



# Extreme Technology

Extremes of technology are indeed extreme: "Any technology is magic to those who do not understand it."

**TL**  
**Extreme**

**Individual Transformations.** The ability to change physical capabilities of individual sophonts, including enhanced characteristics, alternate bodies, and the ability to change between those alternatives.

**Grey Goo.** Self-replicating nano capable of reducing objects (people, cities, living matter, worlds) to a disorganized froth.

**Mythical "Hop" Drive.** Interstellar drive alternative to the Jump Drive. Ideally of greater range, greater fuel efficiency, and higher effective speed.

**Rumored "Skip" Drive.** Interstellar drive alternative to the Jump Drive. Ideally of greater range, greater fuel efficiency, and higher effective speed.

**Rosettes.** A gravitational system of a heavier and lighter bodies orbiting in a regular repeating pattern around a common barycenter. The mechanics of creating a Rosette are the first step in the process of creating Dyson Worlds.

**Practical PsychoHistory.** The ability to make exact predictions of the social behavior of large groups of sophonts, and based on those predictions to shape the course of future history.

**Planetbuster Bombs.** The ability to create devices which will destroy worlds. The term Planetbuster assumes actual fragmentation of worlds; alternative technologies include Nova Bombs capable of exploding stars, "scrubbing" world surfaces with kinetic impacts or nuclear fire, and anti-atmosphere weapons which merely destroy the life-sustaining aspects of the world.

**Many Capsule Dyson Sphere.** A system of multiple worldlets (capsules) dedicated to capturing the energy of a central star in support of the power needs of the local population.

**Portals.** The ability to create portals: instantaneous connections between distant locations.

**Inertialess Maneuver.** The ability to eliminate inertia in spacecraft. Inertialess ships are unrestricted by velocity vectors and achieve very high speeds nearly instantaneously. When inertialessness is turned off, the ship reverts to its previous state of inertia.

**Psionic Engineering.** The ability to manipulate matter (at all scales from the sub-atomic to the macro) without physical interaction: the psionic engineer "encourages" matter to move and interact to accomplish the desired results. Psionic engineering is a prerequisite to many large scale physical constructs.

**World Scale Physical Constructs.** The ability to manipulate the non-stellar elements of a star system. World scale physical constructs includes the ability to create worlds (star mining the matter required) within reasonable time frames (typically less than a sophont adulthood).

**Rapid Terraforming.** The ability to manipulate the characteristic elements of a world. Rapid Terraforming includes the ability to restructure existing worlds, change their orbits, and change their atmospheric and surface details to conform to some desired standard, all within a reasonable timeframe somewhat less than a sophont adulthood. The term Terraforming includes any world specification (not just Terra-like).

**Group Personalities.** The ability to blend distinct personalities into one master personality (temporarily or permanently). Group personalities reflect a variety of experiences and abilities for greater efficiency, creativity, and responsibility.

**Ring Worlds.** The ability to create a solid habitable ring around a central star.

**Engineered Societies.** The ability to create a social and cultural structure based on created specifications. Just as Geneering manipulates genetic structure, Socieneering manipulates social and cultural structure to improve efficiencies, reflect desired values, and propagate them throughout society.

**Reality Manipulation.** The ability to edit reality, primarily through redos: limited retrospective changes to past event to alter their effects on the present.

**Rigid Dyson Spheres.** The ability to create a solid shell surrounding a central star. The shell provides vast land surface area and efficiently captures the energy output of the star.

**Implantable Ethics.** The ability to define right conduct and to implant its constraints on individuals.

**Stellar Scale Physical Constructs.** The ability to manipulate the elements of a star system, including the star itself. Stellar scale physical constructs includes the ability to create stars and their associated worlds within reasonable time frames (typically less than a sophont adulthood).

**Pocket Universes.** The ability to create very small parallel universes (small in a relative sense) containing isolated star systems and accessible from the true universe through a variety of portals.

