

Voice Over IP Communication Headset

The USB400 VoIP communication headset is specially designed for high-performance Internet communication via the latest powerful connection of USB.



Accutone®

USB400 VoIP Communication Headset

INSTALLATION GUIDE & USER MANUAL



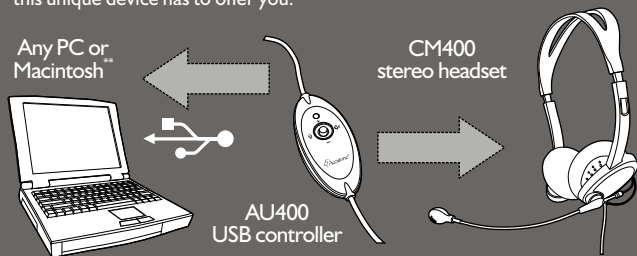


USB VoIP Communication Headset

INSTALLATION GUIDE & USER MANUAL.

Thank you for purchasing the Accutone® USB400 VoIP Communication Headset. This high-performance headset is designed for professional Voice over IP communication, whether it be Skype® chat or any proprietary softwares. Although the USB400 is tailor-made for human voice applications, its 40mm custom-designed stereo speakers are more than capable of handling top notch hi-fi gaming as well as listening to music with your PC. Aside from perfect sound reception, it is also equipped with Accutone®'s noise cancelling microphone. On top of all that, we have reduced the size of the USB module, added the control interface while still fitting it into a compact and stylish casing, giving you digital audio control without compromising convenience.

Now please spend a few moments to read through this user manual before connecting the USB headset to your computer. After familiarizing with the features and functions, you will surely appreciate the top audio performance this unique device has to offer you.



** USB400 VoIP headset is compatible to both desktop and notebook computers with an USB jack. Only the operating systems listed under "Operating Environment" in the section of Specifications of AU400 USB Converter on page 2 are applicable.

*** Outside the operating environments mentioned on page 2, the adaptor is not guaranteed to operate with all computers. The adaptor is not guaranteed to operate with home built computers, operating systems that are personally up-graded or multiple operating systems. The adaptor is also not guaranteed to operate with functions under system suspend, sleep and hibernation modes.

USB

detailed descriptions of all the specifications.

SPECIFICATIONS

Stereo Headset CM400

Cord	2m long
Mass	Approximately 100 g (without cord)
Receiver	
Size	40mm diameter
Type	Open air dynamic driver unit
Voice coil	CCAW
Maximum input power	10mW/20 mW
Impedance	32Ω ± 15% at 1 kHz
Sensitivity	93 ± 3dB/mW
Frequency range	40 - 20,000 Hz
Microphone	
Design	Flexible boom microphone
Type	Electret condenser
Open circuit voltage level	-47dB (0dB = 1V/Pa)
Frequency range	20 - 20,000 Hz

USB controller AU400

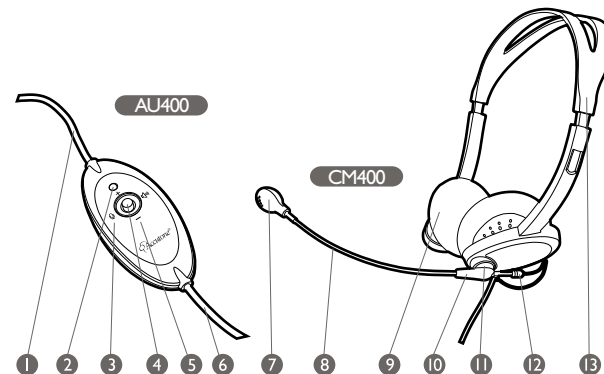
Frequency range	20 - 20,000 Hz (headphone) 100 - 10,000 Hz (microphone)
Data resolution	16 bit
Sampling rate	48 kHz Stereo
Operating Characteristics Rx	
Receiver gain	14dB Max.
Output power	35mW Max.
THD + Noise	<0.4% @ P _o = 30mW 20~20,000 Hz
S/N @ THD <0.4%	86dB
Master volume control range	0~46.5dB attenuation
Operating Characteristics Tx	
Microphone gain	20dB Max.
Volume control range	+12dB ~ -34.5dB, 1.5dB step output (headphone stereo jack)
Input/output jacks	impedance load: 16 or 32Ω input (microphone monaural jack) plug-in-power system
power supply dimensions	USB bus power compliant (5V, 100mA) (excluding projections)
operating environment	approx. 40x100x20mm (w/d/h) compliant operating systems: Windows 98 SE/Windows 2000/Windows Me/Windows XP Apple Macintosh OSX CPU: Pentium II 266 MHz or better

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USB

Learning about the interface & controls.



MAIN SWITCHES AND INTERFACE

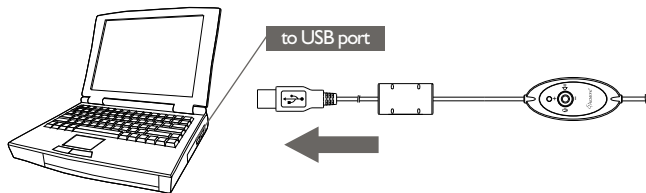
1. Cable ends with USB plug
2. Multiple status LED-indicator (red/amber/green)
3. Silkscreened muting indications (microphone or speaker mute)
4. 4-direction controlling switch (volume adjustments and muting)
5. Silkscreened volume indications
6. Cable ends with connection to headset
7. Microphone Capsule
8. Aluminium microphone voice tube
9. Ear Pad (including 40mm speaker chamber)
10. Adjustable voice tube holder
11. Microphone voice tube rotational pivot
12. Microphone connecting cable (with SR)
13. Extendable double-arm headband

USB

Hooking all the parts together!

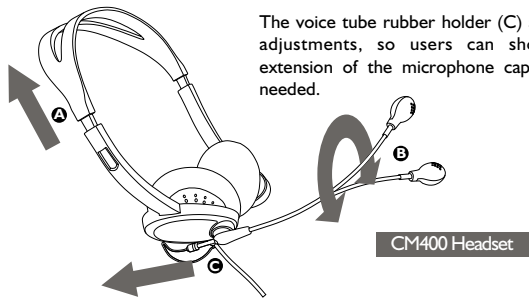
1 CONNECTING THE COMPUTER

Connect the USB plug extended from the AU400 USB controller to the USB port of your notebook or desktop computer. The LED indicator will light up indicating correct connection to the computer.



2 ADJUSTING YOUR HEADSET

There are multiple points of adjustment with the CM400 headset, designed for comfort as well as accommodating different preferences. The double-arm headband (A) is extendable on both sides to fit different head sizes; and the aluminum microphone voice tube (B) is rotatable so users can place the microphone closer to their mouth if they wish. The suggested distance between a user's mouth and the microphone is 1/2 inch. The voice tube rubber holder (C) also allows adjustments, so users can shorten the extension of the microphone capsule when needed.

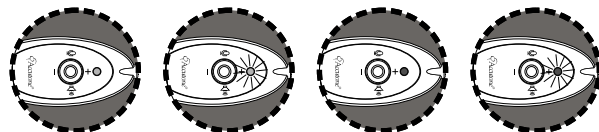


USB

Setup new device from your computer.

3 LED INDICATIONS

The LED-indicator on the AU400 USB controller is able to display various status of the device, and the definitions are listed as below:



steady GREEN light STANDBY MODE	flashing GREEN light OPERATING MODE	steady AMBER light MUTED STANDBY	flashing AMBER light MUTED OPERATING
the device is in standby mode, ready to receive or transmit voice data.	the device is operating, meaning voice data is being received or transmitted.	the device is in standby mode but microphone is muted and no data is coming in or going out.	the device is operating, but microphone has been muted, the device can receive data but not transmit.

4 INSTALLING USB DRIVER & SOFTWARE

To begin, you should restart your computer, and when your operating system finishes loading, connect the AU400 USB converter to any USB port in your computer. This manual will use Windows XP interface as demonstration but the steps should be identical for Windows 98SE, ME or 2000 versions.

! Please note that after you plug in the AU400 USB converter, your operating system may automatically launch the Hardware Installation Wizard. You should abort such installation by pressing cancel, because you should use the Driver Software CD for optimal performance.

- (1) Connect AU400 USB Converter to USB port of computer
- (2) Insert "Driver & Software Installation CD" into your CD-ROM
- (3) Setup program should start automatically
- (4) If Setup program doesn't start, go to the root directory of your CD-ROM and click on the setup.exe file

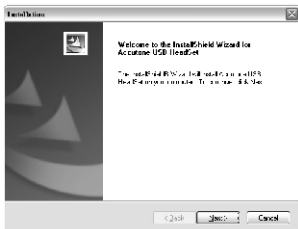
* For setup instructions and troubleshooting of AU400 with Apple Macintosh OSX, please refer to our website at <http://www.accutone.com.hk>



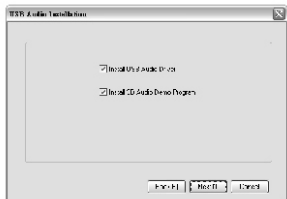
Setup new device from your computer.

4 INSTALLING USB DRIVER & SOFTWARE

Upon starting the installation program, the following welcome screen will be shown, simply follow the InstallShield Wizard according to the following guide:



click **Next**



you have the option to install only the USB driver or with the 3D Audio Demo program, we recommend you check both and

click **Next**



the setup program will install the AU400 USB software to a default path and folder

click **Next**



Setup new device from your computer.

4 INSTALLING USB DRIVER & SOFTWARE



Please note that in some Windows XP system, you may be prompt at this point asking you about Windows Logo testing issues, simply ignore this message and click **Continue Anyway** to continue installation.

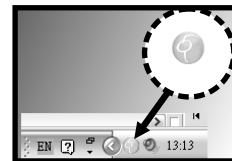


the setup program should begin to copy files into your system,



after copying all the files, the program will automatically install the required drivers into your system, please be patient as this may take a little while.

after successful installation of the drivers, you will have to reboot your system, and when you do, you should be able to see the accutone orange logo displayed on the bottom right corner icon tray.



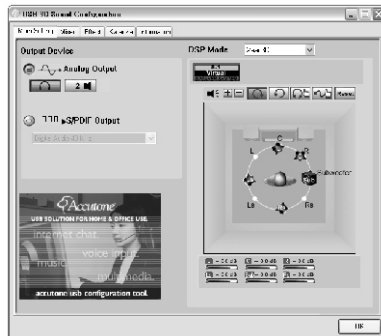
The AU400 driver will only operate when connected to the USB port which you have installed with. If your computer has more than one USB port, you can determine if the port is the correct one by checking whether the orange Accutone icon is in the icon tray as shown above.



Enjoying the extra features of the software.

5 OPERATING THE SOFTWARE

The AU400 USB converter is equipped with a Sound Configuration software for sound adjustments. You can open the program by simply double clicking on the orange Accutone icon in the icon tray, as shown in section 4 of this manual.



In Main Setting tab, you can choose your output device from headset to desktop speakers.

AU400 is also equipped to be used for digital entertainment applications like surround sound movie viewing and gaming.

When connected to a desktop speaker, AU400 can simulate 5.1 surround sound using Xear 3D technology.

Simply select your application here.

When selected Xear 3D as your DSP mode, you can experience the 5.1 3D-surround effect even with your headset. Choose headset as your Output Device, turn on Xear 3D, and click the rotating icon under the 5.1 Virtual Speaker Shifter during your favorite audio applications.



You can also choose to use S/PDIF output when connected to other digital audio devices.



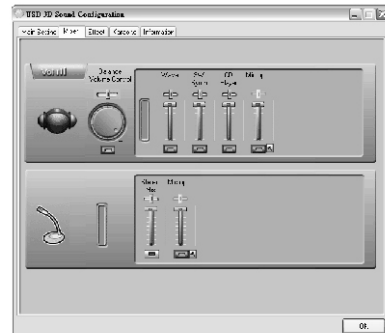
Enjoying the extra features of the software.

5 OPERATING THE SOFTWARE

In Mixer tab, the top panel is the Playback Volume Control, and the bottom panel is the Recording Volume Control.



In Playback Volume Control, you can adjust the main volume and balance by adjusting the knob. Other volume controls includes Wave, SW Synth., CD Player and Microphone realtime playback.



Microphone realtime playback adjusts the feedback volume of the microphone to yourself. The small hammer icon next to the microphone volume control opens up the microphone advanced adjustments. You can choose to turn on the microphone playback mute or microphone boost function.



Please note that in muting function inside the Playback Volume Control - advanced microphone adjustments **ONLY** mute the volume of the microphone going to the speaker of the headset, the user on the other end can still hear you.



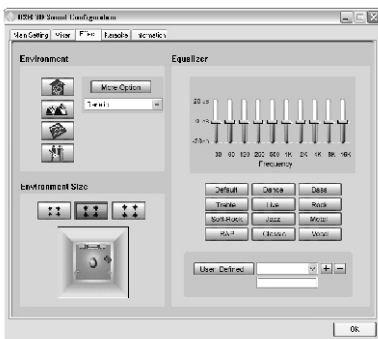
In Recording Volume Control, you can choose the Stereo Mix volume control and the Microphone transmit/record volume control. In this microphone control, you are adjusting the actual outgoing volume. Again, the hammer icon opens up the advanced setting which include mute and microphone boost.



Enjoying the extra features of the software.

5 OPERATING THE SOFTWARE

The Effect tab controls the various sound effect you can use with your AU400 adaptor. There are three panels here: Environment Type, Environment Size and Equalizer.



There are 4 standard environment types: bathroom, opera house, underwater and music lounge. Aside from these four, you can choose from a drop-down menu under More Option for 27 other environment types.

Under environment size, there are 3 selection: small, medium to large environment.

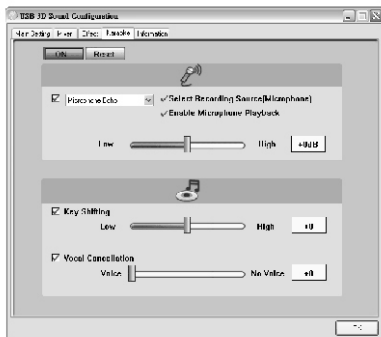
In the equalizer panel you can adjust loudness of various frequencies and save such settings.

You can also choose from the 16 preset options for different types of music.

Under Karaoke tab, you can adjust the microphone effect by selecting the ON button, and checking the Microphone Echo option.

Various Karaoke functions can be set in this section, from adjusting echo loudness to shifting key. You can even remove the vocal sound from any song using the Vocal Cancellation option, so you can have a music-only track.

These functions are applicable to all audio programs.



Double-checking the installation of the driver.

6 VERIFYING SUCCESSFUL INSTALLATION OF THE DRIVER

For all Windows operating systems mentioned earlier, to verify that the installation of the USB driver is successful, you check within the **Device Manager**:

- ▶ click on **Start, Settings, and Control Panel**.
 - ▶ in control panel, click on the **System** icon
 - ▶ open up the **System Properties** page
 - ▶ click on the **Device Manager** tab (or **Hardware** tab and then **Device Manager** button for Windows XP)
 - ▶ in the **Device Manager** page, make sure that the **View Device by Type** is selected.
- (*An alternative way to check whether the USB controller is properly installed, make sure the LED indicator is lit, and press mute, if the light flashes, then the device is properly installed, if not you should check the details settings as suggested below.)

Checking the drivers within the Device Manager

- ▶ scroll down and find the **Universal Serial Bus Controllers** category
- ▶ open it up and see if you can find the **USB Composite Device**
- ▶ if yes close it and look for the **Sound Video and Game Controllers** category
- ▶ open it up and find the **USB Sound Device** (or **Accutone Audio adaptor**)
- ▶ if you see both these drivers installed, then the installation is successful
- ▶ if you cannot locate them, then try to unplug the USB controller, re-boot the machine, and try the installation again or check the troubleshooting section in this manual.

7 CONFIGURING YOUR AUDIO DEVICE

For computers which come with an in-built sound card, you have a choice of using the USB audio device or the original sound card for your multimedia applications. To configure the currently selected audio device:

- ▶ go to the **Control Panel**, click the **Multimedia** icon or **Sounds and Multimedia** icon (for Windows Me, 2000 and XP)
- ▶ select the **Audio** or **Voice** tabs, in either one of the pages you will see **Preferred Device** selected for **Sound Playback** or **Sound Recording** to be **Accutone USB Audio Adaptor** or **USB Audio Adaptor**
- ▶ click the arrow within the selection and you will find your original sound card's name and choose your preference

(*Remember to close all programs before you change this settings. Restart your audio applications



8 TROUBLESHOOTING

No sound coming from the headset

- ▶ *the USB plug is not properly plugged into the jack:* check if the LED is on or replug
- ▶ *the 3.5mm headphone plug and microphone plug are not plugged in their corresponding jack:* check if the logos match
- ▶ *the headset was connected during music software being played:* close all software and restart installation
- ▶ *the audio device selected in your operating system is not correct:* go to control panel, select **Sounds and Multimedia Properties** or **Sounds and Audio Device Properties** (XP), open **Sound Playback** tab and select **USB Audio Device** or **Accutone Audio Adaptor** in the **Preferred Device** scroll-down selection.
- ▶ *the volume control for your operating system or music software is set to mute:* uncheck mute from your system or music software.
- ▶ *the computer does not recognize the USB headset:* restart your system or re-install the USB headset driver by unplugging and re-plugging the USB plug.

Cannot record sound from the microphone

- ▶ *the microphone plug is not properly plugged in:* check the connection of the headset plugs.
- ▶ *the mic muting function is on:* go to **Sound and Multimedia (Audio Device) Properties** and select **Volume** control for **Sound Recording** to check **Selected** in the **Microphone** column.
- ▶ *the audio device selected in your operating system is not correct:* refer to the above section on the same problem but open the **Sound Recording** tab instead.

Other problems

- ▶ *I'm using Windows 98 or 98SE, and the unit just doesn't work properly no matter how many times I re-install the drivers:* pc running Windows 98SE with AMD processor at 350MHz or faster, and pc that uses VIA Technologies USB Controller will require a Microsoft USB Update Patch file, go to www.accutone.com.hk website, under "more information" in the AU400 adaptor section, click "Microsoft Windows 98 Driver Update" and follow the instructions.
- ▶ *can hear sound but unable to listen to CD music-playback:* make sure CD-ROM supports the digital play function, check with your CD-ROM manufacturer.

* For problems not listed in the above section, or more detailed instructions to various troubleshooting, please refer back to **FAQ:troubleshooting** section in our website at <http://www.accutone.com.hk>



9 PRECAUTIONS ON SAFETY

- ▶ Listening with the headset at high volume may damage your hearing.
- ▶ Adjusting the volume for microphone or headphone too high may cause squealing (feedback sound) and can damage your hearing.
- ▶ Do not use while driving and cycling.
- ▶ Place product far away from water, fire, extended exposure of direct sunlight or magnetic field, and places of excessive dust, moist, rain, shock or electromagnetic radiation.
- ▶ Do not drop your headset or subject it to external shock which may cause malfunction.
- ▶ Do not disassemble or attempt to open up the casing of either adaptor or headset.
- ▶ Whenever unplugging the headset or the adaptor, apply force to the plug part only. Jerking the cord instead of the plug may cause damage to the product.
- ▶ Do not use any liquid substance to clean the casing of the product.

10 SAFETY STANDARDS - CE MARK

This product had been subject to testing requirement for the CE mark, and has been approved to claim the CE mark for EMC standards (EN55022:09.98+A1:10.00+A2:01.03, EN55024:09.98+A1:10.01+A2:01.03). The validity of the CE marking is restricted to only those countries when it is legally enforced, mainly in the countries of the European Economic Area.

You are cautioned that any change or modification not expressly approved in this manual could void your authority to operate this equipment.

11 TRADEMARKS AND OWNERSHIP

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