Moving from LIDAR-Lite v3 to LIDAR-Lite v4 LED?

If you are transitioning from the classic LIDAR-Lite v3 to the newer v4 LED, there are three critical differences you must account for to avoid damaging your hardware or under-speccing your range.

1. **Range Reduction (40m vs. 10m)**
   - **The Change:** The v3 uses a powerful Laser emitter to reach 40 meters. The v4 uses a focused LED emitter, which limits its effective range to 10 meters.
   - **Action:** Ensure your application does not require long-distance measurements. If you need >10m, stick with the v3 or v3HP.
2. **Logic Level Voltage (5V vs. 3.3V)**
   - **The Change:** The v3 operates with 5V logic, making it directly compatible with Arduino Unos and older 5V systems. The v4 LED operates with 3.3V logic (even though it accepts 5V power).
   - **Action:** Do NOT connect the v4 directly to a 5V I2C bus (e.g., on an Arduino Uno) without a logic-level converter. Doing so will damage the v4 sensor.
     - *Tip:* If you use the v4 Qwiic version, this conversion is handled for you automatically.
3. **Mounting & Interface**
   - **The Change:** The v3 has built-in mounting holes and supports PWM. The raw v4 LED module has no mounting holes (requires adhesive or zip-ties) and is I2C/ANT® only (no PWM).
   - **Action:** If you need hard-mounting points, the v4 Qwiic version includes a breakout PCB with standard 4-40 screw holes.

Note: *More information can be found on our* [v3/HP](#) *and* [v4 Qwiic](#) *Hookup Guides.*