

Re: questions about light

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- *From:* Sam Goldwasser <sam@xxxxxxxxxxxxxxxxxxxxxx>
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"laura" <laura.brandusan@xxxxxxxxxx> writes:

Hi all,

I face new problems now:

New homework? :)

1. I've did read about photodiodes and it seems that the response time is about 100 ns. Can I measure the fluctuations in the intensity of a light ray which occurs at smaller intervals of time (pico seconds for instance)?

You can get photodiodes with a response to 100 GHz or more. That's 10 ps. A second mortgage may be required to pay for one though. :)

2. Regarding the wave-length. Suppose that I have n rays which have different wave-lengths (w_1, w_2, \dots, w_n). I want to change their wave-lengths to $(w_1+x, w_2+x, \dots, w_n+x)$, where x is a fixed quantity that I know. How can I do that?

How large is x?

--- sam | Sci.Electronics.Repair FAQ: <http://www.repairfaq.org/>
Repair | Main Table of Contents: <http://www.repairfaq.org/REPAIR/>
+Lasers | Sam's Laser FAQ: <http://www.repairfaq.org/sam/lasersam.htm>
| Mirror Sites: http://www.repairfaq.org/REPAIR/F_mirror.html

Important: Anything sent to the email address in the message header above is ignored unless my full name AND either lasers or electronics is included in the subject line. Or, you can contact me via the Feedback Form in the FAQs.

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