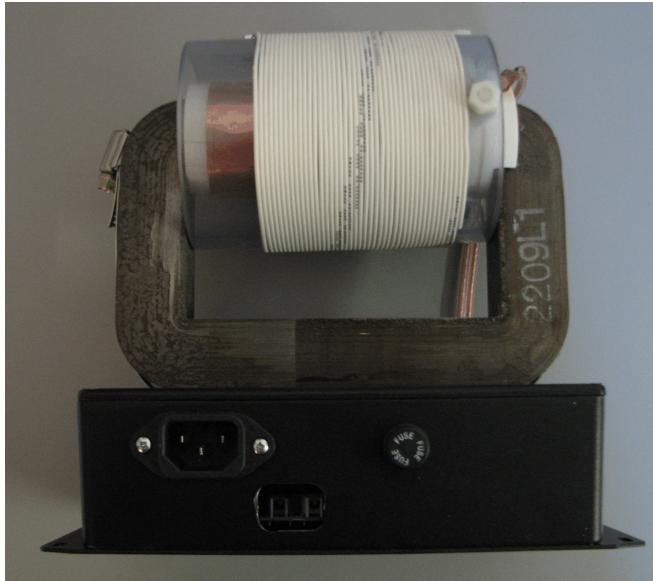




North Star High Voltage
 12604 N New Reflection Dr
 Marana AZ 85653
 (520)780-9030; (206)219-4205 FAX
Highvoltage@Highvoltageprobes.com
www.highvoltageprobes.com

Spark Gap Trigger Systems



Despite the many advances in technologies ranging from IGBTs to magnetic switching, there is simply nothing else that can achieve the “speed” of the pulse from a spark gap-switched system. North Star High Voltage offers spark gap driver systems for general purpose use. These units consist of a fast-risetime transformer and solid state switch combination.

The driver system is designed for use with “midplane” gaps such as those used in Marx generators and also for use with “trigatron style” spark gaps. Risetimes below 300 ns are desirable to achieve multiple gap switching in Marx

generators and low jitter triggering with other spark gap switches.

The risetime of the trigger generator depends on capacitive loading, but can be as short as 200 ns (10-90) when driving < 15 pf. Superior noise isolation is provided by fiber optic triggering. The triggers are all supplied with passive BNC/fiber converters and fiber optic cables in order to eliminate spurious triggering. A monitor fiber which lights when charged is also provided for convenience.

Parameter:

Peak Voltage, risetime	>35 kV, <200 ns rise (<15 pf external capacitive load)
	>30 kV (100 pf external capacitive load)
dV/dt at 70 % of max	150 kV/usec (<15 pf external capacitive load)
Mounting Flange Dimension	8.25" X 3.5" 6-32 Screws
Dimensions	9" X 4" X 9.5" high