

# Overview

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## System Requirement

### Hardware requirements

- J-Link ARM
- P&E Micro Multi-link universal
- Mini/micro USB cable
- USB A to micro AB cable
- Hardware (tower/base board, ...) for specific device
- Personal Computer(PC)
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- P&E Micro Multi-link universal
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- Hardware (tower/base board, ...) for specific device
- Personal Computer(PC)

### Software requirements

- The project files, for lite version example, the path is:  
<SDK\_Install>/boards/<board>/usb/usb\_device\_audio\_speaker\_lite/<RTOS>/<toolchain>.  
For non-lite version example, the path is:  
<SDK\_Install>/boards/<board>/usb/usb\_device\_audio\_speaker/<RTOS>/<toolchain>.

#### Note

The RTOS is BM ,FreeRTOS, uCOSII or uCOSIII.

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## Getting Started

## Hardware Settings

For detailed instructions, see the appropriate board User's Guide.

- The Jumper settings:
    - JP12 connected .
    - JP5 : 2-3
    - JP6 : 2-3
    - JP7 : 2-3
    - JP8 : 2-3
    - JP13 Connected
    - JP14 Connected
- On Peripheral boards:.
- JP1 all on

## Prepare the example

1. Download the program to the target board.
2. Either press the reset button on your board or launch the debugger in your IDE to begin running the demo.
3. Connect a USB cable between the PC host and the USB device port on the board.

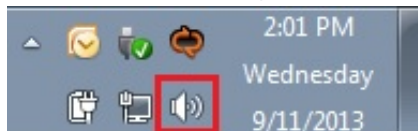
For detailed instructions, see the appropriate board User's Guide.

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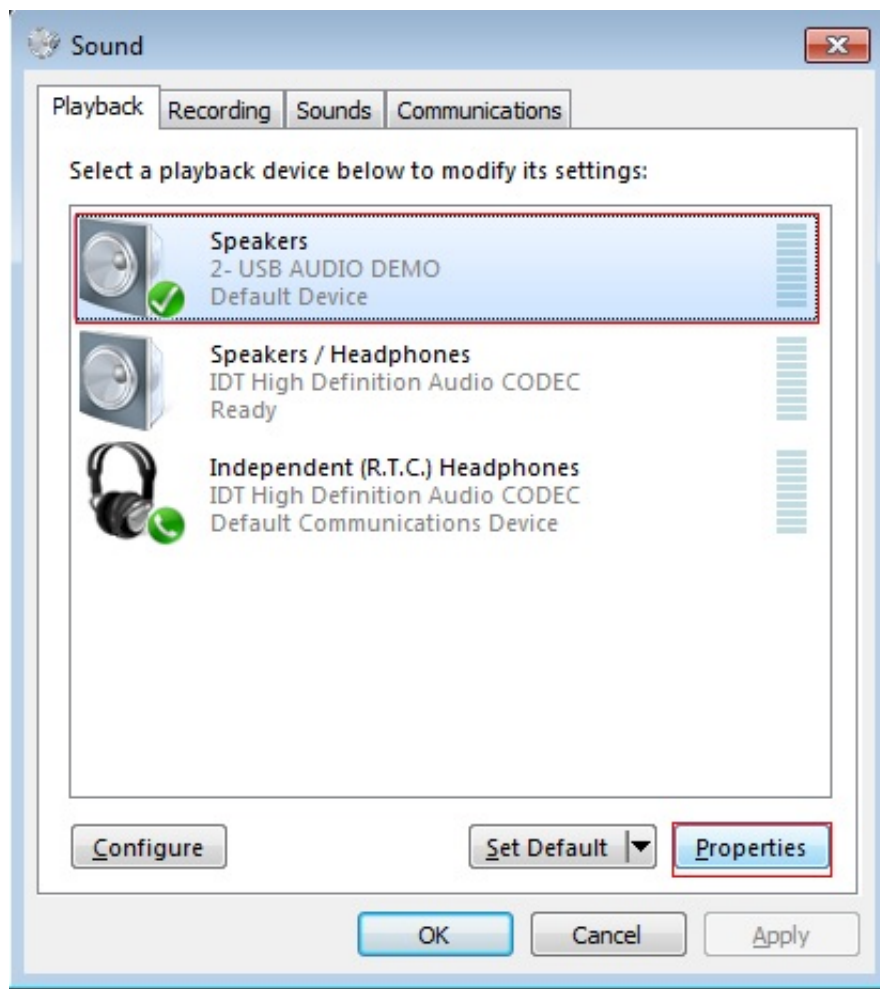
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## Run the example in Windows (USB AUDIO CLASS 1.0)

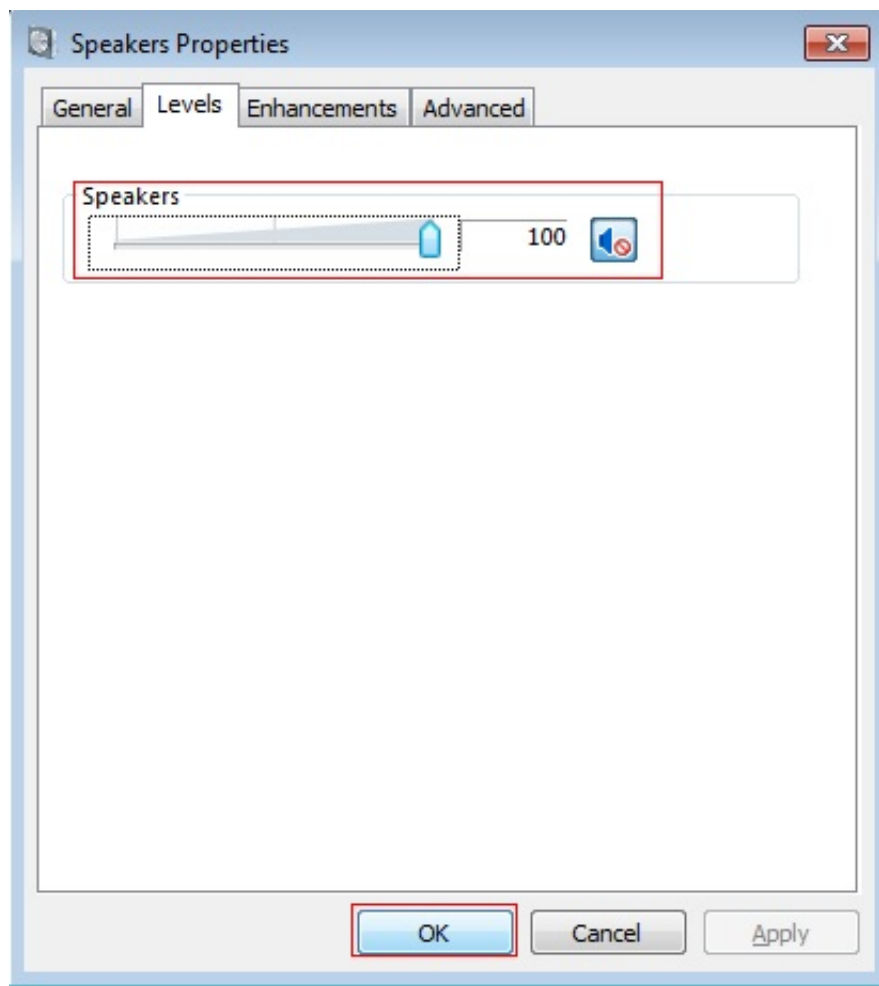
1. Plug-in the audio speaker device which is running Audio Speaker example into PC.
2. You will see a USB AUDIO DEMO device enumerated in Device Manager.
3. Right click on the Sound control icon of the Start bar (near to clock) and select "Playback devices".



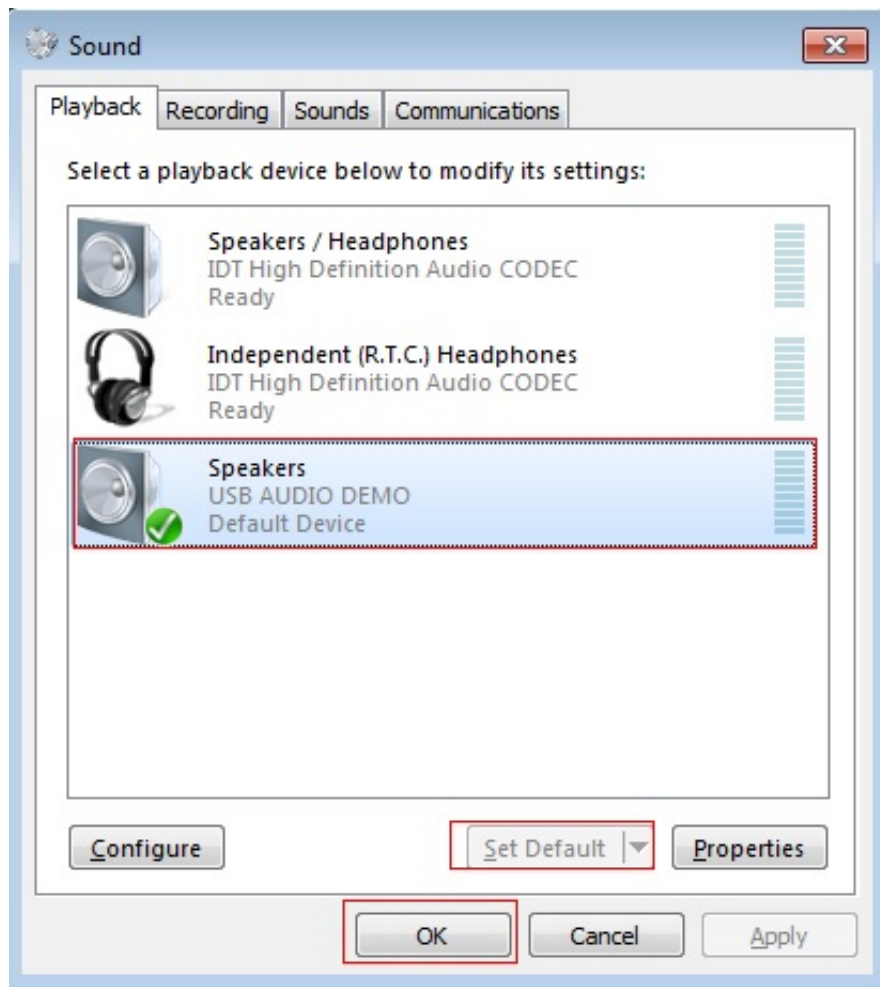
4. On the opened window, select the "Playback" device with the description "USB Audio Device" and click on the "Properties" button.



5. On the new window, go to "Levels" tab, and move the slide until 100%, then, click on "OK".



6. Back on the previous window be sure that "USB Audio Device" is still selected, then click on the "Set Default" button and finally, click on "OK" button.

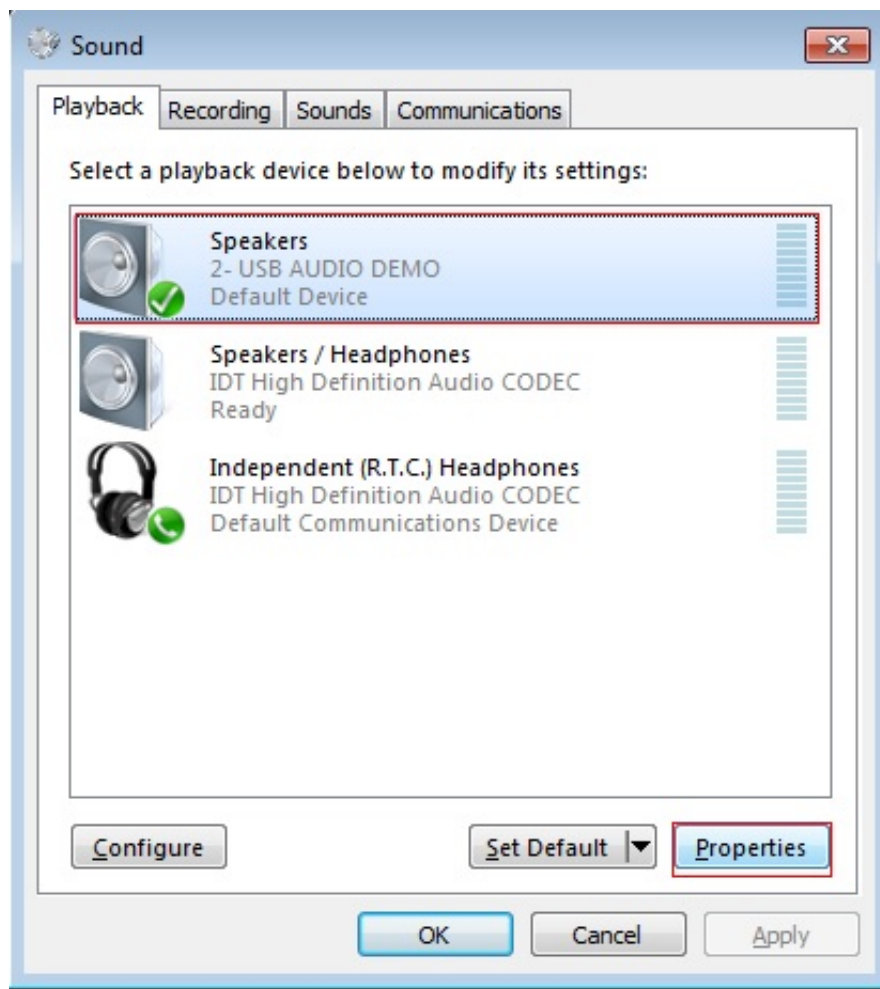


7. Open the Window Media Player application, select and play your favorite song.

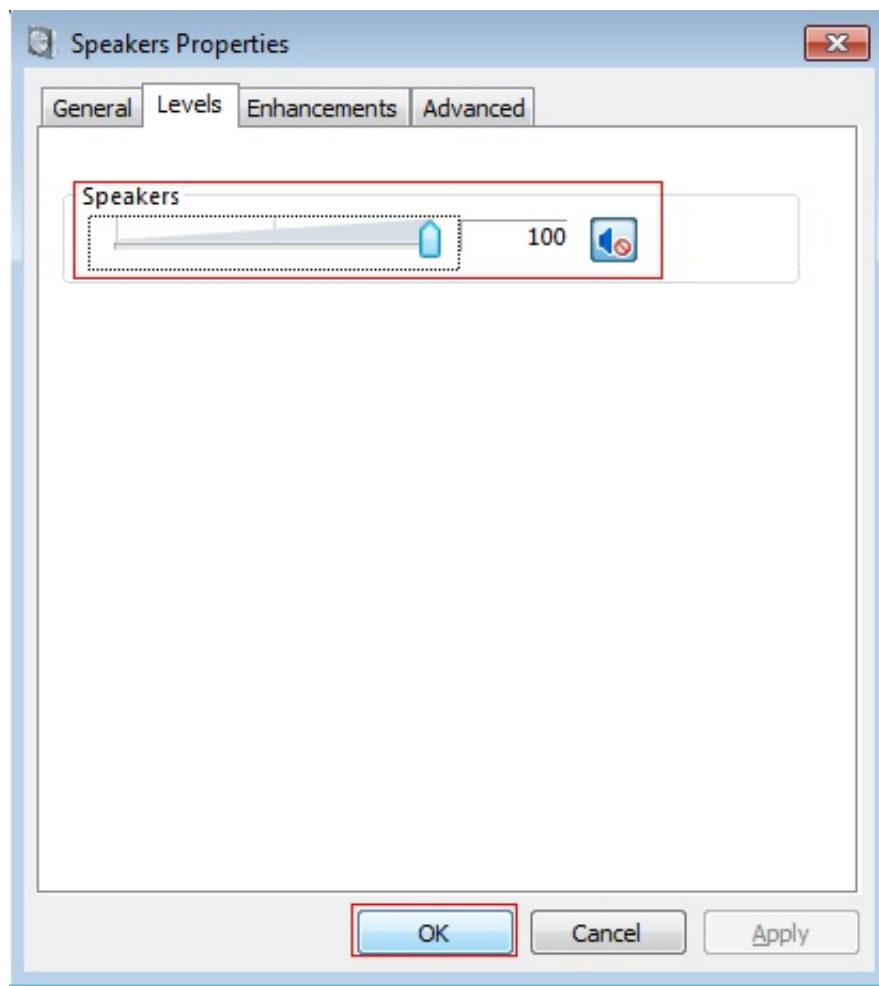
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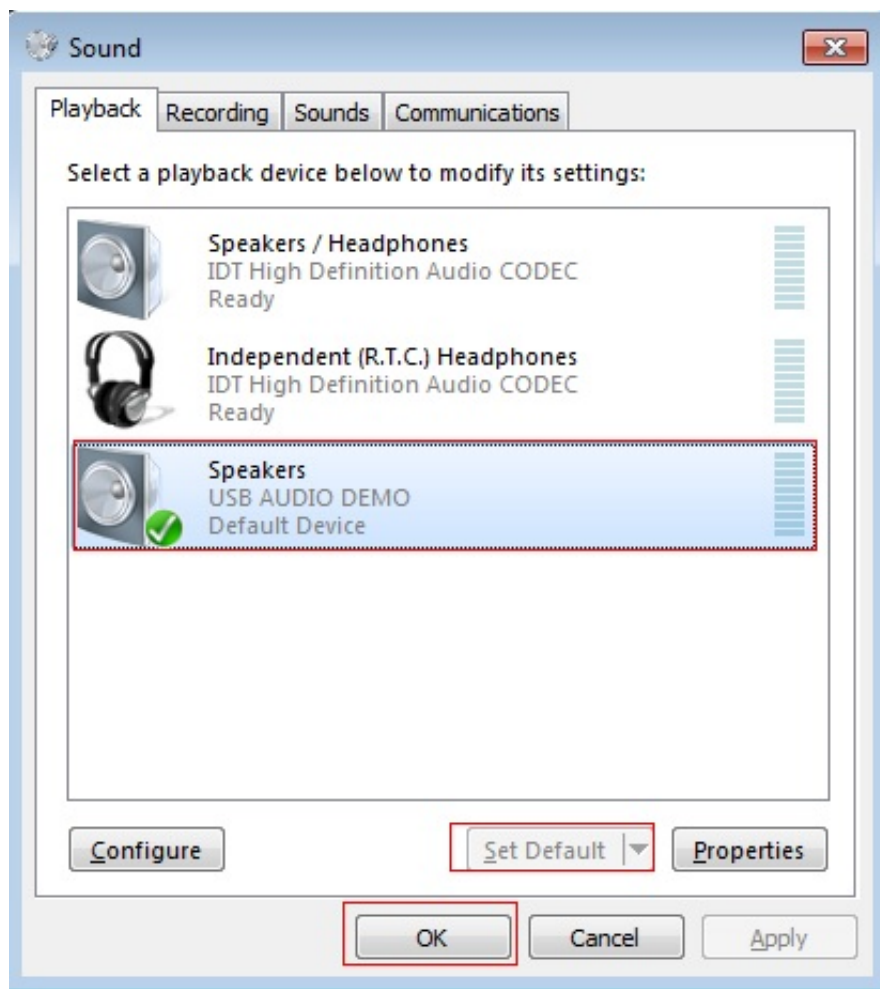
4. On the opened window, select the "Playback" device with the description "USB Audio Device" and click on the "Proprieties" button.



5. On the new window, go to "Levels" tab, and move the slide until 100%, then, click on "OK".



6. Back on the previous window be sure that "USB Audio Device" is still selected, then click on the "Set Default" button and finally, click on "OK" button.



7. Open the Window Media Player application, select and play your favorite song.

## Run the example in MAC (USB AUDIO CLASS 2.0)

1. Plug-in the audio speaker device which is running Audio Speaker example into MAC.
2. You will see a USB audio device enumerated in sound catalog under System Preferences.
3. You can select USB audio speaker device as the default audio device in sound catalog under System Preferences.
4. Open the quicktime application, select and play your favorite song.