

INSTRUCTION MANUAL

for Connection Guide

Data Communication Device **L-05C**

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.

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 & its accessories may not cause harmful interference.
- (2) This device & its accessories must accept any interference received,
including interference that may cause undesired operation.

Body-worn Operation

This Mobile Broadband USB Modem, model L-05C, is approved for use in normal size laptop computers only (typically with 12" or larger display screens). To comply with FCC RF exposure requirements, this modem should not be used in configurations that cannot maintain at least 5mm (approximately 0.2 inches) from your body. Also, when using the USB extension cable, place the USB modem away from your body or any other transmitter of the laptop or PC. This USB modem has been tested for compliance with FCC/IC RF exposure limits in the laptop computers configurations with horizontal and vertical USB slots and can be used in laptop computers with substantially similar physical dimensions, construction and electrical and RF characteristics. When using this USB modem in your computer, it must not be co-located or simultaneously transmit with any other radio (for example, Bluetooth or WiFi radios) in the computer.

Names of Parts and Functions

① USB Connector→P78

Connection used to contact to a PC.

② Antenna Part

The antenna is inside the FOMA terminal.

③ PWR Lamp→P73

Indicates the power supply conditions.

④ IDLE/BUSY Lamp→P73

Indicates the FOMA terminal status.

Examples of ①

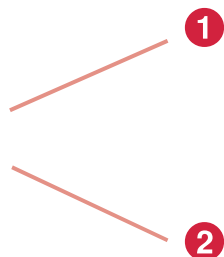
Ex. 1:

※ Pull out from FOMA terminal and turn maximumly 180 degrees before using. (90 degrees + 90 degrees)
However, Damage may result from turning exceedingly 180 degrees.

Ex. 2:

※ The tip part of USB connector can be turned maximumly 180 degrees. (90 degrees+90 degrees) However, it is one-way turn. Damage may result from turning to the opposite direction or turning exceedingly 180 degrees.

Mode Indication Lamp



※ Operation indicating lamp

FOMA Terminal Status		① Power Indication Lamp	② Mode Indication Lamp
When powered on		-	-
Waiting to connect to the FOMA network		Green	Green
Packet communication	Attempting to communicate	Green	Blue (Flash)
	Communicating	Green	Blue
SMS	While receiving	Yellow (Flash)	Green
	Opening SMS	Green	Green
	Sending SMS	Green	Green
PIN	PIN Lock	Green	-
	Waiting to unlock PIN1	Green	-

Using a FOMA Card

The FOMA card is an IC card that stores personal information such as your phone number. Without a FOMA card installed in the FOMA terminal, you cannot use data communication. For detailed information, refer to FOMA Card Manual.

Inserting/Removing

Inserting

Inserting FOMA card with two hands.

- 1 While pushing the cover in the direction of ①, slide the rear cover in the direction of ②. Lift the cover as shown by ③.

2 Insert FOMA card into slot at the direction of arrow with the IC chip side down

3 Fit the rear cover to the ditch of FOMA terminal at approximately 3mm from the top tip of the FOMA terminal. While pressing along direction ❶, slide the rear cover along direction ❷ till hear rear cover clicked.

Removing

Remove FOMA card with two hands.

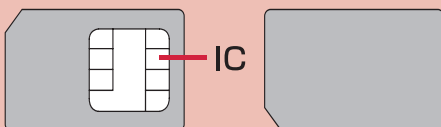
1 While pushing the cover in the direction of ❶, slide the rear cover in the direction of ❷. Lift the cover as shown by ❸.

2 Slide FOMA card in the direction of arrow and remove it from the FOMA Card slot.

- 3** Fit the rear cover to the ditch of FOMA terminal at approximately 3mm from the top tip of the FOMA terminal. While pressing along direction ①, slide the rear cover along direction ② till hear rear cover clicked.

Note

- Make sure not lose the removed FOMA card.
- Make sure to check the direction of FOMA card.



- Be careful not to scratch FOMA card's IC parts.
- Inserting FOMA card in the reverse direction may cause malfunction.
- Inserting and removing FOMA card with an excessive force may cause damage to your FOMA card.
- Do not remove FOMA card while FOMA terminal is inserted to a PC, it may causes damage to your FOMA card.

PIN1 Code

You can set PIN codes (Personal Identification Number) for FOMA Card. 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 the FOMA terminal is turned on for user verification to prevent any unauthorized use by others.

If your FOMA card is set to require a PIN1 code, data communication cannot be performed until the PIN1 is entered. Use L-05C before verifying the PIN1 code, or set ("L-05C INSTRUCTION MANUAL (PDF)" P63)not to verify the PIN1 code in advance.

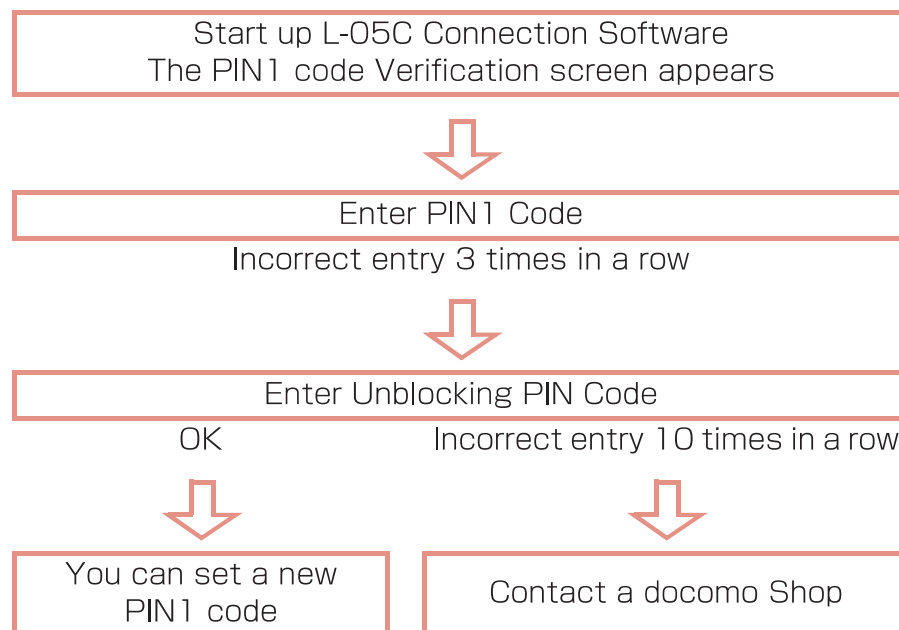
■ Changing the PIN1 Code

You can change the PIN1 code to any number. To prevent any unauthorized use by third parties, change it to your own number. If you improperly enter the PIN1 code 3 times in a row, further entry is locked automatically (PIN lock), so be sure to keep a separate note of the numbers you set.

- Entering PIN1 Code/ Changing PIN1 code→"L-05C INSTRUCTION MANUAL (PDF)" P63

■ PIN Unlocking Code

The PIN Unlocking Code is the number used to unblock the PIN1 code. You are notified of your PIN Unlocking Code when you purchase your FOMA terminal. Entering the Unlocking Code (8-digit) unblocks the PIN lock. If you improperly enter the Unlocking Code 10 times in a row, the FOMA card locks automatically, so be sure to keep a separate note of the number.



FOMA Card Types

Please be aware that the FOMA card (Blue) has different functions from the FOMA card (Green/White) as follows:

Function	FOMA card (Blue)	FOMA card (Green/White)
The number of digits of a phone number that can be saved to the FOMA card Phonebook	Up to 20 digits	Up to 26 digits This terminal allows up to 20 digits.
WORLD WING	Not available	Available

WORLD WING

WORLD WING is DOCOMO's FOMA international roaming service that provides telephone and other types of mobile communications. It allows the subscriber to use the same phone number overseas as in Japan by inserting a FOMA card(green/white) into a FOMA terminal or a mobile phone designed for overseas use.

- If you subscribed to the FOMA service after September 1, 2005, a separate subscription is not required. However, if you unsubscribed to the FOMA service subscription or canceled the service, a separate subscription is required.
- If you initially subscribed to the FOMA service before August 31, 2005 and have not subscribed to "WORLD WING", a separate subscription is required.
- This service is not available with some billing plans.
- Your FOMA card (green/white) is lost or stolen overseas, contact DOCOMO immediately and temporarily suspend your subscription. For contact information, see "docomo Information Center" on the back of this manual. Call and communication charges after the terminal was lost or stolen are still charged to you.

Usage Notes

■ Internet service provider fees

Fees to an Internet service provider may be required to connect to the Internet. These fees are added to the FOMA service fees and are paid to your Internet service provider directly. For details on connection fees, contact your Internet service provider.

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", visit the "mopera" website.

<http://www.mopera.net/mopera/index.html> (Japanese only)

■ User authentication to access networks

Depending on the access point, user authentication (ID and password) may be required to connect. If required, enter the ID and password from the dial-up network. The ID and password will be provided by the network administrator of your Internet service provider or the access point. For details, contact your provider or access point network administrator.

■ Requirements for packet communication

The following conditions must be met to perform communications using the FOMA terminal. However, a connection may not be established if traffic is heavy at the base station or if radio signals are weak.

- The FOMA terminal must be in a FOMA network or DOCOMO's roaming service area.
- The access point corresponds to the FOMA packet communication.

Connecting FOMA Terminal to a PC

When connecting FOMA terminal with computer for the first time, it is required to install L-05C connection software (including a driver). For installing L-05C connection software, refer to the followings.

- For Windows: "Preparation for using L-05C" (P87)
- For Macintosh: "Preparation for using L-05C" (P93)

Inserting

1 Turn on a PC

2 Connecting the FOMA terminal with a PC

■ When using a mounting folder and a USB extension cable

- Use a mounting folder and a USB extension cable to fix on the top of a PC
- ① Pull out the projection part of USB connector 180 degrees by fingertip

- ② Hold the connector part of USB extension cable and insert into the USB connector near the FOMA terminal along arrow direction
※ Make sure to insert in USB connector deeply.

- ③ Put the FOMA terminal between the mounting folder and fix on the top of the PC

- ④ Hold the connector part of USB cable and insert into PC USB port along arrow direction

■ When connecting with a PC directly

- Insert the FOMA terminal into a PC USB port and use it directly.
 - The USB connector of FOMA terminal is able to turn 90 degrees complying to directions of USB port
- ① Pull out the projection part of USB connector 90 degrees by fingertip

- ② Turn the tip part of USB connector 90 degrees with USB connector mark faced up.

※ Available to turn 90 degrees for second time (maximum 180 degrees). However, damage may result from excessive force when turning exceedingly 180 degrees.

- ③ Insert the USB connector of FOMA terminal into a PC USB port

- It is available to use without turning USB connector 90 degrees as the above-mentioned procedure ②.

※ Refrain from turning the FOMA terminal after inserting USB connector into PC USB port. Malfunction or damage may result when subject the FOMA terminal to severe shocks due to carelessness.

3 Start communication connecting

- Using "L-05C connection software"
→ "L-05C INSTRUCTION MANUAL (PDF)" P43
- Using "DOCOMO connection manager"
→ "L-05C INSTRUCTION MANUAL (PDF)" P69
- Configuring manually (OS Standard)
→ "L-05C INSTRUCTION MANUAL (PDF)" P79

Note

—— Power Indication Lamp
—— Mode Indication Lamp

- Confirm whether power indication lamp and mode indication lamp change to green.

Removing

1 End data communication

- If the L-05C connection software/DOCOMO connection manager is already running, exit the L-05C connection software/DOCOMO connection manager. Verify that data connection is disconnected.

2 Remove the FOMA terminal

- When using a mounting folder and a USB extension cable

- ① Hold the connector part of a USB extension cable and pull out the FOMA terminal from PC USB port along arrow direction

- ② Remove the FOMA terminal along with the mounting folder from the top of the PC. Remove the mounting folder from the FOMA terminal

- ③ Hold the connector part of the USB extension cable and pull out from the USB connector near the FOMA terminal along arrow direction

④ Pack the USB connector into the FOMA terminal

※ Make sure the projection part is in front before packing.

■ When connecting to a PC directly

① Hold the USB connector part of FOMA terminal. Pull out the FOMA terminal straightly from PC USB port

② Turn the tip part of the USB connector 90 degrees as shown in the illustration

③ Pack the USB connector into FOMA terminal

※ Make sure the projection part is in front before packing.

Caution

- If you force to remove FOMA terminal and pull out the USB extension cable, this may result malfunction.
- Removing FOMA terminal from USB connector during data communication may suspend data communication and result malfunction or data losses.

Setting up

Setting up	84
Windows Version	87
Macintosh Version	93

Setting up

■ Data communication with L-05C

"Communication configuration file (Driver)" and "L-05C connection software" are required to install for a PC to recognize the FOMA terminal. "Communication configuration file (Driver)" will be installed along with "L-05C connection software".

Although data communication is available with only L-05C connection software, if necessary using it after installing DOCOMO connection manager in addition is also available.

Data communication is also available based on configuring manually after installing L-05C connection software.

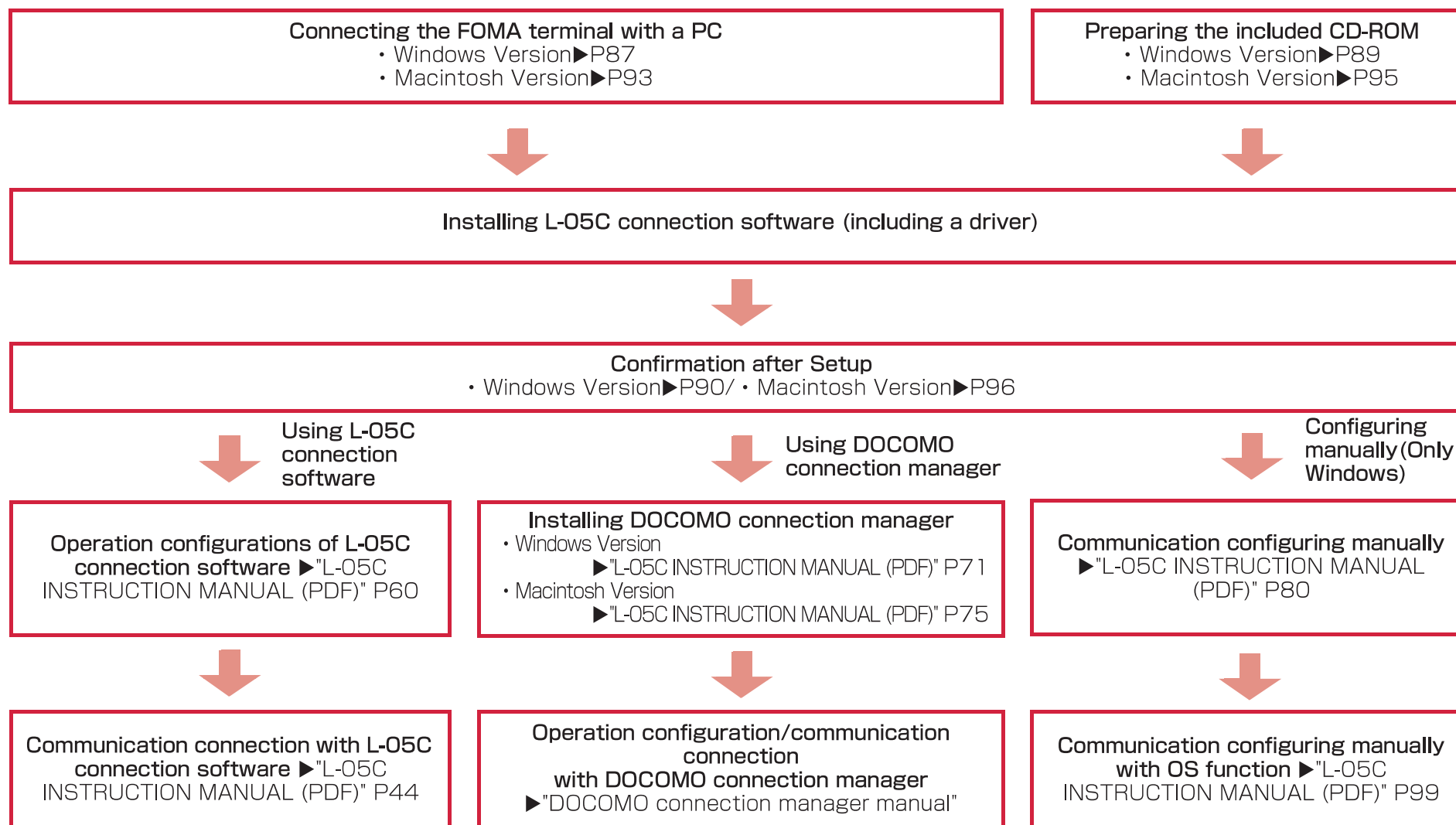
■ Installation of L-05C connection software

Since L-05C has zero installation, when connecting the FOMA terminal to a PC for the first time, "L-05C connection software" installation screen appears automatically. "Zero installation" is supported by the PC with Windows OS in it. If zero installation works improperly, install L-05C connection software with the included CD-ROM.

In addition, although Macintosh does not support the zero installation feature, installation continues through the CD-ROM icon appears when connecting the FOMA terminal to a PC.

The procedure of setting up is described on the next page.

Work Flow of Setting up



Operating Environments

Using this FOMA terminal under the following operational environments.

Item	Requirement
PC Main Unit	• Available CD-ROM drive to use from PC/AT and Mac compatible. • USB port (Comply with Universal Serial Bus Specification Rev1.1/2.0) • DOCOMO is not responsible for any incompatibility of the operation performed through the USB Hub (including USB port available from the monitor, keyboard, etc.) • Display resolution of 800×600 pixels, High Color (65.536) or higher is recommended.
OS*1	Windows 2000 SP4 or later (Japanese versions) Windows XP SP2 or later (Japanese versions) Windows Vista SP1 or later (Japanese versions) Mac OS X 10.4.11 (Japanese versions)*3 Mac OS X 10.5.6 (Japanese versions)*3
Required Memory*2	Windows 2000 : 64Mbytes or more Windows XP : 128Mbytes or more Windows Vista : 512Mbytes or more Mac OS X 10.4.11 : 512Mbytes or more Mac OS X 10.5.6 : 512Mbytes or more
Hard Disk Space*2	50Mbytes or more available space

- ※1 DOCOMO does not guarantee the operation under the supported OS of the OS is changed through update.
- ※2 Required memory or available hard disk space may vary depending on the system environment of a PC.
- ※3 Only Mac with CPU made by Intel Corporation is available.

For latest information of operation environment, visit DOCOMO's "international website"

Note

- The software may not work depending on the operating system environment. DOCOMO does not guarantee any operation other than the environment operation described on the left side.

Windows Version

The L-05C connection software only need to be installed when you connect the FOMA terminal to your PC for the first time.

Note

- When installing, insert FOMA terminal into USB port after OS is activated.
- Take out the CD-ROM from CD driver when zero installation starts.
- Do not remove the FOMA terminal while installing.
- Installation may take several minutes depending on the PC you use.
- Do not install or uninstall during data communication.
- End all the applications before installing. Also end programs on Windows including virus check software.
- When installing, make sure to install from the account with PC supervisor privileges. An error will occur during installation if you install from the account without these privileges.
- For details on setting up PC supervisor privileges, contact your computer manufacturer or Microsoft Corporation.

Preparation for Using L-05C

Setting Zero Installation (Auto)

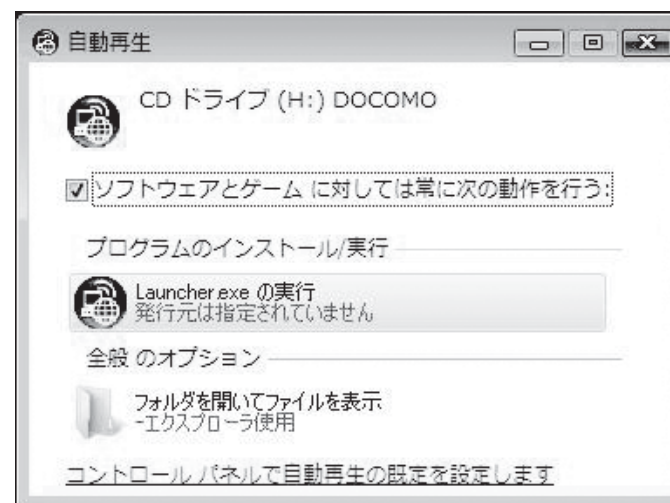
■ For Windows Vista

1 Turn on PC and activate OS

2 Connect the FOMA terminal with a PC

The setup screen of L-05C connection software is automatically displayed by zero installation.

"自動再生" screen will be displayed depending on setting. If the screen is displayed, check "ソフトウェアとゲームに対しては常に次の動作を行う" and select "Launcher.exeの実行"



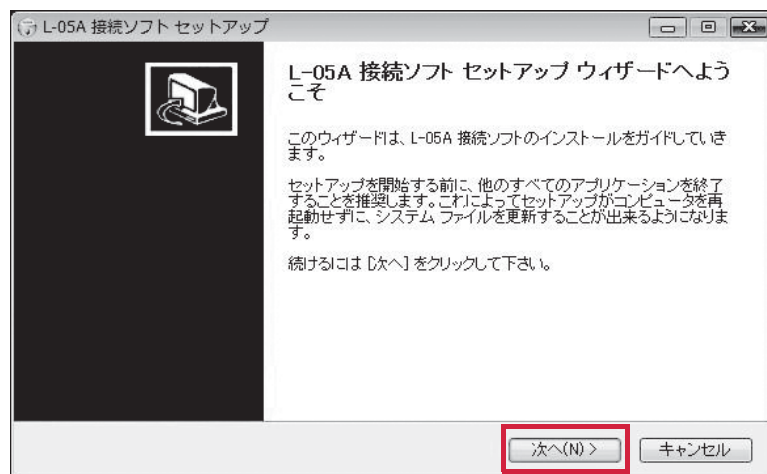
- ※ When the Setting up screen of L-05C connection software is not automatically displayed, install with the included CD-ROM (P89)

3 Click "許可(Allow)" on "ユーザーアカウント制御 (User account control)" screen

■ For Windows XP/2000

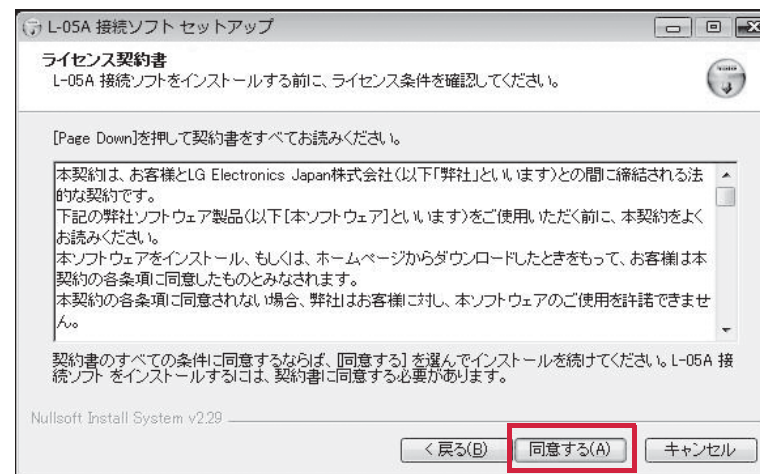
- Because "ユーザーアカウント制御(User account control)" screen is not displayed, follow the next step

4 Click "次へ(Next)"



5 Click "同意する (I Agree)"

Installation starts.



6 Click "完了(Finish)"



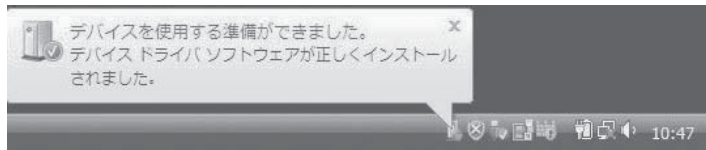
Installation of L-05C communication configuration file (Driver) continues.

7 Confirm whether the FOMA terminal is recognized by PC

On the lower right side of task tray, "デバイスドライバソフトウェアをインストールしています (Device driver software is being installed)" message is displayed, and the FOMA terminal is recognized automatically.



If the FOMA terminal is recognized properly, "デバイスを使用する準備ができました (The device is ready for use)" message is displayed.



■ For Windows XP

- On the lower right side of task tray, "新しいハードウェアが見つかりました。(A new hardware has been found.)" message is displayed, and the FOMA terminal is recognized automatically.



- If the FOMA terminal is recognized properly, "新しいハードウェアがインストールされ、使用準備ができました。(A new hardware has been installed and ready for use.)" message is displayed.



■ For Windows 2000

- The warning screen of removing device is displayed which has nothing to do with using continually.
- "新しいハードウェアが見つかりました (A new hardware has been found.)" message is displayed, and the FOMA terminal is recognized automatically.



Setting Manually (CD)

■ For Windows Vista

- After starting a PC ▶ Insert the included CD-ROM into the PC
- Click  "スタート(Start)" ▶ "すべてのプログラム (All programs)" ▶ "アクセサリ (Accessory)" ▶ Click "ファイル名を指定して実行 (Specify a file name and run)"

■ For Windows XP/2000

Click [スタート(Start)] ▶ "ファイル名を指定して実行 (Specify a file)"

- Enter "<CD-ROMドライブ名>:¥Windows¥ L-05C 接続ソフト¥ StartCD.exe" in "名前 (Name)" ▶ Click "OK"

"自動再生" screen will be displayed depending on setting. If the screen is displayed, check "ソフトウェアとゲームに対しては常に次の動作を行う" and select "Launcher.exeの実行"

4 Perform the same operations as those after step 3 or later on "Setting Zero Installation (Auto) (→P88)"

※ Connect FOMA terminal to PC after clicking "完了(Finish)" in procedure 6.

Confirmation after Installation

Confirming L-05C Connection Software

1 Double click L-05C connection software icon

When the following screen is displayed, the confirmation of installation finishes.



Confirming the Installed L-05C Configuration File (Drivers)

Confirm whether L-05C Communication Configuration File (Drivers) is set in a PC.

■ For Windows Vista

1 Click "スタート(Start)"▶"コントロールパネル(Control panel)"▶"システムとメンテナンス(System and maintenance)"▶"デバイス マネージャ(Device manager)"▶"続行(Continue)"

■ For Windows XP

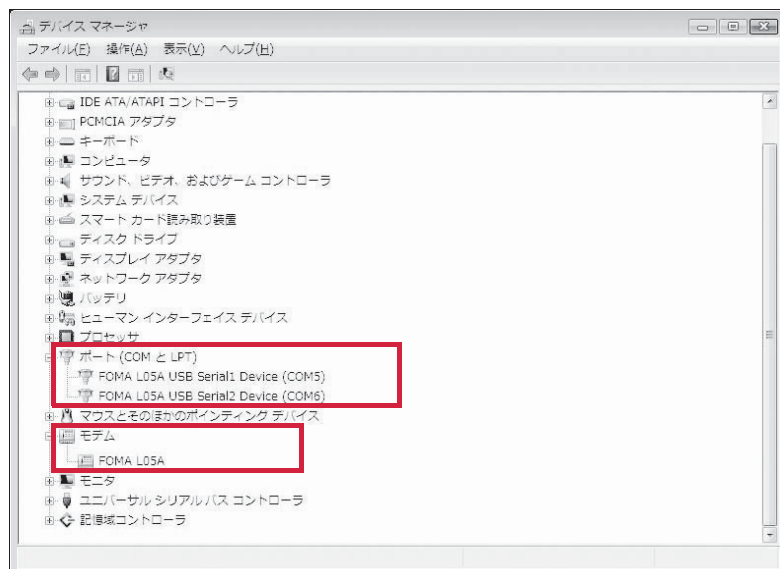
Click "スタート(Start)"▶"コントロールパネル(Control panel)"▶"パフォーマンスとメンテナンス(Performance and maintenance)"▶"システム(System)"▶"デバイス マネージャ(Device manager)" of "ハードウェア(Hardware)" tab

■ For Windows 2000

Click "スタート(Start)"▶"設定(Settings)"▶"コントロールパネル(Control panel)"▶"システム(System)"▶"デバイス マネージャ(Device manager)" of "ハードウェア(Hardware)" tab

2 Click each device display to confirm the driver name installed

- Confirm whether the driver name is displayed below "ポート (COM と LPT)(Port (COM and LPT))", "モデム (Modem)"



- COM port number differs depending on user and PC.

Device name	Driver name
Port (COM and LPT)	FOMA L05C USB Serial1 Device FOMA L05C USB Serial2 Device
Modem	FOMA L05C

Note

- If FOMA terminal is not recognized through the PC's USB port, try other available USB port. FOMA terminal may not be recognized properly with some USB port of PC.
- When communicating data with L-05C connection software, application operation of L-05C connection software is required.
→"L-05C INSTRUCTION MANUAL (PDF)" P60
- When communicating data with DOCOMO connection manager without L-05C connection software, installation of DOCOMO connection manager is required.→"L-05C INSTRUCTION MANUAL (PDF)" P71
- When communicating data with neither L-05C connection software nor DOCOMO connection manager, configure it manually.→"L-05C INSTRUCTION MANUAL (PDF)" P80

Uninstalling L-05C Connection Software (including a driver)

- Before uninstalling, remove the FOMA terminal from the PC.
- When uninstalling, make sure to install from the account with PC supervisor privileges.
- Make sure to save important data in FOMA card. Uninstallation will result in data loss when Phonebook or SMS data is saved in PC.

■ For Windows Vista

- 1  "スタート(Start)"▶"すべてのプログラム (All programs)"▶"L-05C接続ソフト (L-05C connection software)"▶Click "Uninstall"

■ For Windows XP

- "スタート (Start)"▶"すべてのプログラム (All programs)"▶"L-05C 接続ソフト(L-05C connection software)"▶Click "Uninstall"

■ For Windows 2000

- "スタート (Start)"▶"プログラム (Program)"▶"L-05C 接続ソフト(L-05C connection software)"▶Click "Uninstall"



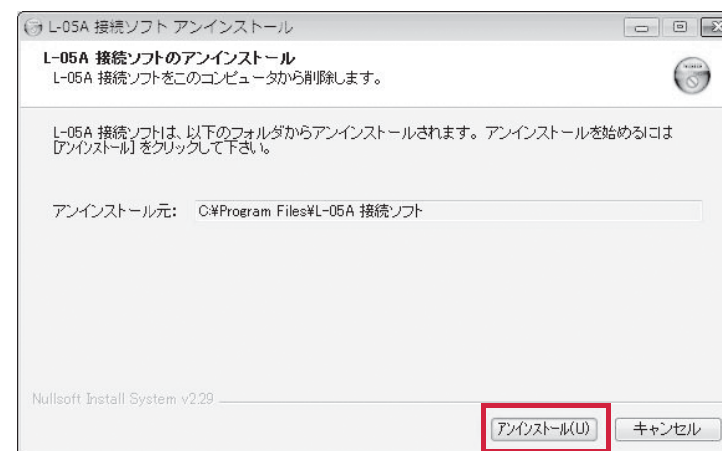
- 2 Click "許可 (Allow)" on "ユーザーアカウント制御 (User account control)" screen

If "キャンセル(Cancel)" is clicked, uninstallation will be stopped.

■ For Windows XP/2000

- Since "ユーザーアカウント制御 (User account control)" screen is not displayed, follow the next procedure.

- 3 Click "アンインストール (Uninstall)"



- 4 Click "完了 (Finish)"



Uninstallation finishes.

Macintosh Version

The L-05C connection software only need to be installed when you connect the FOMA terminal to your Mac for the first time.

Note

- When installing, insert FOMA terminal into USB port after OS is activated.
- Take out the CD-ROM from CD driver when installation via FOMA terminal starts.
- Do not remove the FOMA terminal while installing.
- End all the applications before installing. Also end programs on Macintosh including virus check software.
- When installing, make sure to install from the account with PC supervisor privileges.

Preparation for Using L-05C

Setting by FOMA Terminal

- 1 Turn on Mac and activate OS
- 2 Connect the FOMA terminal with a Mac
CD-ROM icon is displayed on the desktop.
- 3 Double click the CD-ROM icon

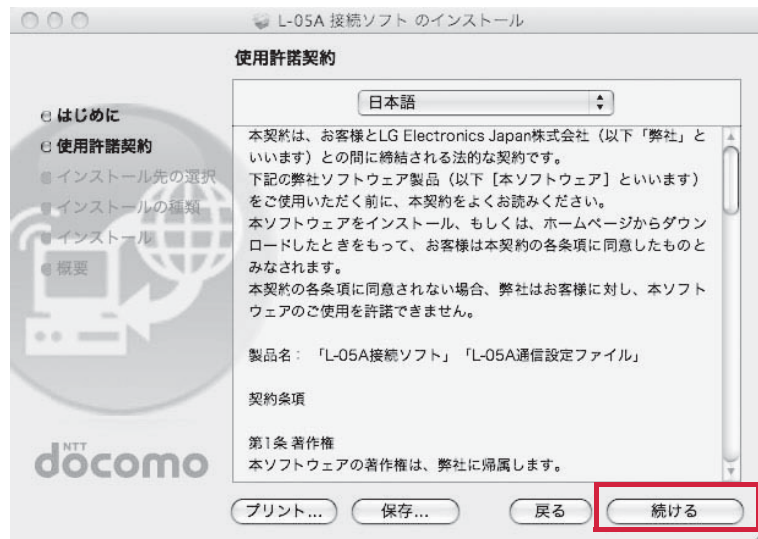
- 4 Double click "L-05C 接続ソフト インストーラー .mpkg (L-05C connection software installer.mpkg)"



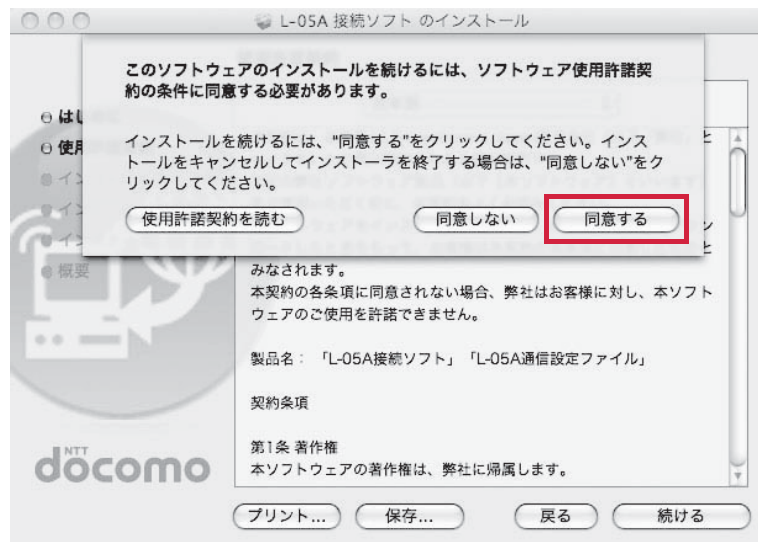
- 5 Click "続ける (Continue)"



6 Click "続ける (Continue)"



7 Confirm "使用許諾契約 (The license agreement)". If agree with the content, click "同意する (I Agree)"



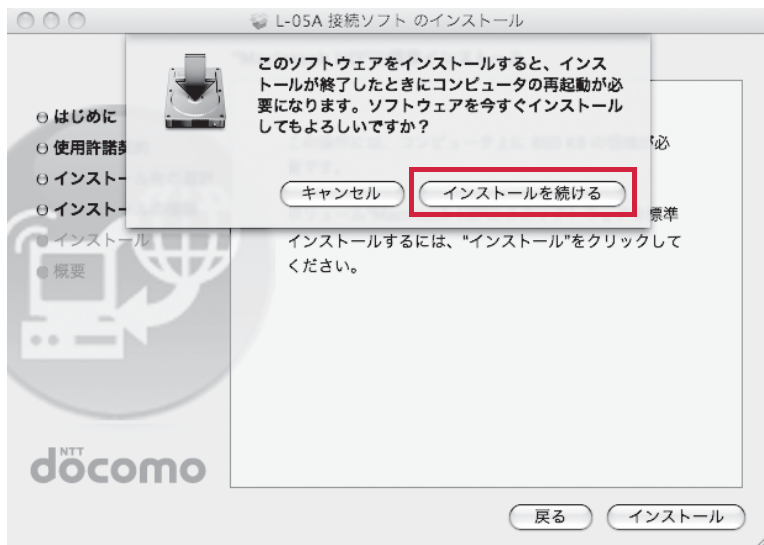
8 Click "インストール (Install)"



9 Enter administrator password ► Click "OK"



10 Click "インストールを続ける (Continue installing)"



11 Click "再起動 (Restart)"

Mac restarts. Installation finishes.



Setting by CD-ROM

- 1 Start Mac▶Insert the CD-ROM into Mac
CD-ROM icon on desktop appears.
- 2 Double click CD-ROM icon▶"Mac"▶"L-05C connection software"
- 3 For subsequent steps, operate the same procedures as those after procedure 4 in "Setting by FOMA terminal)" (→P93)

※ Connect FOMA terminal to PC after restarting Mac in procedure 11.

Confirmation after Installation

Confirming L-05C Connection Software

- 1 Launch "Finder" ▶ "アプリケーション(Application)"
▶ "L-05C 接続ソフト.app (L-05C connection software.app)"

When the following screen is displayed, the confirmation of installation finishes.



Note

- When communicating data with L-05C connection software, setting application operations of L-05C connection software is required. → "L-05C INSTRUCTION MANUAL (PDF)" P60
- When communicating data with DOCOMO connection manager without L-05C connection software, installation of DOCOMO connection manager is required. → "L-05C INSTRUCTION MANUAL (PDF)" P71

Uninstalling L-05C Connection Software (including a driver)

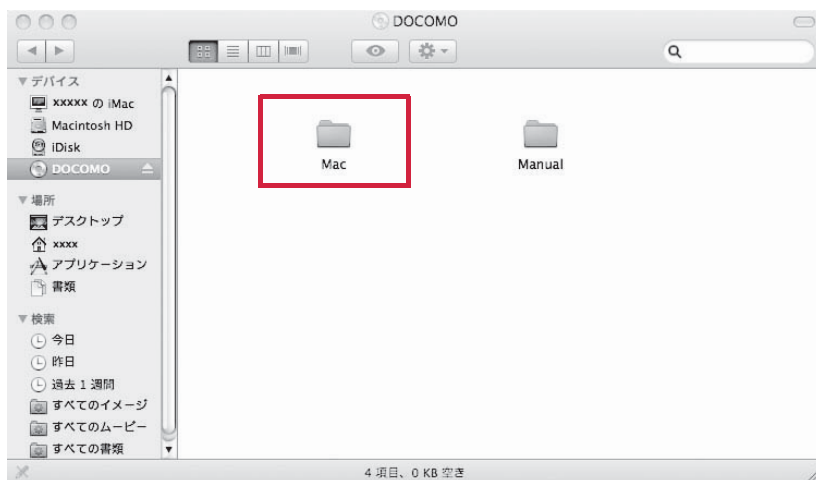
- Before uninstalling, remove the FOMA terminal from the Mac.
- When uninstalling, make sure to install from the account with PC supervisor privileges.
- Make sure to save important data in FOMA card. Uninstallation will result in data loss when Phonebook or SMS data is saved in PC.

1 Insert the included CD-ROM into a Mac

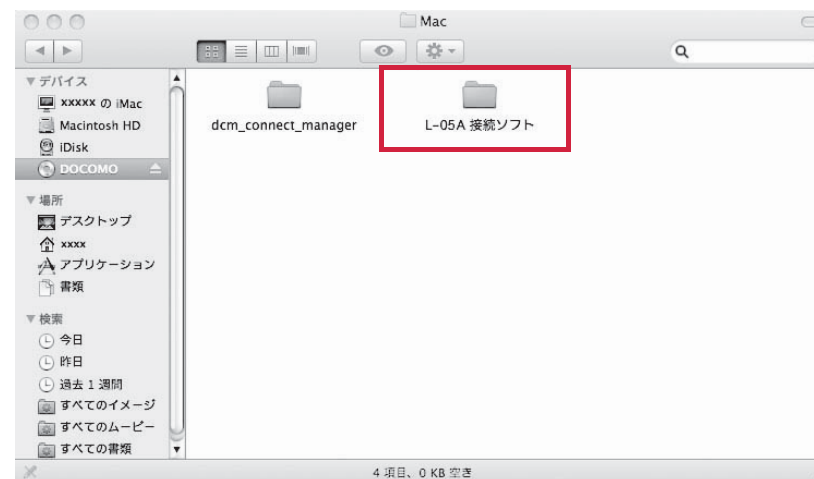
CD-ROM icon is displayed on the desktop.

2 Double click the CD-ROM icon

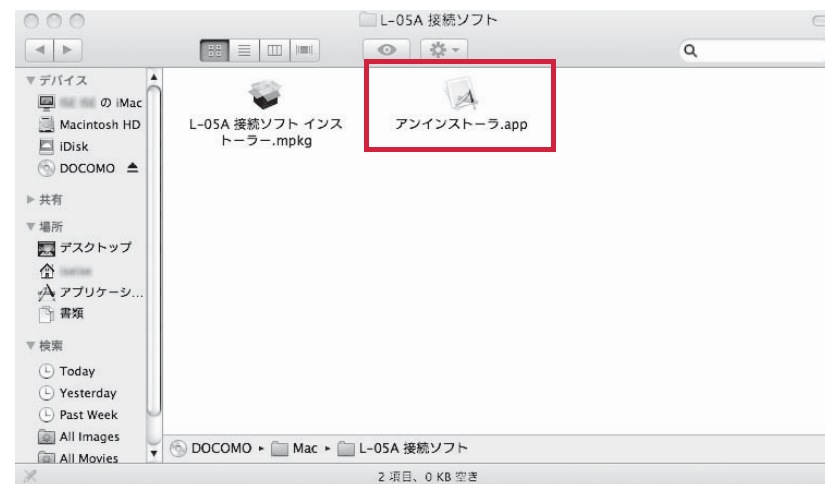
3 Double click "Mac"



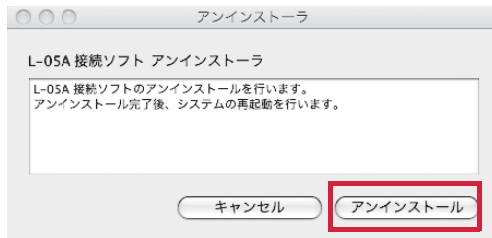
4 Double click "L-05C接続ソフト (L-05C connection software)"



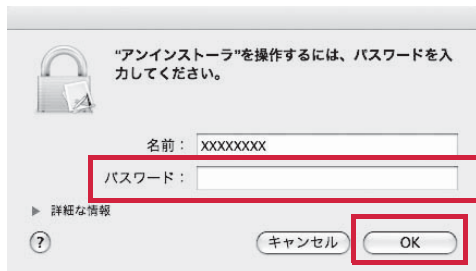
5 Double click "アンインストーラ.app (Uninstaller.app)"



6 Click "アンインストール(Uninstall)"

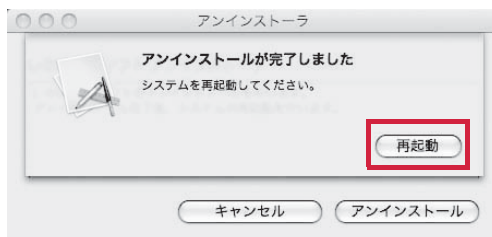


7 Enter administrator password ► Click "OK"



8 Confirm whether the FOMA terminal is connected to USB port before restarting

9 Click "再起動(Restart)"



Mac restarts. Uninstallation finishes.