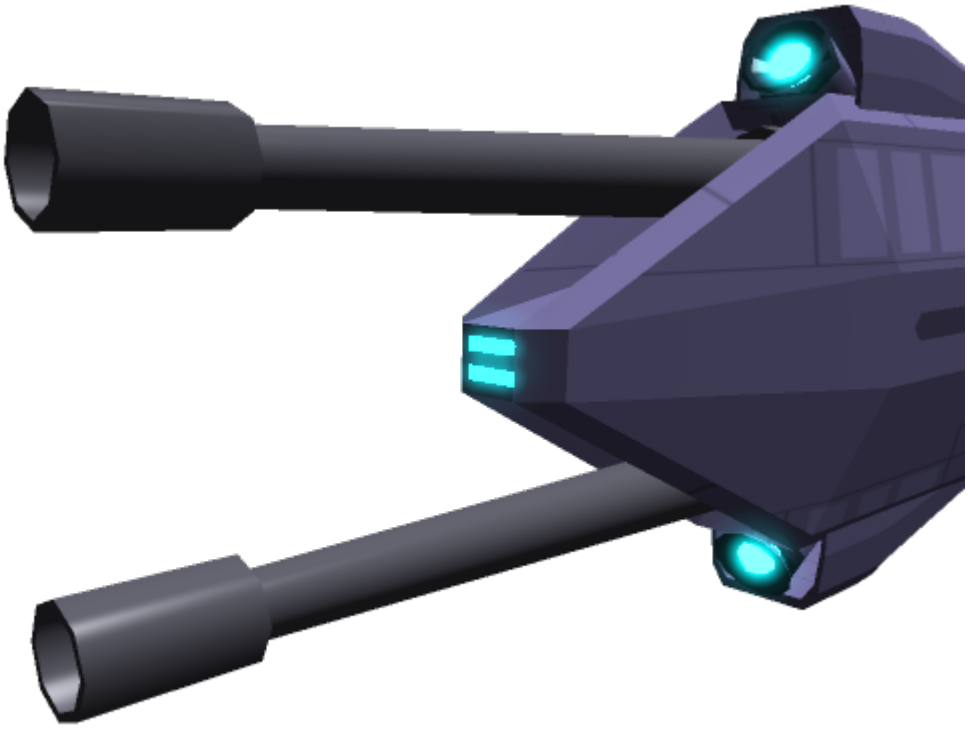
Ke-D7-W3900 Mass Launcher

This weapon was developed in YE 39 for the Star Army of Yamatai. It is notable for being able to launch assorted munitions and being able to adjust the trajectory of the shot after it leaves the barrel via the use of a Scalable Graviton Beam Projector Array. It is also intended to be used on multiple vessels in spite of its nomenclature.



Ke-D7-W3900 Mass Launcher, mounted on a Ke-D7-M3900 Chiaki Pylon Module

About the Ke-D7-W3900 Mass Launcher

In YE 39, Kage Yaichiro looked into upgrades for the Plumeria-class (2D) Medium Gunship and the Chiaki-class (1B) Escort Destroyer which drew from the same parts pool. Though the Fuji-class Expeditionary Gunship was created during this time and intended to replace the Plumeria in the years to come, Yaichiro elected to employ assorted technologies and cost-effective measures to upgrade both vessels at once because of the life they still had left in them. When studying the weapons, however, Yaichiro noted a problem.

The Chiaki's Ke-D7-W3200 Mass Driver Gun was considerably cost-cut over the Plumeria's Ke-S3-W2901 Positron Accelerator Cannons that it was meant to emulate, to the point of being fired at 0.05c. This made the rounds easily outrun at STL speeds in space by virtually any craft under certain conditions. The

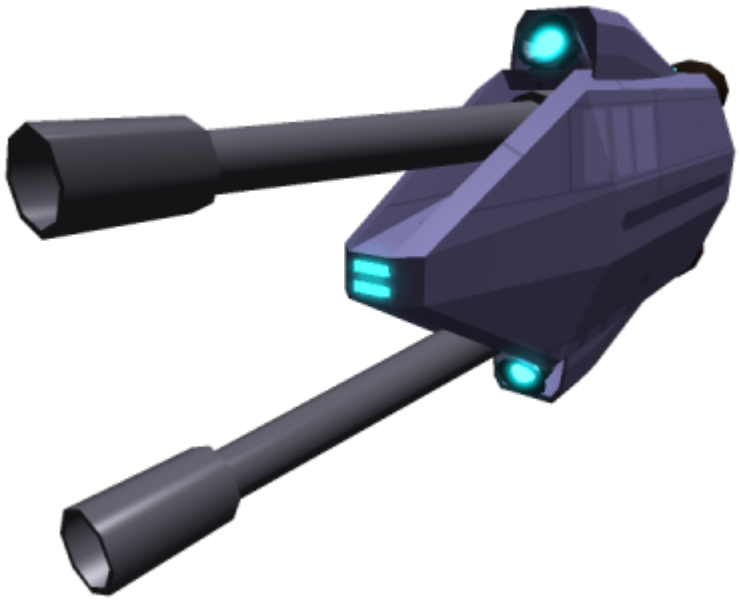
storage of a round that held positrons was also seen as a safety liability. Noting these failings and the fact that the weapon still employed subspace packet encapsulation systems in spite of these cost-cutting measures, Yaichiro chose to simply mass produce a new weapon in a single versatile form that could be used across assorted lines instead of cutting down on features. Even so, cost was still important and he did take various measures to streamline and optimize the decade-old technology. This included developing a Ke-D7-M3900 Chiaki Pylon Module on which to put the weapon and various systems that interacted with it, though the armament could also be installed on a ship's frame in other ways. It is notable that though the weapon and module could have used either a Ke-D7 (Chiaki) *or* a Ke-S3 (Sakura/Plumeria/Fuji) nomenclature, the D7 branding was used to avoid confusion with the newly created Fuji-class' armaments. As such, the new armament was classified as the Ke-D7-W3900 Mass Launcher.

The Mass Launcher is capable of firing the 300mm Mass Launcher Round as well as encapsulated 2000kg masses of positrons or electrons. The 300mm rounds are a direct replacement for the older Mass Driver Gun's armor-piercing rounds. The ability to launch shells and positron ordinance was not new, but the ability to fire electron ordinance to overload a target's power system lent an infrastructure assault capability against enemy power grids. It is expected to notably improve the versatility of the craft overall. The addition of a Scalable Graviton Beam Projector Array also allows the shells or masses fired to have their trajectory adjusted even after leaving the barrels of the weapon by up to 30 degrees up, down, left, right, or any combination thereof that wouldn't strike the vessel firing the weapon; while also providing an additional capability for the vessel to manipulate its environment. It should also be noted that the weapon appears generally in pairs, and the weapons can be discharged independently or fire-linked.

Nomenclature Information

- Designer: Kage Yaichiro
- Manufacturer: Ketsurui Fleet Yards
- Name: Mass Launcher
- Nomenclature: Ke-D7-W3900
- Primary Purpose: Anti-Starship
- Secondary Purpose: Bombardment

Appearance



The appearance of the weapon can vary, but often it is installed on a Ke-D7-M3900 Chiaki Pylon Module. It is also optionally installed on a craft in other ways, such as being hard-mounted as a forward pair of guns or facing rearward to cover the ship's rear. It is even possible to mount the weapon on a turret if desired for a specific application, provided the vessel is large enough to power it. There are always two barrels, however, and a light-blue rectangular light for each barrel. These lights are part of a Scalable Graviton Beam Projector Array that helps redirect the ordinance and also helps the craft tow or push things.

Discharge Information

- Muzzle Flash: Either non-existent or blue-white flash depending on intensity
- Area of Effect: Point of impact and any applicable splash area caused by explosion in case of positron shot
- Effective Range Variable, see Mass Launcher Damage Quick-chart below
- Rate of Fire: 20 rounds per minute for 300mm shell, 16 rounds per minute for Electron/Positron Shot (assuming two barrels)
- Firing Arc: 30 degrees up, down, left, right, or any combination thereof
- Muzzle Velocity: Variable, see Mass Launcher Damage Quick-chart below.
- Capacity: Dependent on ship magazine.

Ammunition

Because of the multi-role nature of the weapon, it fires different types of ordinance with different effects. The assorted types are included below along with their purpose, speed, and range. It should be noted that the speed is variable depending on situation, such as if in atmosphere. This can be used to have an electron round lose cohesion at a set altitude without causing impact damage, if the intent is to assault an enemy's power grid.

Mass Launcher Damage Chart	Purpose	Space Speed	Effective Range
300mm Mass Launcher Round	Tier 10, Light Anti-Starship	0 - 0.75c	up to 2.25 light seconds (0.0045 AU / 674532 km / 419135 miles)
Subspace-encased Electron Shot	Tier 10, Light Anti-Starship, Power Grid Assault	0 - 0.99c	up to just under 3 light seconds (0.0060 AU / 899377 km / 558847 miles)
Subspace-encased Positron Shot	Tier 11, Medium Anti-Starship, Antimatter Explosion	0 - 0.99c	up to just under 3 light seconds (0.0060 AU / 899377 km / 558847 miles)

Because of the nature of the Positron Shot function of the Mass Launcher, it must not be used in atmosphere recklessly. The table below details the strength of the explosion caused by this shell at various distances, not taking into account gamma radiation.

Subspace-encased Positron Shot Explosion Table	
Distance from Detonation	**Effective Purpose**
5 meters	Tier 11, Medium Anti-Starship
7.07 meters	Tier 10, Light Anti-Starship
10 meters	Tier 9, Heavy Anti-Mecha
14.14 meters	Tier 12, Heavy Anti-Starship
20 meters	Tier 8, Medium Anti-Mecha
28.28 meters	Tier 7, Light Anti-Mecha
40 meters	Tier 6, Heavy Anti-Armor
56.56 meters	Tier 5, Medium Anti-Armor
80 meters	Tier 4, Light Anti-Armor
113.14 meters	Tier 3, Heavy Anti-Personnel
160 meters	Tier 2, Medium Anti-Personnel
226.27 meters	Tier 1, Light Anti-Personnel
320 meters	Tier 0, Anti-Individual

OOC Notes

Toshiro created this article on 2017/09/23 21:49. FM approved by Wes on 2017/11/11 and approved by Fred on 2017/11/21, here: https://stararmy.com/roleplay-forum/index.php?threads/ke-d7-m3900-chiaki-pylon-module-subsystems.60276/

From:
https://wiki.stararmy.com/ - **STAR ARMY**

Permanent link:
https://wiki.stararmy.com/doku.php?id=stararmy:weapons:ke-d7-w3900_mass_launcher

Last update: **2023/12/21 01:03**