

Title: Jet Protector JPX – OC launcher

Author: Juerg Thomann, CEO Piexon AG

The objective to develop the Jet Protector JPX was to substantially improve the performance of traditional pepper spray or tear gas canisters. In particular, the new product should have an extended range and a better efficacy by incapacitating a target instantaneously and it should overcome the disadvantageous blow-back effects of a spray in a windy environment and avoid cross-contamination in closed areas. The solution was found by delivering the irritant agent solved in a heavy alcohol based liquid and charged with a high level of ballistic energy generated through a pyrotechnic power device. Projected through a nozzle the charged liquid jet reaches a velocity at V0 of 120m/s and delivers the liquid irritant up to a distance of 7 meters without being significantly diverted by side wind. The carrier liquid including the solved irritant agent is stored in an aluminium container which has a rupture disc at his front end. The rear end of the container is closed with a moveable piston and a power device which acts upon said piston. The mechanically or electrically ignited power device generates a high pressure level to push the piston towards the front end of the container thereby forcing the stored liquid to break the rupture disc and to be pressed through a nozzle delivering an aligned jet.

The Jet Protector JPX is a handheld pistol shaped OC launcher. The JPX system comprises (1) a re-useable receiver incorporating a double-action trigger mechanism which operates two strikers alternately and (2) a disposable magazine that holds two of the aforementioned containers. The two-shot magazine is attached on a mounting rail on the JPX receiver. The device has the seize of the X26 Taser, is light-weight and made from reinforced polymer plastic. As an option it provides an intergrated 650 nm laser sight for target acquisition.