DU-100
Administration Guide

Reversion History:

Version	***Date***	***Modified Contents***
1.0	Apr. 27th, 2005	*1st RELEASE*

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Safety Precaution

- Rechargeable Battery Only. Only insert rechargeable batteries of the same type, never use ordinary, non-chargeable batteries.
- Only use the charger plug supplied. Do not use other chargers, as this may damage the battery cells.
- Do not touch the charger and plug contacts with sharp or metal objects
- The operation of some medical devices may be affected.
- Do not place the base unit in a damp room or at less than 1.5 meters away from a water source. Keep water away from the handset.
- Do not use the telephone in an environment where there is a risk of explosions.
- Dispose of batteries and maintain the telephone in an environment friendly manner.
- Clearing: Clean the telephone with slightly damp cloth or with an antistatic cloth. Never use clearing agent or abrasive solvents.

Accessories (Specific to product package)

DU-100 Package

- DU-100
- USB Cable
- CD of Product User manual and Software

DU-100 and DU-200 Extension Package

- DU-100
- 1.5M USB Cable
- CD of Product User manual and Software
- DU-200 Extension
- Battery
- Charger
- Adapter
- Telephone Line

Chapter 1 Overview

DU-100 is a DECT (Digital Enhance Cordless Telephone) base station that integrates DECT and VoIP communication. User can dial or receive VoIP call without staying in front of PC or laptop.

DU-100 is compatible with all standard DECT handsets. User who has DECT system doesn't need to change original environment, it can accept 6 handsets to register. With selecting different base stations, caller is able to make or receive call through PSTN line (User's original DECT base station) or VoIP network (DU-100).

Except Skype™, DU-100 can also work with Welltech FreeTalk. User can select to use different VoIP communication software via installing different software.

Suit For

- Cordless Telephone (DECT) Users
- SOHO
- Home
- Office

Optional VoIP communication

- **Skype™:** The DU-100 can work with Skype™ v1.1.1.79 above for free Internet call from Skype Skype™ -to-Skype™ and with SkypeOut for calling regular and mobile telephones worldwide at much affordable rates.

- **FreeTalk** FreeTalk: Except Skype™, user has another option, the DU-100 can also work with Welltech FreeTalk for free on-net call from FreeTalk to FreeTalk or calling regular PSTN and mobile phones worldwide at much affordable rates.

Operation Modes

- Free VoIP mode: Making free on-net call through Skype™ or Welltech FreeTalk
- Bargain VoIP mode: Making PSTN off-net call through Skype™ or Welltech FreeTalk via much affordable rates.
- Regular PSTN mode: Making Call through PSTN line at the original PSTN rates

DU-100 Specifications and Features

- Physical Specification:
  - Dimension: 100mm(W) x 100mm(D) x 33mm(H)
  - 3 LED indicator:
    - Power: When DU-100 connects with PC USB port successfully, indicator will light on.

- Status: When DU-100 software starts up on computer, indicator will light on.
- Line:
  a. Flash: After user execute Enable Access function of program; LED indicator will keep flashing for 30 seconds, in this period of time, DU-100 can accept handset registration.
  b. Light on/off: When DECT phone set is off-hook/on-hook indicator will light on/off.

- DectForSKYPE (DU-100 Program for Skype) Features:
  - Support speed dial for Skype™ contact list

- DECT SipPhone (DU-100 Program for Freetalk) Features:
  - Microsoft Windows 98se/ME/2000/XP Operation System
  - Support RFC 3261
  - Support voice codec G.723 / G.711a / G.711u / G.729
  - DTMF generation and support RFC 2833
  - Authentication by Proxy Server
  - Support Keypad input (number or Enter, Dial, End, Hang up)。
  - User's Account and Password modification and real time registration again
  - Display caller ID
  - Support phone book
  - The last number re-dial
  - CDR enquiry
  - Can be used in the Privacy network environment
  - Easy installation
  - Friendly user interface
  - Supports many ways to connect to Internet : dial up、ISDN、lease line、cable modem、xDSL or LAN
  - Must work together with DU-100
  - User can speak over phone and listen music in the same time
  - Support EnableAccess / Deregister PP on the DU-100 base

DECT/DCT Specification

- DECT: ETS 301 444 (GAP) Compliance-1880 to 1898 MHz
- DCT (2G4): 2400 to 2483 MHz
- Registration Capacity: 4 DECT Base Stations
- Expected Range: Indoor up to 50 metros / outdoor up to 300 meters
- Antenna type: PIFA

USB Specification

- USB specification version 1.1 compatible
- USB audio class specification 1.0 compatible
- Integrated USB transceiver
- Supports 12 Mb/s data rate (full speed)
- Supports suspend/resume
- Support USB HID class.
- B type connector

Minimum system requirements

- Windows XP, 2000, Me, 98se
- 400 MHz processor
- 128 MB RAM
- 15 MB free disk space on hard drive
- CD-ROM drive
- Internet connection (broadband type: cable, DSL, etc.)
- Public Switched Telephone Network (PSTN) subscription

Recommended system requirements

- Windows XP, 2000 or 2003 server
- 1 GHz processor
- 256 MB RAM
- 30 MB free disk space on hard drive
- CD-ROM drive
- Internet connection (broadband type: cable, DSL, etc.)
- Public Switched Telephone Network (PSTN) subscription

Environmental

- Operating temperature: 0 to 60 ˚C
- Non-operating storage: -20 to +65˚C
- Operating humidity: 10% to 90% Non-condensing
- Non-operating humidity: 5% to 95% Non-condensing

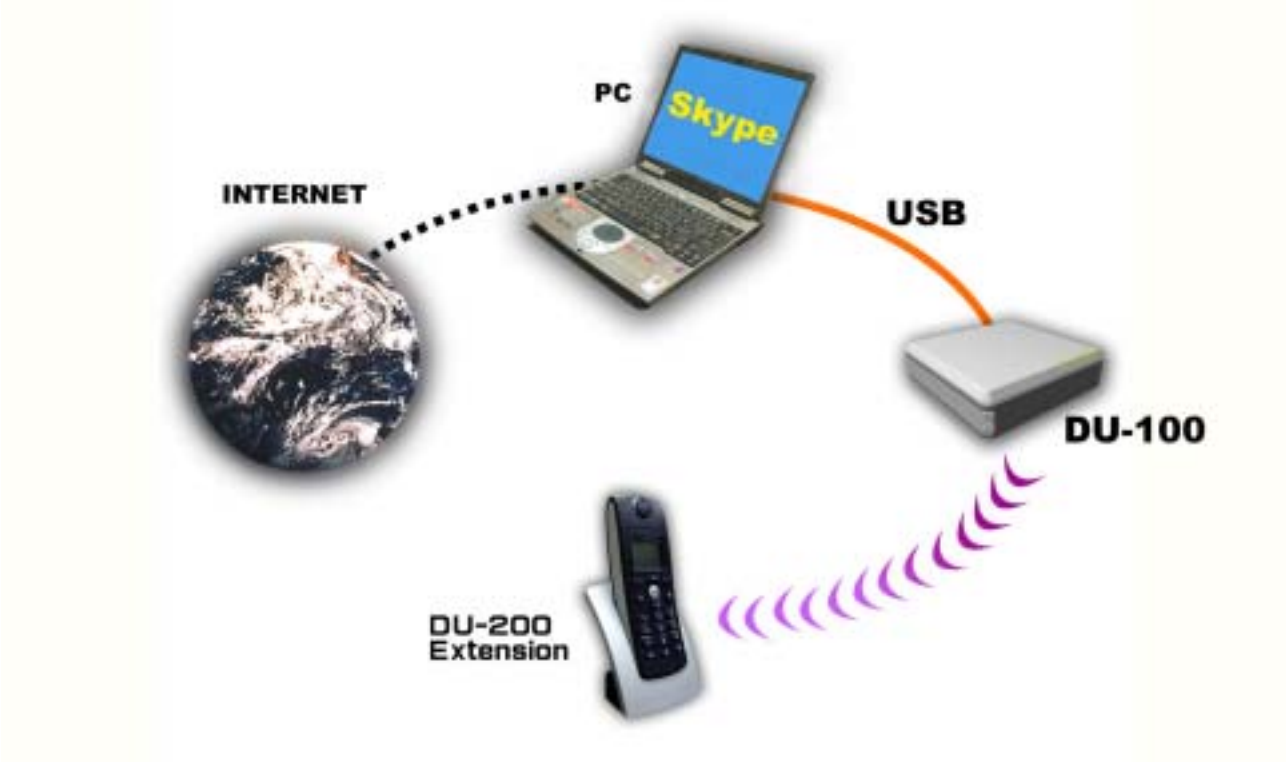
Certification

- CE Class B, FCC Class B

Chapter 2 Installation

2.1 Physical Installation

Please connect DU-100 and computer available USB port with attached USB cable.



DU-100 Application architecture

2.2 Software Installation

User can select to use Skype™ or Welltech Freetalk.

1. Skype™: User has to install Skype™ software v1.1.1.79 above and DU-100 program “DectForSKYPE”.
2. Freetalk: User has to install program “DECT SipPhone”.

> ***Note:***
> User can only use one communication program at one time, please select Skype or Freetalk before start to use DU-100.

2.2.1 DECTforSKYPE program

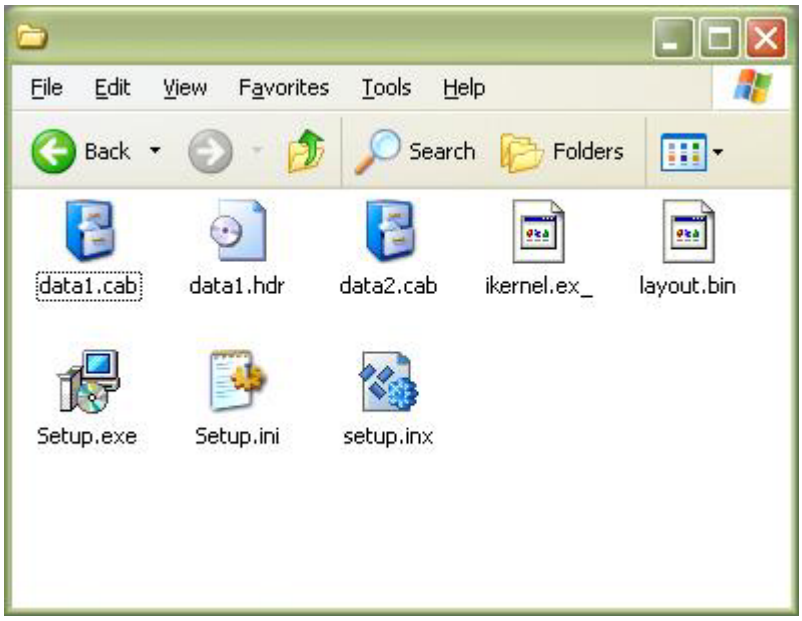
2.2.1.1 Installing DECTforSKYPE program

User who wants to use Skype with DU-100 has to install DECTforSKYPE program. To install the DECTforSKYPE program, please follow steps 1~7 as below.

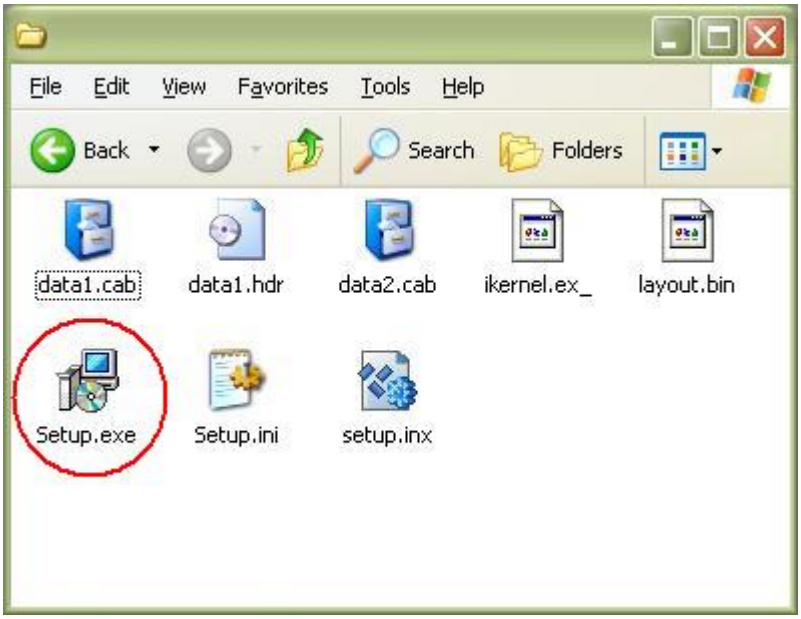
> ***Note:***
> User has to install Skype program ver. 1.1.1.73 above.

Step 1.Unzip the *DECTForSKYPE*.zip file to a folder. For example C:\DECTForSKYPE

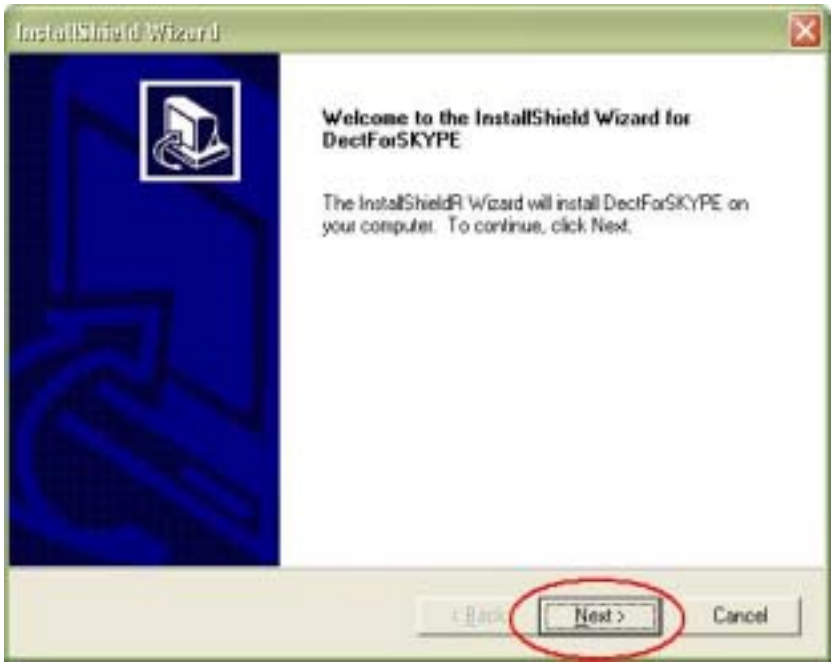
Step 2. Open the [c:\ DECTForSKYPE] folder to begin installation



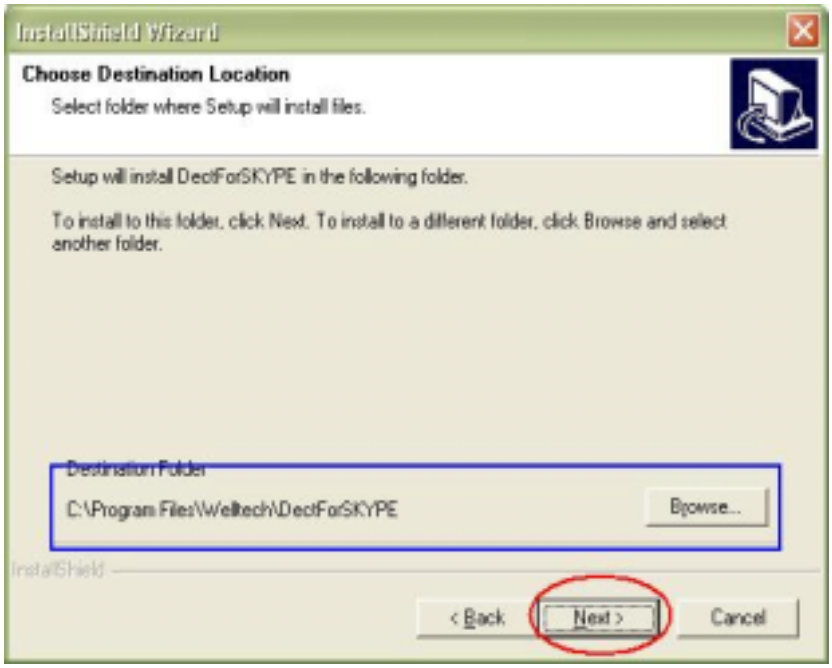
Step 3. Double-click [Setup.exe] to begin installation.



Step 4. The Welcome Screen will appear, click [Next] to continue.



Step 5. *Choose Destination Location*: select the directory that user want to install, and click [next] to continue.



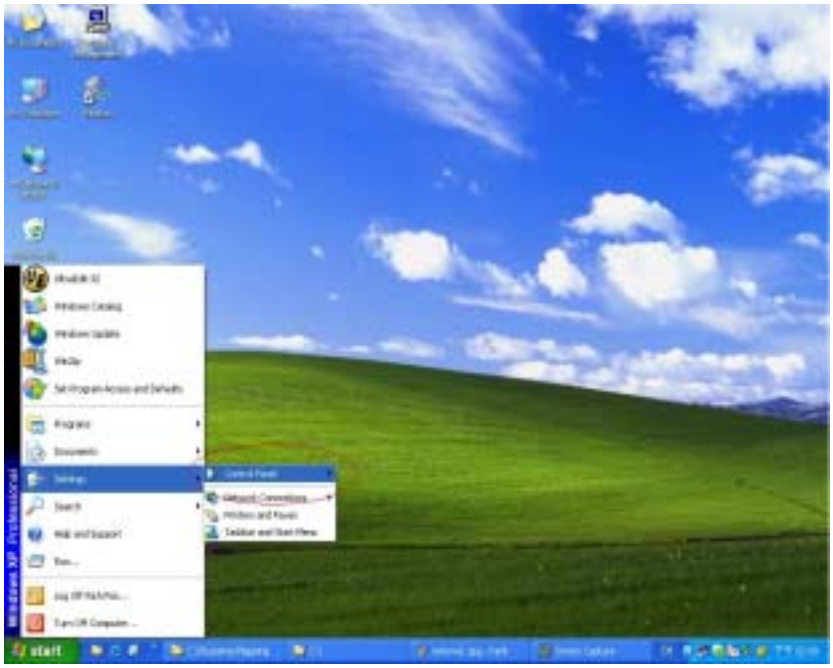
Step 6. *Select Program Folder:* type the program name, and click [next] to continue.

Step 7. After installation, the wizard will inform user the installation is successful. Click [Finish] to exit the installer.

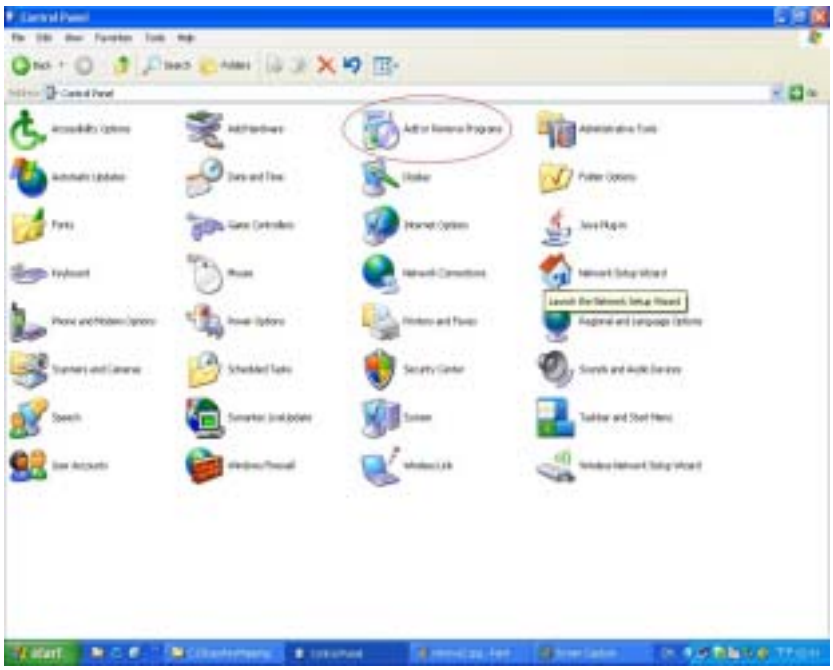
2.2.1.2 Uninstall DECTForSKYPE Program

Step 1. Click [Start] on the Windows taskbar.

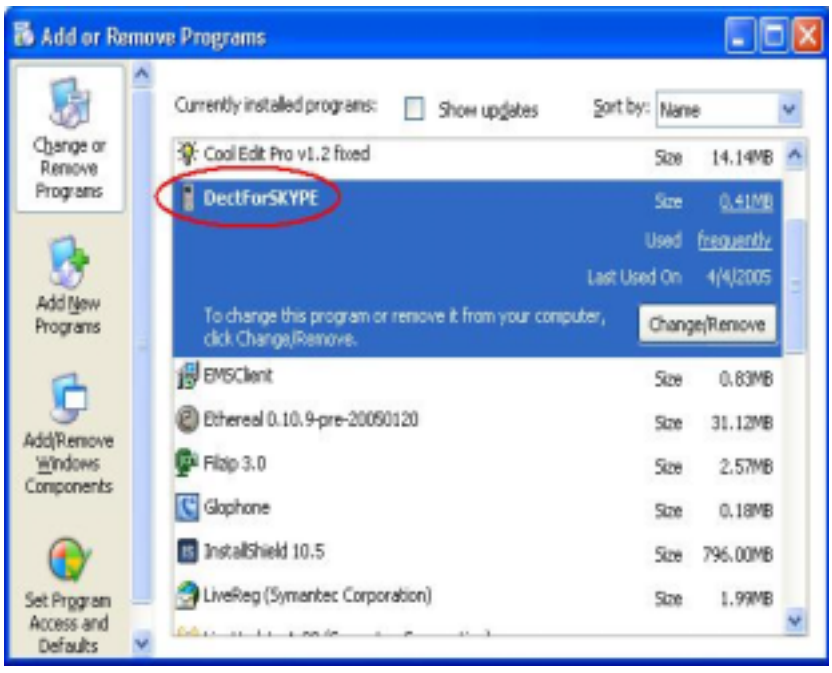
Step 2. Open [Settings] and click [Control Panel] to enter it.



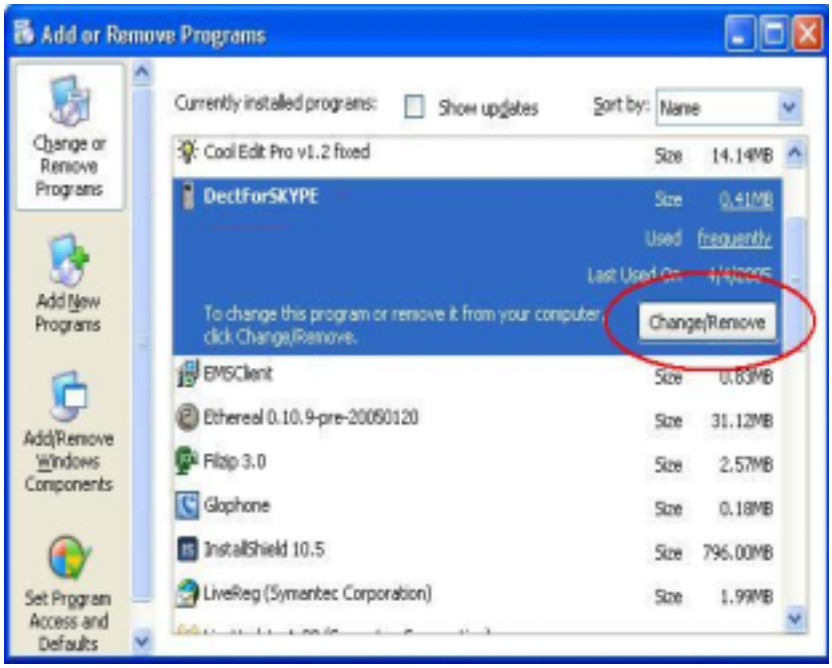
Step 3. Double-click [Add/Remove Programs]



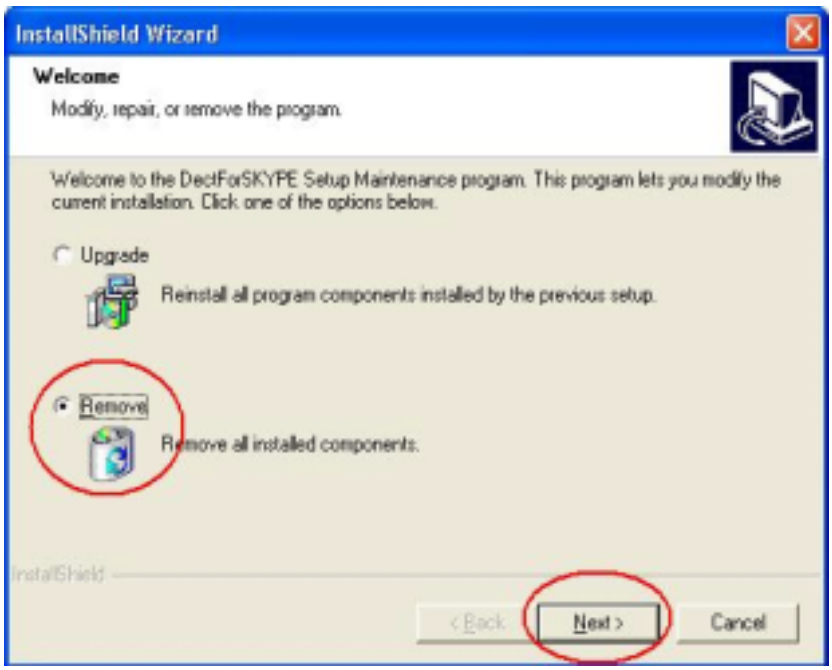
Step 4. Select [SkypeK10XX] in the list of programs.



Step 5. Click [Add/Remove]



Step 6. Click [Remove], and then click [Next]



Step 7. After uninstallation, the wizard will inform user the Maintenance Complete. Click [Finish] to exit the installer.

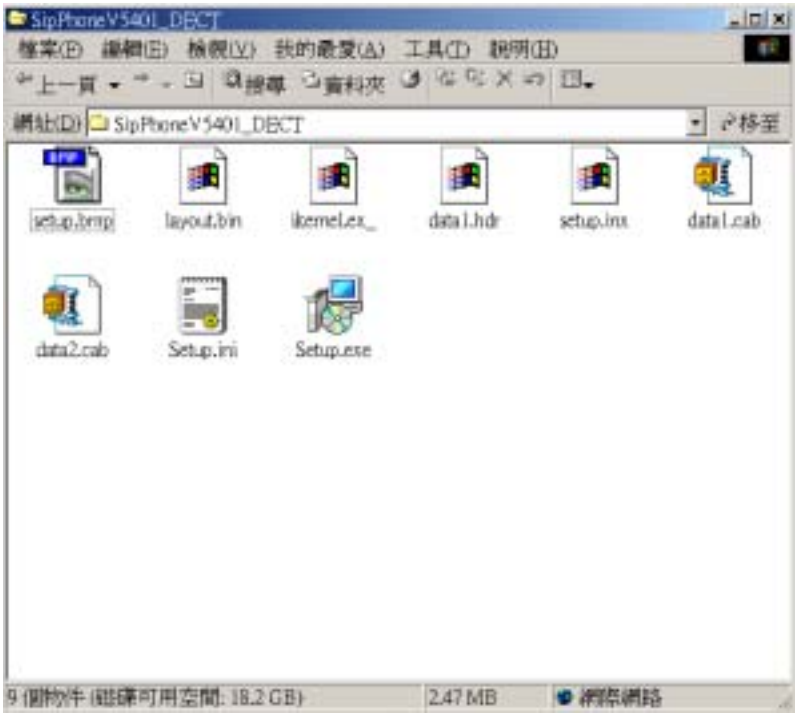
2.2.2 DECT SipPhone Program

2.2.2.1 Installing DECT SipPhone

User who wants to use Freetalk with DU-100 has to install DECT SipPhone Program. To install the DECT SipPhone program, please follow steps 1~7 as below.

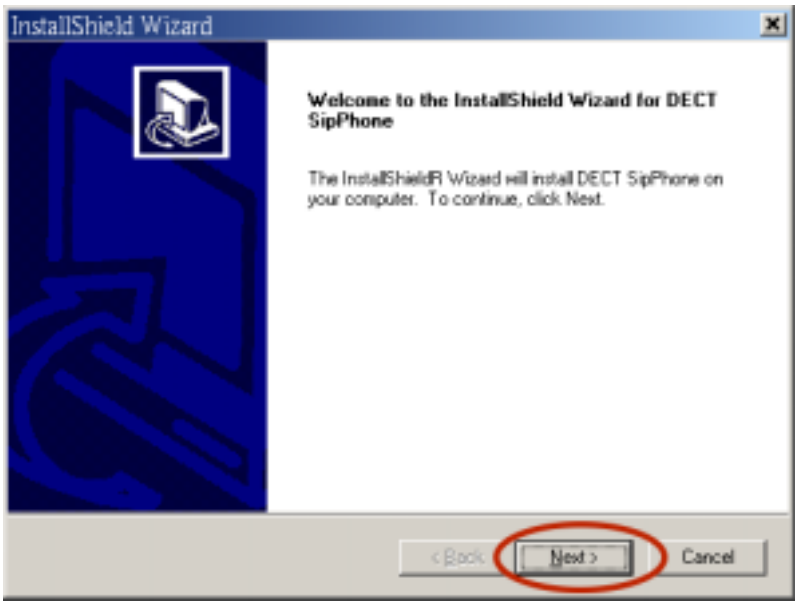
Step 1. Unzip the *SipPhoneV5401_DECT*.zip file to a folder. For example C:\ SipPhoneV5401_DECT

Step 2. Open the [c:\ SipPhoneV5401_DECT] folder to begin installation

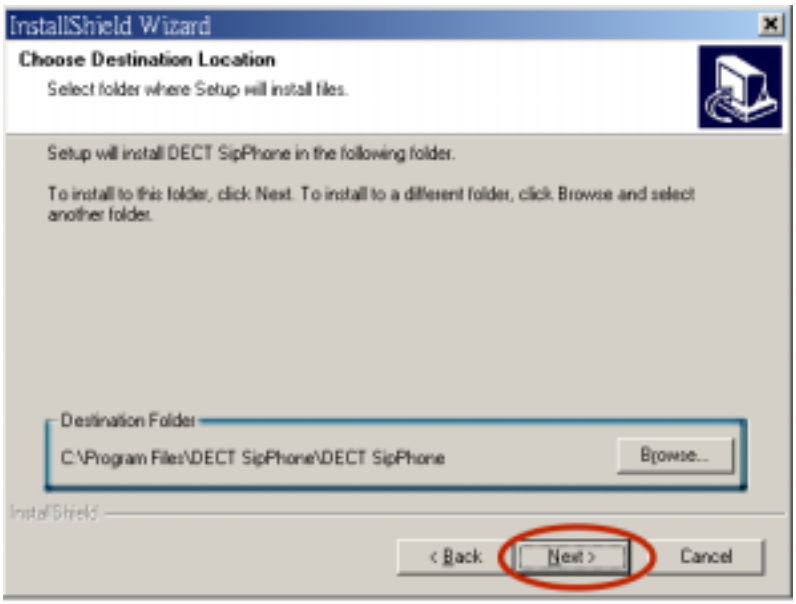


Step 3. Double-click [Setup.exe] to begin installation.

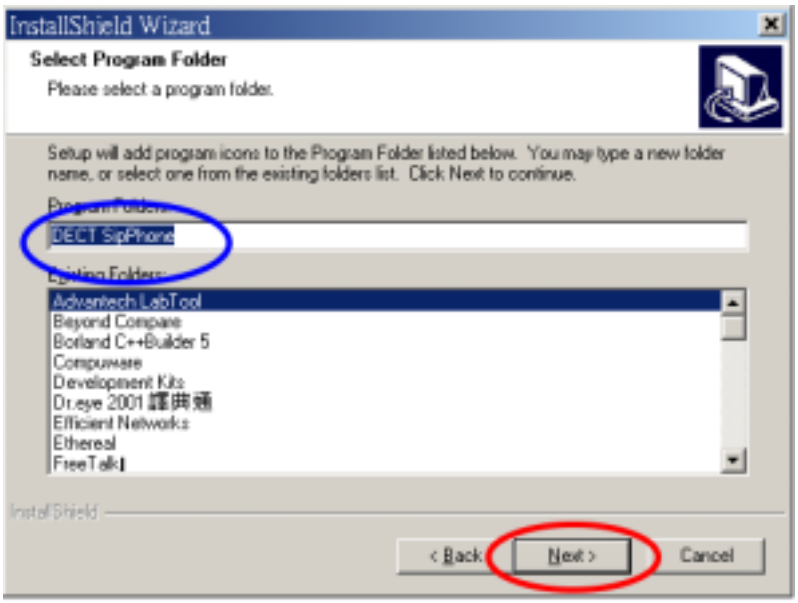
Step 4. The Welcome Screen will appear, click [Next] to continue.



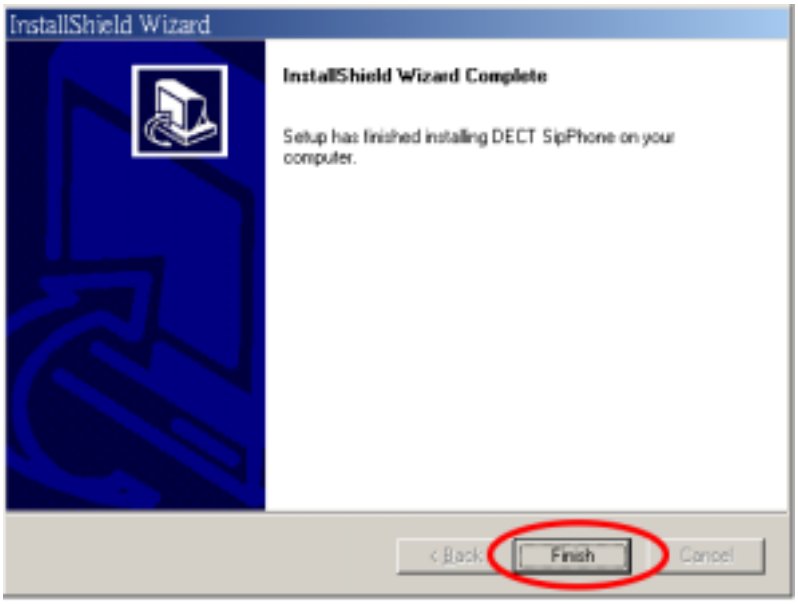
Step 5. *Choose Destination Location*: select the directory that user want to install, and click [Next] to continue.



Step 6. *Select Program Folder:* type the program name, and click [Next] to continue.



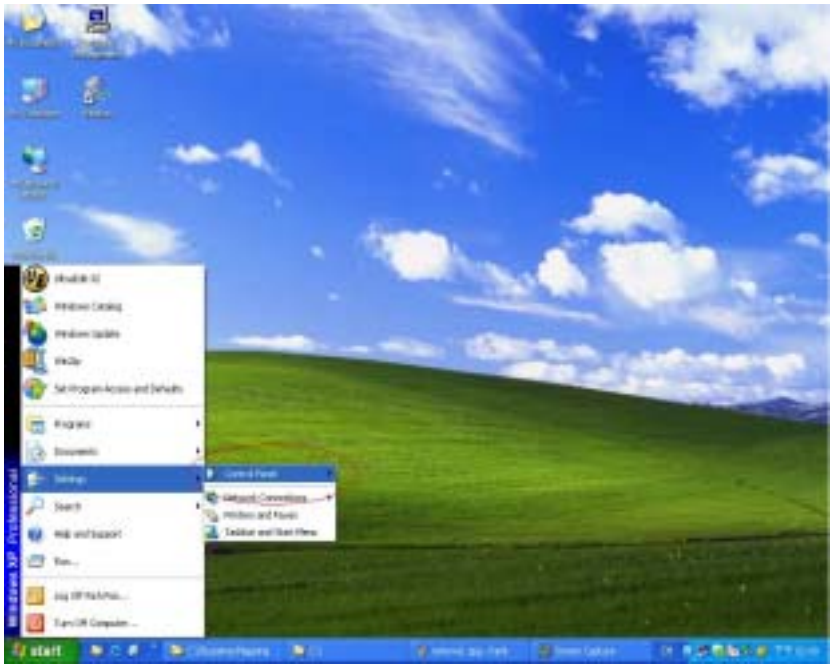
Step 7. After installation, the wizard will inform user the installation is successful. Click [Finish] to exit the installer.



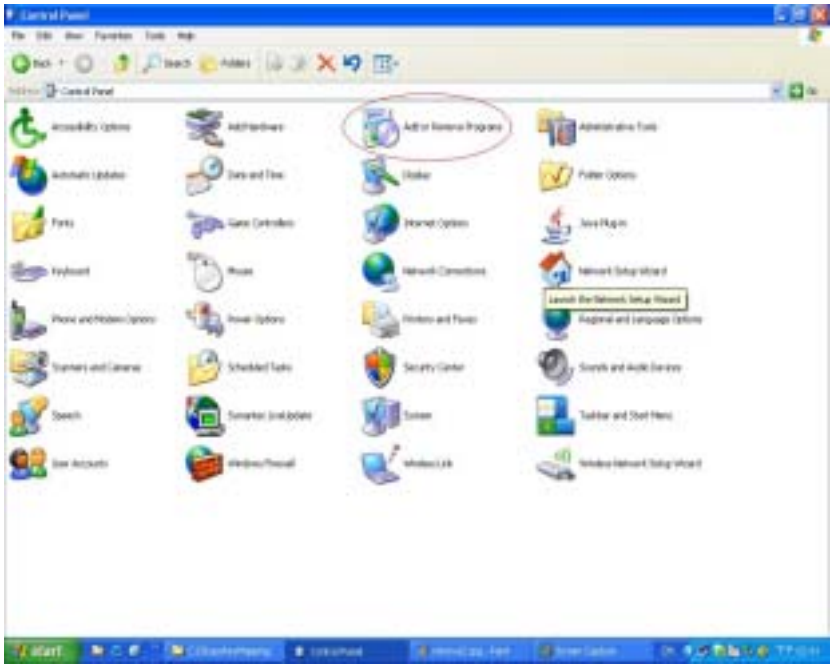
2.2.2.2 Uninstall for DECT SipPhone Program

Step 1. Click [Start] on the Windows taskbar.

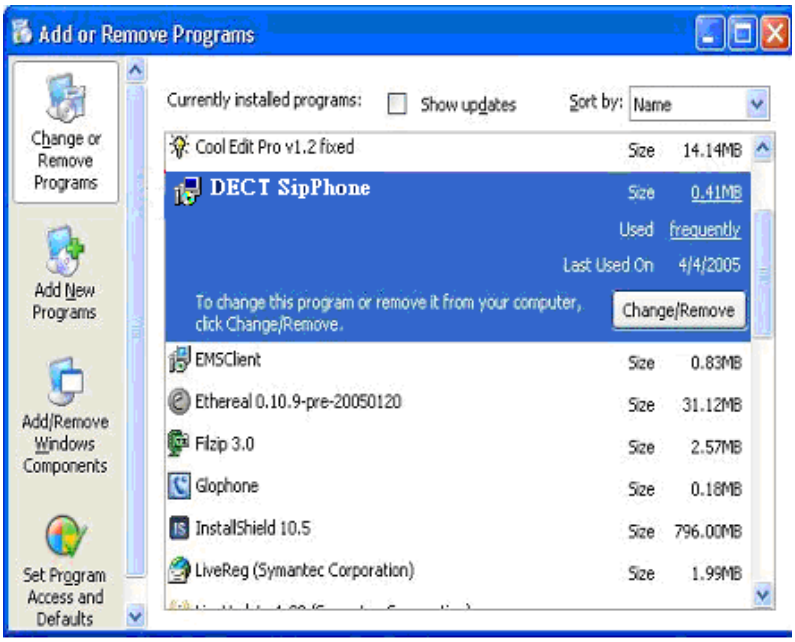
Step 2. Open [Settings] and click [Control Panel] to enter it.



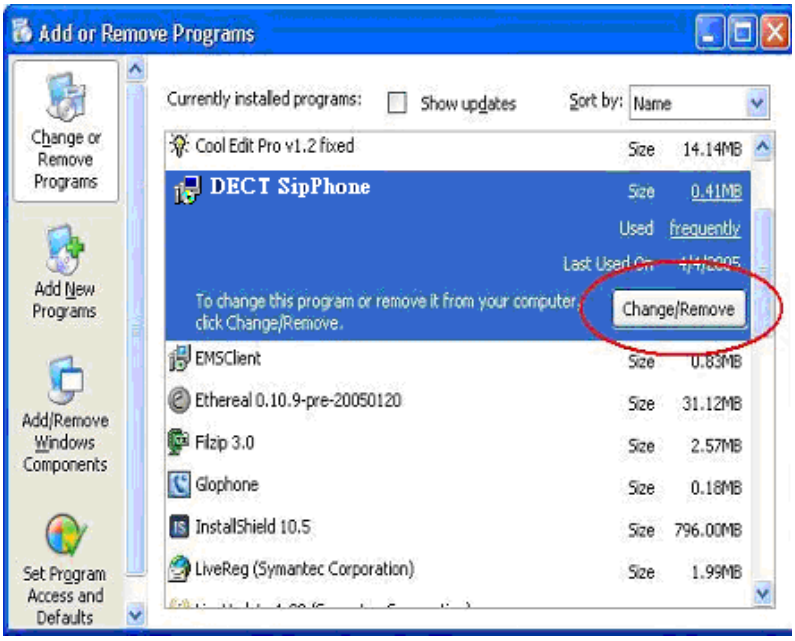
Step 3. Double-click [Add/Remove Programs]



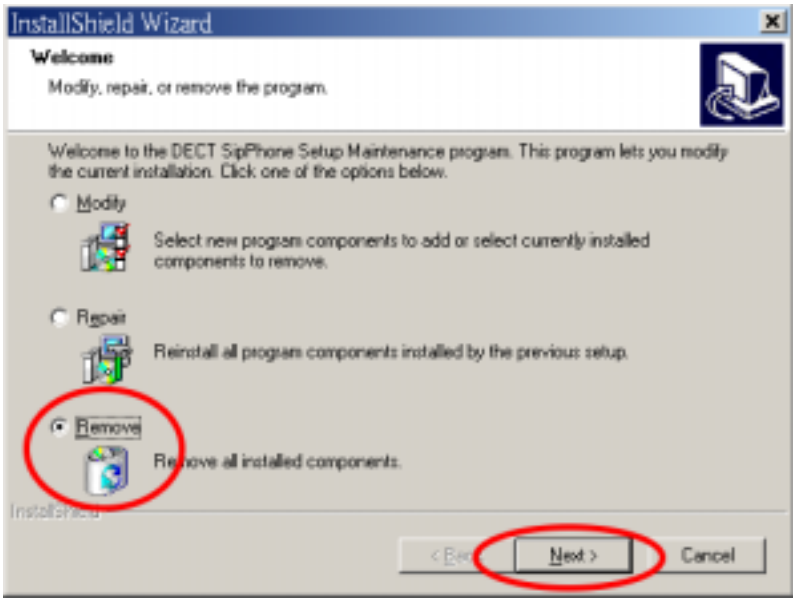
Step 4. Select [DECT SipPhone] in the list of programs.



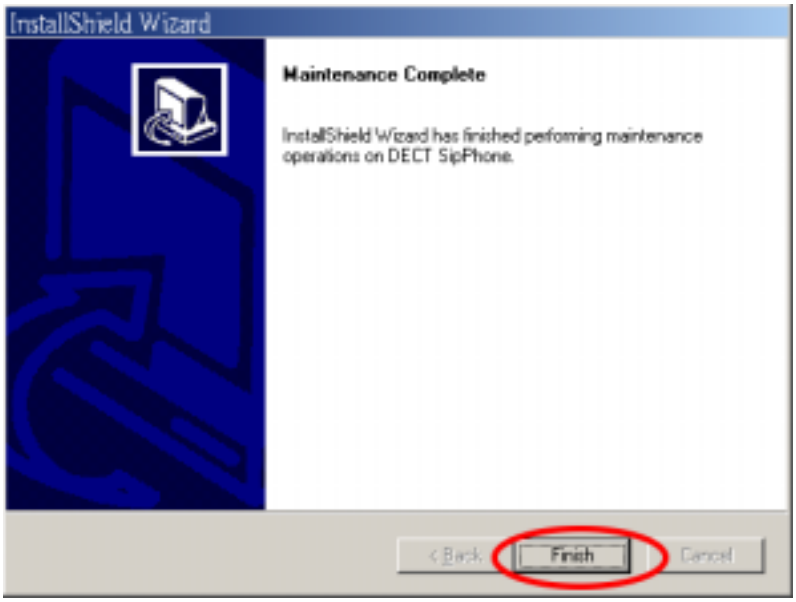
Step 5. Click [Change/Remove]



Step 6. Click [Remove], and then click [Next]



Step 7. After uninstallation, the wizard will inform user the Maintenance Complete. Click [Finish] to exit the installer.



Chapter 3 Getting Start with Skype

3.1 Launch DECTForSKYPE Program

Double-click **[DECTForSKYPE]** icon on the desktop. The *DECTForSKYPE* program will minimize to the system tray (task bar), and show it's version and DU-100 serial number information by a tool tip.

3.2 First use DECTForSKYPE Program

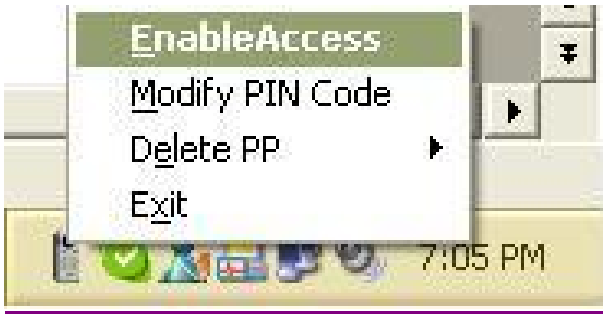
Skype API will display message as below when it is the first time user uses DECTForSKYPE program. Please click **[OK]** to confirm it.

3.3 Configurations of DECTForSKYPE Program

3.3.1 Enable Access

When first use DECTForSKYPE, user has to register handset (DU-200 extension or other standard DECT handset) to DU-100. Please follow steps as below.

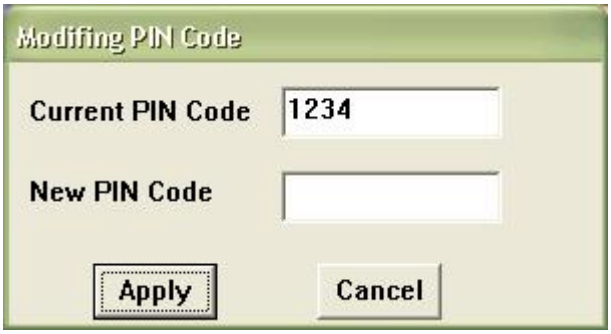
1. Right click on the *DECTForSKYPE* icon at the system tray, select the **[Enable Access]** on the menu, and left click.
2. DU-100 will enter registration mode and Line LED of DU-100 start flashing.
3. Enter handset menu and select register mode and input PIN code of DU-100, the default PIN code is "***1234***".
   For DU-200 Extension, please enter **Menu→System→Subscription→PARK?:** Enter ***0000***(Default PIN code of DU-200 Extension) →Press **Next** display **BS_PIN?:** Enter ***1234*** (Default PIN code of DU-100) →Press **OK**→If registration succeeded will display **Name:** Enter any prefer Name for DU-200 Extension→Press **OK** will display **Int. No. :** Just press **OK** →Press **OK** to finish→Now user can press **Esc** several times to return to main screen, on main screen will display the name user input previously.
4. If register successfully, the Line LED will light off.



3.3.2 Modify PIN Code

User can modify or query PIN code on **[Modify PIN Code]**.

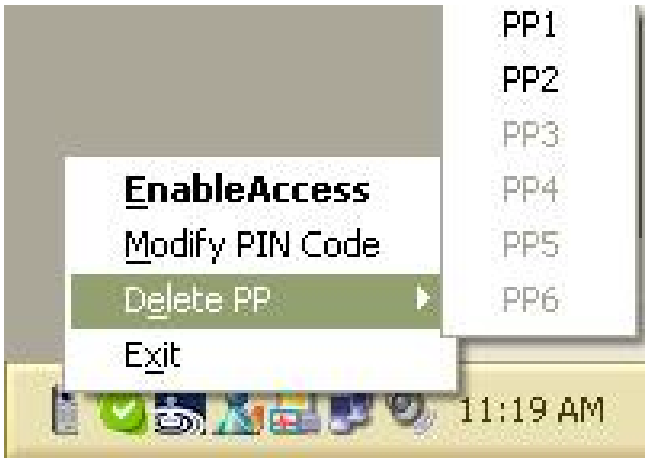
1. Right click on the *DECTForSKYPE* icon at the system tray, select the **[Modify PIN Code]** on the menu, and left click.
2. The screen of Modify PIN Code will pop up. User has to enter current PIN code and enter new PIN code here.


Modifing PIN Code
Current PIN Code
1234
New PIN Code
Apply
Cancel

3.3.3 Delete PP (Portable Part)

User can delete registered handset on **[Delete PP]**.

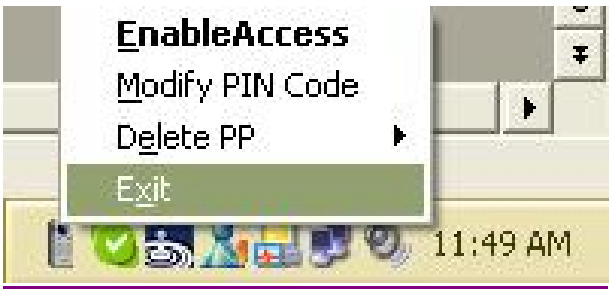
1. Right click on the *DECTForSKYPE* icon at the system tray, select the **[Delete PP]** on the menu, and left click.
2. Select PP that user want to deregister, left click mouse.



Note:
The online handset, which has registered to DU-100, will be shown as black characters. However, when handset register to another base station, it will remain on this PP list. User has to Delete PP manually.

3.3.4 Exit

Right click on the *DECTForSKYPE* icon at the system tray, select the **[Exit]** on the menu, and left click.



3.4 Make a Call

Most Handsets support two ways to make outgoing call:

1. Input the digit numbers then press **Dial out key** to send numbers.
2. Press **Dial out key** then input the digit numbers.

3.4.1 SkypeOUT

Press **00** + **Country code** + **Area code** (without 0) + **Phone numbers**.

For example, if user wants to call Taiwan (886) Taipei (02) 82265699, then user has to press **00886282265699** on handset. If user wants to call Taiwan (886) mobile phone 0916123456, then user have to press **00886916123456** on handset.

3.4.2 Call Skype Contacts

Users must set the **Speed-Dial Key** before dialing user contacts. Please follow steps as below.

1. Select SKYPE Contacts page.

2. Right click on the contact user wants to set.

3. Select **Assign Speed-Dial** then left click.

4. Input Speed-Dial number then click **OK**.

When user sets Speed-Dial Key successfully, user can press Speed-Dial Key on handset to call contacts.

Note:

1. User can also set Speed-Dial Key on SKYPE OUT contacts.
2. For different version of Skype, speed dial key may or may not show on contact list as below.

V 1.2.0.37 V 1.1.0.73

3.4.3 Make internal Call to another DU-200 Extension

Step1. Press **Dial Up Key.**

Step2. Press **Int.** soft key.

Step3. On screen will display **Internal:** Enter internal handset number, and then DU-200 extension will dial out to another internal handset immediately.

Note:

The number of internal extension is according to PP index. User can refer to Delete PP function of DECTForSKYPE Program. For example, if Handset A is PP1, the internal number is 1. User can press **Dial Up Key**→ Press **Int.** soft key→Press 1.

3.5 Receive a Call

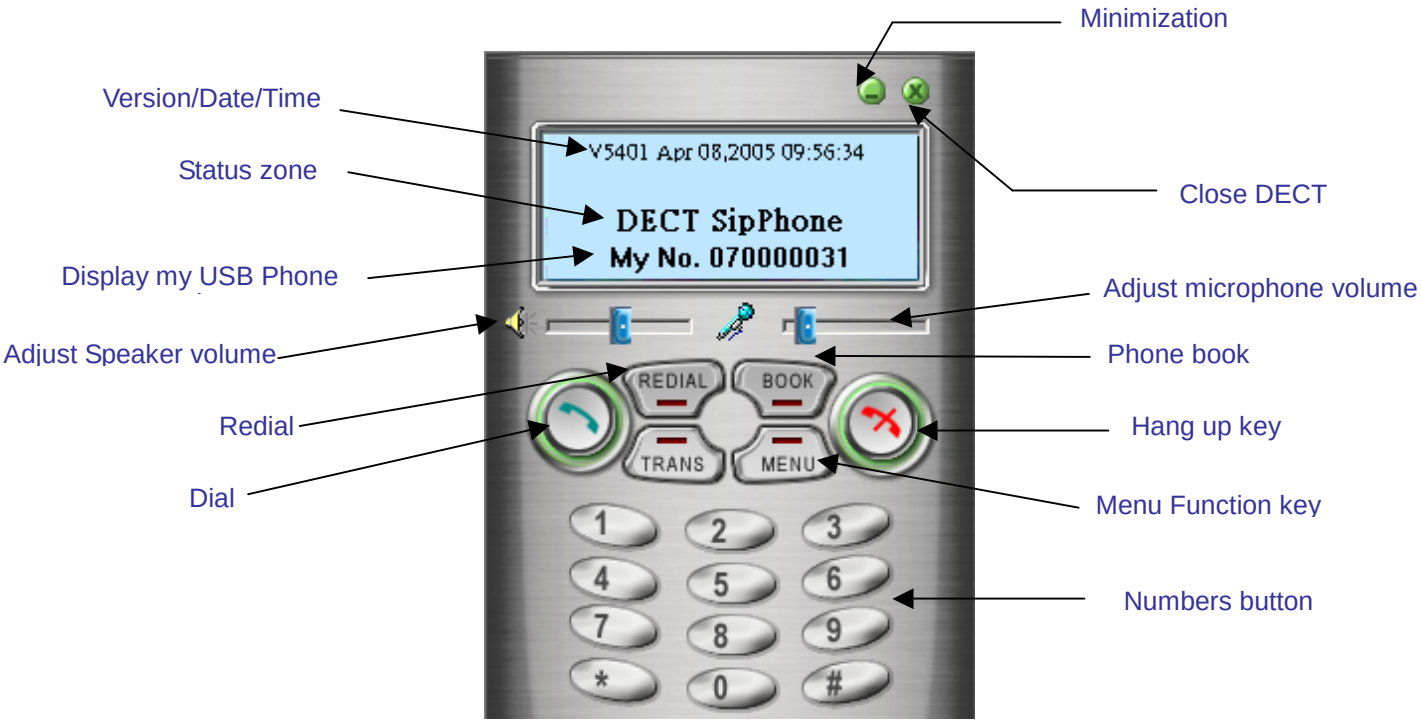
When there is Skype incoming call, all of the handsets registered on DU-100 will ring. Press **Pick Up Key** on handset to answer the call. Press **Hang Up Key** on handset to end the call. (For some models of DECT handsets, Pick Up key and Hang Up key is the same.)

Note:

1. When user is in communication, other incoming calls will be rejected.
2. If handset A and handsets B both register to DU-100, when handset A makes or answers a call, handset B can join them but handset B can not hang up this call.

Chapter 4 Getting Start with Freetalk

3.1 Panel Overview



3.2 Configuration of DECT SipPhone：

3.2.1 Registration Configuration

To register on Freetalk platform, please follow steps as below.

Step 1：press

then the **Account** screen will display as below, please fill in those fields for registration.

Account	**Registration account name**
Password	**Registration account password**
Tel No.	**Registration phone number**

Step 2：Press **Apply** button to confirm account settings.

Step 3：Select **Proxy** and screen will display as below, please fill in those fields.

SIP Proxy IP	**Proxy Address**
SIP Proxy Port	**Proxy Port**
Expire Time (ms)	**Time of Interval to keep registering to Proxy**
Using Domain Name fore Registrar	**Use Domain Name instead of IP to register.**
Outbound Proxy IP	**Outbound Proxy Address**
Outbound Proxy Port	**Outbound Proxy Port**

Step 4：Press **Apply** button to confirm account settings.

Step 5：To register handset on DU-100, please follow steps below.

1. Select **DECT define** and check **[EnableAccess]**.
2. Press **Apply** button.
3. LINE LED will start flashing when DU-100 enters register mode.
4. Enter registration mode of handset.
5. Input PIN code, the default PIN code of DU-100 is **1234**.
6. If register successfully, the LINE LED will light off.

3.2.2 Delete PP

User can deregister handset on **DECT define**.

1. Click the **DECT define** page. Select the **[DeRegisterHandSet]** on the menu.
2. Check what PP user wants to deregister in the screen, and then press **Apply** button.

Note:

Users can use DeRegisterHandSet to deregister handset when the handset will register to other base station.

3.2.3 PhoneBook

1. Press then the **Phonebook** screen will display as below. User can input pbook book table.

Dial	**Dial out selected phone book.**
Add	**Add a new phone book data.**
Del	**Delete selected phone book data.**
Apply	**Save new telephone data.**
Export	**Export phone book data.**
Import	**Import phone book data.**
	Exit menu.

2. Add: Press **Add** button then input name and telephone number, click **Apply** button to save new configuration.

3. Modify: Click and select which phone book data to modify, then click again user can modify data, and finally click **Apply** button to save new configuration.

4. Delete: Click and select which phone book data to delete, click **Del** button to confirm, a inquiry message dialog will pop up, press **Ok** button to complete deleting phone book data.

3.2.4 Received Call

Click **Received Call** to check call detail records.

Name	**Caller Name.**
Tel	**Caller telephone number.**
Date	**Date and time for incoming call.**
Dial	**Dial out selected number.**
Del	**Delete Received Call data.**
Apply	**Save current setting.**
☒	**Exit menu.**

3.2.5 Missed Call

Click **Missed Call** to check detail missed call records.

Name	**Caller Name.**
Tel	**Caller telephone number.**
Date	**Date and time for missed call.**
Dial	**Dial out selected number.**
Del	**Delete missed Call data.**
Apply	**Save current setting.**
☒	**Exit menu.**

3.2.6 Called Number

Click **Called Number** to check detail called records.

Name	**Called Name.**
Tel	**Called telephone number.**
Date	**Date and time for called number.**
Dial	**Dial out selected number.**
Del	**Delete called number data.**
Apply	**Save current setting.**
✕	**Exit menu.**

3.2.7 Codec

Click **Codec** to modify codec priority, packet size and DTMF.

Codec Priority	**Click Up or Down to adjust codec priority.**
Codec Size	**Set packet size of selected codec.**
DTMF	**Set DTMF Type.**
Telephone Event Payload Type	**If DTMF type has been set as RFC2833, user can set RFC2833 payload type here.**
Apply	**Save current setting.**
✕	**Exit menu.**

3.2.8 Net Config

Click **Net Config** to check current network status.

3.2.9 Ring

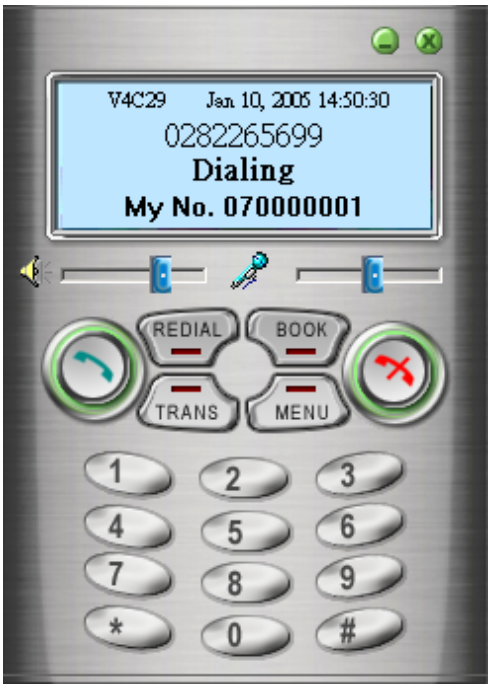
User can select any .wav file to be busy tone, ring tone, or ring back tone.

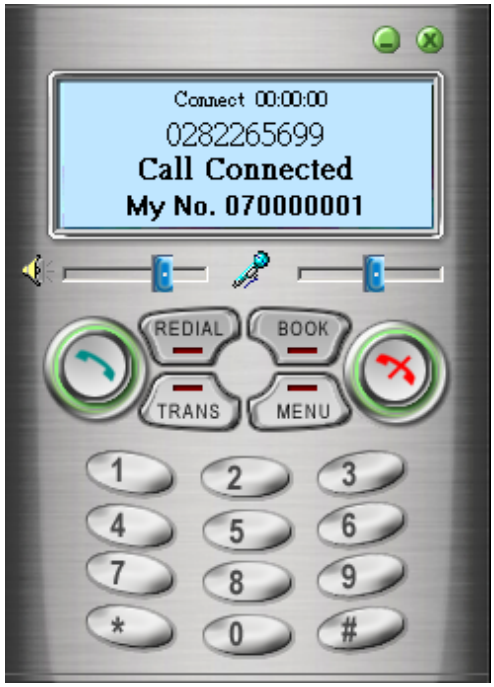
Account
PhoneBook
Called Number
Received Call
Missed Call
Proxy
DECT define
DECT SipPhone
log
processlog
busytone.wav
d0.wav
d1.wav
d10.wav
d11.wav
d2.wav
d3.wav
d4.wav
d5.wav
d6.wav
d7.wav
d8.wav
d9.wav
ringbackTone.wav
RingTone.wav
*.wav
開啟(O)
取消
以唯讀方式開啟(R)

3.3 Make a Call

If DECT handset is connected to DU-100 successfully, DECT SipPhone will display "**Ready**" status and now user can make a call.

Pick up DECT handset and input telephone number, then press button to make a call.

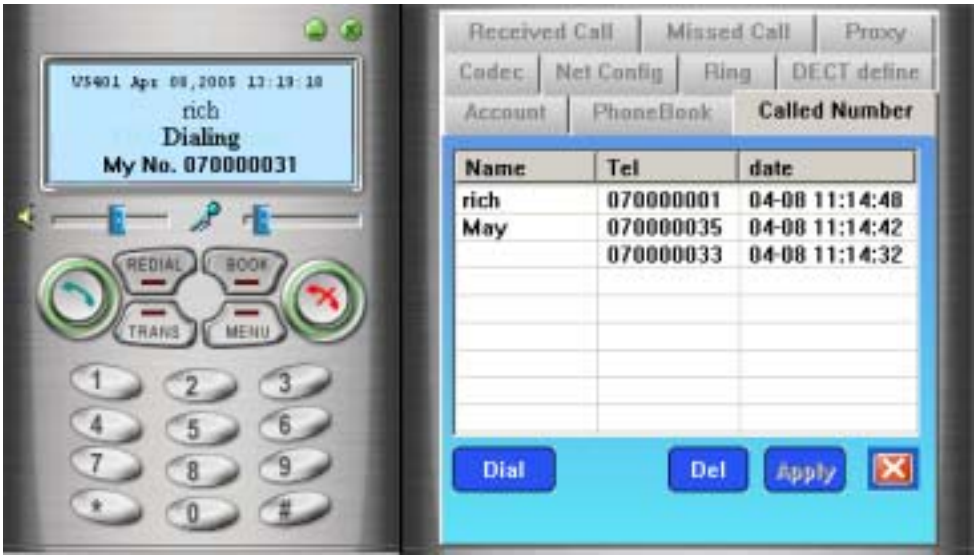




When DECT SipPhone displays "**Call Connected**", the call is successful connected.

3.3 Redial

If user wants to redial, press of **DECT SipPhone**, then Called Number page will pop up. User can select called telephone number, and press **dial** button to dial out.



3.4 Receive a Call

The screen of DECT SipPhone will display "**Call Incoming**" to inform incoming call and the DECT handset will ring too. User can press key of DECT SipPhone or press pick-up key of DECT handset to receive this call.

※ Volume is adjustable in the communication.

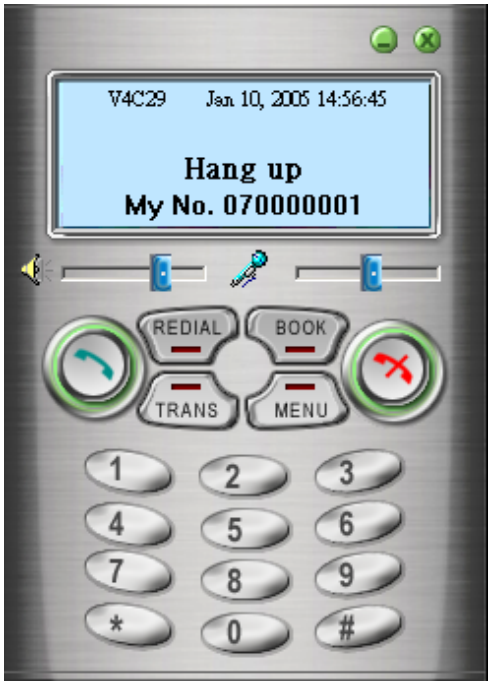
3.5 Hang up a Call

When user is communicating by DECT SipPhone, press can hand up this call.

3.6 Illustration of DECT SipPhone messages

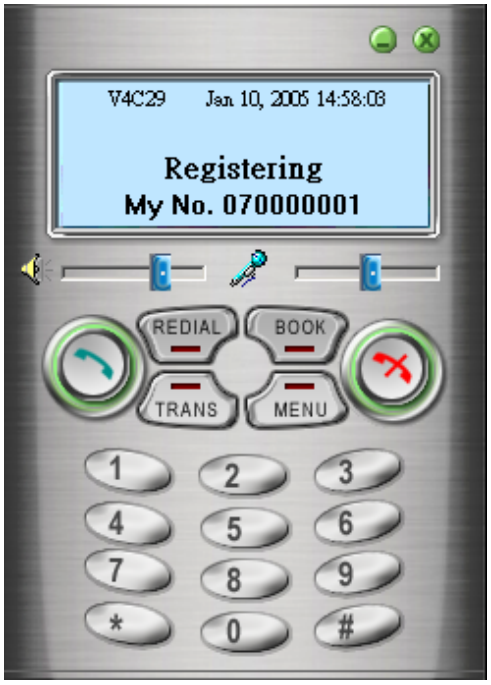
3.6.1 Hang up

Hanging up a call.



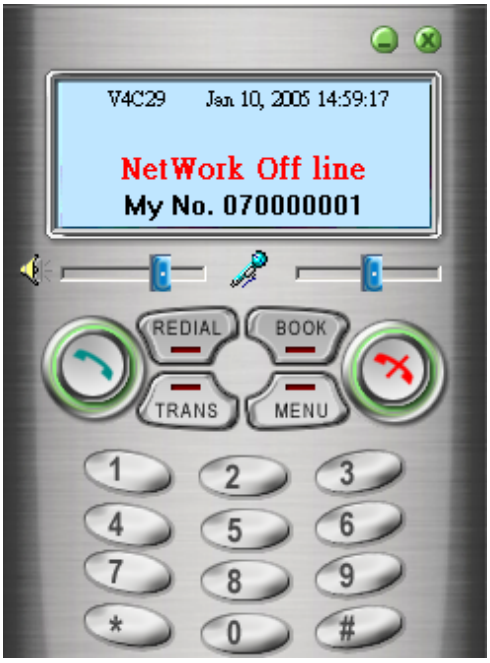
3.6.2 Registering

DECT SipPhone is registering to Proxy.



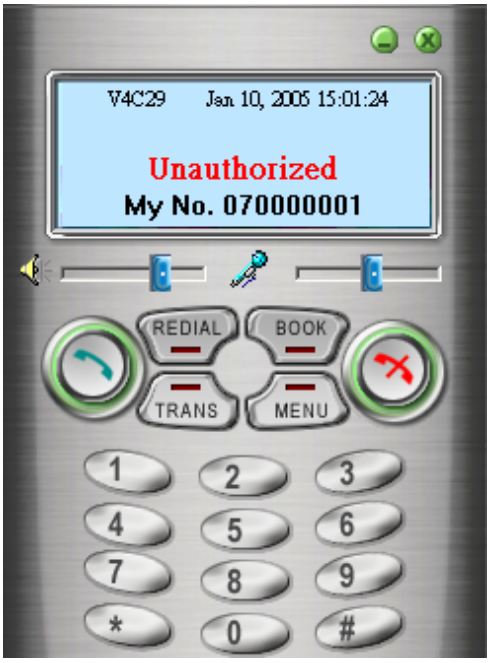
3.6.3 Network Off line

Computer is not connected to Internet.



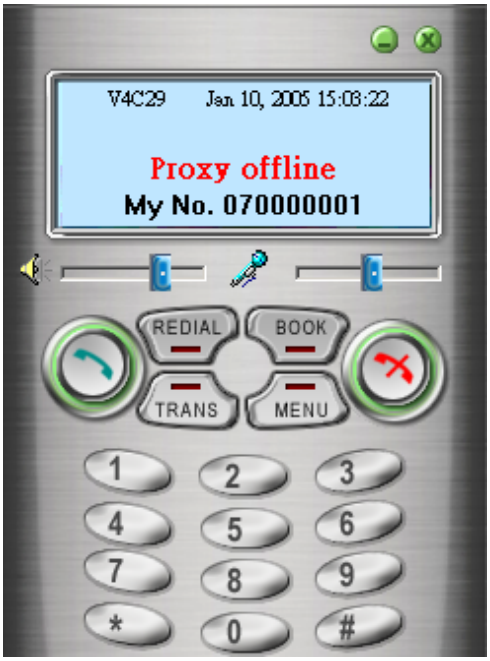
3.6.4 Unauthorized

The registration account and password are unauthorized.



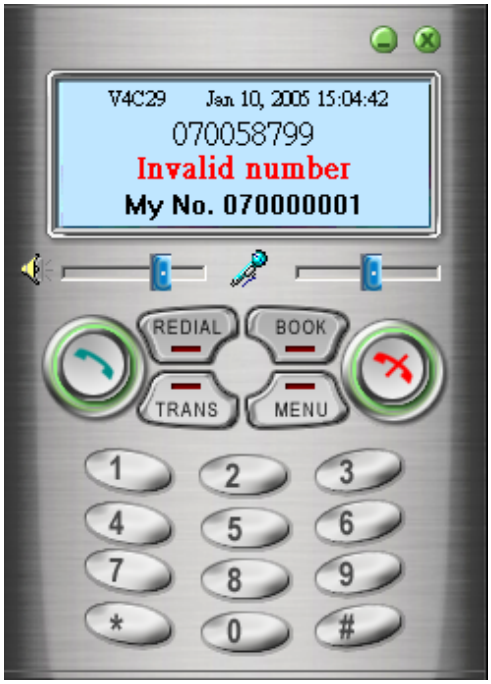
3.6.5 Proxy offline

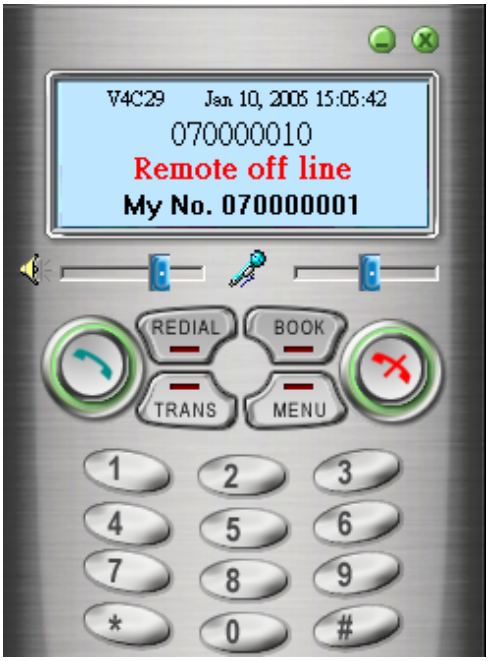
The Proxy server is off line now and can’t provide service to user.



3.6.6 Invalid number

User input wrong telephone number.



3.6.7 Remote off line

Called number if off-line.