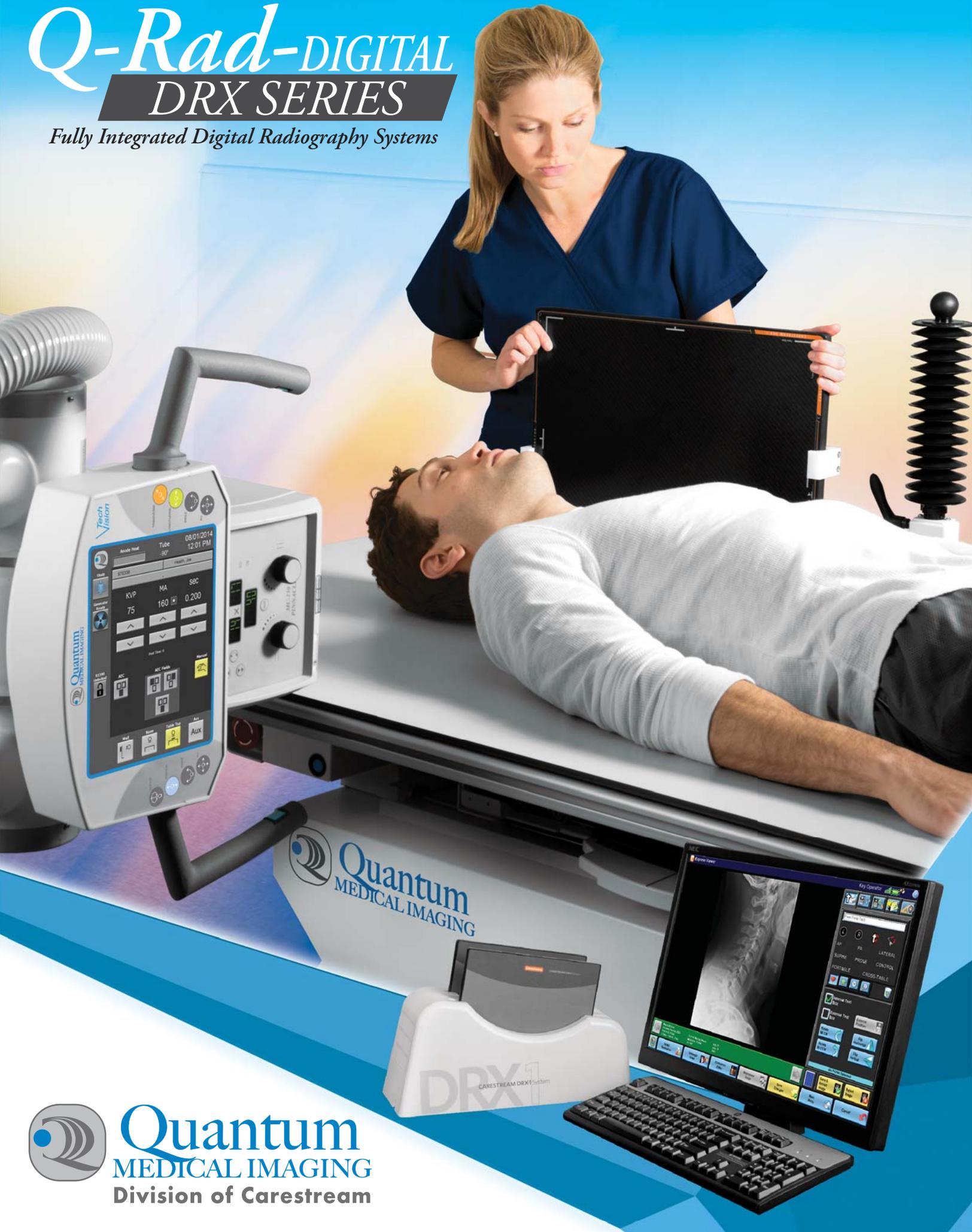


Q-Rad-DIGITAL DRX SERIES

Fully Integrated Digital Radiography Systems



Quantum
MEDICAL IMAGING

DRX1
CARESTREAM DRX1 system

 **Quantum**
MEDICAL IMAGING
Division of Carestream

Q-Rad-DIGITAL DRX SERIES

Fully Integrated Digital Radiography System

QUANTUM: LEADING THE WAY IN DIGITAL IMAGING

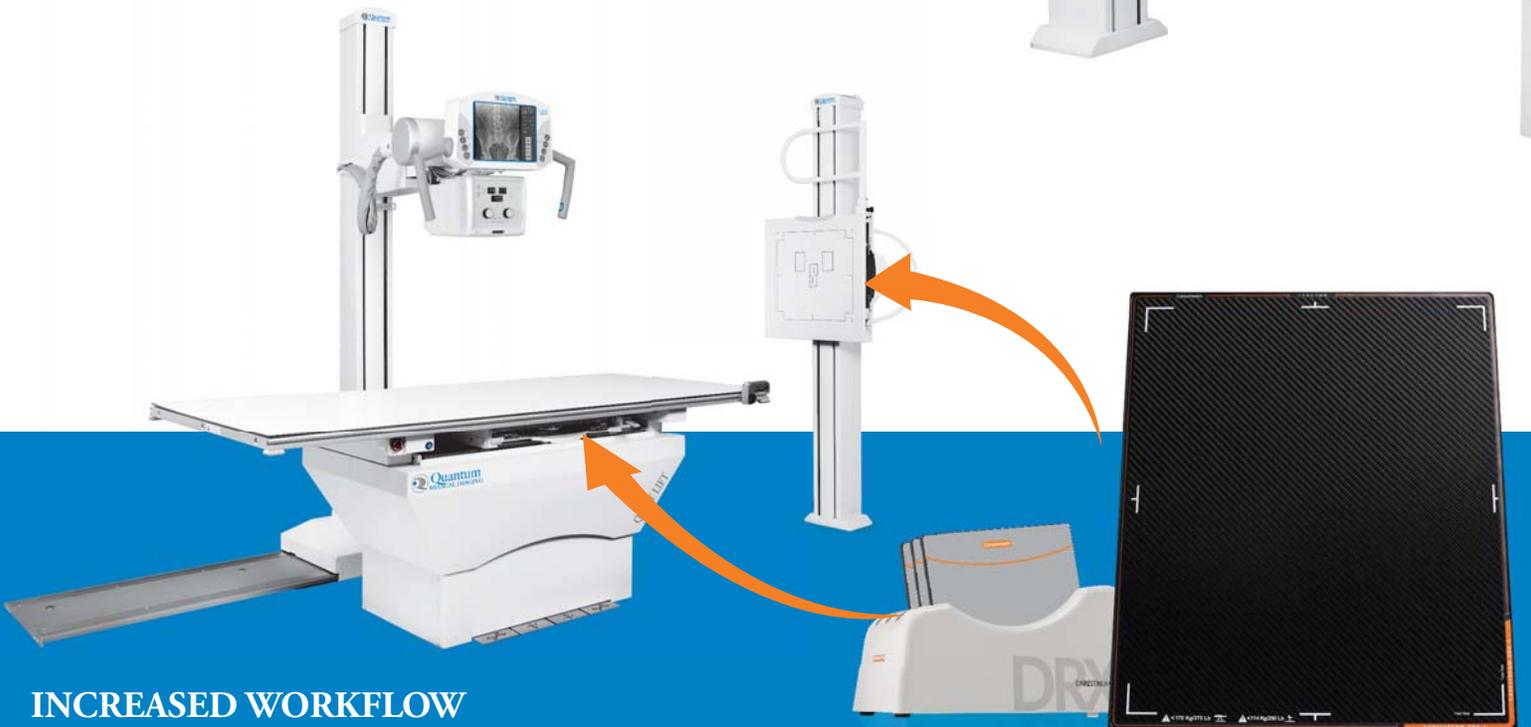
Quantum's Q-Rad-DIGITAL DRX-Series are fully integrated Digital Radiographic Systems, featuring Carestream DRX Technology. Smart-System innovations; such as TechVision™, Operator Touch-Control Center, and the flexibility of Wireless or Wired DR solutions are available in either Ceiling or Floor mounted configurations. All systems provide advanced operational and ergonomic features, with virtually unlimited positioning capabilities.

FLEXIBLE DIGITAL PANEL COMBINATIONS

Choose the DRX detector option best suited to your needs. These include:

- **DRX Wireless Detector** 14 in. x 17 in. (35 x 43 cm) with gadolinium oxysulfide (GOS) scintillator for general radiographic imaging, or cesium iodide (CsI) scintillator with increased DQE and MTF for dose-sensitive applications.
- **DRX Fixed Detector** 17 in. x 17 in. (43 x 43 cm) with gadolinium oxysulfide (GOS), or a low-dose cesium iodide (CsI) flat-panel option for facilities that prefer a larger field of view in a non-portable detector
- **DRX 2530C Wireless Detector** 11 in. x 16 in. (28 x 41 cm) with cesium iodide (CsI) is designed for dose-sensitive pediatric applications and orthopaedic imaging.

**DRX Wireless Cassettes may also be used within other areas of the hospital such as in a mobile x-ray system during morning rounds - then move it to a Q-Rad system room to maximize the utilization of this advanced technology by sharing resources.*



INCREASED WORKFLOW OF WIRELESS CASSETTE

- Wireless transmission & instant image availability reduces exam time
- Wireless Cassette offers positioning freedom of conventional cassettes

SHARED PANEL SOLUTION



Q-Rad-DIGITAL Systems with TechVision™ provide a “Digital Image Preview” & “Study Management” at tube-side.

The “**DRX SERIES**” systems provide positioning flexibility by using a wireless cassette-size detector in either the table or wall stand. The light weight design, large imaging area and fast display times of the innovative detector technology makes it easy to capture high quality diagnostic images for routine diagnosis, as well as in challenging trauma positioning.



WIRELESS CASSETTE

WIRELESS-ON-DEMAND

ONLY WIRELESS WHEN YOU WANT IT

Powered by
Carestream

Q-Rad-DIGITAL DRX SERIES

Fully Integrated Digital Radiography System



DRX ACQUISITION CONSOLE

- Wide Screen touch-panel monitor
- X-ray Generator integration
- Preview image display within seconds
- Consistent grey scale presentation
- DICOM Modality Worklist
- Multi-Modality Acquisition
- Procedure Mapping
- Advanced Trauma Capability
- Patient CDs
- Auto-Correct for Image Display
- EVP Plus Software
- Grid Detection and Suppression
- Black Surround
- Local QC and administrative functions; zoom, window/level, Gamma, edge enhancement, cropping, digital markers, and annotation
- DICOM print & store to multiple destinations

SOFTWARE OPTIONS:

- Long length Imaging/Scoliosis seamless stitching
- IHE Dose Reporting
- Remote Operations Panel
- Remote Patient Data Entry
- Prior Image Review
- Administrative Analysis and Reporting Option
- Total Quality Tool
- Tube and Line Visualization
- Bone Suppression

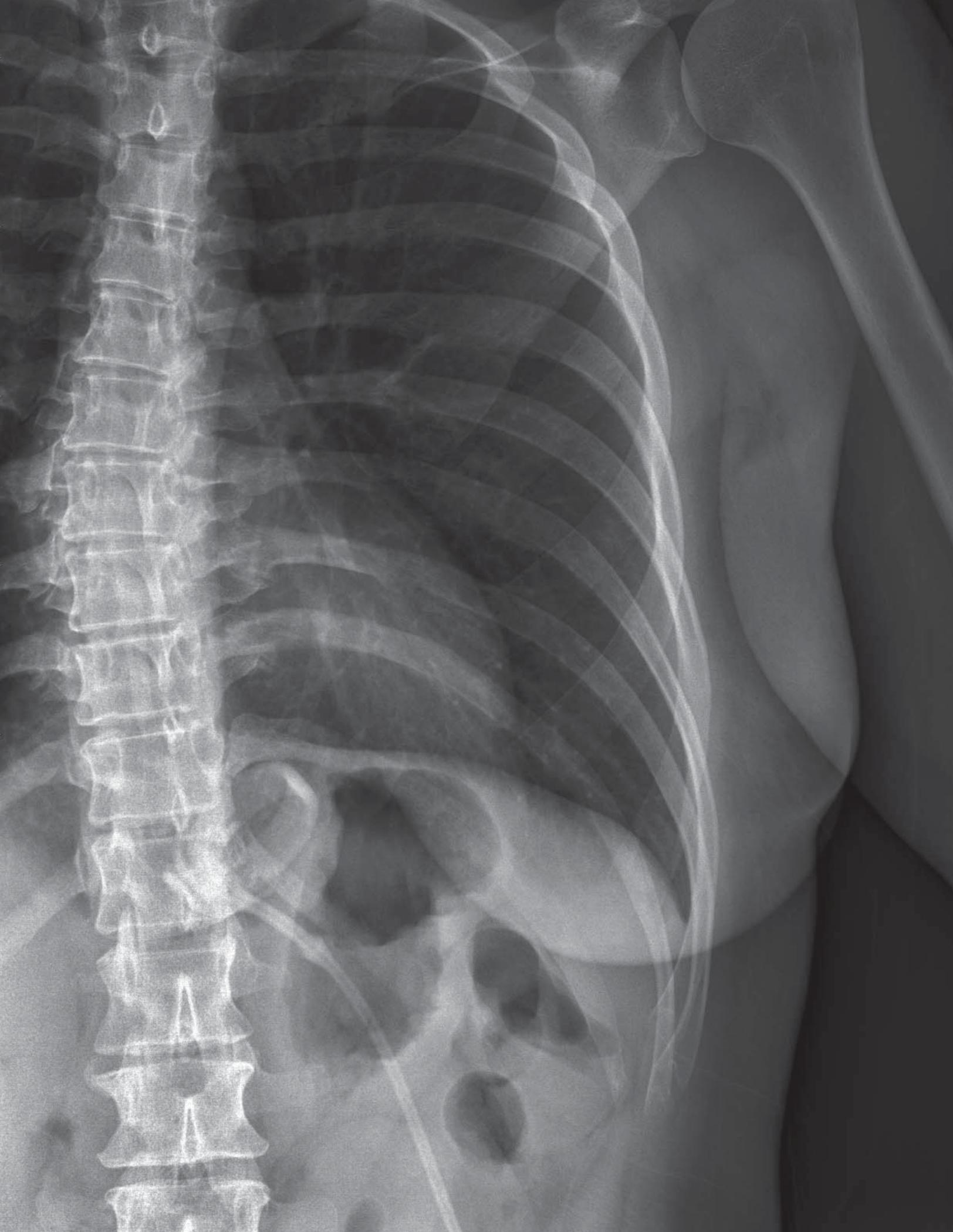


SERVING A WIDE RANGE OF CLINICAL ENVIRONMENTS

The Q-Rad-DIGITAL System configurations are designed for high patient volumes to satisfy a wide variety of clinical environments, from in-patient and out-patient radiology departments, emergency/trauma, imaging centers, orthopedic facilities, and urgent care clinics. From the routine chest or detailed extremities to the non-ambulatory trauma patients, the range of applications with Q-Rad-DIGITAL Systems is virtually endless.

SYSTEM INTEGRATION ENHANCES WORKFLOW AND PRODUCTIVITY

Advanced system integration enhances your DR workflow from patient registration, to exam configuration, patient positioning, image acquisition and image archive. In addition to an inherent productivity gain with network connectivity to Modality Worklist and PACS, the fully integrated Q-Rad-DIGITAL DR Console optimizes the entire patient examination process with fully integrated and Worklist-driven single-accession and multi-accession exam configuration, generator integration, fast image processing, and automated exam sequencing. Now you get maximum productivity with the patient throughput of DR combined with the positioning ease of a single wireless cassette, all with high quality imaging and low patient dose.



Q-Rad-DIGITAL DRX SERIES

CEILING MOUNTED SYSTEMS

Quantum's Q-Rad-DIGITAL Ceiling System enhances your DR workflow and patient positioning. It is available with a range of system configuration options which allow for adaptability into any hospital, imaging center, orthopedic, clinic and/or private office. Overhead horizontal and transverse tracks provide maximum flexibility and virtually unlimited radiographic projections.

(System shown with Quantum's exclusive TechVision™ with digital image preview)

CEILING-MOUNTED TUBE SUPPORT (RS-590)

Ergonomic hand grips with multi-function locks provide smooth, responsive motion. Positioning of the x-ray tube is directed through a series of color-coded fingertip switches on the operator hand control, which coincide with the colors on the various rails, for vertical, horizontal and transverse movements.

A convenient "All-Locks" release switch is also built into each of the soft-grip controls. Lighted display windows indicate system navigation for SID, tube angle and lock functions, to assist the operator with easy and precise positioning.

Collision-avoidance electronics, a FAIL-SAFE braking system and an operator lock-out switch provide for an exceptionally safe working environment.





Float-top motion and Elevating Hand Control Switch

“QUIET-LIFT” ELEVATING/FLOAT-TOP TABLE (QT-750-D)

Quantum’s “QUIET-LIFT” elevating, float-top table eases patient transfer and positioning. With a 650 lb. (295 kg) patient capacity and a rugged lifting mechanism, the table elevates smoothly and quietly. The extra-wide (35”), and completely flat table-top surface simplifies patient transfer and positioning, while providing comfort for larger patients.

Float-top motion and elevating capability is controlled through both recessed foot controls, as well as multi-function hand control switch. Adjustable patient hand grips are included, and can be positioned along the concealed accessory rails to help stabilize the patient during exam positioning.



POSITIONING FLEXIBILITY

A wide range of system flexibility makes patient positioning and system adjustments quick and easy.

COMPLETE CHALLENGING VIEWS

Even the most challenging views, such as weight-bearing, cross-table and off-table projections are simplified through the system’s generous range of motion and flexibility.



Tech Vision™

INNOVATION FOR THE TECHNOLOGIST

Quantum's TechVision is truly an innovation for the Technologist. Technologists can use the color touch display to easily view and edit technique parameters at tube-side.



GENERATOR INTEGRATION

Allows for adjustment of technique parameters at tube-side

TechVision™ Features:

- Large Color Display with Rich Graphics and Fast performance
- Touchscreen technology
- Full APR, AEC, and Manual Technique Selection; including mA, kVp and mAs control
- Eliminates going back and forth from the patient's side to the generator control panel
- Gives the operator complete control to adjust exposure parameters at tube-side
- Improved patient care, as technologist remains close to the patient during exams
- Reduces the steps taken by technologist for faster patient through-put





Close X

Lateral

Position of Patient:

1. Seated or supine. Lateral position arms hanging by sides.
2. Use close collimation and practice ALARA.

Position of Body Part:

1. Midsagittal plane perpendicular to and centered to IR.
2. Shoulder resting against Bucky.
3. Chin slightly extended with shoulders relaxed and depressed as much as possible (using weights if necessary).
4. Cervical spine centered to IR at level of C4; top of IR approximately at top of ear attachment (TEA).

Breathing Instructions:

1. Suspended.

Image Receptor:

1. 8x10 inches (20x25cm) or 10 x 12 inches (24x30 cm).
2. Use Bucky.

Central Ray Placement and Angle:

1. Perpendicular to IR entering C4 (laryngeal prominence).
2. SID: 40 inches (102 cm).

Image Quality Point(s):

1. C3 through C7 and top portion of T1.
2. Left and right zygapophysyal joints superimposed.
3. Chin extended so no superimposition of mandibular over cervical vertebrae.



Powered by: iRadTech www.scintillate.us

These images and instructions are positioning suggestions that do not substitute for a trained operator. Quantum Medical Imaging is not responsible for their accuracy or completeness.

POSITIONING GUIDE

Provides detailed instructions for routine study positioning. This includes patient/body part positioning, breathing instructions and central ray placement/angle, with photo & illustration guidance.



THREE VALUES TO ENHANCE PATIENT CARE AND THROUGH-PUT: GENERATOR INTEGRATION, DIGITAL IMAGE PREVIEW & STUDY MANAGEMENT

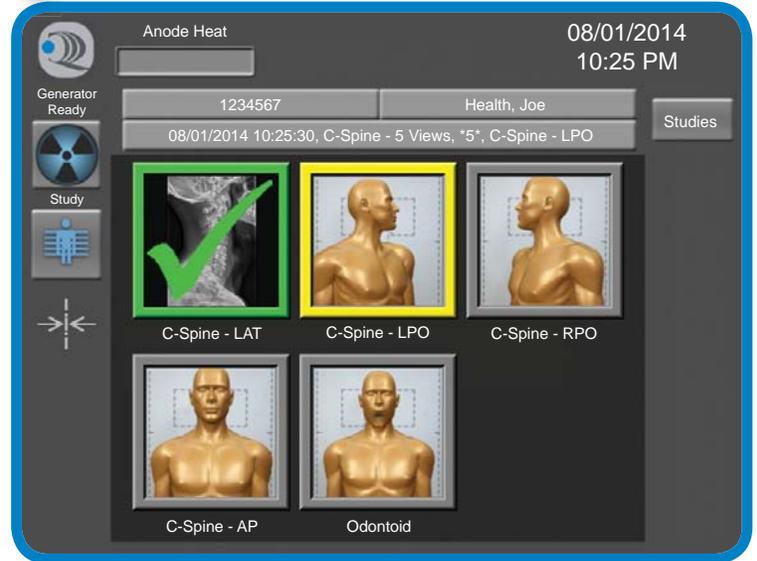
DIGITAL IMAGE PREVIEW

Review preview image seconds after exposure with accept / reject function at tube-side



STUDY MANAGEMENT

Control the examination workflow and image acquisition at tube-side among multi-accessions exams



Digital Image Preview shown simultaneously at DRX computer console and TechVision™ Handgrip

DRX with TechVision™ (INTEGRATION)

TechVision™ minimises going back-and-forth from the patient's side to the generator's Operator Control Panel in order to customize patient exams. The operator has complete control to adjust exposure parameters at the tube-side, just as if they were at the generator's Operator Control Panel.

The fully integrated *Q-Rad-Digital* DR Console optimizes the entire advanced "2-way" generator integration to optimize your DR workflow from patient registration, to exam configuration, patient positioning, image acquisition and procedure mapping to image archive.



DIGITAL IMAGE PREVIEW

TechVision™ offers in-room DR "Image Preview" at patient's side. The technologist no longer has to wait for the DR image Preview on the DR console and can quickly rejoin the injured or frightened patient and position for the next view.



WITH DR IMAGE PREVIEW

WIRELESS-ON-DEMAND

ONLY WIRELESS WHEN YOU WANT IT

“TETHER-CONNECT”:

Wired-Ethernet Connectivity + Detector Battery Charger, All in One Step

The DRX-Tray utilizes “Tether-Connect” technology that enables the DRX detector to connect via hard wire to the system for all data communication. It also constantly charges the detector battery, so it remains fully charged and ready when you remove the detector for wireless exams.

(This feature minimizes the need to manually charge-up the detector battery on a regular basis)



QUICK-CONNECT ADVANTAGE:

When switching from hard-wired (in table or wall stand) to wireless for table top extremity work the detector transitions from wired to wireless (or vice versa) in 2 seconds.

“DROP-N-GO” EASE OF USE

By simply inserting the detector into the DRX-Tray the Detector connects automatically via magnetic plug

INCREASED WORKFLOW OF WIRELESS CASSETTE

The same size as a conventional 35cm x 43cm x-ray cassette, the wireless DRX-1 and DRX-1C detectors make it easy to use your conventional x-ray equipment for digital radiography imaging.

- Wireless transmission and fast image preview reduces exam time
- Wireless Cassette offers positioning freedom of conventional cassettes

DR-Tray Specifications

**Standard on all system packages for table and wall*

Digital Tray with “ROTATING Feature”

- Allows for quick and controlled manual rotation of the digital receptor within tray
- One handed manual rotation Portrait/Landscape in swivel based tray design
- Tray locks provide for safe placement/removal of receptor
- Locking tab secures the receptor within the tray



DRX-Tray

Specifically designed tray for use with
Carestream DRX Digital Technology

WIRELESS-ON-DEMAND
ONLY WIRELESS WHEN YOU WANT IT

Shown with rotating DRX-Tray in wallstand



Shown with rotating DRX-Tray in table



Shown: DRX Battery Charger, DRX Fixed Detector, DRX Wireless Detector & DRX 2530C Wireless Detector

DRX
DIGITAL PANELS
Powered by
Carestream

WIRELESS-ON-DEMAND
ONLY WIRELESS WHEN YOU WANT IT

DRX-Tray Specifications

**Available as an option on all system packages for table or wall*

Designed Specifically for the DRX Detector

Includes "Tether-Connect" Technology

- Enables DRX detector to connect via hard wire to the system for all data communication.
- Constantly charges the DRX battery, so it remains fully charged and ready when you remove the DRX detector for specialty exams. (This feature virtually eliminates the need to manually charge the detector battery on a regular basis)

Q-Rad-DIGITAL DRX SERIES

FLOOR MOUNTED SYSTEMS

Quantum's *Q-Rad-DIGITAL* Floor-mounted systems are the ideal choice for busy imaging centers, orthopedic facilities, clinics and private offices. The advanced features and unique design aspects of the system allow the technologist to fully concentrate on the patient during the examination.

DELUXE FLOOR MOUNTED TUBE STAND (QS-550)

The versatility of the QS-550 Deluxe tube stand provides extended freedom of movement of the tube assembly, allowing for a wide array of examinations. Tube stand positioning is controlled through a series of accessible fingertip switches on the operator hand control.

A single switch releases all tube stand locks for multi-directional motions. An easy-to-read indicator displays system position. Expansive transverse and longitudinal travel, column rotation ($\pm 90^\circ$), tube angulation ($\pm 135^\circ$), and trunnion rotation ($+45^\circ/-20^\circ$), assure complete radiographic coverage even for the most challenging views, such as weight-bearing, cross-table and unique tabletop exams. Studies are simplified through the system's generous range of motion and flexibility.



CROSS TABLE EXAMS MADE EASY

A wide range of system flexibility makes patient positioning quick and easy to accommodate for cross table lateral, wheel chair and other specialty views.

FLEXIBLE CONFIGURATIONS TO MEET ALL YOUR KEY NEEDS



VERTI-Q DIGITAL VERTICAL WALL STAND (QW-420-D)

Features the exclusive "EZ-Glide" Hand control for easy and precise movement. A custom enclosed frame for attractive appearance includes patient chin rest and a low absorption front cover material with cassette and AEC Indicators. A vertical travel of 60.0 (± 1.0)" (1524.0 mm) with a 14.0 (± 0.5)" (355.6.0 mm) minimum Focal Spot-to-Floor Distance and FAIL-SAFE electromagnetic braking plus integral counterbalancing, ensure safe and easy use.



OPTIONAL:

Patient overhead and side-mounted arm rests are available to stabilize patients during standing and weight bearing exams.



"EZ-GLIDE" HAND CONTROL

All VERTI-Q Wall Stands integrate Quantum's exclusive EZ-Glide hand control, which is ergonomically designed to allow operator adjustment from a comfortable standing position, with minimal effort and maximizes technologist efficiency during vertical adjustment of the image receptor.



SYSTEM FLEXIBILITY

Q-Rad-DIGITAL Floor Mounted Systems are available as either single detector 14"x 17" wireless cassette shared among table, wall, & tabletop, or dual-detector stationary 17"x 17" in the wall stand and 14"x 17" wireless cassette for table or tabletop.



SHARED PANEL SOLUTION



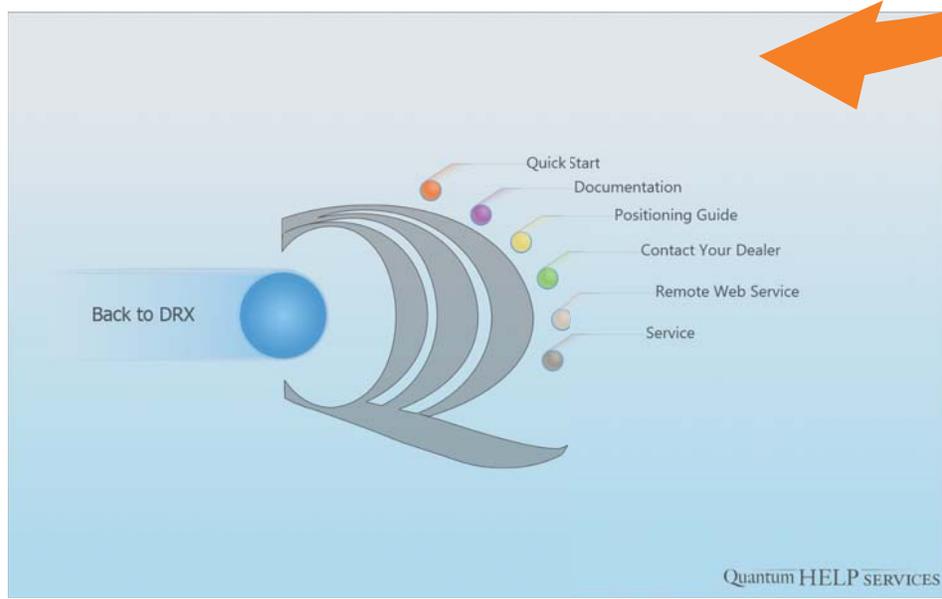
Q-Rad-DIGITAL DRX SERIES

EXCEPTIONAL
SUPPORT FEATURES
WITH DRX SERIES SYSTEMS



Quantum HELP SERVICES

With just the touch of the HELP button on the screen, you can easily access a wide variety of easy-to-use support services and information. From basic quick start info, to documentation of operators and service manuals the information is right at your fingertips. Powerful tools guide the operator through basic operation. Support phone numbers, text messaging and e-mail contacts are just a touch away.



COLOR REFERENCE CHART

- **QUICK START:** Provides a quick overview of system workflow and operations in 4 easy steps.
- **DOCUMENTATION:** Quick reference to operator and technical manuals
- **POSITIONING GUIDE:** Provides detailed instructions for routine study positioning. This includes patient/body part positioning, breathing instructions and central ray placement/angle, with photo & illustration guidance.
- **CONTACT:** Provides full contact information to your regional dealer and service provider
- **REMOTE SERVICE:** You can utilize the WEB - Based Remote Support and Service worldwide; via the built-in web browser (internet access required). System is equipped with video camera and audio mic.
- **SERVICE:** Using a user password, key operators can also access complete History Reporting logs, APR Editor, language change & a host of other useful information.

● QUICK START



● DOCUMENTATION



● POSITIONING GUIDE



● CONTACT



● REMOTE SERVICE



● SERVICE



QUANTUM CASSETTE HOLDERS

ENHANCING DIGITAL IMAGING PROCEDURES



Table Top Cassette Holder (QT-TCH)

- Quick and Easy positioning on the x-ray table top
- Accommodates portable DR, CR or Film Cassettes up to 14" x 17"
- Assists in acquiring cross-table lateral exams, as well as many other specialty views
- Effortless maneuverability with table top scratch protection



Lateral Cassette Holder (QT-LCH-P)

- Mounts to Quantum Table Rails
- Accommodates portable DR, CR or Film Cassettes up to 14" x 17"
- Articulating swivel Arm (+/-90°) allows for variety of angled positions, along table-top
- Provides positioning of image receptor either at or below table top to eliminate image cut-off during cross table examinations
- Angulation: complete receptor control (+/-35°) for patient positioning



Rolling Lateral Cassette Holder (QR-LCH)

- Quick and Secure maneuverability around the x-ray exam room
- Accommodates portable DR, CR or Film Cassettes up to 14" x 17"
- Assists in acquiring cross-table lateral exams, as well as many other specialty views
- Provides positioning of image receptor either at or below table top to eliminate image cut-off during cross table examinations
- Height Adjustable positioning with Vertical travel of up to 45.9" (116.6 cm)
- Single-Handed Vertical Adjustment Locking Mechanism
- Receptor Rotation: +/- 90° for more angle flexibility
- Receptor Tilt: 0° through 90°
- Quick Locking 5" Caster Wheels



Two Step Weight Bearing "Rolling" Stand (QC-WBS)

- Patient Positioning Aid for Lower Extremities
- Two-Step Design to Accommodate Use with Tilting Wall Stands
- Clear-view Design for Patient Foot Location and Easy Visualization of Image Receptor Positioning
- AUTO Locking Front Wheels with Individual Rear-Wheel Locking Control for Easy Positioning and Safety
- Patient Hand-Rails for Easy Positioning and Safety
- Patient "Non-Slip" Type Steps
- Easy Rolling Wheels
- Patient Weight Capacity of 450 lbs. (204 kg)
- Optional Track for Portable DR Panel
- Length 43" (109.2 cm), Height 48.5" (123.5 cm), Width 24.7" (62.8 cm)



Pioneering technology from the premiere innovator in imaging...



QUANTUM MEDICAL IMAGING | DIVISION OF CARESTREAM

Quantum Medical Imaging is a highly innovative company which designs and manufactures medical radiographic systems (both DR and CR digital solutions), for hospitals, imaging centers, orthopedics, clinics and private offices around the world. The company's mission is to supply the radiographic imaging industry with superior products for enhanced diagnostic capability.

As a Division of Carestream, Quantum's reach expands around the globe, offering highly innovative digital radiographic system solutions, utilizing the most advanced CR or DR technologies. Quantum systems and products are sold and installed in over 150 countries around the globe.

DESIGNED FOR TECHNOLOGISTS

Designed by a team of engineers with extensive input from technologists, Q-Rad systems are highly refined for logical and efficient operation. This unique approach to system development simplifies radiographic examinations and assures that Quantum products meet the growing needs of radiology.

Quantum's technology is proven in thousands of clinical installations worldwide.

From the design stage through final product testing, Quantum Q-Rad Series systems integrate high quality, durable materials for robust construction and advanced electronics for optimal performance.

Rigorous manufacturing standards and a commitment to evolving technologies assure long-term system value and customer satisfaction.

The company's radiographic system solutions are backed by our "Gold Star" network of factory-authorized dealers, for sales and service.

