Universally Networked Scalar Array Field Emitter

The UNSAFE unit is a compact, soldier-portable sensory augmentation suite, designed for advanced materials analysis, security, forensic and medical diagnostic applications.

Universally Networked Scalar Array Field Emitter	
Designer	Kuroaki Isuzu
Nomenclature	N/A
Manufacturer	Motoyoshi Fleet Yards and Ketsurui Zaibatsu
Fielded by	Star Army of Yamatai, United Outer Colonies Peacekeeping Forces
Production	Limited Production
Price	1000KS

About the UNSAFE System

The prototype UNSAFE unit was developed by Itto Hei Kuroaki Isuzu, of the Star Army of Yamatai, in early YE 30. The design was donated to Motoyoshi Fleet Yards and went into production in YE 30. When MFY left Yamatai, Ketsurui Zaibatsu continued limited production for the Star Army of Yamatai. The device was not a standard-issue and had to be specially ordered through a ship/unit's supply officer. In YE 31, the UNSAFE unit was replaced in Yamatai by the Star Army Science Scanner, Type 31.

How it works:

The primary components of the UNSAFE unit are a miniaturized, low-power scalar field generator and a highly-specialized quantum computer. Other components include a multi-band EM frequency emitter and sensor array, and a particle emission detector.

The UNSAFE unit generates mild, localized scalar fields that are tuned to emit and react to specific forms of radiant energy, directed energy and electromagnetic field effects. Using its onboard quantum computer to analyze the data returned from the scalar field generator, the UNSAFE unit can perform a wide variety of active and passive scans, including:

- Ultra Wide-Band Electromagnetic Imaging, including visual band, infrared, ultraviolet, microwave, x-ray and RADAR
- Transmissive, Scanning, and Reflective Electron Imaging
- Magnetic Resonance Imaging
- Indirect (laser-reflective) Kinetic Imaging (SONAR, tectonic, motion-sensing)

The UNSAFE unit can accurately image femtoscale structures, allowing it to perform subatomic materials analysis and detect many types of femtomechanical devices.

Without utilizing the scalar field generator, the UNSAFE unit can still utilize its electromagnetic imaging functions in a directed cone in front of the unit, as well as omnidirectionally detect most forms of radiation. Resolution in this mode is limited to nanoscale structures.

Functional Parameters:

- The maximum effective range of the miniaturized scalar field generator in the UNSAFE unit is approximately 10 meters.
- The maximum volume of space that can be scanned at a time is approximately 30 cubic meters.
- Nanoscale, EM-only scans can be performed in a 50×100 meter cone in front of the unit.
- The range of radiation detection will vary depending upon the intensity of the source.
- The UNSAFE Unit can also function as a flashlight, emitting a 50×100 meter cone of EM radiation.

Interface:

The Universal Network interface of the UNSAFE unit is designed to establish a direct psionic link with any system using the Kessaku OS, including Nekovalkyrja and Yamataian digital brains, Yamataian Starships, Power Armors, and IES systems. Data is stored internally on 400 petabyte, solid-state quantum storage drive.

If necessary, users can operate the UNSAFE through a small volumetric display mounted on the housing of the unit. In this mode, the UNSAFE is controlled using retinal tracking or spatial tracking software ('look-to-click' or 'point-to-click'). The volumetric display may be set to project in monochrome infrared, for nighttime operation using infrared vision systems.

Power Use:

The UNSAFE is powered by a small (2x4cm), user-replaceable, high surface area capacitor cell. On a full charge, the UNSAFE can operate continuously for approximately one week. Depending on individual circumstances, this may equate to several months of typical use. Capacitor cells can be recharged in three minutes using a desktop charging cradle. The UNSAFE can also draw power directly from armor or ship-mounted CFS system.

Size, Shape and Form Factor:

The prototype and first-generation production UNSAFE unit bear an almost perfect resemblance to a large utility flashlight. It is a 30cm long cylinder. The first 24cm of the casing is 4cm in diameter, widening to 5.5cm in diameter at the 'head' end. The casing is composed of matte black Durandium alloy, machined with a non-slip grip design. The UNSAFE unit weighs 1.1kg, and is constructed sturdily enough to be used as an emergency hammer or bludgeon.

There is one all-weather button that activates/deactivates the 'flashlight' function with a single-press and the volumetric display interface with a double-press. The button depresses with a firm, mechanical feel, but does not 'click.'

There are two knurled, 1cm rings in the casing, just below the 'head' assembly. The first ring adjusts the intensity of radiation emitted in 'flashlight' mode, and the second adjust the EM bandwidth; IR, ultraviolet, visible, etc.

The capacitor power cell can be removed by unscrewing the base of the UNSAFE unit. More advanced machining techniques may be able to further reduce the size of the unit.

Warnings:

1. The quantum computer contained in the UNSAFE unit is non-sentient and does not confer the user with any skill in the fields of metallurgy, forensic analysis or medical diagnosis. This USAFE unit is a professional-grade sensor tool, but it is only a tool. Please use it responsibly.
2. The scalar field generator contained in the UNSAFE unit is not meant to be used as a weapon. The quantum computer in the UNSAFE unit will automatically collapse if it detects any user attempt to boost the power of the scalar field generator to weaponizable levels.
3. Scalar fields may damage or disable sensitive electronic and quantum-mechanical devices. The UNSAFE unit is designed to automatically adjust to prevent such damage, but please use extreme caution when scanning these devices.

OOC Notes

This page was originally made by Alhazred23.

- The page was updated for historical and formatting purposes by Andrew on 1/03/2021.