

How Cosmoneer Proto simulates a spacecraft

Real Space Environment



Your Desk Environment

Freedom to rotate in 3 axis while in perpetual freefall



Zero Gravity



Freedom to rotate in 1 axis (freefall suspended by string)

Light waves from sun are harnessed by solar cells

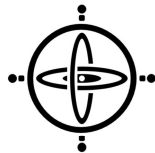


Wireless Power

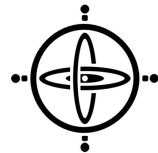


Radio waves from Tx-coil are harnessed by Rx-coil

Inertial Guidance via Control Moment Gyroscope system



Attitude Control



Inertial Guidance via Control Moment Gyroscope system

Navigation and Control via sensors and controllers



Guidance & Nav.



Navigation and Control via magnetometer and ucontroller

Datalink via "line-of-sight" radiowave communications

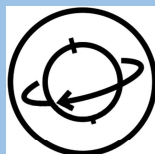


Datalink

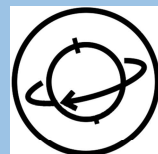


Datalink via "line-of-sight" lightwave communications

Satellite experiences day and night due to orbital plane



Orbit



"Day/night" via servo controlled Rx-coil airgap