MXL

MXL
990 USB Stereo Manual

Warranty

Marshall microphones are guaranteed against defects in material and workmanship for one year from date of purchase. Should you encounter any problem with this unit, promptly contact the company you purchased it from for assistance. The original dated sales receipt will be necessary for any warranty claim. Do not send any unit directly to us without prior authorization from our service department! Warranty coverage is limited to repair or replacement (at our option) of the microphone, and does not cover incidental damages due to use of this unit, nor damage caused by accidental misuse of this product.

Congratulations on your purchase of the MXL 990 USB Stereo mic which uses two gold diaphragm capsules in an X/Y pattern for stereo recording. MXL microphones are the result of world-class engineering and manufacturing capabilities. They are designed to provide you with outstanding performance and exceptional value. While we encourage you to review this entire manual, there are a few key points about handling this microphone that we want you to familiarize yourself with right from the start.

The MXL USB mics are a professional quality, condenser microphone designed specifically for recording. Unlike microphones designed for live performance or lesser dynamic model microphones, **this instrument requires careful handling.** Hence, you should observe the following…

ALWAYS… handle the microphone carefully, avoiding sudden shocks such as dropping or bumping the microphone into other objects.

ALWAYS… maintain a distance of approximately 4 – 6 inches when speaking or singing into the microphone. You are encouraged to use a pop filter for added protection of the sensitive capsule and to shield the instrument from saliva and sudden bursts of air.

NEVER… tap the microphone to check if it's working. The RED LED behind the microphone's protective grill will tell you it's on and that the correct side is facing you.

NEVER… blow into the microphone to check if it's working. The RED LED behind the microphone's protective grill will tell you it's on.

By following these few basic handling procedures, you can expect a long and trouble-free relationship with your new microphone. Again, thank you for your purchase of this outstanding MXL microphone.

A Little Background Information
MXL stereo microphones use what is known as a X/Y pattern, which is two capsules facing 90º apart. Each capsule will send the audio information it receives to the corrosponding right or left side of a stereo track on the computer. The capsule behind the "L" is more sensitive to sound waves arriving from the left side of the microphone as opposed to those arriving from the right side. The capsule behind the "R" is just the opposite. Unlike other MXL models, this microphone benefits from being a USB (Universal Serial Bus) device—meaning this is a plug and play microphone that will interface with Windows and Macintosh computers without the need for any special drivers. As a USB device, it carries the added benefit of not requiring an external microphone preamp, as is the case with most condenser microphones.

We've already mentioned the importance of proper handling, but should you find yourself recording an outdoor performance, you would be well advised to use a windscreen as protection for your microphone.

7. Then select the Audio/MIDI icon in the top row. From the drop down menu under Audio Input, select the USB Audio Codec as shown in Figure #13 below.
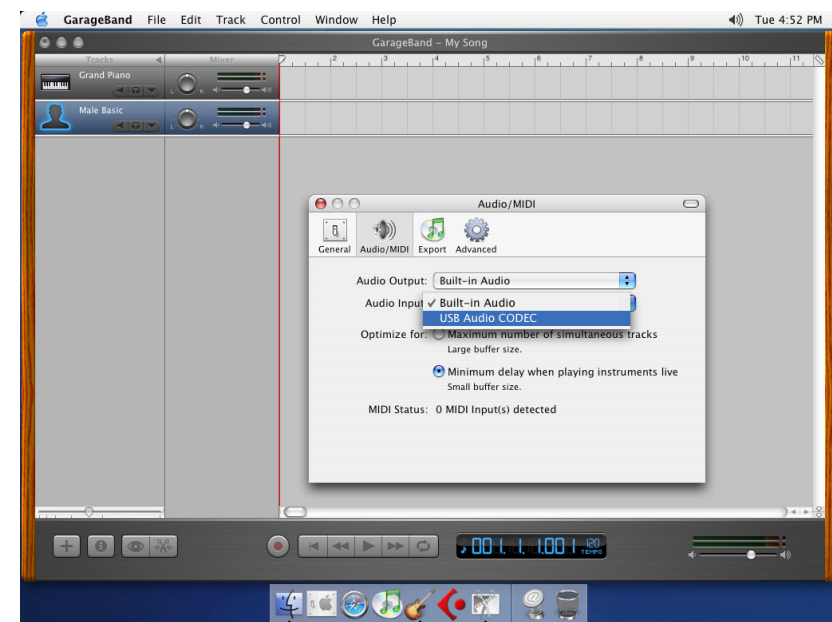

Figure #13

8. You will then be asked if you really want to change the driver. Select Yes. The computer will then say it is initializing the audio driver. Wait until this is done, then close the window.

9. At this point, you should see the meter move when you speak into the microphone. You can now click on the Record button and record your vocals or dialog using your microphone.

PLEASE NOTE: As long as the microphone is plugged in when Garage Band is started, the audio input source settings in Garage Band will be saved until you change them again, even if you close the program or start a new project.

For More Information
For additional information about your MXL USB microphone, how to contact technical support, as well as information on other products manufactured by MXL, please visit us online at **www.mxl-usb.com**.
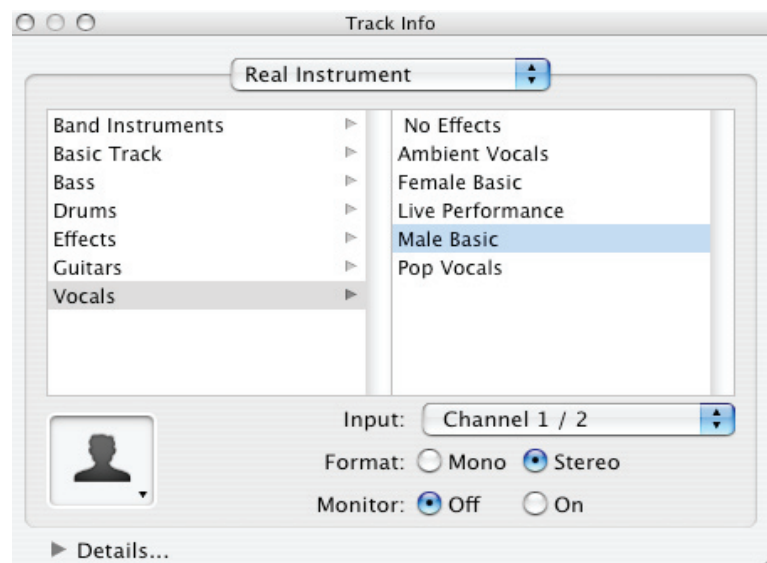
Figure #11

5. Click OK

6. To select an audio input source for Garage Band, click on Garage Band from the top menu bar and select Preferences as shown in Figure #12 below.
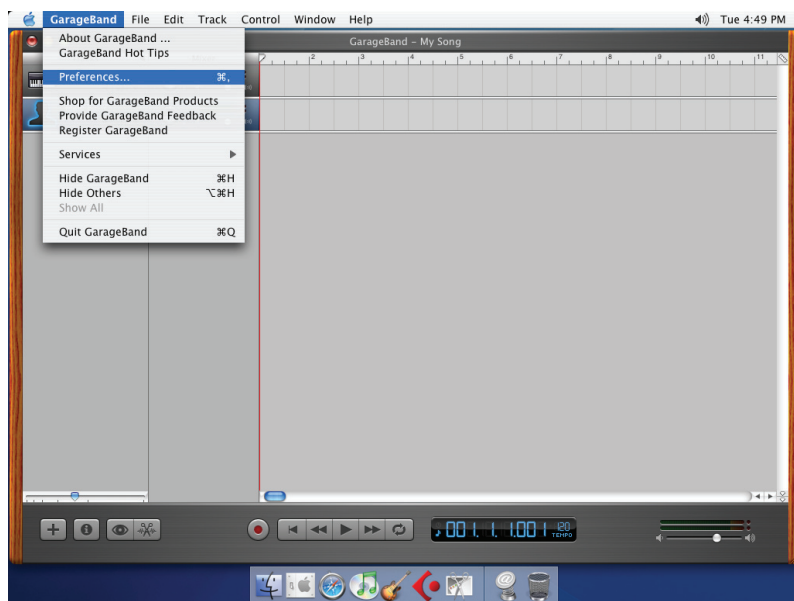

Figure #12

Unpack Your Microphone

Begin by examining the contents of your MXL USB kit.
You should have the following components:
• One MXL 990 USB Stereo microphone
• A 10-foot USB 2.0 high speed cable
• A desktop microphone stand plus the mounting ring
• Owners manual
• Microphone applications guide

Getting Familiar With Your Microphone

In addition to speaking or singing into the side of the microphone with the RED LED facing you, you should also understand the use of the three-position attenuation switch on the microphone's back side.

What's an attenuation switch?

An attenuation switch reduces the signal strength in an electronic device. As the microphone converts acoustical energy (your voice) into electrical energy (the signal that feeds your computer), it is possible that a loud, "boomy" voice, or a vocalist who is really "belting out those notes" may exceed normal recording levels. In this case, you will want to reduce the signal strength by using the microphone's attenuation switch.

The attenuation switch (see Figure #1) on the back side of the USB mic provides three positions: High, Medium, and Low - identified as: Hi, Med, Lo. Normally, you'll want to keep the microphone's attenuation switch in the Hi position. If, however, you

Figure #1

need to "back off" the signal to compensate for a loud voice, simply move the switch to the desired setting. You may also need to move further away from the microphone which will also reduce the level.

PLEASE NOTE: Recording is a creative process, so there are no hard and fast rules. Experimentation is the key to best results.

Using the Supplied Desktop Microphone Stand

1. After opening the stand's tripod leg system and placing it on the table or desk, loosen the angle adjuster and orient the large portion of the microphone holder so that it faces upward, or horizontal.
2. Place the base of the microphone into the microphone holder with one hand while holding it upright with your other hand.

3. While holding the microphone upright and firmly in one hand, secure the microphone to the desktop stand by screwing the black mounting ring into the microphone's base. The microphone should now sit securely in the desktop stand.
4. At this point, attach the end of the USB cable that matches the microphone's connector. The other end of the cable will connect to your computer's USB port.

Connecting the Microphone to Your Computer (Windows)
The MXL 990 USB Stereo microphone will operate with both USB 2.0 (high speed USB) and USB 1.1 data buses. We recommend you connect your microphone directly to the computer's USB port as opposed to using a USB hub. USB hubs have been known to interfere with the performance of various USB devices.

PLEASE NOTE: Audio and video recording can be very taxing to a computer's resources. For this reason, you should close any and all running applications that are non essential.
Please take the following steps to get connected:
1. If open, close your audio recording application. You will open it after the microphone is connected and operational.
2. Connect the remaining end of the USB cable to the computer's USB port. Windows will display the **New Hardware Found** dialog message and your system may make a sound if your computer uses Window's system sounds.
3. Allow Windows time to identify the device.
4. In approximately one minute, Windows should display a dialog message stating that **Your New Hardware is Installed and Ready for Use**. After this first connection, Windows will require just a few moments to identify the microphone.

Congratulations! You are ready to begin recording.

Testing Your Setup

To test your setup, we'll use Window's Sound Recorder. Sound Recorder can be found by navigating the following…
1. Press or click Start.
2. Place your mouse cursor over All Programs, then Accessories, followed by Entertainment.
3. Click Sound Recorder to launch the application. It should look like Figure #2.

Figure #2

7. By watching the movements of the Input level meter in this window, you can now see that the MXL USB microphone is working as you speak into it. This setting will be saved as the default input whenever the microphone is plugged in.

Setting the MXL USB mic to record in Garage Band
1. Open Garage Band. This application will be found in either the Dock Bar or by opening the Apple Finder, clicking on Applications and/or opening Garage Band.
2. Garage Band opens with the default project "My Song". Refer to Garage Band's user manual to change the default project.
3. "My Song" opens with one software instrument track. To record through the USB microphone, click on Track on the top of the window bar and select New Track as shown in Figure #10 below.
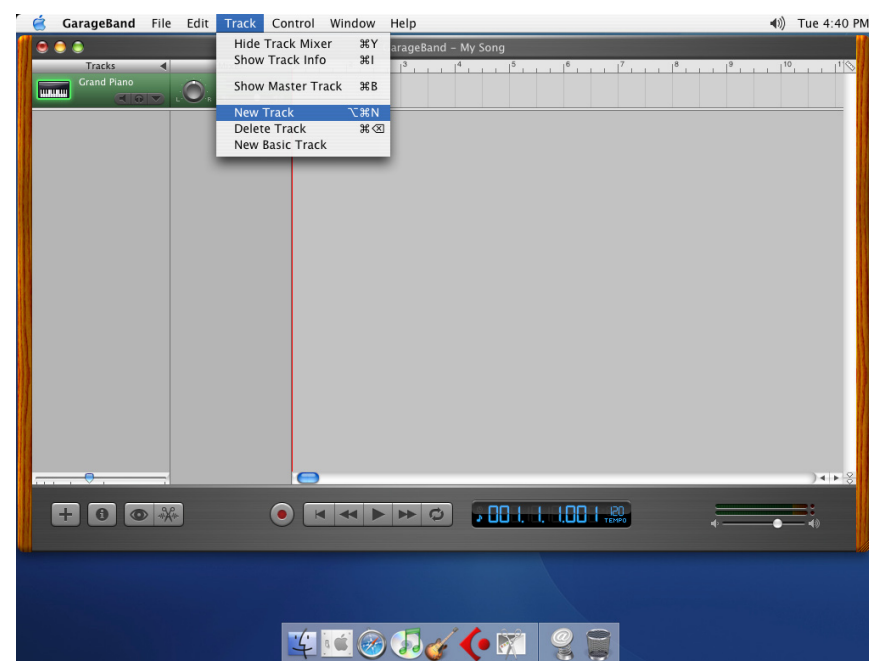

Figure #10

4. Select the tab in the window that opens that says Real Instrument. Then select the source you will be recording through the microphone, such as vocals or guitar, Then be sure to check the box that says "Stereo" under format, as shown in Figure #11 (See next page).

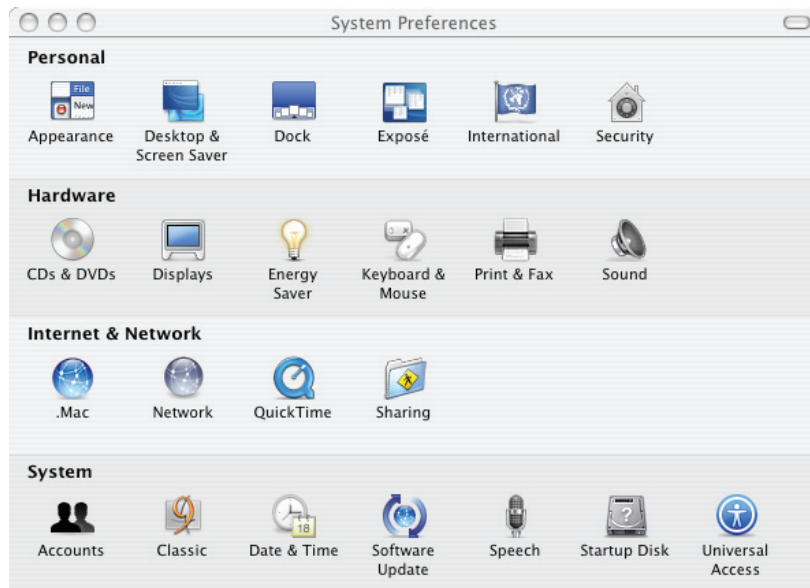4. Next, click on the Sound icon in the Hardware group as shown in Figure #8 below.

Figure #8

5. After opening the Sound dialog screen, there will be three tabs at the top of the window, select the Input tab by clicking on it.

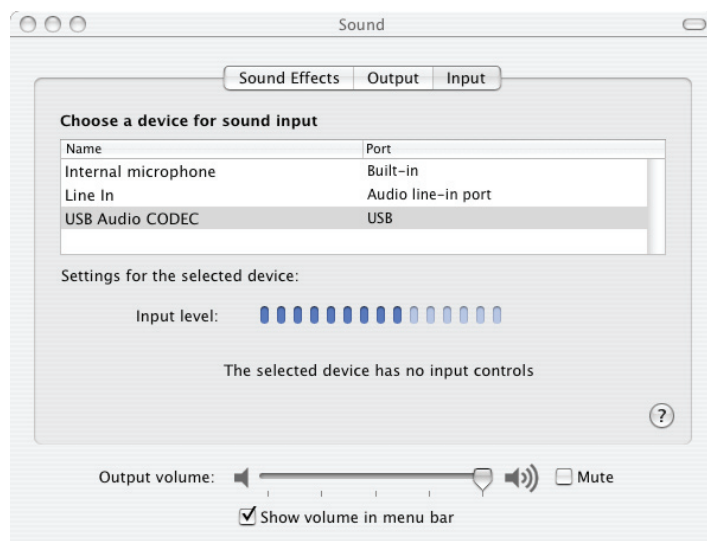6. Then select the USB Audio Codec as the device for sound input as shown in Figure #9 below.

Figure #9

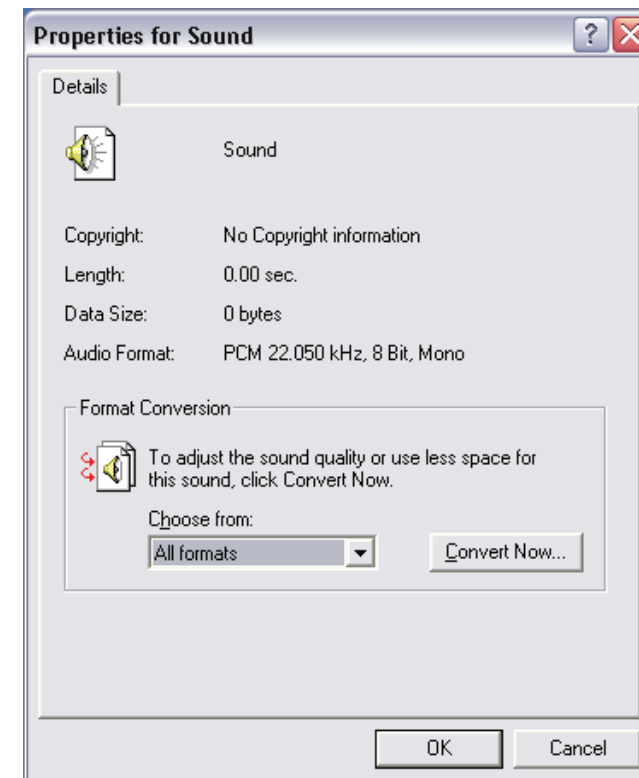4. Select File - Properties. It should look like Figure #3.

Figure #3

5. Click the Convert Now… button. It should look like Figure #4.
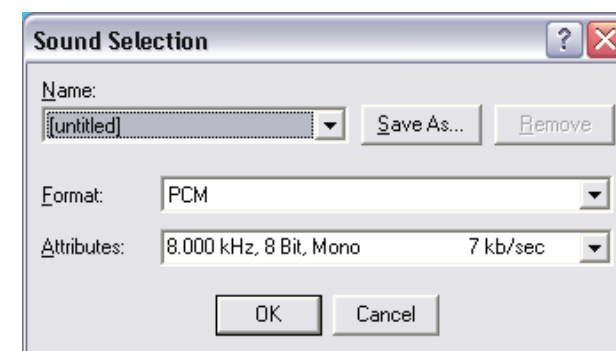

Figure #4

6. In the Attributes drop down Window, select 44.100 kHz, 16-Bit, Stereo as shown in Figure #5.
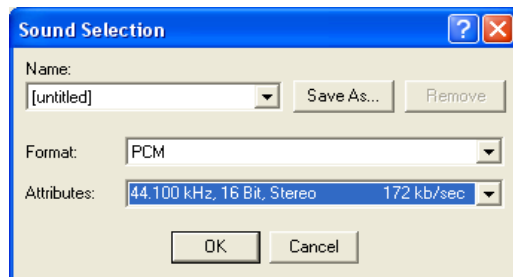

Figure #5

7. Click OK, then Click OK to close the Properties for Sound Window.
8. You are now ready to record!
9. With your mouse, click the RED record button to start recording.
Speak (or sing) into your microphone (with the microphone's RED LED facing you).
10. Click the BLACK, rectangular button to end recording.
11. Press the ◄◄ button to reset to the beginning of the recording.
12. Press the ► button to start playback.

If You Don't Hear Anything…
If you followed the directions and have been unable to record a sound, please check Window's Audio Properties dialog window, shown in Figure #6, and ensure that **Sound recording** is set to **USB Audio CODEC** and S**ound playback** is set for your computer's sound card/audio chip. If you are uncertain of this setting, consult your computer's owner's manual.
To access the Audio Properties dialog window from within Sound Recorder:
1. Click Edit, then Audio Properties

Figure #6
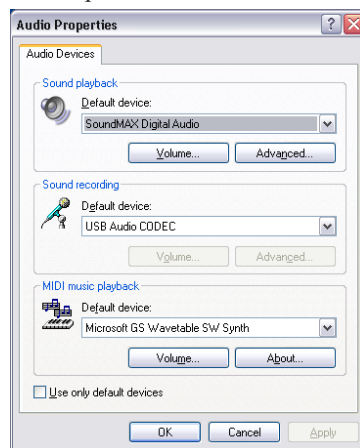
PLEASE NOTE: Each new recording made with this basic sound recording utility will require you to re-select the 44.1 kHz sample rate. Sound Recorder defaults to the 8 kHz Mono setting, which produces unwanted noise.

You are now ready to use the recording application of your choice.

PLEASE NOTE: Professional recording applications typically default to the highest sample rate allowed by your computer's sound card/audio chip. Usually, this is 44.1 kHz, which is the same sample rate used for conventional CDs.

Connecting the Microphone to Your MAC
As is the case with a Windows PC, the MXL 990 USB Stereo microphone will operate with both USB 2.0 (high speed USB) and USB 1.1 data buses. All current Macs operate with USB 2.0. We recommend you connect your microphone directly to the computer's USB port as opposed to using a USB hub. USB hubs have been known to interfere with the performance of various USB devices.

PLEASE NOTE: Audio and video recording can be very taxing to a computer's resources. For this reason, you should close any and all running applications that are non essential.

Please take the following steps to get connected:
1. Make certain that any audio applications are closed.
2. Connect the remaining end of the USB cable to the computer's USB port.
3. To set the USB microphone as the default audio input for audio, click on the Apple icon in the upper left hand of the screen and select System Preferences as shown in Figure #7 below.

Figure #7

www.mxl-usb.com