**Z-MOTION** Control-X Medical



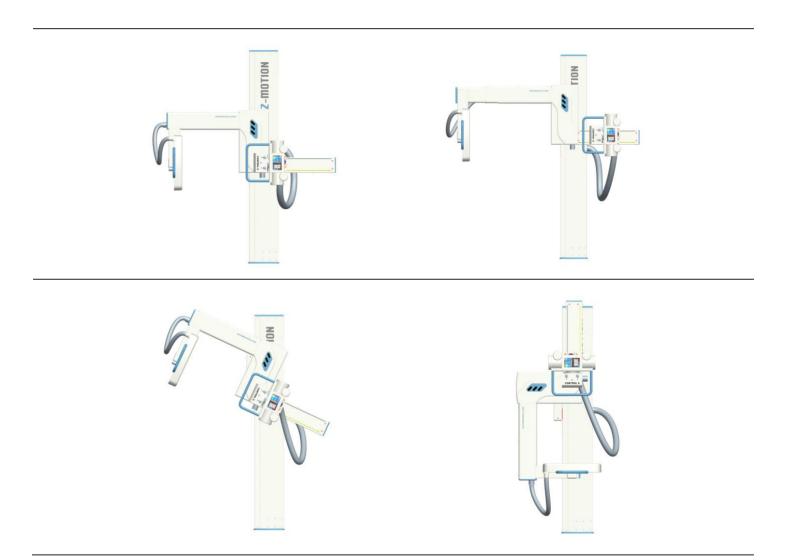
- Universal Digital Radiographic System
- Compact design, low ceiling height requirement
- Motorized and manual movement capability
- Wide motion / SID range
- · Best-in-class image quality
- Flexible connectivity to PACS systems



#### **Easy, Quick Positioning**

The Z-Motion stand is fully motorized and counterbalanced. For quick changes, the stand can be easily positioned in seconds when manually releasing the brakes. The stand is equipped with four electric motors for precise and effortless positioning.

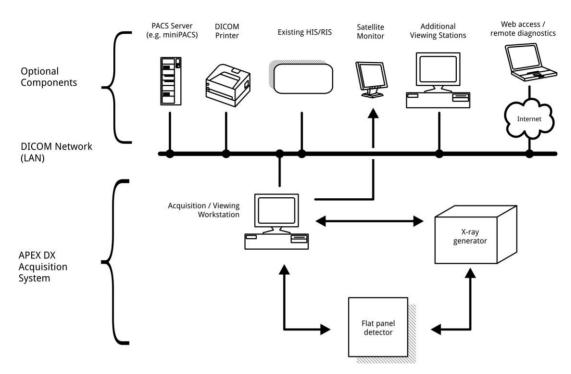
Z-Motion allows patients to sit, stand or lay down on a mobile table. The unique design preserves the alignment between the collimator and the digital receptor in any position. With an SID range of 100 to 200 cm (39.5" to 79"), the stand offers a variety of examination possibilities, including chest, oblique, table and lateral views.



## **Z-MOTION**

#### Connectivity

The Z-Motion system connects to all of today's standard DICOM and HL7 networks. Take advantage of interfacing to existing HIS/RIS and PACS systems. Optional modules include additional viewing stations for consultation rooms or doctor's offices, a PACS server with basic PACS functionality and more.



### **Superior Image Quality**



The Z-Motion Radiographic Systems come with the **APEX** acquisition software package including the *dicomPACS®* DX-R software, which acquires, processes, communicates and archives your images. Patients will appreciate the short exposure times and the ability to view images almost instantly. X-rays can simply be copied onto a CD or sent as email attachments for added convenience to patients.

The **APEX DX Acquisition Software** includes everything one would expect from today's DX modality. All the benefits of DR are now available with **APEX** - an affordable digital imaging solution with state-of-the-art single flat-panel DR technology.





#### **Seamless Workflow**



Detector side membrane control panel



Bluetooth RF remote control



7" touch screen control

The motorized, automatic patient positioning is integrated into the user-friendly touch screen control. The number of programs and their positions can be determined during installation.

A convenient Bluetooth RF remote control is also provided for precise positioning. Use the Slow button for precise positioning or the pre-programmed positions for automatic adjustment.

When rotating the arm, the screen automatically rotates 90 degrees for easy readability.

### **Safety First**

The Z-Motion stand is equipped with a comprehensive set of active and passive safety mechanisms, including spatial awareness, optional proximity sensors for preventing collisions and mechanical safety features to protect users and patients.



# **Z-MOTION**

#### **High Performance X-ray Generator**

The Milestone HF X-ray delivers generator the highest performance reliability in any radiographic environment. Choose from flexible output configurations including single-phase stored energy version up to 80 kW of power, and interface options like AEC control, high speed starter, safety interlocks and more.





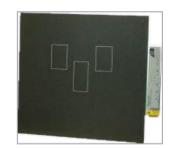
Take advantage of full integration with the digital acquisition system and unparalleled feature set for advanced applications. Service technicians are provided with easy to use configuration procedures with a very short learning curve.

#### **Quality Components and Accessories**

The Z-Motion system comes standard with industry standard highly compatible components and accessories. We use only the most reliable and most widely recognized X-ray tubes, high voltage cables and AEC detectors.









The system also includes two high density grids for perfect, scatter-free exposures – one for short SIDs and another for long source-image distances.

Our floating-top trolley tables allow for regular table exposures as well as lateral procedures in the 100 cm (40") SID range. The mechanical locks provide safe table and patient positioning.



## **Features and Specifications**

Z-Motion Motorized Stand	
Motorized movements	4 movements with electric brakes and clutches
Vertical motion range	125 cm (47.25")
Adjustable SID	100 to 200 cm (39.4" to 78.7")
Arm rotation	-45 to +135 degrees (motorized and manual)
FP detector tilt	-45 to +45 degrees (motorized)
X-ray tube rotation	-90 to +90 degrees (non-motorized)
Manual movement	Counterbalanced vertical and rotational movement in most positions
Total assembled weight	Approximately 400 kg (880 lbs) depending on accessories.
Minimum ceiling height	2400 mm (94")
Operator Control	
Tube side control	7" wide screen LCD with automatic image rotation
Manual controls	Fully configurable brake release switches at detector and tube side
Remote control	Bluetooth remote with 3 x AA batteries
Emergency	STOP controls on LCD and remote plus emergency switch
Flat Panel Detector	
Choice of technology	CsI or Gd₂O₂S scintillator
	Amorphous Selenium / Amorphous silicon substrate
Pixel count	3072 x 3072 (9 MP)
Pixel pitch	139 to 143 µm *
Active detector area	Approx. 430 x 430 mm (17" x 17") *
Theoretical spatial resolution	Approx. 3.6 lp/mm
DQE	70% typically *
MTF @ 2 lp/mm resolution	36% typically *
Energy range	40 to 150 kVp

<sup>\*</sup> depending on type of flat panel type

# **Z-MOTION**

Anti-scatter Grids (2 included)	
Type and operation	Focused grid, stationary
Dimensions (active area)	At least 430 x 430 mm (17" x 17")
Grid resolution	215 lp/mm
Focal distance range	100 to 180 cm (40" to 72") across the two grids
AEC Detector (optional)	
Туре	3-field ion chamber with builtin preamp
X-ray Generator (MS HF Series)	
Frequency / operation	100 kHz high frequency
Power output	32 / 40 / 50 / 65 / 80 kW
kV range	40 to 150 kVp, all models
Max. mA @ 80 kV	400 / 500 / 600 / 800 / 1000 mA
mAs range	0.5 to 600 mAs
Exposure time	0.001 to 6 sec
Configuration	Single tube, radiographic mode
Anode rotation	Low speed or optional dual-speed
Dose area product recording	Available (manual entry or automatically through serial interface)
X-ray Tube	
Default X-ray tube	0.6 / 1.2 mm focus, 18/50 kW, 300 kHU 12 degree target angle
Additional makes & models	Wide range of Varian, Dunlee and Toshiba tubes are available for all radiographic applications
HV cable	10m standard (longer cable pairs available)
Beam Limiting Device	
kV range	40 to 150 kVp, lead shielded
Operation	Manual square field multilayer
Illumination	Min. 160 lux (bulb or LED type)
Imager coverage	430 x 430 mm (17" 17") @ SID = 100 cm (40")



#### Universal Digital Radiographic System

Acquisition Workstation	
Connectivity	DICOM 3.0 compatible
Generator control integration	Included
Standard modules	Diagnostic viewer, worklist query, DICOM print, emergency patient workflow, customizable processing profiles, local image storage
Optional modules	Additional viewing stations, DICOM send, Patient CD, PACS server and more
Hardware	Dual core or better processor, 2GB RAM, 500GB or more hard disk storage, optical drive, all-in-one 19" touch screen operation
Optional hardware	Uninterrupted power supply
	<ul> <li>Extra HDD storage and memory</li> </ul>
	<ul> <li>Medical grade diagnostic monitor</li> </ul>
Certification	ISO and CE certified, pending FDA approval

**(€** 1979

© 2012, Control-X Medical, Ltd. All rights reserves. The manufacturer reserves the right to change specifications and features without notice.

Control-X Medical, Ltd. Fehérvári út 108-112 Budapest, H-1116, Hungary

Tel: +36-1-381-0301; Fax: +36-1-381-0303

For more information, please contact your local authorized distributor:

# **Z-MOTION**

