

Not Rocket Science: A JHU Safety Note

USING LASER POINTERS

Do you **really** need more power than Class 2?

Properly used laser pointers are fantastic tools. They allow presenters to highlight details in their presentations, but when they are used improperly or are too powerful they can cause serious injury. Lecture halls on the JHU Homewood campus—even Shriver Auditorium—are all small enough that Class 2 laser pointers are appropriate.

Not all laser pointers meet safety standards. NIST found that over 44 percent of red pointers and 90 percent of green pointers were more powerful than the label claimed. One even had an output over 11 times the maximum legal limit. Price did not correlate to accurate labeling. <http://www.nist.gov/pml/div686/pointer-032013.cfm>

Many “laser pointers” are actually powerful handheld lasers. Class 3B and 4 lasers may not be sold in the US as laser pointers, but this regulation is often ignored by vendors. Class 3B and 4 lasers can cause blindness, sometimes on very short exposures. Do not use them in classroom/teaching lab applications without professional evaluation.

TIPS

- Check all “laser pointers” for power. Contact the Laser Safety Advocate for free assistance and measurement.
- **Use only Class 2 laser pointers for presentation in Homewood classrooms.** (This is a Homewood Schools policy.) Class 3R lasers, pointer or otherwise, should only be used for demonstrations or teaching labs after consulting the Laser Safety Advocate.
- Never point a laser pointer at a person. If the laser pointer is far enough out of specification, it could be powerful enough to cause eye damage.
- Never use a laser pointer outdoors or point it into the sky. Homewood is very close to a heliport (Union Memorial Hospital), and legal power limit for uncontrolled outdoor use is extremely low. **People have been jailed for illuminating aircraft with standard laser pointers.**

QUESTIONS?

Contact Niel Leon, Laser Safety Advocate (nleon1@jhu.edu or x6-6752) for advice about laser pointers, particularly if you wish to use a Class IIIA/3R/3B or 4 laser in a classroom/teaching application.

Contact Dr. Dan Kuespert, Laboratory Safety Advocate, at 410-516-5525 or dkuespert@jhu.edu for more information about this JHU Safety Note.
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