-byte alphanumeric, "- (hyphen)" and "_ (under bar)".

Country (Default: JAPAN)

Select a country name where this terminal is used. (When JAPAN or KOREA is selected, you can select up to 13 channels. When CANADA or UNITED STATES is selected, you can select up to 11 channels.)

Channel (Default: Auto)

Select a channel of wireless LAN.

IEEE802.11 Mode: (Default: 11b/g/n)

Select an operation mode of wireless LAN.

- 11b only
- 11b/g
- 11g only
- 11n only
- 11b/g/n

(When the security mode (→P57) is set to "WEP", or when the mode is set to "WPA-PSK" or "WPA2-PSK" and "TKIP" is selected, "11n only" or "11b/g/n" cannot be selected.)

SSID Broadcast (Default: Enable)

Select whether to display SSID on the wireless LAN terminal.

- Enable: SSID is displayed
- Disable: SSID is not displayed

Privacy separator (Default: Disable)

Select whether to prohibit communication between wireless LAN terminals.

- Enable: Communication is prohibited
- Disable: Communication is not prohibited

4 Click [Apply] to save the setting.

Setting Wi-Fi auto off Function

1 In the top menu, click [WLAN].

2 In the submenu, click [Wi-Fi auto off].

3 On the setting screen, set the required items.

Wi-Fi auto off (Default: Enable)
Select whether to set the wireless LAN function to off automatically and power saving mode when no client connection is made in a certain period.
- Enable: The wireless LAN function is set to off
- Disable: The wireless LAN function is not set to off

■ When Enable is set
Wi-Fi off time (min) (Default: 10)
When "Enable" is set to Wi-Fi auto off, select the time (minutes) to set automatically to off.
- 10
- 30
- 60

4 Click [Apply] to save the setting.

Setting Security Mode of Wireless LAN

1 In the top menu, click [WLAN].

2 In the submenu, click [Security].

3 On the setting screen, set the required items.

Security mode (Default: WPA2-PSK)
Select the security mode of wireless LAN.
- Open
- WEP
- WPA-PSK
- WPA2-PSK
- WPA/WPA2-PSK mixed

Depending on the Security mode setting, the following setting items are different.

■ When Open is set
Limitation of clients (Default: 1)
The number of terminals which can be connected is displayed (it cannot be changed.).

■ When WEP is set
WEP key1-4 (Default: XXXXX)
Enter WEP key.
You can enter 5, 10, 13 or 26 letters with one-byte alphanumeric.
For 5-letter or 13-letter key, use a key with one-byte alphanumeric (0-9, a-z, A-Z).
For 10-letter or 26-letter key, use hexadecimal numbers (0-9, A-F).
Only the specified number of WEP key in "Current WEP key" is judged for letter type to enter.
Current WEP key (Default: 1)
Select the number of WEP key to use.
For Wireless LAN terminal which cannot specify the index of WEP key (iPod touch and IPad, etc.), WEP key 2-4 cannot be used.
Limitation of clients (Default: 10)
The number of terminals which can be connected is displayed.

■ When WPA-PSK is set
Encryption type (Default: TKIP)
Select the encryption type.
- AES
- TKIP

WPS shared key (Default: XXXXXXXX)
Enter Security key of WPA.
You can enter 8-64 letters with one-byte alphanumeric.
For 64-letter key, use hexadecimal numbers (0-9, A-F).
Limitation of clients (Default: 10)
The number of terminals which can be connected is displayed.

■ When WPA2-PSK is set
Encryption type (Default: AES)
Select an encryption type.
• AES
• TKIP
WPA2 shared key (Default: →P41)
Enter Security key of WPA2.
You can enter 8-64 letters with one-byte alphanumeric.
For 64-letter key, use hexadecimal numbers (0-9, A-F).
Limitation of clients (Default: 10)
The number of terminals which can be connected is displayed.

■ When WPA/WPA2-PSK mixed is set
WPA/WPA2 shared key (Default: XXXXXXXX)
Enter Security key of WPA/WPA2.
You can enter 8-64 letters with one-byte alphanumeric.
For 64-letter key, use hexadecimal numbers (0-9, A-F).

Limitation of clients (Default: 10)
The number of terminals which can be connected is displayed.

4 Click [Apply] to save the setting.

Setting WPS Function

Note
• WPS Function cannot be used when "WEP" is set for "Security" (→P57).

1 In the top menu, click [WLAN].

2 In the submenu, click [WPS].

3 On the setting screen, set the required items.

WPS (Default: Enable)
Select whether to use WPS function.
• Enable: WPS function is used
• Disable: WPS function is not used

■ When Enable is set
WPS type (Default: Push button)
Select a type of WPS function.
- Enable only: When connect with WPS type after pressing the WPS button of this terminal (WPS function is not activated if you press [Apply] button.)
- Push button: When you use the WPS button or connect with WPS type after clicking [Apply] button
- WPS PIN: When you connect by entering the PIN code (8-digit number) for WPS

WPS PIN
Enter the specified PIN code.

4 Click [Apply] to save the selected WPS setting.

The saved WPS setting is valid even after restarting of this terminal.

Setting MAC Address Filter

1 In the top menu, click [WLAN].

2 In the submenu, click [MAC address filter].

3 On the setting screen, set the required items.

Restrict mode (Default: Disable)
Select an operation mode of MAC address filter function.
- Disable: MAC address filter is not used
- Allow: Allows the connection only to this terminal with the specified MAC address
- Deny: Prohibits the connection to this terminal with the specified MAC address

■ When Allow or Deny is set
Mac addresses entry field appears.
Enter the specified terminal's MAC address.
You can specify up to 10 MAC addresses.

4 Click [Apply] to save the setting.

Setting DHCP Function

1 In the top menu, click [WLAN].

2 In the submenu, click [DHCP].

3 On the setting screen, set the required items.

IP address (Default: 192.168.2.1)
Set private IP address of this terminal.
Subnet mask (Default: 255.255.255.0)
Set subnet mask of LAN.
DHCP server (Default: Enable)
Select whether to use DHCP function.
• Enable: DHCP function is used
• Disable: DHCP function is not used
■ When Enable is set
Start IP address (Default: 192.168.2.2)
Set the minimum IP address assigned to this terminal.
End IP address (Default: 192.168.2.99)
Set the maximum IP address assigned to this terminal.
Primary DNS (Default: 192.168.2.1)
Set IP address of primary DNS server.
Secondary DNS (Default: 0.0.0.0)
Set IP address of secondary DNS server.

4 Click [Apply] to save the setting.

Confirming Connected Clients

1 In the top menu, click [WLAN].

2 In the submenu, click [Connected clients].

3 The connected terminal's information appears.

 • Click [Refresh] to refresh the information.

4 To disconnect, click `OFF` in the "Disconnect" field.

Setting UPnP Function

To use the application using the UPnP function, set to "Enable" the UPnP function.

1 In the top menu, click [WLAN].

2 In the submenu, click [UPnP].

3 On the setting screen, set the required items.

UPnP (Default: Disable)
Select whether to use the UPnP function.
 • Enable: UPnP function is used
 • Disable: UPnP function is not used

4 Click [Apply] to save the setting.

Setting Network

Selecting an Access Point

You can specify the access point network.

- This function is unavailable in Japan.

1 In the top menu, click [NETWORK].

2 In the submenu, click [Searching network].

3 On the setting screen, set the required items.

Mode (Default: Auto)
Select whether to specify the access point.
- Auto: The access point to connect is automatically selected.
- Manual: Select when you specify the access point. Click [Apply] to search the available access point and register it to [Operators].

■ When Manual is set
Operators (Default: none)
Select an access point to connect.

4 Click [Apply] to save the setting.

Registering the Access Point Settings

Register, edit or delete the access point settings. You can register up to 10 access points.

- By default, the setting for mopera U is registered and you cannot delete it. When using mopera U, the following setting is not necessary.

1 In the top menu, click [NETWORK].

2 In the submenu, click [Profile].

3 To register a new access point, click [Add New].

■ To edit an existing access point
❶ In [Current profile], select an access point to edit.
❷ Follow Procedure 4.
❸ Follow Procedure 6.

■ To delete an existing access point
❶ In [Current profile], select an access point to delete.
❷ Click [Delete].
❸ Click [OK].

4 On the setting screen, set the required items.

Profile name (Default: mopera U)
Enter an access point name. You can enter up to 15 letters with one-byte alphanumeric.

APN (Default: mopera.net)
Enter APN. You can enter up to 99 letters with one-byte alphanumeric, "- (hyphen)", "@ (at mark)", ". (period)" and "_ (under bar)".

Username (Default: None)
Enter the user name specified by the provider. You can enter up to 64 letters with one-byte alphanumeric, "- (hyphen)", "@ (at mark)", ". (period)" and "_ (under bar)".

Password (Default: None)
Enter the password specified by the provider. You can enter up to 32 letters with one-byte alphanumeric, "- (hyphen)", "@ (at mark)", ". (period)" and "_ (under bar)".

Authentication (Default: CHAP)
Select the authentication method of the access point.
- None
- PAP
- CHAP

5 To register a new access point, click [Save].

6 Click [Apply] to save the setting.

Protecting the Terminal with the Security Code

When this function is set, network communication is locked and entering the security code (PIN1 code) is required when logging in to the setting page.

1 In the top menu, click [NETWORK].

2 In the submenu, click [PIN1 lock].

3 On the setting screen, set the required items.

PIN1 lock status
The current setting condition is displayed.
- Enable: PIN1 lock is set
- Disable: PIN1 lock is canceled
- ■ When Enable is set
  PIN1 code to disable
  Enter PIN1 code set to the miniUIM card.
- ■ When Disable is set
  PIN1 code to enable
  Enter PIN1 code set to the miniUIM card.

4 Click [Apply].

5 When "Enabled" is set, hold down the power button for over 2 seconds to turn the power off, and then turn on again.

Unlocking PIN Lock

If you improperly enter the PIN1 code for 3 times in a row, further entry is locked automatically. In this case, enter "Unblocking PIN Code" (→P26) to unlock.

1 Enter the unblocking PIN code in [PUK code] field.

2 Enter the new PIN1 code in the [New PIN1 code] field.

3 In [Confirm PIN1 code] field, enter the same PIN1 code as [New PIN1 code] for confirmation.

4 Click [Apply].

Changing the Security Code

You can change the security code (PIN1 code).

- Changing security code (PIN1 code) is available only when PIN1 lock (→P64) is set to "Enabled".

1 In the top menu, click [NETWORK].

2 In the submenu, click [Modify PIN1 code].

3 On the setting screen, set the required items.

Current PIN1 code
Enter PIN1 code set to the miniUIM card.
New PIN1 code
Enter the new PIN1 code.
Confirm PIN1 code
Enter the same code as [New PIN1 code] for confirmation.

4 Click [Apply].
PIN1 code is changed.

Displaying Network data usage

The amount of data communication is displayed. Data communication in overseas is not be added to this amount. Also, the amount of data communication in the international roaming area is not displayed.

1 In the top menu, click [NETWORK].

2 In the submenu, click [Network data usage].

3 On the setting screen, set the required items.

Current data usage
Click [Refresh] to see the latest information.
Click [Reset] to reset the information of usage.

The usage is automatically reset in the following cases.
- 0 o'clock on the first day of every month
- When the miniUIM is replaced
- When SIM lock is unlocked

Maximum data size (Default: Disable)
Select from KB, MB and GB, and enter the valid value*.
- * Valid value: Positive integer from 1 to 1024
  Not available: Negative number, 0, decimal point and anything other than the valid value
- * Even if maximum data size is set, data communication will not stop when data usage is over the maximum data size. It is only for your reference.

Display on modem (Default: Enable)
Enable: The amount of data communication is displayed on the display of this terminal.
Disable: The amount of data communication is not displayed on the display of this terminal.

4 Click [Apply] to save the setting.

Setting Security Functions

Using Firewall Function

Unauthorized access via the Internet can be blocked by using the Firewall function. Also, you can set IP filter.

1 In the top menu, click [SECURITY].

2 In the submenu, click [Firewall].

3 On the setting screen, set the required items.

Firewall (Default: Disable)
Set whether to activate the Firewall function.
・ Enable: Firewall function is activated. You can set IP filter.
・ Disable: Firewall function is deactivated.

■ When Enable is set
You can set IP filter.
IP address
When registering IP filter, enter source or destination IP address.
Direction (Default: Source)
Specify the direction of communication to interrupt.
・ Source: Interrupt the access from the specified IP address.
・ Destination: Interrupt the access to the specified IP address.
IP address filter list
List of registered IP filter appears.
・ ○OFF : Delete registered IP filter.

4 Click [Apply].

Discarding WAN Ping

You can discard the Ping request to access from WAN to prevent answering and block the IP information leakage from this terminal and LAN terminals.

1 In the top menu, click [SECURITY].

2 In the submenu, click [WAN Ping blocking].

3 On the setting screen, set the required items.

WAN Ping blocking (Default: Disable)
Set whether to activate the WAN Ping blocking function.
- Enable: Activate the WAN Ping blocking function.
- Disable: Deactivate the WAN Ping blocking function.

4 Click [Apply].

Managing the System

Changing Log-in Password

You can change the log-in password of the setting page.
You can enter only a 4-digit number as a password.

1 In the top menu, click [SYSTEM].

2 In the submenu, click [Modify password].

3 On the setting screen, set the required items.

Current password
Enter the current password.
New password
Enter the new password.
Confirm password
Enter the same password as [New password] for confirmation.

4 Click [Apply].

The message "Password is changed successfully" appears.

5 Click [OK].

Saving/Restoring the Setting Data

All setting data can be saved to a PC on which the setting page is opened. Also, saved setting data can be restored in this terminal.

1 In the top menu, click [SYSTEM].

2 In the submenu, click [Backup & Restore].

3 In the setting screen, make the following procedures.

Backup to file
Click [Backup], specify the file name (Default: webcm_config.cfg) and save the current setting.
  * Depending on the browser, the file name cannot be specified.
Restore from file
Click [参照...(Refer to...)] and specify the file to restore.

4 Click [Apply].

Resetting the Settings

You can reset all settings of the setting page to default. However, the amount of data communication which is displayed on the display cannot be reset. For resetting the amount of data communication, see "Displaying Network data usage" (→P66).

- You can also reset the settings by pressing the buttons on this terminal. For details, see "Resetting this Terminal" (→P89).

1 In the top menu, click [SYSTEM].

2 In the submenu, click [Reset].

3 Click [Reset].

4 Click [OK].
Log out from the setting page and the communication is disconnected.

Confirming the Version Information

1 In the top menu, click [SYSTEM].

2 In the submenu, click [Version].
The version information of firmware and this terminal appears.

3 Make setting for Software Update.
Automatically check new S/W (Default: ON)
- ON: Check the update file automatically.
- OFF: Check the update file manually.

■ When ON is set

The confirmation message for software update appears each time you log in. To make the message not to appear, set to "OFF".

■ When OFF is set

Click [Check now] to check if you have any update files, and a message appears when a new file exists.

For update procedure, see "Updating Software" (→P86).

4 When you have changed software update setting, click [Apply].

Displaying the Inquiries

1 In the top menu, click [SYSTEM].

2 In the submenu, click [Help].

The information of the inquiry website, phone number and the URL of Instruction Manual (PDF) appears.