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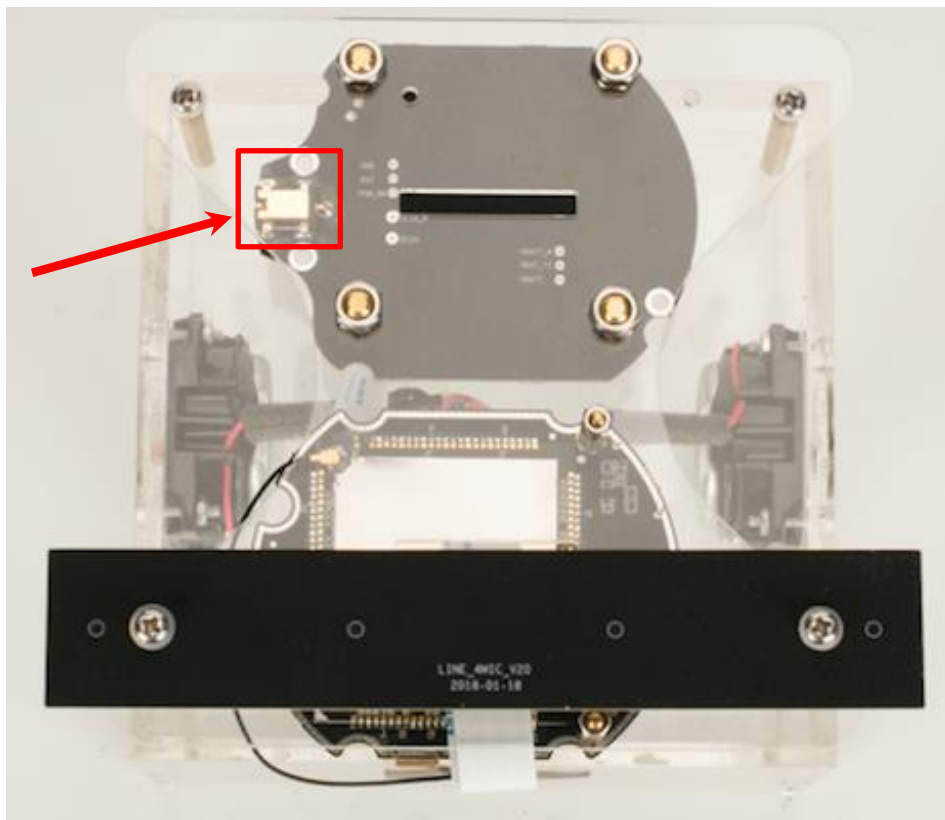
ROOBO provides this product to help accelerate the development of customizable in-home assistants, in-car assistants, smart speaker, IoT devices, or other voice-enabled devices, but not for other purposes.

Figures, photos, schematics and other information are included in this document to show the technical specifications and/or tools instructions. If interested in mass production, please contact ROOBO to obtain additional documents that require an NDA. ROOBO makes no representations or warranties with respect to the accuracy or completeness of the contents presented in this document.

ROOBO Dev Kits User Guide

Dev Kit Set up

Plug in the power adapter, the dev kit should start running automatically.



ADB Debug

You can log onto the dev kit's board, push or pull files by using the adb tool.

On Windows 10:

(1) After the board is running, in the Windows Device Manager, we can see a USB port:





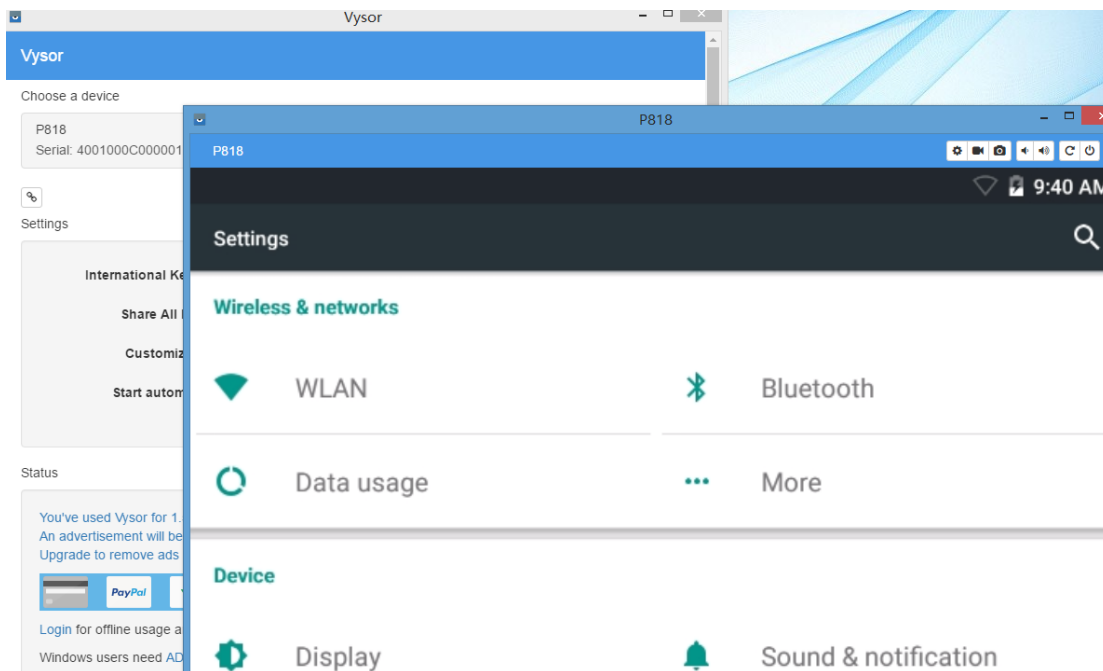
(2) In a Windows cmd window, input command "adb shell", then hit Enter

Notes:

You'll need to have the adb tool installed on your computer and make sure the adb tool is usable.

Vysor

The dev kit has no screen, you will need a tool to "remote" into it for easy interaction. You can download and install the Vysor from <http://vysor.io/download/>.



Record and Playback

If you wish to test the microphones, you can use the roobopri_4mic or roobopri_7mic to capture the mic array pcm data, which is the raw audio data from the microphones. It can save the pcm data to a Tflash card every one hour.

The format of the file name is RB_FileIndexXXX_d_chnX.pcm. XXX is the number which increases one by one each hour, and the X is the mic number in the mic array.



If the recording is less than one hour long, the temporary files will be stored in the /mnt/obb directory.

```
root@P818:/mnt/obb # ls -l
-rw-rw-rw- root    root    1351680 1970-01-01 12:12 RB_FileIndex00000_chn0.pcm
-rw-rw-rw- root    root    1351680 1970-01-01 12:12 RB_FileIndex00000_chn1.pcm
-rw-rw-rw- root    root    1351680 1970-01-01 12:12 RB_FileIndex00000_chn2.pcm
-rw-rw-rw- root    root    1351680 1970-01-01 12:12 RB_FileIndex00000_chn3.pcm
-rw-rw-rw- root    root    1351680 1970-01-01 12:12 RB_FileIndex00000_chn4.pcm
```

Notes:

- *The only supported filesystem of the Tflash is FAT32*
- *The last channel number is the reference data from the playback path.*

If you want to playback a wav file, first input the below commands to config the audio out path.

```
tinymix 'PRI_MI2S_RX Audio Mixer MultiMedia1' 1
tinymix 'RX2 MIX1 INP1' 'RX1'
tinymix 'RDAC2 MUX' 'RX2'
tinymix 'HPCR' 1
```

Then you can use tinyplay to play the wav file.

WiFi Config

- Through adb command.

```
svc wifi ssid: xxx password: xxxx
```

- Config wifi by Vysor tool

