

# CORDIN

## SCIENTIFIC IMAGING

### HIGH ENERGY PULSER

## Model 640

- **High Voltage Output:** up to 5 kV
- **Fast Response Time:** 2.2 microseconds
- **Low Jitter:** 6 nanoseconds
- **High Reliability**
- **Interlock and keyed safety switching**



The **Cordin Model 640** High Energy Pulser is a highly reliable and accurate firing unit that has been a standard for initiating explosive and other events for decades. It is capable of producing a pulsed output of up to 5 kV.

The high voltage output of the Model 640 ensures reliable and accurate initiation of events. The unit interfaces seamlessly with Cordin Model 454 and Model 458 time delay generators. Output voltage can be precisely set with a ten turn knob on the front panel.

Arming and disarming the unit is actuated from the front panel. The unit may be manually fired from the front panel, or from a low voltage (+5V) rising edge trigger supplied to the front panel, or a high voltage (+25V to +185V) rising edge trigger supplied to the back panel.

Load testing can be done right up until immediately before firing to verify continuity across a bridge wire or initiator from the front panel. Voltage across the output can be monitored from a BNC connector on the front panel. The unit can also be safely and quickly disarmed from the front panel.

Operation of the unit is safety controlled with a switch closure interlock through a back panel connector. Power to the unit is switched with a keyed switch.

The Model 640 is available in medium voltage range (750V to 2kV) or high voltage range (2.5kV to 5kV) versions. It is also available in a remote configuration, where the control panel is in a separate chassis apart from the high voltage circuitry, and the two units are connected by a control cable up to 150 feet in length.

#### OPTIONS

**Remote operation configuration w/ 75' cable, or extended 150' cable**

**Current monitor**

**+2kV or +5kV maximum voltage**

**Negative Polarity Pulse**

# CORDIN

## SCIENTIFIC IMAGING

### SPECIFICATIONS

<b>Firing Voltage</b>	750V to 2.0kV, or 2.5 kV to 5.0 kV	<b>Monitoring</b>	Voltage monitoring from front BNC connector  Optional current monitoring from rear BNC connector
<b>Polarity</b>	Positive, Ground Neutral	<b>Power Input</b>	90-260 VAC 47-63Hz, 300 Watts
<b>Trigger Input</b>	+5V rising edge (front) +25V to +185V rising edge (rear)	<b>Weight</b>	7 kg (16 lbs.)

### TYPICAL PERFORMANCE (2.5-5.0 kV Model, 5kV @ 50-Ohm Load)

<b>Firing Current</b>	100 A for 1.4 milliseconds
<b>+5V Trigger Delay</b>	2.2 microseconds
<b>+25V Trigger Delay</b>	1.2 microseconds
<b>Jitter</b>	±6 ns

