

# Adverse Conditions Scanner

A suite of small scale sensors and scanners designed to detect hazardous or dangerous conditions around a vehicle. Originally designed for use in environments such as Fusion powerplants to detect radiation, it can also be fitted onto vehicles to warn crews of any dangers outside.

Designer: [SSS](#) Manufacturer: [Emrys Industries](#) **Users:** Civilian Type: Hazard warning

**Appearance:** While too large to be comfortably handheld, it fits well enough into a small case or into a vehicle. The device appears as a small smooth box that sticks to most flat surfaces with a small collection of sockets to be accessed by a variety of means.

## Description

The Adverse Conditions Scanner (ACS) is an extension of [SSS's](#) technology in the [Star Army Science Scanner, Type 31](#) featuring a collection of wide ranging basic environmental scanners and hazard detection equipment fitted into one suite, specifically designed to warn users of any possibly dangerous conditions in the area. It can send detailed results to the user through almost any compatible screen or datapad, although its own wireless range is limited and it must rely on more powerful emitters to send strong signals.

Essentially an adaption of [SSS's Star Army Science Scanner, Type 31](#), it shares a lot of common parts and was easy to manufacture. This device is marketed to civilian institutes as a safety feature, designed for use on vehicles such as fire trucks and in volatile buildings such as powerplants or gas facilities. While the private citizen may purchase it it's not exactly an additional extra for cars.

The device has a small wireless transmitter to interface with datapads at short range, but can also accept an enlarged antenna for greater range. Several other slots are available for interfacing via wires. The device is easy to interface with, and is easily controlled through a touch screen. The user is able to view the specific levels of whatever the sensor detects easily, right down to down to the chemical level if they so choose, however the device is not designed to detect anything as accurately as a laboratory device.

## Threat Level

The system uses a set of threat levels to indicate the dangers outside:

### Harmless

The average Nepleslian has no problem with this level of exposure, or the amounts are too minute to be detected by the equipment.

## Harming

Possible long-term health damage or other effects, it's advised that Nepleslian users take some precautions before braving these conditions.

## Threatening

The area may or may not contain highly damaging environmental hazards, users are advised to use counter measures and protect themselves from exposure.

## Dangerous

Extremely dangerous conditions, do not leave safety without adequate protection or counter measures.

## Lethal

Exposure is likely to be fatal unless extreme counter measures are taken. Do not risk exposure unless fully prepared.

# Chemical Detector

Used to determine how breathable the surrounding air is and to test for possibly harmful contaminants. It's able to detect but not always identify chemical weapons and other agents in the air. It's also used to keep track of air particles and their ratios on different planets to determine if atmosphere using engines such as combustion or hydrogen fusion engines are able to function and their efficiency.

- Chemical - The system is able to identify harmful chemicals floating in the air and provide a rough particle ratio.
- Solids - Minute solids can often cause harm to the lungs, the system tries to identify these solids, however it can often be set of by something as innocent as duststorms.

# Emissions Detector

This scanner is designed to detect different types of energy emissions in the immediate area, its ranges include magnetic fields, ionizing radiation, and light spectrum's invisible to the human eye.

- Electromagnetic - This scanner is used to detect and identify EM signals, providing the wavelength, frequency, and signal strength based on on the devices own location. However it is not designed to

function as a radio.

- Ionizing Radiation -This scanner can detect and identify particles such as: alpha particles, beta particles, and neutrons. It can also detect radiation on the short wavelength end of the electromagnetic spectrum, namely ultraviolet, x-rays, and gamma rays. In addition to identifying the type of radiation it can roughly determine the level based on the treat counter above.
- Light Spectrum -This scanner can detect and identify light ranging from infrared through the visible spectrum and ultraviolet. It can be set to scan for a particular band of light, or to identify what bands of light are present, and how strong. It's able to detect active IR vision when looked at, and some users have modified theirs to detect laser guidance or other light based pointers.

## Scalar Scanner

This scanner is a compact version of the [Universally Networked Scalar Array Field Emitter](#) which is tuned to emit and react to specific forms of radiant energy, directed energy and electromagnetic field effects. Rather than the wide range of uses from its previous incarnation, the scalar devices on the ACS are designed mainly for scalar detection rather than active scanning or emitting. Serving as a warning if the largely invisible rays are present.

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Last update: **2023/12/21 00:57**

