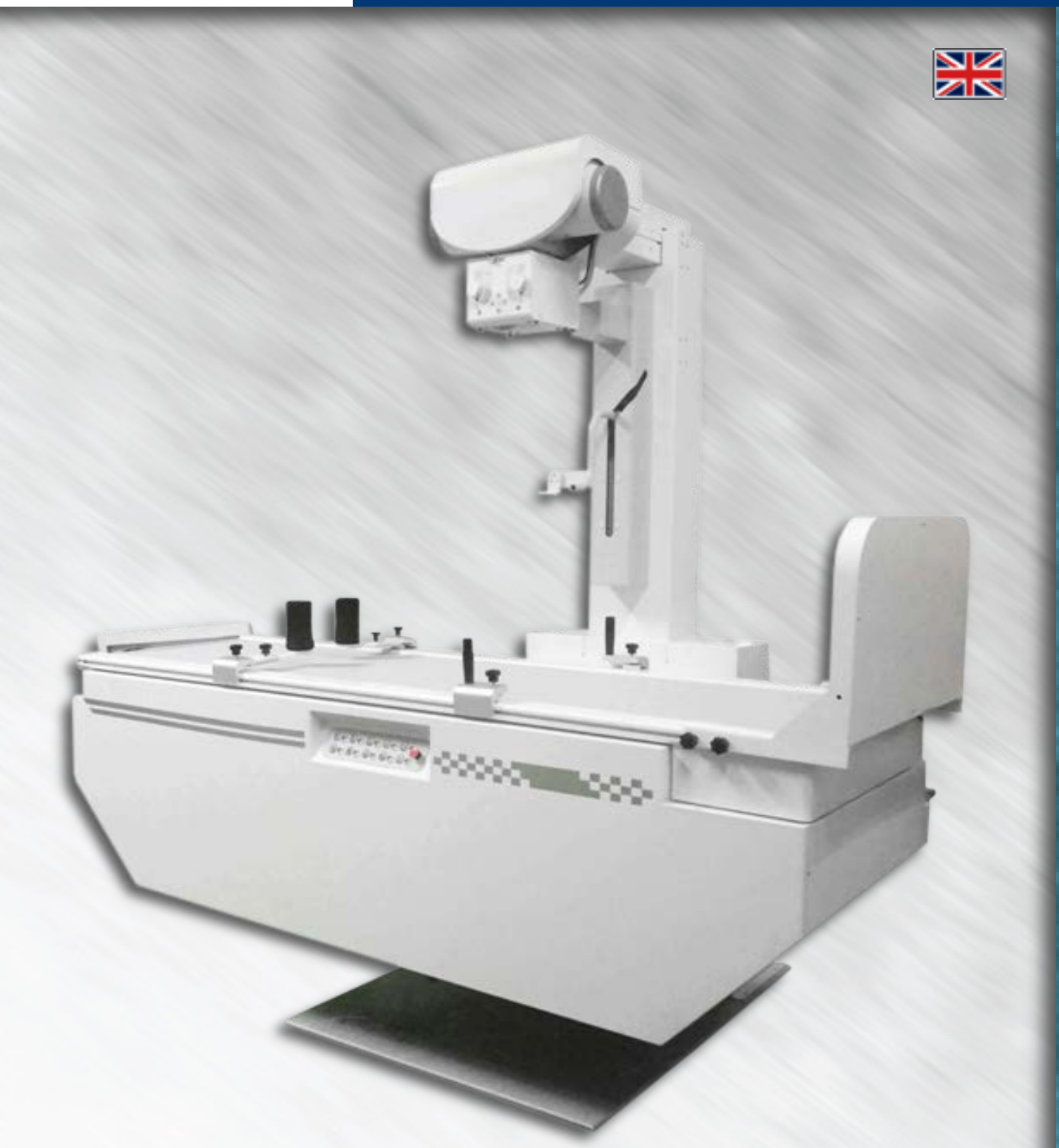
# BRT-40

## ADRF- Multifunctional Dynamic Digital Radiography System

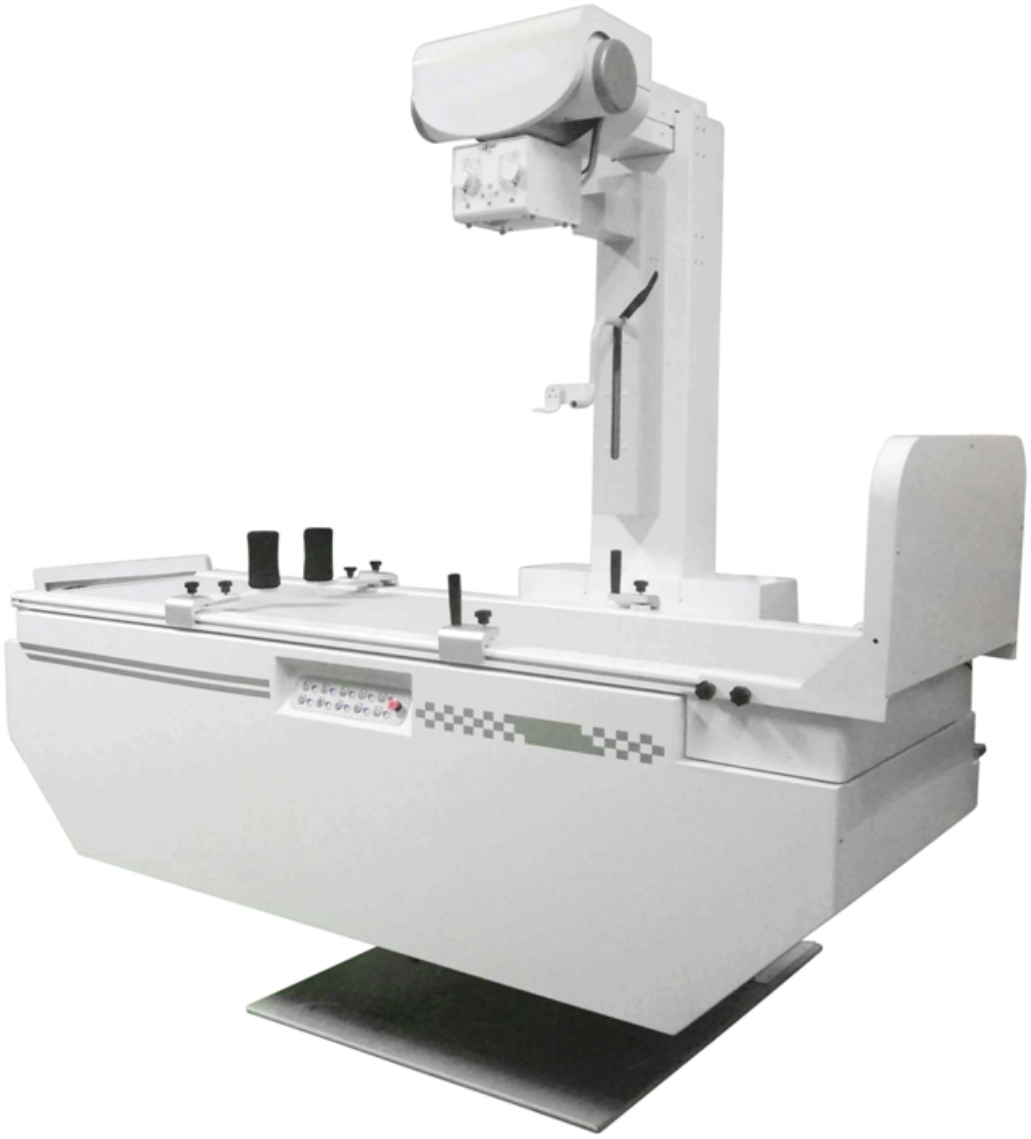


IMAGING SYSTEMS

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

- 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 ~ 680mA / 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