

CR X-RAY SYSTEMS

**Check everything from A4 packages to the
side of a car using one screening system**



SEARCH AND EOD

CR portable x-ray image plate scanning systems from Scanna provide Police, Military and Security Teams with a highly mobile digital flexible plate x-ray solution for suspect package investigations, Search, Counter IED and EOD based tasks.

One of the key benefits of flexible x-ray plates is that you only need to carry a very thin flexible film plate (100g) and a small lightweight generator to the target area. There is no pre-configuration of the system required and the plates are electronic and cable free.

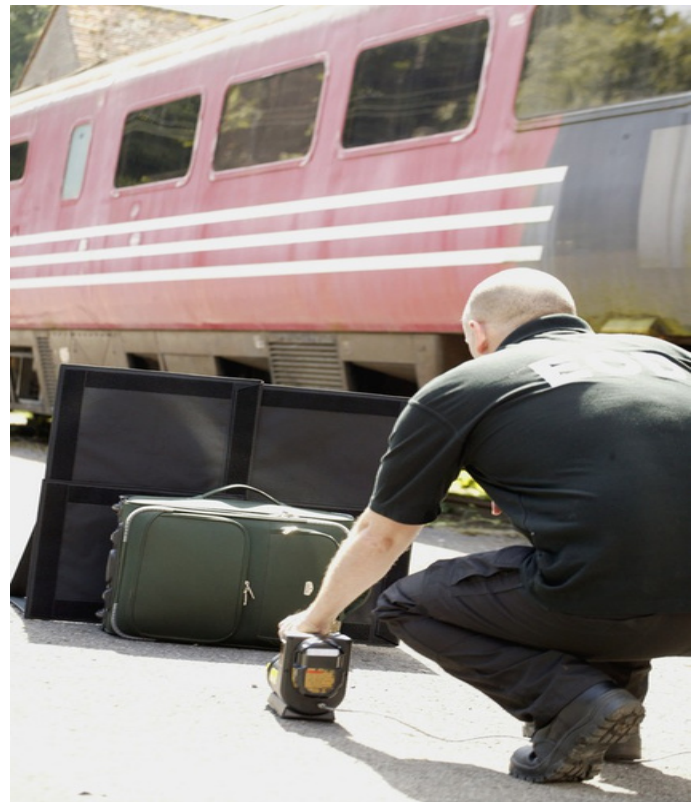
In addition to offering true ground level imaging, flexible x-ray plates can slide easily behind objects placed against a wall or vehicle, as well as being able to attach to or hang alongside virtually any surface area.

Packages and smaller bags can be inspected using a single x-ray image plate which can be useful in confined or hard to reach areas where larger rigid plates cannot fit.

Larger objects such as suitcases can be checked using just one x-ray shot using multiple x-ray plates in a quadplate format (Flexray accessory). The system software stitches multiple image captures into a single large image.

Applications:

- Suspect package investigation
- Abandoned baggage checks
- Building and Venue Search
- UXO Inspection, EC and Post Blast Investigation



The CR image plate reader will produce x-ray images up to 50 micron resolution in less than a minute and its 10 lp/mm definition means that IED circuitry, components and wiring systems can be examined in detail and the construction evaluated as part of any post blast investigation tasks.

Plates can be automatically wiped by the processor after reading and be available for immediate reuse.

CARGO SECURITY

In the field of cargo screening, flexible CR X-ray plates can be used within the Flexray image plate mounting system for ad hoc inspection of shipping cartons and small cargo. The equipment can be used both prior to export and following importation for spot checks of contents against the manifest or to confirm the contents of the carton without the need to open it.

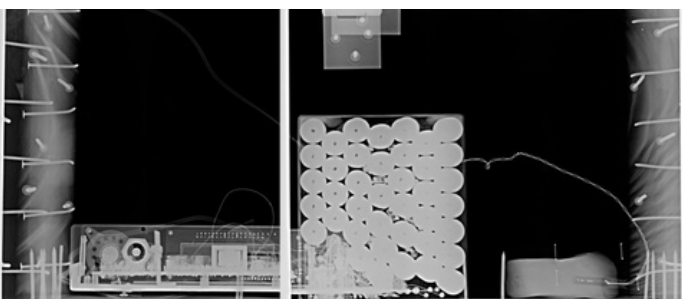
The portability of these x-ray systems means that freight does not have to be transported from the receiving area or warehouse for x-raying and can instead be checked on the spot.

The high penetration x-ray generators will penetrate most shipping cartons and export crates and can quickly identify any prohibited items such as batteries, aerosols, firearms, as well as concealed narcotics or explosive devices. With sufficient accessibility, individual cartons inside a shipping container or onboard a vehicle are also able to be inspected.

The Flexray image plate mounting system can combine up to 9 individual plates size 43 x 35 cm or 3 individual long plates to cover a surface area of 129 x 105 cm in a single x-ray shot.

For security inspection of:

- Small Cargo - Shipping Cartons
- Freight on Vehicles
- Freight in ISO containers



VIP SECURITY

Intelligence agencies and TSCM teams can utilise portable x-ray technology as part of a standard TSCM toolkit to ensure that facilities are free from listening/recording devices, to inspect voids and to analyse any finds.

The flexibility of the CR x-ray image plates allows search teams to check objects inside a room without dismantling them as well as being able to examine furniture, walls ceilings, floors and trunking.

Small items such as phone handsets, plantpots, speakers or laptops up to 43 x 35 cm can be placed on or in-front of the x-ray image plate for x-ray inspection.

Larger wall or ceiling areas in excess of 1.2msq can be checked in a single x-ray shot with multiple long x-ray plates either taped to the surface area or by using our Flexray image plate mounting system to freestand or hang the plates.

The lightweight plates will attach to almost any wall surface, are very thin and durable and flexible enough to bend around pipes or slide easily into difficult to access areas such as wall or ceiling cavities.

CR X-ray for Counter-surveillance and VIP security

- Office Telephony and PC equipment
- Office Furniture and Chairs
- Picture Frames and Walls
- Floors and Ceilings
- Pipework and Trunking



CR X-ray systems can produce an image in approx. 35 seconds and with varying levels of detail from 200-50 microns and from 5-10 line pair/mm even the finest wires and small transmitters can be detected. The clarity is such that any adaptations of electrical items can be identified.

These high definition systems also have applications within the Prison Service for carrying out cellsearches not intrusively - furniture, clothing, shoes, electrical items, toiletries, books and papers can all be checked for prohibited items such as sim cards, phone batteries, narcotics and small blades.



VEHICLE SEARCH

With the latest large format CR portable x-ray image plate scanning systems, Border and Customs Agencies and Search Officers at Security checkpoints have the ability to inspect vehicles without the need to strip them down or carry out a handsearch.

Vehicle doors can be inspected using a single X-ray image plate. Using the larger x-ray plates, areas in excess of 1.2 sq metres, including the fuel tank, can be checked in just one x-ray shot by using multiple plates taped onto or hung behind the exterior area of interest.

CR X-ray image plates are completely flexible which enables them to attach them to virtually any surface area without any special tripod or rigid frame system.

Unlike rigid flat panel imagers that are at least 1" thick, these flexible plates are less than a millimetre thick and will even bend around vehicle panelling and tyres or just as easily slide behind seating.

Scanview X-ray acquisition and imaging software will combine all your x-ray images together into a complete single image for further close up investigation.

The image resolution of Scanna CR x-ray systems is of such good quality that even fine wires (up to 10 lp/mm) and low density contraband such as cigarette cartons inside the doors or drugs concealed in the upholstery can be detected .

Police, Border Control and Customs applications:

- Vehicle Panels and Dashboard
- Fuel tanks
- Seats and upholstery
- Vehicle Flooring and footwells
- Avoids strip down and reduces handsearches



This definition rich imaging means that any adaptations or additions to the vehicle (incl. welding detail) can quickly be recognised. Used with a high penetration X-ray generator, operators can also check inside fuel tanks, side to side or top to bottom through the vehicle.

CR x-ray is also ideal as a secondary screener for drive through x-ray systems and are ideal for checking blindspots around the wheels and chassis.

TECHNICAL INFORMATION

ScanX Scout Image Processor and Phosphor Image Plates



Scout Processor	
Dimensions	39 [w] x 44.5 [l] x 35 [h] cm
Weight	21 kg with battery, 19.5 kg without
Resolution*	Vertical: 3.8 to 5.0 lp/mm Horizontal: 3.8 to 7.0 lp/mm
Pixel Pitch	300 - 100 microns
Laser Class	1, compliance with FDA HHS 21 CF1040.10 and IEC 60825-1
Data Transfer	USB
Power	Mains or 4 hour battery [24DC]

X-ray Image Plates*	
Standard Sizes	35 x 43 cm [14 x 17"] [Standard]
	25 x 30 cm [10 x 12"] [Medium]
	20 x 25 cm [8 x 10"] [Small]
Longer	35 x 90 cm [14 x 36"]
Length	35 x 130 cm [14 x 51"]
Plate Accessories	Flexible Cassettes, Protective Covers, Rigid Carbon, Fibre Cassettes, FlexRay Cassettes

*ScanX Scout is compatible with standard and high resolution x-ray image plates. Image resolution achieved will vary according to the type of image plate used.

*NSN: 6350-99-236-1928

Flexray Image Plate Mounting System

The Flexray Image Plate Mounting system enables the examination of large objects by combining multiple image plates in a variety of configurations. The ability to check large surface areas with a single X-ray shot reduces the time spent in the target area and ultimately time spent on task. Standard size plates can be used to combine from two to nine plates together. Longer length plates can be used in combinations of two or three together enabling over 1 m sq. to be checked using a single X-ray exposure.

Flexray image plate kits include stiffened canvas image plate cassettes, Velcro fastenings, guy line, eyelets, carabiners and suction cups giving you the flexibility to free-stand or hang image plates behind the target or to directly attach them to the area of interest.



X-RAY GENERATOR AND CONTROLLER OPTIONS

Pulsed X-ray Generator Options



XR150



XR200



XRS3



XRS4

	XR150	XR200	XRS3	XRS4
Applications	Special Forces, Light Duty Applications	Police, General Security, Postal Investigation	Military, Counter IED, UXO inspection	Military, UXO Inspection
Dimensions [cm]	23.06 [L] 7.7 [W] 10.34 [H]	27.15 [L] 10.82 [w] 14.81 [H]	39.17 [L] 12.19 [W] 17.91 [H]	48.92 [L] 12.19 [W] 17.91 [H]
Weight	2.58 kg with battery	4.8 kg with battery	5.4 kg with battery	8.3 kg with battery

*Note: Scout is also compatible with various CP x-ray sources

Controller / viewer options

X-ray systems are supplied with a high performance laptop or tablet running Windows Professional 64 bit. Minimum spec: Intel Dual Core Processor, 500 GB-1 TB HardDrive, 4-16 GB Memory.

Other brand name variants and ruggedised MilSpec models with foreign keyboard are available



**Viewer
Options**



Cases

X-RAY IMAGE VIEW AND ENHANCEMENT SOFTWARE

Scanview Software options

X-ray Generator selection	Digital Zoom	ScanClear One Touch Image Optimisation	Voice Annotation
X-ray pulse setting	Vocal annotation	3D [Emboss] Image	Histogram Equalisation
X-ray pulse Activation	Email option	Sharpening	Histocontrast
X-ray Firing Delay	Battery Monitor	Smoothing	Rotate, Flip and Mirror image
Password Controlled Safety Timeout	User login	Edge Enhancement, Find Edges	Copy/paste
Accumulation of Pulses [Summing]	Print	Clarity one click automatic image enhancement	Multiple Undo, Image Restore
Audible and Visual Warning during X-ray Activation	On-Screen Help	Brightness and Contrast	Measure [multiple units]
Incident Reference Creation	Image Tiling	Gamma Correction/Stretch	Calibrate Measurements
Visual database of X-ray images including name, date, category, place, file name	Multiple Zoom including zoom thumbnail window	Import/Export Images	Image Stitching & Cropping
Back up database	Inverse [polarity] image	Shaped Regions	Grid Overlay
Query and Sort in database	Pseudo Colour Images	Select Region of Interest	Save to file or removable device in windows formats - jpg, bmp, tif, png
Compact Database	Sub-image	Annotate Images, Save	Foreign language options