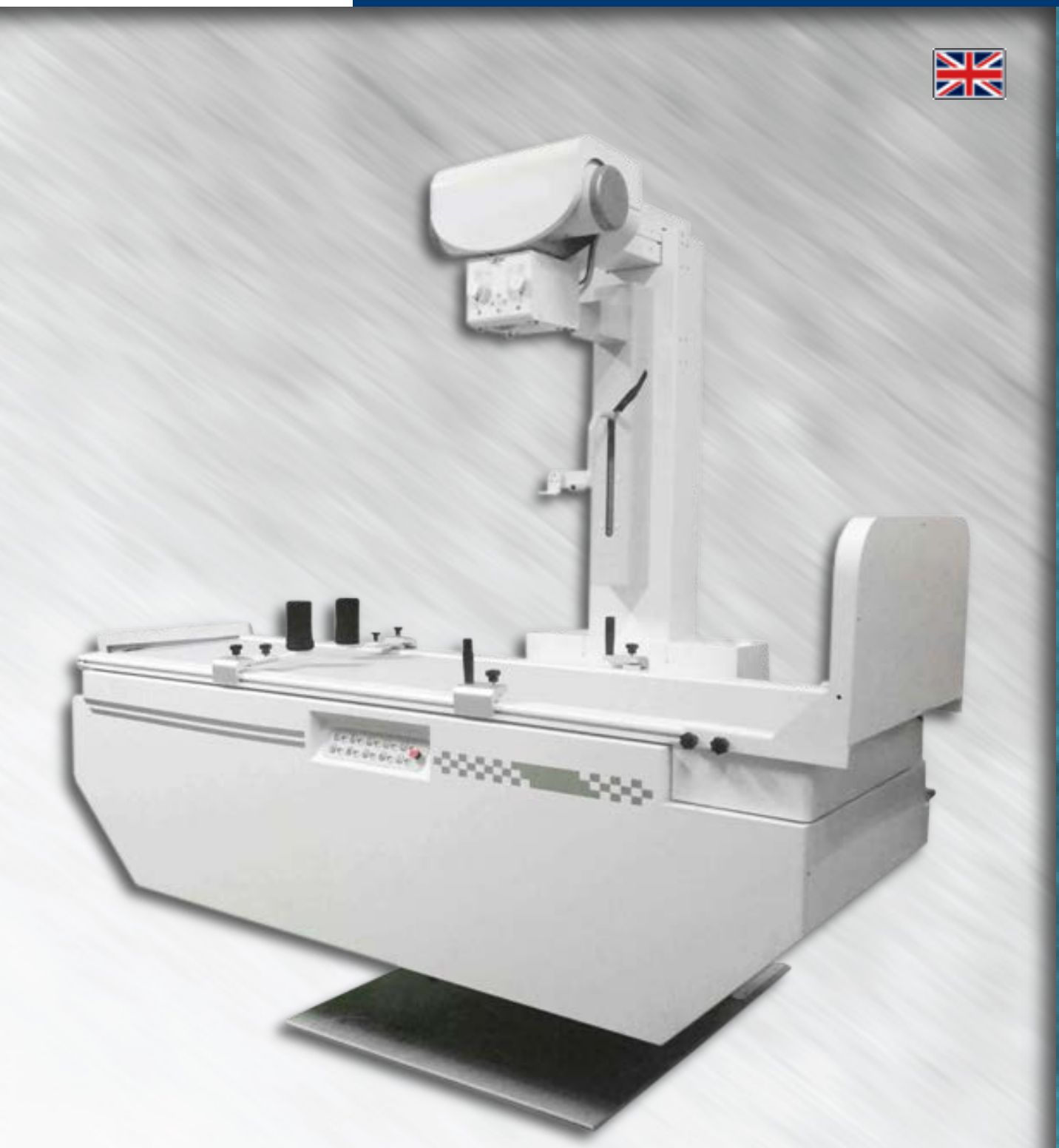
BRT-40

ADRF- Multifunctional Dynamic Digital Radiography System



IMAGING SYSTEMS

BRT-40

ADRF- Multifunctional Dynamic Digital Radiography System

Introduction

• ADRF- uses the patient table it's wide-range movements and auto DR operations reduce the patient movements and make the operation easier and faster. With various functions such as fluoroscopy, imaging and radiography, this system will satisfy all kinds of clinical applications.

• Fluoroscopy: This system uses a Dynamic Flat Panel detector and advanced computer image processing technology, bringing real-time image spot film storage and playback functions. Such as chest X-ray, gastrointestinal and gullet Barium fluoroscopy.

• Angiography: Angiography of respiratory system, digestive tract, urinary system, biliary tract, lower limb vein, gynecologic and interventional examination (option) .

• Radiography: Retractable tube arm, max SID is 1800mm. It could provide omnibearing digital radiography of various body parts without blind area.

Features

Table height in vertical position 2200mm
Vertical mount height 1930mm
Width 2100mm
Maximum height with table in horizontal position and focus to film at 180 cm 2750mm
Depth (distance between mounting base and tabletop side) 820mm
Access from forth side (back) 400mm
Column displacement 1200mm
DFP holder displacement 1200mm
RX covering area 430mm*2100mm
Distance from tabletop to receptor 100mm
Weight distribution plate (to be anchored on the floor) 1100*900*15mm-250kg

Tabletop dimension 2100×880×10mm
Tabletop type Carbon Fiber maximum weight 200kg
Tabletop lateral excursion movement 240mm
Longitudinal excursion 1200mm
Tube angulations range for oblique projections +45 to −45°
Tabletop tilting range (90/-40?) +90°∼0°∼ -15
X-ray tube assembly rotation range -180 to +180°
SID 1000mm to 1800mm

ACCESSORIES
Standard
Shoulder rest;
Pair of ergonomic handlers;
Optional
Removable footrest with surface 400x600 mm;
Paper roll bearer LDC glass bearer Compression band OB-GYN legs bearer
Additional pedal(in examination room)for RAD/Fluoro

DYNAMIC CHARACTERISTICS
Tabletop rise time from lower to max height (horizontal position) 20 sec
Tabletop combined rotation from 0°to+90° 25 sec
Tabletop combined rotation from 0°to- 90° 25 sec
Tabletop combined rotation from-90"to+90° 45 sec
Tabletop lateral displacement From4 cm/sec to 8 cm/sec
Lined translation(tube+ receptor) along the horizontal axis 10 sec
Rotation only from 0° to +90° 20 sec
Focus to film extension from 105 to 180 cm 16sec

Features

- High-performance and high-capacity with bifocals and high speed, which is suitable for long-time diagnosis.
- High inverting frequency and high voltage generator ensures output of constant DC.
- A-Si Dynamic Flat Panel detector could bring digital radiography and fluoroscopy of various positions directly.
- High quality image intensifier with ultralow illumination digital camera (CCD) brings high quality, low noise and rich contrast images. It also avoids edge attenuation and image tailing, which makes accurate diagnosis during dynamic examination.
- High density grid further improves X-ray quality and provides images with good effect

TECHNICAL FEATURES

X-ray Generator	
Output power	**50KW / 80 KW**
Frequency	High frequency with inverter technology
Current (fluoroscopy)	0.5~6,5mA / 0.5~12mA
Voltage (fluoroscopy)	40kV~110kV / 40kV~125V
Current (radiography)	32mA ~ 630mA / 32mA ~ 1000mA
Voltage (radiography)	40kV ~ 150kV
Exposure time	0.01s ~ 6.3s
mAs	0.32mAs ~ 630mAs

X-ray Tube	
Anode type	Rotating Anode
Target angle	12°
Focal Spot value	0.6mm / 1.2mm
Working voltage	40kV ~ 150kV
Anode heat content	150kHU / 250 KHU
X-ray tube assembly heat content	1250kHU / 1566 KHU

X-ray Dynamic Flat Panel	
Type	Amorphous Silicon
Scintillator	Cesium Iodide
Active Area	17x17Inch (43cm x 43cm)
Active Pixel	3072x3072
Pixel Pitch	139um
A/D Conversion	16bits
DQE	≥72%
Spatial Resolution	36Lp/cm
Data acquisition time	2s ~ 4s
Detector pixel area	42,70 (h)x42,70cm (v) Total
Pixel Matrix	Total: 3,072(h)x3,072(v) Effective: 3,032(h)x3,032(v)

Configuration

Operational modality		
	Continuous Fluoroscopy	25 fps | 43x43 cm (1K x 1K)
	Pulsed fluoroscopy	15 fps | 43x43 cm (1K x 1K)
	Radiography	4 fps | 43x43 cm (1K x 1K)

Collimator		
	Type	Manual and multiyear collimator (Electric Optional)
	Power	150W; 24VAC
	Lamp timer	Automatic illumination with timer for lamp (30S)
	Filtration	1.2mmAL

Mobile patient table		
	Type	Table for gastrointestinal imaging
	I.I. longitudinal movement	840mm
	Tabletop lateral movement	240mm
	Rotating range	-40° ~ 0° ~ +90°

Workstation		
	CPU	Intel 2.8GHz
	Memory	2GB
	HDD	500GB
	n.1 Monitor as standard	24''LCD
	n.2 Monitors (OPTIONAL)	24''LCD
	DICOM3.0	Query for integration with any PACS
	Functions	Import/export function
		Image info
		Management of patient info
		Post processing
		Measurement etc.

Optional
Electric motorized Collimator
Normal Angiography + DSA (Digital Subtraction Angiography)
Dosimeter

ESSE3 srl, Via Garibaldi 30
14022 Castelnuovo D.B. (AT)
Tel +39 011 99 27 706
Fax +39 011 99 27 506
e-mail esse3@chierinet.it
web: www.esse3.dreamgest.com