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DRT-CAT-024(Rev.02)

Smart Portability & Best Quality Image
For Limitless Performance

EXPRIMER

DRTECH

EXPRIMER

Smart portability & best quality image for limitless performance

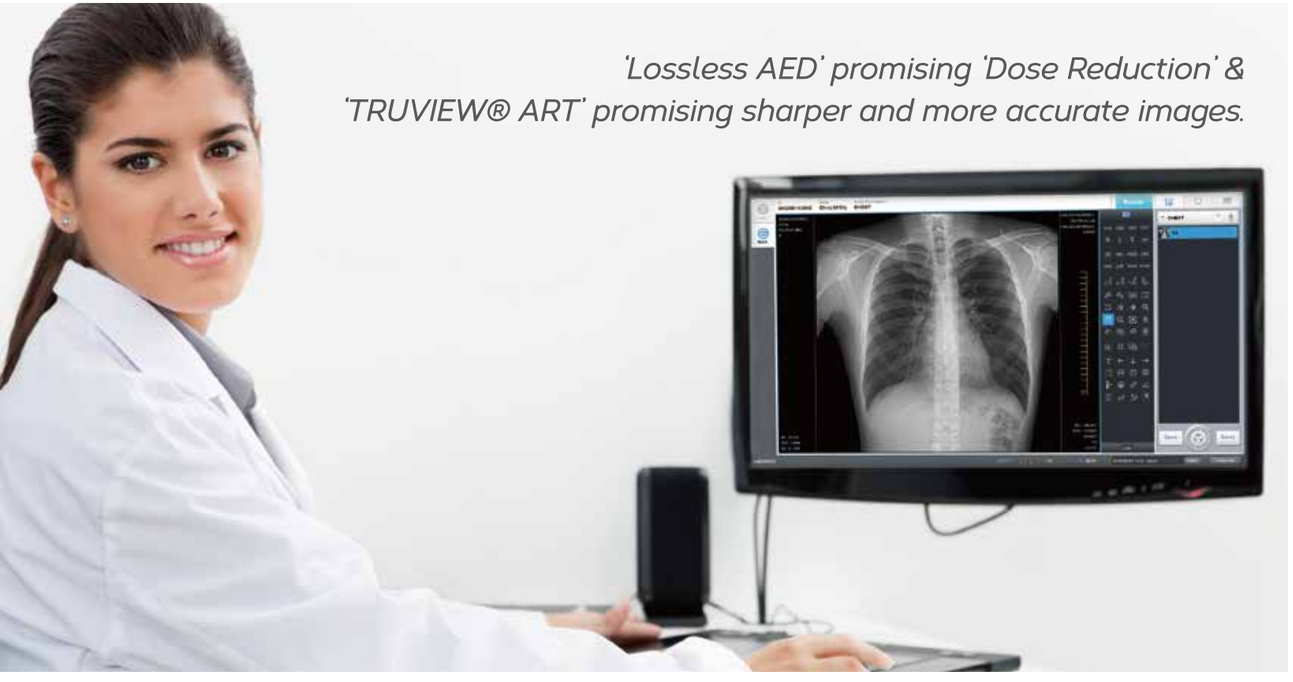
Exprimer, DRTECH's innovative digital X-ray solution combined advanced 'Information Technology' with the latest digital detector technology. With its versatility, Exprimer provides ultimate image quality and can be applied in multiple environments for various applications.
EVS 3643 & EVS 2430W, Exprimer's two portable models provide limitless portability with reliable operation.
Upgrade Now! Experience unbeatable performance of Exprimer and increase your productivity and diagnostic confidence!

❶ EVS 3643 ❷ EVS 2430W ❸ EVS 2430 ❹ EVS 4343
❺ Protection Suit ❻ Battery Charger ❼ PCP (Portable Console PC)

Benefit from Excellent Quality X-ray Imaging with Exprimer

Exprimer, the innovative digital X-ray solutions suit multiple diagnostic environments with different needs.

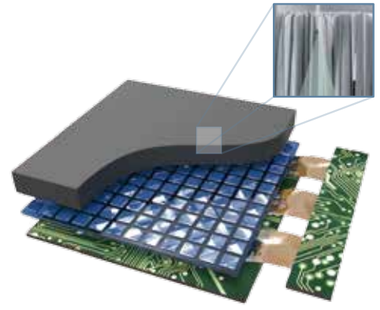
- Excellent image quality using direct deposited CsI
- Ultimate sharpness image by TRUVIEW® ART
- Instant upgrade to digital mobile X-ray system
- Patient dose reduction with reliable Lossless AED
- High resistance to impact and vibration
- Low price fixed grid (120 lines / inch)
- Light weight and durable design for portable applications



'Lossless AED' promising 'Dose Reduction' & 'TRUVIEW® ART' promising sharper and more accurate images.

Intensified image sharpness with directly deposited CsI

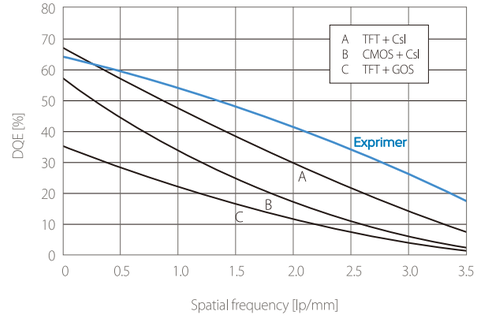
Directly deposited CsI can provide clearer images at lowest dispersion compared to conventional CsI and GOS scintillator. High quality images are not a result of any one feature such as smallest pixel size or low electronic noise, but achieved when all components of the detector are optimized to operate in harmony with each corresponding specification.



Better DQE performance in higher spatial frequencies

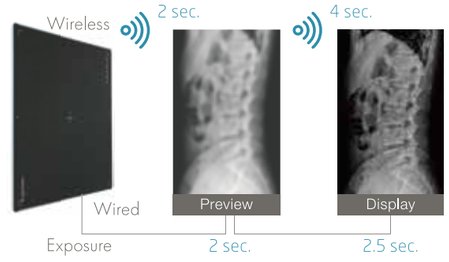
Exprimer with its well oriented direct deposition columnar structure CsI + TFT has high DQE performance providing outstanding high quality images. It also demonstrates comparably excellent DQE* performance in high spatial frequency range.

*DQE measurement condition: RQA-5 (Typical 2.6 uGy)



Faster image display with high speed operating scheme

Fast image preview and display time of Exprimer products allow for more effective and efficient operation leading to increased productivity. Image preview in both wired and wireless modes are achieved less than 2 seconds and a full image is acquired in 4.5 and 6 seconds respectively.

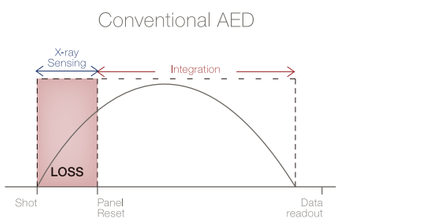


Best image processing solution for fine tuned quality images ECONSOLE1 & TRUVIEW® ART

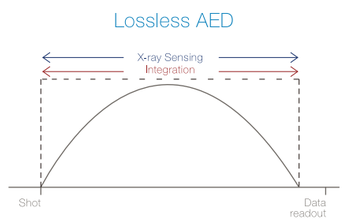
ECONSOLE1 (UI Software) and TRUVIEW® ART (image sharpening algorithm) provides a perfect solution to increase diagnostic productivity and accuracy. With easy to use convenient user interface design and powerful image processing engine, ECONSOLE1 & TRUVIEW® ART enables more accurate diagnosis with high quality and highly defined images.

Lossless AED

Conventional AED function consists of three steps: X-ray sensing, panel reset, and charge integration. Integration time is delayed as extra time is required for panel reset which occurs after the panel senses the incoming X-ray signal. The loss is inevitable even when separate sensor modules within the detector system are used. When acquiring images of thick objects, the loss rate can increase even further. Lossless AED innovatively improved the reliability of sensitivity through operating scheme optimization.



Conventional AED sensing: 3 steps required
1. X-ray sensing 2. Panel reset 3. Charge integration



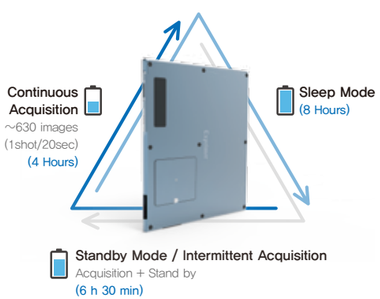
Lossless AED sensing: 1 step required
Simultaneous X-ray sensing & Charge integration

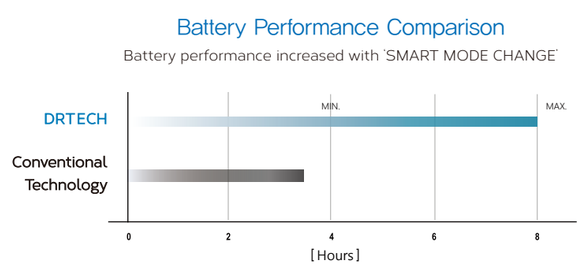
Benefits of Lossless AED

- ✓ Patient dose reduction with more reliable X-ray sensing and integration
- ✓ Increased AED sensitivity
- ✓ Stable and highly accurate X-ray sensing
- ✓ Reliable operation without interruption by external shock or vibration
- ✓ Long lasting battery with low power consuming operating system
- ✓ Easy switch from sleep mode to acquisition mode with 'Smart Mode Changes'

Lossless AED Power Management with 'SMART MODE CHANGES'

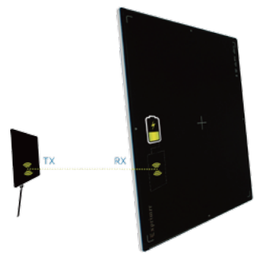
Lossless AED Mode, Innovatively Improving Battery Performance

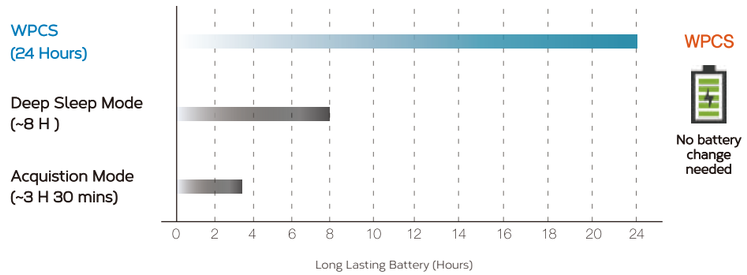




WPCS – Wireless Power Charging System

EVS 3643 and EVS 2430W are embedded with industry's first wireless charging system to enable seamless 24 hour wireless operation for perfect portability. WPCS technology incorporates RX and TX power transmission technology to enable fast and effective wireless charging without the need for a battery change to provide ultimate convenience to its users.





Benefits of WPCS

- ✓ Available in two forms for integration in every diagnostic environment
- ✓ Type : Bucky installation or Cradle
- ✓ Safer diagnostic environment with removal of hazardous wires and cables
- ✓ No need for battery change
- ✓ Fast and reliable battery charging
- ✓ Less product corrosion due to battery removal
- ✓ Longer battery life

The Ultimate Versatility of Exprimer Mobile Detectors

EVS 4343

- Robust and safety design against shock and drop
- High Resolution images by direct deposition CsI
- Fast image acquisition time less than 2 sec.
- Highly reliable and stable genrad.

Slim Cassette Wired

EVS 4343

General Radiography
Portable Radiography

EVS 3643

- Ultimate portability
- WPCS support (wireless battery charging)
- Light weight 2.98 kg and robust design
- Water proof function for increased reliability [IPx4]

Slim Cassette Wireless

EVS 3643

General Radiography
Portable Radiography
Mobile Radiography
Vet. Portable
Security / NDT

EVS 2430W

- High Resolution imaging with smallest 76㎛ pixel
- Ultimate portability
- WPCS Power System (Wireless Charging)
- Smart information by OLED display
- Light weight 1.85 kg (w. battery) and fancy design
- Various applications available
- Water proof function for increased reliability [IPx4]

Slim Wireless

EVS 2430W

General Radiography
Mobile Radiography
Neonatal / Pediatric
Portable Radiography
Equine
Vet. Portable / Vet System
Security / NDT

EVS 2430

- High Resolution imaging with smallest 76㎛ pixel
- High Resolution images by direct deposition CsI
- Highly reliable and stable genrad.
- Fast image acquisition
- Embedded X-ray trigger interface
- Designed to withstand shock and drop

Slim Wired

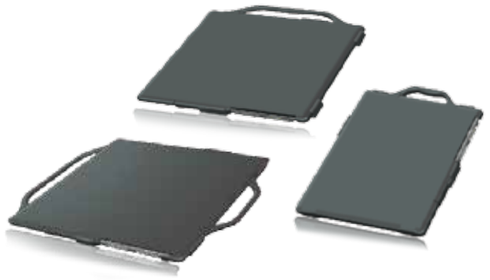
EVS 2430

Dental Cephalo. System
Podiatric System
Mini U-arm System
Vet System

Innovative Technologies for Limitless Portability

Slim Dual Battery Charger

Simultaneous charging two batteries is possible with the dual battery charger. With its horizontal and vertical insertion design, this charger supports both EVS 3643 or EVS 2430W batteries. Supported with 12V, charging on-the-go is possible as it connects with the cigar outlet of any car. The charger is standard component of EVS 3643 or EVS 2430W detectors.



Protection Suits

Available in three different designs to meet the various user requirements and to protect your Exprimer detector from environmental hazards. With an ergonomic design, you can achieve optimum usability in any X-ray applications. Combined with a tablet mounter, you can increase your productivity with one compact package in any portable situations.

PCP (Portable Console PC)

Instant digital upgrade is possible when PCP is combined with EVS 3643 or EVS 2430W. Eliminate the need for additional control box between the detector and the PC, user can acquire digital images instantly with DRTECH's PCP.
Built-in AP maximizes the portability of Exprimer by allowing direct communication with tablet PCs. Acquired images can be checked by smart phones or other mobile devices. With a PCP and wireless communications, high resolution images can be acquired anywhere and anytime allowing for unlimited outdoor and mobile imaging.

EVS 3643 / EVS 2430W with Water Proof [IPX4]

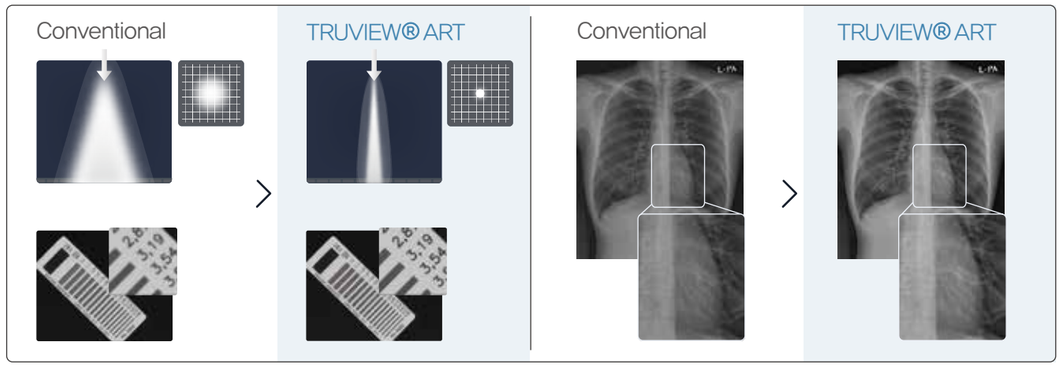
EVS 3643 or EVS 2430W has the water resistance [IPx4] feature which provides protection against blood, sudden rain or other contaminants which can affect the detector performance in mobile applications.
EVS 3643 or EVS 2430W delivers reliable performance in any environments and unexpected situations providing perfect portable solution for X-ray diagnostic imaging.

TRUVIEW® ART

TRUVIEW ART

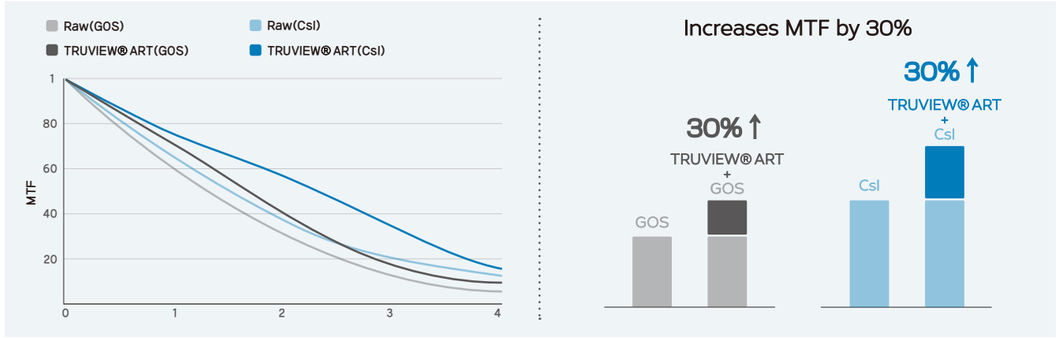
ADVANCED IMAGE RECONSTRUCTION TECHNOLOGY

Image sharpness of an object in a conventional image is reduced due to light dispersion. TRUVIEW® ART, unique reverse filtering technology using mathematical analysis, reconstructs and improves image sharpness to increase the possibility of detecting abnormalities.



MTF Enhancement Effects of TRUVIEW® ART

This advanced image reconstruction technology increases MTF by 30%. Thanks to this solution, the image sharpness level of Exprimer Gadox models match up to that of conventional CsI panels, and the image sharpness of Exprimer CsI models is further enhanced by 30% increasing the MTF level of Exprimer detectors to the highest level.



ECONSOLE1

Image Processing Engine

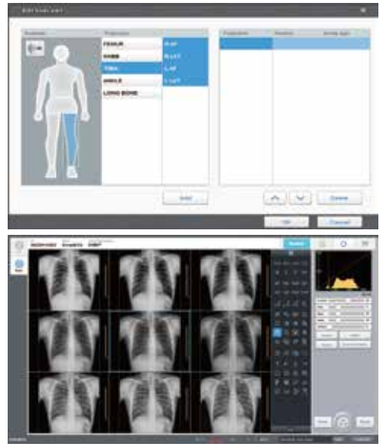
TRUVIEW®ART, DRTECH's proprietary algorithm feature of ECONSOLE1, reengineered the performance of Exprimer detectors. The MTF of Exprimer is improved by 30% by TRUVIEW®ART's Image reconstruction technology in conjunction with EVS detector's characteristics of direct deposition CsI and low noise electronic design. With this software, image quality of EVS detectors is significantly improved than conventional indirect type detectors.

ECONSOLE1
X-ray Acquisition Software

ECali1
Image Calibration Software

TRUVIEW® ART
Advanced Reconstruction

ETune1
Parameter Tuning Software



Excellent Post-Processing Image Quality
Optimized algorithms and parameters for each body part.
Adaptive noise reduction to minimize image signal loss.
Image detail enhancement by multi-frequency image processing.

User Experience Design
Smart workflow minimizing the need for page switch and mouse click.
Editable tool bar and dual monitor support.
Easy to use stitching (up to 5 images).

Image Parameter Tuning Wizard
User can select from 9 image styles processed using different parameters on a 3x3 matrix display.

Tablet, Smart Phone Supports
Supports viewing of crystal clear digital images on display devices with WiFi communication such as Smart Phones and Tablets.

Specifications

EVS 4343

EVS 3643 *[IPx4]*

	EVS 4343	EVS 3643
Model	EVS 4343	EVS 3643
Detector Type	Direct deposition CsI or Gadox	Direct deposition CsI or Gadox
Dimension	460 (H) x 460 (V) x 15 (D)	386 (H) x 460 (V) x 14.5 (D)
Weight	4.5 kg	2.98 kg (including Battery 3.3 kg)
Active Area	430 X 430 ㎜	358 X 430 ㎜
Pixel Pitch	140 ㎛	140 ㎛
Resolution	3,072 X 3,072	2,560 X 3,072
A/D Conversion	14 bit	14 / 16 bit
Input Voltage	DC 12V, 5A	DC 12V, 5A
Communication	Giga Ethernet	Giga Ethernet / IEEE 802.11n (5 GHz)
X-ray I/F	Lossless AED / Sync Trigger	Lossless AED / Sync Trigger
Image Acquistion time	Wired- 4.5 sec. / Wireless- N/A	Wired- 4.5 sec. / Wireless- 6 sec.

EVS 2430W *[IPx4]*

EVS 2430

	EVS 2430W	EVS 2430
Model	EVS 2430W	EVS 2430
Detector Type	Direct deposition CsI or Gadox	Direct deposition CsI or Gadox
Dimension	267.5 (H) x 327.5 (V) x 15 (D)	267.5 (H) x 327.5 (V) x 15 (D)
Weight	1.85 kg	1.85 kg
Active Area	233.47 x 291.84 ㎜	233.47 x 291.84 ㎜
Pixel Pitch	76 ㎛	76 ㎛
Resolution	3,072 X 3,840	3,072 X 3,840
A/D Conversion	16 bit	16 bit
Input Voltage	DC 12V, 5A	DC 12V, 5A
Communication	Giga Ethernet / IEEE 802.11n (5 GHz)	Giga Ethernet
X-ray I/F	Lossless AED	Lossless AED / Sync Trigger
Image Acquistion time	Wired- 4.5 sec. / Wireless- 6~8 sec.	Wired- 4.5 sec. / Wireless- N/A

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