

Re: Flash Pump Options

Source: <http://sci.tech-archive.net/Archive/sci.optics/2007-05/msg00175.html>

- *From:* Sam Goldwasser <sam@xxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* 25 May 2007 09:43:57 -0400
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Will <mysweeps123@xxxxxxxxxxxx> writes:

Hi again,

I took a chance and purchased a laser head on . The item text read: "..., Model: -TM4, Laser head. It comes with the Flash lamp and a Holmium rod already installed, which are in good condition. The Pump Chamber holds a 4 by 89 Laser Rod. When installed on the laser head, the pump chamber was capable of producing 15 Watts of power, when pulsed at 5 or 2.2 Joules of energy. To produce that Power/Energy, the Flashlamp was pulsed using a 1.5 Kilovolt, High Voltage Power Supply with a pulse width of 200:s". I don't really have any delusions of running this anywhere near the described output but would like to get something 'noteworthy' out of it. I tried to locate tech. specs. but haven't turned anything up so far and am trying to find a 'modest' method to pump it without turning up a 1.5 power supply. Does anyone have any idea if the installed tube can be driven with anything less than the described power supply or should I carefully remove it and look for an alternative? In the past and for different projects I have taken multiple disposable cameras and used the trigger from one camera to trigger 4 flashes as the same time, or what appeared to be at the same time. Is there any value in heading back down that road with this rod?

You should be able to determine the approximate range of operation of the lamp based on its dimensions. It's best to use that lamp since the reflector will be optimal for it, rather than cobbling together a bunch of little disposable flashes!

See the Laser FAQ, starting with chapter on solid state lasers, for more info and links.

--- 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

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