LSM710
Troubleshooting
Kim Peifley
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Real Time Controller Error aka RT Controller Error

When starting software if it seems “stuck” you will see a RT Controller area and instructing you to push the reset button.

The RT Controller box is the black box below the X-Cite bulb. Open the door to get to the reset button.

RT Controller Box

RT Controller Box with door open

RTC Rest Button
DIC Shift

If the DIC image is not “even”, split up or partial.

Example: DIC looks like the illustration on the left instead of the illustration on the right

Check your pixel dwell time. If it is below 0.5µsec then this is causing the DIC to shift. We have seen this especially when the frame size is set high. Example 1024x1024 or 2048x2048.

Fix: Reduce the pixel dwell time until it is over 0.5µsec. We have found especially with a frame size of 2048x2048 the pixel dwell time may need to be over 1.0µsec.

Note: You will likely need to restart part of the system before you will see the correction.
1. Close Software.
2. Turn off Components.
3. Turn Components back on.
4. Open software.
5. Double check your scan speed to see that it is the necessary reduced scan speed.
**Laser Safety Lock:**
If the laser is not firing look to see if the laser safety lock is engaged.

If the laser safety lock is not engaged you will see the green light next to Stand on the laser box [A].

If the laser safety lock is engaged this light will flash [B only showing the off part of the flash].

The laser safety lock can be seen in the left panel [C]. The first thing to check is that the cable for the live cell sensor is not stuck in the turret [D].

The most likely cause is that the turret is not fully in place. It can be very hard to tell [E] but is often due to the top sliders of the incubation chamber not being open enough when the turret is brought back down and cannot get fully in place [F]. Open the sliders a bit and make sure it is fully in place.
This is the laser safety lock on the turret.
If the lock is not engaged you will see the green light on next to Stand.

If the laser safety lock is engaged the light next to Stand will be flashing.
What can trigger the laser safety lock?

One thing is if the sensor cable gets closed in the turret.