# WiMAX USB Dongle User Manual



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# About this Manual

### Purpose

This document provides information and procedures on installation and configuration of WiMAX USB Dongle. You could utilize the theoretical information in this guide to setup your device.

### Conventions Used in this Document

The following typographic conventions and symbols are used throughout this document:

Ш	Very important information. Failure to observe this may result in damage.
l	Important information that should be observed.
i	Additional information that may be helpful but which is not required.
bold	Menu commands, buttons and input fields are displayed in bold

# Chapter 1 – Installation on Windows OS

This chapter describes the procedure of installing WiMAX USB Dongle for Windows XP, Windows Vista and Windows 7. Please follow the steps below to install WiMAX Connection Manager.

Step1: Plug-in WiMAX Dongle to your PC/ Laptop.



Plug-in WiMAX Dongle

**Step2:** A new drive called "WiMAXCM" would be shown after the device plug-in. If auto run of your system is enabled, the installer will be launched automatically. Otherwise, please execute the installer manually.



New Device "WiMAXCM"

Step3: Click Next to continue the Setup Wizard.

**Step4:** Click **Browse** to select the installation path, and then

click **Install** to start the installation.



Setup Wizard – Welcome Page

WIMAX Connection Manager Setup	
Choose Install Location Choose the folder in which to install WIMAX Connection Manager.	0
Setup will install WIMAX Connection Manager in the following folder. To install in a folder, click Browse and select another folder. Click Install to start the installation.	different
Destination Folder	
Space required: 18.9MB Space available: 17.0GB	
WIMAX Connection Manager Version 2.1.1.8	Cancel

#### **Step5:** Starting the installation.

**Step6:** Click **Finish** to complete the installation.

#### Setup Wizard – Browse Installation Path



Setup Wizard – Installing



- **Step7:** The WiMAX Connection Manager window will appear after the setup wizard is completed.
- **Step8:** Now you could configure your dongle through the Connection Manager.



Setup Wizard –Complete Setup Wizard

WiMAX Connection Manager

# Chapter 2 – Reference Manual for Windows OS

This chapter shows the definition of the configurations on the Connection Manager.

### Main Menu

 $\lambda$  **Connect Button:** Click the **Connect** button, then your dongle will

connect to the Base Station.

- $\lambda$  Settings Button: Click the Settings button to change the configurations.
- $\lambda$  Status Button: Click Status button to view the device status.
- $\lambda$  **[X] Button:** Close WCM.
- $\lambda$  [-] Button: Minimize the window to system tray.
- $\lambda$  [?] Button: Launch user manual.



Connection Manager – Main Menu

### Settings | Basic

**Default Setting** 

 $\lambda$  Automatically Start CM when Device is Plugged:

WiMAX Connection Manager will start automatically when the dongle is

plugged to PC.

 $\lambda$  Automatically Connects When CM Starts:

WiMAX Connection Manager will try to connect to WiMAX network

automatically when it starts.

 $\lambda$  Upgrade Button: If DM is supported and this button is enabled, user can

click on it to check whether there is a newer version of WiMAX

Connection Manager.



Settings - Basic

- $\lambda$  **OK button:** Click OK to apply the changes.
- $\lambda$  **Cancel button:** Click Cancel to cancel and close the setup window.

### Settings | Authentication

#### Authentication

- λ Method: Select the Authentication Method as suggested by your service provider and enter the login credentials, User Identity and User
   Password.
- $\lambda$  **Realm**: Enter the **Realm** provided by your service provider.
- $\lambda$  **OK button:** Click OK to apply the changes.
- $\lambda$  **Cancel button:** Click Cancel to cancel and close the setup window.

Settings	۲
Basic Authenticatio	
Authentication	
Method:	EAP-TLS
User Identity:	
User Password:	
Realm:	escuelas.prima.com.ar
ок	Cancel

Settings – Authentication

### Status | IP Network

Display the Physical Address, IP Address, Subnet Mask, Default Gateway and

DNS Servers.

 $\lambda$  **Close button:** click **Close** to close the status window.



Status – IP Network

### Status | WiMAX

Display the State, Session Duration, Temperature, Base Station ID, Center

Frequency, Bandwidth, RSSI, CINR, TX Power, Downlink Rate, Uplink Rate,

Byte Sent and Byte Received

 $\lambda$  **Close button:** click **Close** to close the status window.

WIMAX		
State:	Operational	
Session Duration:	0:0:21	
Temperature:	40 C / 104 F	
Base Station ID:	42:57:41:11:11:11	
Center Frequency:	2505000 KHz	
Bandwidth:	10000 KHz	
RSSI:	-67 dBm	
CINR:	23 dB	
TX Power:	-3 dBm	
Downlink Rate:	0 kbps	
Uplink Rate:	1 kbps	
Byte Sent:	14.893 KB	
Ryte Received	1.641 KB	

Status – WiMAX

### Status | About

Display the Product Name, Product Version, Driver Version, Firmware,

Version and URL

 $\lambda$  **Close button:** click **Close** to close the status window.



Status – About

### How to Connect to WiMAX Network

 $\lambda$  If Automatically Connects When CM Starts is enabled, a blue button

with dynamic background will be shown and WiMAX Connection Manager

will try to connect to any available WiMAX BS.

 $\lambda$  When being connected to WiMAX network, a small blue button with colorful concentric circles that represents the WiMAX signal strength would be shown.

Some basic information is also shown on this window, and details can be

found on the status window shown once Status button is clicked.



Automatic Connection Mode



WiMAX Connected

 $\lambda$   $\;$  By clicking the orange button, your WiMAX network will be disconnected.



WiMAX Disconnected

# Chapter 3 – Installation on MAC OS

This chapter provides the software installation of WiMAX 802.16e USB dongle for Mac OS X 10.5 and above. Please follow the steps below to install WiMAX Connection Manager.

**Step1:** Plug-in WiMAX Dongle to your PC/ Laptop.



Plug-in WiMAX Dongle

Step2: A volume image named "WiMAXCM" will be mounted automatically after the device plug-in. Browse "Mac" folder in this volume image.

**Step3:** Double click on "WiMAXCMInst.mpkg" to start the

installation procedures.



New Device "WiMAXCM" - "MAC" Folder



Double click on WiMAXCMInst.mpkg

Step4: Click Continue to continue the Setup Wizard.





Introduction



**Destination Select** 

Step6: Click Install to start installation.

Step7: Before starting installation, please enter User Name and Password of the account with root privilege and then click OK to continue.



Installation Type



Enter User Name and Password to Make Changes

Step8: A message window will pop-up and show that the user must restart the system after installation. Click
Continue Installation to continue.

**Step9:** Starting the installation.



Pop-up Massage Window



Starting the installation

Step10: Click Restart to complete the installation.



Summary

### Chapter 4 – Network Service

This chapter describes how to create a network service related to the new WiMAX network interface in Mac OS X.

 $\lambda$  If it is the first time to use the device on your computer, the

system will pop up a window that asks you to add a new

network service. Click Network Preferences... to continue.

 $\lambda$  Select the device at the list and click on **Apply** to complete

the configuration.



#### Network Preferences

► Show All				۹	
	Location:	Automatic	:		
AirPort     Connected     Ethernet     Not Connected	( (-)	Status	Unknown State The status of your network cannot be determined.	connection	
C WXUBB-115 No IP Address		Configure IPv4: IP Address: Subnet Mask: Router: DNS Server: Search Domains:	Using DHCP	:	
+ - 0-			(	Advanced)	(?)

Complete Network Preferences

# Chapter 5 – Reference Manual for MAC OS

This chapter shows the definition of the configurations on the Connection Manager.

### Main Menu

 $\lambda$  **Connect Button:** Click the **Connect** button, then your dongle

will connect to the Base Station.

- $\lambda$  Settings Button: Click the Settings button to change the configurations.
- $\lambda$  **IP Network:** Click **IP Network** button to view the device network status.
- $\lambda$  **WIMAX:** Click **WIMAX** button to view the device WIMAX status.
- $\lambda$  About Button: Click About button to view the device status.

00	Wi	MAX Connec	tion Manag	jer	
					(
	Main	IP Network	WiMAX	About	
Duration:					
IP Address:					
DL Speed:					
UL Speed:					
Sent:					
Received:					
				Connect	C
o Device				ſ	🙆 Settin

Connection Manager – Main Menu

- $\lambda$  **Red Button:** Close WCM.
- $\lambda$  Yellow Button: Minimize the window to system tray.
- $\lambda$  [?] Button: Launch user manual.

### Settings | Basic

 $\lambda$  Automatically Start CM when Device is Plugged:

WiMAX Connection Manager will start automatically when the

dongle is plugged to PC.

 $\lambda$  Automatically Connects When CM Starts:

WiMAX Connection Manager will try to connect to WiMAX

network automatically when it starts.

 $\lambda$  Upgrade Button: If DM is supported and this button is enabled, user can click on it to check whether there is a newer version of

WiMAX Connection Manager.

 $\lambda$  **OK button:** Click OK to apply the changes.



Settings – Basic

 $\lambda$  **Cancel button:** Click Cancel to cancel and close this window.

### Settings | Authentication

- λ Method: Select the Authentication Method as suggested by your service provider and enter the login credentials, User Identity and User Password.
- $\lambda$  **Realm**: Enter the **Realm** provided by your service provider.
- $\lambda$  **OK button:** Click OK to apply the changes.
- $\lambda$  **Cancel button:** Click Cancel to cancel and close the setup

window.

B	asic Authentication
Method:	EAP-TLS
User Identity:	
User Password:	
Realm:	escuelas.prima.com.ar

Settings – Authentication

### IP Network

Display the Physical Address, IP Address, Subnet Mask, Default

Gateway and DNS Servers.



Status – IP Network

### WiMAX

Display the State, Session Duration, Temperature, Base Station ID,

Center Frequency, Bandwidth, RSSI, CINR, TX Power, Downlink

Rate, Uplink Rate, Byte Sent and Byte Received

Main	P Network WiMAX About
State:	Operational
Session Duration:	0:0:30
Temperature:	36 C / 96 F
Base Station ID:	42:57:41:11:11:11
Center Frenquency:	2505000 KHz
Bandwidth:	10000 KHz
RSSI:	–59 dBm
CINR:	25 dB
TX Power:	–13 dBm
Downlink Rate:	0 kbps
Uplink Rate:	0 kbps
Byte Sent:	3.681 KB
Byte Received:	2.658 КВ

WiMAX Status

### About

Display the Product Name, Product Version, Driver Version,

Firmware, Version, Copyright and URL

work WiMAX About	
MAX Connection Manager	
1.1.0	
.00.014	
).1189	
1	1.1.0 .00.014 0.1189

Status – About

### How to Connect to WiMAX Network

 $\lambda$  If Automatically Connects When CM Starts is enabled,

WMAX Connection Manager will try to connect to any available

WiMAX BS. Otherwise, click on the Connect button on Main

Menu.

00	WiMAX Connec	tion Manag	jer	
				?
	Main IP Network	WiMAX	About	
Duration:				
IP Address:				
DL Speed:				
UL Speed:				///
Sent:				
Received:				
		5	Connect	
Disconnected fro	om WiMAX			Setting

Automatic Connection Mode

λ When being connected to WiMAX network, the blue concentric circles that represent WiMAX signal strength would be shown.
 And some basic information is also shown on this window.

 $\lambda$  By clicking the **Disconnect** button, network will be

disconnected.



WiMAX Connected

#### Federal Communication Commission Interference 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 to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one 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 Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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

#### **IMPORTANT NOTE:**

#### **Radiation Exposure Statement:**

The product comply with the US/Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far

as possible from the user body or set the device to lower output power if such function is available.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

SAR compliance has been established in typical laptop computer(s) with USB slot, and product could be used in typical laptop computer with USB slot. Other application like handheld PC or similar device has not been verified and may not compliance with related RF exposure rule and such use shall be prohibited.

The USB dongle transmitter is approved for use in typical laptop computers. To comply with FCC RF exposure requirements, it should not be used in other devices or certain laptop and tablet computer configurations where the USB connectors on the host computer are unable to provide or ensure the necessary operating configurations intended for the device and its users or bystanders to satisfy RF exposure compliance requirements.

Due to the essential high output power natural of WiMAX device, use of this device with other transmitter at the same time may exceed the FCC RF exposure limit and such usage must be prohibited (unless such co-transmission has been approved by FCC in the future).