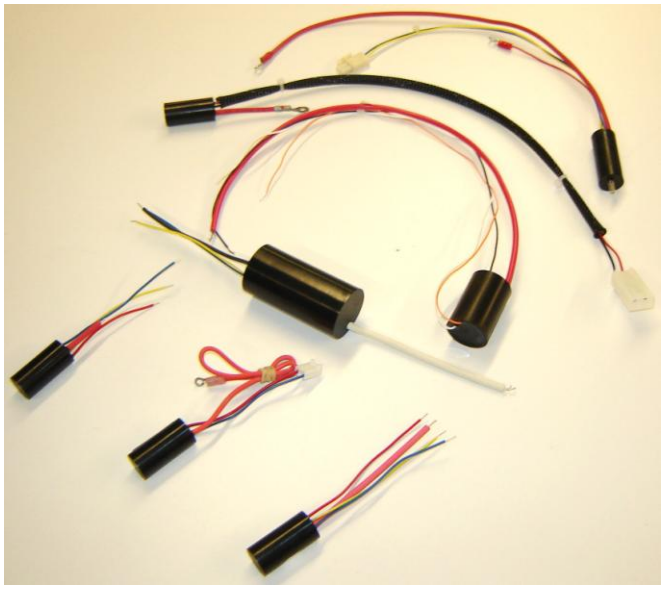
Trigger Pulse Transformers



Our trigger pulse transformers are used to trigger:

- Xenon flash lamps
- Biomedical Lasers
- Targeting Lasers
- Industrial Cutting Lasers
- Laser Measuring Equipment

BUILT WITH SOLID CONSTRUCTION

All trigger transformers are constructed using components and manufacturing techniques that provide high voltage isolation between the primary and secondary windings.

MANUFACTURED IN THE US

We are proud to be a US based manufacturer operating in the United States. Custom Coils has been manufacturing trigger type transformers for almost 30+ years.

FEATURES AND SPECIFICATIONS

Peak Output Voltage: up to 40kV*

Load Current: up to 80A RMS

DC Input Source: 150V to 600V

Turns Ratio: Custom configurable for each application

- Internally connected primary & secondary
- External triggering
- Series injection triggering
- Simmer mode triggering

Other Design Elements:

- Custom wiring harnesses can be created for each individual's application.
- Pinned inputs for through-hole applications.
- Encapsulated for isolation & protection

* Open Circuit, unloaded secondary.

Most applications that use trigger transformers require an intense pulse of radiant energy. These applications harness this energy to accomplish many different things. Industries have harnessed this energy to produce visible flashes that can provide light for stop motion applications, camera flash applications, and visible beacon applications. Other applications use the high voltage to start a laser that can be used in any number of applications. Custom Coils would like the opportunity to build your custom trigger pulse transformer.

CUSTOM COILS

APPLICATION SUPPORT

Please contact our engineering to help select the correct trigger transformer you need. Designs can be customized to meet the specific design requirements of your application.

PRODUCTION TESTED

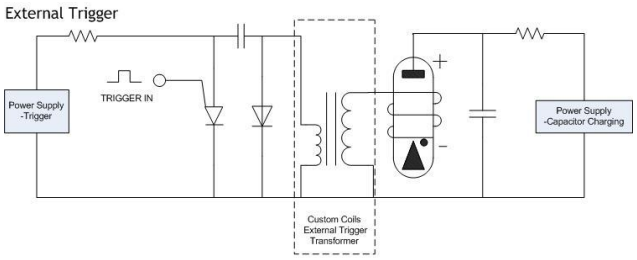
All trigger transformers manufactured at Custom Coils are 100% tested on one of our Voltech AT3600 Transformer Testers.

TURNKEY SOLUTIONS

Turn ratios, wiring harnesses, and pin outs can be designed to accommodate the unique environment and space restrictions of your product.

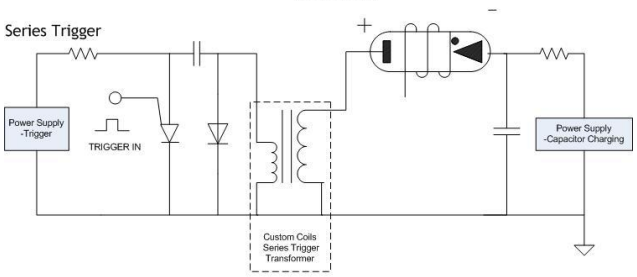
For more information on any of our products or services please visit us on the Web at: www.customcoils.com

Modes of Operation



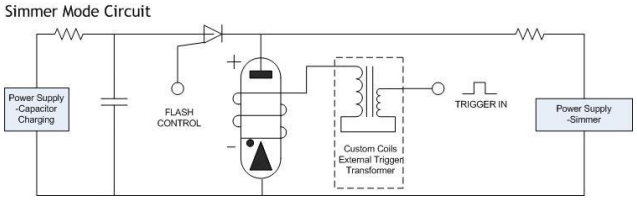
External triggering

Identified by how the transformer is coupled to the flash lamp. The external trigger wraps the flash lamp in a conductor and uses its peak output voltage to induce a thin ionized ribbon between anode and cathode



Series injection triggering

Identified by its much larger size, the series trigger must accommodate the capacitor discharge current through the secondary winding.



Simmer mode triggering

Characterized as being initiated by an external trigger, the circuit operation is different because it uses a separate, specially designed, power supply to force the continued flow of current through the flash lamp.

Trigger Transformers

- Trigger transformers can be designed to utilize the primary capacitor discharge voltage being used in your circuit.
- Turn Ratios can be adjusted to provide the High Voltage Peak Output Voltage sought after.
- Many different mounting options are available and the trigger transformer can be configured to function efficiently in your design.

KEY DESIGN ELEMENTS

High Voltage Peak Output

Quick Rise Times

Low Primary Inductances

Configurable Turns Ratio

Adjustable Hold-off Voltages

Multiple Lead & Pin Configurations

CUSTOM COILS