

C3900
user guide



User Guide for the Kyocera C3900 Mobile WiMax USB Modem

This manual is based on the production version of the Kyocera C3900 Mobile WiMax USB Modem. Software changes may have occurred after this printing. Kyocera reserves the right to make changes in technical and product specifications without prior notice.

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FCC Compliance Information

This device complies with Part 15 of 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.

Body worn operation

SAR compliance has been established in the laptop computer(s) with Horizontal and Vertical slot configurations, and can be used in laptop computers with substantially similar physical dimensions, construction, and electrical and RF characteristics

The antenna(s) used for this USB dongle must not be co-located or must not operate in conjunction with any other antenna or transmitter within a host device.

Warnings

This equipment has been tested and found to comply with 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 can generate, use, and 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 unacceptable interference to radio and 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.

Caution

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Safety Instructions

Be sure to read the following precautions.

Failure to follow the directions may cause product damage or failure.

- Do not drop the product or subject it to severe shock.
- Do not disassemble or modify the product. See product Warranty for service and repair by an authorized service center.
- Do not expose the product to rain, spilled liquids or use it in a location with high humidity.
- Do not use or store the product near a source of high temperatures.
- Do not insert any metal or flammable materials into the product.
- Do not clean the surface of the product with chemical solutions or detergents. Clean surface only with a dry cloth.

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1. Product overview

C3900 is a USB type wireless modem that enables portable Internet services by using Mobile WiMAX.

When this product is connected to a USB port on a notebook, you can freely use Internet services within the Mobile WiMAX service area.

The WiMAX Connection Manager software contained on the enclosed CD enables you to connect to Internet service.

2. Product specification

- Size : 27x62x11mm (1.06x2.44x0.43")

- Weight : 18g (0.63oz)

Standard	IEEE802.16e Mobile WiMAX Wave 2	Band Class	3.A
Access/Duplex	OFDMA / TDD	Host Interface	USB 2.0
Operating Frequency	2.496GHz~2.690GHz	Data Throughput	Downlink : MAX 30Mbps
			Uplink : MAX 6Mbps
Bandwidth	10MHz	Tx. Power	Max power : 23dBm
Center Frequency Allocation	Carrier dependent		
Modulation	QPSK, 16QAM	Operating Temperature	-20 °C ~ 60 °C (-4°F ~ 140°F)
Demodulation	QPSK, 16QAM, 64QAM		

3. System Requirements

Minimum specifications

- OS: Windows VISTA 32bit, Windows XP SP2
- CPU: Pentium4 /1GHz or higher
- Memory: 512MB RAM
- Interface: Compatible with USB 2.0

Recommendation

- O/S : Windows VISTA 32bit, Windows XP SP2
- CPU: Pentium4 /2GHz or higher
- Memory : 1GB RAM
- Interface: Compatible with USB 2.0

4. Description of parts



LED Status information

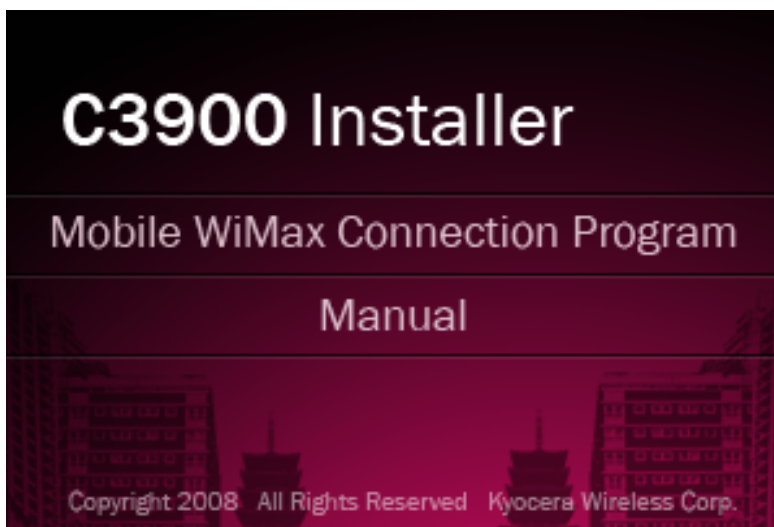
Modem power on	Solid Blue
Receiving/Sending data	Blinking Blue

5. Installation

Installing the C3900 causes the Connection Manager Installer window to appear automatically on the screen.

Insert the installation CD for WiMAX Connection Manager.

1. When the C3900 Installer screen appears, click **Mobile WiMAX Connection Program**.



Note:

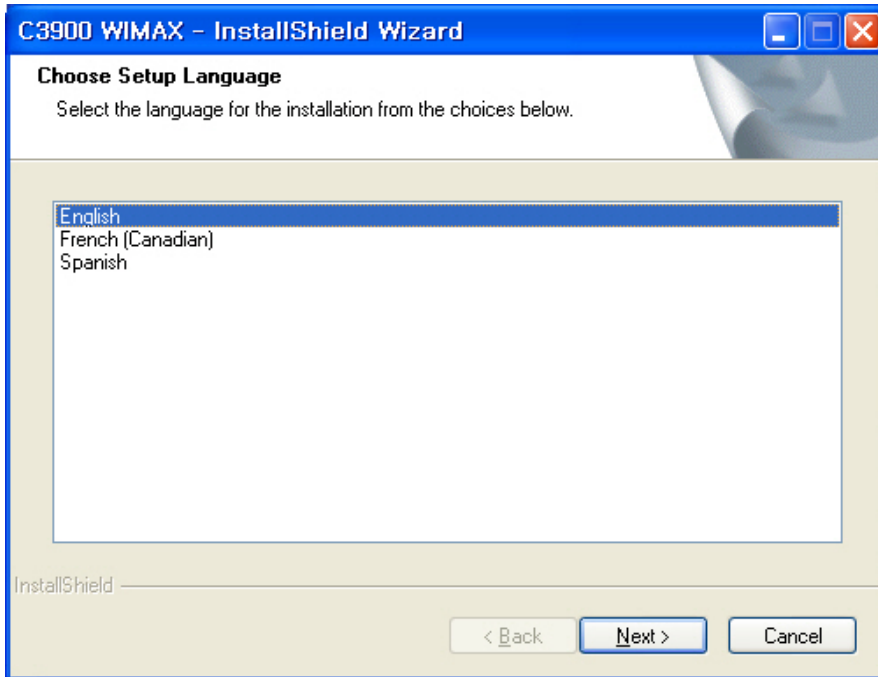
If auto-installation window does not appear, please follow the process below.

- 1) Go to "My Computer", Right-click on the CD Drive then, click "Open"
- 2) Double-click "Setup.exe".

IMPORTANT!

When attaching the modem to your PC, choose the USB port furthest away from your LCD screen to avoid interference with the signal. For the best reception, rotate the modem to the vertical position.

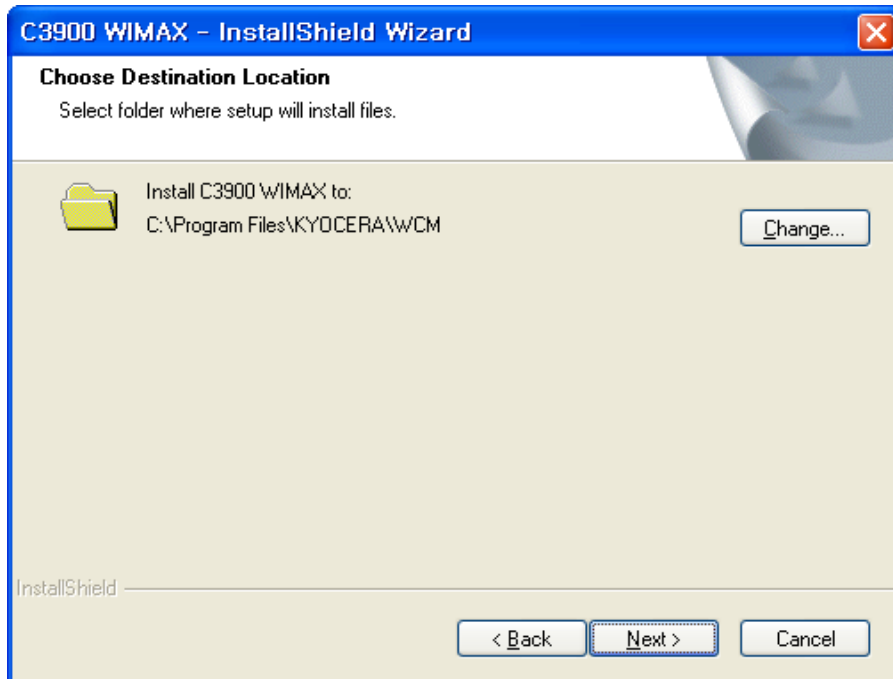
2. After selecting the setup language, click NEXT.



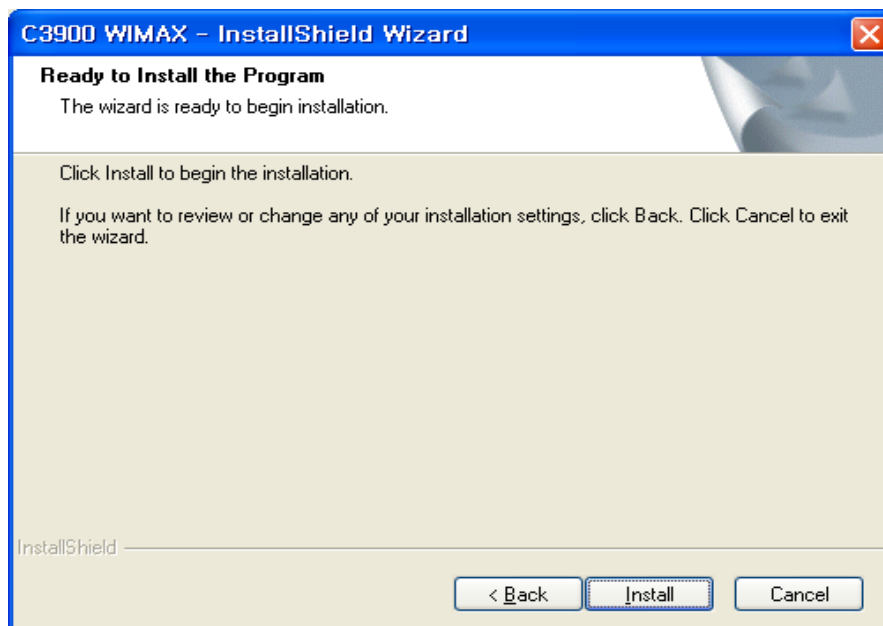
3. Click NEXT to start the installation



4. After selecting the installation path, click NEXT. It is recommended that you accept the default installation path.



5. Click Install



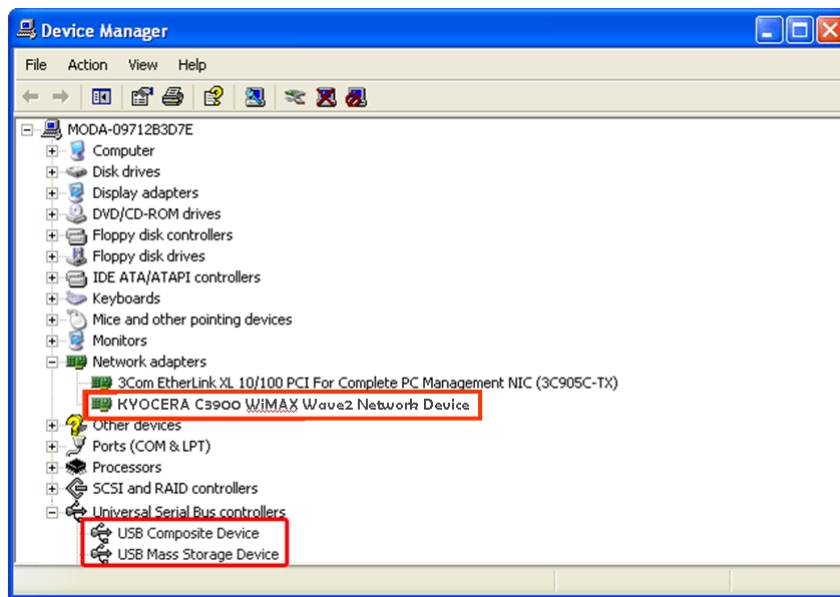
6. When the installation completion message appears, click **Finish** to complete.



6. Checking the installation

After the program setup is completed, check the installation status as follows.

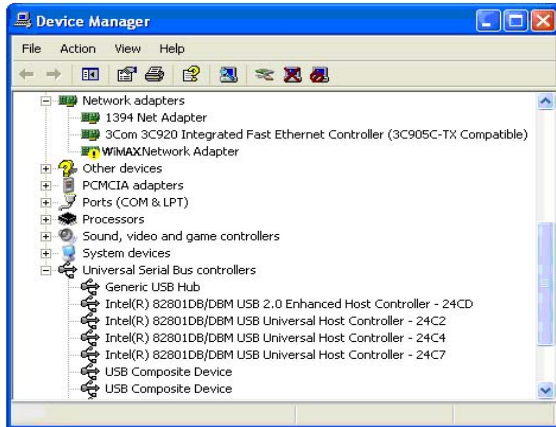
Select **Start > Control Panel > System > Hardware > Device Manager**.



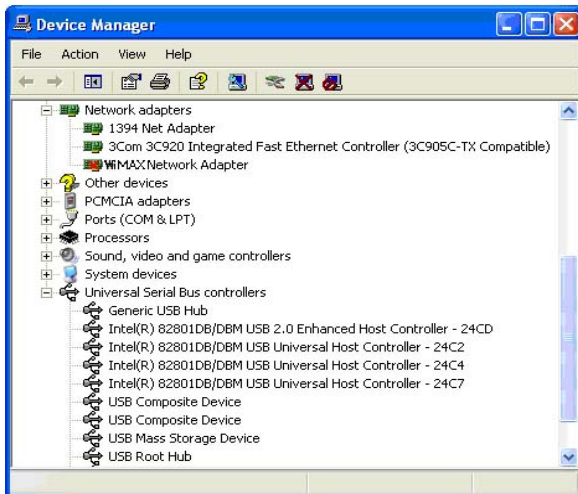
Confirm that the Kyocera C3900 WiMAX Wave2 Network Device driver is listed under Network adapters and that the USB Composite Device and the USB Mass Storage Device are listed under Universal Serial Bus controllers.

Note

1. If any of the devices installed have an exclamation mark icon indicated, right click on the name and select Driver Update.



2. If any of the devices installed have a red X icon indicated, right click on the name and set to Use.



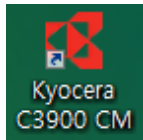
3. The names and sequences may differ depending on the user environment.

7. Starting the application

1) Using the Start menu

Click Start > All Programs > KYOCERA > C3900 > Kyocera C3900 CM

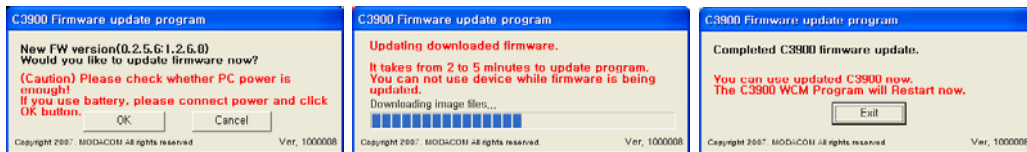
2) Using the desktop shortcut;



Double-click the shortcut icon on Desktop.

Note: Firmware Update

When there is updated firmware available, an automatic program update window opens.



1. When the update window appears, click **OK**.

Downloading updates takes approximately 2 to 5 minutes.

2. When the update is completed, click **Exit**.

(!) During the update process do not terminate the program or detach the modem.

Removing the modem or turning off the PC during the update may damage the device beyond repair.

8. Connection/Termination

You can use Internet services only When Kyocera C3900 CM (Kyocera C3900 Connection Manager) is connected. You can check the connection status through the messages on the main screen

1) Connecting Kyocera C3900 CM

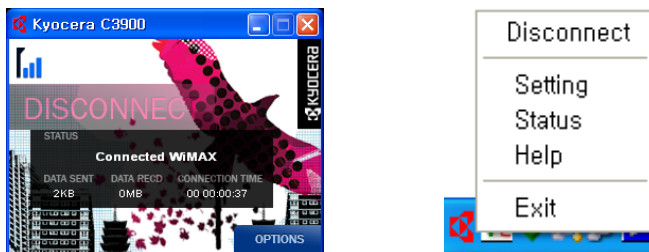
When you click **CONNECT**, WiMAX is connected.

(The automatic connection can be enabled in **OPTIONS > SETTINGS**.)



2) Terminating Kyocera C3900 CM

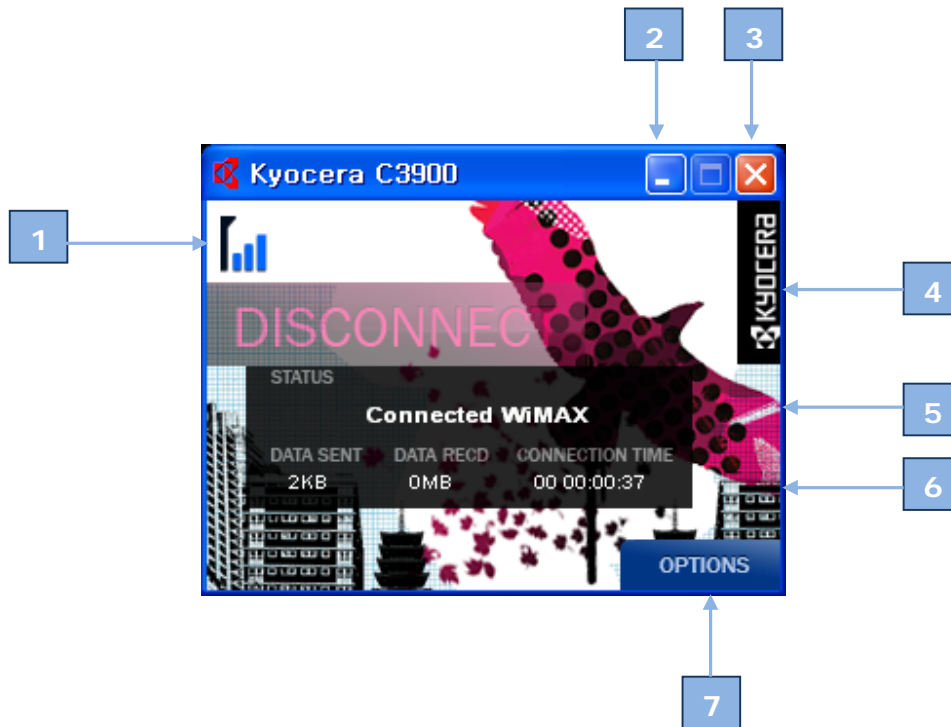
To terminate WiMAX, click **DISCONNECT** on the main screen or tray icon menu for disconnection.



9. Using MENU

9.1 Main screen

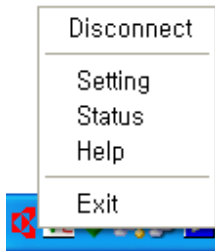
When Kyocera C3900 CM runs, the following main screen appears.



- (1) Displays the signal strength of the connected WiMAX.
- (2) Hides the screen in the system tray.
- (3) Terminates Kyocera C3900 CM.
- (4) Click here to move to the KYOCERA Homepage.
- (5) Displays the current connection status.
- (6) Displays the current network progress information.
- (7) Displays Options. (Setting, Status, Help)

9.2 System Tray Icon window

With the Main screen minimized, you can double-click on the Kyocera tray icon in the system tray to open the Main screen again. The following Connection Manager menu appears when you right-click on the tray icon.

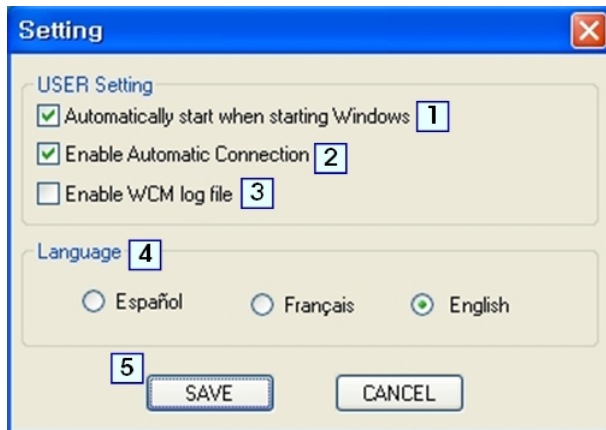


- Connect/Disconnect
- Setting: Moves to Setting
- Status: Displays the status (connection information)
- Help: Displays the help on the program
- Exit: Exits the program

10. Settings

You can set additional functions.

For environment settings, click Setting on the Main menu or the system tray icon menu.



(1) Automatically start when starting Windows

- After Windows starts, the WCM main screen appears on Desktop

(2) Enable Automatic Connection

- When the program runs, automatic connection is established without pressing the connection button
- When the modem loses then reacquires the signal, it reconnects to the network automatically.
- When the modem is removed then replaced while connected to the network, it reconnects automatically.

(3) Enable WCM log file

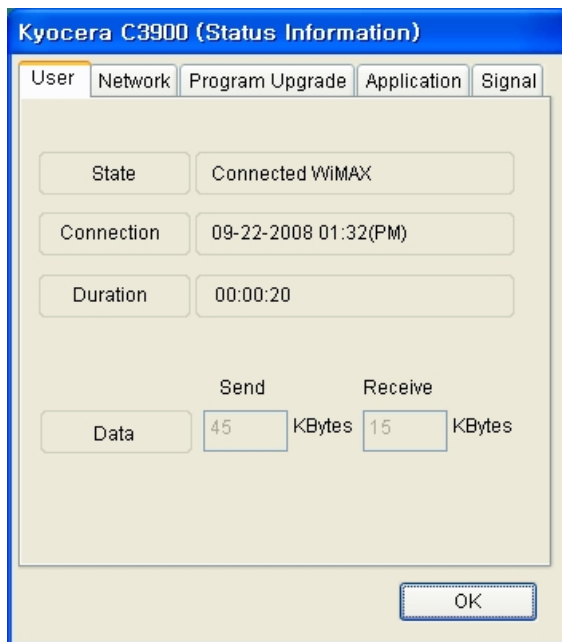
- If you select Enable WCM log file, it creates a dated folder at C:\WCM_LOG. The log file contains WCM and authentication messages. If you experience problems while using your WiMAX device, your service provider may ask for these files to assist in troubleshooting the device.

(4) Set the language

(5) Save or Cancel

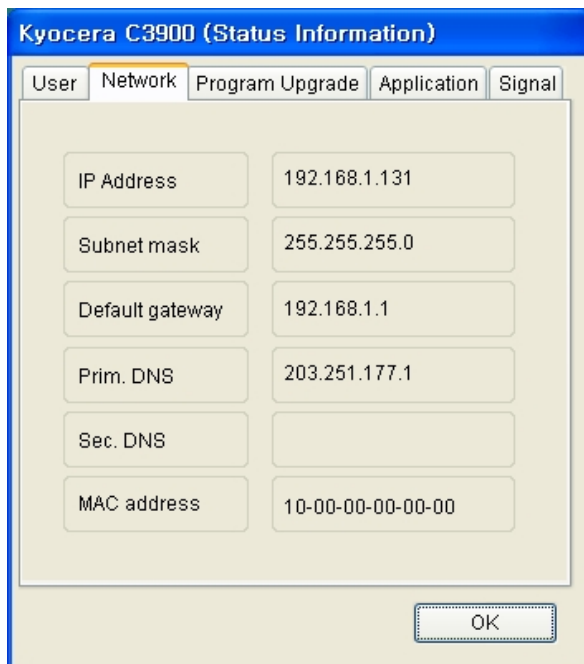
11. Status

When you select MENU > Status, you can check the information for User, Network, Program Upgrade, Application and Signal

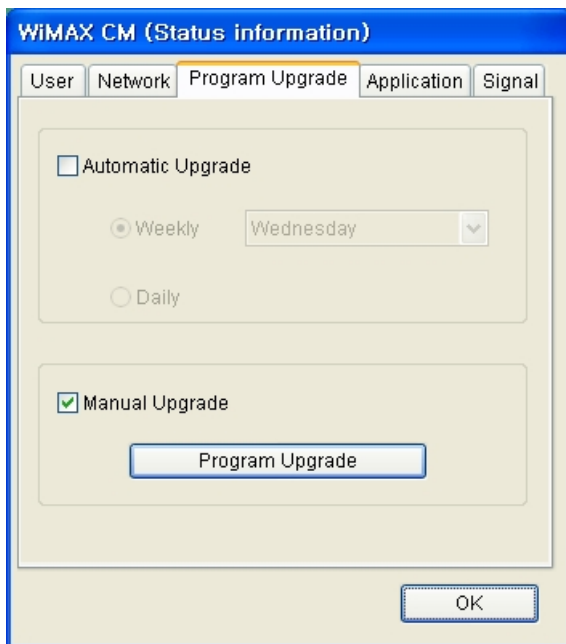


1) User: Contains the following information:

- State: Displays the status such as whether the modem is installed or not, whether initialization is a success or not, and whether the Internet is connected or not.
- Connection: Displays the date and time of the WiMAX connection to the Internet.
- Duration: Displays the length of time connected to the Internet using WiMAX.



2) Network: Displays the current network information of assigned IP & MAC address, Subnet mask, Default gateway and DNS.



3) Program Upgrade:

- Automatic Upgrade: Weekly upgrade is operated on a certain day of the week that user pre-set. Daily upgrade is operated once a day.
- Manual Upgrade: starts when Program Upgrade button is pressed.

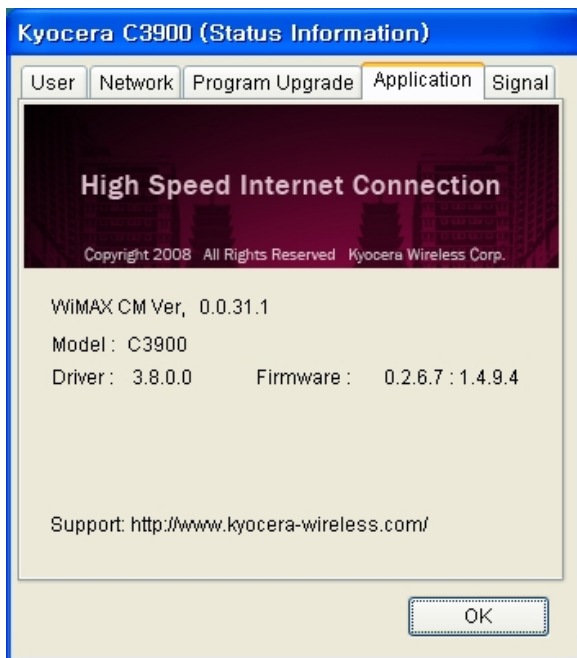
Upgrade process always starts with checking CM to see if upgrade is available.

{ *Program Upgrade* }

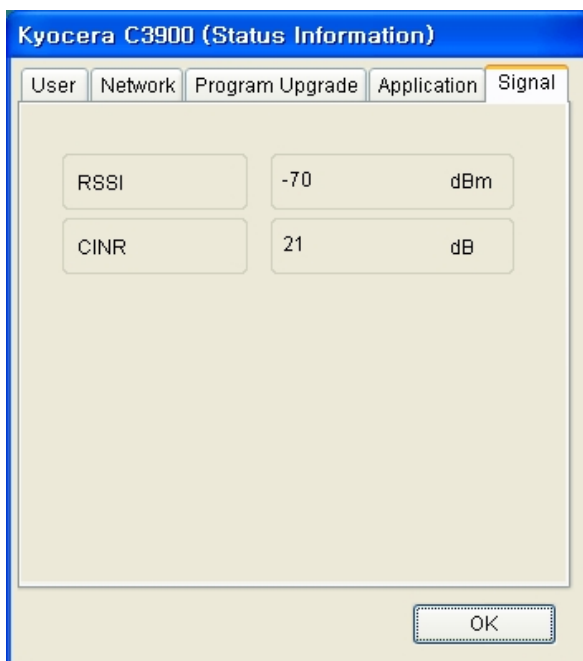
- If the Program upgrade button is activated, you may upgrade your program version by clicking the button.
- The upgrade process is operated automatically after clicking "Program Upgrade" button.
- Reconnect the modem after the program upgrade process is completed.

Note:

[The "Program Upgrade" button is enabled only when the modem is connected to the server]



4) Application: Displays the current version of the program.



5) Signal: Indicates the current values of RSSI and CINR on the device.

12. Uninstallation

Method 1)

Click Start > All Programs > KYOCERA > C3900 > Uninstall Kyocera C3900 CM

Method 2)

Click Start > Control Panel > Add or Remove Programs > C3900 WiMAX > Remove

13. Troubleshooting

Problem	Cause and Remedy
Searching modem	<ul style="list-style-type: none">● The system is searching the modem.● When this status continues, check the modem status and reconnect it.
Please check the modem	<ul style="list-style-type: none">● The system cannot search the modem due to a modem failure.● Check the modem status and reconnect it.
NO WiMAX signal detected at this location	<ul style="list-style-type: none">● The connection has failed because the quality of the WiMAX signal is very weak.
We have no encryption key	<ul style="list-style-type: none">● There is no encryption key. Please consult with your service provider.
Device control initialize failed	<ul style="list-style-type: none">● The device initialization has failed. When the device fails to initialize after several retries, consult with your service provider.
You can't use WiMAX service due to lack of power	<ul style="list-style-type: none">● The system stops the use of your modem due to low battery level in the laptop. Recharge or replace the laptop battery and retry using services.