# Codonics Virtua<sup>®</sup> Medical Image Viewer

#### Overview

The Codonics Medical Image Viewer is a standalone application used for viewing and manipulating digital medical images from various sources (CT, MR, US, PET, etc.). The Viewer image manipulation tools include windowing, leveling, magnification, and various measurement tools. The Viewer application is included as part of the Codonics Virtua Operating Software.

#### System Requirements

The Codonics Medical Image Viewer runs on Windows<sup>®</sup>-based PC computers. It has been validated under Windows 2000, Windows XP, Windows Vista and Windows 7.

Recommended minimum configuration:

- Pentium III processor
- 512 MB RAM
- 40 GB hard drive
- 32 bit graphics board
- 19" display
- Windows 2000, Windows XP, or Windows 7

## **Required Software**

The Codonics Medical Image Viewer requires the Microsoft® Visual C++ 2005 SP1 Redistributable Package (x86) to be installed on the PC in order to run. This software is included on the Study Disc, and the viewer will prompt the user to install it if necessary. A PDF viewer, such as the Adobe<sup>®</sup> Reader, is required in order to open the Help documentation. The Adobe Reader is available free at http://www.adobe.com.

#### **Starting the Viewer**

If the CD or DVD was burned with the Virtua's auto run option turned on, the Viewer program will launch when the disc is inserted into a PC's CD-ROM drive. If this option was not enabled when the disc was burned, the viewer must be started manually. To start the viewer manually select **My Computer** located in the Windows Start Menu. Double-click the drive labeled **CODONICS** to display the contents of the CD/DVD. Double-click **RunViewer.bat** to launch the viewer.

#### **Opening a Series of Images**

When the viewer launches the Selection Window will automatically appear. It is split into two sections.

- **Patient information:** Displays patient information such as the patient name, patient ID, birthdate and sex.
- **Study information:** Lists the study folders, series folders and patient images.

Patient Name		Patient	ID	Birthdate	Sex	
2 ∰ 15 M CA Lt Breast, Post Biopsy Rt, 2 ∰ 15 O High Res Knee, 2 ∰ 15 P C Cardiac + MRA, 2 ∰ 15 S LUMBAR,		ex-St Ba ex-Kuma ex-Child 400066	ex-St Barnabas Acc, USA-317 ex-Kumamoto Cyuou Hosp, J ex-Childene Hospital Boston, 400066604			
🖇 😽 *30 A Carotids SENSEx9,		ex-Bonn	ex-Bonn University Hosiptal,			
Study Date/Time	Description		Accession No	Study ID		
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#### Icon Guide

Patient 💈	Last name, first name, date of birth, patient ID
Study 😁	Creation date and time, study ID, procedure description
Series	Modality, series description, number of frames, creation date, creation time
Image	Image number, number of frames, DICOM instance UID

List the sub-levels on the selection window (e.g.: images of a series) by clicking on the +/- button.

Double click on the series icon to access the images contained within that series.



## Using the Toolbar

New/Clear Selection	×	Close all open series and return to the selection window.
Select/Browse	<b>‡</b> ₽	Go back to the selection window to select an additional series or patient. The current series remains open.
Print	9	Send the current image window to a Windows printer. The Codonics Horizon <sup>™</sup> Imager configured with the PostScript option can be used to create high quality color and grayscale prints.
Tile Mode	-	Display multiple images from the same series.
Magnifying Glass	P	Magnify a portion of the active image. Select zoom factor by right-clicking in the magnified area (from x2 to x8).
Reset Window Level	<b>*</b> ●≮	Resets window levels to the original values.
Polarity	3	Changes the polarity of the active series; black becomes white, white becomes black.
Synchronize Slices	ÞÞ	In this mode, the frames displayed that are in the same orientation will be synchronized.
Hide/Display Graphics	سس 	Toggle the display of graphics (drawing and measurement tools).
Distance Measurement	Heleno	Determine the distance between two points in the active image.
Angle Measurement	Ý	Determine an angle within the active image.
Pixel Measurement	pix	Display the pixel value of a point within the active image.
Calibration		Calibrate the active image pixel size. Allows for measurement of a known size element within an image and allows for input of the known size.
Mosaic Mode	₽?	Split the current display window so that multiple series may be displayed.
Cine Loop	]	Allows display of multiple images from a series, one after the other. Clicking on the forward or reverse buttons allow the increase or decrease of the display rate.
Left Mouse controls Window Level	1 1 1	The default action for the left mouse button; adjusts the window level of the active image.
Left Mouse controls	5	Allows movement of the active image within the display window.
Left Mouse controls \$ Zoom Level	° C	Allows for zooming in and out.
Left Mouse controls Stack Navigation	<sup>q</sup>	Move through the images of the selected series.
Left Mouse controls Drag and Drop	ð	Move the series to another display section (used in Mosaic Mode).

# Get it all with just one call 1-800-444-1198

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