

DigiRad

digital radiography

Applications for Portable Digital X-ray Inspection without cables in Security



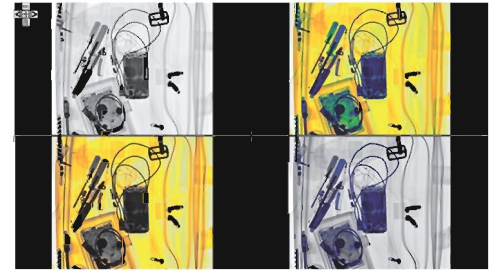
EOD (Explosive Ordnance Disposal) / IED (Improvised Explosive Device) for Police Bomb Groups



Exclusive automatic software method to differentiate organic and inorganic materials assigning colors to metals and other objects and substances of interest.

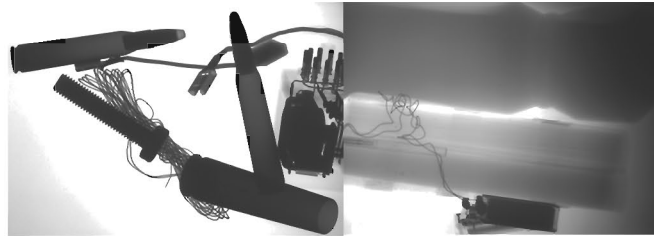
Software Material Discrimination (SMD) is valid for continuous and pulsed x-ray sources that removes the utilization of extra hardware components of other systems applied to x-ray devices. This feature simplifies the system and reduce the time of exposure. This is a solid procedure to identify other typical security artifacts (electronics, detonators, cables, ...) or substances like different kind of explosives.

The operation without cables in wireless mode give a big advantage to operator that works in neutralization and identification of suspected objects making analysis in almost real time giving a valuable help on the immediate decision making.



True portable system designed for field use give an automatic best high resolution image with an equivalent penetration of near 15mm of steel to detect very thin objects like cables, detonators, different explosives and/or bombs mechanisms.

Munitions, cables and bomb components using XR200 pulsed x-ray. In the same image we see thick and thin components with the same good image quality and without any loose of important information.



Bomb with explosive, detonator and filled bottle using automatic filtering for best enhancement (window leveling, adjusted histogram and textures)

Inspection in border and communications facilities

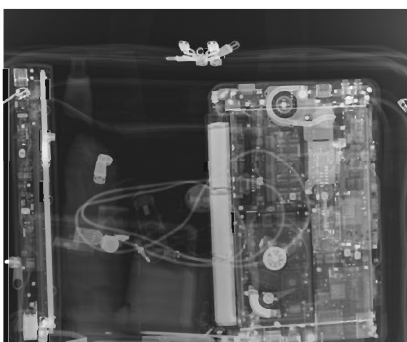
Quick and detailed inspections in borders with confidence and without distort the organization people, any kind of vehicles and transit of merchandise. In our days, the detection of increasing new methods of contraband need also sofisticated tools to fight against them.

With a very quick setup of this portable system the border security agents can access for inspection to difficult locations as cargo hatch, containers, big trucks, ... all with no need to dismantle suspicious parts.

With this method, inspection in borders are really safe, quick and highly discrete.



Duty inspection in Customs



By definition portable digital inspections allows to inspect inside almost any volume item, in a short time, and with any touch that could cause damage.

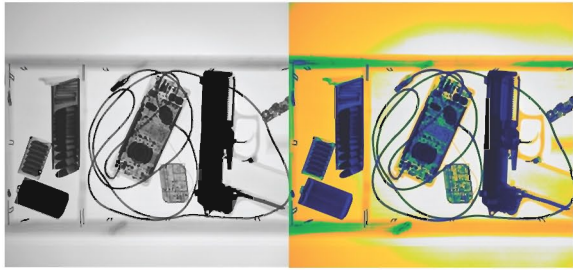
Help for the costly detection of contraband of drugs, explosives in a non destructive inspection that safe legal requirements saving a good amount of time and without damaging the inspected good. Additionally the operators safety increase in an important way.

Inspections in vehicles containers and stores containers are safe, quick and very effective in detection of several objects illegal and suspicious.

Our exclusive real time SMD (Software Material Discrimination) applying official colout codes allows to detect hidden specific drugs in organic materials and liquids.

Protection to people and public or private personalities

Help for lifeguards and personal of Security Forces that requires safety on moving persons by detecting any minimal change in baggage and/or electronic thin devices that could break security codes

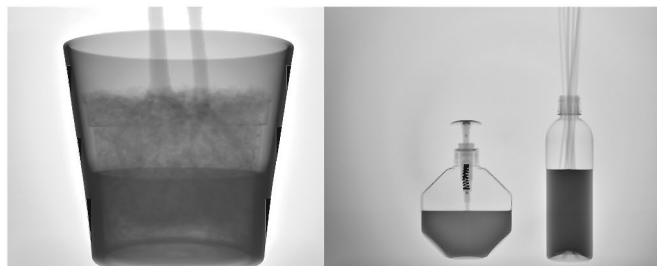


Wooden box inside baggage. Detection of different objects applying SMD method with official colours detecting organic/inorganic items

Possibility for flexible configurations of the digital inspection system using conventional suitcases

Inspection of artifacts inside different offices devices like plants, walls, furniture, phones...

Periodic inspections in offices could detect minimal changes that could breach security norms. Additionally regular inspections could be made to office staff to detect hidden objects in clothes, shoes and personal complements.



Security in the Forensic field

Scene crime requires a very fast and non contaminated proofs that helps the forensic investigation.

Specially the use of a 100% wireless inspection helps any forensic investigation and assure a clean and unpolluted area.

High resolution images and capability of big penetration offers the possibility of obtaining a library of scenes / objects that can be saved and recorded the operational experience with the use of digital forensic inspection

Homemade devices as miniature explosives inside real comercial products

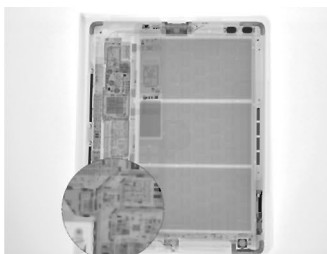
Detection of illegal trafic of living or lifeless human organs and bones



Fire investigation

Used in field and also in the investigation process.

In field a quick collection of a set of images could be very important in the determination of the cause of the fire. Operation with batteries and in wireless mode is very vaulable in this case. Material discrimination (SMD) is used to investigate organic and inorganic components that could cause the fire such as detection of suspected elements of ignition like gasoline and others



The analysis of short circuits in electrical devices can be analyzed from the analysis of metals and burned connector elements by SMD

Important to remark that one of the aspects to take care is the non contamination of the fire scene with wires and other elements in the investigation

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