

Pulsonic Laser Artifact Outline (1 Page)

A Pulsonic Laser is based in part on the idea of High-Intensity Focused Ultrasound. Sound is primarily basis for the weapon's functionality, as when the trigger or activator for the weapon is used the first step of the process sees the production of extremely high-energy sound. A phased ultrasonic array emits a pulse which passes through both an amplification and a focusing crystal, the first transforming the sound energy into thermal energy while the later projects it outward. The result is a laser-like blast of sudden, intense heat initially produced from a sonic pulse, thus the name pulsonic laser. The resulting intense heat that passes through the crystals also carried with it some light energy, coloured based on the colour of the crystal itself.

The initial ultrasound is primarily shelled in mineral wool, the exception being the amplification crystal. The crystal is an acoustic meta-material, artificially created rather than a natural formation. The focusing crystal is itself also artificially made and designed with some similar properties to sapphire, or aluminum oxide. Due to the delicate nature of the device's contents the weapon's casing is ideally something at least as durable as titanium. The weapon's primary power source for the more portable versions is an ejectable power pack, similar to a bullet magazine, which uses artificial organic gel to store energy. Due to the weapon's nature a larger pulsonic laser would have the potential to be more intense as it would be capable of housing a bigger power source and thus, with correct design, output more heat converted from sound. A constant source of power could also allow for a steady beam rather than relying on a quick pulse of energy.