

U-1 Prototype Variable Mecha

The U-1 is a prototype variable mecha developed by the OSO in order to fill multiple roles in its pseudo-military with a single vehicle. It is designed primarily to serve as either a flexible heavy armor vehicle in its humanoid mecha form when on the ground, or to serve as a superiority fighter when in space. It is also capable of transforming while in space for extra maneuverability.

About the U-1

The U-1 is not intended for any single purpose. It is highly modular to ease repair (All damaged arms/legs and heads can be swapped out with fresh ones in about an hour.) and it has many hardpoints to mount weapons. These hardpoints have a plethora of different options for weapon integration, including space to store magazines internally, power and plasma conduits, and computer control systems.

Key Features

The U-1 sports full life support for a pilot and passenger in the cockpit, aim and piloting assistance from a powerful onboard computer, and a neural link for mindware or electronic brains to allow for control by thought. The cockpit can also be replaced with a semi intelligent AI to pilot the craft.

Advantages

The U-1's main advantage over traditional fighters and mecha is its modularity. Damaged arms, legs and head can all be swapped out in an hour by a maintenance team, and it can be outfitted for any mission by equipping it with the proper gear.

Drawbacks

The U-1's largest fault is that without modification, it is unarmed, and not especially good at anything.

History

The U-1 began development after the operation to save the I'ee. It became clear afterward that a standard war fighting machine was necessary. [Junkers](#), mecha and fighters used in the operation each required different facilities for repair. The solution was the U-1, a standardized vehicle capable in almost every situation, highly modifiable, and modular for easy repair. It began testing in [YE 38](#) with the OSO pilot [Alex Patton](#), and later was put into full production as the [U-1 Production Model Variable Mecha](#)

Appearance



Statistical Information

Organization: OSO Type: Variable mecha/superiority fighter Class: U-1 Designer: [Alex Patton](#)
Manufacturer: OSO Production: Limited

Crew: 1 pilot. Maximum Capacity: 1 pilot and 1 passenger. Passenger Capacity: One in the cockpit.

Mecha form

- Width: 5.5 meters.
- Length: 3 meters.
- Height: 12.5 meters.
- Mass: 14 metric tons dry, 18 metric tons takeoff maximum

Fighter form

- Width: See wingspan section, body is 4.75 meters wide.
- Length: 14 meters.
 - Hight: 3 meters (note; this measurement is the ground clearance with landing gear down.)
- Mass: 14 metric tons dry, 18 metric tons takeoff maximum

Wingspan

- (fully extended 20°) 14 meters
- (swept forwards 46°) 11 meters
- (overswept forwards 72°) 8.25 meters
- (in stowage position at 122°) 4.4 meters

Speeds

Ground speed: Running: 100 KPH Skimming: 242 KPH Air speed:

- In atmosphere: Mecha form: Mach 1.7, Fighter form: Mach 3.7
- Zero atmosphere: Mecha form: .27 C, Fighter form: .32 C

Damage Capacity

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

- Body: 25 SP (T 7 under new DR rules) (Armor Scale)
- Shields: 25 SP threshold 5 (T 7 under new DR rules) (Armor Scale)

Interior

The interior of the craft varies depending on the mode it is in. In fighter mode, the cockpit is fairly standard.

However when in mecha mode, the cockpit shifts around, becoming more compact and armored as well as activating the analogue controls for the arms and legs.

Getting In and Out

To enter the U-1, the user sends a signal to the computer to open up the cockpit covers, which unfold to either side of the front fuselage, and then the cockpit opens upwards, allowing entry.

After entry, the cockpit folds back down and the cockpit covers fold back over the cockpit. Then, the displays are activated as well as a system that allows vision as if the cockpit covers were transparent.

Hardpoints

The U-1 has many hardpoints on which weapons, armor, thrusters or additional systems can be mounted.

The Hardpoints are located all over the mecha, though a smaller amount are useable in the fighter form. There are: 1 hardpoint on either side of the head, which usually house point defense weapons. 2 hardpoints on each forearm. (oriented in such a manner that weapons can be mounted on both while letting both fire) 1 on each upper arm. 1 hardpoint on each shoulder. 2 on each side of the chest. 2 hardpoints on each leg (oriented in the same way as those on the arms). 4 hardpoints on each wing, 2 on the top face and 2 on the bottom. 1 hard point centrally located on the back. 1 hardpoint on either side of the inner fork in the rear fuselage, to allow for a payload, or large thrusters to be mounted.

Weapons Systems

The U-1 has no defined weapons systems, however it has numerous hardpoints where external weapons of most natures can be mounted and integrated into the craft. These hardpoints act as space for internal magazine storage for weapons that use magazines, plasma and power conduits for plasma or power based weapons, and as magnetic “holsters” for weapons that are unattached to the hull.

Onboard Systems Descriptions

The U-1 has standard sensor, life support, power and thrust systems. It is also very durable and has many redundant systems to keep it in the fight even after extreme damage.

Armor

The armor is composed of an outer layer of hardened [Durandium Alloy](#), followed by several other layers. The spine and skeleton are composed of [ADNR \(Aggregated Diamond Nanorods\)](#) and [Durandium Alloy](#). These layers serve as excellent armor against kinetic, cutting, energy and plasma based weaponry.

Shields

The shield systems are based on salvaged shield generators from an [OI-M3-1A Gekido](#). They contain both gravitic and electromagnetic shielding types.

Power Systems

The power plants for the U-1 are an origin [SLAM](#) in the main fuselage, and four [BURST](#) reactors, one in each limb.

Propulsion

The U-1 uses heavy fusion thrusters salvaged from a [OI-M3-1A Gekido](#). These reliable thrusters are energy efficient and good for high acceleration.

Sensors and Computing

The U-1 prototype uses a salvaged [FATE S](#).

Additional Equipment

The U-1 has been designed for modules to be installed.

Rear Modules:

- [U-1bm Booster Module](#).

Weapons

[U-1 weapon list](#)

Transformation

The major system of note is the transformation system. The transformation of the U1 is based on a simple concept: The hull being built around a single “spine” piece. This piece acts as a truss, pushing the legs further back in fighter-mode and bringing them to bear against the nose of the U1 in its frame-configuration.

The transformation begins by breaking the shoulder of the frame behind its front intakes, which are linked to its hips – which unlock from the underside of the body. The legs, supported on the spine-truss swing down to lock against the underisde of the fuselage.

The shoulders (resembling the “normal wings” of a craft directly behind the intakes but before the large forward swept wings) slide forward, rotate and lock against the body providing support while the back-plate rotates 90 degrees - making the shoulder-plates much smaller and providing mounting-trusses for the shoulders themselves to dock into.

The long forward swept wings sweep backward into a fork-like housing, becoming finlets on the hips - and the large rudders are rotated 180 degrees and angled rearwards to avoid contact with the ground.

The arms of the fighter are housed directly beneath its bulky engines – with the four nozzles above becoming part of its backpack and the arms below on segmented rail locking to the shoulder-housing.

At this point the intakes now on the hips tilt and shut, sealing the engines off.

It should be noted that a second pair of “arms” are located inside the knees, commonly used with the fore-arms and rotating rear engine-pods to tilt down as a VTOL lift system in flight configuration.

In addition, the forward swept wings can lock forward into a delta-formation for high speed forward flight during fighter mode operation.

The space between the two engine pods is designed for a bespoke mission operation package which in the transformation sits between the two engine-pods becoming the backpack of the frame on the armature which hangs between the two which in transformation becomes a 'tail' of sorts.

Standard Equipment

In the cockpit there is a emergency kit containing basic first aid items, basic repair tools and 3 days worth of emergency rations.

OOO Information

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