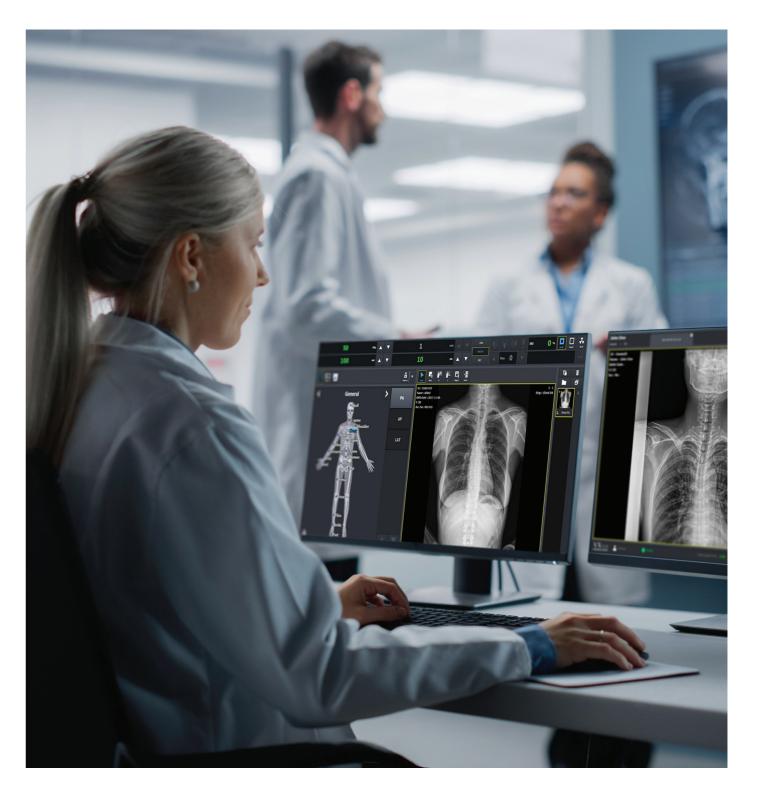


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# **VXvue**

Digital Radiography Image Acquisition Solution



### **VX**vue

#### **Digital Radiograph**

#### **Acquisition Viewer Solution**

Explore VXvue, Vieworks' sophisticated imaging software meticulously crafted for the VIVIX static flat panel detector (FPD) series.

Guided by our motto, "Imaging Excellence: Vivid. Simple. Precise," VXvue is meticulously designed to enhance precision and streamline the user experience. By seamlessly integrating PureImpact and AI, VXvue marks the beginning of a new era in medical imaging, characterized by exceptional clarity and precision. Experience this advanced technology with Vieworks FPDs, where clarity meets innovation for unmatched imaging excellence.

#### Easy and Smooth Integration

- DR FPDs
- DICOM 3.0 compatible
- QXLink (Vieworks' PACS) compatible
- Easy 3rd-party integration: Generator, U-arm, collimator, DAP (Dose Area Product), and auto-stitching.



Vivio

Pioneering Imaging Solutions with Superior Imaging Quality



Simple

Convenient Usability with Streamlined Workflow

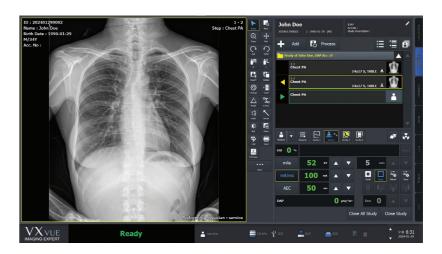


Precise

Patient-centric Solutions with Low-dose, Precise Imaging

#### **Optimized Imaging Workflow**

#### Informative exposure mode



VXvue's Informative Exposure Mode enhances imaging efficiency by introducing an intuitive graphical user interface (GUI) and an expanded exposure viewer.



User-Friendly Layout with Larger Image Viewer



Streamlined Exposure Process



Different Layout Options (Previous Layout Available)

#### **Applications**







#### Human

- Optimized for general radiography
- Supports over 100 body parts
- Specialized functions (e.g. Auto-stitching)

#### Vet & Equine

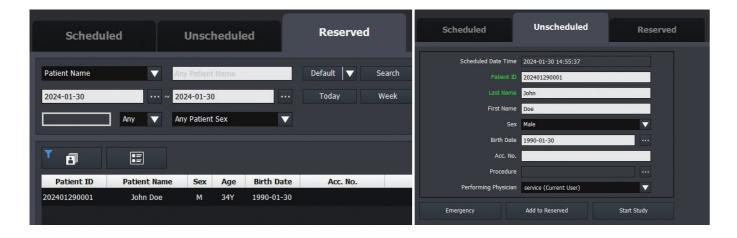
- Vet: Supports dog, cat, and exotic animals
- Equine: · Specialized exposure procedures & features available
  - · Optimized parameters for all animal sizes
  - $\cdot$  Specialized functions (e.g. diverse measurement tools)

#### Vehicle

- Optimized for vehicle-based X-ray system
- Supports managing multiple studies: auto-generate, import, and expose multiple studies

#### **Patient Registration**

#### A simple yet diverse registration process



- Scheduled: For mid to large hospitals with MWL (modality worklist)
- Unscheduled: Register patient on-site
- Reserved: Pre-register patients for offline examination settings (e.g. portable application)
- **Emergency button:** Prioritize patient care in unexpected urgency

#### X-ray Exposure

### Streamlined workflow for easy and fast image acquisition



- Fast and easy integration with VIVIX FPDs
  - Embedded-AEC (Automatic exposure control) for automatic adjustment of X-ray options

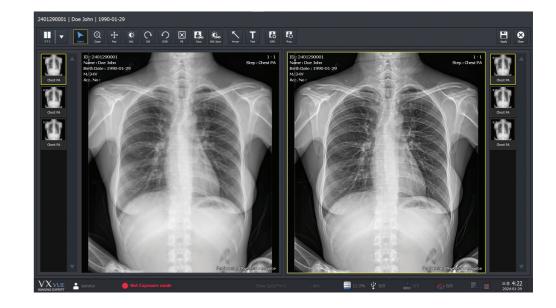


- Easy control of X-ray generator and collimator through smooth integration
  - Pre-define dose for limitless number of body parts and projects using software APR

\*APR: Anatomic Programing Radiography

#### **Processing Images**

#### Optimizing images for precise diagnosis









- Adjustment tools
  - Basic: Zoom, pan, crop, window width/level
- Advanced: Free-angle, undo/redo

#### Stitching

- Create a single image from separate X-ray images
- Pattern matching / physical matching (auto stitching function integrated with fullsystem)

#### Easy processing adjustment

- Adjust the image processing parameters to achieve the best image quality (normal, soft, hard)
- Gridline suppression
  - Remove the gridline automatically or choose to remove vertical/horizontal gridline

#### S.B.S.C. (Software-based scatter correction)

 Image processing algorithm that prevents quality degradation caused by scattered radiation

### **Managing Images**

### Intuitive management tools for simple workflow







#### ame Patien... Label Label Pos Text Text Pos odomen Erect Large L TopLeft Text TopLeft

- Customizable layout options
- Customizable ratio for different layout
- Text annotation
- Basic: Right/left label
- Advanced: Customizable annotation and text
- Advanced measurement tools
- Basic: Distance, angle, ellipse, rectangle
- Advanced: Cobb angle, vertical discrepancy, guide grid-line
- Supporting software APR for each body part, projection, and size
- Pre-defined labelling and annotation
- Pre-defined cropping
- Pre-defined image rotation
- Pre-defined target Exposure Index(EI)

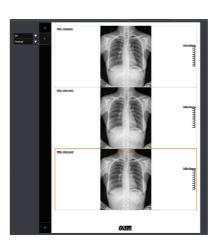
\*APR: Anatomic Programing Radiography

#### **Exporting Images**

### Easy image sharing in various image formats and to different devices







#### Send

- Multi-send: Send to multiple storage at the same time
- Auto-send: Auto-send image after closing a study
- Auto-close: Auto-close study after sending all images

#### Export & Import

- Export: JPEG, TIFF, BMP and DICOM formats
- Customizable options: Anonymized data, annotations
- Import: Only in IMG format file created from VXvue
- External storage save: Automatically save images to USB or network storage

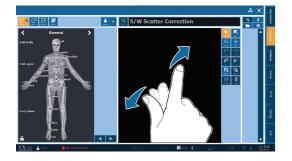
#### Print

- DICOM printer
- Paper printer
- Customizable layout
- Flexible header and tail
- Editable company logo

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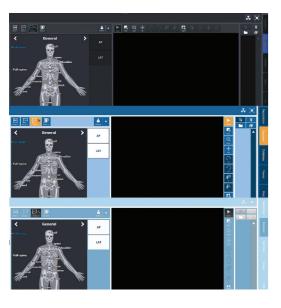
#### **User-friendly Interface**

### Convenient usability tailored for individual users



#### Touch Mode

- Supports touch interface: Two finger zoom, swipe pan, on-screen keyboard
- Automatically rotating screen when the monitor is set vertically



#### Multiple theme support

- 1. User-mode
- Onyx Classic for general users
- Sapphire Blue for touch users
- 2. Resolution
- FHD (1920 x 1080)
- Tablet (2160 x 1440)
- QHD (2560 x 1440)

#### Informative exposure mode

- Expanded image viewer area
- Simple workflow progressing in unified direction
- Thumbnail with customizable information

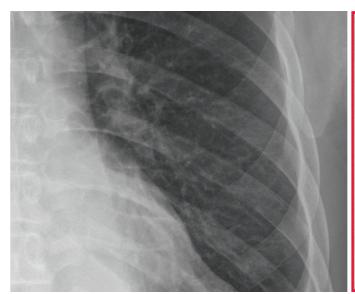


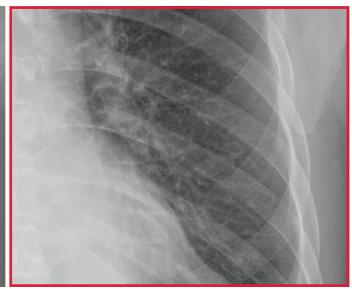
#### Quick access tool

• Supports customized functions such as Zoom, Pan, Send

#### Support multi-language

- Chinese, English, French, German, Italian, Japanese,
  Portuguese, Russian, Spanish, Turkish (total of 10 options)
- Supports language customization





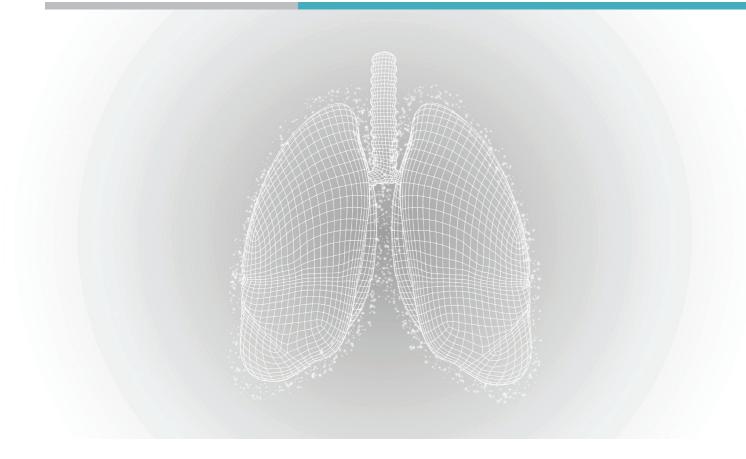
PureImpact™ is a post image processing algorithm to provide supreme image quality. Various preset parameters are optimized for each target examination, thereby showing fine details according to each examination. Advanced features like soft tissue delineation, non–grid processing, and grid–line removal with clear resolution support efficient diagnoses.

- Fine details without visual artifact
- Enriched soft tissue delineation
- Virtual grid processing (S.B.S.C.)
- Gridline removal with clear resolution
- Fine tuning (bright/dark region suppression)
- Wide latitude
- Optimized preset parameters for each target examination











Step into the future of radiology with VXvue's cutting-edge Al integration. VXvue with Al introduces a paradigm shift in diagnostic precision, featuring state-of-the-art technologies such as Diagnostic Support powered by Al, Bone-X Al, and Noise-X Al. Elevate your diagnostic capabilities as VXvue seamlessly integrates artificial intelligence, offering enhanced insights and image clarity. Experience the synergy of advanced imaging software and Al, where every detail matters in achieving more accurate and efficient diagnoses. VXvue with Al is your gateway to a new era of intelligent radiology.



Precise and Prompt Diagnosis Support



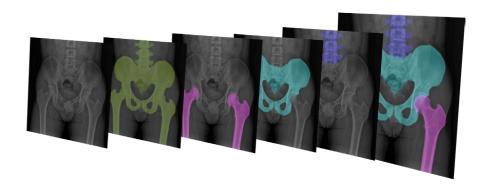
Bone-X AI



Noise-X Al

#### **Precise Diagnosis Support**

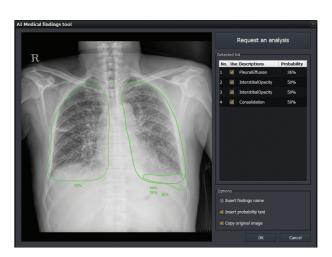
Deep learning-based semantic segmentation



- Anatomy-based dose control
  - Extract more stable and consistent exposure index (EI)
- Anatomy-based image enhancement
  - Can be used for tone mapping, an image enhancement technique
- Anatomy-based workflow optimization
- Automatic detection of unnecessary objects, labeling of objects, and auto-cropping

#### **Chest X-ray Diagnosis Support**

Abnormality detection from X-ray images powered by Al



- Five Findings of chest X-ray abnormality detection
  - Nodule/mass, consolidation, interstitial opacity, pleural effusion, pneumothorax
- Increase accuracy by 8%

- Efficient & convenient usages
  - User-friendly UI
- Prompt delivery of abnormality findings (Reduce reading time by 50%)

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\*Please check certification regulations in your region of interest.

## **VXVUE** with AI

#### **Bone-X AI**

#### Improved soft tissue visibility without extra radiation exposure



Achieve diagnostic precision effortlessly with VXvue's Bone-X AI - a solution that swiftly unveils soft tissues by suppressing ribs and clavicles within the lung field. Delivering a clear, suppressed image in moments, this feature prioritizes patient care by acquiring images without additional radiation exposure.

VXvue's Bone-X AI redefines radiological imaging, ensuring swift and precise diagnoses while upholding the highest standards of patient care.

#### Precise & fast diagnosis aid tool

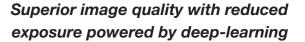
- Suppression of ribs and clavicles within the lung field
- Amplified clarity of soft tissues previously obscured by bone shadows
- Clear suppressed image delivered in under a minute

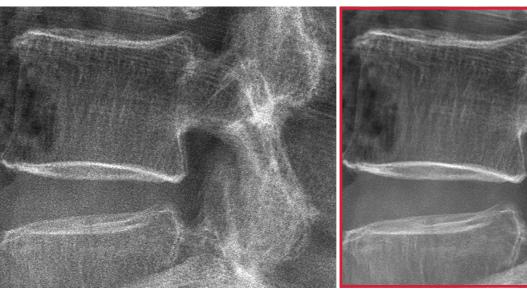
#### Patient-centric imaging

 Acquiring bone suppression images without extra radiation exposure



#### Noise-X Al







In its commitment to patient safety and unmatched diagnostic precision, Vieworks presents 'Noise-X AI,' Al-powered noise reduction technology. Adhering to the ALARA principle, this algorithm ensures minimal radiation exposure during imaging, while preserving exceptional clarity and anatomical detail.

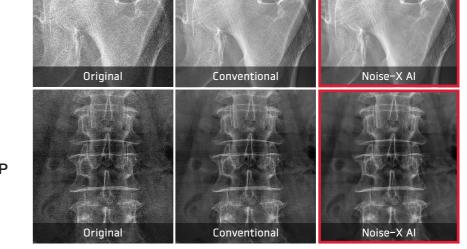
#### Detail-oriented imaging

• Exceptional image quality by reducing image noise based on deep learning algorithm

#### Patient-oriented imaging

 Minimize radiation exposure without compromising on clarity or anatomical detail

Hip AP



L-Spine AP

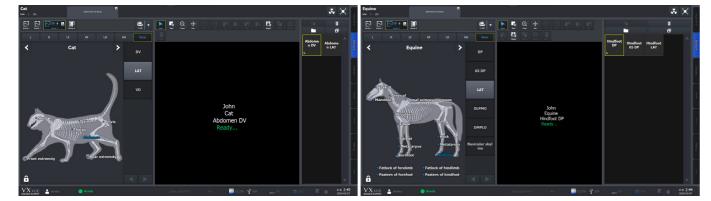
### **VXVUE** for Veterinary



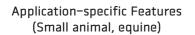
Immerse yourself in advanced veterinary radiology with VXvue's dedicated application. Tailored for animal care, this veterinary mode integrates Al-powered diagnostic support, redefining standards in veterinary imaging. VXvue enhances workflow efficiency and diagnostic accuracy through specialized tools, ensuring unparalleled clarity in every detail.

Veterinarians now have cutting-edge technology to streamline practice, assisting in lesion diagnoses and analyzing anomalies from X-ray imaging. Experience the future of veterinary radiology with VXvue – where innovation seamlessly supports diagnoses for optimal animal healthcare.

VET EQUINE







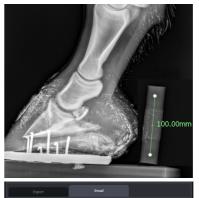


Optimized Parameter Setting



Al-powered Diagnosis Support

#### **Vet-specialized Features**



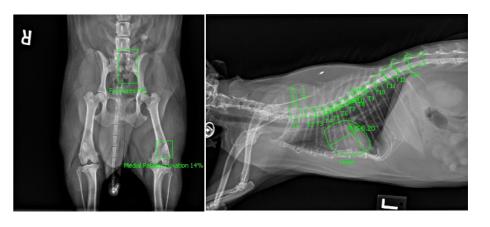


### Convenient features specialized for each application

- Multi-patient registration: Able to achieve faster and more efficient imaging
- Diverse measurement tools
- Standard: VHS, TTA, TPLO, Norberg angle, Distraction Index
- Equine: Coronary Extensor, Sole Depth, Palmar Angle, Horn Laminae, RHL-P3
- Report tool: Easy generation of images and findings
- Automatic pixel pitch calibration (equine)
  - Automatically corrects pixel pitch spacing
  - Operates quickly and easily using a tool with a specific shape
- Email: Simple and easy sharing of X-ray images

#### **Al-powered Diagnosis Support**

### Accurate diagnosis support powered by X Caliber



- Supports four applications
- VHS(Vertebral Heart Size measurement)
  Automatic VHS measurement powered by Al
- Musculoskeletal System
  Subluxation, medial patellar luxation, fractures, etc.
- Abdomen

 ${\it Gastric \ dilation, \ gastric \ for eign \ body, \ ure thral \ calculi, \ etc.}$ 

Chest

Generalized cardiomegaly, left atrial enlargement, bronchial pattern, etc.