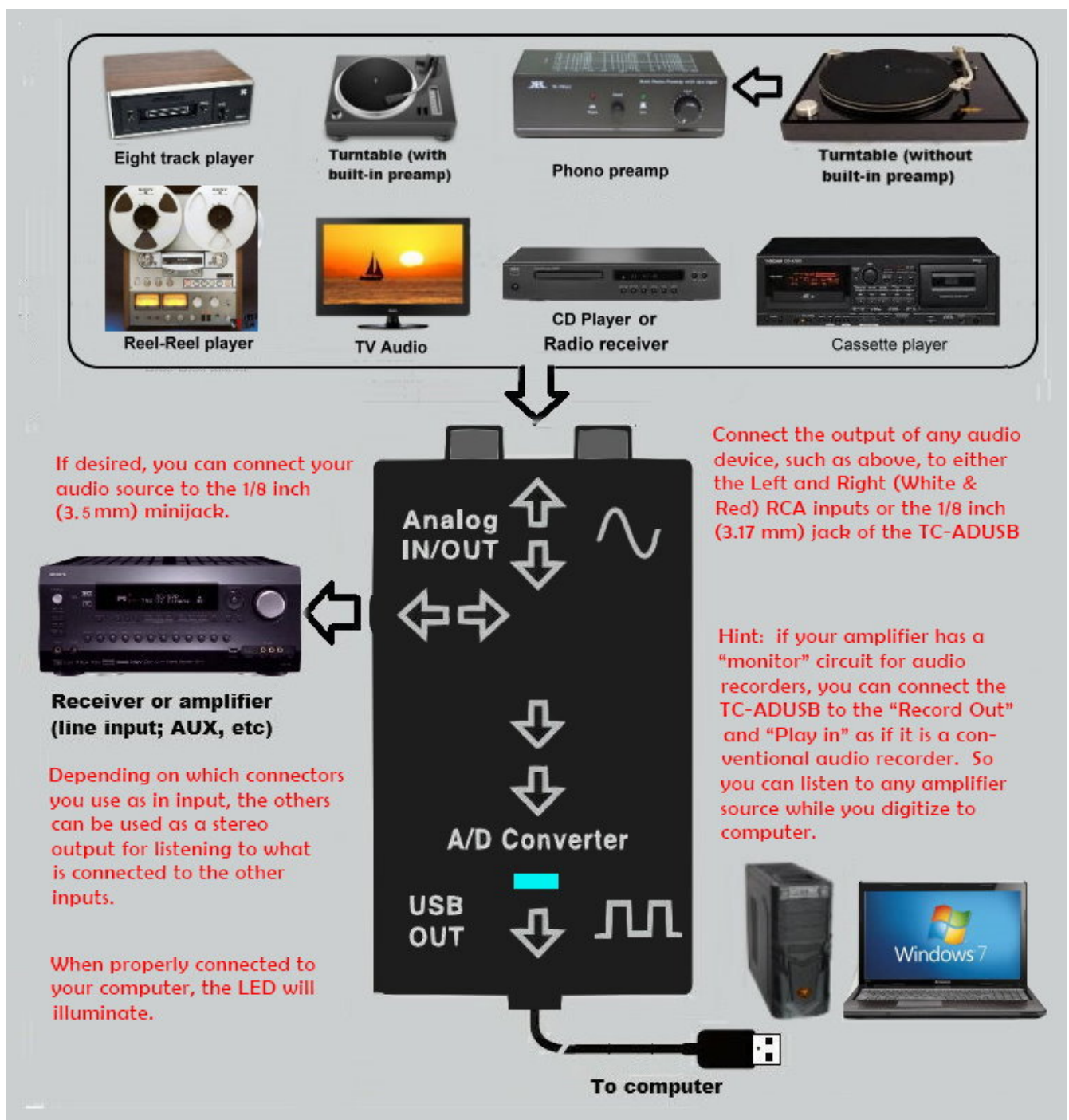# TC-ADUSB   Digital Audio Converter

This guide will help you set up the TC-ADUSB as well as the Audacity software.   Please take the time to carefully read through this guide as it will help you better understand the use of your TC-ADUSB.

Connections:

Connect the TC-ADUSB to the computer or laptop USB port.   Connect a line-level analog output to the TC-ADUSB RCA input port.   You can monitor the sound by connecting the 3.5mm stereo plug to your hifi amplifier as per the connection diagram shown below.   An adapter cable may be necessary.

Eight track player

Turntable (with built-in preamp)

Phono preamp

Turntable (without built-in preamp)

Reel-Reel player

TV Audio

CD Player or Radio receiver

Cassette player

If desired, you can connect your audio source to the 1/8 inch (3.5 mm) minijack.

Connect the output of any audio device, such as above, to either the Left and Right (White & Red) RCA inputs or the 1/8 inch (3.17 mm) jack of the TC-ADUSB

Analog IN/OUT

Receiver or amplifier (line input; AUX, etc)

Depending on which connectors you use as in input, the others can be used as a stereo output for listening to what is connected to the other inputs.

When properly connected to your computer, the LED will illuminate.

Hint: if your amplifier has a "monitor" circuit for audio recorders, you can connect the TC-ADUSB to the "Record Out" and "Play in" as if it is a con-ventional audio recorder. So you can listen to any amplifier source while you digitize to computer.

A/D Converter

USB OUT

Windows 7

To computer

COMPUTER SETUP

Microsoft (Windows 98SE thru Windows 8.1), Apple OS-X and Linux provide generic USB audio device drivers which are compatible with the TC-ADUSB for plug-and-play installation. For enhanced performance we provide an OEM driver for Windows XP thru Windows 8, which supports 64 bit versions of Windows. It is available by download at our website and requires WinRAR or WinZip to extract. After downloading it, click on *Setup.exe*.

We suggest downloading and installing the OEM DRIVER *before connecting the TC-ADUSB to the USB port on your computer; if done in this order, it usually is not necessary to reboot.*

Most information given here is WINDOWS 7 & 8.1 oriented. For other systems we recommend you check with the Audacity website.

Connect your analog audio source to the TC-ADUSB input, using either the dual RCA jacks on the end or the 1/8" stereo mini-jack on the side. The remaining unused inputs can be used as monitor outputs to your stereo receiver or amplifier. The TC-ADUSB can remain connected even when not being used with your computer. When you want to use the TC-ADUSB, insert its USB plug into your computer. The USB cable can be lengthened using extensions up to five meters (about sixteen feet) without any effect on sound quality.

The first time you connect the USB cable, your operating system will install the driver (either the generic Microsoft or Apple one, or the OEM driver if present). Once finished, check that other programs using audio devices (Skype, Youtube, etc.) still function normally. If you've lost audio from a laptop mic, or your computer speakers no longer function, go to *Control Panel>Sound* (or your OS version's equivalent); click the *Playback* tab. The device with the green check mark is the one your OS uses as the default Playback device. If the checked device is not the one through which you normally, highlight your preference and then press the Set Default button. The TC-ADUSB installs a single **Playback** device (shown circled below as SPEAKERS**,** 2- USB Multimedia Audio Device) which is <u>not</u> active, so ignore it. Now click the *Recording* tab and check that the default device is the one you record from or listen to *when using your OS utilities* (for instance *Windows Sound Recorder*) that require an audio input.

Since virtually all programs that require an audio input override the OS default while active (for instance Skype, which always chooses a laptop's built-in mic for its default audio input source), how the OS default is set matters less than the PB default setting. The TC-ADUSB installs three **Recording** (circled) *2- USB Multimedia Audio Device* devices: LINE, SPDIF Interface and Microphone. Only LINE (boxed in blue) is active. This is the recording device you will be choosing later in your audio editing software. To use the TC-ADUSB as your source to your computer and its speakers, select **LINE** as the OS default recording device**.**
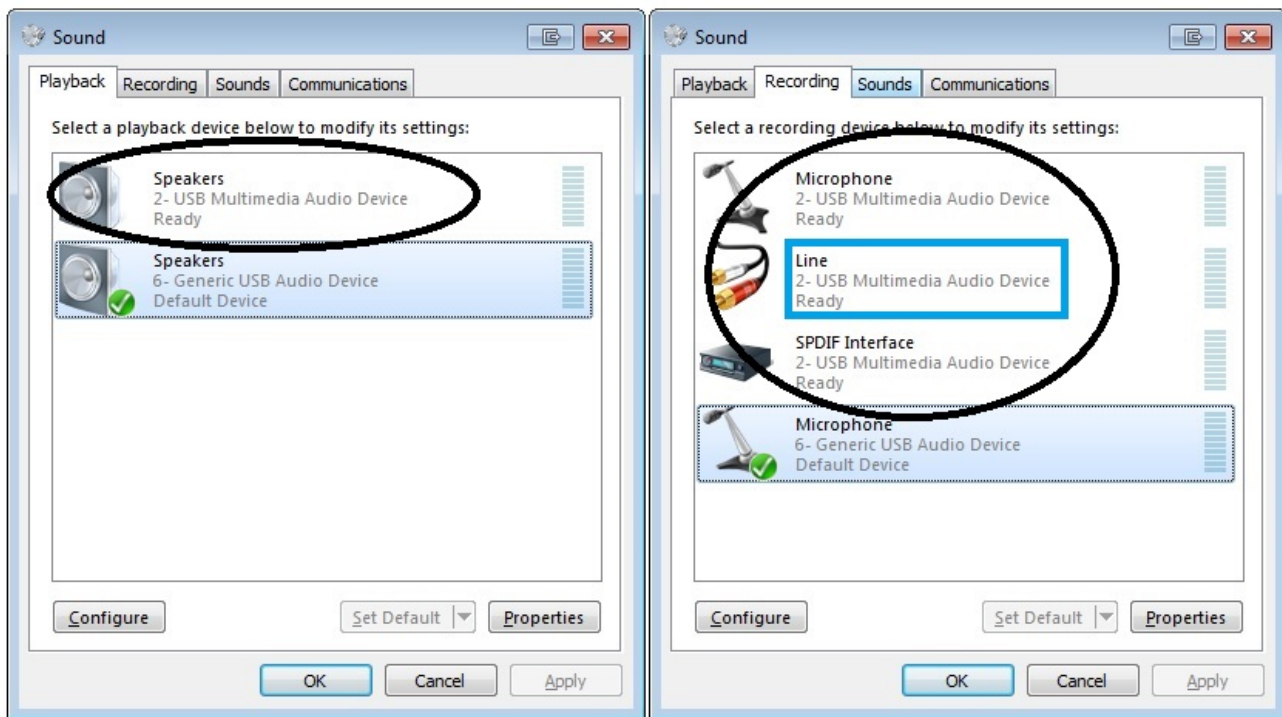
SOFTWARE

To record and edit on your computer, there are many record and editing software programs available to permit you to record and edit sounds on your computer.   Some are Adobe Auditon and Audacity.   As Audacity is free and readily available, we follow with a brief introduction to it.

INSTALLING AND SETTING UP AUDACITY

Audacity® is free, open source, cross-platform software for recording and editing sounds. You can download Audacity from http://audacity.sourceforge.net/

After downloading Audacity software, choose the setup, to open the install wizard.   Follow the prompts and the wizard will install Audacity and create an Icon on your computer desktop.   When the install wizard finishes, click the icon on your desktop, this will open Audacity.

Open the program.   Select the **EDIT** menu**,** then **PREFERENCES.** This will open a dialogue box.
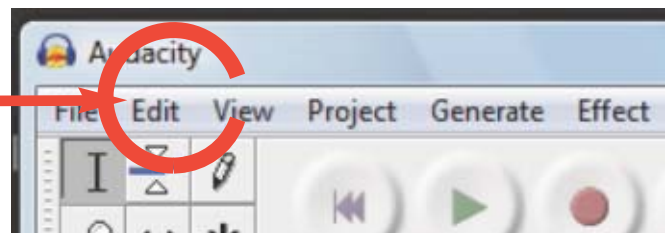
AUDACITY SETTINGS

Although the **PREFERENCES** box has numerous items, the first four will need your attention.

AUDIO Input/Output

DEVICES, on the left, is where you choose how **Audacity** sends and receives audio. Normally this occurs automatically when you plug in the TC-ADUSB. These settings are as follows:

In the **Interface** area choose **MME** for most applications. Under **Playback** choose the sound card used in your computer. Example: **(Speakers (Realtek High Definition).**

Recording: Set Device to **Line (USB Multimedia Audio Device)**. Audacity will then be set to record from the LINE input of the TC-ADUSB, depending on which one you are using. **Channels** should be set to the default **2 (Stereo)**.

Under **RECORDING**, on the left, there are two extra features that require attention. The first box **Overdub: Play other tracks while recording new one** should be UNCHECKED. The second box **Software Playthrough: Listen while recording or monitoring new track** should be CHECKED.

Under **QUALITY**, on the left, **Default Sample Rate** should be set to **44.100Hz**, and the **Default Sample Format** should be **32-bit float**. Both **Real-time Conversion** and **High-quality Conversion** should be set to **High Quality**. Then also **Dither** should be set to **None**.

Under **Import / Export**, on the left, check **Read uncompressed audio files directly from the original (faster)**.

The other two sections should be left at their default setting. Once you have completed your settings, choose **OK** and the settings box will close, automatically saving the new settings.
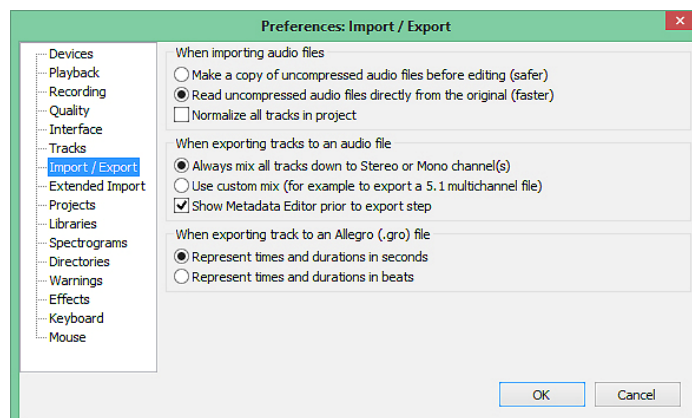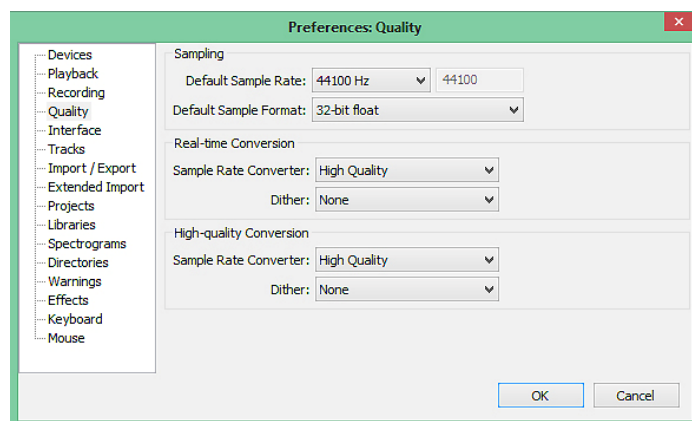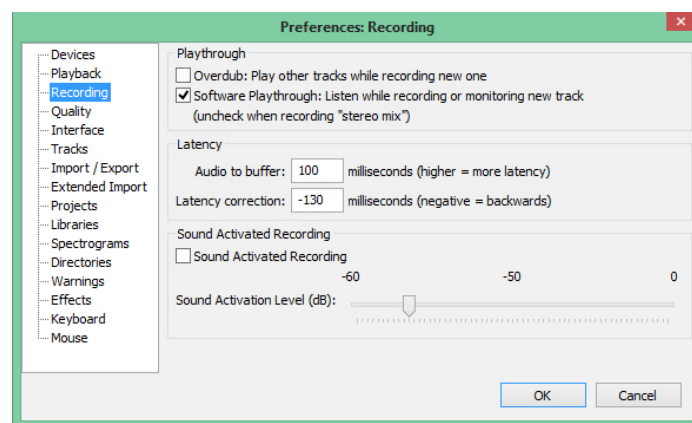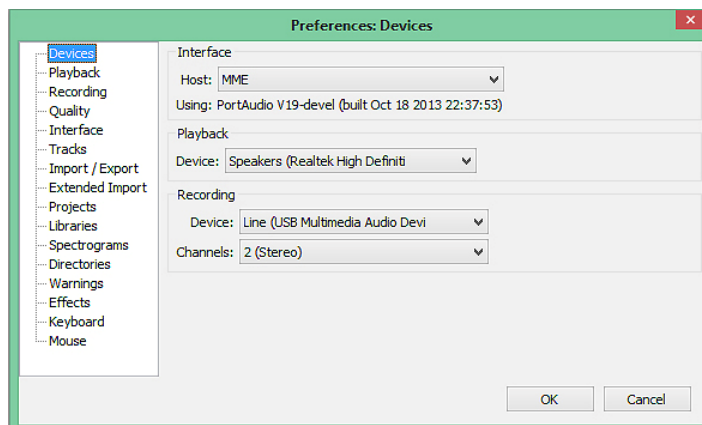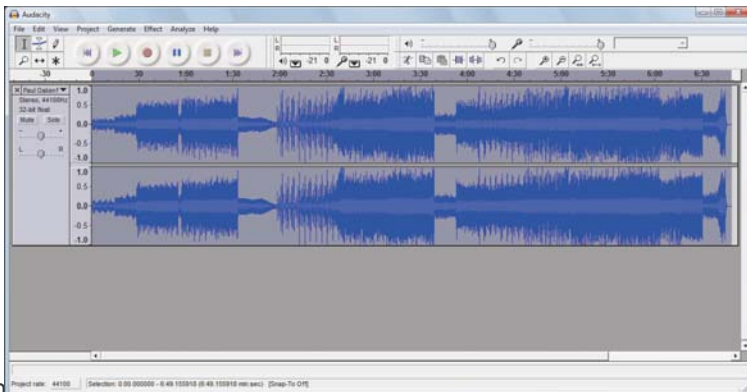
RECORDING

The following is intended to get you started quickly.　There are many variations in technique that you can follow as you become more familiar with Audacity

To monitor the audio signal that you are sending to the TC-ADUSB, set the pull-down menu that is located next to the right of the little Microphone icon in the Meter area to **Start Monitoring**.

(Choose the Monitor input so you can hear the music that is being recorded)

Move the input level control to set your record level.　To begin recording, click the red **RECORD** button. The record time indicator will begin moving to the right and the waveform envelope will be created as it sweeps.　When you are done press the square **STOP** button.　To save your recording, choose **Export** under the **File** menu and **WAV (Microsoft) signed 16 Bit PCM** under the **Save as type** pull down.　Choose the drive and folder in which you want to save it and click **Save**.