1. INTRODUCE GOODS

1) ABSTRACT

According to the free internet phone user explosion recently, the free phone service (PC to Phone) for business model leaps into fame suddenly. However it is the reality that there is only the temporary member increasing due to the low-quality call and its inconvenience. Which results from the low priced & quality sound card for PC to Phone service user due to the price competition among PC manufacturers so that led to the low internet phone calling quality. Besides it brings inconvenience to its user that the internet phone requires the user certification.

As the results, Streamnet made USB Internet Phone secured easy usage and high calling quality for its user so that can attract more users and create several kinds of beneficiary models.

The USB chip sets for USB Internet Phone Ver 1.0 enabling highly efficient audio codec, acoustic echo-cancellation and several interfaces support available solution for business model like e-commerce, internet education, multiple-functional telephone.

2) System Requirements

➢ CPU	OVER Pentium 300MHz
➢ BROWSER	OVER MS Internet Explorer 5.0
➢ HDD	EXTRA SPACE OVER 100MB
➢ OPERATING SYSTEM	OVER MS WINDOWS 98
➢ CD-ROM	OVER X 8
➢ RAM	OVER 32 M/B

2. FEATURE

➢ Easy to use internet phone through Wowcall, Dialpad

➢ Easy installment with USB Plug & Play

➢ Securing safe and high fidelity sound by built-in DSP Codec

- ➢ Voice data controlled by Full Duplex
- ➢ No extra sound card required as a perfect USB Audio Device
- ➢ Enable to play every kind of music file as full conversion to 100% digital file(MP3, MIDI, WAVE)
- ➢ High quality sound with low latency and echo cancellation

2. Specialties

1) Concept

(1) Device :

Sound Device
- ■ Internal Speaker
- ■ Handset(MIC + Receiver Unit)
- ■ Headset 3.5 (Mono MIC + Mono Speaker) => **Option**

Hid Device
- ■ Hook Switch
- ■ LED
- ■ Function 3 Keys (F0, F1, F2)

(2) Command :
- ■ Enable to control Enable/Disable state of handset
- ■ Enable to control Enable/Disable state of internal speaker
- ■ Enable to control Enable/Disable state of Side Tone Effect
- ■ Enable to control On/Off state of LED

(3) Event :
- ■ On/Off Event - When On/Off hook, a event occurs through hook switch
- ■ Function 3 Keys - Pressing a Key, the event for respective key occurs

(4) Option:
- ■ Enable automatic changeover into handset or headset in the case of Audio Jack added.

2) Block Organization

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| MIC | speaker |
| Side Tone |

Mono Audio Jack

(Option)

Handset
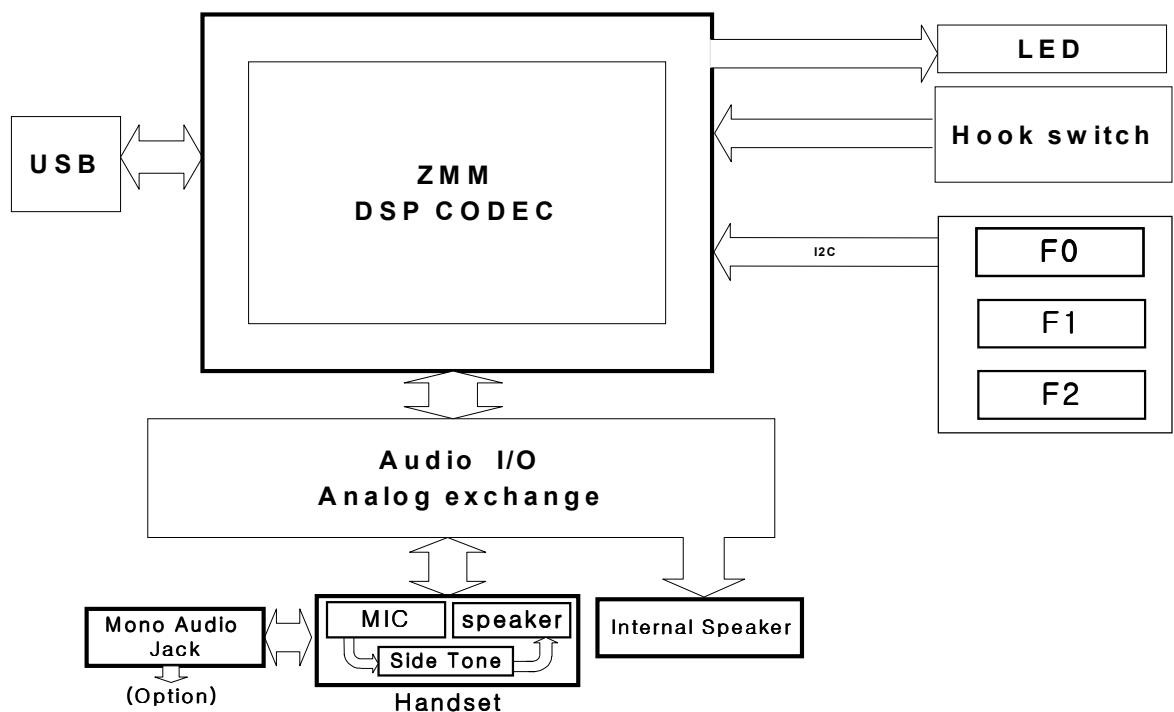
Internal Speaker

[USB Internet PHONE Version1.5]

3. HOW TO USE USB Internet Phone Ver1.5

1) Handset Enable/Disable
▸When Off Hook, handset mode Enable
(If Audio Jack is connected to Headset, sound is input/output through headset)

2) Internal Speaker Enable/Disable
▸Enable - To notice a call from someone, special state with playing Wave file

3) Side Effect Enable/Disable
▸When we use internet phone, Side Tone is Enable to make the same effect as regular telephone

4) Lamp Enable/Disable
▸Notice the state of USB Internet Phone.

(1) SEND MODE

① Off Hook(Lifting Handset)

▸Handset Enable
⇨Changeover into Audio I/O Handset or Headset
(Enable to change into headset mode by pressing special key)
▸Internal Speaker Disable
▸Side Effect Enable
▸Lamp Enable

② Input Send Key (Supposed 'F0' is a send Key)
▸ As you press a Send key, you can link with a service through Internet Phone Program by client program

③ Call connection
▸When the other part receives your call, a call by internet phone is available.

(2) Hang up mode

  ① On Hook(Hang up a handset)

    ‣ Handset Disable
    ‣ Internal Speaker Enable
    ‣ Side Effect Disable
    ‣ Lamp Disable

  ② When user puts down the handset on the phone to hang up, internet phone is disconnected as data event is transmitted to client program by Device Hook switch

(3) Receive mode

    ‣ Internal Speaker Enable : Ring Wave file Play
    ‣ Lamp Enable, Disable Loop

(4) Input Digital Key

    ‣ As you press a function key built in Device, several functions is available by client program with transmitted data.

4. Driver Installment for USB Internet Phone Ver1.5

USB Internet Phone using standard USB driver provided by Microsoft doesn't require extra driver. Basically users can install it easily with the install CD for post Windows version including Windows 98 .

Installment 4-Steps

- ➢ **USB Multiple Device**

- ➢ **USB Human Interface Device**

- ➢ **USB Audio Device**

After completing the above installment, you can use USB Internet Phone.　The next step for installing S/W provided enables to realize several kinds of functions for easy internet phone

1) USB Multiple Device Installment

When you connect both USB Internet Phone and USB port with USB cable, you can see the following picture on your screen.

If you click the 'next' button, the following picture will be seen

After checking the item, ' assigning the location to search' , assign the place located either ' Windows installment CD' or ' Windows installment program' .

After you assign the place located ' Windows installment program' , the driver is installed automatically

When the installment for USB multiple equipment is completed, the screen completed installment as the following picture will be shown.

(2) USB Human Interface Device installment

On finishing the installment for USB Multiple Device, you can see the screen for USB human interface device installment as the following picture.

As mentioned above, click the button 'next'.

USB human interface device installment is completed. The next step is the installment for USB audio device.

(3) USB Audio Device Installment

As the course as mentioned above, install USB audio device driver.
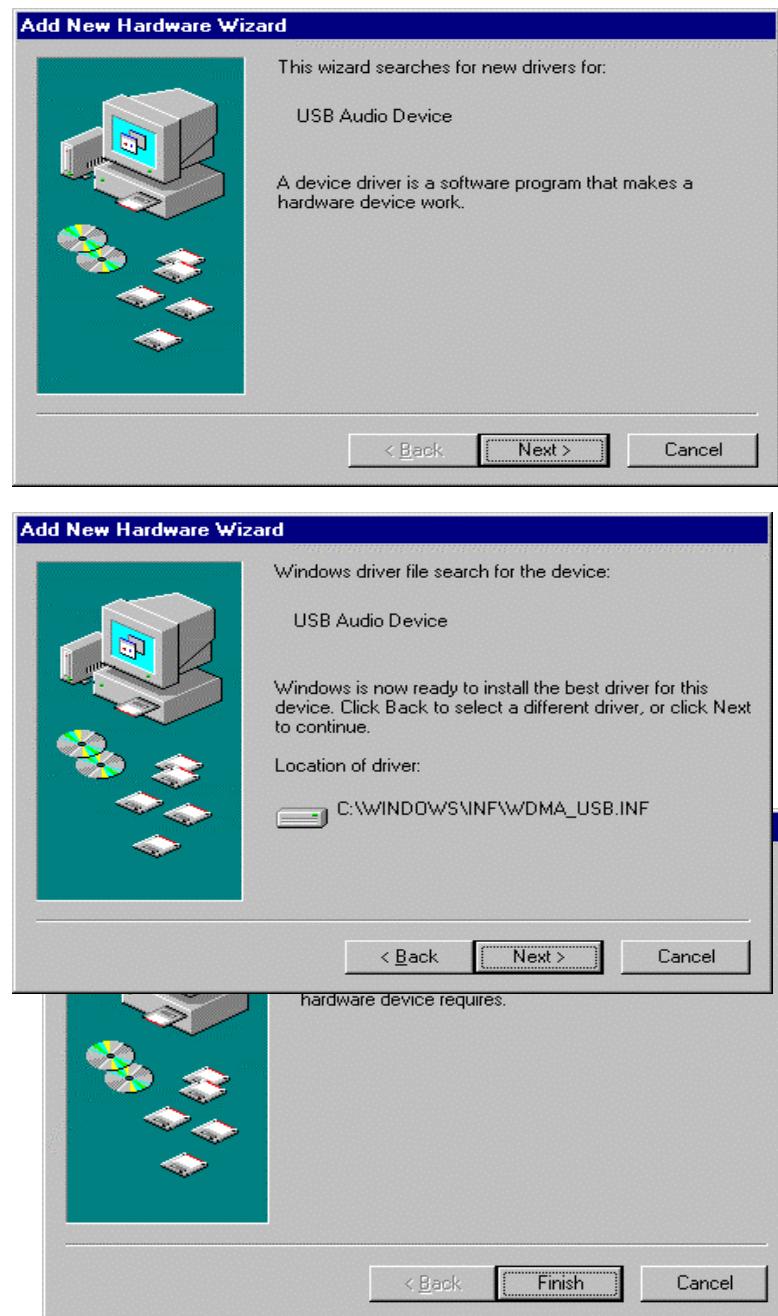
If you can see this picture, USB internet phone installment is completed.

Now you can use it as a sound card or internet phone.

5. Before using

1) Checking DEVICE CONTROLLER

▶ After clicking the right button of the icon for **MY COMPUTER** on BASIC SCREEN and selecting the icon for **DEVICE CONTROLLER** on the **REGISTERD INFORMATION**, you can see the following picture. You have to check whether USB Root Hub', ' USB Composite Device', ' USB Audio Device', ' Human Interface Devices' are recognized properly
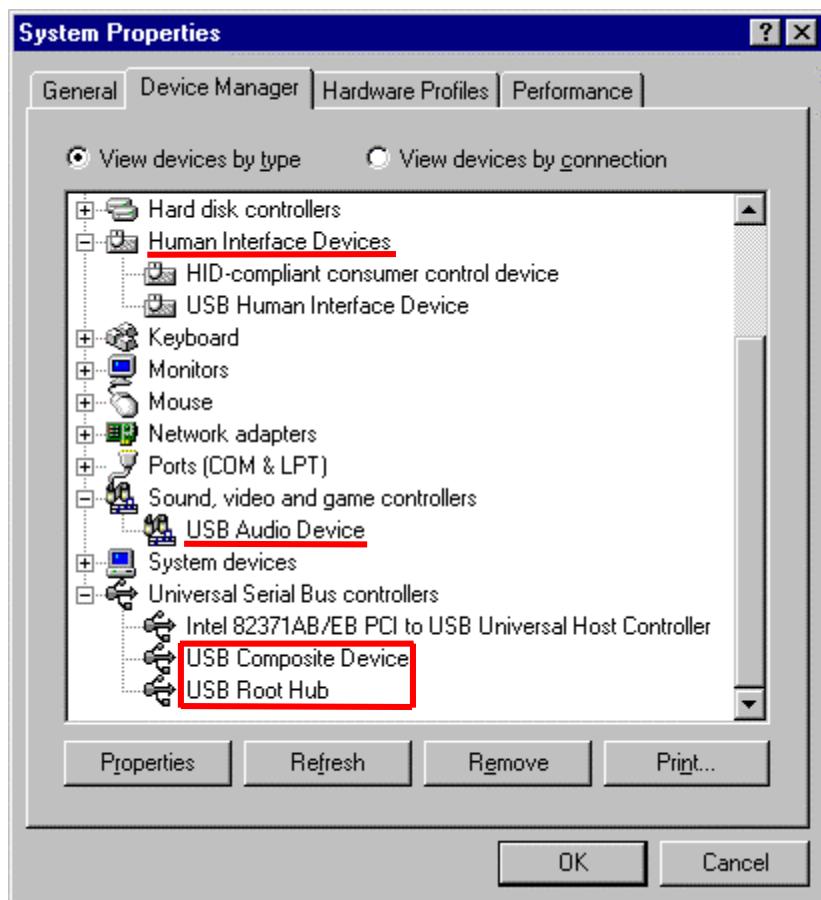
2) Checking the REGISTERD INFORMATION on MULTIMEDIA

▸In the case of using existing sound card, you must set up **Gz** as basic audio device.

Select **MULTIMEDIA** on ' **START** -> **Setting Up**-> **Control Panel'** of **BASIC SCREEN**.

Set up both **Playback** and **Recording** with **USB Audio Device** and click the **OK** button.
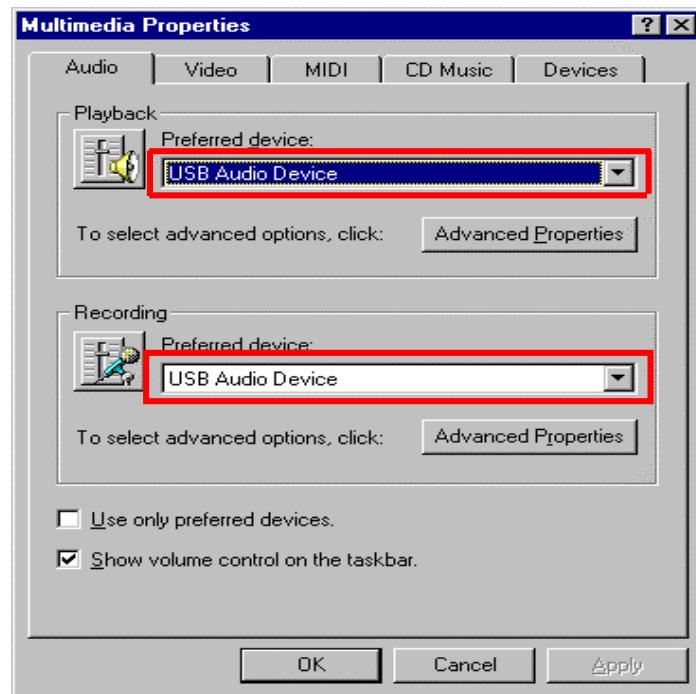

3) Recorder test

‣ After checking both **Device Controller** and **Multimedia Registered Information**, check whether proper input/output are made with recording test.

Selecting **Start -> Program -> Assistant Program -> Recorder** on **Basic Screen,** the following Recorder window is seen.

If you press **Properties** of **File** in Menu, the following window is seen.
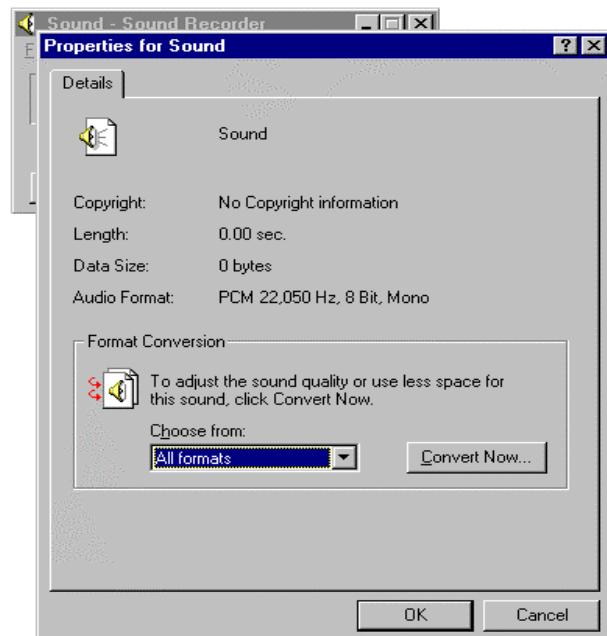
After pressing the button, **Convert Now** and seting up **Attribute** into ' 22,050 Hz, 16bit, Mono' , press the **OK** button.
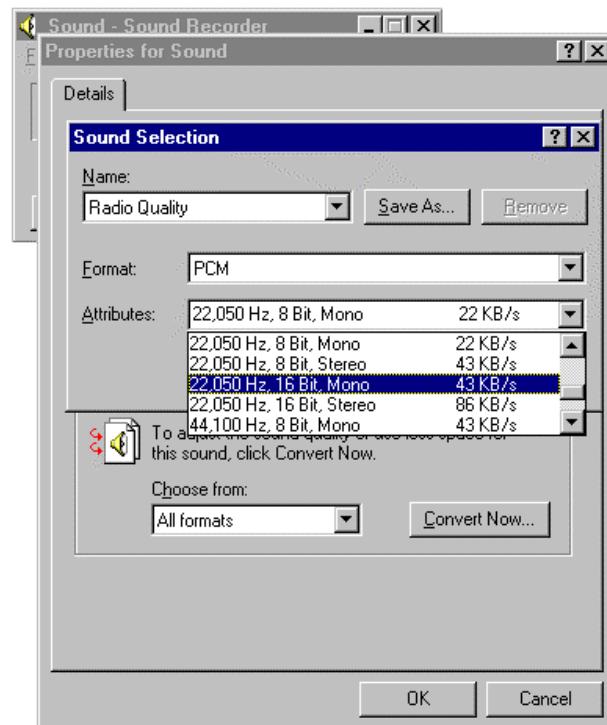
After changing the **Attribute**, test recording.