



L3HARRIS®
FAST. FORWARD.

X-RAY CONTROLLER (XCON) TRIGGER SYSTEM

XCON Model 43120 combines a trigger amplifier, delay generator and pulsed event timer into a single unit for greater flexibility and ease of use

Trigger Amplifier: Upon triggering the unit, a high-voltage (-2500 volt(v)) pulse is generated at the back of the device and a low-voltage (-10 V) monitor pulse is provided on the front panel.

Delay Generator (TG): This allows the user to delay the firing of the trigger amplifier by a select amount of time. It also allows the user to select the trigger threshold voltage and polarity level to avoid accidental triggering in an electrically noisy environment.

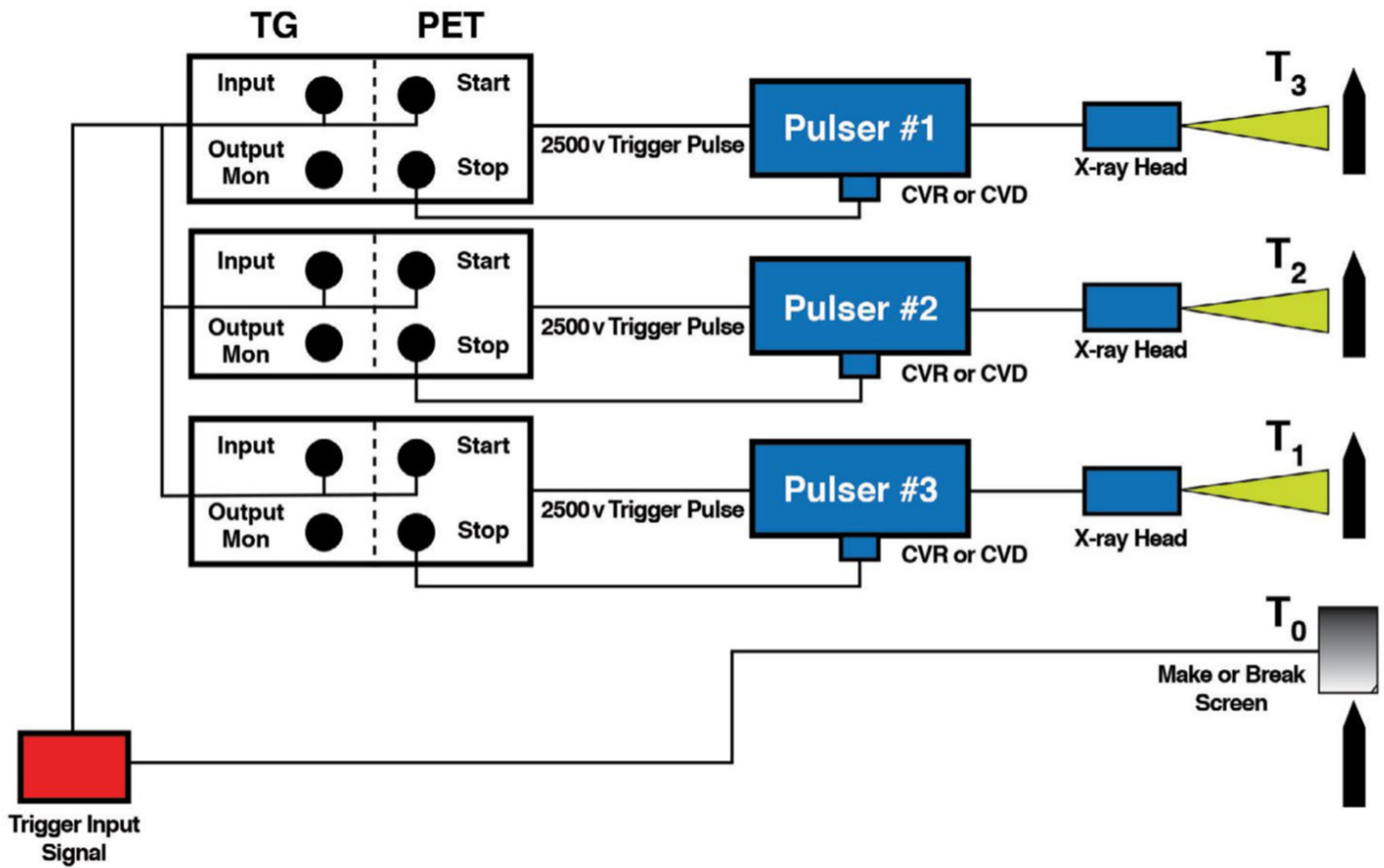
Pulsed Event Timer (PET): This accurately and reliably measures time intervals between events associated with high electromagnetic and RF interference signal. It is designed for use with L3Harris Flash X-ray systems.

ELECTRICAL	
User trigger input pulse	
Voltage	+/- 2 V to 200 V into 50 ohms (protected to 250 V)
Trigger output monitor	
Voltage	-10 V nominal
Trigger output pulse	
Voltage	-2500 V (nominal); 2 parallel connectors provided on back panel
User delay	0-1000 ms (user set in 10 ns increments)
Internal delay	< 400 ns (from external trigger to output of pulse generator)
Jitter	+/- 10 ns max to 3.5 ns RMS
Pulsed event timer – start pulse	
Voltage	+/- 2 V to 200 V into 50 ohms (protected to 250 V)
Pulsed event timer – stop pulse	
Voltage	+/- 2 V to 200 V into 50 ohms (protected to 250 V)
Pulse interval timer	
Time range	0-1000 ms
Timer resolution	10 ns
Physical size – standard 19” rack mount	
Power	100-240 V, 50-60 Hz
Height x weight x depth	3.5x19x13 in
Weight	Approximately 8.0 lbs



KEY FEATURES

- > Local and remote computer control
- > Standard lab view control software supplied with each system
- > Timing reproducibility +/-10 nsec
- > LCD display
- > Push button, rotary knob, and numeric keypad data entry
- > Independent threshold voltage and polarity settings for triggering, PET Start, and PET Stop
- > All inputs +/- 2 V to +/-200 V
- > Built-in command fire button
- > Ethernet communication
- > Dual trigger outputs for orthogonal
- > X-ray pair images
- > 10V monitor output



EXAMPLE: TYPICAL 3 PULSER RANGE INSTRUMENTATION WITH XCON