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## Characterisation of a triggered mid-plane spark gap with UV illumination

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This paper describes the results of a study into the performance of a triggered three electrode, uv illuminated spark gap. A test cell containing the 3-electrode triggered spark gap and a separate two electrode spark gap (to provide the UV illumination) was developed initially. UV from the two electrode gap was produced by breaking the gap with an independent HV pulse generator, which allowed UV timing and intensity to be varied easily. The effects of intensity and timing of the UV illumination on the trigger voltage required to initiate the closure of the spark gap were measured. Subsequently the trigger circuit for the 3-electrode spark gap was modified to simultaneously provide the trigger pulse and the HV pulse for the UV illuminator.

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