QV-800 DIGITAL
UNIVERSAL SYSTEM

Quantum MEDICAL IMAGING
Division of Carestream
Quantum Medical Imaging, designed the QV-800 Digital Universal System, a world-class direct digital imaging system, for use in all general radiology applications.

The QV-800 incorporates many advanced operational and ergonomic features, with virtually unlimited positioning. The QV-800 Radiographic Projections and anatomical design inherently maintains constant alignment between the x-ray tube and image receptor, regardless of C-Arm rotation or image receptor tilt. Its extraordinary flexibility makes the system ideal for all patients, including those who are physically restricted.

With a focus on today’s technology, all Quantum systems provide a path for conversion from analog imaging to Quantum’s digital imaging platform.

**ADVANTAGES OF DIGITAL RADIOGRAPHY**

* Faster exam times, for increased patient throughput and productivity
* High-resolution digital imaging for greater diagnostic confidence and patient care
* Instantaneous image preview
* Enhanced visualization of both soft tissue and bone in the same exposure (wide dynamic range)
* Eliminates cassettes, cassette handling, film processing, and processors/chemicals.
* Significant reduction in repeat exposures
* Seamless integration into RIS/PACS networks

The QV-800 is a single detector system that provides filmless radiography while offering exceptional system positioning capabilities. Using a highly sensitive digital detector, the QV-800 provides excellent detailed radiographic images for optimized diagnostic capabilities.
DIGITAL IMAGING

Available as an Exclusive option with your “QV-800 Digital” is Quantum’s TECHVISION Technology. TECHVISION is truly an innovation for the technologist. The TECHVISION multi-color touch panel screen mounted at the tube stand hand grip allows the technologists full remote generator control for AEC & manual technique selection from within exam room, while remaining close to the patient during exams, improving patient care and productivity. TECHVISION provides full “2-way” generator integration with DR console for control and display of generator parameters, with DR “Image Preview” and study management within exam room. Image recall allows review of any previous image for the current patient.

TECHVISION™, with Quantum Q-Rad Digital systems, provides “DIGITAL IMAGE PREVIEW” and “Review” at tube/table side.
SKULL PROCEDURES THROUGH LOWER EXTREMITIES, THE QV-800 DOES IT ALL

The exceptional versatility of the QV-800 permits virtually unlimited positioning. Vertical travel of the C-Arm is dual-speed motorized and easily allows for weight bearing exams on children (15” floor-to-focal-spot distance) and skull exams for adults. The system’s main C-Arm rotates 180°, and includes auto stops at 0°, 90°, 135°, and -45°. The image receptor rotates within a range of +/- 45° to provide for various studies.

SAFETY
Collision sensors are designed into the electronic movement controls, for both vertical travel and C-Arm positioning. In addition, the receptor unit includes a “collision sensing bumper” designed for additional safety.
The remarkable flexibility of the QV-800 system makes patient positioning and system adjustment quick and easy. The x-ray tube source and the image receptor remain in constant alignment for fast and accurate imaging. The system’s operator-friendly controls, dual speed motorized movements, and collision sensing electronics enable smooth, single-handed operation.

**40”- 72” VARIABLE SOURCE TO IMAGE DISTANCE**
The QV-800 provides a variable horizontal source-to-image distance (SID) of 40” to 72” (100 – 180 cm) to accommodate a range of radiographic studies. Once the C-Arm is angled into the horizontal position, the x-ray tube assembly can be easily moved from 40” to 72”, by using the operator hand control.

**POSITIONING FLEXIBILITY AND EASE OF USE**
Slow speed system adjustments can be made from the receptor switch control panel. This provides for adjustments of the vertical travel and the C-Arm angle, for precise fine tuning to accommodate proper patient positioning.
650 POUND PATIENT WEIGHT CAPACITY
MOBILE EXAM TABLES WITH FLOATING TOP ADJUSTMENT

The QV-800 Universal system simplifies recumbent exams through the use of Quantum’s QT-711-QLW and QT-712-EV Series tables, which can accommodate patients up to 650lbs (295kg).

The QT-712 and QT-711 series tables combine the convenience of four-way float-top tables with the simplicity of mobile tables. The unique float-top permits complete patient coverage with no adjustment required in either the subject or the table location. Generous longitudinal travel of 15” provides substantial float capability. The table length of 85” and table width of 27.5” easily accommodates most patients, and a transverse travel capability of 5” permits effortless table adjustment. The QT-712-EV provides motorized elevation with detector collision sensing of electric locks for float.

The QT-711-QLW table (shown above) includes “QUAD” Locking wheel system, with LEFT side single foot control lever, which locks ALL four wheels. It also includes “Steering” mode feature: right front wheel locks at 0° or 90°, when table is moved.

The QV-800’s unique C-Arm design accommodates cross-table examinations using the mobile table. The QT-711 table shown above also includes a floating-top design for easy patient positioning.

* Shown with non-elevating table. Elevating tables are available.

The operator hand control provides pushbutton motor drive functions and status indicators. It also includes an “AUTO-STOP” feature for precise table positioning of the image receptor.
QT-712-EV
Elevating Radiographic Float Top Table

- Patient weight capacity: 700 lbs. (318.2 kg)
- Elevating travel range of 22.5”–33.75” (57–86 cm)
- Collision sensing electronics
- Laser sensor below table for sensing digital image receptor with automatic stopping
- Programmable “Preset” table height position with indicator on foot control
- Table Length 85” (216cm)/
- Table Longitudinal Travel +/- 9.5” (19” Total / 48cm)
- Table Width 28.” (71.12cm)
- Table Transverse Travel +/- 2.25” (4.5” Total/11cm)
- Pivot feature option: allows for quick table maneuverability

QT-711-QLW
Radiographic “Quand-Locking” Mobile Float Top Table

- Patient Weight Capacity: 650 lbs. (295 kg)
- Table Length 85” (216 cm)
- Table Longitudinal Travel +/− 7.5” (15” Total / 38.1 cm)
- Table-Top Width 28.25” (71.8 cm)
- Table Transverse Travel +/− 2.25” (4.25” Total / 11.4 cm)
- Table Height: 31.5” (80 cm)
- *27.5” (69.8 cm) height available if required - consult factory
- Includes one set (2) Patient Grips
- Accessory rails (both sides)
- “QUAD” Locking wheel system, with LEFT side single foot control lever, which locks ALL four wheels
- Includes “Steering” mode feature: right front wheel locks at 0° or 90°, when table is moved, in “Steering” mode

QT-710
Radiographic Mobile Fixed Table

- Patient Weight Capacity: 650 lbs. (295 kg)
- Table Length: 74” (188 cm)
- Table Width: 28” (71 cm)
- Table Height: 31.75” (81 cm)
- Table Length: 74” (188 cm)
- Includes one set (2) Patient Grips
- Low absorption tabletop material
- Locking 5” caster wheels, individually locking
CORPORATE OVERVIEW
Quantum Medical Imaging is a highly innovative company which designs and manufactures high quality radiographic systems for hospitals, orthopedics, clinics, and imaging centers around the world. The company’s mission is to supply the radiographic imaging industry with superior products for enhanced diagnostic capability.

DESIGNED FOR TECHNOLOGISTS
Designed by a team of engineers with extensive input from technologists, Quantum QV-800 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 hundreds of Quantum QV-800 installations worldwide.

SYSTEM SPECIFICATIONS
Main C-Arm Rotation Assembly:
- Dual speed motorized rotation movement
- Collision sensing electronics and automatic safety sensing
- 180° range of rotation (135° to -45°)
- Automatic stops at 0°, 90°, 135° and -45°

Main C-Arm Vertical Assembly:
- Dual speed motorized vertical travel
- Collision sensing electronics and automatic safety sensing
- Counterbalanced with FAIL-SAFE braking system
- 51” vertical travel (129.5 cm); with C-arm horizontal
- 21” inches vertical travel (53.3 cm); with C-arm vertical

Operator Handgrip Control Unit:
- Multi-function, fingertip control buttons for C-Arm vertical and rotation movements (rotation only at 40” SID)
- Horizontal source-to-image distance control switch; with 40” and 72” visual indicators
- Angulation display for x-ray tube position
- System ready and alarm LED indicator lights, with manual emergency stop

“TechVision”: (QG-TVC) - (OPTIONAL)
- Synchronized x-ray generator control; mounted on handgrip
- Multi-color touchscreen (16 Bit; 800 x 600 Pixels; 8.4”) display
- Technologist can control x-ray generator technique selection at tube-side
- Full APR, AEC, manual technique selection; including mA, kVp & mAs control
- Technologist remains close to the patient during exam set-up
- Reduces steps taken by technologist during exam set-up procedure, x-ray technique control is within exam room

Variable Source-to-Image Distance (SID):
- Variable SID of 40” through 72” (100 -180 cm) Horizontal
- Automatic stop and lock positions at 40” and 72”
- Electro-magnetic FAIL-SAFE braking system

Image Receptor Assembly:
- Angulations of +/- 45°, with indicator of angle
- Electro-magnetic FAIL-SAFE fingertip control locking system
- Collision sensing electronics and safety sensing bumper

X-Ray Tube Head Assembly:
- Angulations of +/- 135°, with angle display
- Electro-magnetic locking system

Notes:
1) Includes Power Supply for QV-800 Unit
2) Left hand loading only available (image receptor on left side)
3) System available for Direct Digital or Conventional Film receptors

SYSTEM SPECIFICATIONS
QV-800 UNIVERSAL SYSTEM
Specifications subject to change without notice.

Minimum room size recommended:
12’ 6” W x 10’ D x 9’ 3” H