

# Pearl Nano

---

# Limitations and known issues

---

This section includes known issues or limitations that affect functionality or usability and ways that you can work around these limitations.

## Affecting encoding

- **Limitation:** When Pearl Mini is overloaded, video frames or audio samples can be dropped causing variable frame rate and audio cracks.  
**Workaround:** Pearl Mini is a powerful system capable of many simultaneous tasks, but like any other computing device, it has finite resources. If this problem is observed, check the CPU load from your system's Info page.
- The color range of the HDMI and SDI video inputs is limited. As such, the color black (0.0.0) in the video signal is encoded as nearly black (16.16.16). This does not affect HDMI pass-through or media like images that are added to a layout that contain the color black; however, this can affect matching black colored backgrounds and media with black content in the HDMI and SDI video.  
**Workaround:** Use backgrounds or media that are nearly black (16.16.16) when it's necessary to match the black of the video signals.
- **Limitation:** When encoding 720×480i and 720×576i HDMI™ video signals that have a YUV 4:2:2 color space and a bit depth of 24 bits, black visual elements such as a background display as green.

## Affecting streaming and recording

- AFU to Amazon Web Services S3 Simple Cloud Storage transfer sometimes does not recover after the network connection is cut. The expected behavior is that the file transfer would restart, but there is sometimes a time desync that results in a failed transfer.  
**Workaround:** If the network connection is severed during a AFU transfer, the process must be restarted from the beginning, and the transfer must proceed without interruptions to the network.
- When an empty stream is created that has no streaming parameters configured, pressing the Stream control key on the front panel of Pearl Nano starts the unconfigured stream.  
**Workaround:** Delete from the channel's streaming page any stream that has no settings configured.

## Affecting the Admin panel

- Cropping a video source to 16:9 using the layout editor may not scale correctly and can appear as a thin line in the layout editor. This happens when the device or web browser you're using with the admin interface has a different approach to composing layout. Recording and streaming are not affected.  
**Workaround:** Due to color space limitations (YUV with 2x2 subsampling), the cropped region's

---

dimensions must be set to even values.

- The Status section of the HDMI video input page does not indicate when the video input signal is interlaced.
- The Single Touch control option appears on the channel's Streaming configuration page in the Admin panel; however, Pearl Nano doesn't currently support Single Touch control.  
**Workaround:** Ignore the Single Touch control option.

## Affecting CMS integrations

- If the SD card is removed while a recorded event is uploading to Panopto, uploading is interrupted and the file does not upload; however, the event in Panopto appears as upload complete. If the SD card is immediately re-inserted, Pearl Mini must be rebooted before Pearl Mini will detect it.  
**Workaround:** Wait a minimum of 5 minutes before re-inserting the SD card and rebooting Pearl Mini if the SD card is ejected while files are uploading to Panopto.
- If you modify a particular recurring lecture capture plus live webcasting event (e.g. a VOD + Live Stream event in a recurring series), Kaltura excludes that event from the recurring series and the webcast doesn't stream. That's because the RTMP URLs for the modified event loses its mandatory tokens. However, the recurring Kaltura event does record as scheduled and other events in the series are not affected.  
**Workarounds:** To regenerate the RTMP tokens for a live event, go to MediaSpace, find the modified live event entry and uncheck the Live event checkbox - and save. Then re-check it and save the event again. Alternatively, you can go to the Kaltura Management Console (KMC), find the modified live event entry and then, in the Live stream tab, click **Re-generate Stream Token**.