OEC 9800

Remanufactured OEC 9800 C-arms from Blue Ox Medical Technologies offer excellent imaging results at a remarkable price. Even more remarkable is our ability to deliver performance and safety features guaranteed to meet or exceed original manufacture's specifications.

Thoroughly remanufactured, our OEC-9800 C-arms are restored to like-new conditioned through multi-step processes. We disassemble, mechanically and electronically restore, refinish, calibrate, and perform final testing and QA on each C-arm. Our full line of OEC C-arms offers imaging excellence and reliability, at an affordable price.

X-RAY SYSTEM

Generator

- 60kHz high frequency
- 15kW power
- Up to 120kVp
- Up to 75mA for radiographic film exposure
- Continuous high level fluoro (HLF) up to 20mA
- Digital spot up to 75mA
- Digital cine pulse
  - 15 or 30 pulses per second
  - Up to 150mA
  - 10ms pulse width
- Full power from standard wall outlet
- Patented battery buffered design

X-ray Tube

- Rotating anode X-ray tube
- 0.3mm and 0.6mm focal spots
- Anode heat capacity: 300,000 HU (per IEC 60613)
- Anode cooling rate: 70,000 HU/min. (85,000 HU/min. motorized and cardiac)
- Housing heat capacity: 1,600,000 HU
- Housing cooling 15,000 HU/min.
- Auxiliary cooling system: 22,500 HU/min. (Standard on all vascular 15 fps, neuro-vascular, cardiac and 12 inch (31cm) I.I. systems. Optional on all other systems.)
- 31,000 HU for Cardiac Super C and motorized C-arm only.

Digital Image Rotation

- Digitally adjusts image display
- Automatic image update
  - -Image rotation
  - -Image reversal (side-to-side)
  - -Image invert (top-to-bottom)
- Image positioning without additional exposure

PreView™ Collimator

- On-screen collimator position indication
- PreView™ iris collimator
- PreView™ Tungsten rotatable double leaf collimator
- Adjusts collimators without X-ray exposure

Fluoro Mode

- kVp range: 40 -120
- mA range: 0.2 - 10 normal mode
  - 20 HLF (high level fluoro)
- Auto and manual fluoro modes
- AutoTrak™ ABS varies mA, kVp, camera gain

Pulsed Fluoro Mode

- kVp range: 40 - 120
- mA range: 0.2 - 10
- Pulse rate: 1, 2, 4, 8
- Pulse Width: 25 or 50ms
- AutoTrak™ ABS, mA, kVp, camera gain
- Reduces X-ray dose to patient and operator

High Level Pulsed Fluoro

- kVp range: 40 - 120
- mA range: 1 - 40
- Pulse rate: 1, 2, 4, 8
- Pulse Width: 25 or 50ms
- AutoTrak™ ABS, mA, kVp, and camera gain

Digital Cine Pulse Mode

- kVp range: 40 - 120
- mA range: up to 150
- Pulse rate: 15 or 30pps (cardiac and neurovascular systems) 15pps (vascular systems)
- Pulse width: 10ms
- AutoTrak™ ABS, mA, kVp, camera gain

Digital Spot Mode

- kVp range: 40 - 120
- mA range: Up to 75
- Automatically terminates exposure with automatic image save

Radiographic Mode

- mA range: up to 75
- mAs range: up to 300
- Computer controlled exposure time
- Optional film cassette holder
  10" x 12" (24cm x 30cm) for 9" I.I.
  14" x 14" (35cm x 35cm) for 12" I.I.

VIDEO IMAGING SYSTEM

9" Image Intensifier

- Tri-mode 9"/6"/4.5" (23cm/15cm/11cm) image intensifier
- Minimum central resolution (at the monitor):
  - -9" (23cm): 2.1 lp/mm
  - -6" (15cm): 2.9 lp/mm
  - -4.5" (11cm): 3.4 lp/mm
- DQE: 65% (typical)

12" Image Intensifier

- Tri-mode 12"/9"/6" (31cm/23cm/15cm) image intensifier
- Minim m central resolution (at monitor):
  - -12" (31cm): 1.5 lp/mm
  - -9" (23cm): 2.1 lp/mm
  - -6" (15cm): 2.6 lp/mm
- DQE: 65% (typical)

AutoTrak™

Automatic Brightness Stabilization

- Automatically seeks the subject anatomy anywhere within the imaging field and selects the optimum imaging technique
- Automatically adjusts to anatomical size and location
- Provides uniform image quality throughout entire image
- Simplifies operation

Image I.Q.

- Smart Window
  -Dynamically senses the collimator position and automatically adjusts brightness and contrast to produce high image quality
- Smart Metal
  -Allows user to adjust automatic brightness and contrast sensitivity evels to metal
  -Provides optimum image quality even when metal is introduced to the field
- Tungsten Collimator
  -Denser collimator limits X-ray exposure area
  -Reduces scatter radiation
  -Improves image detail

Video Camera

- High resolution 1k x 1k CCD camera
- Full frame capture
- Motorized rotation
- On-screen orientation indicator (real-time feedback without fluoro)
- Left-right image reversal
- Top-bottom image invert

Video Monitor

- Dual 16" (41cm) square monitors
- Anti-glare, progressive full frame scan monitor
- Touch screen system control
- 1,000 line high resolution monitors
- Ambient room-light compensation

IMAGE PROCESSING

GSP Platform

- 1k x 1k x 16 bit image processing
- Noise filter with on-screen indicator
- MANRS (real-time Motion Artifact and Noise Reduction System)
- Real-time variable edge enhancement
- Automatic digital brightness and contrast control
- Manual digital brightness and contrast control
- Negate mode
- Save and auto-save feature
- Swap and auto-swap feature
- Patient information
  - -Examination list
  - -Customized patient information
- Customize functions
  - Workstation set-up
  - Mainframe set-up
  - Patient information set-up
  - Date/time set-up
  - DICOM 3.0 interface set-up (optional)
- Last image hold
- 63 image storage
- Removable PC diskette image transfer and archive (floppy disk)
  - 512 x 512 or 1k x 1k
  - BMP or OEC format

ESP PLATFORM
Includes all the GSP features and:
- 400 image storage
- Zoom and roam function
- Image annotation
- Measurement software

ESP Platform with 8fps Digital Disk
Includes all the ESP features and:
- 8fps Dynamic digital disk
  - Recording /playback rate: 1, 2 , 4, 8fps
  - Recording time: 2 minutes @ 8fps

PMCare Platform*
Includes all the ESP 8fps features and:
- 8fps Digital subtraction (DSA) to visualize arterial & venous flow

ESP Platform with 15fps Digital Disk
Includes all the 8fps ESP features and:
- 15fps Dynamic digital disk
  - Recording/playback rate: 1, 2, 4, 8, 15fps
  - Automatic image playback capability
  - Frame-by-frame review
  - Recording time: 10 minutes @ 15fps

Basic Vascular Platform
Includes all the ESP features and:
- Real-time subtraction
- Roadmapping
- Peak opacification
- Re-registration
- Variable landmarking
- Mask save/recall
- Auto cine loop playback
- 8fps Dynamic digital disk
  - Recording/playback rate: 1, 2, 4, 8fps
  - Recording time: 5 minutes @ 8fps
  - Automatic image playback
  - Frame-by-frame review

Vascular Platform
Includes all the Basic Vascular features and:
- Digital cine pulse mode
  - 15 pulses/sec
  - Up to 150mA
  - 10ms pulse width
- 15fps Dynamic digital disk
  - Recording/playback rate: 1, 2, 4, 8,15fps
  - Recording time: 10 minutes @ 15fps (time depends on record frame rate)
- Auxiliary X-ray tube cooling

EPCare Platform*
Includes all Vascular features and:
- Super C (Motorized only)
- Single leaf curved collimator
- 30 fps Dynamic digital disk
- Three pedal footswitch
- X-ray tube heat management

Neurovascular Platform
Includes all the Vascular features and:
- 30fps Dynamic digital disk
  - Recording/playback rate: 1, 2, 4, 8, 15, 30fps
  - Recording time: 10 minutes @ 30fps

Cardiac Platform with Interventional Vascular Capability
Includes all the Neurovascular features and:
- Super“C”configuration (9”/23cm I.I. only)
- Single leaf curved collimator
- Removable dynamic image storage
  - 2G removable media
  - 1,500 images storage capacity
  - 1k x1k or 512 x 512 static image recording in BMP/OEC format
  - 1, 2, 4, 8, 15, 30 frame rate
- Integrated DICOM 3.0 interface
- Three pedal footswitch
- Cardiac menu
- X-ray tube heat management

ADDITIONAL FEATURES
9800 MD C-arm - 9” or 12” I.I.
- 9°/sec. Orbital Motorized Rotation
- 9°/sec. Lateral Motorized Rotation
- RUI (Remote User Interface - Table Side Control Panel)
  - All 9800 Mainframe Controls
  - Image Review Functions
  - C-arm Motion Joystick Control
  - Motorized Vertical Lift
- Contact/Collision Detection
- C-arm Angle Display - real-time and saved images
- X-ray tube heat management included with MD

X-ray Tube Heat Management Option Super C only
- Improves Anode Target (X-ray Tube) cooling capacity
- Improves X-ray tube housing (cooling)
- Increased daily patient load

Other Image Storage Options
- Removable dynamic digital disk
- CD/DVD Writer digital interface (external)
- Integrated DICOM 3.0 interface (storage class/print class/query work-list)
- Analog memory options
  - Integrated S-VHS VCR with playback
  - DV CAM recorder

Hardcopy Options
- Integrated film/paper printer
  - No film developing required
  - 8” x 10” (20.3 cm x 25.5 cm) laser quality film/paper
  - Multi-format, 1, 2, 4 on 1
  - Multi-copy capability
- Thermal printers
- Integrated DICOM 3.0 Interface (storage class/print class/query work-list)

User Interface
- Entire system is computer controlled and software upgradeable
- Touchscreen control simplifies operation
- Automated system operation requires minimum operator interface
- Multi-functional controls
  - Footswitch
  - IR remote (optional)
  - Hand-held control
- Simplified keyboard
- Multi-purpose image directory
  - Retrieve and review images
  - Compose hardcopy films
  - Copy images
- X-ray dose summary

Electrical
- Input power (60Hz or 50Hz) 9800 Plus (except Super C Cardiac)
  - 100V @ 20 A (Japan)
  - 120V @ 15 A
  - 200V, 220V, 230V, 240V @ 10A

  9800 MD 9” (23cm) and 12” (31cm) and 9800 Cardiac Super C
  - 120V @ 20 A (not available in Japan)
  - 200V (Japan)
  - 200V, 220V, 230V, 240V @ 10A

  Super C cooling kit (non-motorized)
  - 120V @ 20 A (not available in Japan)
  - 200V (Japan)
  - 200V, 220V, 230V, 240V @ 10A

  Available Languages for Operator Manuals
- English
- German
- French
- Spanish
- Italian
- Portuguese (Brazilian)
- Chinese
- Japanese

Regulatory Compliance
- U.S. 21 CFR Subchapter J
- NFPA 99
- UL 2601 (CSA/NRTL)
- IEC60601-1 (plus relevant Collateral
- and Particular Standards)
- CE Marking in accordance with 93/42/

EEC (Medical Devices Directive)
*PMCare & EPCare platforms are not available in all regions.w

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