

VIZION DR + CALIBRATION GUIDE



Calibrating ViZion DR +

This guide will provide you with detailed instructions on how to calibrate your ViZion DR + panel once the installation process has been tested and verified.

To Start the Calibration Process

- 1. Power up the system
- 2. Start the Acquistion (Scanner) Interface: this can be accomplished using either **a** or **b** below.
 - a. Stand-alone Launcher
 - 1. Run Command enter c:\opal\bin\OpalUAIStandalone.exe Figure 1
 - 2. Left click Launch on the UAI Session Launcher Figure 2
 - 3. Proceed to STEPS TO CALIBRATE page 4

📨 Run	
	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	c:\opal\bin\OpalUAIStandalone.exe
	This task will be created with administrative privileges.
	OK Cancel Browse

Figure 1

🖳 UAI Session Launcl	her 😂 🗖 🗖 🗙
uaistand ufirst	ulast
Patient Patient ID 123dt	
Prefix First Dr. Ronald	Mid. Last Postfix McDonald III
Gender Male Female	DOB 20070912
Study Description	
Date 20120614	Time 030621
Body Part	Modality DR
UID 1.3.6.1.4.1.11157.20	08.1.3.12.42.45.1
Launch	Close

Figure 2



- b. Sign into Opal.
 - 1. Left click the Opal Study Icon
 - a. User Name: siteadmin
 - b. Password: Consult your PACS Administrator Figure 3
 - 2. Select test study
 - 3. Left click "Add New Image"
 - 4. Proceed to STEPS **TO CALIBRATE** page 4.

•	×
2.3.3.96	
VIZTEK	
I	localhost CFG
User Name :	
Password :	
LOGIN	EXIT

Figure 3









A password is required to manipulate the software settings.

Only authorized service technicians should proceed.

Cancel

Steps to Calibrate

- 1. Once the Acquisition Interface is activated select Options Figure 4
- Authorization Required box prompts for a password "adc4me" Figure 5
- 3. Select the Device Configurations tab. Figure 6
- Highlight Default under Configuration Pool to activate the Acquisition Device.
- Under the Acquisition Device, select the device you wish to configure from the list.
- Scroll down the list under device options section , under Figure 5 the connectivity section select the appropriate com port under Serial Link, and the appropriate network adapter under ethernet link (ie. com1 , realtek PCI GBE)* . Figure 6 & 7



*If Ethernet Link Dropdown field is empty , the drivers are not installed be sure the NIC card is configured as 1.0GBps full duplex. Figure7



4

5

 Scroll down the list further, locate the calibration utility section, click Launch to begin the *Calibration Wizard*. Figure 8

ion		Version 2.3.4.20
	Subject tree Levende Uompurations Program Settings Tools & Amotations Post+hocessing Device Licensing and Driver Im Device Licensing and Driver Im Licensee Products: Venu DR Display Name: Icon:	stallation >> Launch <<
	NZon DR+ Supporting De	rice
	Dexetor: A Tigger Mode Inner T Ergozure Timeut 10	
	Office Mode: POST	
	Defaults OK	Cancel Apply

Figure 8

- The "Welcome to the ViZion DR + Calibration Wizard" window appears, read and complete each tab, selecting Next to proceed. Figure 9
- Environment Setup tab: Complete each item using no grid, grid-cap, table-top, or bucky between the generator and the flat panel detector, select Next Figure 10





Figure 9



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10. <u>Capture Check tab:</u> set your x-ray generator to 70KVp 3.0MAs, open your collimator 1" past the edges of the panel to ensure full coverage of the flat panel detector, select Acquire, and take an expose during the 10 second countdown. The black boxes will display pre-calibrated images, once completed click Next.

Figure 11

/iZion+ Calibration Wizard		
troduction Environment Setup Capture Check Gain Defect Oversaturation Summary		
Capture Check	Image Data (14	-bit)
This step is optional; you may click Next to proceed. However, it is recommended to perform, for verifying loquine the system is ready for acquisition and calibration.		
1) Place an object in the x-ray field (eg. cell phone, keys, etc.)		
2) Set an appropriate technique (eg. 70kVp 3.0mAs)	Image Data (Aut	o W/L)
3) Click 'Acquire' and expose at any point during the count-down		
4) Confirm that you can see the object in the Image Data squares		
Don't worry about image quality or artifacts at this point!		
Close	<< Back	Next



11. Gain tab:

OpalUAI v2.3.4.21 Remove 500 and 2000 from the directives fields, adjust exposures to 2 Exposures per Target, and adjust Target Tolerance to 300 Target Tolerance. Select **START** and fire tube head within all targeted fields. **Figure 12** *OpalUAI v2.3.4.22+* Removal of the 500 and 2000 fields have already been adjusted, as well as the Target Tolerance, Select **START** and fire tube head within all targeted fields. **Figure 12**



Figure 12

Sourceray 130 Mobile Cart

Exposure Range	kVp	mAs	Time
700-1300	70	0.9	.06
3700-4300	70	3.0	.20
6700-7300	70	5.2	.35
9700-10300	70	8.2	.55

Using an SID of 60" adjusting up or down as needed to hit targeted fields



12. Defect tab:

OpalUAI v2.3.4.21: adjust Bright Tolerance to 300 Bright Tolerance, select **START**, once Dark Frames are complete, select **Acquire**, and fire shots within Targeted field. Note that it does not take the same amount of radiation to reach the desired exposure level because offset subtraction was not previously in effect on other tabs. Figure 13

OpalUAI v2.3.4.22+: Bright Tolerance is already adjusted, select **START**, once Dark Frames are complete, select **Acquire**, and fire shots within Targeted field. You will notice that it does not take the same amount of radiation to reach the desired exposure level because offset subtraction was not previously in effect on other tabs. Figure 13



Figure 13

13. Oversaturation tab:

OpalUAI v2.3.4.21: select **Acquire** button, Expose x-ray with the same level used to achieve the 9700-10300 target field in Gain Tab.

OpalUAI v2.3.4.22+: select **Generate** and wait up to 1 minute for file to be generated. (Do not take an exposure) Figure 14

iZion+ Cali	ibration Wizard					
troduction	Environment Setup	Capture Check C	Sain Defect Oversat	unition Summary		
			Generate			
Clock					ere Back	Novt

Figure 14

14. Summary Tab:

OpalUAI v2.3.4.21: The summary page will be completely blank this is normal. Figure 15

OpalUAI v2.3.4.22+: The calibrated fields will be populated, the blank fields are normal; these fields were not needed during the calibration procedure. Figure 15

- 15. After calibration is complete click **Apply**, then **OK** buttons on Configuration windows.
- 16. You are now ready to acquire a few test images, use proper techniques, and inspect for image quality.



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	OFF	File .00	ect ove	RSAT.	
GAIN #1	GAIN #2	GAIN #3	GAIN #4	GAIN #5	GAIN #6
1058	4134	6970	9567	No Frame	No Frame

Figure 15



Troubleshooting and Advance Features

Note: The ViZion DR + 1417p prime panels require some settings to be set prior to calibration. If settings are not put in place prior to calibration you will experience a randomly occurring pinstripe pattern during image acquisition, it is recommended you calibrate with the settings below. Figure 16



Figure 15

Auto-Clear - The scrubbing feature of auto-clear is recommended to be disabled on all panels, but during the calibration procedure of the ViZion DR + 1417p prime panel you will need to keep it enabled. After the calibration procedure it is recommended you turn auto-clear back off. Figure 17

Max Exposure Duration – With the max exposure duration set as auto, you allow the panel to decide when to cut off the image from accepting exposure. If the panel sees any downward trend during an exposure it stops the panel from accepting image then reinitiates accepting image this causes a random line artifact. During the calibration of the ViZion DR + 1417p prime panel this setting needs to be set as auto, after calibration is complete you can return the setting to your desired exposure window. Figure 17

Configuratio	n
Detector:	A •
Trigger Mode	e: Inner 🔻
Enable I	nterlock
	uto-Clear
Exposure T	meout
10	
V Audible	
	10420112
Max Expos	ure Duration
V Auto	0



