

Multi-Role Science Drone Type 43

The Multi-Role Science Drone is a Science Drone designed for the [Star Army of Yamatai](#) in [YE 43](#).

History and Background

With the end of the [Kuvexian War](#) in early [YE 43](#), [Ketsurui Zaibatsu](#) set out to improve the available [Star Army Equipment](#) for [Science Officers](#). The first designs released were the [Star Army Science Pad and Kit Type 43](#) and the [Star Army Combined Sciences Laboratory](#). In terms of in-service equipment, most designs had come available between [YE 30](#) and [YE 35](#). Most designs were in need of modernization, streamlining, and also needed to fit the more modular ethos of [Star Army of Yamatai](#) designs. The [Star Army of Yamatai](#) had several specialized drone and platform designs, but the desire was to streamline and compact these designs into a single multi-role science drone that could be deployed from a ship or taken to the surface of an interstellar body manually. To achieve this goal, [Ketsurui Zaibatsu](#) once again pulled collaboration from [Kessaku Systems](#) and [Star Army Research Administration](#).

The [Star Army Science Pad and Kit Type 43](#) featured an accessory, the [Nodal Capsule Sphere](#), which operated as a small-scale drone attachment to the [Type 43 Science Pad](#). The designers wanted to take that small-scale design and deploy it on a higher level. The miniaturization of systems was very important to this project because the [Star Army of Yamatai](#) would want the drone to have as many capabilities and uses as possible.

Multi-Role Science Drone	
	
Year of Creation	YE 43
Designer	Ketsurui Zaibatsu , Kessaku Systems , and Star Army Research Administration .
Nomenclature	Ke-O10-1A , Also Type 43
Alt. Nomenclature	None

Multi-Role Science Drone	
	
Manufacturer	Ketsurui Zaibatsu
Fielded by	Star Army of Yamatai
Availability	Mass Production
Damage Rating (Version 3)	Tier 4
Price	10,000 KS

This system replaces: [Variable Configuration Mission Adaptive Drones](#), [Star Army FTL Sensor Drone](#), [Orbital Geological Survey Platform](#).

Propulsion and Range

Propulsion and Range for this Drone.

Propulsion and Range	
Integrated CFS Array	0.1c to 12,000c
Multi-Stage Aether Drive	0.375c
Anti-Gravity System (For Atmospheric Flight)	1235 km/hour.
Range	10 LY.
Lifespan	100 Years
Refit Cycle	Every 5 Years and As Needed.

Mission

The uses of this drone are listed below.

- Study of planets, nebula, and other phenomena.
- Reconnaissance, Survey, and Analysis.
- Scanning Structures, Ships, Space Stations, and other craft.
- Terrain and Mapping.
- Sample Collection.

Can be launched from:

- Any [Star Army of Yamatai](#) ship or space station.
- Ground Facilities.
- [Standard Starship Cargo Containers](#)

Appearance

The Multi-Role Science Drone is an egg-shaped drone with a sensor package in its forward section. Its Nodal Capsule Bay and propulsion systems are in its aft section. It is often seen with a cloud of its nodal support capsules around it. The hull color is a typical [Star Army of Yamatai](#) cornflower blue and gray color scheme with black accents. The [Star Army Hinomaru](#) is on its midline equator. Its propulsion systems are in the pods attached to the main body.

Dimensions: 0.8m x 0.5m x 0.5m



SubSystems

The Subsystems of the Multi-Role Science Drone.

Hull Construction

The drone's shell is composed of [Xiulurium](#) coated [Yamataium](#).

Integrated Hull Systems

The following systems are integrated into the drone's hull.

- [Integrated CFS Array](#) for space propulsion, stealth, and defense.

Power Systems

The unit is powered through its own compact [Aether](#) generator and capacitor system.

Electronics Package

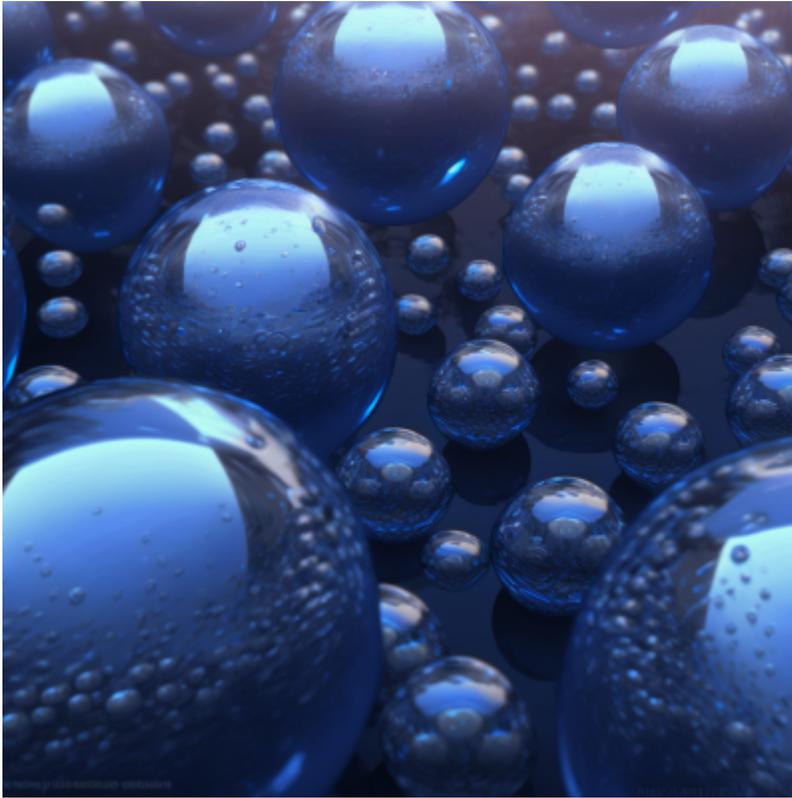
This drone utilizes the [Armor Integrated Electronics System \(AIES\)](#) and comes equipped with all current [communications](#) and [sensor](#) systems. The drone also deploys 📡 [microphones](#), 📡 [telescopes](#), etc to aid with analysis.

Propulsion Systems

Since the Multi-Role Science Drone will have to perform in both space and atmospheric conditions it is outfitted with the following propulsion systems.

- [Integrated CFS Array](#) propulsion through CDD.
- [Multi-Stage Aether Drive](#) for sublight applications.
- A simple Anti-Gravity System for atmospheric and aquatic flight.
- Maneuvering Thrusters (📡 [ion thrusters](#)) are used primarily attitude adjustment, docking and station keeping.

Nodal Capsules



The nodal capsules released by this drone are a more complex version of those deployed from the [Nodal Capsule Sphere](#). They are larger gauge capsules with a 1200mm diameter that are capable of boosting the main unit's [sensors](#) and conduct more intensive and specific scans. They hold a 10-hour charge and can be recalled to the main unit for recharge as needed or for sample delivery back to the ship, base, or personnel that deployed them. It has a simple laser system for cutting rock samples to size for capture.

The capsules have shielded capture chambers which they can use to take samples of solids, liquids, gases, and plasma for more intensive analysis. The drones are also used for scans in hard to reach locations, hostile environments, and other applications where personnel either can't reach or are at risk. The nodal support drones are programmed to return to the base sphere, report results, and in the event that they are compromised they will self-destruct to prevent manipulation of their technology. Replacement drones are produced in fabrication facilities onboard ships and bases.

These are constructed using [Hemosynthetics](#) through the use of the [Nodal Liquid Conduit System](#) and [Universal Fabrication System](#).

Capsule Count: 800 per drone unit.

Science Officer's Guide

How to use the Multi-Role Science Drone.

Deployment

Thanks to the diverse nature of this unit, it can be deployed in several different ways. On several [Star Army Starship Classes](#) these can be launched from the ship's Torpedo Launchers or a specialized drone launcher system if the ship is appropriately equipped. This is generally done when the drones are deployed in larger numbers for larger-scale missions.

On a smaller scale, drones can be delivered in [Standard Starship Cargo Containers](#) or individually onto a planet or other body's surface.

Control

The Multi-Role Science Drone can be controlled through several different methods. The drone can also report back through these same channels.

- remote control via [PANTHEON](#)'s hierarchy of systems.
- remote wireless via the [Nekovalkyrja](#) digital mind.
- remote wireless via the [Type 43 Science Pad](#).

Capsules and Samples

The Nodal Capsules often return with samples in their chambers, these can be extracted in the [Star Army Combined Sciences Laboratory](#) or another science facility for easy further analysis and study.

OOO Notes

[Andrew](#) created this article on 2021/01/23 10:24.

- Art redone by [Andrew](#) using Midjourney Bot on 2022/11/08.
- [Approval Thread](#)

Star Army Logistics	
Supply Classification	Class N - MISC
Products & Items Database	
Product Categories	robots
Product Name	Multi-Role Science Drone
Nomenclature	Ke-O10-1A
Manufacturer	Ketsurui Zaibatsu
Year Released	YE 43
Price (KS)	10,000.00 KS
DR v3 max	Tier 4

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