# HSUPA USB Modem

SUC-2000 User Guide



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# Cautions for Safety

The cautions for safety are the contents to keep the safety of users and to prevent possible loss in property or convenience caused by accidents. The product should properly be used after sufficient understanding of the contents.

## Warning

- Do not discretionally disassemble, modify, or repair the product.
- Do not use the product if possible at the place where the use of handsets is prohibited.
- Use the product according to the rules and regulations of hospitals or medical institutions when using the product in such places.
- Do not use the product in the Airplane.
- Keep the product and accessories out of children's reach.
- Do not touch or use with wet hands.
- Do not use the product outside in the thundering or lightning weather.

## Cautions

- Be careful not to give impact to the product and not to throw (or drop) the product because the product may be broken or deformed.
- When a trouble is occurred with the product, visit a designated service center to receive the service.
- Keep the USB port of the product clean always.
- The data to use the product is stored in USIM CARD; be careful to avoid possible damage to USIM CARD.
- Do not use or keep the product with magnetic storage media together.
- Do not use or keep the product at the very hot or very cold place or the place with large variation of temperature.
- If the model is disconnected from PC in switch-on status, the data may be damaged; disconnect the model from the PC after the programs are terminated and the power LED is turned off.

• When the product is used in connection with a notebook with use the battery only, the battery of the notebook may be somewhat rapidly discharged due to additional consumption of the power by the product.

# Introduction

Thanks you for purchasing SUC-2000 of Epivalley Co., Ltd.

SUC-2000 is a USB Modem by *HSUPA* method to use wireless internet anytime and anywhere with no limit in time or place.

\* **HSUPA** (High Speed Uplink Packet Access): This is the mobile communication method for sending/receiving data at the speed significantly faster than that of W–CDMA or CDMA.

# Specific Features

#### \* General Features

- USIM Support
- Internet, Intranet
- SMS
- Address
- Connection logs

#### \* Mechnical Features

- Main Intenna
- UMTS Diversity Intenna (2100MHz)
- 2 Colors LED
- Dimension:  $34mm(W) \times 9.8mm(H) \times 92.5mm(D)$
- Weight: 42g

#### \* Data Rate

- Download: Up to 7.2 Mbps
- Upload: Up to 2.0 Mbps
- \* Frequency Band
- GSM: 850 / 900 / 1800 / 1900 MHz
- UMTS: 850 / 1900 / 2100 MHz
- \* Power Consumption
- Voltage: 5V

# Configuration

The configuration of SUC-2000 product is as shown below:



The configuration of the product may be somewhat changed wit no prior notice to improve the functions of the product.

# Condition for Use

The minimum specification of the PC to use SUC-2000 is as described below:

- Operating System: Windows® 2000, XP or Vista(32bit, 64bit), Mac® OS X
- CPU: Pentium 4, 1 GHz or above
- Memory: 128 MB RAM or above
- Hard disk space: 100 MB or above
- Connection port: USB slot A-Type

# Name of Each Part

# Front Part

Lateral Part







# Installing Program

S/W is included in USB Modem.

1. When SUC-2000 is inserted into the USB port of the PC to use SUC-2000, the installation program is automatically run.

Note: If SUC-2000 Dialer program is already installed, the program is not automatically run. If you want to reinstall the program, manually start the installation program with use of explorer.

2. When the installation is automatically started, below-shown screen is displayed. Choose the setup language and click [OK] button.

Choose Setup Language 🛛 🛛 🗙		
త	Select the language for this installation from the choices below.	
English (United States) 🗸 🗸 🗸		
	OK Cancel	

Note: If the installation is not automatically run, doubleclick "setup32.exe" file in CD. (In case of Vista 64, setup64.exe)

3. To install the program, files are copied from Modem to PC.



4. When "Welcome to the Installshield Wizard" message is displayed, click [Next] button.

🙀 SUC2000 HSUPA Dial	er - InstallShield Wizard	×
4	Welcome to the InstallShield Wizard for SUC2000 HSUPA Dialer	
	The InstallShield(R) Wizard will install SUC2000 HSUPA Dialer of your computer. To continue, click Next.	'n
	WARNING: This program is protected by copyright law and international treaties.	
	< Back Next > Cancel	

5. Designate the destination folder to install the program and click [Next] button.

🙀 SUC 200	00 HSUPA Dialer - InstallShield Wizard	X
	ion Folder xt to install to this folder, or click Change to install to a differe	ent folder.
	Install SUC2000 HSUPA Dialer to: C:₩Program Files₩EpiValley₩SUC-2000₩	<u>C</u> hange
		Destination folder of the program
InstallShield -	< <u>B</u> ack	> Cancel

6.Click [Install] button to install the program.

🙀 SUC2000 HSUPA Dialer - Inst	allShield Wizard 🔀
Ready to Install the Program The wizard is ready to begin installation	n.
Click Install to begin the installation.	
If you want to review or change any o exit the wizard.	of your installation settings, dick Back. Click Cancel to
InstaliShield	< Back Install Cancel

7. Files are copied from Modem to PC.

Installing	0 HSUPA Dialer - InstallShield Wizard
<b>₽</b>	Please wait while the InstallShield Wizard installs SUC2000 HSUPA Dialer. This may take several minutes. Status:
InstallShield –	< Back Mext > Cancel

8. Program is completely installed. Click [Finish] button to finish the program installation.



# Deleting Program

The method to delete Epivalley HSUPA Dialer installed in PC is as described below.

1. On the task bar, click [Start] – [Program] – [Epivalley] – [SUC-2000 HSUPA Dialer] – [Uninstall] in order.

📗 Epivalley 🔹 🕨	📕 SUC2000 HSUPA Dialer 🗆	🔄 SUC-2000 HSUPA Dialer 👘
		😪 Uninstall

2. When a popup screen is displayed and it is asked whether to delete the program, click [Yes] button.



# Using USIM

USIM (universal subscriber identity module) consists of SIM (subscriber identity module) containing subscribers' information and UICC (universal IC card) and various functions including user authentication, global roaming, and e-commerce are performed with a card.

For proper use of SUC-2000, USIM Card should be inserted.





## PIN Code

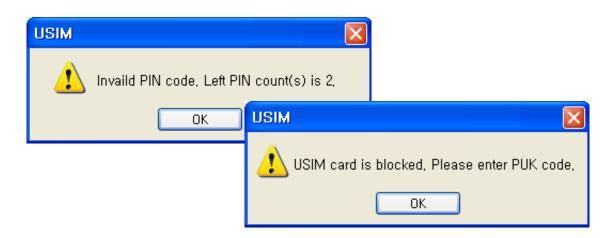
PIN Code is the password to be inputted for confirmation when running the program to use SUC-2000.

(If PIN Lock Option is in [ON] status, you should input the password when starting Epivalley HSUPA Dialer program.)

Verify PIN code (remain : 3)		
Enter PIN code	OK	
	Cancel	

Carefully input the password and click [OK] button; if valid password is inputted, Epivalley HSUPA Dialer program is properly run and, if invalid PIN Code is inputted, an error message is displayed as shown below.

Note: If invalid PIN Code is inputted three or more times, USIM Card is blocked and cannot be used.



Blocked USIM Card may be released with input of PUK Code.

## PUK Code

PUK Code is a pre-defined code to release blocked USIM Card.

PUK code (remain : 10)		
Please enter PUK	code and new PIN	
PUK code		ОК
New PIN code		Cancel

Input PUK Code and new PIN Code and click [OK] button to release blocked USIM Card.

USIM	
♪	Success to unblock PIN,
	ОК

Note: PUK Code may be identified in USIM Pack when purchasing USIM and consists of 8-digit numbers.

If invalid PUK Code is inputted, an error message is displayed. In this case, click [OK] button and input valid PUK Code and new PIN Code to release blocking.



Note: Be careful because, if you fail in inputting valid PUK Code 10 or more times, USIM Card is blocked and cannot be used. (You have to purchase USIM Card again.)

## SIM Lock Code

Verify USIM unlock code (remain : 10)			
Please enter USIM unlock code			
******	1		
OK	Cancel		

If the usim card is not of the particular appointed operator, it would require specific unlock code when the program starts. Then, please input valid 10 digits. Once you input correct number, it will not require anymore.

If invalid number input 10 times, the usim card can not be used permanently, so please contact relevant operator.

# Using SUC-2000

# Running Program

Run Epivalley HSUPA Dialer program be below-described method.

1. 1. Doubleclick the shortcut icon (Epivalley HSUPA Dialer) on the window.



Or on the task bar, click [Start] – [Program] – [Epivalley] – [SUC-2000 HSUPA Dialer] – [SUC-2000 HSUPA Dialer] in order.

📔 Epivalley 🔹 🕨	📗 SUC2000 HSUPA Dialer 🔸	💁 SUC-2000 HSUPA Dialer 👘
1.1.1		😸 Uninstall

#### 2. Epivalley HSUPA Dialer program is run.



# Connecting with PC

The USB Port of SUC-2000 is built in the main body. Pull out the USB Port and connect it with PC.



Check whether LED part is lighted on.

Note: When SUC-2000 is not used, remove it from PC and push USB Port inside to be stored.

Note: When SUC-2000 is used connecting with a notebook, the receive sensitivity may be reduced due to the electronic wave generated by LCD monitor. In this case, use it using the USB extensible cable supplied when purchasing the product.

# Checkig Connection

When SUC-2000 is connected with PC, the connection status may be confirmed on the status display bar at the lowest part of the program.



When SUC-2000 is properly



When SUC-2000 is not connected

When SUC-2000 is connected but USIM Card is not inserted or is improperly insertted

Ths status of product may also be checked on the LED at the side of SUC-2000 .

1. RED: Power On

Blink - No service

2. Yellow GREEN: In service,

Blink - Receiving SMS

3. Orange: Blink - No SIM

## Epivalley HSUPA Dialer

Connection with intenet or sending/receiving SMS is possible with use of Epivalley HSUPA Dialer program and the telephone numbers and addresses may conveniently be managed in the address list.

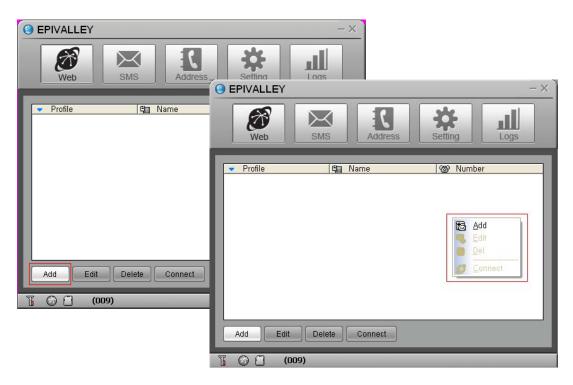
#### Web

[Web] is the menu used in connecting with internet. When using [Web] for the first time, the profile needed to connect with internet should be created and, from the next use, internet connection is possible with use of the stored profile.

#### 1. Click [Web].



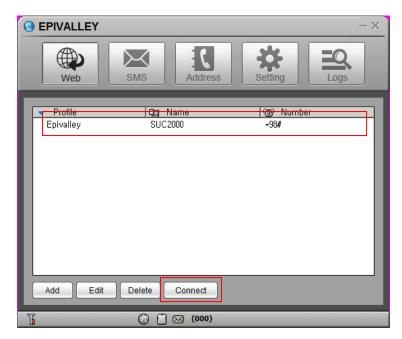
2. Create the profile needed to connect with internet. Click [Add] or click the right button of mouse and select [Add] button.



3. Input Profile Name to create the profile for internet connection and input the information needed to connect with profile. Click [OK] button to create a profile.

Property		
Profile Name Epivalley		
	cess Point Name	
Number : *98# Username : SUC2000	Sepivalley	- ×
Password :	Web SMS	Address Setting
	Profile	I Name 🛞 Number
		SUC2000 *98#
	Add Edit Delete	Connect
	<b>T</b> Ø	📋 🖂 (000)

4. Select the profile created for internet connection and click [Connect] button.



5. Internet is connected and the time of internet use and packets may be checked.

() EPIVALLEY	- ×
Web SMS Address	Setting Logs
Profile     Profile     Epivalley     SUC2000      Connecting      Registering your computer on the network     Cancel	(3) Number           *98#
Add Edit Delete Connect	EPIVALLEY       - ×         Image: Sms mark       Image: Sms mark         Meb       Image: Sms mark         Image: Sms mark       Image: Sms mark         Image: Sms mark
	Profile     Item     Item       Epivalley     SUC2000     +98#
	Add Edit Delete Connect

#### SMS

[SMS] is the menu that is used in sending short messages or consfirming received short messages.

Short messages may be sent with setting the sending time and the short messages received from numbers for rejection are automatically classified into spam messages.

- Send
- 1. Click [SMS] button.

	$- \times$
Web SMS Address	Logs
🖂 Send 🕞 Inbox 📑 Sent 🗖 Draft 🔀 Spam	
0/140 To :	
Search Log Add	Del
From : 01020131633	
Clear Templates Reserved Save	Send
🚡 📀 📋 🖂 (000) Tx 8,816B 🛛 Rx 37,446B	00:02:44

2. Write the message on Editor screen.

epivalley	
Web SMS	Addres
🖂 Send 📑 Inbox 📑 Sent 🗖 Draft	1 🗠 s
	8/140
Hello~~~	
Clear Templates	
ធ 🕅 🖂 (000)	

Clear: erase the message written on Editor screen.
Templates: designates the templates of message
Emoticon: inputs emoticon.
Special: inputs special characters.

- 24 -

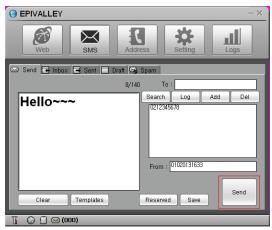
3. Input the telephone number to receive the message and click [Add] button to designate the number as the receiver's number. The telephone number may be added by selecting a number in the numbers registered in the address or may be designated by selecting a number in the message sending history after clicking [Log] button.

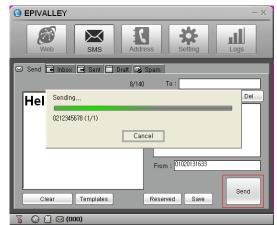


•Wrong designated receiver's number may be deleted by selecting the receiving number in the telephone number list and by clicking [Del] button.

•*To send a messages with reservation, click [Reserved] button designate the time and date to send the messages.* 

4. Click [Send] button the send the message.





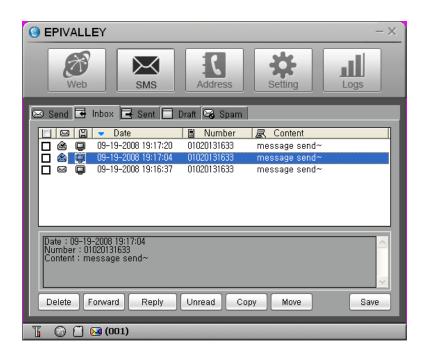
#### • Inbox

In [Inbox] tab, you can see the received messages.

Received messages are automatically stored in Inbox.

When a message is received, the receipt is noticed on the Windows popup screen and, if the program is minized, the tray icon flashes.

The messages may be arranged by Date, Number, Content, Destination, and Message Status; the message may be relayed with clicking [Forward] button and a reply message may be sent with clicking [Reply] button.



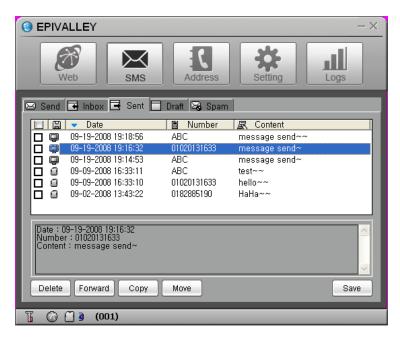
Note: The method to notice the receipt of a message may be set in [Incoming SMS Alert] in [Setting] menu.

#### • Sent

In [Sent] tab, you can check the messages sent.

The messages may be arranged by Date, Number, Content, Destination, and Message Status and the message may be relayed with clicking [Forward] button.

Also, the destination (PC or USIM) where the messages are stored may be confirmed with the icon.

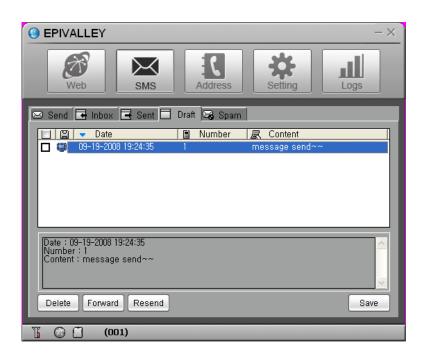


Note: Click [Save] button to store the telephone number to which the message was sent or change the destination to store the message.

#### • Draft

In [Draft] tab, you can check the reserved messages, the messages not sent, and the messages failed in sending.

The messages may be arranged by Date, Number, Content, Destination, and Message Status and the message may be relayed with clicking [Forward] button.

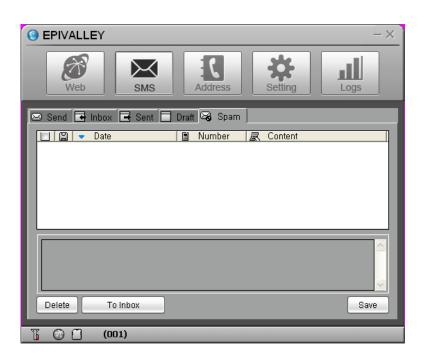


Note: Click [Resend] button to send the selected message again.

#### • Spam

In [Spam] tab, you can check the messages received from the telephone numbers designated as Spam and the messages containing the words designated as Spam.

The messages may be arranged by Date, Number, Content, Destination, and Message Status and the message may be stored with clicking [Save] button.



Note

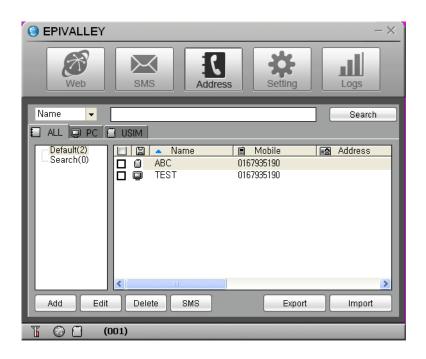
- Click [Inbox] button to move or resend the selected message.
- You can define the Spam messages in [Spam message Settings] in [Setting] menu.

#### Address

[Address] menu is used to register, edit, and delete telephone numbers.

#### • Viewing Registered Telephone Numbers

You can check the stored telephone numbers with selecting All, PC, or SIM tab and you can view the registered telephone numbers in the arrangement by Name, Mobile, Address, Office, Home, Fax, E-mail, and Comments.



#### Searching Telephone Numbers

You can search the registered telephone numbers with selecting the search type (Name, Mobile, Group, Address, Office, Home, Fax, E-mail, and Comments), inputting the search condition, and clicking [Search] button.

	- X
	<b>.</b>
Web SMS Address	Setting Logs
Address Address	
Name 🗸	Search
🕄 ALL 📮 PC 📳 USIM	
Default(2) Search(0)	🖬 Mobile 🛛 📾 Address

#### • Registration, Correction, and Deletion of Telephone Numbers

You can register a new telephone number or correct or delete registered telephone numbers with use of the button at the lowest part of Address Menu.

	Add
Add Edit Delete SMS	TYPE © PC © USIM
🚡 🙆 📋 (001)	
	Name Group Default 💌
	Mobile Home
	Office Fax
	Address
	E-mail
	Comments
	OK Cancel

- Add: registers a new telephone number in the telephone book.
- Edit: may correct the information on the registered telephone number.
- Delete: deletes the registered telephones from the telephone book.

#### Sending Short Messages

You can send a message to the registered telephone numbers with clicking [SMS] button at the lowest part of Address Menu. Check the telephone numbers to send the message and click [SMS] button.



#### • Address list Export, Import

You can export and import a phonebook as CSV file format using export, import button.

	다른 이름으로 저장	? 🔀
EPIVALLEY   Web SMS   SMS   Address     Address     Address     Address     Default(3)   Search(0)     Address     All   Default(3)   Search(0)     B   C   33	지장 위치(): (2) 바탕 화면 · · · (2) 수 (2) (2) (2) (2) (2) (2) (2) (2) (2) (2)	
	파일 미름(N): test.csv	저장( <u>S</u> ) 취소
Add Edit Delete SMS	Export Import	

Before importing to make a CSV file, please input Name, Mobile, Address, Office, Home, Fax, Email, Comments regardless of Capital letter or small letter in the first row in order. From the second row, input contents according to the each item stated in the first row. (If the first row is empty, please input contents from the second row.)

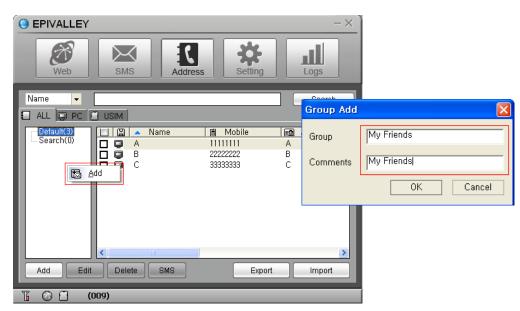
	H18	-	fx.					
	A	B	С	D	E	F	G	Н
1	Name	Mobile	Address	Office	Home	Fax	Email	Comments
2	A	11111111	A	1111	1111	1111	A	A
3	В	22222222	В	2222	2222	2222	В	В
4	С	33333333	С	3333	3333	3333	С	С
5								

• Managing Telephone Number Groups

Telephone numbers may conveniently be managed with classification into groups.

A group may be created with clicking the right button of mouse and clicking [Add] button.

You can move the registered telephone numbers to another group with Drag & Drop and send a message to a group or groups at a time.



Also, you can move or copy the registered telephone number by selecting the number and clicking the right button of mouse.

	- X
Web SMS Add	dress Setting
Name	Search
Default(3) My Friends(0) Search(0) Multiple B C C	Mobile         Address           11111111         A           22222222         B           33333333         C           Xadd         Edit           Delete         Move           Copy         SMS
Add Edit Delete SMS	Export Import
🚡 🕜 🗂 🖂 (009)	

#### Setting

In [Setting] menu, you can set the environment related with the use of Epivalley HSUPA Dialer program.



#### • General

In [General] tab, you can set the information on the language and color theme related with Windows.

Setting	×
🎬 General 🖾 SMS 📋 Usim 🔒 Lock 🗐 Information	
Windows Settings	
Auto execution when windows startup	
Execute Program on Background	
Language Settings	
Color Theme	
Gray	
OK Cancel	

## • SMS

In [SMS] tab, you can set the information on notice of message receipt and Spam message management.

Setting	×
🎇 General 🖾 SMS 🔒 Usim 🔒 Lock 🗐 Information )	1
Incoming SMS Alert Default Call Number ☐ Blinking Tray Icon C Usε  ⓒ Not Use ☐ Auto Popup Call Number: ☐ Sound Prompt0111234567	
Spam Message Setting	
CUse CNotUse Number Word	
0111234567 0102223333	
Add Edit Delete Add Edit Delete	
OK Cancel	

#### • USIM

In [USIM] tab, you can set the information related with PIN Code.

Setting	×
🎇 General 🖾 SMS 🚺 Usim 🔒 Lock 🗐 Information	
Current PIN Code :	
PIN Lock Option	
⊂ On © Off	
New PIN Code	
OK Cancel	

### • Lock

In [Lock] tab, you can set the information related with lock function.

Setting	X
🎇 General 🖾 SMS 🔒 Usim 🕻	Lock 🗐 Lock
General Lock	SMS Lock
⊂ On ⊙ Off	⊂ On ⊙ Off
	Lash Cata
Internet Lock	Lock Code
⊂ On . € Off	Change Lock Code
	OK Cancel

## Information

In [Information] tab, you can check the information related with S/W Version, Modem, and Memory.

Setting	<b>X</b>		
🎇 General 🖾 SMS 📋 USIM 🔒 Lock 📳 Information			
My Phone Number	Application		
	Version 1, 1, 0, 11		
- Modem	Memory Information		
	Address [2]		
Model : SUC-2000	PC: 0		
	USIM : 2		
S/W:ST2000DT08	_SMS [22]		
H/W: 1.0	PC: 22		
	USIM : 0		
	OK Cancel		

#### Logs

In [Logs], you can check the information on the date and time of internet connection and the quantities of sent/received data in relation to use of internet.

epivalley	- X
Web SMS Address Setting	Logs
🗊 Internet	
Image: System of the system         Image: System of the system	Epivalley
Prev Date : 09-19-2008, Time : 00:06:51 Rx : 37446, Tx : 9980	Next Export
ធ 🗇 📋 🖂 (002)	

- Prev: confirms the internet logs of previous month.
- Next: confirms the internet logs of next month.
- Export: The internet logs of current month are downloaded in csv file type.

# Terminating Program

To terminate Epivalley HSUPA Dialer program, click  $\blacksquare$  at the right top of the program.



Or click the right button of mouse on the tray icon and click [Exit] button.



If you informs the expected problems and solutions in relation to the use of SUC-2000, the troubleshooting will be prepared with referring to the related contents of other models.

# Specification

Specification will be prepared after confirming the final specification.

Let use be informed of the warranty policy of Epivalley.

# FCC

The highest SAR value for this HSDPA USB MODEM is 0.837 W/kg (GSM Cellular Band) / 0.478 W/kg (WCDMA Cellular Band) / 0.869 W/kg (GSM PCS Band) / 0.589 W/kg (WCDMA PCS Band). The FCC has granted an Equipment Authorization for this HSDPA USB MODEM with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet / fcc id after searching on FCC ID: R2NSUC-2000

Additional information on Specific Absorption Rates (SAR)can be found on the Cellular Telecommunications & Internet Association (CTIA) web-site at http://phonefacts.net.\*In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6watts/kg (W/kg)averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any agitations in measurements.

In August 1996 the Federal Communications Commission (FCC) of the United States with its action in Report and Order FCC 96-326 adopted an updated safety standard for human exposure to radio frequency (RF) electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies. The design of this phone complies with the FCC guidelines and these international standards.

For more information about RF exposure, please visit the FCC website at www.fcc.gov

#### WARNING! Read this information before use

#### Caution

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

#### **Near-Body Operation**

To maintain compliance with FCC RF exposure requirements, maintain a 5mm, separation distance between the user's body and the HSUPA USB Modem, including the antenna, whether extended or retracted.

#### **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.

#### Information to User

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

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