the general science journal

Gravitational wave communication

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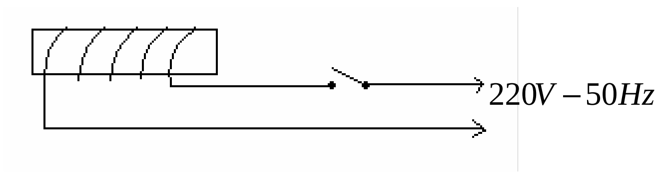
See the Unified Absolute Relativity Theory at:

www.wbabin.net/saraiva/saraiva305.pdf
www.wbabin.net/saraiva/saraiva306.pdf
www.wbabin.net/saraiva/saraiva307.pdf
www.wbabin.net/saraiva/saraiva328.pdf
www.wbabin.net/stham/saraiva347.pdf
www.wbabin.net/stham/saraiva366.pdf

SI units.
The usual gravitational wave detectors don't work, because there's no macroscopic length contraction.
The gravitational waves are waves of acceleration or force.

Emitter:



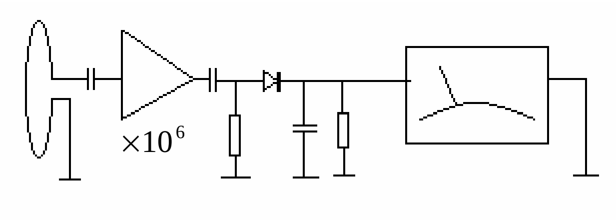
$$\Delta.a = \frac{n^3\pi.G\mu}{R^2}\Delta V$$

a – Acceleration; n – Number of turns; G – Gravitational constant; μ -- Permeability; V – Voltage; R – Electric resistance.

$\Delta V = 620V$; n = 5000; $\mu = 1.3\times10^{-3}$; Electric power = 10 Watt;
R = $4.8K\Omega$

$\Leftrightarrow \qquad \Delta.a = 10^{-6}ms^{-2}$

Detector:



$$\Delta V = \frac{R^2}{n^3 \pi . G \mu_0} \Delta a$$

$\Delta a = 10^{-6}$; $R = 1.7 \times 10^{-8} \Omega$; n = 1 ; μ_0 -- Air permeability.

$$\Leftrightarrow \qquad \Delta V = 1 \mu V - 50 Hz$$

The signal is the digital on-off.
The detector and the emitter must be shielded with two boxes of mu-metal.

It's evident that the usual wave detectors don't work because the signal is near $10^{-20} m$ and the detectors sensitivity is $10^{-26} m$, and no signal is detected.

Using a moving mass as an emitter:

$$a = \frac{Gm}{D^2} \qquad \Leftrightarrow \qquad \Delta a = \frac{2Gm}{D^3} \Delta D$$

m = 10kg ; D = 0.1m ; $\Delta D = 1m$

Transversal movement relative to the detector coil axe.

$$\Leftrightarrow \qquad \Delta a = 1.3 \times 10^{-6} ms^{-2}$$

It's easier to detect gravitational waves in a lab.

Signal from a binary neutron star system:

$$\Delta h = 10^{-20} m \qquad \Leftrightarrow \qquad \Delta a = 10^{-13} ms^{-2}$$