

Technical Notes

BrainSphere P10/P130/P15 F7 Audio Behavior with Internal Speaker

ALTOS

Version 1.0
Mar 23, 2022

Revision History

Ver.	Date	Description
1.0	Mar 23, 2022	First release

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Preface

There are 3 different form factor of BrainSphere P10/P130/P15 F7 chassis. This notes applies to all chassis with internal speaker (Acer P/N SC.30411.06J) installed.

Description

If the system comes with an internal speaker installed and the OS (Windows 10) is installed by using preload image, the external speaker connected to audio (line) out jack of rear panel does not work.

This is an expected behavior under Windows 10. This is due to, by default, the rear audio output will be disabled when a headphone is plugged into the front panel. And the internal speaker module is connected between the front panel audio module and M/B. The system will detect the internal speaker as a headphone connected to the front panel. So the speaker connected to the rear panel will be disabled automatically.

To make the speaker connected to rear panel to work, the Realtek utility (Realtek Audio Console) is required to change the default setting.

Setting Internal Speaker and Rear Panel Audio Output

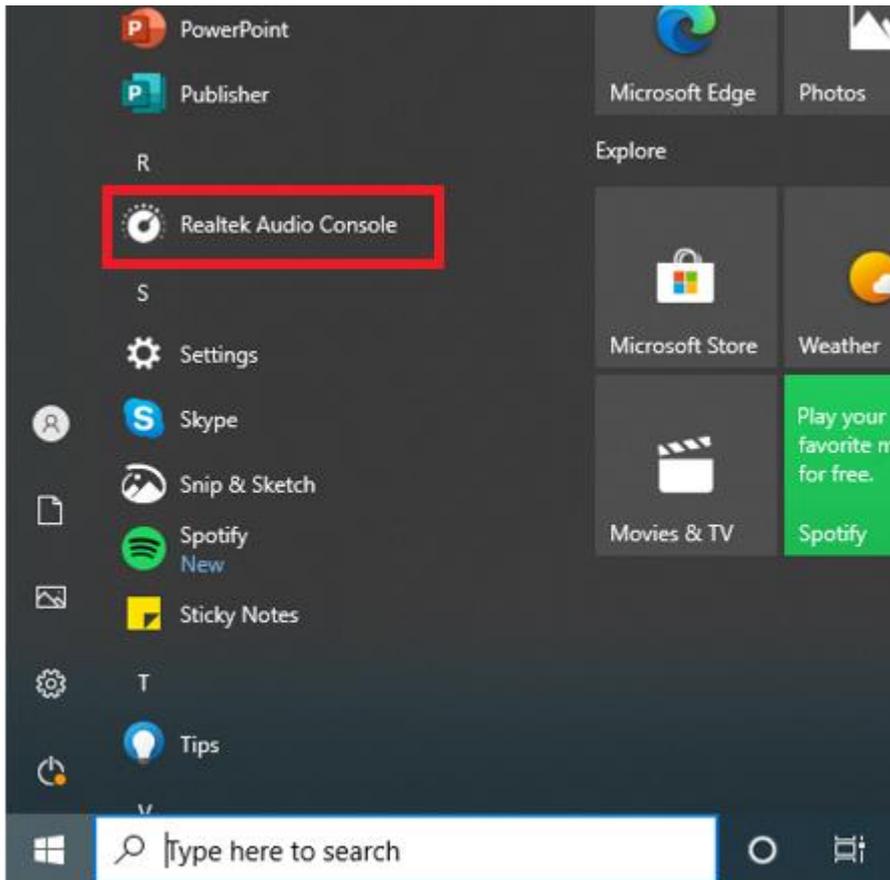
Install Realtek Audio Console

With the Windows 10 installed by using preload image, the Realtek Audio Console is not installed by default. The Realtek Audio Console will be installed automatically by running Windows Update to install updates.

Check the update history after installing update from Windows Update. There should be several Realtek SoftwareComponent listed under Driver Updates in update history as below.



After the Realtek SoftwareComponent are installed, the Realtek Audio Console will be available in Startup menu.



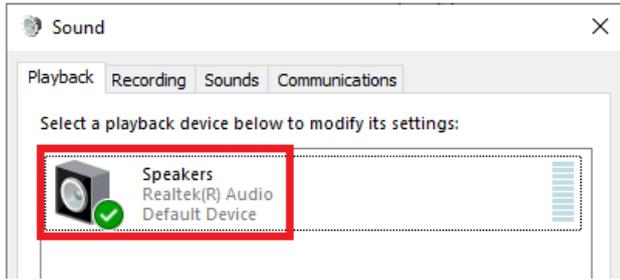
Modify the Setting for Internal Speaker and Rear Panel Audio Output

There are different ways to use the internal speaker and rear panel audio output. (The listed usages may not be available for all of P10/15/130 F7. The available settings in Realtek Audio Console may vary due to the different codec used for different models and different versions of Realtek Audio Console installed.)

- Play audio from internal speaker only (default setting)
- Play audio from the external speaker connected to rear panel only
- Play the same audio stream with internal speaker and external speaker connected to rear panel
- Play the different audio streams with the internal speaker and external speaker connected to rear panel

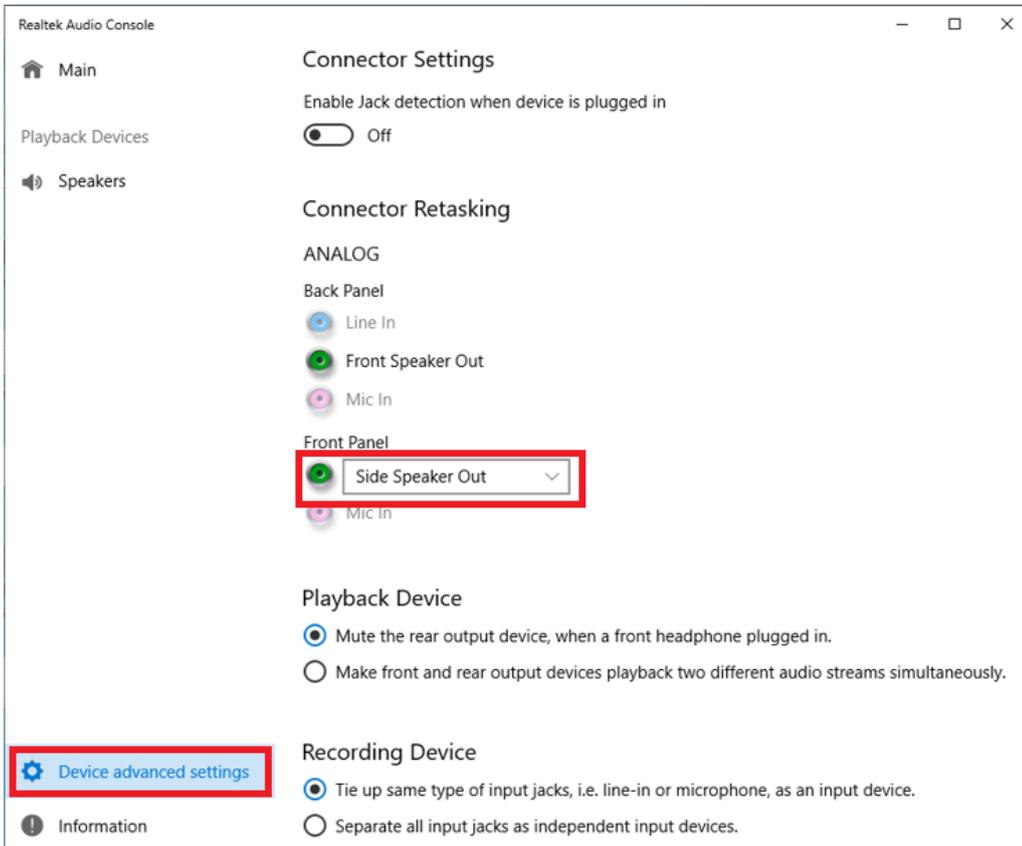
Play audio from internal speaker only (default setting)

No need to modify any setting. It's default. There will be only one speaker listed as Realtek Audio device in Playback of Sound control panel. The audio will be played from the internal speaker only.



Play audio from the external speaker connected to rear panel only

Connect the external speaker to the rear panel. Launch **Reaktek Audio Console**, select **Device advanced settings** and change the setting **Headphone** under of **Front Panel** to **Side Speaker Out**.

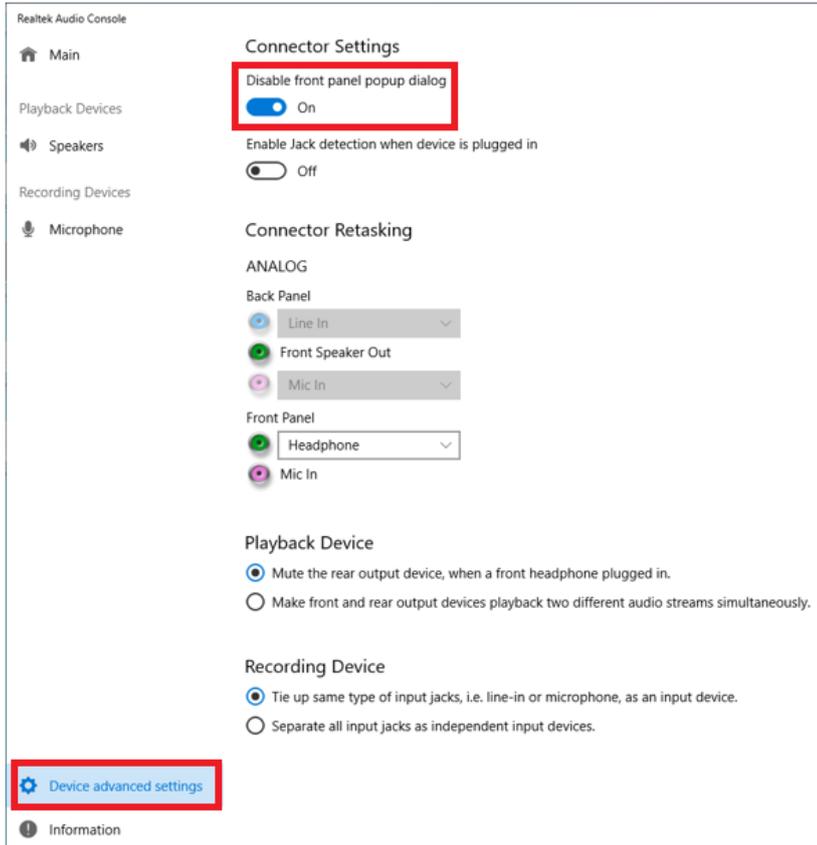


There will still be only one speaker listed as Realtek audio device in playback of Sound control panel. And the audio will be played from the external speaker connected to rear panel only.

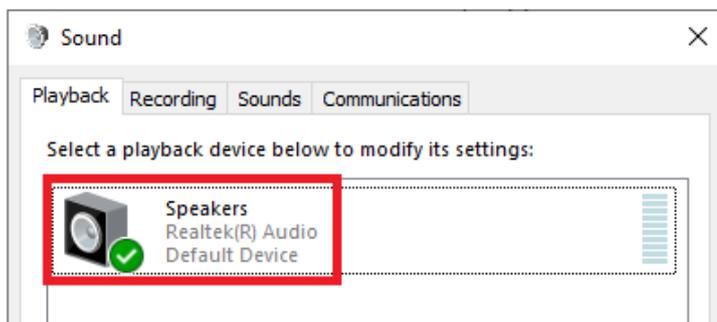


Play the same audio stream with internal speaker and external speaker connected to rear panel

Connect the external speaker to the rear panel. Launch **Reaktek Audio Console**, select **Device advanced settings** and turn on **Disable front panel popup dialog**.



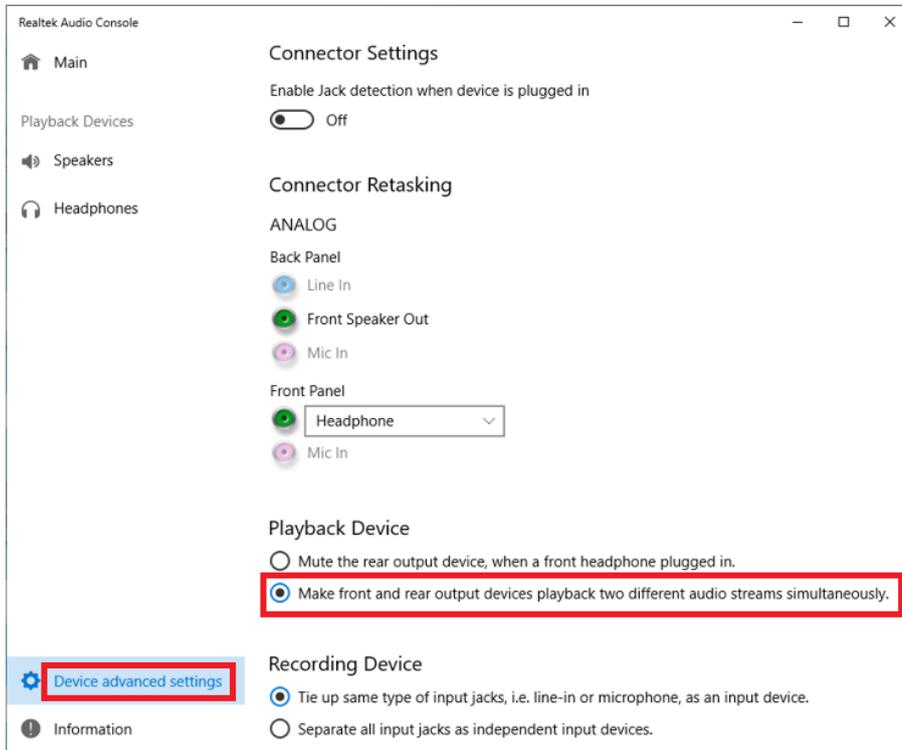
There will still be only one speaker listed as Realtek audio device in playback of Sound control panel. The same audio will be played from both internal speaker and speaker connected to rear panel.



Play the different audio streams with the internal speaker and external speaker connected to rear panel

Connect the external speaker to the rear panel. Launch the **Realtek Audio Console**, select the

Device Advanced Settings and select **Make front and rear output devices playback two different audio streams simultaneously for Playback Device.**



There will be one speaker and one headphone listed as Realtek audio device in Playback of Sound control panel. You can set the usage for the devices.

