

OI-M1-1B Advanced Ashigaru "Asura"

The OI-M1-1b Asura is the fourth mechanical design by [Origin Industries](#) in YE 31, designed as a full mass production version of the earlier Ashigaru test frame.

About the Asura

The Asura is the upgraded, completed form of the [OI-M1-1A Ashigaru](#), with enhanced combat capabilities, better armor, and a more powerful shielding system. The basic skeleton and armor is the same as the Ashigaru's, but new [Boreanium Alloy](#) and [Endurium](#) alloy plating has been added to the outer armor, increasing the frame's survivability when under heavy fire. The frame uses the new [Silhouette/Mirror Neural Operating Construct](#) system, increasing the Asura's responsiveness to the point where it leaves its predecessor in the dust.

The Asura's armament is massively superior to the Ashigaru's. While it keeps the same pulse lasers and autocannon, the Asura has taken out the Phased Array Laser and the missile launchers in the legs. Two new [Gamma Ray Vulcans](#) in the head replace the old phased array laser, and can be used for Anti-Missile work or as a deterrent to unarmored infantry. The two [Mini Missile Pods](#) in the shoulders, and the two [Light Railguns](#) connected to the waist give the Asura long range firepower to destroy incoming threats before they get within range to use their weaponry. A small Nerimium Blade connected to the right forearm allows the Asura to perform surgical melee strikes, without resorting to using its fists.

The Asura keeps all the propulsion systems of the Ashigaru, but it uses a new Origin made [Inline Aether to Plasma Drive](#) to provide main power and propulsion, increasing the frame's maximum speed and power output, though not giving it flight capability. Two thermonuclear hover jets, one in each leg, allows the Asura to hover just above the ground to move at high speeds in a terrestrial environment, at speeds up to one hundred and eighty kilometers an hour.

Statistical Information

- Government: Various Buyers, [Origin Industries](#)
- Organization: [Origin Industries](#)
- Type: General Production Powered Frame
- Class: OI-M1-1b Asura
- Designer: Origin Armor Works
- Manufacturer: [Origin Industries](#)
- Production: 60 produced initially for Origin Industries and for promotional handouts
- **Cost:** 50,000 KS

Appearance



- Width: 5.8 Meters
- Height: 8.7 Meters
- **Mass:** 18.5 Tonnes

Speeds

- **Ground speed(Running):** 45 KM/h
- **Ground Speed(SMS):** 90 KM/h
- **Ground Speed(Hover):** 130 KM/h (x2 for five minutes using afterburner)
- **Zero Atmosphere:** .150c (x2 for five minutes using afterburner)
- Crew: The Asura has a crew of one
- Maximum Capacity: The Life support systems are sufficient to keep two humanoid life forms inside the cockpit .
- Range: Intercontinental
- **Lifespan:** 10 Years

Damage Capacity

See [Damage Rating \(Version 3\)](#) for an explanation of the damage system.

- Hull: 20
- Shields: 20 (Threshold 2)

Interior Descriptions

Cockpit

The Asura's cockpit is a near perfect spheroid, with the walls covered with a 360 degree panoramic monitor, linked to the main camera and other backup optical sensors. The part of the monitor directly in front of the pilot is lined with semi-transparent status displays, allowing the pilot to focus on his surroundings without having to look away from the monitor. The Pilot's seat is form fitting, lined with foams and gels designed to absorb impacts, with a five-point harness going across the chest to keep the pilot from jerking around. The chair's headrest, and the orbs at the end of the hand-rests serve as link ups to the silhouette system. There is a small storage space underneath the chair for storing weapons, ammo, or clothing.

Weapons Systems

Optional Weapons

The Asura can use a number of optional hand-held weapons. The average loadout is a [OI-M1-W3202 Graser Rifle](#) as the primary handheld weapon, dual [Chain Straights](#), four [Plasma Pistols](#) as backup weaponry, and a [Targa Shield](#). [Powered Frame Accessories](#)

Secondary Weapons

Reinforced Hand-To-Hand

The Asura's physical strength, like the Ashigaru's and the Kirin's, is almost unmatched in the realm of modern armor, mostly due to the leanings of its design team. The Frame is surprisingly powerful and agile for its size, giving it the edge in melee combat. Furthermore, the Asura's armor has been reinforced in key points such as the knuckles, elbows, shoulders, knees, and shins, to allow it to do that much more damage in a melee.

(1)Nerimium Forearm Blade

The Nerimium Forearm Blade on the Asura is a close in weapon system, designed to allow the Asura to have a degree of close in melee weaponry without relying on it carrying anything. The [Nerimium](#) blade is always in place, jutting out from the Asura's right forearm.

Purpose: Anti-Armor **Location:** Right Forearm **Damage:** Tier 4, Light Anti-Armor Range: Melee

(1) Single Barrel Autocannon

[Oi-M1-W3103 Single Barrel Autocannon](#)

Purpose: Anti-Armor, Anti-Vehicle **Location:** Left Forearm **Damage:** Tier 5, Medium Anti-Armor Range: 500 meters in atmosphere, Theoretically unlimited in vacuum Rate of Fire: 150 RPM Muzzle Velocity: Mach 1.2 Payload 200 round drum magazine

(2) Gamma Ray Vulcan

[OI-M1-W3110 Gamma Ray Vulcan](#)

Purpose: Anti-Personnel, Anti-Drone **Location:** Left and right sides of the head **Damage:** Tier 3, Heavy Anti-Personnel Range: 600m in Atmosphere, 200,000 KM in space Rate of Fire:500 rpm Muzzle Velocity: 1c Muzzle Flash: Green Flash of light

(2) Light Rail gun

[OI-M1-W3112 Light Railgun](#)

Purpose: Anti-Armor **Location:** Waist **Damage:** Tier 7, Light Anti-Mecha Range: 100 km in Atmosphere, Theoretically infinite in space Rate of Fire:20 Rounds a Minute Muzzle Velocity: .74c

(2) Mini-Missile Pods

[Origin Mini-missile Pod](#)

Purpose: Various **Location:** Shoulders **Damage:**Dependent on Munitions Range: 50 Km Atmosphere, 250,000 kilometers in space. Rate of Fire: computer-controlled, up to 100 RPS **Speed:** .5c Payload100 rounds.

Dual Ultraviolet Pulse Laser

[OI-M1-W3104 Ultraviolet Pulse Laser](#)

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* **Purpose:** Anti-Armor
* **Location:** Left and Right upper Torso
* **Damage:** Tier 5, Medium Anti-Armor
* Range: 200 meters in atmosphere,100,000 KM in space
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- * Rate of Fire: Two pulses a second
- * Muzzle Velocity: 1c
- * Muzzle Flash: The Ultraviolet pulse laser's discharge is a short, purplish beam.

Systems Descriptions

Hull and Hull Integrated Systems

Hull and Chassis

The Asura is heavily defended, with a resilient ADNR-Durandium alloy outer armor with Boreanium and Endurium plating, and a sturdy Nerimium internal Skeleton. Though heavy in comparison to powered armor, the Asura's IAPD allows it to reach speeds comparable with modern Powered armors.

ADNR reinforced Durandium Alloy Outer Armor with electromagnetic field&heat dissipating coating The Asura's outer armor is composed of ADNR impregnated Durandium, layered in plates over the frame's skeleton. The Armor is neither heavy nor light, but offers superb protection. The outer armor is electrically charged, generating a tight, form fitting electromagnetic field, separate from the shielding system. This electromagnetic field isn't powerful enough to completely deflect incoming attacks, but it does weaken kinetic impacts and damage from Particle Plasma and Laser weapons, up until the point where the charge wears off. The armor also has a layer of heat-dissipating paint, which ablates off when exposed to high-temperatures, leaving the armor under it unharmed. **Armor Type:** Medium **Structural Points:** SP 5

Boreanium Alloy and Endurium plating The Asura has added defensive plates of Endurium and Boreanium, two new alloys designed by Origin Industries, plated over the cockpit, lower body, shoulders, and knees; the Boreanium is layered on top of the Endurium. These plates help to increase the Frame's durability, giving it military grade defense. Due to the special properties of Boreanium, the Asura leaves behind, when expelling hit from its surface, misty 'afterimages' composed of ablated boreanium. **Armor Type:** Heavy **Structural Points:** SP 5

Nerimium Internal Skeleton The frame's internal skeleton is constructed from Nerimium for a sturdy build. The skeleton's joints are flexible enough to mimic human movement, a magnetic coating applied to the joints to decrease friction; a few changes have been made to it's structure in order to compensate for size. Armor, electronics, and other systems are mounted directly to the skeleton, with plasma conduits running along it. The cockpit, IAPD, nuclear fusion reactor, and main computer are located inside a protective 'ribcage'. The Frame moves it's limbs with numerous nano-muscle clusters, each one enhanced by hydraulics and electric motors. The Asura's skeleton is flexible enough to allow it to be much more maneuverable in combat than its size would indicate. **Armor Type:** Light **Structural Points:** SP 10

Sub Arms (4) Located in the shoulders(2) and skirt armor(2) of the frame, the Asura has four secondary arms. The four sub arms are lightweight and unarmored, and are little more than manipulators and actuators with stabilization gear to keep the arm steady when firing, meant to allow the Asura to use its

entire handheld armament at once. The Sub Arms have a full range of motion, and are sturdy enough to be used in melee combat.

Life Support

The Asura has a standard life support system, with a pressurized cockpit, oxygen scrubbers, and a temperature-humidity regulation system. The Asura also has an inertia control system to keep the g-forces on its crew to a minimum.

Binders

The Asura has three Fuel Binders, with the large one on its lower back, and the smaller ones connected to the upper back. The Fuel Binders have a dual usage, both acting as extra limbs to assist in AMBAC movement, and as fuel-storage. In the role of extra-limbs to assist in AMBAC, the Fuel Binders are connected to the Asura by highly flexible joints, which allow the Binders a 90 degree range of movement. In the fuel storage role, the Binders each contain an hour's worth of Deuterium-Tritium liquid fuel, with fuel lines leading to the Fusion Reactor. The reason the Binders also serve as fuel-tanks is to increase their mass, which assists in AMBAC movement. The Fuel-Binders are detachable from the Frame, and can be replaced with specialized equipment packs

Vernier Thrusters Located on the backs of the Asura's shoulders, the two verniers are an extension of the AMBAC system. While shorter and lighter than the Binders, the Verniers incorporate propulsion thrusters into a movable extension, increasing the Asura's AMBAC and powered maneuverability. The base of each vernier has 90 degrees of mobility in four directions, allowing the Frame to rapidly change direction in zero-atmosphere.

Shields

In keeping with its role as a heavily armored battle platform, the Asura has two types of shields, electromagnetic and gravitic, layered with each other. Each shield is generated from two tandem generator pairs within the frame. The two shield systems work in concert, allowing the frame to survive large amounts of damage. Due to the improved power output from the IAPD and the nuclear fusion reactor, the shields on the Asura are much more powerful than the shields on the Ashigaru.

Electromagnetic & Gravitic Shielding

The [Electromagnetic shield generator](#) is located in the Asura's lower torso. The shield generator creates a powerful field, which hugs close to the frame like a tight bubble. The [Gravitic shield generators](#) are located in the Asura's shoulders, creating a spherical gravitic shield around the entire frame.

Locations: Lower Torso and Shoulders **Shield Points:** SP 20 (2) **Runtime** Operative as long as power is available

Power

Main Power and Propulsion

The Asura, instead of using a nuclear fusion reactor for the main source of power and propulsion, uses an Origin Industries [Inline Aether to Plasma Drive](#), which serves as both a main power source, and as the main propulsion for the frame. The IAPD is not powerful enough to allow the frame to fly in atmosphere, but is enough to propel it in zero-g, and enhance the long jumping leaps of the Asura.

Omni-Directional Vectored Thrusting

Ports are located on every surface of the frame. Connected to the IAPD, they allow the frame to travel up to .20c in any direction without changing the frame's heading; they are capable of halting the frame's forward movement and propelling it backwards within 1/100th of a second. These same thruster ports are capable of changing the frame's direction in the same time span, as well as spinning, rolling, and otherwise controlling the frame. Generally, however, the thrusters do not use the amount of power required for such maneuvers.

Afterburner

The Asura's IAPD has been modified to allow for brief periods of increased operation, using a system known as the afterburner. The Afterburner operates by increasing the input to the IAPD for a short amount of time, effectively doubling the Asura's speed. The downside to this system is that the Asura will show up on all aetheric sensors within 1 AU, effectively eliminating any stealth it might have had. The Asura's afterburner only lasts for five minutes before internal safeties activate and force it to return to normal operation.

Secondary Power

The Asura still uses a Nuclear fusion reactor, albeit relegated to a secondary role, as a secondary power source, as well as to generate plasma for secondary propulsion, weaponry, and defenses. The reactor requires Deuterium-Tritium liquid fuel in order to operate. The Asura carries enough fuel for nine hours of operation

Plasma Conduit System

In order to transfer the plasma from the nuclear reactor and IAPD to weapons and auxiliary thrusters, the Asura uses a series of Plasma Conduits which transfer plasma to the smaller auxiliary thrusters which line the back of the frame's legs, and to supplemental maneuvering thrusters in the shoulders. Plasma conduits also lead to plugs in the frame's hands, which connect to handheld weapons to supply them with plasma. The PCS can also be used as a last ditch weapon (The plasma only goes out to half a meter,

but does Tier 5, damage to anything it connects with).

Emergency Power Sources

As a backup, the Asura has five stirling radioisotope generators (SRG), which in normal use supply backup power to the frame's electronics. During an emergency, the SRGs can be used to power the entirety of the frame, though there is not enough power for combat operations.

Secondary STL Propulsion

The Asura uses a Nuclear-Thermal Plasma Rocket system, which uses the Plasma generated from its nuclear fusion reactor to generate thrust, and a gravimetric drive. The main thruster unit using the Nuclear Thermal Plasma rocket system are the secondary maneuvering thrusters, located on the shoulders. The thrusters use electromagnetism to push the plasma out at high speeds. The rear of the Asura's legs are covered with additional thrusters, which are connected to the main reactor through a series of plasma conduits. These secondary thrusters provide additional thrust, and assist in jumping, high-speed movement, in-flight maneuvering, and enhance the Asura's mobility in space. The Gravimetric drive system both generates limited anti-gravity to keep the Asura mobile in terrestrial environments, allowing it to hover and use the plasma thrusters to propel itself forward as a sort of secondary movement system; and as a secondary propulsion method, causing the frame to make 'controlled falls' in order to accelerate. As a propulsion method, the gravimetric drive is used to slow down and change the Asura's direction, which when combined with the AMBAC and the IAPD, gives the frame a greater maneuverability then it would have without it.

Secondary Movement System

The mass produced Asura incorporates a Secondary Movement System into the frame's lower legs. The Secondary Movement system is a powerful thermonuclear hover jet, allowing the Asura to move along the ground at one hundred and eighty kilometers an hour, without engaging its IAPD or Plasma Thrusters.

Electronics

The Asura uses the [Pawn](#) to assist the crew, easing their workload and making them that much more effective in combat.

Computing

The heart of the Pawn suite is an extremely advanced quantum computer, capable of performing nearly endless amounts of data-churning and possessing untold memory. Quantum computers, unlike old computers which could only process 1 and 0, can process an effectively infinite range of digits. Unlike its

larger brethren, the Pawn suite does not have a very large memory for data storage, and must be more or less purged once a year to remain effective. The Asura's computer is located in an armored box, just below the cockpit

Sensors

The pawn suite has sensors which, in passive mode, can detect things up to 1,000 miles away, and in active mode can detect and provide information (Heading, velocity, size, ship type, energy signatures) on objects up to 550 miles away. All of the Asura's sensors are located inside the frame's head, while the main visual sensor is a single Monoeye, on a track which allows it to move up to 160 degrees side to side on the frame's head; secondary optics are on both sides of the head, in the chest and back shoulders. The Asura has a variety of sensors including:

- Electromagnetic sensors
- Electrogravitic sensors (scalar)
- Radar(From the ECM Suite)
- Unified field mass/energy sensors (Field of force sensors (I.e., Gravity, Radioactivity, and Energy))
- Neutrino sensors (nuclear reaction sensors)
- Aether detectors
- Visual sensors
- Mass Detectors

Targeting control

The Pawn Suite has a targeting control system that can give detailed information (Heading, velocity, size, ship type, energy signatures) on ten targets, as well as position and orientation (IFF) on up to 25 more targets.

Communications

Laser

For close-range transmissions, it is more difficult for the enemy to intercept, because they have to be in the area of the beam. Also limited to light-speed.

Radio

Full spectrum, Dual-Modulation, range theoretically unlimited except by interference. Practical range is short, since the waves only travel at light-speed.

Control Systems

The Asura uses the [Silhouette/Mirror Neural Operating Construct](#) neural control system, which is combined with the mind-machine interface from the original Ashigaru to give the frame a highly responsive control system.

Active Mass Balance Auto Control (AMBAC)

Active Mass Balance Auto-Control (AMBAC) is a program in the Asura's Pawn AI suite that allows for thrusterless maneuvering in the zero-G environment of space by means of precise control of limbs. AMBAC works by leveraging the Third Law of Motion (when there's an action there is an equal and opposite reaction) to effect changes in direction. AMBAC is by its nature limited to re-orienting the Frame about its center of mass, and is not a substitute for propulsion.

Automatic Stability Management

Another design feature on the Asura, the ASM is four gyroscopes, one in each shoulder, and one in each of the Frame's thighs. The gyroscopes serve to keep the Asura steady during aiming and maneuvering. A unique feature, the ASM helps to improve the frame's stability while it's on the move.

Electronic Warfare

The Asura uses a [Compact Electronic Countermeasure Suite](#) for handling electronic warfare, such as ECM, ECCM, and SIGNIT operations.

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