



**imaging dynamics**

[www.imagingdynamics.com](http://www.imagingdynamics.com)

151, 2340 Pegasus Way NE

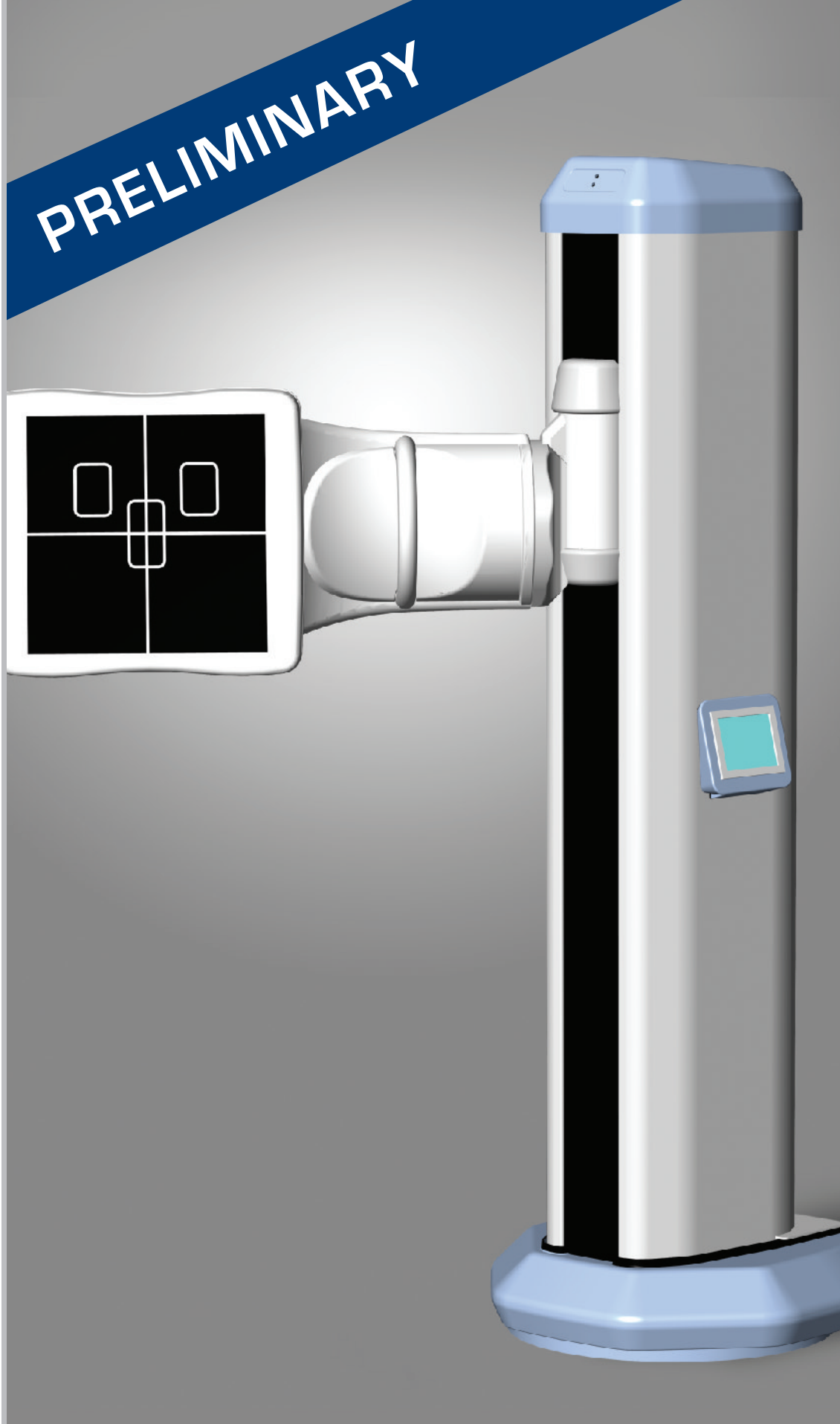
Calgary, Alberta, Canada

T2E 8M5

**Phone:** 403.251.9939

**Fax:** 403.251.1771

**Email:** [info@imagingdynamics.com](mailto:info@imagingdynamics.com)



Copyright 2003. Printed in Canada.

**X P L O R E R 1 8 0 0 <sup>TM</sup>**

# XPLORER 1800™

## PRODUCT SPECIFICATIONS

The **Xplorer 1800 DR** digital radiographic system combines IDC's exceptional image resolution, reliability and affordability with high throughput automation. The **Xplorer 1800 DR** combines automated positioning with a fully integrated workstation. This unique and practical level of integration saves technologists' valuable setup time and delivers maximum patient throughput.

At a touch of a button, the **Xplorer 1800 DR** automatically positions itself for a specified examination. Detector positioning controls can rapidly be selected from one of three locations: the workstation, the touch screen control panel, or by remote control.

As with all IDC systems, the **Xplorer 1800 DR** delivers the industry's highest level of image resolution with use of IDC's patented and proven Very High Density-Charge Coupled Device (VHD-CCD) digital sensor technology.

The **Xplorer 1800 DR** detector is built around a unique modular design. All of its components offer proven reliability and the ability to upgrade individual components as technology advances. IDC's unique design eliminates product obsolescence and greatly reduces service costs.

Most existing X-ray rooms can incorporate the **Xplorer 1800 DR** system as an 'upgrade', eliminating the expense of replacing the existing tube or generator. This provides an affordable transition to direct digital imaging.

The **Xplorer 1800 DR** is ideal for placement in heavily scheduled imaging suites where every minute saved by increased efficiency is important to the imaging department's operation.

### SPECIFICATIONS

Detector array	Full field, single VHD CCD
Active image size	43cm x 43 cm (17 in x 17 in)
Element matrix	4,128 x 4,128
Number of pixels	17 Million
Pixel size (element pitch)	108 microns in both the x and y direction
Spatial frequency	4.6 lp/mm
Bit depth	14-bit capture
Fill factor	100 percent utilization
AEC	3 field ionization chamber device-operator adjustable
Preview Image	less than 7 seconds
Processed Image Display	between 7 to 15 seconds
Acquisition cycle time	Immediately upon display of previous image
SID	Variable
Pixel Optimized Dose (Opt)	User selectable spatial and dose performance

### GRID

Ratio	13:1
Frequency	70 lines per cm
Type	Stationary, removable
Focal Distance	180cm (72in) and 100cm (40in)

### INTERGRATED UNIVERSAL STAND

Vertical travel (minimum to maximum height)	34 cm (13.5 in) to 185 cm (74 in) at the center of the imaging area
Maximum vertical speed	6cm/sec (2.3 in/sec)
Horizontal swing travel	0 to 180 degrees
Horizontal swing speed	10 degrees/sec
Detector rotation	0 to 120 degrees
Detector rotation speed variable	15 degrees/sec

- Vertical and Rotation movements have "SmartSpot" control.
- Collision safeties provided by "Proximity Sensors".
- Touch Screen control located at stand with jog controls on detector.
- Additional final adjustment controls located on detector head and on the operator handle.

### ENVIRONMENTAL CONDITIONS

Temperature	15 - 30°C (60-86°F)
Humidity (non condensing)	30 - 70 percent

### POWER REQUIREMENTS

Xplorer 1800	Dedicated 110-250 volts 15 amps, 50/60 Hz
Technologists Workstation (User Interface)	110-250V auto sensing, 1.5A, 50/60Hz

### REGULATORY COMPLIANCE

CAN/CSA C22.2 No. 601.1	EN60601-1
FDA 510(k)	IEC-60601
UL 60601-1	

### NETWORK INTERFACE

Ethernet 10/100/1000 mbit/s

### TECHNOLOGIST WORKSTATION

Minimum hardware configuration:

Computer:

- Pentium 4 Processor 3Ghz
- 1 GB RAM
- Dual RAID 80GB H/D

Monitor:

- 1200 x 1600 Color Display
- Flat Panel

Advanced image processing functions include:

- Tissue Equalization
- Sharpening
- Image Contrast Enhancement
- Segmentation
- Shuttering
- Pixel Optimized Dose (optional)

### DICOM 3.0 FUNCTIONALITY

Print Management  
Modality Worklist  
Modality Performed Procedure Step  
Storage Class User

### OPTIONAL ACCESSORIES

X-ray generator	Split panel mobile curtain
X-ray tube/stand/collimator	Patient Table/Upright Support

