

Resolving most types of common microphone/line-in problems in Windows

Use the following steps to test, check hardware and connections, update audio drivers, and configure Windows sound settings. If you follow these steps in proper order, you will fix the problem or you will find that the audio software needs to be configured or updated.

Step 1: Testing for an audio signal in Windows

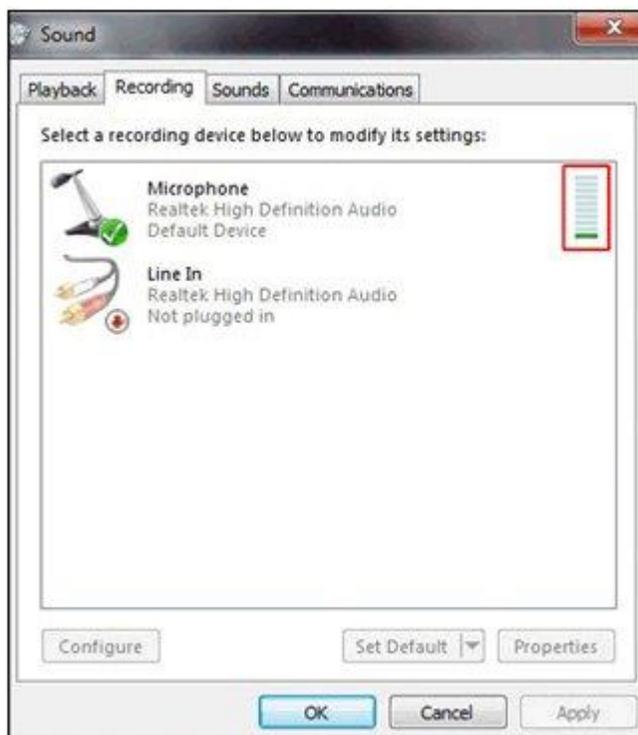
Use this process to find out if Windows can detect an audio signal from the microphone or from the line-in port.

NOTE:

If you are testing the line-in port, and if the source device has a volume control, turning the volume up too high on the source device can cause distortion and might damage the audio hardware. Start with the volume low and slowly turn it up until recording is at the desired level. Never turn up the volume more than half way on the source device.

1. Click **Start** , and then click **Control Panel**.
2. Click **Hardware and Sounds**, and then click **Managing audio devices**.
A Sound window opens.
3. Click the **Recording** tab.
4. To test the microphone, speak into it. To test line-in, send a signal to the line-in port from the source audio device (press play from the audio player). Look at the gray bars next to the device name on the recording tab:
 - If the gray bars next to the device name change to green, this device is active and an audio signal is passing through the microphone or line-in port. This step shows that the problem is related to sound settings in the software that uses the microphone. If you have not already done so, set the selected device to default and [adjust the volume levels as shown in Step 3](#). When the device is set to default and the levels are set, use and adjust the sound recording or voice carrying software.
 - If the gray bars remain gray and inactive, the device is not recognizing a signal. Leave the recording tab open and go to the next step.

Figure : Sound: Recording tab showing a detected signal for the Microphone device



Step 2: Checking connections and hardware to resolve microphone and line-in problems

Try each of the following connection tips, if they apply to your situation, to correct issues involving microphone connections:

Tip 1: Connect the microphone (or the source device used for line-in) into another computer or audio device. For example, to check a microphone you can plug the microphone into a tape recorder. If the tape recorder can record sound, the microphone and cable are good. If a microphone or source device does not work with another audio device, replace it.

Tip 2: Disconnect and reconnect the plug. Even if the plug was already connected to the correct connector, reconnecting might help if there is a connection problem between the plug and socket.

Tip 3: If you are using a USB microphone, try a different USB connector. If the USB microphone came with software, make sure it is installed properly and is compatible with Windows.

Tip 4: Know and use the correct microphone connector on your computer when connecting the microphone to the computer.

Identifying microphone and line-in connectors on desktop PCs

- The microphone connector is usually pink.
- The line-in connector is usually blue.

Figure : Example of audio connectors on a desktop PC: pink for microphone, blue for line-in



Identifying microphone and headphone connectors on notebook PCs

There are two types of headphone connectors on HP computers:

- The first type supports only sound to the headphones.
- The second type supports both sound to the headphones **and the use of a microphone.**

The connectors are marked with symbols next to them.

Figure : Example of microphone and headphone connectors on notebook PCs



Making sure the microphone plug works with the computer connector

Headphones use either a four-point plug or a three-point plug. Each of these plugs perform different audio functions. Make sure the plug is connected to the correct computer connector, as described below.

- Connectors on the computer marked with a headset only, , support output sound only and work with a standard three-pin headphone or a four-pin headphone, **for sound only.**

Figure : Standard three-pin plug



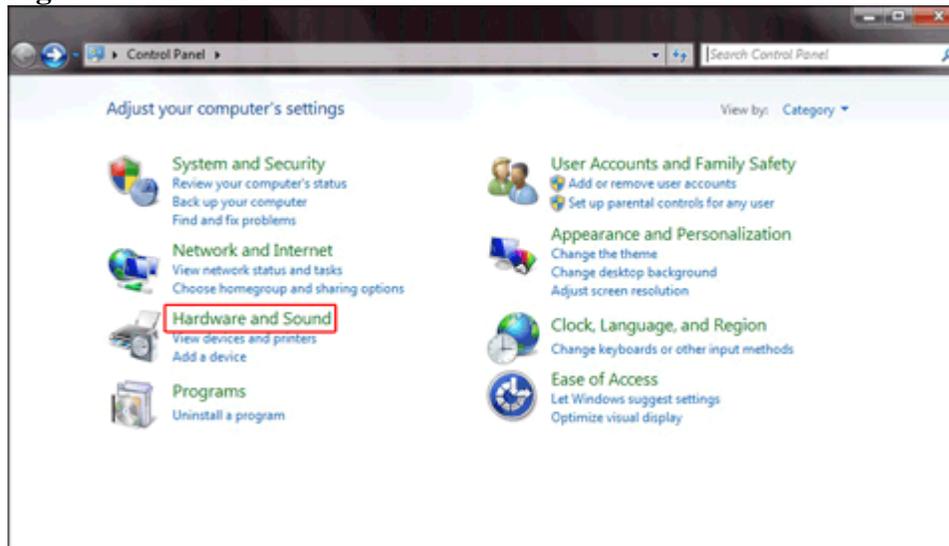
Step 3: Checking volume and mute settings in Windows

The speaker volume for the microphone and line-in might be muted or turned down, causing microphone and line-in problems. Use the following steps to check the speaker volume levels for line-in and microphone:

1. Unplug all headphones or audio devices before starting.
2. Click **Start** , and then click **Control Panel**.

Control Panel opens.

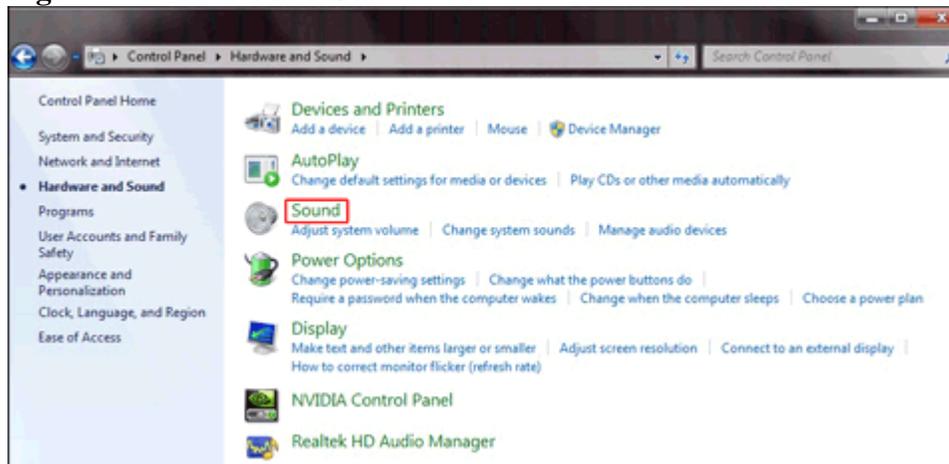
Figure : Control Panel



3. Click **Hardware and Sound**.

Hardware and Sound opens.

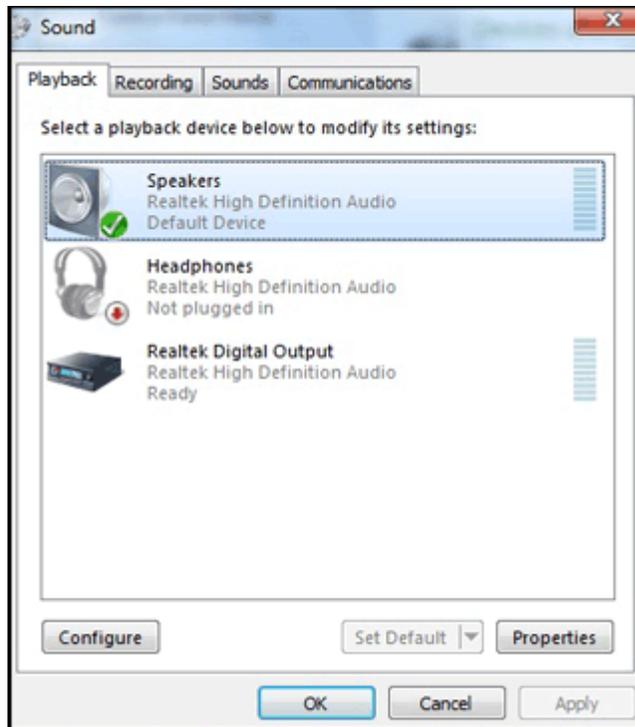
Figure : Hardware and Sound



4. Click **Sound**.

The Sound window opens.

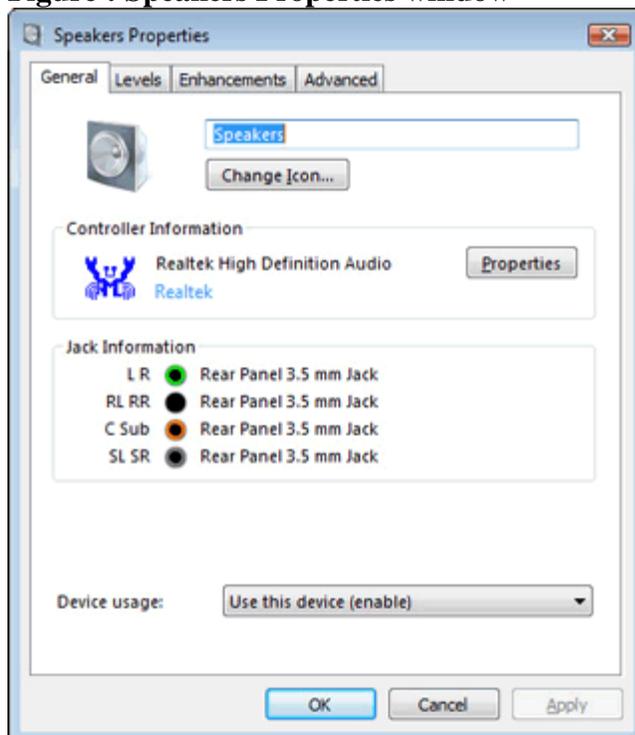
Figure : Sound window



5. Select **Speakers**, and then click **Properties**.

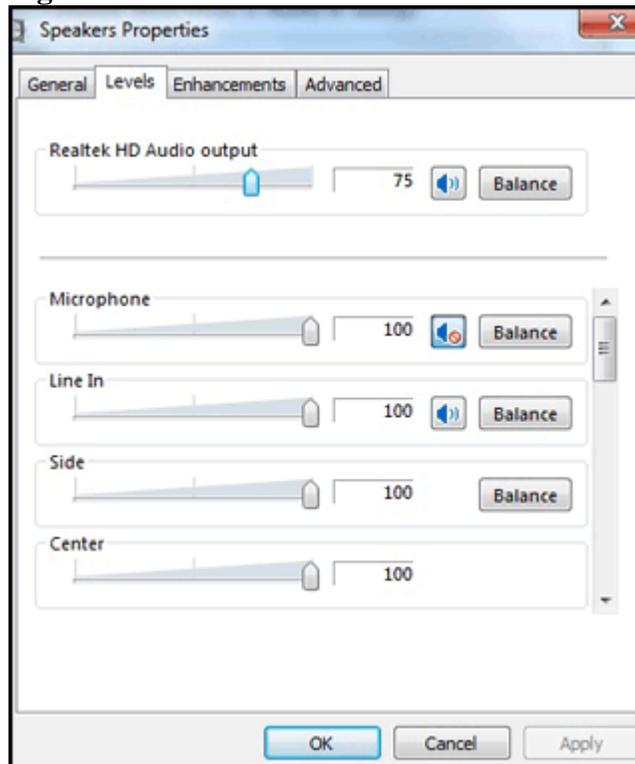
The Speakers Properties window opens.

Figure : Speakers Properties window



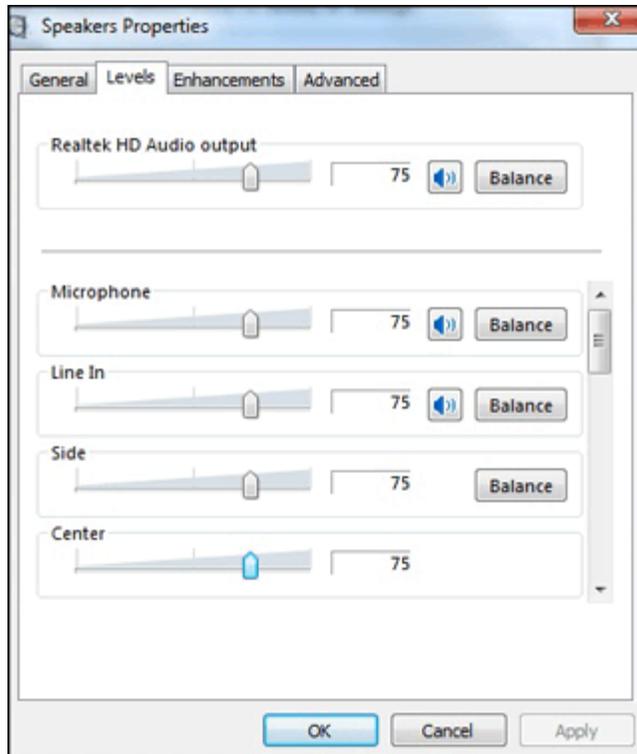
6. Click the **Levels** tab.

Figure : Levels tab



7. Click the **Muted**  button next to **Microphone** and any other line-in that is muted.
8. Use the slider bar to raise the level for **Microphone** and each line-in to at least 75.

Figure : Speaker Levels



9. Click **OK**.

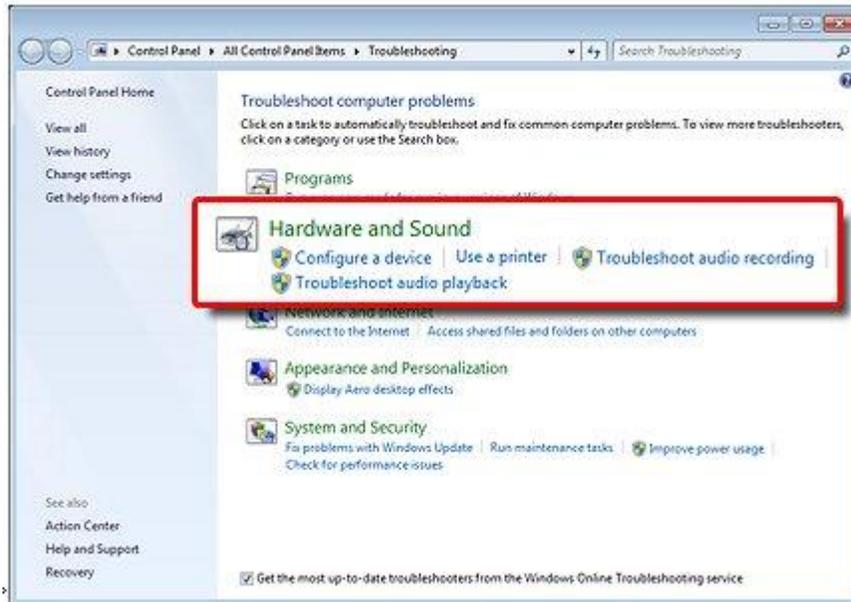
Step 4: Using Windows Automated Troubleshooting to correct microphone and line-in problems

The Troubleshooting tool in Windows can automatically fix common problems with your computer, such as audio recording. Although it may not fix every problem, it is useful to run the Troubleshooting tool first before you manually correct problems.

To use the Troubleshooting tool:

1. Click **Start**, enter troubleshooting in the search field and select **Troubleshooting** from the list.
2. Under Hardware and Sound, click **Troubleshoot audio recording** and then click **Next** when the Recording Audio window opens.

Figure : Hardware and Sound



3. Select the device you would like to troubleshoot and then click **Next**.

If a recommended action displays, select **Apply this fix** or **Skip this step** to continue to search for other problems. If your problem has not been resolved, continue to manually troubleshoot using the rest of this document.

Step 5: Checking the audio drivers in Windows to resolve microphone and line-in problems

You might find that a front microphone port does not work, a recording device is missing from the recording tab, a microphone is not recognized when it is plugged in, or other problem. There might be updated audio drivers that can fix these types of issues.

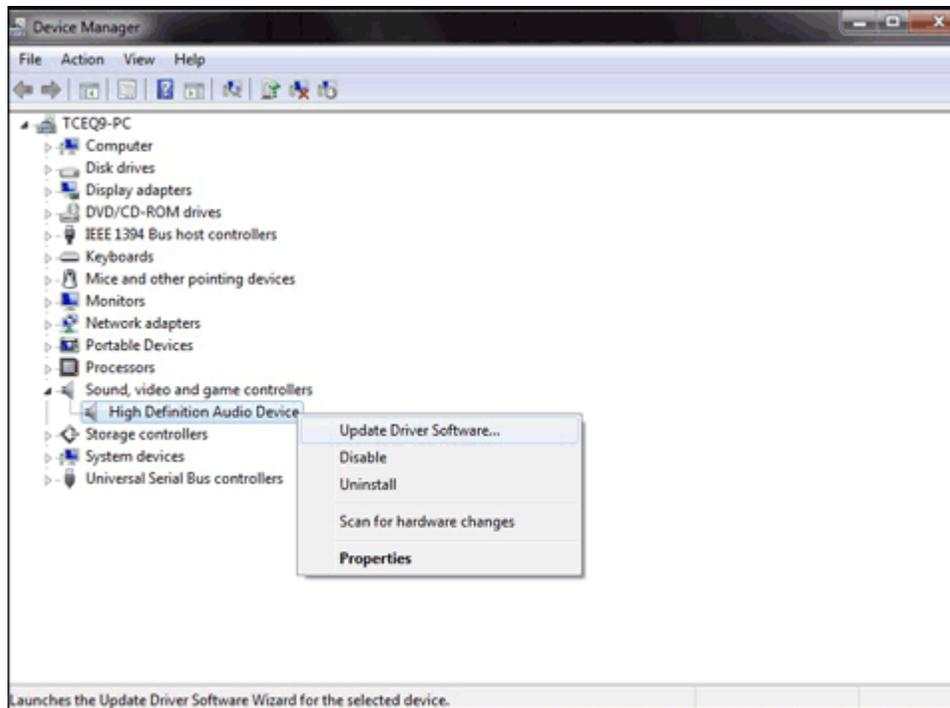
Use the following steps to make sure audio drivers are up to date:

1. Connect to the Internet.
2. Click **Start** , and type device manager in the Start search field.

A Device Manager window opens.

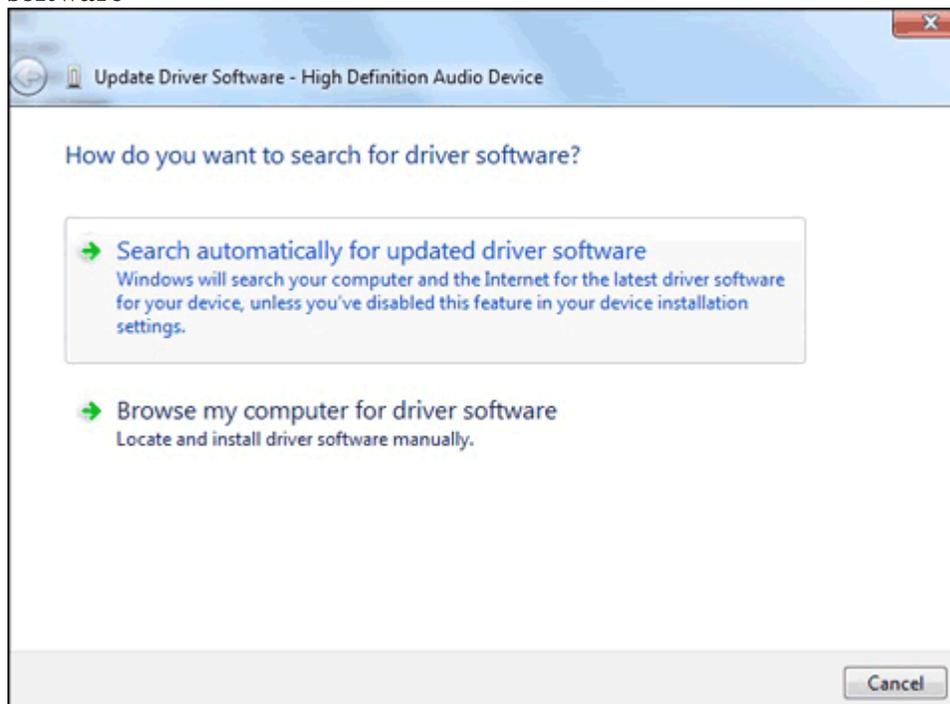
3. Double-click **Sound, video and game controllers** .
4. Right-click the name of the sound hardware and select **Update Driver Software....**

Figure : Device Manager: Update Driver Software



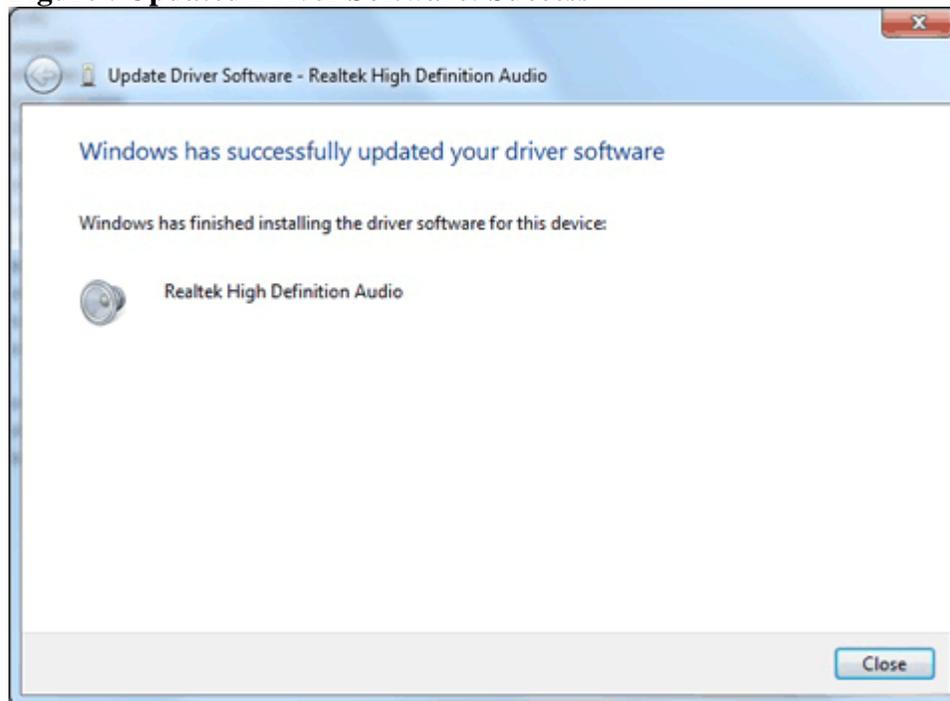
5. Click **Search automatically for updated driver software** and wait for Windows to update the driver software.

Figure : Updated Driver Software: Search automatically for updated driver software



6. Windows checks a remote Web site to see if updated driver software is available.
 - If an update is available, let Windows install the update.
 - If an update is not available, skip to the next step.
7. When the update is installed successfully, test the microphone or line-in as was done in step 1. If the problem persists, go to the next step.

Figure : Updated Driver Software: Success



Step 6: Configuring recording settings in Windows

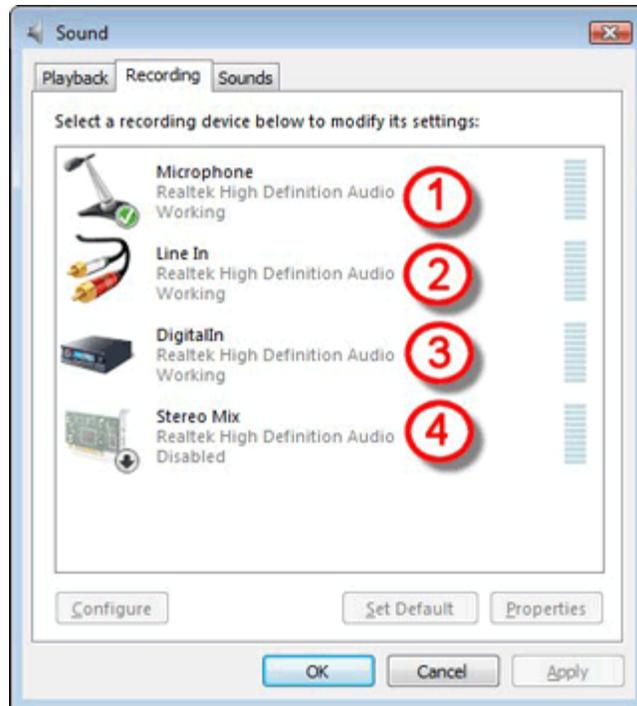
By default, Windows automatically enables microphones and line-in ports. Use the following steps to set the microphone/line-in port to be the default port and to configure the recording levels:

1. If the Recording tab in the sound window is not selected, open the Sound window and click the **Recording** tab using the instructions in Step 1.

NOTE:

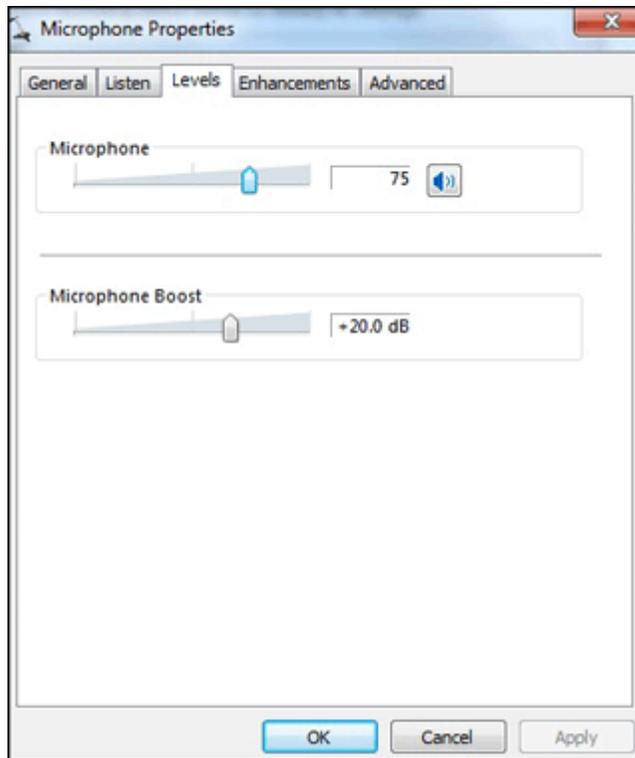
Your desktop or notebook PC configuration may include different components than shown here.

Figure : Example desktop PC with a Realtek on-board audio hardware configuration)



1. **Microphone port** -  **working and set as Default**
 2. **Line In** - **Working**
 3. **Digital In (S/PDIF port)** - **Working**
 4. **Stereo Mix (Software mixer)** -  **Disabled**
2. If multiple microphones or line-in ports are available, select the port that you want to use. Click **Set Default** to make this device the default audio input device.
 3. If the device you want to use contains a small circle with an arrow pointing down, the device is disabled. To enable the device, right-click the device name and select **Enable**.
 4. With the device selected, click **Properties**, and then click the **Levels** tab.

Figure : Microphone Properties: Levels tab



5. Adjust the **slider** to 75.
6. If Mute is on, click the mute button to un-mute the device. The mute button should show as a blue speaker **without a red circle**.
7. If Microphone Boost is available, adjust to +20.0 dB.
8. Click **OK** to make the changes.
9. Test the microphone using the instructions in Step 1 to determine if Windows is able to detect a signal for the microphone or line-in being used. If you have performed all the steps and the microphone or source device still does not work, the audio ports or sound hardware on the computer might be bad.

Microphone fails after a web camera or a USB microphone is installed in Windows

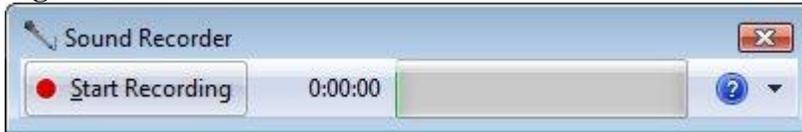
To use the microphone on a Web camera or a USB microphone, it might need to be configured separately using the software that came with the device. Make sure the USB device and any associated software is compatible with Windows. If you want to use a different microphone than the USB microphone or Web camera, select the default microphone that Windows will use. For more information on how to set a default microphone, use [Step 6: Configuring recording settings in Windows](#) section in this document. Refer to the support Web site of the manufacturer of the Web camera or USB microphone for more information.

Using Windows Sound Recorder to test the microphone in Windows

Find out if your computer can record a signal from the microphone and play it back. Use Windows Sound Recorder to create an audio file using the following steps:

1. Plug the microphone into the computer.
2. Click **Start** , **All Programs**, **Accessories**, and select **Sound Recorder**.
3. Click **Start Recording** (the red circle) and speak into the microphone.

Figure : Sound Recorder initial screen



4. When finished recording, click **Stop Recording**.

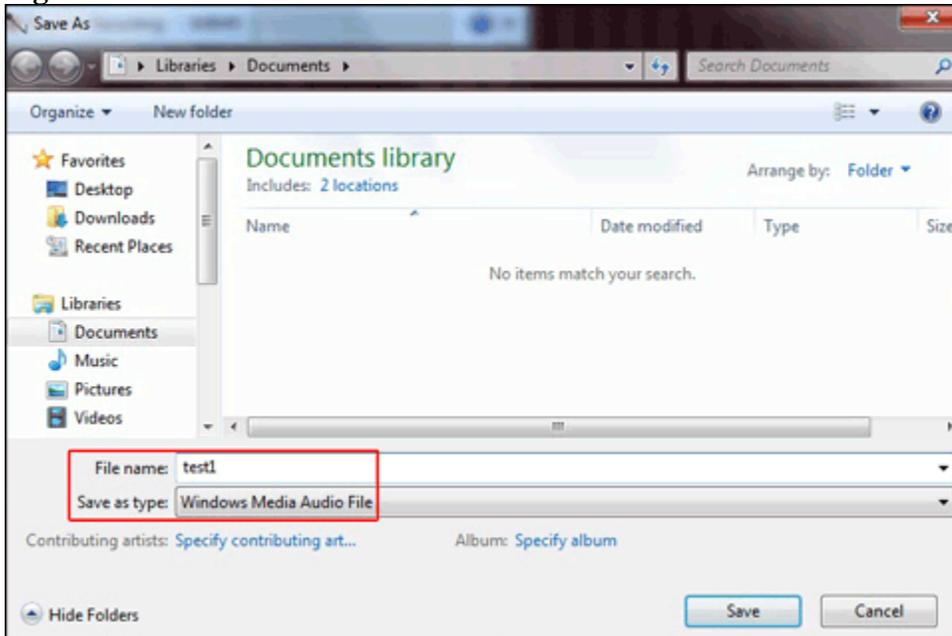
Figure : Sound Recorder while recording



A save screen automatically opens.

5. Type a filename and click **Save**. A file of type WAV or WMA is created in the Documents folder.

Figure : Sound Recorder Save As screen



6. Find and double-click the filename of your recording to play back the recorded sound. The file should play from the sound software that is associated with the audio file type - either WAV or WMA. You can open the sound file using Windows Media Player.