

## USB Recorder User's Manual

The USB Recorder can be used to:

- Play music from SD card (Uncompressed Wav and compressed Ogg Vorbis)
- Use as PC speakers and PC microphone
- Drive headphones or even large speakers (contains D class speaker amplifier)
- Record music from PC to the SD card
- Record voice from PC and Microphone to the SD card
- Use as PC SD Card reader/writer (USB 1.1)

**Table 1: USB Recorder Operation Modes**

Mode	Entered by:	USB Function	SDCard Function
<b>PC Player Mode</b>  ( Play PC Music, SDCard writer )	Power Up with USB  or Press button <b>"PC / Stop / Power"</b>	- USB Speakers - USB Microphone - USB Mass Storage  <i>if no USB cable: do nothing</i>	PC read/write via USB
<b>Voice Record Mode</b>  ( Microphone record, Skype call record )	Press button <b>"Rec LP PC+Mic"</b>	- USB Speakers - USB Microphone  <i>if no USB cable: Record Microphone sound to 22kHz mono .wav files</i>	Record PC sound mixed with Microphone sound to 22kHz mono .wav files
<b>Lossless Record Mode</b>  ( PC Music record )	Press button <b>"Rec HQ PC"</b>	- USB Speakers  <i>if no USB cable: go to Voice Record Mode</i>	Record PC sound to 44.1 kHz stereo .wav files
<b>Stand-Alone Player Mode</b>  ( Play from SD Card )	Power up without USB  or Press button <b>"Play / Pause"</b>	<i>no USB</i>	Play .wav and .ogg files from SD card

## General instructions

- Do not remove the SD card when the power is switched on.

## Playing music from SD card

- Connect Battery power or USB.
- Press "**PC / Stop / Power**" button to turn power on.
- If battery is connected, playing will start automatically.
- If USB is connected, press "**Play/Pause**" button to start playing.
- The last recorded song on the SD card is played first.

## Using as PC Speakers and Microphone (no recording)

- Connect USB Cable.
- Press "**PC / Stop / Power**" button to turn power on.
- The device will identify to USB as "USBRecorder in PC Player Mode"
- The PC will see USB Speakers and USB Microphone.
- The PC will also see SDCard reader/writer as "Removable Disk"
- **Because the PC sees the SD card, recording is not possible.**  
(Windows does not allow independent writing to the SD card when it is connected to PC)

## Recording a Skype Call

- Connect USB Cable.
- Press "**PC / Stop / Power**" button to turn power on.
- The device will identify to USB as "USBRecorder in PC Player Mode".
- Press "**REC LP PC+Mic**" button to go to voice recording mode.
- The device will drop away from USB.
- The device will re-identify to USB as "USBRecorder in Voice Record Mode".
- The PC will see USB Speakers and USB Microphone
- Wait until REC LED will **blink** to show that the board is ready to record.
- Start the Skype Call.
- Recording starts automatically when there is sound coming from the PC.
- Recording is done in Mono, 22 kHz 16-bit Wav file.
- After recording, press "**Play / Pause**" to play the recorded file.
- If the board is in Pause mode, press "**Play / Pause**" again.

## Recording Music or Web Radio from PC

- Connect USB Cable.
- Press "**PC / Stop / Power**" button to turn power on.
- The device will identify to USB as "USBRecorder in PC Player Mode".
- Press "**REC HQ PC**" button to go to lossless recording mode.
- The device will drop away from USB.
- The device will re-identify to USB as "USBRecorder in Lossless Record Mode".
- Set PC volume to 100% for best recording quality.
- Wait until REC LED will **blink** to show that the board is ready to record.
- Recording starts automatically when music is started from the PC.
- The REC LED will be **on** to show that data is recorded to the SD card.
- Recording is done in Stereo, 44.1 kHz 16-bit Wav file.
- The REC LED will be on to show that data is recorded to the SD card.
- Warning: Some SD cards may not be able to record with full speed without clicks.
- To stop recording, press "**Play / Pause**" to play the file.
- If the board is in Pause mode, press "**Play / Pause**" again.

## Recording from the Microphone (No PC)

- Connect Battery power or USB.
- Press "**PC / Stop / Power**" button to turn power on.
- Press "**REC LP PC+MIC**" button to go to Voice Recording Mode.
- Wait until REC LED will **blink** to show that the board is ready to record.
- Press "**REC LP PC+MIC**" button again to start recording.
- Recording is done in Stereo, 44.1 kHz 16-bit Wav file.
- The REC LED will be **on** to show that data is recorded to the SD card.
- To stop recording, press "**Play / Pause**" to play the file.
- If the board is in Pause mode, press "**Play / Pause**" again.

The software is Beta Release for you to test with our hope that it will be useful.

Please contact [support@vlsi.fi](mailto:support@vlsi.fi) to report problems. We will do our best to solve them.

Thank you for testing the USB Recorder

- The Audio Solution Support team