

LACRAMMS countermeasure system

LACRAMMS or laser-system countermeasure system for rockets, artillery, mortar, missiles and shells are just that: a system using specially timed high intensity lasers to estimate based on common characteristics the thinnest point of a target after a search-sweep to determine its shape – and then to superheat it: buckling the hull to knock it off trajectory of the round or igniting its contents to explode the round. The LACRAMMS system has a number of other useful cathode laser based functions, such as a range-finder and active sensor system when paired with other equipment.

Importantly, LACRAMMS requires a rough idea of where its target is, similar to the way a battleship CIWS system relies on a long-ranged radar to determine where to apply its own sensors – with the detection equipment on LACRAMMS itself having a low aperture and field of vision due to its required precision.

A given unit might employ a number of spherical LACRAMMS domes or windows beneath its hull to protect different sides, some the size of marbles – others the size of basket-balls depending on their rated output. LACRAMMS itself is intended as a cheaper stealthier low-radiance low-power low-observability low-cost alternative to active shielding systems or to supplement them.

- The LACRAMMS went on sale in YE36 to the public and retails for 1200 KS per unit.

About

The LACRAMMS was originally designed as a means to limit the effectiveness of classic [BVR](#) engagements. Properly used, it is often a cheaper alternative to using a shield generator (especially when combined with thick plating or manoeuvrability) or a backup in the event shields fail in more fully featured units.

Hardware

The unit is a compound high strength programmable cathode and a spherical lens normally about the size of an eyeball which can redirect cathode laser beam and is matched with high-resolution conventional optics and a laser-receiver which receives the return bounced laser-wave, similar to the way radar works: Changes in the beam after striking the target are used to determine its characteristics or compared against one another similar to an optical scanner to build a more comprehensive idea of what the target is.

It acts like a turret beneath a window in a hull, feeding from information fed by sensors to issue its response, exploding incoming rockets, artillery, mortar, missiles and shells.

Other Functions

The LACRAMMS by default searches for munitions to detonate but is programmable and can be overridden to provide a number of useful options ideal for armoured platforms:

- **Illumination** - By pushing the emission units into the visible spectrum and widening the beam, a variable-strength search-light can be created.
- **Dazzler** - by having the beams aim directly at a given targets optical sensors, they can be seared or blinded.
- **Outing** - Used in specific ranges, lenses and sensor equipment 'light up' like shotgun pellets on an X-ray, making snipers extremely easy to detect.
- **Ignition** - By spreading the beam over a wider area, it can be used to ignite foliage. Ideal for flushing out personnel or forming a cover of smoke.
- **Anti-personnel** - To temporarily blind or create a false burning sensation on the skin of soldiers. Good for flushing them out of cover.
- **Optical chaff** - If dirt is kicked up into an area or smoke released, it can be heated or even used to dazzle objects in a wider range, making the 'cloud' blinding to look at as the light diffuses through it.
- **Redirection** - Essentially, taking control of laser marker guided weapons, guiding them back at the source.
- **Spotting** - Spreads the beam extremely wide, as an active optical search system, similar to active radar. While the LACRAMMS has no pickups of its own, if the exit radiance is known, the calculated return can be compared by optical sensors to act as a scanner.
- **IR False positive** - Denser areas of an environment, such as rock or concrete can be heated in specific patterns and shapes, fooling infrared sensors into thinking something is there, which is not.
- **Scoring** - Images can be scored or burned into objects. Works best with metal, concrete and rock. Multiple images can be tiled to create a large image.

OOC

Approved for use in roleplay.

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