

Service Manual – Corrective maintenance NIMXEN080L

## 11.2.11. 3D Recostruction adjustment

In order to adjust the 3D reconstruction and remove possible artefacts, it is necessary to use the software "Phd\_C\_Test" you can find in the directory C:\Program Files (x86)\OWANDY\PANORAMIC PHD\_C.

1. Once you start the software, select on the menu "Image processing" the modality "3D offset computing".



2. On the window that opens set the following parameters:

	1st slice	2nd slice
Slice to reconstruct	0	300
Offset min (μm)	-2000	-2000
Offset max (µm)	2000	2000
Offset step (µm)	100	100



3. Insert support plate on the chin rest, and place the centering cylinder in the middle of the plate.



Figure 37: Support plate and centering cylinder positioning

4. In "PhD\_C\_Test" program, from the "Exam parameters" window select the exam ID "3D" and the Format "86x90 Full dentition". Set the parameters to 60kV-5mA.

ID	3D	•
Format	86x90 Full dentition	•
Resolution	Normal	•
Params1	Unused	•
Patient	Adult	•
Biting	Standard	•
k٧	60	-
mA	5.0	•

- 5. Press >0< button on the unit keyboard and wait until the chin rest support is positioned. Press >0< button again to complete the unit positioning.
- 6. Press the X-ray button to perform the acquisition.
- Open the files located in C:\ProgramData\OWANDY\PANORAMIC PHD\_C\Centring with an image viewer: the name of these files contains two values: OFFSET\_HORIZONTAL\_Z and OFFSET\_HORIZONTAL\_UM.





- 8. Among the files named OFFSET\_HORIZONTAL\_Z=000 look for the file in which the reconstructed circle is the most continuous (see right image) and write down the corresponding value OFFSET\_HORIZONTAL\_UM contained in the name of the file.
  - e.g.: OFFSET\_HORIZONTAL\_Z=000 OFFSET\_HORIZONTAL\_UM=600.bmp



9. Repeat the operation for the files named OFFSET\_HORIZONTAL\_Z=300 and take note of the OFFSET\_HORIZONTAL\_UM value.

e.g.: OFFSET\_HORIZONTAL\_Z=000 - OFFSET\_HORIZONTAL\_UM=800.bmp

10. In "PhD\_C\_Test" program go to menu "Settings" and select "Flat panel position".

🗅   ጅ   🖬	Software settings Display average Copy all pictures	
	Network Setup	> Axis offset
	3D planes 3D axes	Network settings     Generator preheating levels Motors offsets
		Machine type Generic

11. In the panel "First slice" insert the values Slice number z = 0 and Horizontal offset ( $\mu$ m) = HORIZONTAL\_OFFSET\_UM previously chosen for slice number 0. In the panel "Second slice" insert the values Slice number z = 300 and Horizontal offset ( $\mu$ m) = HORIZONTAL\_OFFSET\_UM previously chosen for slice number 300.

First slice		
Slice number z	0	Send parameters
Horizontal offset (µm)	[	
		Save & exit
Second slice		
Slice number z	300	Discard & exit
Horizontal offset (um)	<u></u>	-

- 12. Click on "Send parameters".
- 13. Click on "Save & exit".