



Troubleshooting Guide





Rev. 1.01

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I: Licensing / Registration

After launching ProfSuni from the icon onto your desktop, you will see the following: <u>Trial Version Licensing Information</u> screen.

rial Version Licensing Information	X
Prof. Suni	
Prof.Suni Version 3.11 (Build 23) You have 30 day(s) left on this trial	
Prof.Suni Trial Version 3.11 (Build 23)	4
Apteryx, Inc, licenses this software to you only upon the condition that you accept all of the terms contained in this license agreement. Please read the terms carefully before using this software package, as using the package will indicate your assent to them. If you do not agree to the terms of this license agreement, then Apterys, Inc, is unwilling to license the software to you, in which event you must destroy all copies of the SOFTWARE PRODUCT and all of its component parts.	
EULA Agreement	
This End-User License Agreement ("EULA") is a legal agreement between you (either an individual, single entity, or company) and Aptexy. Inc. for the software product(s) identified above which may include associated software components, media, printed materials, and "online" or electronic documentation ("SOFTWARE PRODUCT"). By installing, copying, or otherwise using the SOFTWARE PRODUCT, you agree to be bound by the terms of this EULA. If you do not agree to the terms of this EULA, do not install or use the SOFTWARE PRODUCT.	
Software Product License	
The SOFTWARE PRODUCT is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The SOFTWARE PRODUCT is licensed, not sold.	
 GRANT OF LICENSE. This EULA grants you the following rights: * Software. You may install and use one copy of the SOFTWARE PRODUCT on a single computer. 	
2. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS *SOFTWARE PRODUCT. You may not modify adapt, translate, rent, lease, load, resell for profit, distribute, or create derivative works based upon the SOFTWARE PRODUCT or any part thereof. *MISUSE. Apteryx, Inc. takes no responsibility for the consequences resulting from the alteration of, deletion of or addition_	•
Register 🔗 Extend Trial	

Click on the **Register** button to get to the next screen:

Register 🛛 🗙			
Prof. S	Suni		SPTERYX.COM.
STEP 1: REGISTRATIO	N INFORMATION	N	
Please enter the following inform	nation in order to regist	er this product. Your re	egistration number can be found
on either a re	jistration card or on a l	abel located on the CD	-HUM sleeve.
Registration Number:	1		
	I have additional regi	istration numbers I would like	e to use
Install ID:	C6B74024		
User Name:			
User Company:			
User Email:	Í		
User Phone:			
STEP 2: ACTIVATION C	ODE		
Get Activation Code			
You may obtain your Activation Code by options require internet access. You may	clicking on the "Get Activa	tion Code'' button or by visit septative or Anterux Technic	ing http://apteryx.com/register; both
options require interfet decess. Fouring	and cargo a duce repres	Service of specify rectiling	san oropposis sooning association and the second
STEP 3: CONTINUE			
If you do not have an internet connection 'Done' button.	, you may simply press the	U Done	Continue Using Trial

Enter the license 9C50-685A-****, user name information, skip <u>STEP</u> <u>2: ACTIVATION CODE</u> and click on **DONE** to get into the program.

II: Vista: Repeat Registration Problem – Trial Mode

Symptoms:

After registering the software in Vista, and re-launches the program, it asks for registration information again.

Register Proof. Suni STEP 1: REGISTRATION INFORMATION Please enter the following information in order to register this product. Your registration number can be found on either a registration card or on a label located on the CD-ROM sleeve.				
Registration Number:				
	, I have additional regi	stration numbers I would like	to use	
Install ID:	C6B74024			
User Name:				
User Company:				
User Email:				
User Phone:				
STEP 2: ACTIVATION	CODE	tion Code" button or by visiti entative or Apteryx Technic	ng http://apteryx.com/register; both al Support during business hours.	
STEP 3: CONTINUE				
If you do not have an internet connect 'Done' button.	ion, you may simply press the	y Done	Continue Using Trial	

Solution:

The problem occurs because the user does not have the administrative privileges necessary to create registration information. To properly register the software, the user should right click on **ProfSuni.exe** and choose **'Run as administrator'**.

E	>		
		Open	
Prof		Open file location	
	۲	Run as administrator	
	۷	Scan for threats	
		Pin to Start Menu	
		Add to Quick Launch	
		Restore previous versions	
		Send To	+
		Cut	
		Сору	
		Create Shortcut	
		Delete	
		Rename	
		Properties	

Re-enter the registration number 9C50-685A-****, user information and skip <u>STEP 2: ACTIVATION CODE</u>, then click **DONE** to access the program.

III: Sensor Capture Error – Suni hardware could not be found!

Problem:

After positioning the sensor and activating the unit, the following message is displayed.



This error message is generated due to one of the following situations:

- a) The Suniray USB is not recognized by the computer
- b) The Suniray USB driver is not installed
- c) Insufficient power from the computer USB port
- d) The Suniray USB firmware files need to be updated

Solution:

- a) The Suniray USB is not recognized by the computer
 - Make sure the Suniray sensor is plugged in to the back USB port and the computer recognized the hardware.
 - Check the Windows Device Manager to verify if the USB driver was installed successfully.



• If the Suniray USB driver was NOT properly installed, a device named **USB** device marked with a yellow exclamation mark will appear under other devices.



- b) The Suniray USB driver is not installed
 - Insert the ProfSuni disc in the CD-ROM drive. //The driver is in D:\Drivers\SDR303
 - Double click on **USB Device** in **Other devices** then follow the 'Found New Hardware' wizard to install the driver.

Found New Hardware Wizard		
	Welcome to the Found New Hardware Wizard Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). Read our privacy policy Can Windows connect to Windows Update to search for software? O Yes, this time only Yes, now and every time I connect a device No, not this time	
	< Back Next > Cancel	

Found New Hardware Wiz	ard
	This wizard helps you install software for: USB Device If your hardware came with an installation CD or floppy disk, insert it now.
	What do you want the wizard to do? Install the software automatically (Recommended) Install from a list or specific location (Advanced) Click Next to continue.
	< Back Next > Cancel

• Follow the prompts to finish the driver installation, when it's done successfully, Digital Radiography Device (SDR303) should be listed under Device Manager.

- c) Suniray sensor is not properly plugged in
 - Unplug the sensor and re-plug it back in, make sure the connector pushes all the way in.
- d) Suniray USB firmware files not updated
 - Right click on ProfSuni.exe icon on desktop, select Properties→Find Target and make sure the SuniUSBII.SED file is dated 6/10/09 or newer.

	10010	100001.00	Ster (2000 Ster 111)
📼 settings.xml	2 KB	XML Document	5/27/2009 12:07 PM
🗟 ssiAdvancedImaging.IADLL	148 KB	IADLL File	2/29/2008 2:06 PM
🔊 ssiaip.dll	204 KB	Application Extension	2/1/2008 7:09 PM
📋 Suni Imaging.SED	340 KB	SED File	2/7/2008 12:25 PM
🔊 suniusb.dll	108 KB	Application Extension	12/14/2007 6:11 PM
🗐 SuniUSB.SED	344 KB	SED File	_2/9/2007 10:36 AM
📋 SuniUSBII.SED	724 KB	SED File 🤇	6/10/2009 12:47 PM 💫
🖬 U12bin021108.mcs	85 KB	MCS File	12/10/2002 10:16 AM
🖬 U12std021108.mcs	85 KB	MCS File	12/10/2002 10:16 AM

• Go to <u>http://www.apteryxware.com/dental/downloads/xva3_5/suni.shtml</u> for the latest SuniUSBII firmware upgrader.

<u>Note</u>: Suni hardware USB2000 and Suniray currently support 64-bit operating system; please refer to the readme.txt file in the TEC_Driver folder in our FTP site for proper installation instructions.

IV: Abort Sensor in Middle of Layout Series

Symptoms:

When trying to switch sensor or stop in the middle of layout capturing, the following message is displayed:



Cause:

User did not quit image captures properly or completed the previous captures before closing it.

Solution:

Finish the image capturing or stop layout series properly by clicking on the red 'X' on the lower bottom left hand corner to abort capturing.

V: Sensor Self Triggering

Problem:

The sensor triggers by itself without any radiation induces.

This problem may occur due to the following:

- a) Sensor enclosure splitting/opening
- b) Sensor cable(internal) or connector damaged
- c) Insufficient power from computer USB port
- d) Noise Interference

Solution:

- a) Sensor enclosure splitting/opening
 - Inspect the enclosure of the sensor and make sure there's no splitting or cracks on the sensor.
- b) Sensor cable(internal) or connector damaged
 - Switch out the sensor. If the new sensor works, the problem most likely to be the first sensor; if the problem persisted, then it might not be the sensor.
- c) Insufficient power from computer USB port
 - Use the <u>Ultra</u> brand powered USB hub came with the sensor, connect the sensor to one of the ports and the cable from the port to the USB port.
- d) Noise Interference
 - Go to **Tools** -> **Options** -> **SuniUSBII** -> **Detection Sensitivity and Threshold**, lower the sensitivity value by 2 until no self-trigger is observed.

<u>Or</u>

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e) Go to Tools→Options→SuniUSBII→Detection Sensitivity and Threshold, increase threshold value by 16 until no self-trigger is observed.

Sensor Option	ns 🔀
	SuniRay Adjustments Default Calibration Detection Sensitivity and Threshold *
	Trigger thresholds indicate how much exposure is required before capturing an x-ray for the Suni hard w are
	Suni SuniRay
	Detection Sensitivity 4 Detection Sensitivity 7
	Detection Threshold 15 🕂 Detection Threshold 160 ÷
8	Integration Time 300 📩 Integration Time 350 📩
	Return binned image
	Defaults
	* - password protected options
	OK Cancel

(Default is 160) Password: dentalimage

VI: Sensor Not Triggering

Problem:

When attempting to capture an image, screen stays at green 'Sensor Ready' mode even after the radiation induces.

This problem occurs in one of the followings:

- a) Inconsistent or no radiation from the x-ray machine
- b) Sensor not securely connected to the USB cable
- c) Insufficient power from computer USB port
- d) Low Sensor Detection Sensitivity

Solution:

- a) Inconsistent or no radiation from the x-ray machine
 - Increase the exposure settings or change to another x-ray machine to see if the problem persisted.
- b) Sensor not securely connected to the USB cable
 - Unplug the sensor and re-plug it back in, make sure the connector pushes all the way in.
- c) Insufficient power from computer USB port
 - Use the <u>Ultra</u> brand powered USB hub came with the sensor, connect the sensor to one of the ports and the cable from the port to the USB port.
- d) Low Sensor Detection Sensitivity
 - Go to Tools→Options→Sensor→SuniUSBII→Detection Sensitivity and Threshold, increase Detection Sensitivity value by 2 until trigger is observed. (Default is 7) password: dentalimage

VII: ProfSuni Software Upgrade Error

Symptoms:

After downloaded the software upgrader and trying to run it, the following message is displayed:

Apteryx Appli	cation Upgrader	
	×	Va3 Upgrade Results
	1 file(s) were not upgraded	
	Item	Result
hoaduug	🕞 🤍 XVa3 Application ProfSuni Upgrade Results	
signed	– 🔃 XVa3 Application ProfSuni Upgrade Path	
M.C.	- 🔀 ProfSuni.exe	The file could not be updated! Please be sure that all versions of the application a
Aptery		· ·
		< Back Next.> Finish

Resolution:

Make sure ProfSuni program is closed in all computers (local and network) before running the software upgrader.

VIII: Out of PAC License Warning

Symptoms:

When starting ProfSuni, licensing warning information is displayed.

Licensing Information	
LICENSED	Licensed Computers: FRONTDESK2 OP1 OP2 OP3* TU67LUU8ITNPMS
You have 1 license(s) You have used 5 license(s) YOU MUST PURCHASE ANOTHER 4 LICENSE(S)	
ОК	管 Reallocate License

Cause:

The user has used/exceeded the number of licenses were purchased for the software.

Resolution:

To resolve licensing problem, the user must either purchase additional licenses or reallocate previously allocated license by selecting license from the **Licensed Computers** listing and then click on **Reallocate License** button.

IX: Image Quality – Grainy (or "noisy")

Problem:

Image appears to be too light, grainy and lack of contrast.

Sample grainy image:



Cause:

Grainy (or "noisy") image generally causes by under exposure.

Solution:

- a) Increase the exposure setting from the X-ray unit, and/or decrease the distance between the unit and the sensor.
- b) Use the image enhancement tools **Brightness and Contrast**. In general, brightness/contrast enhancement changes the brightness and

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the contrast of an image in order to try to improve the overall dynamic appearance of an image.

• **Real time B/C** – This feature can be used to quickly modify the appearance of an image.

 Open an image, click on B/C on the sidebar to adjust the image by clicking and dragging in the main area of the control. To set the B/C back to normal, you can either double click or right click on the control.



- **Automatic Brightness / Contrast** This feature automatically tries to determine the optimal brightness/contrast settings for the image.
 - Go to Enhancement→Brightness/Contrast→Auto Brightness/Contrast to automatically adjust the brightness and contrast of the image. To set the brightness and contrast back to normal, click on 'Undo All'.
- **Brightness** / **Contrast** This feature allows you to manually adjust the brightness and contrast of the image. After define the optimal B/C values, and then you can apply them to the pre-filters.
 - Go to Enhancement→Brightness/Contrast→Brightness and Contrast and enter the optimal B/C values then click OK to save it.
- **Tips**: Presetting <u>Brightness to -5</u>, <u>Contrast to 5</u> and <u>Gamma to 0.75</u> usually a good starting point, however, you can increase/decrease the value based on the result of the image.

Sensor Optio	ns 2000 Image Processing 2000 Adjustments SuniRay Image Processing SuniRay Adjustments D • • •
	BC adjustments are used to compensate for radiation variations in your x-ray equipment Posterior Defaults Brightness: 5 ÷ Contrast: 5 ÷ Gamma Correction: 0.75
	* - password protected options OK Cancel

X: Image Quality – Dark (or "burned-out")

Problem:

Image appears to be too dark, or teeth appear to be jagged.

Sample burned-out image:



Cause:

Dark (or "burned-out) image generally causes by over exposure.

Solution:

Try turning the radiation down a notch. Most sensors operate best at a time of between 0.06 seconds (about 4 pulses) to 0.10 seconds (6 pulses). Usually, a good starting point is at 70kVp, 7mA and 0.06 seconds (about 4 pulses), and then go up or down one notch at a time from there.

Note: It's generally a good idea, though, to get in a habit of having the X-ray unit in the same position of all your X-ray images, this will ensure consistency.

XI: Image Quality – Stripes on the Edge

Problem:

Stripes appear on the edge of the image, or "stair-stepping".

Sample "stair-stepping" image:



Cause:

Longer warm up pulses from certain AC-head machine.

Solution:

Go to **Tools** \rightarrow **Options** \rightarrow **Sensor** \rightarrow **SuniUSBII** \rightarrow **Detection and Sensitivity** and then increase the integration time by a step of 50ms until no stripes is observed.

Sensor Optio	ns	×
	SuniRay Adjustments Default Calibration Detection Sensitivity and Threshold * Allow auto-orientation Password Required A password is required in order to access the advanced options. Password OK Cancel	
	* - password protected options	Cancel

Sensor Option	s SuniRay Adjustments Default Calibration Detec	tion Sensitivity and Threshold *	
	Trigger thresholds indicate hov capturing an x-ray	w much exposure is required before for the Suni hardware	
	Suni 2000 Detection Sensitivity 4 Detection Threshold 15 Integration Time 300 Return binned image	Suni SuniRay Detection Sensitivity 7 Detection Threshold 160 Integration Time 850	
	* • password	protected options	Defaults

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XII: Image Quality – Blurry (or "fuzzy")

Problem:

Image appears to be blurry, or fuzzy.

Sample "blurry" image:



Cause:

- a) Longer warm up pulses from certain AC-head machine.
- b) Movement from the x-ray head or the image taking technique.

Solution:

- a) Use the same method on page 20 to increase the integration time
- b) Make sure no movement from the x-ray source

Tips: Another way to enhance the blurry image is to use the 'Sharpen' enhancement tool in the application. In Enhancements, go to Enhancement→Sharpen, then adjust the <u>Sharpening Factor</u> and select the <u>Mask Size</u> to get the optimal result.



The following image as a result of <u>Sharpening Factor</u> set at 20, custom <u>Mask Size</u> of the Width at 41and Height at 3.



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XIII: XVA Crash in Middle of a Layout Series

Problem:

Prof. Suni application crashes in the middle of a layout series.

This problem occurs due to one of the following:

- a) User does not quit or complete active image captures before terminating application.
- b) User capturing image from a layout that previously did not closed.
- c) Computer enters suspend mode.
- d) Bad USB connection to the computer.
- e) Older version of software or USB firmware used.

Solution:

- a) Make sure no capturing in progress before terminating application.
- b) Close the previous progression before capturing under a new one.
- c) Disable the suspend mode of the computer Control Panel \rightarrow Power Options
- d) Go to Device Manager and see if the USB driver still recognized. If not, replace the USB cable and/or replace the sensor to see if the problem persisted.
- e) Call Suni technical support at 1-800-GET-SUNI to get help with the appropriate software upgrade.