Audio issues

Most audio issues on Batocera **v31** and below have been fixed with the release of **v32**. This is because Batocera **v32** introduced a brand new sound management layer (Pipewire) to handle most of the audio stack. This article is more here for users on older versions or those really persistent audio issues.

I have no sound!

If trying to use HDMI sound on a Radeon GPU, first check that you have enabled the setting in the boot line. If on a Nvidia card, make sure your official drivers are activated.

When that's all clear, first experiment with different settings in **MAIN MENU → SYSTEM SETTINGS → AUDIO PROFILE**. You should get sound immediately when exiting back to the **MAIN MENU** (there is background music playing by default). If you're still not able to get any sound, try also manually setting an **AUDIO OUTPUT** device (they change with each different profile, you need to exit back to **MAIN MENU** to update the list). This may take a lot of trial and error, but only needs to be done once.

In **v32** and higher, going into Kodi to test various audio outputs live is no longer required. This can all be done from within the EmulationStation **MAIN MENU → SYSTEM SETTINGS** audio settings, then backing out, no reboot required.

In Batocera **v31** and lower, only **AUDIO OUTPUT** is selectable and a reboot is needed for changes to take effect. You can instead quickly test each audio device by using Kodi:

1. Launch Kodi from the **Main Menu**, then navigate to **Settings** (the small gear symbol near the top left corner), **System**, **Audio**, **Audio output device** and test all available Audio output devices listed there. If you navigate with a controller or keyboard through Kodi, you will hear a "click" sound while navigating menus when you have chosen the correct/working Audio output device.
2. Remember the name/number of this working Audio output device (for example HDMI#0), exit Kodi and go to the Batocera **Main Menu** > **System Settings** > **Audio** and select the Audio output device, which has the same (or at least a similar) name to the one that works in Kodi. Then reboot and you should have working audio.
3. You can also diagnose some sound issues with the `alsamixer` sound mixer that is available when pressing `[Ctrl]+[Alt]+[F4]` (text-mode sound mixer). Make sure that all the outputs are enabled, and they have their volume up. You can return to Batocera with `[Ctrl]+[Alt]+[F2]`.

I have sound in Kodi, but not in the main menu or emulators even after selecting the audio device from the above steps and rebooting

> No longer applicable for **v32** and up. EmulationStation can see all audio devices and profiles.

It could be that, for one reason or another, Kodi sees the audio device order differently to EmulationStation. Do the following:

1. In Kodi, go to back to the **Audio output device** list.
2. Now on the device listing, count from the top to the bottom (first device listed is #0, the second is #1, etc.).
3. Remember which # your working device is (let's use #4 in this example).

Then, edit your `system/batocera.conf` file from the network share/built-in file manager (F1 on the main menu) like so:

> Don't use Windows' Notepad as that will corrupt your `batocera.conf` file! Use a Unix-respecting editor like Notepad++ or just use Batocera's built-in file manager if you're not sure.

1. `[Ctrl]+[F]` and find "audio.device=", it should be set to your (currently not working) audio device.
2. Replace the second digit with your audio number. For instance, if it is `audio.device=0,3`, then according to our example it would be `audio.device=0,4`. The following text doesn't particularly matter, that's just the label it shows in EmulationStation.
3. Reboot, and if your audio still isn't working then try `audio.device=1,3`, then `audio.device=2,3` and so on.

I have sound in emulators and the main menu, but not during video previews

> No longer applicable for **v32** and up. `.asoundrc` isn't read by Pipewire (there shouldn't be this specific problem in the first place anymore).

If you have sound on EmulationStation, and in the emulators, but you can't hear the sound of the video snapshots, here are several steps that may help you:

1. First, make sure you have enabled video snaps sounds in the menu **Sound Settings → Enable Video Audio**
2. Then, you can try to [connect to Batocera through SSH](#) and enter the following command:

```
wget -O /userdata/system/.asoundrc
https://www.batocera.org/users/lbrpdx/asoundrc
```

This command will create an alsa config file as `/userdata/system/.asoundrc`. It should fix your video snap sounds for most SBC like Odroid Go Advance, but maybe not on a PC.

On a PC, depending on your hardware configuration, your GPU and audio chipset, it might be trickier to get it working.

First, through SSH, get the list of audio outputs with the command `aplay -l`. In my setup, I get:

```
# aplay -l
**** List of PLAYBACK Hardware Devices ****
card 0: PCH [HDA Intel PCH], device 0: ALC255 Analog [ALC255 Analog]
  Subdevices: 1/1
  Subdevice #0: subdevice #0
card 0: PCH [HDA Intel PCH], device 3: HDMI 0 [HDMI 0]
  Subdevices: 0/1
  Subdevice #0: subdevice #0
card 0: PCH [HDA Intel PCH], device 7: HDMI 1 [HDMI 1]
  Subdevices: 1/1
  Subdevice #0: subdevice #0
card 0: PCH [HDA Intel PCH], device 8: HDMI 2 [HDMI 2]
  Subdevices: 1/1
  Subdevice #0: subdevice #0
card 0: PCH [HDA Intel PCH], device 9: HDMI 3 [HDMI 3]
  Subdevices: 1/1
  Subdevice #0: subdevice #0
card 0: PCH [HDA Intel PCH], device 10: HDMI 4 [HDMI 4]
  Subdevices: 1/1
  Subdevice #0: subdevice #0
```

If I want to use the audio output from HDMI0, I can see that it is `card 0` and `device 3`. So, to make audio work on my setup, I need to edit the `/userdata/system/.asoundrc` file and replace `pcm "hw:0,0"` with `pcm "hw:0,3"`, and then save and on reboot, it worked. This method might not work in 100% cases, but it's worth a try.

Worst case, if it doesn't work and you want to go back to the original state, just remove the file `/userdata/system/.asoundrc` (or `\system\.asoundrc` from the network share).

No sound during the splash video

First of all, check that the splash.screen.sound value in the `batocera.conf` file is set to 1.

> The following is no longer applicable for **v32** and up.
> Pipewire is used, not Alsa, which has a completely different configuration (there shouldn't be this specific problem in the first place anymore).

If this isn't the cause of the problem, you may need to edit the file containing the splash screen command to add the correct sound device:

1. Run the command `mpv --audio-device=help` on your batocera using SSH
2. Locate the sound device you need to use, for exemple `alsa/hdmi:CARD=HDMI,DEV=2`
3. Edit the file `/etc/init.d/S03splash`
   - find the line `/usr/bin/mpv --really-quiet -fs --no-config --vo=drm $mpv_audio $mpv_video "$video" &` and add `--audio-device=DEVICE` where DEVICE is the name you found previously (in our exemple, the line will become `/usr/bin/mpv --audio-device=alsa/hdmi:CARD=HDMI,DEV=2 --really-quiet -fs --no-config --vo=drm $mpv_audio $mpv_video "$video" &`)
4. Run the command `batocera-save-overlay` to keep the changes.
5. Reboot
6. When updating batocera, those changes will be lost.