FUJIFILM
Value from Innovation

FDR Smart X
DIGITAL RADIOGRAPHY SYSTEM

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FDR Smart X

Selectable Two Style

FDR Smart X is Fujifilm's newly developed X-ray system, providing multi-function, high-quality, cost-effective X-ray solutions.

The Smart X offers ceiling suspended X-ray tube configurations as well as a floor mounted X-ray tube option for use with the upright stand and table, providing flexible solutions for your imaging department.

Compatible with Fujifilm's latest D-EVO II series DR panels with their advanced features and high image quality.
Also CR cassette and F/S cassette are available for FDR Smart X.

FDR Smart X

Ceiling Suspended Tube Stand

The Ceiling mounted tube provides tracking with the upright stand and table detectors improving workflow, throughput and efficiency.

Touch Screen Console

A Digital display on the tube head provides easy access to exam parameters in the X-ray room.

Compatible and Optimal X-ray Solution

The Floor mounted tube option, provides flexibility to install in limited space, maximizing the imaging systems available in the department.

Floor Mounted Tube Stand

Wall Bucky Stand Automatic Tilting

Automatic and manual tilting of the upright bucky stand is available*.
Providing an improved workflow for the radiographers and an improved
experience to those patients in wheelchairs.
*Different stand is lined-up for each

Control Panel of Automatic Tilting Wall Stand

The ability to store preset positions and move the wall
stand automatically to those positions provides a quick and
efficient workflow.

Remote Control

- Auto Positioning (User Programmable)
- Control of Synchronization with Tube Stand
- Motorized Collimation & Lamp Control
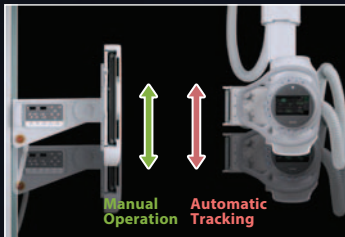- Motorized Tilting Movement
- Motorized Vertical Movement

Removable Grid

Removable grids in both the table
and upright stand, allow flexible
working (such as Pediatrics).

Automatic Tracking

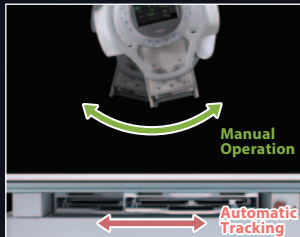Tube head and bucky move synchronized with each other supporting positioning for exposure.

Motorized Vertical
Synchronization with wall stand

Motorized Vertical
Synchronization with table

The table bucky tracks after the
horizontal movement of the
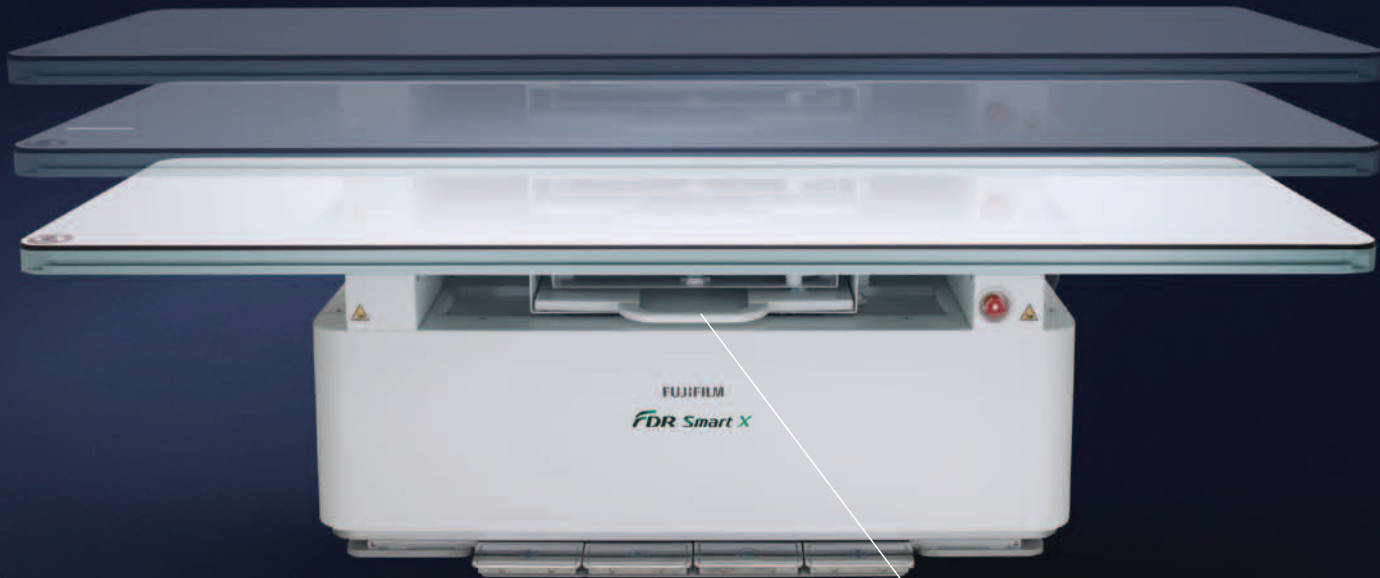tube head (same as floor
mounted tube head)

The table bucky tracks after the
rotating motion of the tube
head (same as floor mounted
tube head)

Multi function stand and table supporting efficient workflow
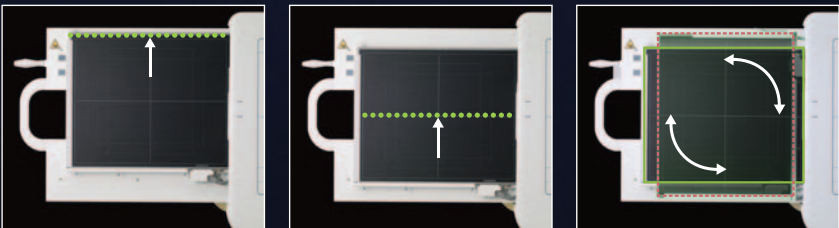
Elevating Patient Table

A motorized height adjustable floating top table with a weight limit of
300 kg. Synchronisation (Tracking) of the tube with both upright and
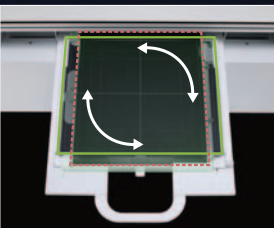table detectors. Available with ceiling and floor mounted systems.

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Dual Reference Rotation

Not only top reference, but also center rotation can be selected when using 14" × 17"
DR panels. This provides flexible solutions, enabling exposure of areas other than the chest
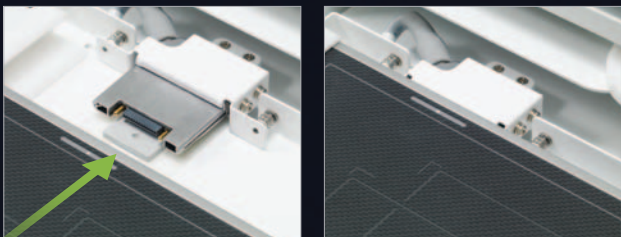without taking out the panel and insert again in rotated direction or using larger panel.

Rotating Tray

Rotating tray is also available for
table. Direction of the panel can
be changed according to the
patient position.

Automatic Connection

The SE cable + connector are already built in the tray, thus, just setting
the DR panels into the tray, DR panels are automatically connected.
Also, there is no need to handle the cables around the bucky.
Combined with rotation function, this will greatly improve efficiency
and remove the stress of the workflow.

Fail Safe Switch

Fail safe switch detects panel in side the tray / bucky. When the panel is not inside the bucky or not inserted properly,
exposing X-ray is unable. Thus, false exposure can be prevented.

Integrated and optimized workflow and High Image Quality

Console

X-ray operation

Technique select buttons

*From Console

*From X-ray operation

Connected modalities (panels / cassettes) are displayed both in Console and X-ray controller. By simply selecting the button, the modality can be changed and they are synchronized between Console and X-ray controller.

Status display for DR panel

80%

When DR panel is used, it is available to confirm its status; wireless connection level, battery charge level, etc.

Integrated Console

Realizing optimized workflow

Detector Console and X-ray controller are integrated, displaying in the same monitor. Setting the exposure condition and selecting the exposure menu can be done in the same PC.

Compatible for DR and CR systems

Both DR panel and CR cassette can be used for FDR Smart X. (Also, F/S cassette is available as mentioned previously) They can be used in the same system at the same time, either the workflow is the same, and the image appears in the console. (Using F/S cassette, image does not appear)

FDR Smart X ············ Integrated Console ············ FCR Reader

Dynamic Visualization II

Dynamic Visualization II

Contrast and density can automatically adjusted through recognizing each body part and object based on the estimated 3D information.

Optimizing Contrast and Density with latest Exposure Data Recognizer

Conventional | Dynamic Visualization II | Conventional | Dynamic Visualization II

High definition, made smarter.

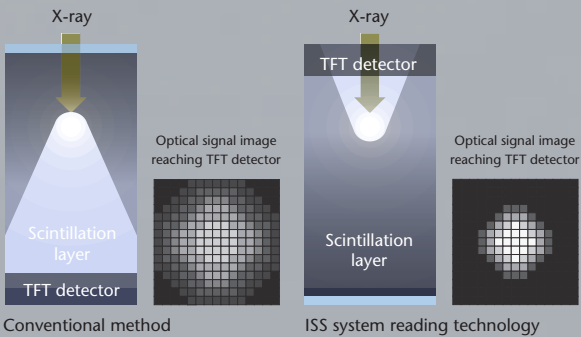## FDR D-EVO II

Improved image quality through Fujifilm's innovative designs like ISS and noise reduction circuit allows smarter imaging.

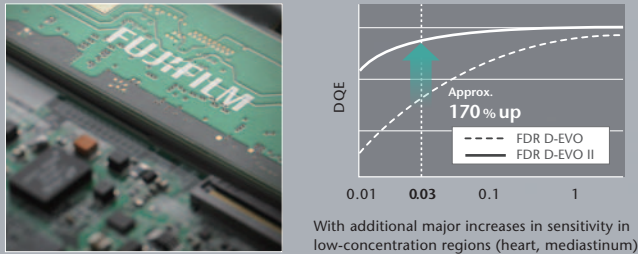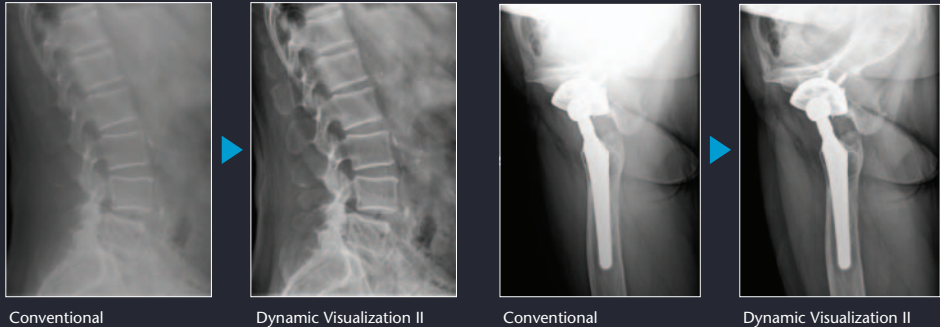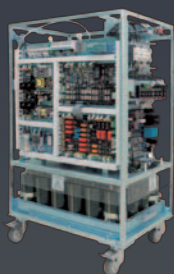17×17 inch model | 14×17 inch model

ISS system reading technology promotes high sensitivity

Equipped with an indirect conversion system flat detector display using ISS, which bonds optical sensors (TFT) to the X-ray irradiation side unlike traditional flat detector displays. This greatly suppresses scattering and attenuation of X-ray signals, creating sharp images with low doses of X-rays.

X-ray

Scintillation layer

TFT detector

Optical signal image reaching TFT detector

Conventional method

X-ray

TFT detector

Scintillation layer

Optical signal image reaching TFT detector

ISS system reading technology

Fujifilm noise reduction circuit improves detector sensitivity in high absorption regions

The uniquely developed noise reduction circuit reduces noise in the image. It achieves 1.7 times the DQE of existing systems with a 0.03 mR dose. In particular, granularity of low-concentration regions such as the heart and mediastinum is dramatically improved.

DQE

Approx.
170 % up

FDR D-EVO
FDR D-EVO II

0.01   0.03   0.1   1

With additional major increases in sensitivity in low-concentration regions (heart, mediastinum)

Flexible generator line up provides solutions for all environments

■ Medical Center

Capacitor Assisted Generator

Perfect for the medium sized X-ray department. No power supply modification necessary 40kW Single Phase Input power 3kVA

■ Country side

*Unstable electricity supply

UPS Generator

Supplies power for 5 hours (or approximately 500 shots) without electricity. The ideal solution for regions with unstable power supply 40kW Single Phase Input power 1kVA

■ Hospital

Line Powered Generator

We can adjust our generator to the workload required in a big hospital. 40kW/52kW/68kW/82kW Three phase. This is a high frequency X-ray generator

FDR Smart X Specifications

	FDR Smart FGXR series									
	FGXR-32S	FGXR-C32S	FGXR-U32S	FGXR-40S	FGXR-C40S	FGXR-U40S	FGXR-52S	FGXR-C52S	FGXR-68S	FGXR-82S
Generator Model	GXR-32	GXR-C32	GXR-U32	GXR-40	GXR-C40	GXR-U40	GXR-52	GXR-C52	GXR-68	GXR-82
Output Rating	32kW			40kW			52kW		68kW	82kW
Line Nominal, Phase	230VAC, 1Φ, ±10% 400/480VAC, 3Φ, ±10% (option)	110-120/ 220-230VAC, 1Φ, 3KVA	100-240VAC, 1Φ, 1KVA	230VAC, 1Φ, ±10% 400/480VAC, 3Φ, ±10% (option)	110-120/ 220-230VAC, 1Φ, 3KVA	100-240VAC, 1Φ, 1KVA	400/480VAC, 3Φ, ±10%	110-120/ 220-230VAC, 1Φ, 3KVA	400/480VAC, 3Φ, ±10%	
Line Frequency	50/60Hz (Outside North America)									
kV Range	40~125kV, 1kV step (150kV option)						40~150kV, 1kV step	40~125kV, 1kV step (150kV option)	40~150kV, 1kV step	
mA Range	10 to 400mA			10 to 500mA			10 to 640mA		10 to 800mA	10 to 1000mA
Timer Range	0.001 to 10 sec, 38 steps									
mAs Range	0.1 to 500mAs (Optional higher mAs)									
Max. Power Output	400mA@80kV 320mA@100kV 250mA@125kV			500mA@80kV 400mA@100kV 320mA@125kV			640mA@81kV 500mA@104kV 400mA@130kV 320mA@150kV	640mA@81kV 500mA@104kV 400mA@130kV	800mA@85kV 640mA@106kV 500mA@136kV 400mA@150kV	1000mA@82kV 800mA@102kV 640mA@128kV 500mA@150kV

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