Chiro-X Systems

Chiropractic X-Ray Systems and Digital Solutions

Digital Radiography

Chiropractic Systems

Ultra HF Technology

Quantum Medical Imaging

Innovations in Chiropractic Imaging
Quantum’s Chiropractic Imaging Solutions

Digital Work Flow
Conventional chiropractic radiographic systems have usually been associated with growing operating expenses year after year. The cost of film, processing chemicals, storage, chemical disposal and darkroom maintenance are costs applicable long after the initial equipment investment has been paid off. Quantum’s Digital Chiropractic systems cater to any practitioner looking for a clean, convenient, and cost-effective image processing system while providing superior diagnostic image quality.

Chiro-DX Direct Digital Chiropractic Systems
Quantum’s advanced technology incorporates digital image capture technology on the wall stand for an efficient and cost effective solution. The Chiro-DX system produces images in less than six seconds without the need for cassettes.

Chiro X: Chiropractic Radiographic Systems
Chiro-X product line expands into different system packages, designed to address the variety of chiropractic requirements.

Quest HF Series - High Frequency Generator
The QUEST HF’s ULTRA High frequency technology permits a near-constant potential of up to 120 kHz, for highly efficient, superbly precise imaging.
Chiropractic Direct DIGITAL
Chiropractic Digital Imaging Solutions

**CHIRO-DX**

DR (Digital Radiography) is now affordable for the Chiropractic Professional. Quantum’s advanced technology incorporates CCD(DR) Technology on the wall stand for an efficient and cost effective solution. The Chiro-DX system produces images in less than six seconds without the need for cassettes.

### Efficiency
- Image preview in less than six seconds improves patient throughput.

### Simplicity
- Chiro-DX systems come with image acquisition and viewing software that enables a simplified way to view and manipulate images.

### Chiro-DX DR System Specifications: System Specifications
- Quest 40 kW, 500 mA, High Frequency (120 kHz Generator)
- 0.6/1.5 200,000 Heat Unit X-Ray Tube
- 178 Lpi High Resolution Grid included
- QS-506 Tubestand with 6’ Tracks with Fail Safe Electric Locks
- QW-420-CCD Vertical Wall Stand with Fail Safe Electric Locks

**Digital Detector Specifications**
- 17” x 17” Field of View
- Complete Computer Workstation with 21” Flat Panel Monitor
- Scintillator: Cesium Iodide
- 3.4 lp/mm Nyquist Resolution

The advanced 17 x 17 inch field coverage digital radiography camera is using a unique image processing system and a proprietary CCD(DR) based hardware to optimize the diagnostic procedure required for current digital imaging community standards.

The image processor provides consistent image quality at a lower dose and faster image information with optimized algorithms for each different study.

### Cost effective benefits of Digital Radiography

Quick study results and image evaluation. Electronic archiving allows for great space savings while eliminating the costs of film at the same time. This results in increased workflow and overall client satisfaction.
**QS-500 SERIES TUBESTAND**
Quantum’s QS-500 Series tubestand is ideal for all chiropractic environments. The tubestand is easily positioned using the dual soft-grip handles. Fingertip controls permit easy access to multi-function lock release switches, including longitudinal, vertical and angulation. The handgrip also includes an easy-to-read angulation display for accurate indication of tube rotation and LED indicators to verify the SID.

**MOBILE RADIOGRAPHIC TABLE (QT-710)**
The Quantum mobile radiographic table is ideal for performing supine radiographs. Large caster wheels provide smooth table movement and maintain table stability when locked.

**CHIRO-X VERTICAL WALL FRAME (QW-400)**
The Chiro-X Vertical Wall Frame is custom designed for the chiropractic profession. This full-length frame allows for complete spinal imaging without the need for patient re-positioning, as the image receptor is easily repositioned behind the patient, using Quantum's EZ-Glide hand control.

**EZ-GLIDE HAND CONTROL**
Quantum’s exclusive EZ-Glide hand control, a standard feature on Chiro-X and VERTI-Q, is ergonomically designed to allow operator adjustment from a comfortable standing position with minimal effort, thereby limiting the repetitive motion required for continuous receptor adjustment by the operator.

**VERTI-Q 14" X 36" VERTICAL WALL STAND (QW-421)**
The Quantum VERTI-Q Vertical Wall Stand allows repositioning of the entire image receptor by the operator. VERTI-Q provides extensive vertical travel and features the exclusive EZ-Glide hand control.

**QS-506 Tubestand with VERTI-Q 14” x 17” Vertical Wall Stand (QW-420) and Mobile Table (QT-710)**
120 kHz ULTRA High Frequency X-Ray Technology

**QUEST HF SERIES DESIGNED FOR THE CHIROPRACTIC FACILITY**

**ADVANCED FEATURES**
- Three modes of operation for optimized imaging:
  - APR (Anatomical Programmed Radiography)
  - APR/Patient Type - APR/AEC
- AEC (Automatic Exposure Control) (optional)
- Manual
- Integrated self-diagnostic and self-test programs indicate system performance and detailed history
- X-ray tube protection circuitry
- Automatic line voltage compensation
- RS-232 interface enables remote functions
- Automatic shut-off timer (variable time settings)
- Generator and X-ray tube exposure counter
- X-Ray Tube Anode "Heat Unit" monitor
- Contemporary and compact design

**THE QUEST HF SERIES™**

The QUEST HF Series provides an innovative solution for today’s challenges in radiographic imaging. Merging sophisticated technology and system architecture with a simple, menu-driven program, the design team at Quantum Medical Imaging has addressed the concerns of technologists and clinicians.

The QUEST HF’s ULTRA High frequency technology permits a near-constant potential of up to 120 kHz, for highly efficient, superbly precise imaging. A simple operating program, with integrated user prompts, permits a wide range of routine, specialized and custom examinations.

The QUEST HF Series generator offers superior flexibility and user-friendliness for complete, high quality radiographic imaging without compromise.

**SUPERIOR IMAGING TECHNOLOGY...**

**120 KHZ ULTRA HIGH FREQUENCY**
- Near constant potential of up to 120 kHz operating frequency
- ULTRA high frequency imaging enables greater efficiency, shorter exposure time, and minimized patient dose
- Output ranges of 50 kW through 20 kW (and up to 150 kVp) satisfies varying imaging requirements

**TYPICAL KVP OUTPUT WAVEFORM**

- **HIGHER MR/MAS**
- **SHORTER EXPOSURE TIMES**
- **REDUCED PATIENT DOSE**
- **LONGER TUBE LIFE**
- **SUPERIOR IMAGING QUALITY**

**KVP=70 • mA=500 • time=10 msec**

2 MSEC / DIVISION

10 KVP / DIVISION
Specialized Chiropractic APR Programs

ANATOMICAL PROGRAMMED RADIOGRAPHY (APR)
Accessing a menu with over 100 examination views derived from cervical, thoracic, lumbar and 7 other anatomical regions, the APR mode automatically determines and sets the required technique factors. These parameters include kVp, mA, time (mAs), focal spot, film speed, SID and imaging receptor. In addition, the operator may input the actual patient thickness (in cm's) providing the optional technique parameters for that exam.

STEP 1
SELECT ANATOMICAL REGION FROM APR MENU

- LUMBAR

STEP 2
SELECT DESIRED VIEW FROM MENU

- LUMBAR
- LATERAL

STEP 3
READY FOR EXPOSURE*

STORED ENERGY (SE) GENERATORS
Quantum’s advanced Stored Energy (SE) technology permits powerful operation using only a standard “low amperage” wall outlet or alternate power source. The SE’s power cells are virtually maintenance-free and provide years of usage. These units are ideal in facilities where incoming power is unavailable and for mobile imaging applications. (50kW to 20kW)
Corporate Overview
Quantum Medical Imaging is a highly innovative company which designs and manufactures high quality chiropractic radiographic systems for chiropractic clinics, and imaging centers around the world. The company’s mission is to supply the chiropractic radiographic imaging industry with superior products for enhanced diagnostic capability.

Designed for Chiropractors
Designed by a team of engineers with extensive input from technologists, Chiro-X 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 chiropractic radiology. Quantum’s technology is proven in hundreds of chiropractic installations worldwide.

From the design stage through final product testing, Quantum Chiro-X 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 chiropractic radiographic system solutions are backed by our Gold Star network of factory-authorized dealers, for sales and service.

Support
All Chiro-X Series Systems are supported by Quantum IT, Digital Imaging, and X-Ray specialists.