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So-C1-2a Vajra-class Cruiser

The Vajra-class Cruiser is a dedicated warship designed to lead the spearhead in flotillas of frigate-class ships such as the Vayu-class, or as the primary ship of heavier strike forces. It is optimized for frontal assaults with long to medium ranged beam and laser batteries, and carries a larger complement of mecha compared to smaller vessels.

About the Ship

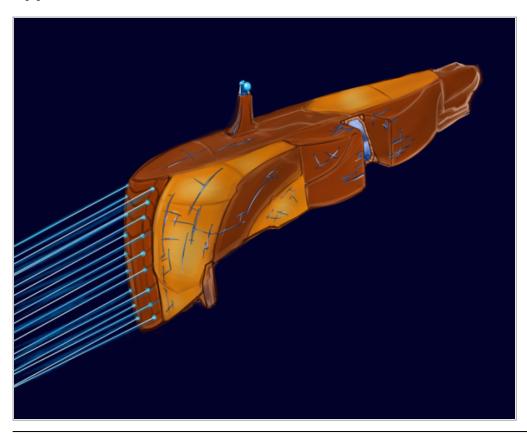
Key Features

- Forward facing array of 18 CEHB Lasers.
- Powerful conformal and directional shields.
- Decent complement of VANDR.

Mission Specialization

- Medium anti-capital ship.
- Fast attack/assault.

Appearance



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History and Background

Since the Third Outer System conflict, High Command in the Astral Vanguard recognized the need for cruiser-class vessels to combat enemy starships and transport VANDR in force. Although the Vayu-class was a capable frontline scout with the ability to defend itself from other frigates, it lacked the firepower to defeat anything substantially larger than itself. This became painfully obvious towards the end of the war, when reel forces move away from attacking from land-based emplacements and began relying on modified cargo liners retrofitted with large numbers of frames and missiles.

Plans in the early 930's had Solan design a new cruiser-class vessel for the Astral Vanguard from scratch, using an entirely new and revolutionary spaceframe fitted with only the latest and most expensive technologies. The 'Heaven's Fall' incident in AR 935 had those plans scrapped in favor of a revival of the old Derzelas-class Cruiser design, a vessel that had served as a powerhouse of the space forces for a century and a half. Bristling with state of the art laser weapons and high-impact conventional missile warheads, the Derzelas the definitive heavy cruiser of its era, and saw use from the 720's up until the Second Outer System Conflict 720's, when it was determined that a vessel with VANDR capacity would better serve the Astral Vanguard's interests. Despite being slated for decomission, there was no formal attempt made at scuttling the vessels and the majority remained in service until AR 858.

Despite using an aeroframe that is virtually identical to that of the Derzelas, the Vajra was entirely rebuilt by Solanii engineers, using modern weapon systems. With the design finished in the year of AR 936, new Vajra-class began entering production to fill the immediate needs of the Vanguard, which had begun a new campaign against returning enemies.

Statistics and Performance

General

Class: So-C1-2a Vajra-class Cruiser Type: General Purpose Cruiser Designers: Solan Starworks Manufacturer: Solan Starworks Production: Mass Production Fielded by: Astral Vanguard

Passengers

Total Crew: 1872

Command: 33 Starship Operations: 201 Transport Operations: 32

Medical: 80 Maintenance: 620 Support: 310 Civilians: 44

Security: 388 Frame Runners: 164

Maximum Capacity: An additional 670 passengers may be taken aboard, but life support systems will be strained and require additional resources.

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Dimensions

Length: 711 meters (2332.6 feet) Width: 128 meters (419.9 feet) Height: 350 meters (1148.2 feet)

Decks: 49 (2.1 meters each)

Propulsion and Range

FoMASC Drive: .1 ly/m (52 594.87c) MASC Drive: 2000c Sublight Engines: .25c Range: Up to 8 months, without refueling or employing BHS to replenish resources Lifespan: The organoid components of the ship can last up to a century. Refit Cycle: Twice a year.

Damage Capacity

See Damage Rating (Version 3) for an explanation of the damage system.

Hull: Tier 13Shields: Tier 13

Inside the Ship

Decks	Sub-Compartments	
Deck 1	ECM Array Access, Emergency Shields	
Decks 2-9	Bridge, CIC, Captain's Quarters, Storage	
Decks 10-20	Officer Quarters, Crew Quarters, Communal Bathrooms, Secondary Armory	
Decks 21-28	Crew Quarters, Crew Shrine, Mess Hall, Rec Room	
Decks 29-33	Medical Center, Gymnasium, Simulation Bay, Main Armory, Storage	
Decks 34-37	VANDR Bays, Engineering	
Decks 38-42	Fabrication Bay, Storage, Engineering	
Decks 43-46	Storage	
Decks 47-48	Docking Bay, Emergency Shields	

Passageways

Living Space Hallways

Standard Movement Assist Hallways

Facility Hallways

Standard Movement Assist Hallways

Communal Bathrooms

Standard Communal Bathrooms

Crew Shrine

Standard Crew Shrine

Mess Halls

Standard Mess Hall

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Wardroom

Standard Astral Vanguard Wardroom

Command

Bridge

Cruiser-type Bridge

Combat Intelligence Center

Standard CIC Room

Support Facilities

Medical Center

Cruiser-type Medical Bay

Engineering Facilities

Engineering

The Engineering section of the Vajra does not fit the typical norm of ship design philosophy. Instead it acts as a rather straight forward 'hub' filled with lifts, and hallways between the various important ship systems. The routes are direct, and well marked for the mechanists to easily reach their destinations with the upmost possible alacrity. Along the way are various panels, and displays to assist the mechanists in their repair and upkeep of the ship's systems. The lifts however are nothing more then simple hand lifts which allow quick exits, and boarding. Overall, this design philosophy is designed to increase rapid response time by getting on the scene quickly, and efficiently.

Chief Mechanist's Station

This is where the Chief Mechanist sends their subordinates off on their daily duties, or during combat operations. It is a simple, but well-equipped station, allowing the Chief Mechanist to remain in contact with those they send out, and keep an eye on the ship's systems. Entry Port Access upon the station is available if necessary, allowing the Chief to increase their response times to the various nuances of their jobs, during combat situations and above all, keeping their mechanist subordinates organized and on task.

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Fabrication Bay The Fabrication Bay is the manufacturing area of the Vajra-class. It is the first vessel to feature mobile construction systems, and as such has a more limited capacity for assembly and construction. Its main purpose is to assemble stored components into replaced VANDR units, although it is also able to manufacture a limited number of replacements for the ship's inorganic components. Construction times vary, although is generally takes at least 30 hours of operating one of the bay's six workshops to replace a single VANDR of any type.

Combat Facilities

Armory

Cruiser-type Armory

Gymnasium

Simulation Bay

Standard Simulation Bay

(2): VANDR Bay

Cruiser-type VANDR Bay

Ship Systems

Armored Hull and Hull Integrated Systems

Hull and Chassis

Aerudirn Armor Colonies

Organoid-type Substructure

Life Support Systems

The Vajra's life support functions are tied in directly with the Organoid's natural bioelectrics and life functions, meaning that should power failure occur, these systems will continue to function until the components expire.

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So-C1-V0722 Organoid Internal Life Support Life support systems are enabled via a combination of potent thermo/photosynthetic reprocessing of air, allowing the organoid to feed itself while producing breathable gasses for the crew. This is done by drawing light from the nearest star, or absorbing heat and radiation from the various compartments of the ship, including the reactor and inhabited regions of the ship. It may also deploy small antibody-like drones to neutralize vermin and naturally search out and sequester harmful substances and antigens inside of the ship's environment.

So-F1-V1722 Gravitic Boundary System

So-F1-R0815 KORD System The KORD (Kinetic Force Diffuser) is an essential system that protects the frame runner from the tremendous G-Forces and shocks the Erla VANDR experiences during both before and after FTL travel and during highly perilous combat maneuvers. It also protects from weapons that kill through kinetic force, in a manner similar to maces against armored troops in ancient times.

Computers and Electronics

Starship Control ANIOS

Starship Control ANIOS are advanced assist NI that are designed to interact with the operator of their respective starship, greatly improving the general effectiveness of maneuvers and allowing them to be aware and compensate for effects an unassisted Iromakuanhe would be unable to. As starships have astronomical numbers of subsystems and operating system subroutines, the construct is essential in the effective operation of most Astral Vanguard vessels without the implementation of larger numbers of crewmen.

Standard Capabilities

- Deciphering and ordering gathered and received data.
- Voice interface with selectable persona.
- Maneuvering assistance and coordination.
- Weapons system assistance and coordination.
- Semi-automated subsystem management.

Limitations

- Requires connection to pilot for all non-essential functions.
- Subservient to OMNI systems.
- Sub-sapient intelligence.
- Cannot automate all functions.

Fleet Intelligence OMNI Dock

The Vajra is meant to be a command vessel in light and medium battlegroups composed of frigates and

cruiser-class vessels. Because of this, it features a dock that allows it to house an OMNI-type intelligence in addition to its SCANIOS.

Sensors

So-C1-E0936 Cruiser Sensors Package

Includes:

- Vector Wave Sensors
- Subspace Mass Sensors
- LADAR
- RADAR
- MASC Particle Scanner
- Thermal Sensors

Communications

So-C1-E1936 Cruiser Communications Package

Includes:

- Laser
- Radio
- MASC-Assisted Laser
- MASC-Assisted Radio

Internal:

Fiber Optic

Electronic Warfare and Stealth

So-C1-E2936 Combined Deception System The Combined Deception System, or CDS, is a combined antielectronic warfare/observation system that creates multiple false positives in data and can interlace transmitted data with malware types that might be dangerous to a conventional computer. It does not have a specific range, and is instead limited by the range it can transmit, and be intercepted by unfriendly sources.

So-C1-E3936 Listening Device The Listening Device is a system employed to passively intercept and sample data being transmitted through unsecured methods. It is also a critical component in many important electronic warfare devices, and allows Astral Vanguard starships and vehicles to track the communications of hostile forces. As the unit approaches the source of the transmissions, it becomes increasingly easier to track, until a positive match can be made at a certain threshold.

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Can Intercept:

- Radio
- Microwave
- Subspace (requires Vector Wave Sensors)

Specifications			
Medium	Maximum Interception/Detection Range	Tracking Range	
Radio	1 200 000 KM	30 000 KM	
Microwave	600 000 KM	15 000 KM	
Subspace	15 000 KM of Receiver or Sender	5000 KM	

So-M1-E0815 Cruiser-type Immersion Control Pod

Due to their natural interface abilities, designing a responsive and intuitive control system for an Iromakuanhe was relatively easy. This system, known as the Immersion Control Pod, allows easy and natural control of most vehicles, including large units such as powered frames and starships. The Control Pod is the seat component of the cockpit, and is comprised of a rounded chair in which the pilot is most comfortable in a reclining position, and multiple entry port plugs. The chair itself is lined in a soft, organic material lined in a highly flexible rubbery skin that is smooth to the touch and has a light golden reflective sheen, surrounded with an open egg-like enclosure on all sides to prevent harm. The chair will naturally conform to the user's body, and can even form cushioned indentations for the tips of horns. In normal conditions, the system feeds the pilot a small amount of Prajna through the entry port ducts to keep them in working condition for long shifts. In case of emergency, the enclosures can be closed and filled with Prajna to keep the pilot alive for an extended amount of time.

Use

To connect with the machine, one must connect the plugs to their entry ports, which can be done manually, or automatically by the organoid. Unlike the use of a VANDR-which suspends and supplant's the user's senses, it instead places them inside of a dynamic virtual data processing room that spans the entire, network to the extent their ship allows. it is usually customized in some degree by the commanding officer of the vessel, reflecting his or her personal tastes, but tends to have a very abstract and minimalist feel. This type of networking allows all connected crewmen to communicate and coordinate at all times

Note

Transfer of pain cannot occur because organoids lack developed tactile senses in most cases, however, there have been uncomfortable sensations reported by pilots when their units lost limbs or took heavy damage, similar to a sort of strong pressure. On very rare occasions, the sensory redirection effect caused by the control module lasts after disconnection from the craft, which will require immediate medical attention.

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Solan Emergency Systems

Includes:

- Interlocked Shutter Doors
- Aerudirn Autosealing
- Breach Shields
- Firefighting

Propulsion

So-C1-P0934 Cruiser-type MASC Drive

So-C1-P0935 Cruiser-type FoMASC Drive

Shield Systems

So-C1-S0815 Cruiser Vector Field Suite The Vector Field System is a combined package shield array that relies on a combination of various advanced space comrpession technologies for multi-purpose defenses idea for the modern battlefield. They can be deployed as a conformal shell, known as the vector Shroud or heavy shields known as Vector Barriers. Vector Shrouds are sophisticated vector field systems that envelop the craft in a conformal shell of compressed space, allowing one to become relatively invisible to electromagnetic and particle based sensors, and shrinking the ship's profile to other systems. As a shield, it is reliable and particularly effective versus energy weapons.

Location: Internal Shield Structural Points: SP 40 Threshold 4

More powerful than the Vector Shroud, Vector Barriers are large, oval 'hard' space compression shields that are effective against all weapon types, especially directed energy weapons. The Vajra's array allows it to project one diagonal barrier around its front section.

So-C1-S2815 Cruiser Repulsor Burst Array Repulsor systems work by creating a temporary vector field, which at regular intervals can be overcharged and super-expanded, which generates an omni-directional concussive blast that is fully capable of causing tractor beams be dispersed and unwanted hangers to disengage, allowing one to temporarily shrug off the effects of such devices. It is commonly used to force boarding craft away from hulls, knock away incoming projectiles and can potentially kill or disable poorly protected infantry with pure kinetic force.

Purpose: Defensive Countermeasure Secondary: Deterrent Damage: MDR 2, Kills through Kinetic Force Range: 20m radius Rate of Fire: One pulse every 6 seconds

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Weapons Systems

Main Weapons

(18): So-C1-W0936 "Symphony of Light" Synchronized CEHB Laser Array

CEHB (Compression-Enhanced Heavy Beam) Laser

Location: Nose Purpose: Anti-Vehicle/Anti-Starship Secondary: Navigational Protection Damage: Tier 11

Range: 20 KM in Atmosphere, 600 000 KM in Space Rate of Fire: Beam can be maintained for up to 1 minute. Cooldown is 1/8 of projection time. Muzzle Velocity: 1c

(24): So-C1-W1936 "Star Hydra" PWAC-V Missile Batteries

PWAC (Particle Wave Cruise) Missile

Location: Dorsal (12) and Ventral Arrays (12) Purpose: Anti-Starship Secondary: Anti-Shield Salvo Size: 1 Damage: Tier 14, Electrical Damage

Range: 3 Light-Seconds Rate of Fire: 1 salvo every 15 Seconds Area of Effect: 15 Meters Muzzle Velocity: .25c Ammunition 8 Missiles Ammo Replenish: Can refill capacity in hospitable conditions in about 2 hours outside of combat. Any further attempts to refill will require an external source of biomass.

Point Defense

(104): So-C1-W0934 "Storm Wave" HEMB Laser Array

HEMB (Heavy Enhanced Multi-Beam) Laser

Location: Port, Starboard, Dorsal and Ventral Purpose: Point Defense Weapon Secondary: Anti-Vehicle, Navigational Protection Damage: Tier 10

Range: 10 KM in Atmosphere, 300 000 KM in Space Rate of Fire: Can maintain up to 36 beams simultaneously. Muzzle Velocity: 1c

Vehicle Complement

Shuttles

• (10): So-T1-1a Waka class Shuttle

Mecha and Powered Armor

VANDR

168 of the following, plus a number in storage.

- So-M2-1A Raevr VANDR
- So-M1-1A Erla VANDR
- Erla Vandr 2

VAHIN

• (410): So-KM1-1A Graiv VAHIN

Drones

- (60): So-O1 Series MACD (Mobile Arsenal Canister Drone)
- (80): So-O2-1A Haidan VAADW

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