

# Alternator. a moving image art work including sound.

*Topic: Lightning arc Drawing.*

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## *Abstract*

As a muse the history of lightning in the arts and crafts goes back many thousands of years. While the use of it in our modern world goes back hundreds.

From my perspective looking at and thinking about lightning must be as old as fire.

*Lightning Arc Drawings is an idea* to use electricity to generate art works from drawing with conductive elements including things.

A lightning arc drawing circuit involves a variable transformer, an AC transformer and a large back electrode and an artwork electrode.

The audio visual element of air breaking down in the form of corona, plasma and sound is spiritually loaded and offers fear and a very present danger.

In this artwork the Lightning arc drawing materials are made and found objects enlivened with high voltage. A coffee filter, being the most recently filmed, begins and ends the film, a hand made wire triangle and a few tin foil squares are also used in the film. I have layered older audio visual material, created in the same way. This showing of a novel and flexible medium for artwork has at its forefront the idea of light acting in time and space. Alternator1 is a composition of a selection of ' lightning arc drawings' sharing the complexity of corona and power arcs.

The generative ideas within the work are vast, corona- visually as a soft glow is created when air breaks down lowers the resistance and creates small tree-like paths for arcs to follow. Power arcs between the two electrodes create small explosions which in turn create small vacuums which then create a new path of least resistance. Nearly every arc is accompanied with a sound. With the sound although adjustments to tone and

pitch have been made, the sounds are generated by the electrical arcs so the blue colour is the loud noise.

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**Main References:**

Bell, S., Enright, W., Tunstall, K., Bodger, P. (2007) Lightning Arc Drawings - Dielectric Barrier Discharges for Artwork. Ljubljana, Slovenia: 15th International Symposium on High Voltage Engineering (ISH), 27-31 Aug 2007.