ATTACHMENT E.

- USR'S MANUAL

MPP-100 User Guide

FCC COMPLIANCE STATEMENT:

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.

U.S.A.

U.S.FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT INFORMATION TO THE USER

NOTE : 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 of a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.

Changes or modification not expressly approved by the party responsible for Compliance could void the user's authority to operate the equipment.
Connecting of peripherals requires the use of grounded shielded signal cables.

I .Summary

MPP-100 USB Device have normal PC soundcard function and Data Storage function.

a. Sound Card function
b. Support Stereo 2.1channel Dolby output
c. AGC(Auto Gain Control) basic institution function
d. Support Mike input(support 8bit, 16bit sampling)
e. Supply separate Exterior speaker output port

f. Volume adjustment function

g. Speaker & MIC mute function

h. Support Ear-Mic's in/output

□. Specification

*** MPP-100 Specification**

Part	Description
USB Spec	USB Version 1.1
Operating Power	USB Self Bus Power
USB Connector	A Type to PC & Mini A Type to Module
USB Cable	1.2mm Shield Cable with Core
Speaker Jack	3.5pie Stereo Plug
Microphone Jack	3.5pie Mono Plug
Ear-Mic	2.5pie Mono Plug
Audio	MIC : 11kΩ, +22.5dB Input : Mono 8~16 bit SPE : 32Ω, 1130mVrms Output : Stereo 24 bit
S/N	A/D : 92dB , D/A : 96dB
Etc	Volume Up & Down Switch Speaker Mute & MIC Mute Switch
Size	79mm x 44mm x 14mm

□I. Composition

Check your MPP-100 package for the following item-list.

1. MPP-100
2. Software & Driver support CD
3. 1.2m USB Cable
4. User Guide

5. Quick Setup Guide

IV. Installation

1. What is USB ?

It is a initial of Universal Serial Bus.

It is developed spec. easily to connect between PC and PC circumference .

It can transfer data quickly and has Plug & Play function.

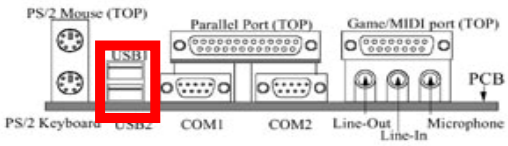
2. Check the Circumstance of Utilization

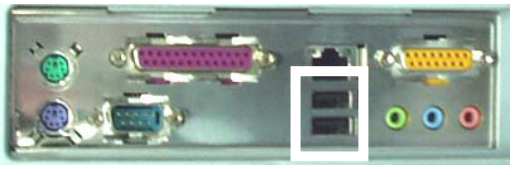
You can use this product under over Windows 98 SE , Linux, Mac OS9 operating system.

□ Do you have USB port in your PC?

If you use Celeron or Pentium □/□, you have 100% of USB port.
There are two USB port which are located beside keyboard and mouse's plug in the rear of computer.
But it is possible to have USB port in front of computer, if your computer is a new style.

□ **Wait!** How to find USB port





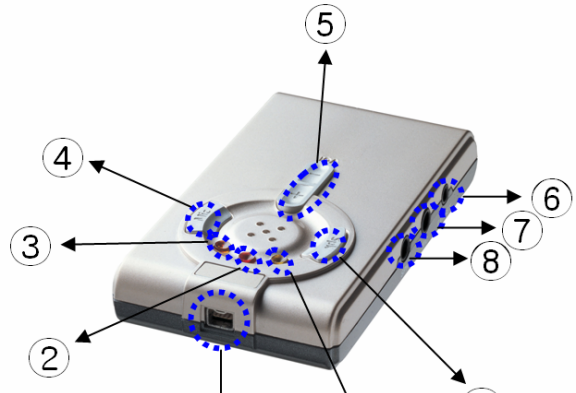
" □ "'s mark is USB port, has to plug USB connecter.

□ Is your Operating system(OS) over Windows 98SE?

If you have over Windows 98SE'OS, it can be recognized USB automatically regardless of a separate driver. But sometimes Installing driver can be possibly to need a original CD.

3. Product picture

1) MPP-100



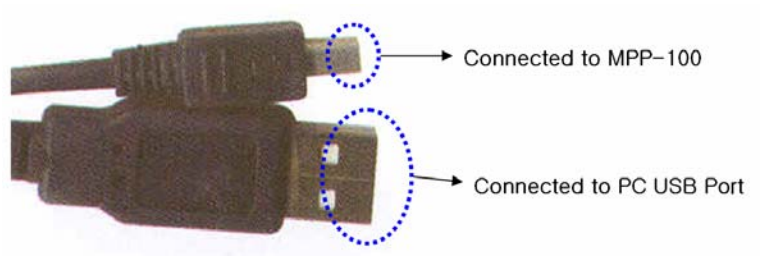
Mini USB port

Power Display Lamp

□ MIC Mute Display Lamp

- MIC Mute Button
- Volume Up & Down Button
- EarMIC Jack
- Microphone Jack
- Speaker Jack
- Speaker Mute Button
- Speaker Mute Display Lamp

2) USB Cable



4. How to Install MPP-100

1) Connect offered USB Cable to PC and MPP-100.

2) If your PC O/S is a standard Windows XP, there is a general recognition procedure of new hardware on the Taskbar.

[Picture4-1]

[Picture 4-2]

[Picture 4-3]

[Picture 4-4]

[Picture 4-5]

[Picture 4-6]

[Picture 4-7]

[Picture 4-8]

[Picture 4-9]

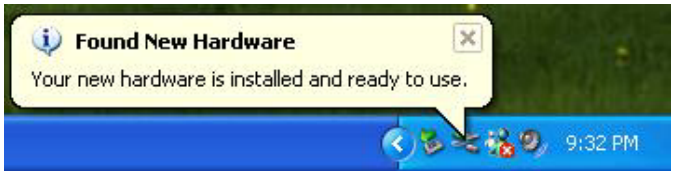
[Picture 4-10]

[Picture 4-11]

[4 Picture -12]

After proceeding as above procedure, it will be displayed as [Picture 13].

It means the recognition of MPP-100 hardware is done.



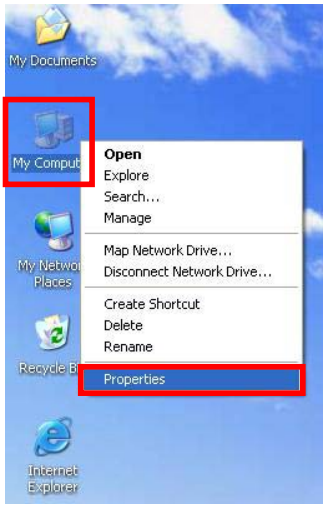
[Picture 4-13]

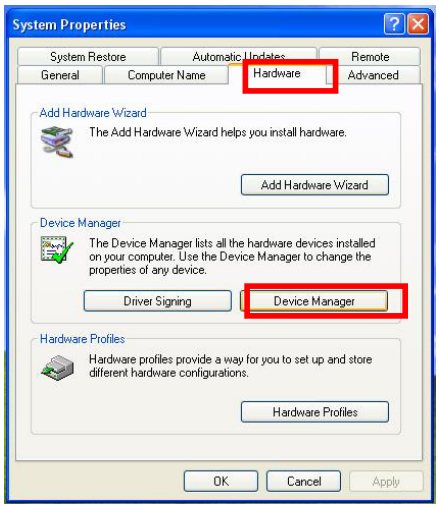
Now user can use MPP-100.

5. Check Installing a MPP-100

1) Device Manager□□ Check

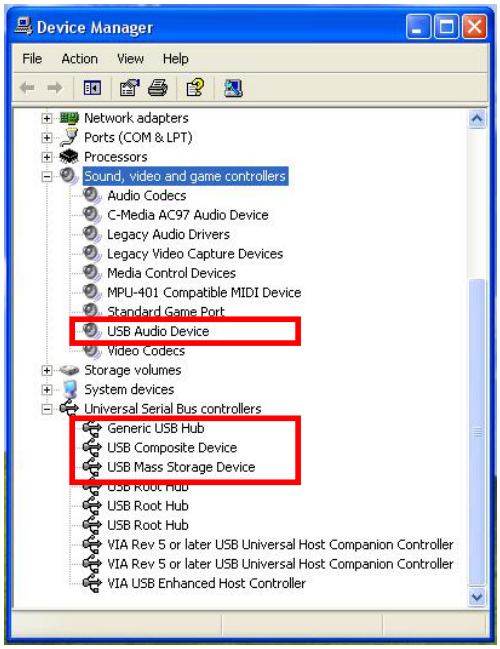
(1) After mouse pointer move from "My computer" to "Properties" on the menu as [Picture 5-1], click the right of mouse. Then it will be showed the window of "System Properties" as [Picture 5-2].





[Picture 5-1] [Picture 5-2]

2) After clicking "Hardware" on System Properties as [Picture 5-2], select "Device Manager".
Then it will be showed the window of "Device Manager" as [Picture 5-3].

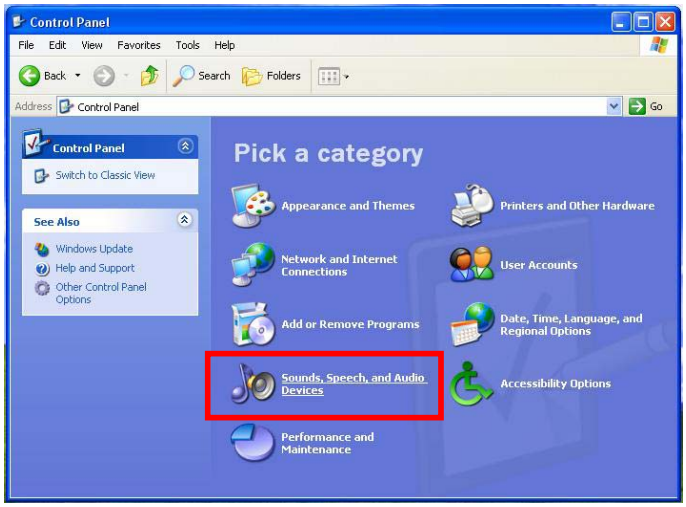


[Picture 5-3]

If showed above marked information as [Picture 5-3], it means MPP – 100 is recognized correctly.

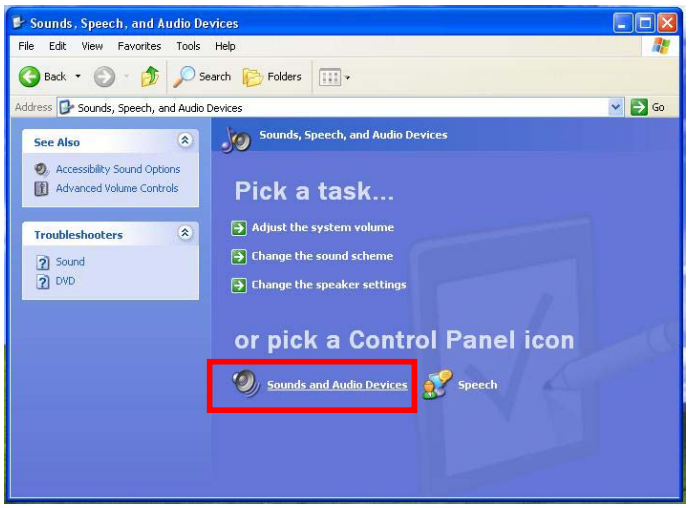
2) Control Panel□□ Check

(1) After clicking "start" on the Taskbar, select "Control Panel" on menu.
Then it will be showed the window of "Control Panel" as [Picture 5-4].



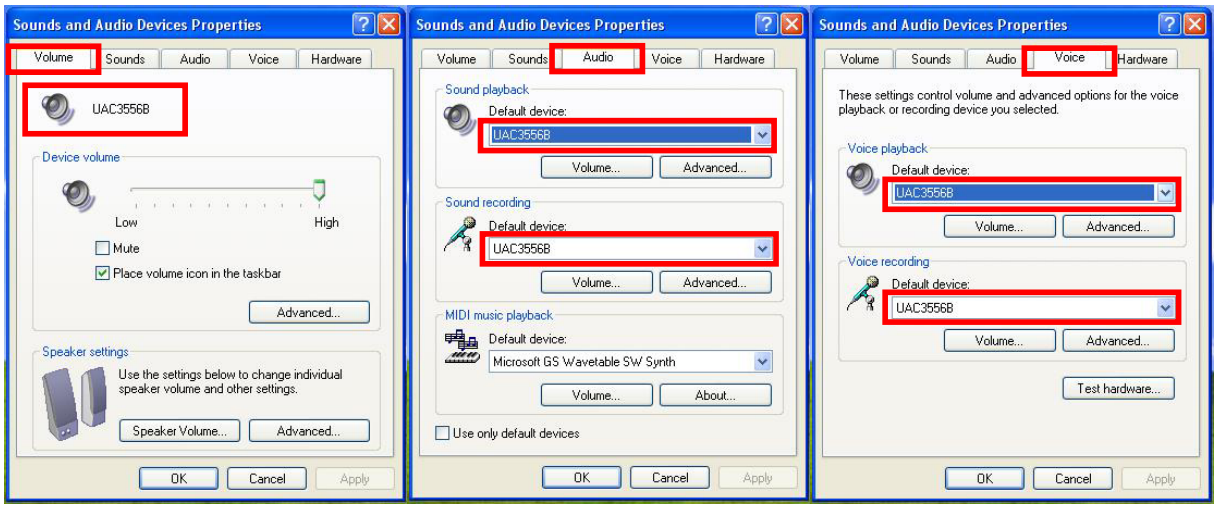
[Picture 5-4]

Click "Sound Menu" on the "Control Panel" as[Picture 5-4], then it will be showed the window of "Sounds, Speech, and Audio Devices" as [Picture 5-5].



[Picture 5-5]

Click “Sounds, and Audio Devices” on the menu of “Sounds, Speech, and Audio Devices” as [Picture 5-5]. Then it will be showed the window of “Sounds, and Audio Devices Properties” as [Picture 5-6].



[Picture 5-6] [Picture 5-7] [Picture 5-8]

If there is each of “UAC3556B” mark on the Volume menu as [Picture 5-6], on the Audio menu as [Picture 5-7], on the Voice menu as [Picture 5-8], it means MPP – 100 is recognized correctly.

6. How to remove MPP-100

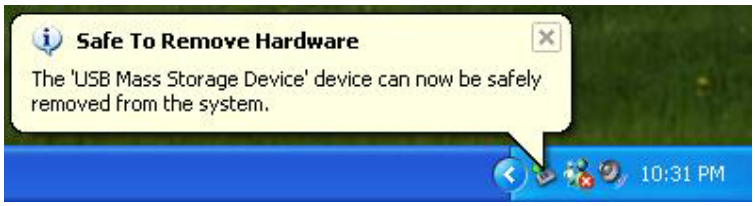
1) After Mouse Pointer move to “Show hidden icons”, click the left side of mouse on the marked icon as [Picture 6-1]. Then it will be showed “Message bar” as [Picture 6-2].

[Picture 6-1]

2) Click “Message bar” as [Picture 6-2].

[Picture 6-2]

3) If you have the message of “Safe To Remove Hardware” as[Picture 6-3], MPP-100 can be removed from PC.



[Picture 6-3]

If you forcibly remove MPP-100 from PC without above procedure, be careful to damage on stored MPP – 100 data.

7. How to use MPP-100 and How to test functions

1) How to use MPP-100

Similar usage to general sound card of PC

(1) Make sure of connection between PC and MPP-100.

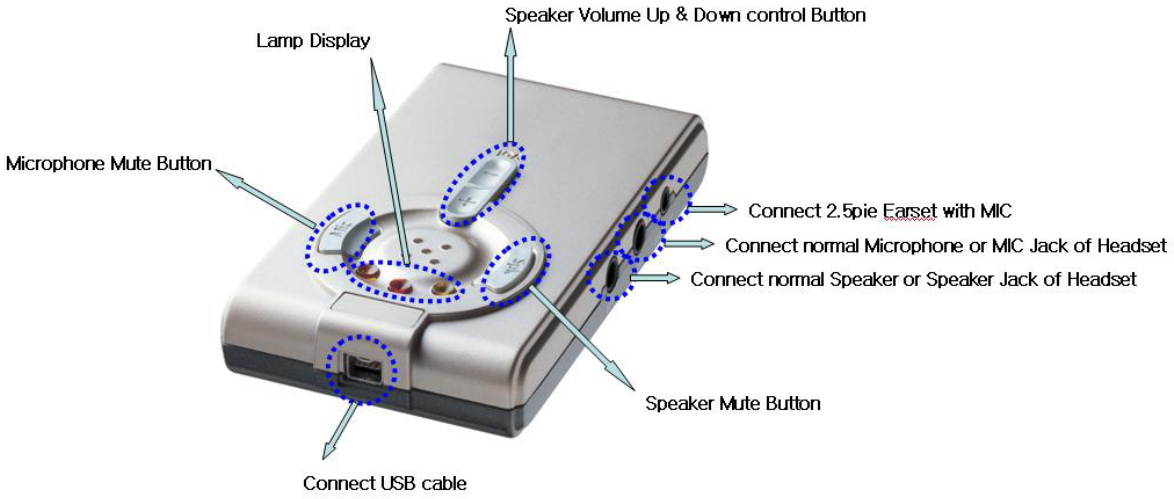
(2) If there is a "Red" lamp on MPP-100, it means correctly connected.

(3) Connect the terminal of general speaker or headset's speaker to "spk" on the left side of MPP-100.

(4) Connect the terminal of general Microphone or headset's microphone to "MIC" on the left side of MPP-100.

(5) Connect the terminal of general 2.5 pie' earset or served earset to "EARSET" on the left side of MPP-100.

[The Description of Picture]



[Picture 7-1]

(6) The description of functions

a. "spk" Button : "spk" button has "Speaker mute" function.

If "mute" is on, there is no sound-output from connected device because only mute function is operated in the MPP-100 except for sound from "EARSET" port.

- Mute ON : Press "spk"' button one time, operated with "Yellow Lamp".
- Mute OFF : Press "spk" button one more time, operated without "Yellow Lamp".

b. 'Mic' Button : "Mic" button has "MIC mute" function.

If "Mute" is on, there is no sound-input from connected device because all mute functions of "MIC" port and "EARSET" port are opercated in the MPP-100.

- Mute ON : Press "Mic" button one time, operated with "Orange Lamp".
- Mute OFF : Press "Mic" button one more time, operated without "Orange Lamp".

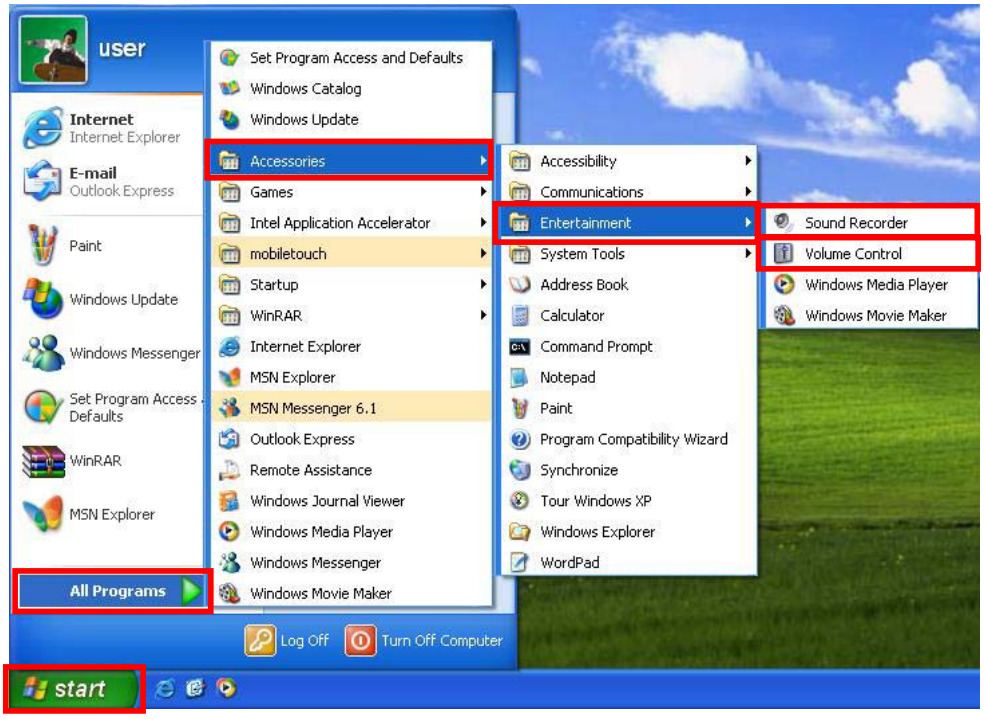
c. "+/-" vol Button : "+/-" button has the function of adjusting volume.

- Press "+/-" button's "+" once or continuously , increase sound-output volume.
- Press"+/-" button's "-" once or continuously, decrease sound-output volume.

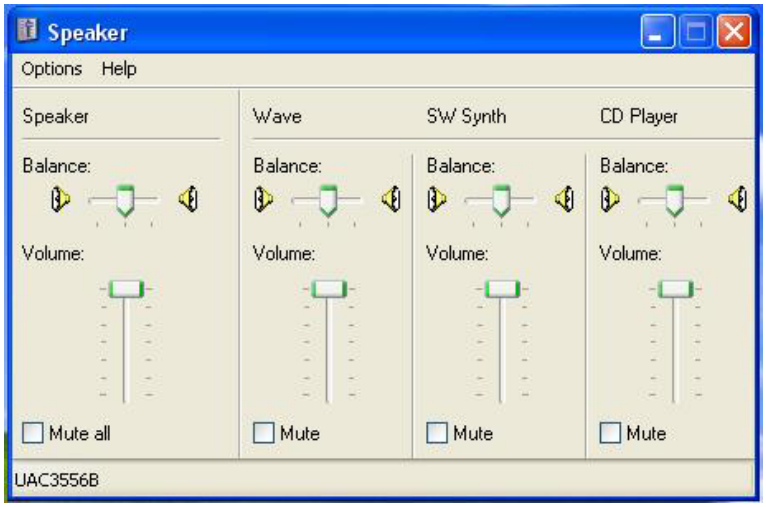
2) The advanced function of MPP-100

(1) How to output user voice

Click "start -> All Programs -> Accessories -> Entertainment -> Volume Control" on the Taskbar menu as [Picture 7-2] in order, it will be showed the window of "speaker" as [Picture 7-3].

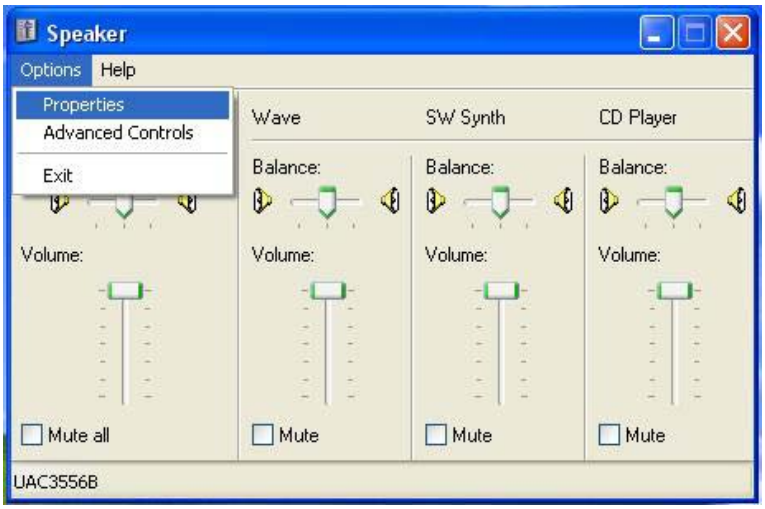


[Picture 7-2]

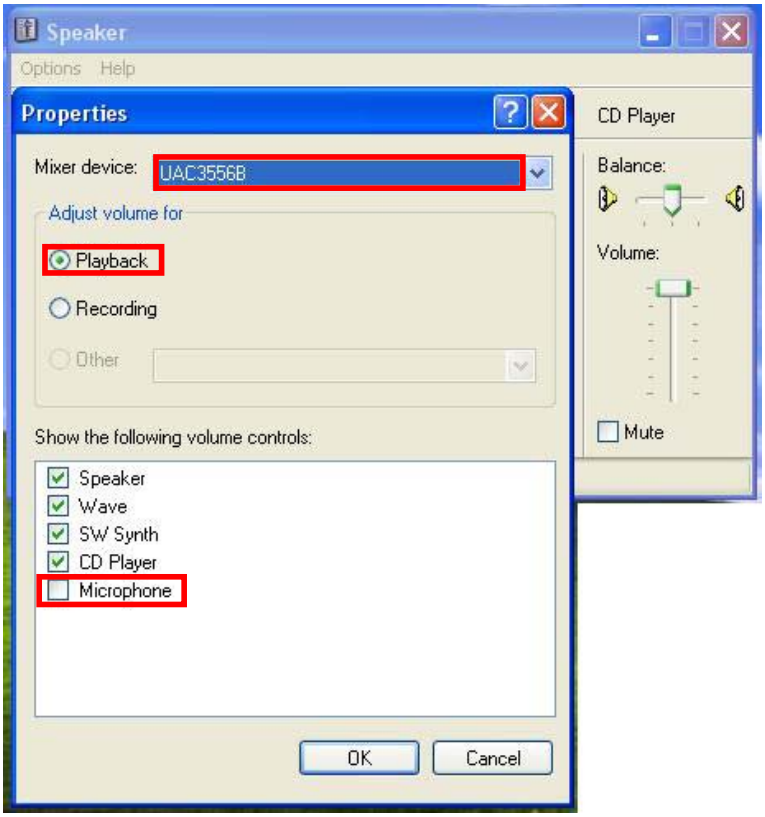


[Picture 7-3]

Click "Options" on the [Picture 7-3] as [Picture 7-4], select "Properties". Then it will be showed the window of "properties" as [Picture 7-5].

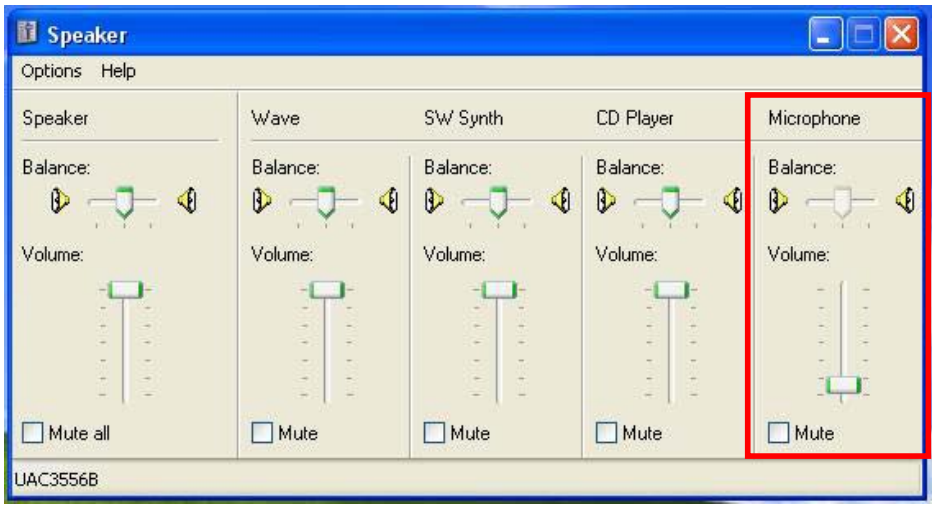


[Picture 7-4]



[Picture 7-5]

Select “Microphone” in the “Show the following volume controls” as [Picture 7-5], click “OK” button. Then it will be showed the window of “Speaker” as [Picture 7-6].



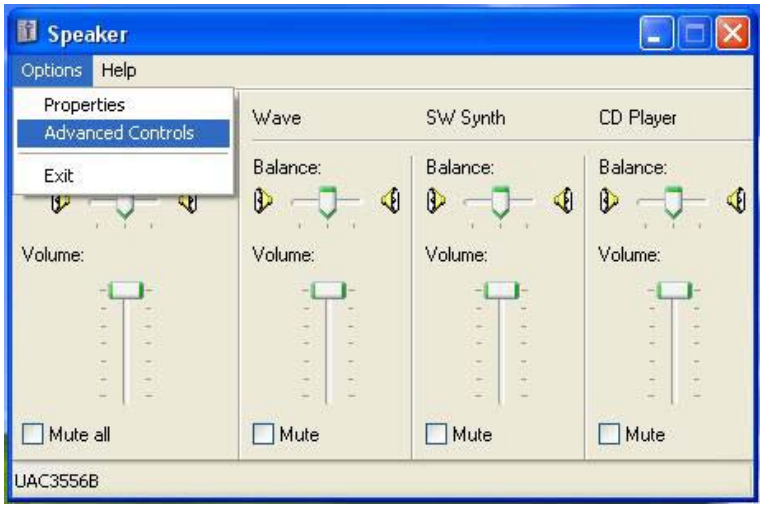
[Picture 7-6]

According to "Microphone" setting up as [Picture 7-6], adjust voice-output of user.

- Setting up by "Mute" : It doesn't come out user voice from speaker, but mic is generally operated.(Possible to communicate with contact in the chat program as messenger)
- Volume : According to height of Volume's bar, increase/decrease volume.

(2) How to output advanced controls of Speaker

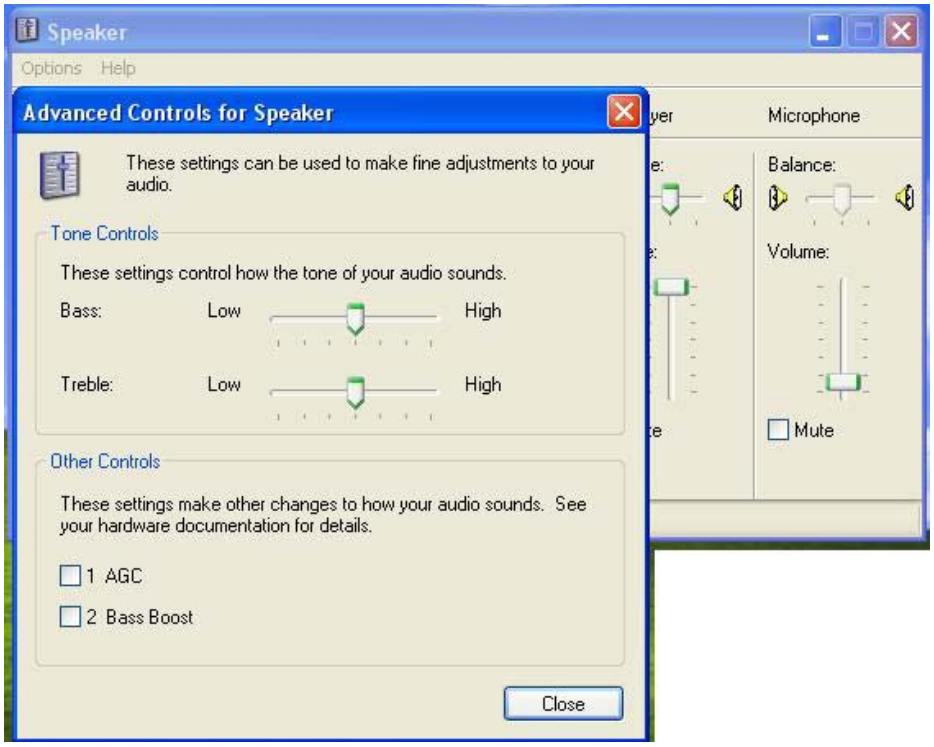
Click the window of "Speaker" same as "How to output user voice" on the [Picture 7-6].



[Picture 7-6]

After clicking "Options", "Advanced Controls" in order as [Picture 7-6], it will be showed the window of

"Advanced Controls for Speaker" as [Picture 7-7].



[Picture 7-7]

You can adjust sound quality in the "Advanced Controls for Speaker" as [Picture 7-7]. After adjusting, if press "Close" button, setting up is completed.

(3) How to test MIC

Click "start -> All Programs -> Accessories -> Entertainment -> Sound Recorder" on the Taskbar menu in order same as [Picture 7-2] of "How to output user voice", it will be showed the window of "Sound-Sound Recorder" as [Picture 7-8].

[Picture 7-8] [Picture 7-9]

Press Recording Button as [Picture 7-8], it will be started recording as [Picture 7-9].

If recording is completed or press the Stop Button in the middle of record, it will be showed as [Picture 7-10].

[Picture 7-10]

[Picture 7-11]

If you want to listen to the recorded, press Play Button as[Picture 7-11], then it will be started to play the record.

(4) How to test Speaker

If you want to test sound-output form speaker normally, play stored audio file with general Audio and Media player as general PC's Sound Card.