DK⁺, the Best Healthcare Company

GMP
Korea Food & Drug Administration

CE 2460

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※ The appearances and specification are subject to change without prior notice for further improvement.
KMKT-BC-004(Innovision-EXII)

Digital Radiography System
INNOVISION - EXII

DK⁺ Medical Systems

DK⁺

The Best Healthcare Company, DK⁺ Medical Systems

A Professional and leading manufacturer which is at the forefront of the X-ray industry and has specialized in medical X-ray Systems since 1992.

1. **H.Q** Seoul, Korea
2. **FACTORY** Pyeongtaek, Korea

Generator

- High Frequency Inverter
- Low Ripple Tube Voltage and High X-ray Quantum Efficiency /Frequency Variable According to Load Conditions
- Stable X-ray Output

Specification

	HX-630C	HX-1000C(Option)
kW	50kW	80kW(Option)
kV Range	40 - 150kV	40 - 150kV
Power Output Ratings	320mA at 150kV	500mA at 150kV
	500mA at 100kV	1000mA at 80kV
sec Range	1ms ~ 10sec	1ms ~ 10sec
mA Range	10 - 630mA	10 - 1000mA
mAs Range	0.1 ~ 500mAs	0.1 ~ 1000mAs
Anatomical Programing	244	1024
Automatic Exposure Control (2 Chambers)	Optional	Optional
Bucky Signal Supply	Standard	Standard
Line Voltage	380-400Vac, 50/60Hz	380-400Vac, 50/60Hz
	Three Phase	Three Phase
Digital Interface	Available	Available
Tube	E7884X	E7869X
	RAD-14	

※ The specification on the table can be changed.

Structure

Ceiling Type

| Elin-T5

| Elin-T4

| Elin-T3 Plus

Universal Type

| SF-90T/ DS-90T

3-in-1 Type

| ST-90D

Floor Type

| SF-90/ DS-90/ TF-90

| SF-90C/ DS-90/ TE-90

Digital Radiography System
INNOVISION - EXII

Superiority and Efficiency
of the Ultimate Versatile System

The new-generation INNOVISION-EXII powered by Flat-Panel Detector covers the complete spectrum of clinical requirements and drastically reduces redundant work steps. Thus, it greatly optimizes the workflow, leading to higher performance.
INNOVISION-EXII has realized the safe, easy, and fast acquisition of clear radiographic images and low levels of radiation dose.
Its unprecedented ease-of-use networking, combined with DICOM 3.0, enables a streamlined workflow through seamless, effective data transfer. Its refined total design package for real-time diagnosis can be translated into an ideal working condition.

Digital Imaging...

Digital Imaging offers significant advantages to medical radiology, from top-quality images produced almost instantaneously to easy image processing, transmission, and storage. Superb high-quality images for more precise diagnosis as well as immediacy of viewing the images provided by the flat-panel detector are noteworthy clinical advantages in the radiographic field. Digital radiography allows the operator to use various image-processing functions, such as changing the contrast (to a lighter or darker one), enlarging images, and placing color enhancements on images. All these features facilitate detection for any kind of diagnosis that needs immediacy and effectiveness. Thus, digital imaging makes every step of radiography less complicated both for the operator and for the patient, realizing its ultimate concept – easier, simpler, cleaner, and definitely faster operation compared to the conventional radiography.

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Quick and Easy Preparation for Examinations

Soft Handling for Ceiling-mounted X-ray Tube Support

3,700mm
2,400mm   1,500mm

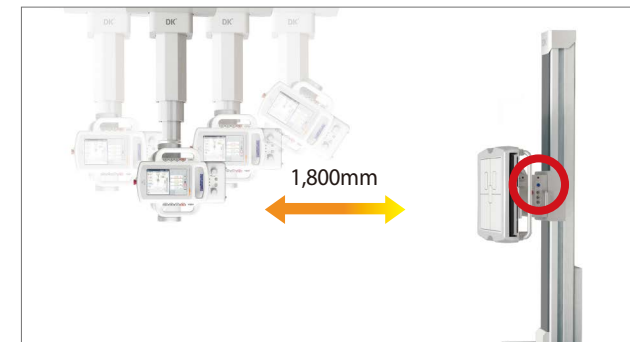Smooth manual moving

1,500mm

Long vertical stroke

End Study Button

When the End Study Button on the menu is pressed after the check, the tube support automatically rises and the table goes down so that patients can easily get down from the table without running into the device when pushing themselves up. Such End Study Button increases work efficiency by making operators able to care for patients better after the check.

Call Buttons for the Registered Position

Once the call button is pressed on wall bucky stand or table, regardless of where the ceiling support is located, each of them moves to their position in accordance with detector's center and makes it quick and convenient.

1,800mm

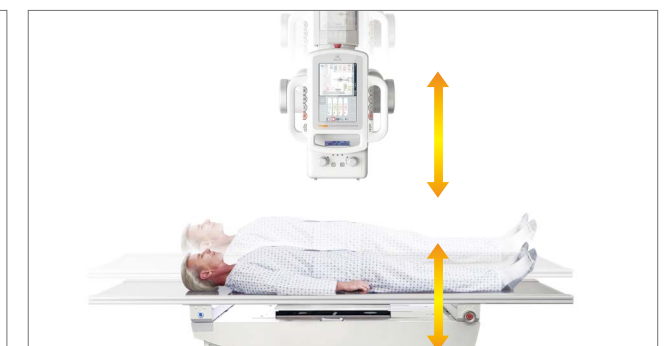Call button for wall bucky stand

1,000mm

Call button for table

Ceiling Suspended X-Ray Tube Support Linked with a Bucky Stand and Table

The focal spot of the X-ray tube unit can be moved up and down in conjunction with vertical movement of the bucky stand and table. For a supine-positioned patient, the X-ray tube automatically moves to a preset SID, enabling precise and fast positioning.

Synchronized for chest exams

Auto-synchronization

Detector Unit Synchronized to the Ceiling-Mounted X-ray Tube Support

The longitudinal travel of the detector can be easily synchronized. The synchronization between the X-ray field and the detector enables fast positioning for complex exams like oblique radiography.

DK' Medical Systems

Automatic Positioning for Flexible and Versatile Applications

Auto-positioning for Patient Comfort and Safety

The ceiling-mounted X-ray tube support automatically moves to the registered position with a single button press, relative to the bucky stand and table. The SID and X-ray tube angle change automatically, enabling easy tube support preparation and stowage, and ultimately realizing a remarkably efficient workflow. Manual positioning is also available for high-precision positioning.

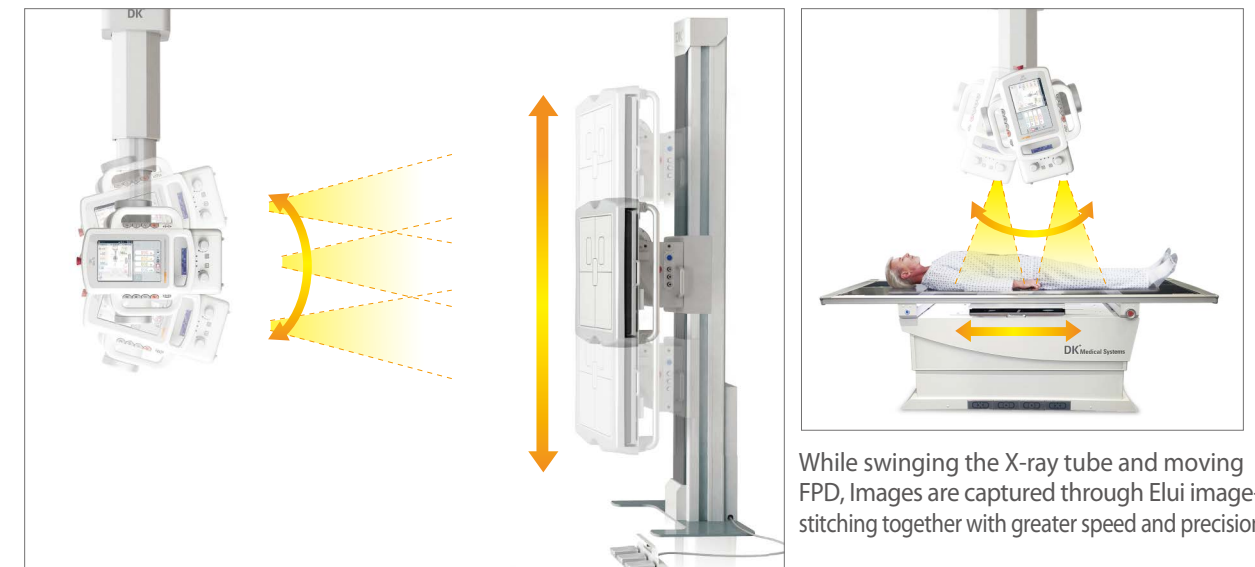Auto-positioning

Remote controller

Auto positioning is a more high advanced type of automation. It includes the syncing you get from auto tracking, but also moves both the tube head and the bucky into position based on pre-programmed position from the systems console. The intent of auto positioning is to increase workflow by allowing the user to input their studies for the day in advance so, at the push of a button, the X-ray system can move itself between studies and be in position before the patient even gets into the exam room.

Advanced Imaging Applications

Auto-stitching Images for Full spine and Long bone

Auto-stitching

INNOVISION is very easy to use with auto-stitching images at not only wall bucky stand but also table examination. It makes long bone examination fast and convenient.
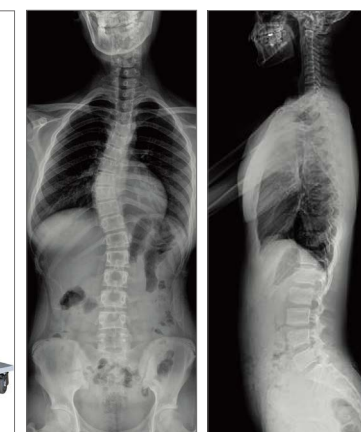
While swinging the X-ray tube and moving FPD, Images are captured through Elui image-stitching together with greater speed and precision.

Clinical Benefits of Full Spine Imaging

Orthopedic diagnosis will benefit from this innovative application software in areas such as the assessment of scoliosis. Potential applications include, for example, accurate measurement of spine angles and distances between anatomic entities, assessment of the evolution of therapy over time, identification of orthopedic surgery indications.

Patient Stand

Visualize the complete spine by easily combining images with Elui image-stitching software

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Ergonomic Design for High-Performance and Easy Operation

Bucky tilt allows horizontal positioning for upper extremity studies

Tiltable Bucky Stand (-20˚~ 90˚ tilting angle)

Equipped with a tilting FPD unit, which accommodates wide-range positioning to meet all patient ranges and studies.
Combined with the ceiling-type X-ray tube support, the collimator self-adjusts according to the SID.
Compactly designed for the easy examination of a seated patient.

Elevating Horizontal Radiographic Table

The four-way floating top and electromagnetic locks enable easy positioning. It features both a highly rigid design and a durable shock-absorption mechanism.

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Digital Radiography System

INNOVISION - EXII
Ceiling Type (Elin-T4)

More Convenient & Easier for Operator

- Synchronized Tube Stand and Tray
- Tube Support with Long Vertical Movement
- 7" LCD Display
- Auto Stitching Function

Specification

Elin-T4 (Tube Support)	
Balance System	Spring Balance
Vertical Travel	1,500mm
Longitudinal Travel	Max. 2,820mm
Transverse	Max. 2,430mm
Tube Rotation	±180°
Tube Swivel	±180°
Driven Type	Manual or Manual Driven
THD*	Tube Angle & SID Display
	LCD Type

TE-90 (Table)	
Type	6 way Table
Dimension (L)	2,000mm
Dimension (W)	800mm
Longitudinal Travel	630mm
Transverse Travel	300mm
Vertical Travel	290mm (566 ~ 856mm)
Bucky Movement Range	479mm
Vertical Movement Type	Actuator Type
Bucky Type	Fixed Detector Type (Basic)
	Cassette Tray Type (Option)
Tabletop Material	Acryl (Basic)
	Melamine (Option)

DS-90 (Stand)	
Type	Detector Stand
Balance System	Weight Balance
Bucky Type	Fixed Detector Type (Basic)
	Cassette Tray Type (Option)
Vertical Travel	1,450mm
Height	2,026mm
Drive Type (Vertical)	Manual & Motor
Vertical lock	Electro magnetic

※ The specification on the table can be changed.

TE-90

DK Medical Systems

Easy Operation

Tube Support Synchronized with Table and Bucky Stand
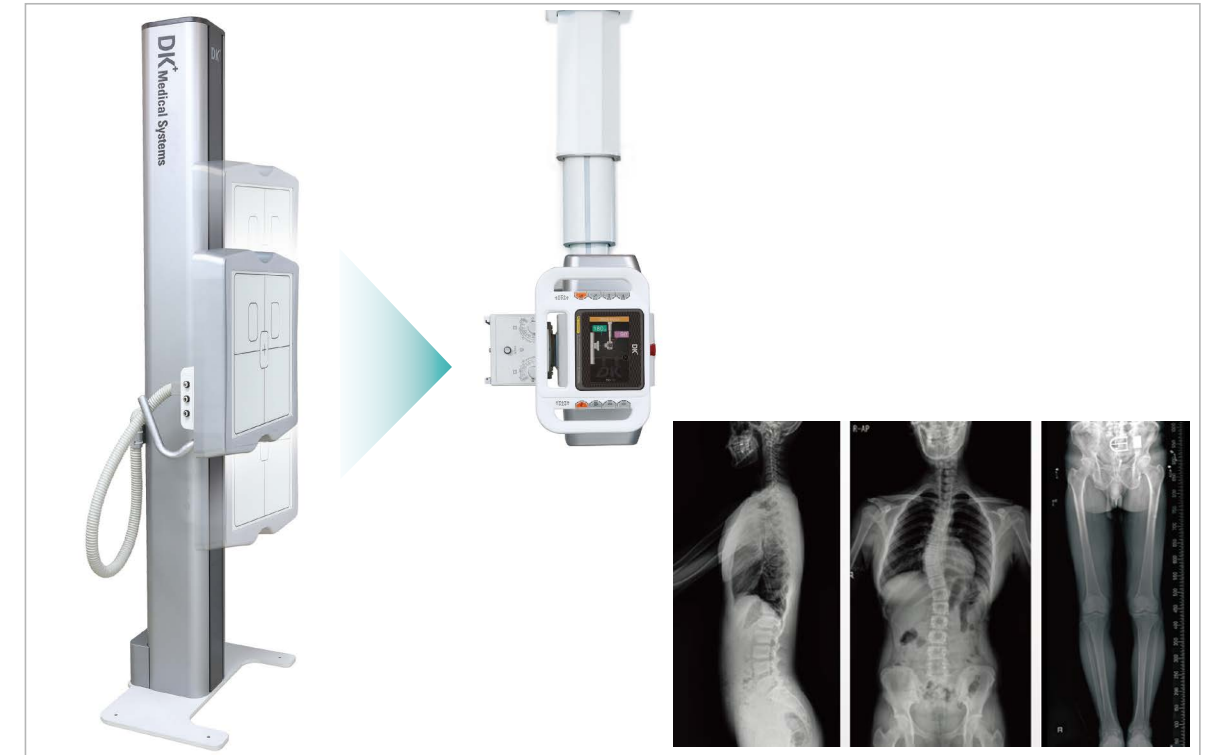
Synchronized with Bucky Stand

| 7 inch LCD on Handle Bar
  Displays Tube Angle Degrees /SID
  Bucky & Table Mode

| Motorized Up and Down Movement

Auto Stitching

Automatically merging two to three images after shooting for whole-spine and long bone images

Ergonomic Design

Easy To Position for Wheelchair Patient

Digital Radiography System

INNOVISION - EXII
Ceiling Type (Elin-T3 Plus)

The Field-proven System

- The Best Selling and Customer-proven System
- Can Be Configured to Manual or Semi-auto

📋 Specification

Elin-T3 (Tube Support)

Balance System	Spring Balance
Vertical Travel	1,300mm
Longitudinal Travel	Max. 2,867mm
Transverse	Max. 2,711mm
Tube Rotation	±180°
Tube Swivel	±180°
Driven Type	Manual Driven (Motor Option)
THD*	Analog Type Goniometer

TF-90 (Table)

Type	4 Way Table
Dimension (H)	700mm
Dimension (L)	2,000mm
Dimension (W)	800mm
Longitudinal Travel	630mm
Transverse Travel	300mm
Bucky Movement Range	479mm
Bucky Type	Cassette Tray Type (Basic)
	Fixed Detector Type (Option)
Tabletop Material (Basic)	Melamine (Basic)
	Acryl (Option)

DS-90 (Stand)

Type	Bucky Stand
Balance System	Weight Balance
Bucky Type	Cassette Tray Type (Basic)
	Fixed Detector type (Option)
Vertical Travel	1,450mm
Height	2,026mm
Drive Type (Vertical)	Manual
Vertical Lock	Electro magnetic

※ The specification on the table can be changed.

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Digital Radiography System

INNOVISION - EXII
Universal Type System

I SF-90T / DS-90T / TM-22

Specification

DS-90T (Detector Support)	
Type	Detector Stand
Balance System	Weight Balance
Vertical Travel	Rail 2,400mm (Basic) : 1,300mm
	Rail 3,000mm (Option) : 1,700mm
Detector Rotation	45°
Detector Tilting	90°
Driven Type (Vertical)	Motor Driven
Driven Type (Longitudinal)	Motor Driven
Vertical Travel	Electro Magnetic Lock
Detector	Detector (Fixed as 17x17 size)

TM-22 (Mobile Table)	
Type	Mobile Table
Dimension (H)	750mm
Dimension (L)	1,740mm
Dimension (W)	775mm

SF-90T (Tube Support)	
Type	Floor to Ceiling Type
Balance System	Spring Balance
Vertical Travel	1,450mm
Longitudinal Travel	Rail 2,400mm(Basic) : 1550mm
	Rail 2,800mm(Option) : 1,950mm
	Rail 3,500mm(Option) : 2,650mm
Transverse Travel	0mm
Tube Rotation	±180°
Tube Swivel	0°
Driven Type	Manual Driven
THD*	Analog Type Goniometer
	LED Light

※ The specification on the table can be changed.

Feature

Unique and Resourceful Design

- Versatile digital radiography system equipped with a 17"x17" flat-panel detector
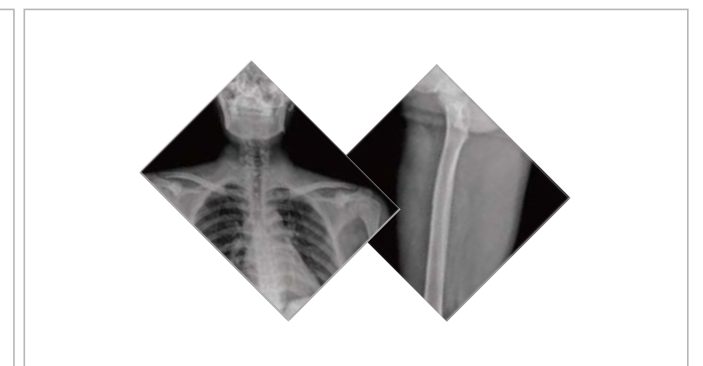- Specifically designed for limited spaces, especially those with low ceilings

I Chest Mode
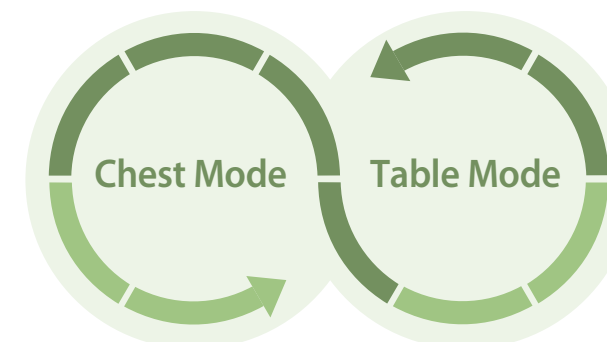

I Table Mode

I Stand Knee / Ankle Position

I 45 ° Rotation

I Shoulder / Clavicle Image

Motorized Remote Control

- Transformation Motorized by Remote control

Chest Mode — Table Mode

DK Medical Systems

Digital Radiography System

INNOVISION - EXII

3-in-1 Type System

I DS-90 / ST-90D

I ST-90D

I DS-90

Specification

ST-90D		
Tube Stand	Vertical Movement	1,450mm
	Longitudinal Movement	1,400mm
	Transverse Movement	125mm
	Balance Type	Weight Balance
	Tube Rotation	±180°
Tabletop	Length	2,000mm
	Width	742mm
	Height	700mm
	Longitudinal Movement	600mm
	Transverse Movement	225mm
	Bucky Unit Travel	480mm
	Table Material	Melamine
	Bucky Type	Cassette Tray Type (Basic)
	Vertical Movement	Fixed Detector Type (Option)
Lock Type	Manual Type by Electromagnetic	

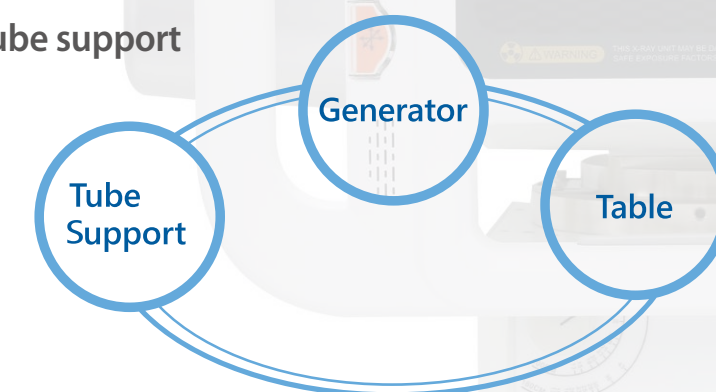| DS-90	
Type	General Bucky Stand
Balance System	Weight Balance
Bucky Type	Cassette Tray Type (Basic)
	Fixed Detector Type (Option)
Vertical Travel	1,450mm
Height	2,026mm
Driven Type (Vertical)	Manual
Vertical Lock	Electro Magnetic Lock

※ The specification on the table can be changed.

Feature

3- in-1 System

- **Combined system consisting of tube support table and generator**
- **Efficient space utilization**

Generator

Tube Support

Table

Tube Support & Table Synchronization

- **Bucky tray following in same direction with tube stand movement**
- **Collimator turning on automatically when operators press the footswitch**
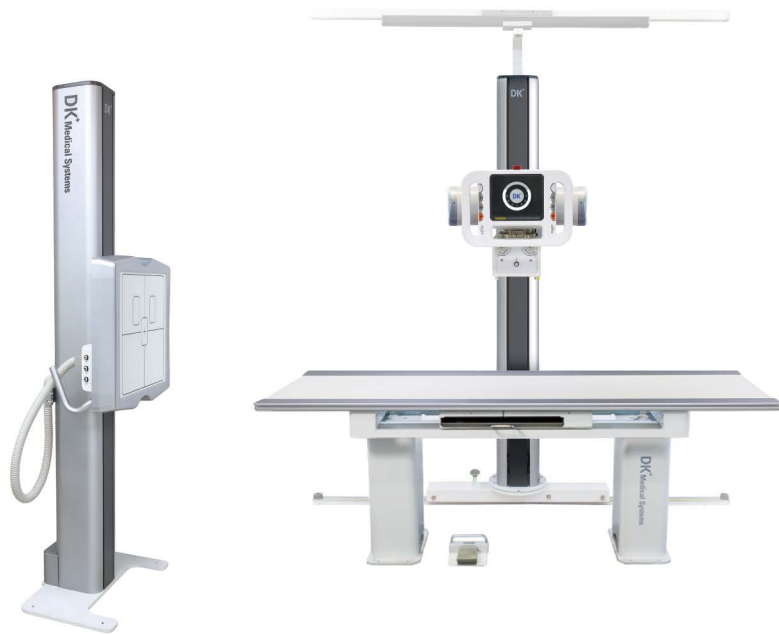
Standing Knee Position

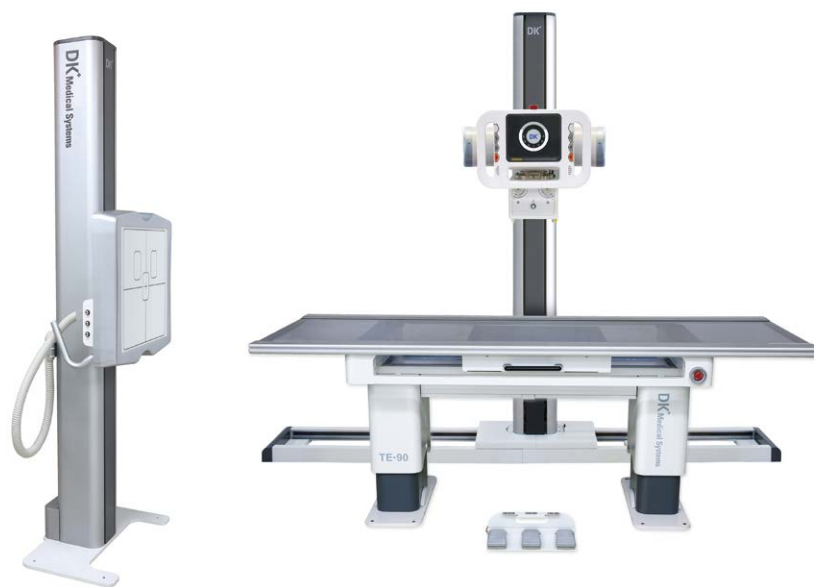- **Enable users to take images more conveniently without any hospital stool**

350 mm

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Digital Radiography System

INNOVISION - EXII
Floor Type System

| SF-90B (Floor to Ceiling Type) / DS-90 / TF-90

| SF-90C (Stand Alone Type) / DS-90 / TE-90

Specification

| SF-90B

SF-90B	
Type	Floor to Ceiling Type
Balance	Weight Balance
Vertical Movement	1,450mm
Longitudinal Travel	Rail : 2,400mm (Basic) : 1,550mm
	Rail : 2,800mm (Option) : 1,950mm
	Rail : 3,500mm (Option) : 2,650mm
Transverse Travel	225mm
Tube Rotation	±180°
Tube swivel	±90°
Driven Type	Manual
THD	Goniometer (LED Type)

| SF-90C

SF-80C	
Type	Floor to Ceiling Type
Balance	Weight Balance
Vertical Movement	1,450mm
Longitudinal Travel	Rail : 2,400mm (Basic) : 1,800mm
	Rail : 3,000mm (Option) : 2,400mm
Transverse Travel	225mm
Tube Rotation	±180°
Tube swivel	±90°
Driven Type	Manual
THD	Goniometer (LED Type)

| DS-90

DS-90	
Type	Floor to Ceiling Type
Balance System	Weight Balance
Bucky Type	Cassette Tray Type (Basic)
	Fixed Detector Type (Option)
Vertical Travel	1,450mm
Height	2,026mm
Drive Type (Vertical)	Manual
Vertical Lock	Electro Magnetic

| TF-90

TF-90	
Type	4 Way Table
Dimension (H)	700mm
Dimension (L)	2,000mm
Dimension (W)	800mm
Longitudinal Travel	630mm
Transverse Travel	300mm
Bucky Movement Range	479mm
Bucky Type	Cassette Tray Type (Basic)
	Fixed Detector Type (Option)
Tabletop Material (Basic)	Melamine (Basic)
	Acryl (Option)

| TE-90

TE-90	
Type	6 Way Table
Dimension (L)	2,000mm
Dimension (W)	800mm
Longitudinal Travel	630mm
Transverse Travel	300mm
Vertical Travel	290mm (566~856mm)
Bucky Movement Range	479mm
Vertical Movement Type	Actuator Type
Bucky Type	Cassette Tray Type (Basic)
	Fixed Detector Type (Option)
Tabletop Material	Melamine (Basic)
	Acryl (Option)

※ The specification on the table can be changed.

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Elui Software

⁘ Optimized Image Processing Software

Elui is an advanced image-processing software optimizing the digital radiography. By using Elui, X-ray exposure and image parameters can be adjusted conveniently on the main screen. After the exposure, captured image will be transferred and be checked immediately through a monitor (within 3 sec through wired detector). This benefit can speed up your workflow and save your time. With Elui image processing software, you can see and diagnose the patient condition in right time, making medical condition better.
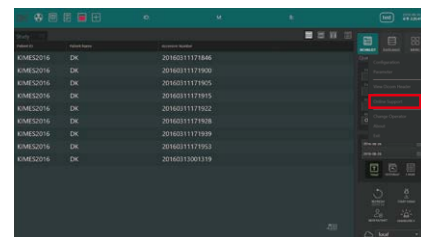

Powerful User Interface
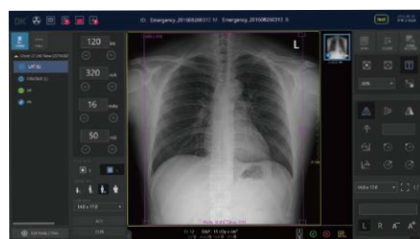- All-in-one Work Flow
- Display Device Information

Advanced Post Processing Image
- Superior Noise Processing
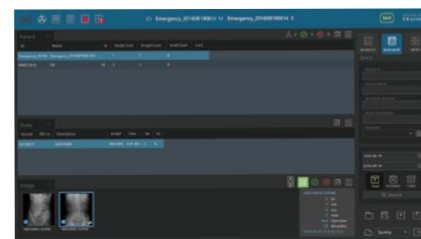- Optimized Image Processing

Remote Service
- Remote Access Software Included
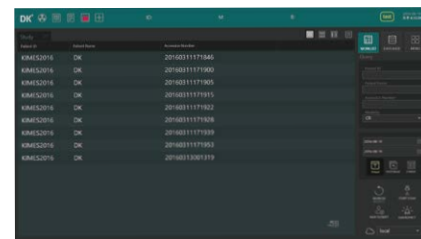- Download Files and Maintenance Instructions

Easy Tools
- Eidetic Icon
- Convenience Motion
  (Pan/Zoom/Windowing)

Easy Statistics Report
- Support Statistical Analysis Function
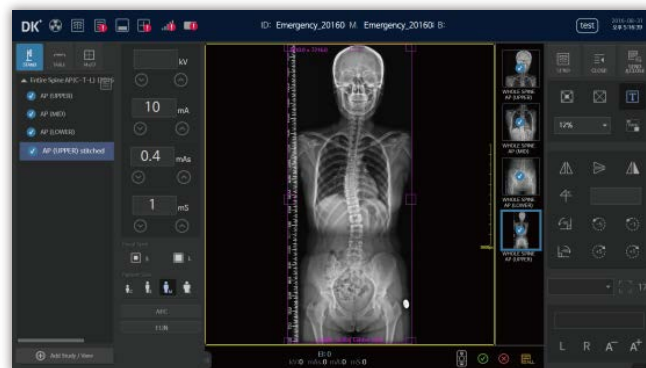- Export Image

Patient Worklist
- Support Modality Worklist
- Easy Emergency Study

⁘ Stitching

This stitching module allows you to stitch several images automatically, perform measurement and send DICOM compliant image to a printer and/or PACS.

📋 Specification

FPD Specification	1417SA(B)	1417WA(B)
Detector Type	Indirect	Indirect
X-ray Conversion	A : CSL (Cesium Lodide)	A : CSL (Cesium Lodide)
	B : Gadox (Gadolinium Oxysulfide)	B : Gadox (Gadolinium Oxysulfide)
Wired / Wireless	Wired	Wireless
Panel Size	14 X 17 inch	14 X 17 inch
Total Pixel Number	2,560 X 3,072	2,560 X 3,072
mage Format	14 Bit	14 Bit
Spatial Resolution	4.0 lp/mm	4.0 lp/mm
Pixel Pitch	140 Micron	140 Micron
Acq. time*	Elui(DXIE) : 2.4 sec	- Wireless type Elui(DXIE) : 5.7 sec Elui(XIPL) : 7.5 sec
	Elui(XIPL) : 4.2 sec	- Wired Type Elui(DXIE) : 3.2 sec Elui(XIPL) : 5 sec
AEC	Yes	Yes
Dimension	444 X 460 X 15mm	384 X 460 X 15mm
Weight	3.6kg	3.4kg

FPD Specification	1717NA(B)	1717NA(B)W
Detector Type	Indirect	Indirect
X-ray Conversion	A : CSL (Cesium Lodide)	A : CSL (Cesium Lodide)
	B : Gadox	B : Gadox
Wired / Wireless	Wired	Wireless
Panel Size	17 X 17 inch	17 X 17 inch
ToTal Pixel Number	3,048(W) X 3,048(H) Pixel (FXRD-1717NA)	3,060 X 3,060
	3,072(W) X 3,072(H) Pixel (FXRD-1717NB)	Indirect
Image Format	16 Bit	16 Bit
Spatial Resolution	4.0 lp/mm	4.0 lp/mm
Pixel Pitch	140 Micron	140 Micron
Acq. time*	Elui(DXIE) : 2.7 sec	- Wireless Type Elui(DXIE) : 4.2 sec Elui(XIPL) : 6 sec
	Elui(XIPL) : 4.5 sec	- Wired Type Elui(DXIE) : 2.7 sec Elui(XIPL) : 4.5 sec
AEC	Yes	Yes
Detector Type	460 X 460 X 15.5mm	460 X 460 X 15.5mm
Detector Type	4.2kg	4.5kg

※ The specification on the table can be changed.

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