

# **BENNETT™**

## *RENAISSANCE SERIES*



***Dedicated to Quality, Innovation and  
the Chiropractic Profession***

# About HCMI, Inc.



For over 20 years, HCMI, Inc. has been providing quality equipment for the chiropractic profession. From tables to x-ray, all your capital equipment needs can be acquired from one manufacturer. Our 30,000 square foot manufacturing facility is centrally located in Springfield, Missouri, USA. We incorporate quality workmanship, reliability, simplicity, serviceability and affordability within all our product lines.

As a leader in the chiropractic profession, HCMI is honored to have radiographic systems in nearly every chiropractic college in the U.S. and the first direct digital system, the DCX, in a chiropractic college.

Our objective is summed up well in our creed, "Dedicated to Quality, Innovation and the Chiropractic Profession." Commitment to Chiropractic Excellence is evident throughout the HCMI product line of adjusting tables, traction tables, film-based and digital radiographic systems.



## Making the Right Choice

At HCMI, the company dedicated to the chiropractic profession, we believe that objective information is the key ingredient of the decision-making process. Understanding that the purchase of an x-ray system is one of the biggest expenses for any practice size, we would like to help you make an educated decision and choose the solution that is right for you!



## Built-in Quality Protects Your Investment

Our rigorous manufacturing process and adherence to the highest level quality assurance measures guarantees that every product will provide years of trouble-free operation. As a testimonial to our commitment to quality, HCMI proudly backs every chiropractic film-based radiographic system with a 7-year parts warranty, the best warranty in the industry.

## About HCMI Dealers

Through a network of quality dealers and representatives, our products are sold and serviced worldwide by professionals who care about the chiropractic profession. These authorized dealers have the knowledge and skills to assist you with your clinical needs. Whether it's an adjusting table or a brand new radiography suite, your HCMI dealer has the experience to ensure each system will be installed and maintained to the highest factory standards. Our dealers stock parts and are factory trained to keep your system running like new, with little or no downtime. In addition, HCMI's knowledgeable factory representatives offer additional service and support that is second to none!



# The Benefits of Digital Imaging



Digital imaging systems provide advance features and tangible benefits that exemplify the superiority of digital technology. Your transition to digital technology provides immediate value by demonstrating the commitment of your practice to provide the highest level of care.

## Improved Patient Care

The first and most important advantage of digital technology is the elevated quality of care. The range of the digital receptor allows discovery of pathologies that may not be found with other systems, so you have in your hands a much better diagnostic tool that provides for an immediate and precise diagnosis. At the same time, the short exposure time and reduction in re-takes increases patient safety because the radiation dose is limited by as much as one-third, without sacrifice in image quality. In short, the achieved higher standard ensures your patients' trust and satisfaction.

## Elimination of Film

Digital x-ray directly eliminates the use of film, but more importantly, it eliminates the need of darkrooms and storage space, the processing and disposal of chemicals, time-consuming film duplication and retakes due to poor image quality. It also makes filing and file retrieval much more efficient. Consider all these savings as an integral part of the equation when deciding on a digital solution.



## Ultra Fast Image Acquisition

As we all know, time is money. Thankfully, direct digital imaging is nearly instantaneous. Digital exams can be conducted 2 to 4 times faster than traditional film-based x-rays, so busy chiropractors can increase the number of patients seen each day. The image is ready to view within seconds and can then be instantly sent to a radiologist, stored on your hard drive or placed on CD or DVD for future review and back up.

## Superior Image Quality and Enhancement Options



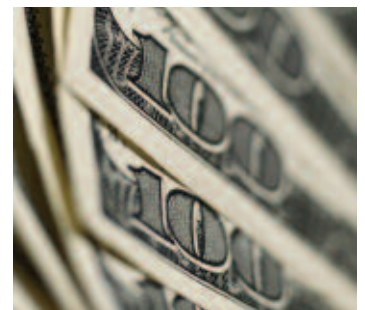
The ability to manipulate the digital data exemplifies the superiority of digital x-ray imaging over analog systems. The advanced digital environment allows a doctor to:

- ✓ Enlarge the image
- ✓ Alter the contrast
- ✓ Alter the density
- ✓ Reverse the image (from negative to positive)
- ✓ Make exact digital measurements and add annotations
- ✓ Save the file in a near limitless number of variations
- ✓ Share images for consultations

...all with a click of a mouse. Interpreting the image is also easier because the digital medium allows the doctor to adjust aspects of the image that can cloud the view of the spine. Film is not capable of such manipulation.

## Cost Advantages of Digital vs. Film

The transition to digital imaging can seem like a major capital expenditure, however with a careful analysis of the bigger picture, you'll discover that **digital x-ray is more cost effective than film-based systems**. Add that to the elimination of film, cassettes, chemicals and the space needed for darkrooms and storage; it's easy to see that digital is the right choice.





# Digital Radiographic Systems

## **DCX** - Exceeding Expectations

The DCX meets the challenges of increased exam volumes, stringent operating budgets and staffing shortages - all without the use of film, cassettes or expensive imaging plates.

Technology is the single most important consideration when investing in a new digital x-ray system. By combining a patented, single CCD direct digital receptor and a time-tested anatomical 100 kHz generator, the DCX produces high resolution images within seconds exceeding every expectation. This system allows you to examine more patients each day, up to three times more than a conventional film-based or CR (Computed Radiography) system.

The digital receptor has an excellent dynamic range, producing 16,384 shades of gray that allows discovery of pathology that may not be seen by other systems. Patient positioning is easy due to the large 17" x 17" (43 cm x 43 cm) image area. Lower radiation dose and high efficiency of the digital receptor is evident by the system's high Detective Quantum Efficiency (DQE is an industry measure of digital image quality).



## **Easy-to-use Software and 100% Compatibility**

Performance and simplicity are key factors in a digital system's operation. The DCX software is easy to use and compatible with **DICOM** standards accepted by the industry. The DCX can function as a stand-alone imaging workstation or can be seamlessly integrated into a shared Picture Archive and Communication System (**PACS**). In addition, the DCX makes it easy to adhere to strict regulations such as the Health Insurance Portability and Accountability Act (**HIPAA**) and **Health Level 7**.

After the exposure is made, the acquired digital image appears on the system's display within seconds, allowing for immediate positioning verification and diagnosis. Digital images are processed and ready to send to a printer, send electronically for a second opinion or save for later review with a few keystrokes. Advanced imaging processing functions include: tissue equalization, sharpening, imaging contrast enhancement and many more. Markers for Right, Left, AP and PA are easily applied for permanent reference.



## **Experienced Support is Standard**

The superiority of the digital technology alone won't compensate for poorly maintained equipment, operator error or faulty techniques. A competent HCMI expert is recommended. Using your high-speed internet connection, HCMI dealers may provide remote support to your system and also access factory support.

## **Industry Best Product Warranty**

The DCX system parts warranty is the best in the industry. A limited seven-year warranty on the x-ray system with a three-year warranty on the computer/monitor and two-year warranty on the digital receptor demonstrates our complete product confidence.

# Film-Based Radiographic Systems

HCMI is known for innovative development and quality workmanship. Each component has been designed for long-term durability under heavy patient volume conditions. An example of our quality is shown in our orthopedic-grade tubestand:

- ✓ manufactured of 1/4 inch thick welded steel, and over *twice* the weight of other tubestands, for many years of reliable service.
- ✓ digitally machined to eliminate drift and guarantee accurate alignment with smooth operation.
- ✓ travels on stainless steel precision bearings and hardened steel tracks for sturdy, vibration-free movement.
- ✓ each unit is factory-erected and laser-aligned to exacting standards to ensure precise tube positioning.
- ✓ includes a user-friendly operator handle with individual lock releases for vertical and horizontal motions.



## DC-1 - Proven Superior Imaging

Over 1,200 DC-1 systems currently satisfy the radiographic needs of the chiropractic profession. Leading the industry, the DC-1 system includes a 0.6/1.5 mm fractional focal spot x-ray tube as standard to provide finer image detail and meet the unique application requirements of rare earth film and screens. In addition, the hospital grade 200,000 heat unit capacity of the tube compliments the increased power output of HCMI high-frequency generators. Also standard on the DC-1 is a full-length, Vertical Frame designed exclusively for chiropractic imaging to allow the heavy-duty 17" film cabinet to travel without contacting the patient. Complete spinal imaging is easily performed without re-positioning the patient. A 10:1 ratio, fine line grid and heavy-duty cassette tray are included as standard for the optimal in image quality. Examples of popular options to the DC-1 include:



*Tilting Bucky Structure with gear-driven adjustment, ideal for upper cervical images.*



*Conventional Vertical Structures for 17" x 17" or 14" x 36" film cabinets.*

## DC-2 - Designed For Full Spine Imaging

The DC-2 is a special version of the DC-1 system that provides a 14"x 36" film cabinet in the Vertical Frame for full spine films or smaller.

## DC-Blue - Simple and Reliable

Ideal for the budget-minded practice. The DC-Blue features a 1.0/2.0 mm focal spot, 140,000 heat unit x-ray tube, 8:1 ratio grid, 17" regular-duty film cabinet and tray for general radiographic needs.

## Digital Ready - Right For Today and Tomorrow

All of our radiographic systems are compatible with most digital imaging systems. Our DCX Upgrade, can be easily added to your system any time after purchase, converting it to a DICOM-compliant digital imaging system.

# Proven, High Performance Generators

HCMI generators feature advanced imaging capabilities and user-friendly operation through state-of-the-art technology.

## HF-300 and HF-400 - Advanced 100 kHz Technology

High frequency technology has revolutionized chiropractic radiography, however not all "high frequency" generators are alike. More powerful than conventional standard or medium frequency generators, our HF-300 30 kW and HF-400 40 kW generators produce **true** 100 kHz high frequency power. With less than 1 kV ripple, the x-ray produced is very efficient and extremely effective in addressing the most critical aspects of upright skeletal radiography. The advantages of our 100 kHz generators are:



HF-300 Console



HF-400 Console

- ▶ Exposure times are reduced by a minimum of 50%.
- ▶ Patient radiation dosage is reduced by 26%.
- ▶ Shorter exposure times greatly reduce the risk of patient motion.
- ▶ Increased penetration power at lower kV techniques, result in optimal film density with greater bone and soft tissue contrast, giving you the highest diagnostic quality.
- ▶ Longer x-ray tube life and greater efficiency.

Allowing for easy operation, these generators include anatomical programming software that:

- ✓ Eliminates the need to set all technique factors.
- ✓ Automatically selects the lowest kV to maximize contrast on each image.
- ✓ Utilize techniques proven through years of use and provides specialized chiropractic weight-bearing views.

For outstanding performance and dependability, our 100 kHz generators offer the ultimate in high quality imaging at an affordable price.

## HF3-SE - Ideal For Leased Office Space

The HF3-SE generator is a special version of the HF-300 that delivers full 30 kW, high frequency power from a standard 110 VAC outlet. This unique technical advantage permits affordable installation in facilities where incoming power line installation or modifications would be too costly, or adequate power is inaccessible. It makes good economic sense for a private practice that leases or rents a facility.



## HF-30 - 20 kHz High Frequency Power

Ideal for the budget minded practice, the HF-30 uses 20 kHz high frequency technology and provides full 30 kW power for general radiographic needs. The operator friendly console provides fast 2-point technique selection. An optional anatomical programming mode offers consistent, effortless images by fast, automatic technique selection.



HF-30 Console with optional AP

## 360 - Simple and Reliable

A high quality, full featured single phase generator ideal for today's private practice setting. Designed for rare earth imaging, precise technique selection is easily accomplished for extremity views.



360 Console

Specifications Model	HF-300	HF-400	HF3-SE	HF-30	360
Technology	100 kHz High Frequency	100 kHz High Frequency	100 kHz High Frequency	20 kHz High Frequency	Single Phase
Anatomical Programming	Included	Included	Included	Optional	N/A
kW rating	30	40	30	30	37.5
kVp range	40 - 125	40 - 150	40 - 125	40 - 125	40 - 125
mA range	25 - 300	10 - 500	25 - 300	50 - 300 Optional 500 mA	24 - 360
Power requirement	240 VAC 1 phase	480 VAC 3 phase/ 240 VAC 1 phase	110 VAC 1 phase	240 VAC 1 phase	240 VAC 1 phase
Automatic Exposure Control	Optional	Optional	Optional	Optional	N/A



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