



Audio troubleshooting grid



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A quality version of this page, approved on 1 December 2020, was based off this revision.

Some typical issues related to the **audio** domain are listed below. Solutions or debugging methods are proposed for these issues.

If your issue is not listed, try looking at in the articles in the [Audio or troubleshooting grids](#) categories.

Symptom	Resolution
ALSA	
The sound card does not probe.	<p>If one or more audio interfaces are missing, the sound card cannot probe:</p> <ul style="list-style-type: none"> - Look for missing audio interfaces in <code>/sys/kernel/debug/asoc/dais</code>. - Check kernel config, modules and error trace for missing interfaces.
<pre>aplay: pcm_write:2030: write error: Input/output error</pre>	<p>This error occurs on an audio playback, when audio samples are not output. A possible cause is a wrong configuration of the audio interface:</p> <ul style="list-style-type: none"> - DAI gpios not activated: missing in DT or in bad state - DAI/codec not clocked: kernel /master clock not enabled <p>Refer to Soundcard configuration</p>
<pre>Error -16 setting sai_ck parent clock. Active stream rates conflict</pre>	<p>The two SAI sub blocks which are connected to the audio codec, share their master clock on Disco and Evaluation boards. When running both capture and playback on the codec, the chosen sampling rates must be multiple of each other, because of this dependency. If sampling rates are not compatible, an error is issued.</p>
Miscellaneous	
	<p>The following points have to be checked:</p> <ul style="list-style-type: none"> - The headset jack must be compatible with CTIA standard.



Symptom	Resolution
ALSA	
Silence is recorded from headset microphone.	<ul style="list-style-type: none">- Check volumes and mute switches in record path. (ALSA control configuration and Pulseaudio settings)- Check that the codec is fed with master clock.
The capture level is too low at maximum volume.	The ALSA plugin <code>softvol</code> ^[1] can be used to boost the volume. However, this may lead to saturation.



References

- | ALSA PCM plugins

Advanced Linux sound architecture

Digital Audio Interface

Device Tree

Serial Audio Interface (Mechanism used to transfer non-buffered audio data between processors and/or audio converters.)