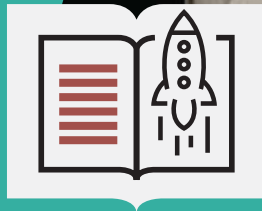


# F<sup>RS</sup>INA

Forsina Radiology 3D

## Quick Manual



## About Forsina

"FORSINA" **the biggest medical library in the world**, aims to assist universities, students, healthcare professionals, and even patients in receive quality and accurate medical information, and it provides different tools to easily view, study, and understand human anatomy for male and female using 3D, Virtual Reality, and real CT scan models.

We have the biggest medically accurate content written developed by our anatomy experts and doctors, offering more than 1000 histology images, 50000 landmarks, 20000 traceable blood vessel and nerve paths, 500000 CT images and over 5 million medical words.

---

## Forsina Products

Forsina has created software that mainly focus on the anatomy of the human body and histology in addition to radiology and Dicom convertor for the purpose of learning and harnessing the best tools to facilitate and empower the learning and researching process

### Our Products



#### Forsina Anatomy 3D

Explore the female and male human body comprehensive structure in a stunning 3D environment covering every anatomical structure with full medical information for each one

#### Forsina Anatomy VR

Explore the female and male human body comprehensive structure in an immersive Virtual reality environment covering every anatomical structure with full medical information for each one



#### Forsina Dicom Converter 3D

Convert your DICOM files into a 3D module to be used in your desktop or mobile, this will allow you to explore your DICOM images in 3D environment

#### Forsina Dicom Converter VR

Convert your DICOM files into a Virtual Reality module to be used using your VR tool kit, this will allow you to explore your DICOM images in one of a kind experience you have never had before



#### Forsina Radiology 3D

Learn and understand how to read CT medical images, control the body density and frontal planes (axial, Sagittal, coronal) in a stunning 3D module created from over 120000 CT images for your studies

#### Forsina Radiology VR

Learn and understand how to read CT medical images, control the body density and frontal planes (axial, Sagittal, coronal) in an immersive VR module created from over 1 Million CT images for your studies



### Quick Guide



**Figure 1 | start screen**

Button	Function
Female Body	Access 3D female body structure
Male Body	Access 3D male body structure
Help	Visit Forsina support <a href="http://www.forsina.com/support">www.forsina.com/support</a>
Exit	Exit Forsina Radiology 3D








## Default Workspace









**Figure 2** | default workspace















Num.	Icon	Name	Function
1		Select	Select a slice to control and use various tools on it
		Hide	Select a hide option to apply to the selected slice
			Make the selected slice invisible. Hide all slices above the selected slice. Hide all slices below the selected slice.
		Fade	Select a Fade option to apply to the selected image
			Fade all slices other than selected slice or group of slices . Fade the selected slice or group of slices
			50  50 Control the fade value applied to the selected slices, and the fade tint color of the selected image or group
		Isolate	Isolate the selected slice to see it alone in the scene
		Screenshot	Take a screenshot of the current view
		Measure	Measure the distance between two point on an isolated slice
		Transform Body	Rotate the body in 3 axes





Num.	Icon	Name	Function
2		Single Selection	Select a single part of the slice
		Group Selection	Select a group of parts of the slice
		Group Percentage	Select a percentage of the CT images from a drop-down list to be displayed and use tools
		Highlight	Highlight a single slice from the CT model so you can select the desired image easily (Depending on the currently active axis ).
3		Navigation Button	Show/Hide navigation ring
	<div>Navigation Ring</div>	Zooming	Clicking on the  or  buttons to zoom in/out of the view
		Increase/Decrease Camera Depth	Use  or  buttons to increase or decrease camera depth
		Directional Arrows	Used to move the entire 3D view up, down, left, or right
		Reset Camera	Used to reset the camera view to the original position
		Move	Used to move navigation ring on screen
		Close	Used to close current navigation ring
	Clicking on  will reopen the navigation ring		
		Planes of Body	Used to reveal three plane lines that can be moved on the body
		CT Color	Change the tint color of CT images to the desired color
		Color Density	Change the color of the CT image depending on the contrast of the image
		Reset Color	Reset the color of the CT images to default setting
4		Forsina Store	Takes to the Forsina store to view all Forsina products
		Help Center	View product manuals, FAQs, setup guides, and more
		Settings	Open settings menu where resolution, language, and sounds can be changed
		Disable Hide	Disable the hide action applied to all hidden images
		Disable Isolate	Cancels the isolate action to bring all other Images back in view
		Disable Fade	Disable the fade action applied to all faded images
		Disable Measure	Remove the measuring tool effect from the scene
		Clear Labels	Remove all labels

Num.	Icon	Name	Function
5	<div>Right Side Panel</div> 	CT Densities	Select one of the preset densities to be able to better see certain structures based on their density
6	<div>Body Regions</div> 	Body Regions	<p>Select an axis or more to display all CT images in the selected axis, or select a region to display CT images in all axes for the region. Also select a certain region and certain axis to be displayed</p> <div> <div>Show All</div> Show all body regions         </div> <div> <div>Hide All</div> Hide all body regions         </div> <p>Control the number of CT images to be displayed</p>  <p>-Axial plane: Shows the images in the axial plane          -Coronal plane: Shows the images in the coronal plane          -Sagittal plane: Shows the images in the sagittal plane</p>
		View Switch	Switch between viewing the full body or body regions
	<div>Full Body</div>	Full Body	<p>Display the full body according to the selected axis</p> <p>-Axial plane: Shows the images in the axial plane          -Coronal plane: Shows the images in the coronal plane          -Sagittal plane: Shows the images in the sagittal plane</p> <div> <div>Show All</div> Show all body regions         </div> <div> <div>Hide All</div> Hide all body regions         </div> 

Num.	Icon	Name	Function
7	Active Image	Active Image	 <p>Determine the desired region and axis, and select any slice using the slider (When in full body view, the option to select the region is disabled )</p> <p><b>Image 819</b> The number of the selected CT image</p> <p> Show or hide the slider</p>
	Hide Options	Hide Options	 <p>Determine the desired region and axis, and hide the images using the two sliders (When in full body view, the option to select the region is disabled )</p> <p><b>Reset Region</b> Disable the hide action in the active region</p> <p><b>Reset All</b> Disable the hide action in the all regions and axes</p>
	Help Image	Help Image	 <p>Reveals a bar the allows to select a region, an axis, and a percentage of images to show in the model using a slider. If the images you select from the help image bar are already visible on the model, nothing will happen. (When in full body view, the option to select the region is disabled ).</p> <p> Pin: Pin down the current view to the scene</p> <p><b>Reset Region</b> Removes the pins on the selected region</p> <p><b>Reset All</b> Removes the pins on all regions</p>
8		Left-side Panel	Contains the tabs for information, selecting a slice, and manipulating the contrast of the CT images

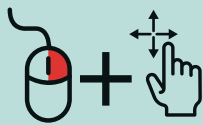


Num.	Icon	Name	Function
8		Information	Show information related to the selected CT image, such as number of image, gender, region, axis, and density
	   	Pick Slice          	Select the slice to apply different action to it and show landmarks on it and change its density  Hide all slices above the selected image  Hide all slices below the selected image  Undo the hiding action  Isolate the selected slice to see it alone in the scene  Clicking on this button opens the 2D window, which allows you to see 2D images of the selected slice in all three axes at the same time. You can also change the image displayed using a slider  Show the landmarks on the parts visible in the selected image. The landmarks reveal the exact location of the part and their names   Turns off the lights of the selected landmarks Show/hide landmark on body parts Show information for the selected landmark

Num.	Icon	Name	Function
		<div>Image Densities </div>	Change the density of the selected CT image to make structures with a certain density more visible
		<div>Contrast</div> <div>Reset All </div>	<p>Contrast: Change the contrast of the image</p> <p>Color: Change the color of the CT image depending on the contrast of the image</p> <p>Bones: Increase or decrease the visibility of bones in the image</p> <p>Muscles: Increase or decrease the visibility of muscles in the image</p> <p>Cardio: Increase or decrease the visibility of the heart in the image</p> <p>Organs: Increase or decrease the visibility of the organs in the image</p> <p>Resets all slider to the default setting</p>



# Mouse + Mac touchpad Controls



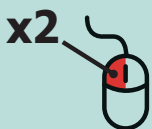
Rotate camera



Right click menu



select, move, functions



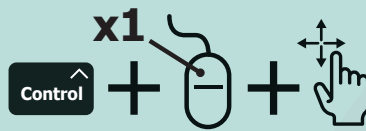
Focus on body part



↑ Zoom in  
↓ Zoom out



Pan camera



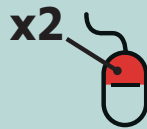
Rotate camera



Right click menu



select, move, functions



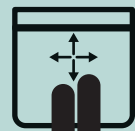
Focus on body part



↑ Zoom out  
↓ Zoom in



Pan camera



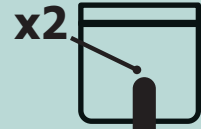
Rotate camera



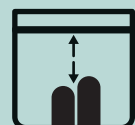
Right click menu



select, move, functions



Focus on body part



↑ Zoom out  
↓ Zoom in



Pan camera



Right click can be activated from:  
system preferences > mouse > secondary click activation