WinRad32 SPECIFICATIONS

WinRad-32 Advanced Workstation Software (WR32-060-0001)

WinRad Advanced Review provides the necessary software to receive and review images from other WinRad stations, and to send images to other WinRad stations. It may be used for teleradiology and, with appropriate options, as a network-based reading station.

Minimum Platform Requirements

Pentium 500 MHz or faster PC with 96 MB or more RAM, 4 GB or larger hard disk. CD-ROM required for installation. SuperVGA display adapter capable of 800 x 600 pixels at 256 colors. US Robotics Courier V.Everything modem required if serial communication of images is necessary. A Symantec PC Anywhere 32 license is required.

Operating System

Windows 98, ME, NT 4.0 or Windows 2000.

Display Specifications

Resolutions up to 1600 x 1200 landscape or portrait are supported. Color images are displayed in True Color mode. Support for multiple monitors and higher resolution portrait or landscape monitors is available as separately purchaseable options.

Image Types

8-bit, 10-bit, 12-bit and 16-bit grayscale images, 8-bit palettized and 24-bit color images.

Image Sources

Frame grabbed video from other WinRad systems; digitized film (8- or 12-bit) from other WinRad systems; DICOM grayscale and color images including Secondary Capture, CT, MR, CR, NM, US, XA, and RT. DICOM multiframe objects are supported.

Compression

Decompression of images received from other WinRad Stations.

Lossless: PNG, up to 3:1 compression.

Lossy: JPEG 8- and 12-bit, up to 30:1 depending on modality. Wavelet 8-, 12- and 16-bit up to 100:1 depending on modality.

Image Manipulation

Rotate, Flip, Continuous Fractional Zoom, Panning, Edge Enhancement Filters (Selectable); Gray scale invert. Masking of XA DICOM images can be enabled/disabled.

Window/Level

Interactive via mouse control; select from list of configurable presets; default to original settings; keyboard control. Authentic local windowing of 12- and 16-bit data.

Annotations and Measurements

Deposit arrows, text, Rectangular and elliptical ROI; linear and angle measurements. Show and hide annotations and measurements as virtual overlay. Measurement calibration taken automatically from DICOM scale data.

Display Format

Selectable rectangular grid formats from 1x1 to 10x10. Images displayed in matrix or stacked formats.

Ciné

Continuous loop. Frame rate is mouse-controlled and displayed on-screen.

Manual Ciné

Rapid mouse-driven display of image stacks. Multiple image stacks may be displayed in tandem.

Conferencing

Interactive dual-cursor, peer-to-peer conferencing with other WinRad stations. Either side of conference can control image selection, image manipulation and window/level on both participating conference stations.

Serial Communications

Automatic retransmit on image delivery failures; if a study has been partially received, only missing images are sent subsequently. Either sender or receiver can initiate study download ("push" and "pull"). Selectable transmission rates. Multiple serial connections may run concurrently (with optional software). WinRad can signal a paging device if requested when study download is complete.

Collage

Selected image(s) from one or more studies, including annotations and measurements, may be saved and sent to other WinRad stations.

Printing

Study, selected series, selected images or collage may be printed in selectable rectangular matrix formats on Windows printers.

Image Export

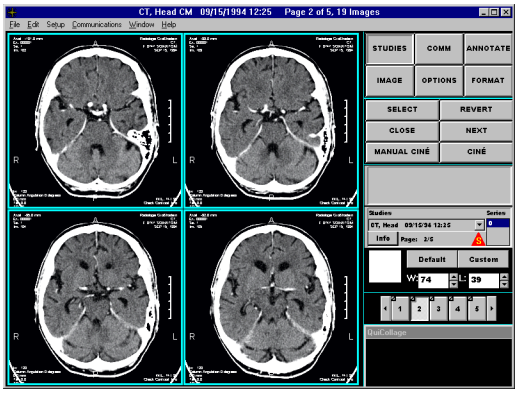
Study, selected series, or selected images may be exported in TIFF or JPEG formats. 12-bit images are windowed to 8-bit before conversion.

Study Deletion

Manual or automatic, based on elapsed time and/or disk usage high- and low-water marks. Individual studies can be marked as non-deleteable.

Media

Delivered on CD-ROM. Printed operator manuals are also delivered in machine-readable (Adobe PDF) format. One HASP software protection lock delivered with each license, placed on computer's parallel port or USB port to enable and configure system parameters.



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