

Xplosive Modular IED Training Aid

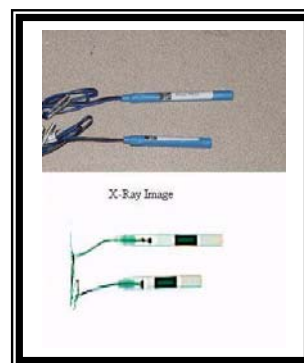
Global Systems Technologies (GST) has supported the explosive detection and R&D programs for FAA's Aviation Security Laboratory and now the DHS's Transportation Security Laboratory since 1993. Our assignments have included assessment of all known and imaginable methods of penetrating a secure area with explosives or weapons and development of tools and strategies to foil them. We have identified characteristics whereby explosives can be detected under x-ray or trace analysis - and then have developed harmless simulants for use in training materials.

The Modular IED Training kit includes the Xplosive simulants, detonators, detonator assemblies and inert explosives.

GST developed the Xplosive simulants of various commercial, military and homemade explosives for the DHS and other governmental agencies. Different detection systems will identify explosives based on different properties. Detailed knowledge of the properties of various explosives and principles of detection for a given system is used to develop a safe inert material that will mimic those properties.

The Xplosive detonators are x-ray quality test and training objects that simulate the internal structure of commercial electric detonators. Other suppliers simply provide empty shells with wires, which are good visual quality objects, but can be easily discriminated under x-ray. Some suppliers provide a metal shell filled with powder and lead wires attached. These are slightly better than empty shells, but have no internal structure detail. No other manufacture produces electronic detonators with this level of detail provided with the Xplosive detonators.

Xplosive Detonators



The detonator assemblies are tactile and visual representations of several types of detonators configurations that are commonly used in IED's (Light, Suicide, Tilt Motion and Timer activated switches).

The "detonator well" design on Xplosive Dynamite, Semtex and C-4 inert explosives allows for the maximum flexibility in developing multiple threat scenarios. The user can combine any of the detonator assemblies with any of the inert explosives to create a different concealment scenario or simulated IEDs.

Upgrade option is available of examples of a threat image of some of the components in the Xplosive Modular Training Aid are provided in the DVD 'Introduction to X-Ray Technology'. This is an easy to follow information tool which also provides an excellent introduction to x-ray image interpretation.

Overview of Xplosive Modular IED Training Aid

Feature	Function	Benefit
Simulant tailor made to detection systems	Optimized to explosive detection recognition features of system	Mimic the properties of explosives under the x-ray for best training results
Detonators x-ray quality test objects	Simulated the internal structure of commercial electric detonators	Simulate real commercial electronic detonators for best training results
Light, Tilt Motion, Timer, Remote, Suicide switch activated detonator assemblies	Provide tactile & visual representations of commonly used detonators used in IEDs	Provide simulation of most common used detonators for best training results.
Detonator Well	Mix –match detonator assemblies with inert explosives	Allows for maximum flexibility in creating different threat concealment scenarios
Dynamite, Semtex & C-4 inert explosives	Mimic the properties of the explosive under the x-ray	Tactile and x-ray representation of real explosives for best training results
Introduction to X-Ray DVD	X-ray image of the Modular IED Training Kit components	Computer based training tool for x-ray interpretation

Overall GST has the unique combination of:

- Technical expertise on the principles of explosive detection;
- Scientific capability for the development of simulants and;
- Practical experience to design and manufacture realistic training & testing objects