

Portable Laser Dazzle Device  
M.V. Silnikov, A.I. Mikhailin  
NPO Special Materials, St. Petersburg, Russia

Keywords: Laser, non-lethal weapon, portable, dazzle device

This article presents scientific and technological footing of developing portable laser dazzle devices and experimental technical characteristics data achieved. Areas of their application have been determined, medico-biologic and legal aspects of their application in law-enforcement operations have been concerned.

The authors have proposed an original method of developing laser dazzle devices. The method is based on the fact that under the action of a bright light a human eye blinks reflexively within 0,2 second. Thus, to achieve a temporary blindness, it is not necessary to subject a human eye to a longtime light action. The laser dazzle device creates a narrow beam with width/length as 1/5. The length of the beam is about a meter at 20-m distance. The device looks like an ordinary pocket flashlight. Sliding a horizontal beam of light over a human body, one directs the beam into a suspicious person's eyes and blinds him with a short-term action. The small area of the stoplight allows applying 10-30 mw lasers.