

# Tutorials for Enterprise and Engineering Editions





Tutorials are provided to demonstrate different aspects of the Imaging Gauge<sup>™</sup> program. Completion of all tutorials is recommended to become comfortable with the system.

Tutorial Name	Page	Description
Tutorial 1: Image Adjustment Tools	3	Covers the use of tools including the rectangular region tool for selecting the target, zoom tool, pan tool and select tool. Adjusting the test regions individually or as a whole is also shown.
Tutorial 2: Color Accuracy	8	Compares the tonescale and Delta E values for two images: the original image and a color modified version of the original.
Tutorial 3: Resolution	16	Compares the Functional and Sensor Resolutions for two images.
Tutorial 4: Color Space	22	Demonstrates the relationship between Color Space (sRGB, Adobe RGB, ProPhoto and ECI) and the color accuracy metrics (Delta E).
Tutorial 5: Create Profile	31	Demonstrates how to create or modify an existing specification profile using the Direct Editing method.
Tutorial 6: Quick Setup	37	Provides an overview of the Quick Setup utility to create new specification profiles. Resolution and Color Accuracy samples are presented for five different imaging applications.
Tutorial 7: Results	47	Shows the various ways that results are displayed to the operator and saved to files. Individual and summary results files are reviewed for content and format.
Tutorial 8: Account Management	53	Demonstrates the Account Management interface to activate a software license and add image actuations.

## **Tutorial 1: Image Adjustment Tools**

Imaging Gauge Analysis Software			
Test Image Summary Resolution Details	Color Details Test Limits		
IMAGING Test GAUGE System			*
Select "Open" to load an image.			
Demo Profile.ini			
Sensor Resolution Aim: 50 dpi Color Space: sRG8 Deta E Method: 1976 Site: APPLED MAGE, Inc. Camra: Test Method: Both Color: Test Method: Both Comments: Tutorial Profile			
	<		7
		Images = 501	

1. Select "Demo Profile.ini" from the Profile Drop-Down list.

- 2. Select **Open** to select a test image.
- 3. Select "Demo Image.jpg" from the dialog box.



4. Press and hold the mouse from the upper left corner to the lower right corner of the target as shown. Release the mouse button when done.

GAUGE System		-
Draw a Rectangle around the target and choose "Select"		)
Demo Profile.ini		
Sensor Resolution Aim: 50 dpi Color Space: sRGB Deta E Method: 1976 Site: APPLED MAGE, Inc. Camera: Test Lab Color Test Method: Both Comments: Tutorial Profile		
	C	Y.
	163,164,169 (748,705) Demo Image.jpg Images = 501	

5. Choose **Draw** for continue.

6. Select the **Zoom** tool  $\swarrow$  and click the mouse in the upper left corner of the image as shown:



7. Select the **Pointer** tool **and** move the cursor over a circular test region until the cursor shows a cross.

Imaging Gauge Analysis Software				
Test Image Summary Resolution Details	Color Details Test Limits			
	-			
GAUGE System			A PAGE T	1
Adjust test regions if necessary and select "Run" to analyze the image				
-1-2+3 C				
Open Draw Run			4 1978-1	
Demo Profile.ini			100 0	
Sensor Resolution Aim: 50 dpi	-	<b>₹</b> #	-200 TVL	and the second
Site: APPLIED MAGE, Inc. Camera: Test Lab			ŧ	
Color Test Method: Both Comments: Tutorial Profile				
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	215,119,42 (184,212)	Demo Image.jpg	images = 501 🥢	
Entermine Medule	Consider @ 2012 45			
Enterprise Module	Copyright © 2013 AP	PLIED IMAGE, Inc.		<b>U</b>

8. While holding down the mouse button, drag the circular test region to a slightly different location and release the mouse button.

9. Select the **Pan** tool 🕐. Click and drag the mouse to move across the top of the image.

Image Summary Resolution Details	Color Details Test Limits	
MAGING Cuality GAUGE System		
Acquisities regions if necessary and select "Run" to analyze the image -1 -2 → 3 C Open Draw Run	IMG-QA-90-5	A tear Tri
Color Space: sRGB Defa E Method: 1976 Ste: APPLIED MAGE, Inc. Commentes: Lab Color Test Method: Both Comments: Tutorial Profile	•	
<b>N N N N</b>	185,181,182 (586,256) Demo image_jog images = 501	
		1

Adjust test regions if necessary and	$\bigcirc$				Î
elect 'Run' to analyze the image	APPLE Midel Ing	20	0	IMG-QA-9	0-5
Demo Profile.ini					
		USAF 28.5 = 1	II III ≡ 32.0 \	ALUES	

10. Use the horizontal scroll bar to move to the center of the image.

11. Select the **Zoom** tool **W**. Move the cursor into the image area hold down the **Shift** key. Notice that the cursor changes from a [+] to a [-]. While holding the **Shift** key, click the mouse in the center of the image. Notice that the image de-magnifies.



- 💙 Imaging Gauge Analysis Software ----Test Image Summary Resolution Details Color Details Test Limits IMAGING Quality GAUGE System Adjust test regions if necessary and select "Run" to analyze the image 100 NO GARSE -2-3 C Draw Run Open Vis Demo Profile.ini 2 Sensor Resolution Aim: 50 dpi Color Space: sRGB Deta E Method: 1976 Ste: APPLIED IMAGE, Inc. Camera: Test Lab Color Test Method: Both Comments: Tutorial Profile 0 2 2 1 1 \* \* \* 209,211,206 (0,0) De mo Image.jpg 0 🛛 Enterprise Module Copyright © 2013 APPLIED IMAGE, Inc.
- 12. Adjust the test regions using the left, right, up and down arrows.

13. Select **Reset** C twice to clear all test regions and the original image.



End of Image Adjustment Tools Tutorial

## **Tutorial 2: Color Accuracy**

1. Select "Demo Profile.ini" from the Profile Drop-Down list.



- 2. Select **Open I** to load a test image.
- 3. Select "Demo Image.jpg" from the dialog box.



4. Press and hold the mouse from the upper left corner to the lower right corner of the target as shown.

Imaging Gauge Analysis Software		
Test Image Summary Resolution Details	Color Details Test Limits	
Draw a Rectangle around the target and choose "Select"		*
		l
Demo Profile.ini		L
Color Space: skidd Defate Ellefod: 1976 Ste: APPLED MAGE, Inc. Carrera: Test Lab Color Test Method: Both Comments: Tutorial Profile		l
		7
	163,164,169 (748,705) Demo Image.jpg Images = 501 🗼 🔶	
		-

6. Inspect the location of all inspections regions and use the adjustment buttons, if necessary.



7. Select **Run** when all regions are positioned properly.

8. Note the **Passed** notice when processing is completed.



9. Select the **Summary** tab and select the [+] toggle to expand the **Color Accuracy** information. Note that all color patches passed below the maximum Delta E limit and that the mean Delta E of all patches passes.

Measurement	Pass/Fal 2	LowerLimit	Value	Unper Limit I .	Π
Color Accuracy	PASS	CONTENT CALLS	1000	opper came	5
Dark Skin	PASS	0.00	0.69	10.00	
Light Skin	PASS	0.00	0.53	10.00	
Blue Sky	PASS	0.00	0.86	10.00	
Foliage	PASS	0.00	1.48	10.00	
Blue Flower	PASS	0.00	0.80	10.00	
Bluish Green	PASS	0.00	1.04	10.00	
Orange	PASS	0.00	0.21	10.00	
Purplish Blue	PASS	0.00	0.32	10.00	
Moderate Red	PASS	0.00	0.45	10.00	
Purple	PASS	0.00	0.80	10.00	
Yellow Green	PASS	0.00	0.72	10.00	
Orange Yellow	PASS	0.00	0.59	10.00	
Blue	PASS	0.00	0.55	10.00	
Green	PASS	0.00	0.35	10.00	
Red	PASS	0.00	1.10	10.00	J.,
- Yellow	PASS	0.00	0.14	10.00	
Magenta	PASS	0.00	0.31	10.00	
Cyan	PASS	0.00	4.53	10.00	
White	PASS	0.00	0.16	10.00	
Gray-1	PASS	0.00	0.30	10.00	
Gray-2	PASS	0.00	0.02	10.00	
0	0.00	0.00		40.00	

10. Select the Color Details tab and note the maximum and mean Delta E values.









12. Return to the Test Image tab and select the Open

button.



13. Select "Demo Color Accuracy.jpg" and choose the Select Image button.

- 15. Adjust the positions of the test regions, if necessary, and select Run
- 16. Note the **Failed** notice when processing is complete.



17. Select the Summary tab and toggle Color Accuracy. Note that a number of color patches exceeded the maximum Delta E limit of 10 and that the Average of all 24 patches exceeded the limit of 5.

st Image Summary	Resolution Details Color Details Test	Limits				
	Measurement	Pass / Fail ?	Lower Limit	Value	Upper Limit	
	Foliage	PASS	0.00	2.36	10.00	
	Blue Flower	PASS	0.00	3.58	10.00	
	- Bluish Green	PASS	0.00	9.20	10.00	
	Orange	FAIL	0.00	18.35	10.00	100
	Purplish Blue	FAIL	0.00	12.05	10.00	
	Moderate Red	PASS	0.00	9.77	10.00	
	Purple	PASS	0.00	3.41	10.00	
	Yellow Green	PASS	0.00	9.63	10.00	
	- Orange Yellow	FAIL	0.00	19.59	10.00	
	Blue	FAIL	0.00	11.19	10.00	
	Green	PASS	0.00	5.34	10.00	
	Red	PASS	0.00	9.32	10.00	
	- Yellow	FAIL	0.00	20.58	10.00	
	Magenta	PASS	0.00	9.80	10.00	
	Cyan	FAIL	0.00	24.76	10.00	
	White	PASS	0.00	0.44	10.00	
	- Gray-1	PASS	0.00	0.32	10.00	
	Gray-2	PASS	0.00	0.10	10.00	1.1
	- Gray-3	PASS	0.00	0.74	10.00	
	Gray-4	PASS	0.00	0.21	10.00	
	Black	PASS	0.00	0.38	10.00	
	Average of all 24 Patches	FAIL	0.00	8.04	5.00	T

[13]

18. Select the Color Details tab and note the high Delta E values.



19. Select the "Tonescale" tab and inspect both Tonescale and Delta from Aim charts. Note that the red, green and blue digital code values for all six (6) color patches are within specification.



20. Repeat the analysis for the "**Demo Brightness.jpg**" image. Note the high average Delta E value and the tonescale difference.

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## End of Color Accuracy Tutorial

**Tutorial 3: Resolution Measurements** 

1. Select "Demo Profile.ini" from the Profile Drop-down control.



- 2. Select **Open** to load a test image.
- 3. Select "Demo Image.jpg" from the dialog box and choose Select Image.



- 💙 Imaging Gauge Analysis Software Test Image Summary Resolution Details Color Details Test Limits QAO GAUGE Jsystem Draw a Rectangle around the target and choose "Select" STA 1 4 -2+3 C 1 Draw Run 親能受 1 W/600 Demo Profile.ini Sensor Resolution Aim: 50 dpi Color Space: sRG8 Deta E Method: 1976 Ste: APPLED IMAGE, Inc. Camera: Test Lab Color Test Method: Both Comments: Tutorial Profile ET Marrie 0 1 images = 501 👍 🔶 🔶 163,164,169 (748,705) Demo Image.jpg \* Enterprise Module Copyright © 2013 APPLIED IMAGE, Inc 0 🛛
- 4. Press and hold the mouse from the upper left corner to the lower right corner of the target as shown.

# 5. Choose Draw

to continue.

6. Inspect the location of all inspections regions and use the adjustment buttons to move all regions simultaneously. To move Individual regions, press and hold the left-mouse button, then drag the region to the new location. Release the button.



7. Select Run when

when all regions are positioned properly.

8. Note the **Passed** notice when processing is completed.



9. Select the **Summary** tab and select the [+] toggle to expand the **Resolution** information. Note that the **Sensor Resolution** is between the Lower and Upper Limits, and that the **Functional Resolution** is greater than the Lower Limit.

Test Image Summary	Resolution Details Color Details Te Measurement Target Poston Resolution Functional Resolution (dpi) Color Accuracy Tonescate Noise Registration E Uniformity	Pass / Fai ? PASS PASS PASS PASS PASS PASS PASS PASS	Lower Limt.   40.0 35.0	Value 50.0 38.8	60.0 60.0		
						Ŧ	
Enterprise	Module Copyrigh	t © 2013 APPLIEC	) IMAGE, In	c.			 0

10. Select the **Resolution Details** tab. Notice that the information is identical to the **Summary** tab with the addition of **Optical Efficiency**.

est Image	Summary Resolution De	tails Color D	etails Test Limits		
Resolution	Horizontal SFR Curves	Vertical SFR C	urves Functional Resolution Det	ails 50% Resolutio	n Details
, Se	sor Resolution (dpi) 60	х	Optical Efficiency %	=	Functional Resolution (dpi)
Sensor	size (pixels) divided by the te Field-of-View (inches)	Dots Per Inch	Effect of optical component losses on Sensor Resolution (DPI) Cycles/mm TV Lines	Effe both s Target Size	ctive camera resolution using ensor and optical contributions
	Tool to Convert Resolution Units	€) 50	= () 0.98 = () 600	1x1 ft. ▼	

11. Select the **Horizontal SFR Curves** tab. Notice that the frequency corresponding to **0.1** amplitude (the Discernment Limit) is approximately 38 dpi (the functional resolution). Check the same value in the **Vertical SFR Curves** tab.



12. Select the **Functional Resolution Details** tab. Notice that the chart shows the resolution from the SFR Curves charts that correspond to the Discernment Limit. The dotted line represents the minimum acceptable Functional Resolution.



13. Select the **50% Resolution Details** tab. Notice that these values are above the expected 50% Resolution line (dotted). This reference line represents half the Sensor Resolution.



14. Return to the **Test Image** tab and repeat the analysis with the "**Demo Functional Resolution.jpg**" image.

💱 Select an imag	je	<b>×</b>
Look in:	🎳 Tutorial Images 🔹 🗸 🌀 🏂 🔛 🖬 🗸	
Recent Places Desktop Libraries Computer	archive         Berno Tonescale.jpg         Berno AdobeRGB.jpg         Resolution A.tif         Demo Color Accuracy.jpg         Resolution B 180.tif         Demo Founctional Resolution.jpg         Resolution B CW.tif         Demo Image.jpg         Demo Neutral Balance.jpg         Demo Resolution.jpg         Demo Registration.jpg         Demo Registration.jpg         Demo Sensor Resolution.jpg         Demo Uniformity.jpg	Demo Functional Resolution.jpg JPEG 871 x 800 32-bit RGB image
Network	Image:         Demo Functional Resolution jpg         Select Image           File name:         Custom Filter ("jpg:"bmp:"tif:"png)         Cancel	,

[20]

15. Select the **Summary** tab and notice that the **Functional Resolution** is below specification. Also notice that the **Sensor Resolution** is unchanged from the original image.

Test Image Summary	mary Resolution Details Color Details	Test Limits				
	Measurement	Pass / Fail ?	Lower Limit	Value	Upper Limit	
	Target Position     Resolution     Sensor Resolution (dpi)     Functional Resolution (dpi)     Functional Resolution (dpi)     Tonescale     Noise     Noise     Neutral Balance     Registration     D     UniformBy	PASS FAIL PASS FAIL PASS PASS PASS PASS PASS PASS PASS	40.0 35.0	49.9 26.1	60.0 inf	
			P.,			

16. Select the **Resolution Details** tab and notice that the **Optical Efficiency %** has dropped from 72.1% to 52.3%. Also notice that the **Sensor Resolution** remained constant at 50 dpi. Review the details in the other tabs to compare these results with the original.



End of Resolution Tutorial

**Tutorial 4: Color Space Tutorial** 

1. Select "Demo Profile.ini" from the Profile Drop-Down list.



😰 Select an imag	e							×
Look in:	Jutorial Images	3	•	G 🤌	► 🖽 🏷			
Recent Places	archive Demo Adobel Demo Brightn Demo Color A Demo Color A Demo Functio Demo Imagej Demo Nustral Demo Noisejj Demo Noisejj	RGB.jpg ess.jpg unal Resolution.jpg ipg Balance.jpg pg njpg		emoTor lesolutio lesolutio lesolutio lesolutio lesolutio	nescale.jpg n A.tif n B 180.tif n B CCW.tif n B CW.tif n B.tif			
Computer	Demo ProPho Demo Registra Demo Sensor Demo sRGB.jp Demo Uniform	to.jpg ation.jpg Resolution.jpg ig mity.jpg iii				,	DemosHBB,pg JPEG 871 x 800 32-bit RGB image	
Network	File name: Files of type:	Demo sRGB.jpg Custom Filter (*.jpg;*.bmp;*.t	f;*.png)	•	Select Image Cancel			



3. Draw a rectangular region around the target as shown and choose Draw



4. Inspect the test regions and select Run



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to continue.

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[23]

5. Select the **Color Details** tab and note the low **Delta E** value for all color patches. This represents the optimal performance of a camera system using sRGB color space. Note: the cyan patch has an  $L^*a^*b^*$  value outside the gamut of sRGB space.

lest Image	Summa	ry Resolu	tion Details	Color Details	Test Limits						
Color Accu	iracy	Tonescale	Neutral Bala	nce Noise	Registration	Uniformity					
		4.46	Maximum	0.71	lean	Del	ta E	Delt	a E (a* & b*)		
	1	.0 -									
		0-									
		-									
		8-								- 11	
		7-								- 10	
		6-								- 88	
	Ita E	5-									
	De	í —	_		_					- 11	
		4-								- 11	
		3-						-		- 11	
		2-								- 11	
		1-	. 1 .							- 11	
		11			111						
1											_
-											-
E	ngineer	ing Module		Cop	oyright © 2013 /	APPLIED IMAG	SE, Inc.				0

6. Select the **Tonescale** tab and note the agreement between the aim tonescale and the actual tonescale curve.





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7. Return to the **Test Image** tab and select **Open** using the same steps as above.

Open "Demo AdobeRGB.jpg" and analyze



8. When the image is processed, select the **Color Details** tab. Note the increased level of **Delta E** for a number of color patch and the low **Delta E** levels for the neutral patches.



9. Select the Tonescale tab and note the agreement with the tonescale aim curve.



10. Return to the **Test Image** tab and run the "**Demo ProPhoto.jpg**" image. Note the high **Delta E** levels and the lack of agreement with the sRGB tonescale aim curve.







11. Return to the **Test Image** tab and run the "**Demo ECI.jpg**" image. Note the high **Delta E** and **Tonescale** values.



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[28]



[29]

12. Return to the Test Image tab and change the test profile to Demo ProPhoto.ini.



13. Select **Open** and re-run the **Demo ProPhoto.jpg** image. Note the low **Delta E** levels and agreement with the **Tonescale Aim** curve.



14. Run the other Demo color space images with their profiles to observe their performance.

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End of Color Space Tutorial

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Tutorial 5: Create Test Specification Profile Tutorial

1. Select "Demo Profile.ini" from the Profile Drop-Down list.



- 2. Select **Open t** to load a test image.
- 3. Select "Demo Position.jpg" from the dialog box.

🔛 Select an imag	×
Look in:	🕌 Tutorial Images 🔹 🗸 🎯 🏂 📂 🖽 🗸
Recent Places Desktop Libraries Computer	archive Demo AdobeRGB.jpg Resolution A.tif Demo Brightness.jpg Resolution B 180.tif Demo Color Accuracy.jpg Resolution B 200.tif Demo Functional Resolution.jpg Resolution B CW.tif Demo Noise.jpg Resolution B.tif Demo Noise.jpg Demo Noise.jpg Demo Registration.jpg JPEG Demo Sensor Resolution.jpg BPENG Demo SRGB.jpg St Noise St Noise Demo Registration.jpg St Noise St Noi
Network	
	le name: Demo Position.jpg
	les of type: Custom Filter (",jog," bmp;" tif;" png) ▼ Cancel

4. Press and hold the mouse from the upper left corner to the lower right corner of the target as shown.



5. Choose Draw for continue.

6. Select **Run 3** when all regions are positioned properly.



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Test Image Summary	Resolution Details Color Details Test L	imits		
	Target Position       Horizontal Position, %       Vertical Position, %       Color Accuracy       Tonescate       Noise       Noise       Noise       Noise       Noise       Uniformity	Pass / Fail 2 Lower Lind FAIL 40.0 PASS PASS PASS PASS PASS PASS PASS PAS	Value Upper Limit 34.4 50.0 37.4 60.0	<u>v</u>
Engineerin	g Module Copyright ©	2013 APPLIED IMAGE, In	1C.	0

7. Select the **Summary** tab and note that the failed position values are below the lower limit (40%).

8. Select the Test Limits tab. Change the lower limits for both Horizontal and Vertical positions to 20%.

Profile In	formation Color Accuracy F	Resolution Uniformity	Registration Noise Tone	iscale Neutral Balance
	Active Profile Name		Target Location in the (	Camera Field-of-View
	Demo Profile.ini	0		
	Profile Information		(0,0)	Vartical St of Height
	Site APPLIED MAGE, I	nc.		
	Camera Test Lab		Horizontal % of	Width
	Comments Tutorial Profile			
	Description:		Horizon	ntal (20) (60)
	processing. Text fields can be let	results files to assist data It blank or used as needed.		Minumum % Maximum %
	Target Location is specified to en	sure that the target is	J Color Test Method	
	If location is not critical, enter 0 to	100%.	O Color Profiles	🔿 Tonescale Only 💿 Both
	2	Save Limits 🛛 👍 L	.oad Limits Save	as Default
	Engineering Module	Copyright © 2	013 APPLIED IMAGE, Inc.	

📴 Enter a filenan	ne for the new limi	ts file			<b>×</b>
Save in:	) setup profiles	•	G 🤌 📂 🛄 -		
Recent Places	archive Demo Adobel Demo Eclinii Demo Profile Demo ProPho MIST Level J.ii NIST Level J.ii NIST Level J.ii NIST Level J.ii Setup Tutorial Tutorial 1.ini Tutorial 2.ini	RGB.ini ini ito.ini ni ni ni ni i <u></u> iini			
Network	File <u>n</u> ame: Save as <u>type</u> :	Position OK.ini Limits File (*.ini)		•	Save Limits File Cancel

10. Enter the file name: Position OK.ini and select the Save Limits File button.

11. Select the **Test Image** tab. Note that the new profile is selected in the drop-down menu.



Look in:       Tutotial images       Image: Computer State	12. Select Ope	en 1	button a	nd re-run the	"Demo	Position.jp	<b>og"</b> image.	
image: space with the second space with the secon		Look in:	\mu Tutorial Ima	ages	- 0	🏂 📂 🛄 <del>-</del>		
Network		Recent Places Desktop Libraries Computer Network	archive Demo Add Demo Add Demo Brig Demo CCL Demo Fun Demo Nas Demo Nas Demo Nas Demo Posi Demo Posi Demo Posi Demo Rog Demo Sen Demo Sen Demo Sen Demo Nas	beRGB.jpg htness.jpg yr Accuracy.jpg jpg ctional Resolution.jpg ge.jpg tral Balance.jpg iej.pg tion.jpg istration.jpg sor Resolution.jpg B.jpg formity.jpg ur	Demo Resolu Resolu Resolu Resolu	Tonescale.jpg trion A.tif trion B 180.tif drion B CCW.tif trion B CW.tif trion B.tif	Demo Position.jpg JPEG 871 x 800 32-bit RGB image	

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13. Note that the image now passes the requirements of the new profile.

Imaging Gauge Analysis Software		
Test Image Summary Resolution Details	Color Details Test Limits	
All tests PASSED Open another image to analyze.		A.
Spatial Frequency Aim: 50 dpl Color Space: sRGB Deta E Method: 1976 Ste: APPLED MAGE, Inc. Camera: Test Lab Color Test Method: Both Commenta: Tutorial Profile		
	166,171,165 (812,497) Demo Postion.jpg Images = 16 (4) (9)	P
Engineering Module	Copyright © 2013 APPLIED IMAGE, Inc.	0

Test Image Summar	y Resolution Details Color Details	Test Limits		
	Measurement Target Position Horizontal Position, % Vertical Position, % Resolution Color Accuracy Color Accuracy Tonescale Noise Neutral Balance Resolution	Pass / Fail ?         Lower Lint           PASS         20.0           PASS         20.0           PASS         20.0           PASS         PASS           PASS         PASS	Value         Upper Limit         A           34.6         60.0         37.6         60.0	
	E Uniformity	PASS	[test123]	

14. Select the **Summary** tab and note that all categories have **PASSED** measurements.

End of Profile Editing Tutorial

GAUG	F System					<u> </u>
Select "Op	en" to load an image.					
-1- Open	Draw Run					
	mo Profile.ini					
Sensor Resolu Color Space: s Deta E Method	ation Aim: 50 dpi					
Site: APPLIED Camera: Test I Color Test Met Comments: Tu	MAGE, Inc. Lab thod: Both torial Profile					
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				Images = 501		
Ent	terprise Module	Copyright © 20	11 APPLIED IMAG	E, Inc.		0

1. Launch the Quick Setup application by selecting the **Profile Setup Tool** from the front panel **(20)**.



2. Enter the following information on the front panel.

**Site** = Metro Police Station Camera = Camera Model 1234 **Comments** = ID Processing

Note that the default Resolution Aim Value is 30 and the Delta E Limits from Maximum and Mean are 25 and 9, respectively.

Quick Profile Wizard				
	IMAGING <sup>™</sup> Quality GAUGE System	Quick Set	up Wiza	rd
System Info	ormation			
			Site Metro Pol	ice Station
System Inform configurations the test results	ation fields are available to organize multiple car within an organization. These fields are saved v s database as a means to sort and extract data	mera within <b>g b</b> Ca	amera	Model 1234
une teot reoutit		Comr	ments ID Proces	sing
Five scenarios feature size the satisfactorily re	s represent a size range of target features. Selec at is closest to your application. Select a quality I esolve the feature.	t a evel to	Review Samples	dpi 30
Color Accur	acy Requirments			
Color inaccura metric. Select Mean Delta E.	acies are presented to show their effect on the De acceptable images to set limits for Maximum an Select camera color space below. IRGB O Adobe RGB O ProPhoto O ECI	d	Review Samples	Delta E Limits Max 25 Mean 9
Copyright © 2013	APPLIED IMAGE, Inc.		Save New Pro	file 🕥 🛙

uick Profile Wizard			-
	IMAGING <sup>™</sup> Quality GAUGE System Quick	< Setup	Wizard
-System Info	rmation		
		Site	Metro Police Station
System Inform configurations	ation fields are available to organize multiple camera within an organization. These fields are saved within	Camera	Camera Model 1234
ure test results	udabase as a means to soll and thirdd dala.	Comments	ID Processing
feature size the satisfactorily re	at is closest to your application. Select a quality level	Samp	dpi 30
Color inaccura metric. Select Mean Delta E.	cies are presented to show their effect on the Delta E acceptable images to set limits for Maximum and Select camera color space below.	Revision Samp	ew Delta E Limits Max 25 Mean 9
Copyright © 2013	APPLIED IMAGE, Inc.	💽 Sa	ve New Profile

3. Select Review Samples in the Image Resolution Requirements section.

3. Review the five (5) **Application** types by selecting each radio button in the **Select Application** control. After reviewing the different application, select **ID Photos** to continue. Adjust the **Quality Level** from 50 dpi to 10 dpi by sliding the green pointer up and down through the scale. Select 50 dpi

when done reviewing the Quality Levels and select Return



4. Note that the Resolution Aim Value has changed to 50 dpi. Select Review Samples



	IMAGING Cuality GAUGE System	Quick	Setup	Wizard	
System Info	mation				
System Informa configurations the test results	ation fields are available to organize multiple within an organization. These fields are sav database as a means to sort and extract da	camera ed within ta.	Site Camera Comments	Metro Police Statio	on
Image Resolu Five scenarios feature size tha satisfactorily re	ution Requirements represent a size range of target features. St t is closest to your application. Select a qua solve the feature.	elect a lity level to	🔶 Revi Samp	ew oles	tion Aim Value
Color Accura	cy Requirments			-Data Fi	in the
Color inaccurat metric. Select a Mean Delta E.	cies are presented to show their effect on the acceptable images to set limits for Maximum Select camera color space below.	e Delta E a and	Revi Sam	ew bles Me	an 9
opyright © 2013	APPLIED IMAGE, Inc.		💽 Sa	ve New Profile	0

5. Review the different **Application** types. Toggle the **Color Change** type for each **Application** and adjust the quality level for each combination. Select (1) **ID Photos**, (2) **Color Shift (Max)** and (3) **Max < 15** when done reviewing.





6. Select Brightness (Mean) and Mean < 6, then select Return



7. Note that the **Max** and **Mean** values have changed to 15 and 6, respectively, and that the **Color Space** is set to **Adobe RGB**.

Quick Profile Wizard	×
	k Setup Wizard
System Information	
	Site Metro Police Station
System Information fields are available to organize multiple camera configurations within an organization. These fields are saved within the test results database as a means to sort and extract data.	Camera Model 1234
	Comments ID Processing
Image Resolution Requirements	Resolution Aim Value
Five scenarios represent a size range of target reatures. Select a feature size that is closest to your application. Select a quality level to satisfactorily resolve the feature.	Review Samples dpi 50
Color Accuracy Requirments	
Color inaccuracies are presented to show their effect on the Delta E metric. Select acceptable images to set limits for Maximum and Mean Delta E. Select camera color space below.	Review Samples
Copyright © 2013 APPLIED IMAGE, Inc.	Mean 6 Save New Profile

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[40]

8. Select Save New Profile to create a new specifications profile.

🔁 Quick Profile Wizard					<b>—</b>
	IMAGING <sup>™</sup> Quality Test GAUGE System	Quick	Setup	Wizard	
System Info	rmation				
System Informa configurations the test results	ation fields are available to organize multiple ca within an organization. These fields are saved database as a means to sort and extract data.	amera within	Site Camera	Metro Police State	on
			Comments	ID Processing	
Image Resolution Five scenarios feature size that satisfactorily response to the satisfactorily resolution of the satisfactorily res	ution Requirements represent a size range of target features. Sele at is closest to your application. Select a quality isolve the feature.	ct a level to	Revie Sampl	es Resolut	tion Aim Value
Color Accura	acy Requirments				
Color inaccura metric. Select : Mean Delta E.	cies are presented to show their effect on the D caceptable images to set limits for Maximum ar Select camera color space below. RGB   Adobe RGB   ProPhoto   ECI	velta E nd	Revie Samp	ew les Me	imits Max 15 ean 6
Copyright © 2013	APPLIED IMAGE, Inc.	-	Sav	ve New Profile	

8. Enter the name "Tutorial Profile" in the File name field and select Save Limits File.

🛂 Enter a filenan	ne for the new limi	its file			×
Save in:	) setup profiles		•	G 🦻 🖻 🖽 -	
Recent Places Desktop Libraries Computer Computer	archive Demo Adobel Demo Eclinio Demo Profile Demo ProPho Mist Level J.i NIST Level J.i NIST Level J.i Stup Tutoria Stup Tutoria Tutorial 1.ini	RGB.ini ini ni ni ni ni ni l.ini			
Network	File <u>n</u> ame: Save as <u>type</u> :	Tutorial Profile Limits File (*.ini)		Save Limits     Cancel	File

Note: The Enterprise Edition will display a window to save the file as text-based ASCII or encrypted. Select Text-based for this tutorial.





10. Note that the values entered in the **Setup Guide** have been exported to the **Imaging Gauge** front panel.

			· ·	in a second s	in the second se				5
Profile Info	mation	Color Accuracy	Resolution	Uniformity	Registration	Noise To	onescale   1	leutral Balance	
	Active Pro	file Name			Targe	et Location in t	the Camera Fie	ld-of-View	
		Tutorial Profile	ini						
	Profile Inf	ormation		_		(0,0)		Variant N. of	Haiaht
		Site Metro Police St	ation					Vendear se or	nega
		and Commentation	1004	2					
	Cam	era j Camera Model	1234			Horizontal %	of Width	THE OWNER OF	
	Comme	ID Processing							
						Hor	izontal	4 100	
	Description Profile Info	on: <u>rmation</u> is saved in t	he results files t	lo assist data		Ver	tical () 0	100	
	processing	<ol> <li>Text fields can be</li> </ol>	left blank or us	ed as needed.			N	inumum % Max	imum %
	Target Loc correctly k	ation is specified to ocated within the Fie	ensure that the Id-of-View of th	target is le camera.	Color	Test Method			
	If location i	s not critical, enter (	to 100%.		0	Color Profiles	O To	nescale Only	Ø Both
					1				
				10		10		-	
			Qava Limite		ad Limits	A 8:	ave as Defau		

9. Note that the new profile has been added to the profiles drop-menu. Select the Test Limits tab.

11. Note the Color Space and Delta E limits.

Profile Information Colo	Accuracy Resolution Uniformi	ty Registration Noise Tonescale Neutral Balance
Description		Specification
Color	Accuracy Regions	Image: state
CELab values and the ca measured for all twenty- calculated from all patche of any single color patch.	ice an cours devergen the target bured camera values. It is our patches. The mean is s. Maximum is the highest value	Des ROB Adobe ROB D50 ProPhoto Eci Backing of any single color patch 1994 2000 Maximum of any single color patch 15 Maximum of the mean of al color patches 6
	Save Limits	Load Limits Save as Default

12. The **Minimum** and **Maximum Sensor Resolution** values are calculated using 10% of the aim **Sensor Resolution** selected in the Setup Guide (Aim = 50 dpi >> Minimum =45 dpi, Maximum = 55 dpi)



13. **Minimum Functional Resolution** is set at 20% less than the **Sensor Resolution**, i.e. 80% Optical Efficiency.

naging Gauge Analysis Software	0 6
Text Image   Summary   Resolution Details   Color Details	TestLimits
Profile Information Color Accuracy Resolution Unite	ormity Registration Noise Tonescale Neutral Balance
Description	Specification Sensor Resolution Functional Resolution
Ender the state of th	ethch
Tool to Convert Resolution Units	Cycleshm TV Lines Target Size
10	
Save Limits	Load Limits Save as Default

14. Select the Test Image tab and select Open

to test an image.



Look in:	Tutorial Images		G 🤌 📂 🖽 🛪	
ecent Places	archive Demo AdobeRGB.jpq Demo Brightness.jpg Demo Color Accuracy.jp Demo ECI.jpg Demo Functional Resolu Demo Neutral Balance.jp Demo Noise.jpg Demo ProPhoto.jpg Demo Registration.jpg Demo Registration.jpg Demo Sensor Resolution Demo SRGB.jpg Demo SRGB.jpg	B De Re Re Re Re Re Re Re Re	moTonescale.jpg solution A.tif solution B 180.tif solution B CCW.tif solution B CCW.tif solution B tif	Demo AdobeRGB.jpg JPEG 871 x 800 32 bit RGB image
Network	III File name: Demo Adot Files of type: Custom Filt	eRGB.jpg +	Select Image	

15. Select the Demo AdobeRGB.jpg and choose Select Image.

16. Draw a rectangular region around the target, then presselect Run 3.



🔁 Imaging Gauge Analysis Software		
Test Image Summary Resolution Details IMAGING Quality GAUGE System Adjust test regions if necessary and select 'Run' to analyze the image -1-0-0-3 C	Color Details Test Limits	
Tutorial Profile ini		
2022	202,202,204 (14,382)         Demo AdobeRG8 (pg)         mages = 16	
Engineering Module	Copyright © 2013 APPLIED IMAGE, Inc.	0 🛛

17. Select the **Summary** tab and note that **Sensor Resolution** is in specification but the Functional Resolution is below the lower specification limit.







End of Quick Setup Tutorial

1. Select "Demo Profile.ini" from the Profile Drop-Down list.



2. Select Open

and choose "Demo Image.jpg".



3. Press and hold the mouse from the upper left corner to the lower right corner of the target as shown.



4. Choose **Draw** for continue.

5. Inspect the location of all inspections regions and use the adjustment buttons, if necessary.





results file and the summary file. Select the "Return" button to continue.

3

6. Select the **Run** button

7. Select the "Save Data" button

💱 Select an image × Look in: 🁔 Tutorial Images - 🗿 🎓 📂 🛄archive Demo AdobeRGB.jpg Demo Brightness.jpg Demo Color Accuracy.jpg Demo ECLjpg Demo Functional Resolution.jpg Demo Functional Resolution.jpg 9 🗟 DemoTonescale.jpg Resolution A.tif Resolution B 180.tif Resolution B CCW.tif Resolution B CCW.tif Recent Places Demo Functional Resolutio Demo Image.jpg Demo Neutral Balance.jpg Demo Noise.jpg Resolution B.tif Desktop Demo Position.jpg Libraries Demo ProPhoto.jpg Demo AdobeRGB.jpg Demo Registration.jpg Demo Sensor Resolution.jpg Demo sRGB.jpg JPEG 871 x 800 Computer 32-bit RGB image 🗟 Demo Uniformity.jpg ٦ • Network File name: Demo AdobeRGB.jpg Select Image Files of type: Custom Filter (\*,jpg;\*,bmp;\*,tif;\*,png) 💌 Cancel

9. Repeat the process to analyze the image and select the **Save Data** button **Save Data**

Select Return to

Results Saved Successfully	×
Individual Results:	
C:\Imaging Gauge Files\Results\Individual Results\Results_Demo AdobeRGB_0112132022.txt	
Summary Results:	2
C:\Imaging Gauge Files\results\Summary Results.bxt	
Return	

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when all regions are positioned properly.

A dialog displays the name and location of the individual

[50]

10. Navigate to the installed location of the results folder, typically **C:\Imaging Gauge Files\Results**. Note the **Individual Results** sub-folder and the **Summary Results** file.

Organize 💌	Include in library 👻	Share with  Burn	New folder		III • 🗐 🧯
lame	^	Date modified	Туре	Size	
Individual R	lesults	1/12/2013 9:20 PM	File folder		
Summary R	esults.txt	1/12/2013 9:20 PM	Text Document	13 KB	

11. Open the **Summary Results.txt** file into a spreadsheet editor such as Microsoft Excel®. Use the scroll bar to view all data saved for both files. Close the **Summary Results.txt** file. Note: this file is formatted as a spreadsheet and is difficult to read with a standard text editor such as Notepad.

1	A	B	С	D	E	F	G	1
1	Image Name	Profile	Date Time Analyzed	<b>Date Time Captured</b>	Site	Camera	Comments	10
2	Demo Functional Resolution.jpg	Demo Profile.ini	12/16/2012 11:04	12/6/2012 17:49	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	
3	Demo Image.jpg	Monitor QC.dat	12/23/2012 16:50	12/6/2012 16:53	Applied Image Inc.	Lobby	All Pass Profile	
4	Demo Functional Resolution.jpg	Monitor QC.dat	12/24/2012 10:00	12/6/2012 17:49	Applied Image Inc.	Lobby	All Pass Profile	
5	Resolution A.tif	Demo Profile.ini	12/27/2012 20:25	12/3/2012 19:19	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	
6	Demo Image.jpg	Demo Profile.ini	12/30/2012 17:28	12/6/2012 16:53	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	
7	Demo Image.jpg	NIST Level 3.ini	1/6/2013 17:53	12/6/2012 16:53	Municipal Police Station	Photo ID	NIST Level 3 ID Photo Standar	d
8	Demo Position.jpg	Monitor QC.dat	1/6/2013 18:28	12/6/2012 17:45	Applied Image Inc.	Lobby	All Pass Profile	
9	Demo Image.jpg	Demo Profile.ini	1/8/2013 20:36	12/6/2012 16:53	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	
10	Demo AdobeRGB.jpg	Demo Profile.ini	1/8/2013 20:41	12/6/2012 17:57	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	
11	Demo Functional Resolution.jpg	Demo Profile.dat	1/12/2013 8:53	12/6/2012 17:49	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	
12	Demo Image.jpg	Demo Profile.ini	1/12/2013 21:16	12/6/2012 16:53	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	
13	Demo AdobeRGB.jpg	Demo Profile.ini	1/12/2013 21:20	12/6/2012 17:57	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	
4	Summary Results							III.

12 Open the Individual Results sub-folder and note the two files saved for the images processed.

Organize 👻 Include in library 👻 Sha	re with 💌 🛛 Burn	New folder		
Name	Date modified	Туре	Size	Change your vie
Results_Demo AdobeRGB_0112132022.txt	1/12/2013 9:20 PM	Text Document	13 KB	
Results_Demo Image_0112131602.txt	1/12/2013 9:16 PM	Text Document	13 KB	
Results_Demo AdobeRGB_0108134155.txt	1/8/2013 8:41 PM	Text Document	13 KB	
Results Template.xls	1/8/2013 12:30 PM	Microsoft Excel 97-2	275 KB	
temp.txt	8/16/2011 5:43 AM	Text Document	0 KB	

13. Open either file into a standard text editor such as Notepad or into a spreadsheet program such as Excel®. Scroll down the file and note that the data is identical to the data saved in the Summary Results file with additional CIELab data and the SFR data. Close the individual results file.

Results_Demo AdobeRGB_0112132022.txt - Notepad	
<u>Eile Edit Format View Help</u>	
Tmage Name = Demo AdobeRGE.jpg       profile = Demo Profile.ini       pate Time Analyzed = 1/12/2013 9:20:22 PM       Date Time Captured = 12/6/2013 9:57:40 PM       Site = APPLIED IMAGE, Inc.       Camera = Test Lab       Comments = Tutorial Profile       Resolution Aim (dpi) = 50       Discernment Limit = 0.10       Target Size = 1 ft. x 1 ft.       Delta E Version = RGB       Sittion = PASS	E
Color Accuracy = FAIL Tonescale = PASS Noise = PASS	
Neutral Balance = PASS Registration = PASS Uniformity = [PASS [Target Position as percent of Field-of-View]	
Horizontal Position % = 50.1 Vertical Position % = 49.9 [Color Accuracy Delta E values] Delta E Max = 13.18 Delta E Maan = 5.75	
Delta E Dark Skin =         4.94           Delta E Lipht Skin =         5.09           Delta E Blue Sky =         3.20           Delta E Foltage =         4.91           Delta E Blue Shower =         0.59           Delta E Bluish Green =         10.20           Delta E orange =         12.15           Delta E Urplish Blue =         2.14	
Delta E Moderate Red = 10.98	*

	Results_Demo AdobeRGB_0112132022.txt	_ Ξ Σ	3
	А	В	
1	Image Name =	Demo AdobeRGB.jpg	
2	Profile =	Demo Profile.ini	
3	Date Time Analyzed =	1/12/2013 21:20	
4	Date Time Captured =	12/6/2012 17:57	
5	Site =	APPLIED IMAGE, Inc.	
6	Camera =	Test Lab	
7	Comments =	Tutorial Profile	
8	Resolution Aim (dpi) =	50	
9	Discernment Limit =	0.1	
10	Target Size =	1 ft. x 1 ft.	
11	Delta E Version =	1976	
12	Color Space =	sRGB	
13	[Summary Results]		
14	Position =	PASS	
15	Resolution =	PASS	
16	Color Accuracy =	FAIL	
17	Tonescale =	PASS	
18	Noise =	PASS	
19	Neutral Balance =	PASS	
20	Registration =	PASS	
21	Uniformity =	PASS	
22	[Target Position as percent of Field-of-View]		
23	Horizontal Position % =	50.1	
24	Vertical Position % =	49.9	
25	[Color Accuracy Delta E values]		
26	Delta E Max =	13.18	-
14 4	Results_Demo AdobeRGB_011213		:

14. If Excel is available, reopen the results file into Excel.

15. Select all data and copy it to the clipboard.



16. Open the **Results Template.xls** file. Select all cells in the *data* tab and paste the entire data set from the test file into the *data* workbook page.



17. Select the **Color Accuracy** tab and note the Delta E values are identical to those in the User Interface of the main program.



18. Save the file using a new name and close the template file without re-saving.

### **End of Results Tutorial**

#### Tutorial 8: Managing the Account

There are three main functions of the Account Manager interface: Activating the software, Adding Images Actuations and De-Activating the software. These functions are demonstrated sequentially in this tutorial. The tutorial assumes a new installation of the software.

1. Select **Account Information**. Note the same Account Management interface is used for all three software editions. The Deployment Edition is used in this tutorial.

2. Select the Purchase Software Key Online button.

Account Information							
Imaging Gauge <sup>™</sup> Account Management							
Curr	rent Status						
Internet Software License	Image Count Software Edition						
Connected Not Activated	Images = 25						
Computer Registration Number	Use Proxy Server						
Durchase	Draduat Kaua						
Purchase	Product Keys						
Purchase Software Key Online	Purchase Image Keys Online						
Activate IIs	ing Product Keys						
Software	Images						
Activate Deactivate	Activate						
Sales Information: APF Phone: 585.482.0300 x216	PLIED 1653 East Main Street Rochester, New York 14609						
FAX: 585.288.5989	Phone: 585.482.0300 Website: www.Appliedimage.com						
Copyright © 201	3 APPLIED IMAGE, Inc. 🕐 🔀						

3. Select the **Add** button to purchase an Activation Key for the software. This can be skipped if you already have an activation key.

Scales	World leader for over 25 years of Imaging Calibration Standards and Custom Imaged Bectro-Optical Components	APPLIED IMAGE Inc.	1653 East Main Street Rochester, NY 14609 voice: 1.585.482.030 fax no: 1.585.288.598
SUCCESSION AND AND AND AND AND AND AND AND AND AN	<ul> <li>Peployment Edition: [IMG-SOFT] in field or production environments</li> <li>Engineering Edition: [IMG-SOFT] functionality for engineering and lal</li> <li>Enterprise Edition: [IMG-SOFT-E capability of the Engineering Edition Deployment Edition.</li> </ul>	Keyword -RND] is designed for non-technic -RND] provides complete technica be nvironments. ENT] is full featured to provide all n as well as interface capability wi	al operators Il analysis th the
Producta Specification Table	Part No. Buy IMG-SOFT-DEP Add IMG-SOFT-RND Add IMG-SOFT-ENT Add		

Account Information	×							
Imaging Gauge <sup>™</sup> Account Manage	ement							
Current Status								
Internet Software License Image Count	Software Edition							
Connected Not Activated Images = 25	Deployment							
Computer Registration Number Use Proxy Server								
Purchase Product Keys								
J								
Purchase Software Key Online Purchase	Image Keys Online							
Activate Using Product Keys								
Software Im-	ages							
12345678-XXXXXX								
Activate Activate Act	tivate							
Sales Information:	Fast Main Street							
Phone: 585.482.0300 x216	lester, New York 14609							
Imaging-Gauge@AppliedImage.com	e: 565.482.0300 site: www.AppliedImage.com							
Copyright © 2013 APPLIED IMAGE, Inc.								

4. Enter the Activation Key that was sent when the software was purchased. Select Activate

- 5. Note the following changes:
  - Software License changes from "Not Activated" to "Fully Activated"
  - Computer Registration Number is assigned
  - Deactivate button is enabled
  - Activate button for Image Keys is enabled

Recount Information				x					
Im	aging Gauge <sup>™</sup> /	Account Mana	igement						
	Current Status								
Internet	Software License	Image Count	Software Edition						
Connected	Fully Activated 🚄	Images = 25	Deployment						
Computer Re	gistration Number	Use Proxy Server							
12345-678912	3-45678-912345 🛛 🗲	-							
	Durchaso	Product Kows							
	Purchase	Product Keys							
Purchase	Software Key Online	Purcha	se Image Keys Online						
S	Activate Usi	ing Product Keys	Images						
123456	78-XXXXXX		-						
Activate	Deactivate	4	Activate						
		<b>—</b> <u>—</u>							
Sales Phone: 585.4	Information: APF		653 East Main Street						
FAX:	585.288.5989		hone: 585.482.0300						
maging-Gauge@App	lealmage.com InC	v	vebsite: www.Appliedimage.co	m					
	Copyright © 201	3 APPLIED IMAGE, II	ıc. 🕐	×					

and information			
Ima	aging Gauge™,	Account Manage	ement
	Curr	ent Status	
Internet	Software License	Image Count	Software Edition
Connected	Fully Activated	Images = 25	Deployment
Computer Reg	jistration Number	Use Proxy Server	
12010 010012	5 10010 012010		
Purchase	Software Key Online	Purchase	Image Keys Online
	Activate Us	ing Product Keys	ages
So	itware		
So 123456	78-XXXXXX		
So 123456 Activate	78-XXXXXX Deactivate	Act	ivate
So 1234567 Activate Sales I Phone: 585.44 FAX: 5 Imaging-Gauge@Appli	nformation: APF 12.0300 x216 185.288.5989 edimage.com	PLIED 1653 SE Phon Webs	ivate East Main Street ester, New York 14609 e: 585.482.0300 site: www.AppliedImage.com

7. Select **Add** to purchase an activation key for images. Note: image activations are also included as part of annual subscriptions. This step can be skipped if you already have image activation keys.

fat hen fperetes Joob Help			-	10.10.000	1027124
(WEEL) Author Login (#) Applied Image Mail			8.0.0	in . Entre Pare	y . Tgols .
	Works leader for of imaging Califer and Califer Becho-Ophod	over 25 jeses onur 25 jeses durin Standonds ni Skolged Camponents	APPLI IMAGE Inc.		Fact March 1999 1 1997 1997 1997
Didich Cashilles Celach Deckod I	Cert Terms and Condition	a Celais		Keyword	1.6
APPLIED'					
	and a second	and the second second			
MAGE		Description:			
Inc		Description: IMG-KEV-29 IMG-KEV-50	Mr. 250 image actuations Mr. 500 image actuations		
Image Actuations		Description: IMG-KEY-29 IMG-KEY-50 IMG-KEY-10	Nr. 210 image actuations Nr. 500 image actuations NN: 1000 image actuation		
Image Actuations		Description: DAG-KEY-29 DAG-KEY-30 DAG-KEY-30	Mr. 210 image actuations Mr. 500 image actuations NMR: 1000 image actuation		
MAGE Inc Image Actuations	Perso	Description: IMG-KEY-25 IMG-KEY-36 IMG-KEY-36	Mr: 250 image actuations Mr: 500 image actuations NMR: 1000 strage actuation		
Image Actuations	PeriNe Dido KEY-210	Description: IMG-KEY-59 IMG-KEY-59 IMG-KEY-59 IMG-KEY-59 IMS IMS IMS	Mr. 210 enlage actuations Mr. 500 unlage actuations NMR: 1000 strage actuation	8	
Image Actuations	EntXa DIG KEY-219 DIG KEY-300	Description: DMG-KEY-24 IMG-KEY-34 IMG-KEY-34 Buy Add Add	Mr. 210 image actuations Mr. 500 image actuations MMR: 1000 image actuation	8	

6. Select the Pu

8. Enter the Activation Key to add images and select **Activate**. Note that the Image Count increases from 25 to 525.

🖓 Account Information						
Imaging Gauge <sup>™</sup> /	Account Management					
Curr	ent Status					
Internet Software License	Image Count Software Edition					
Connected Fully Activated	Images = 25 Deployment					
Computer Registration Number	Use Proxy Server					
12345-6789123-45678-912345						
Purchase Product Keys						
Activate Usi	ing Product Keys					
Software						
123430/18-7777	96703432-ABCDEF					
Activate Deactivate	Activate					
Sales Information: Phone: 585,482,0300 x216 FAX: 585,288,5808 Imaging-Gauge@AppliedImage.com	PLIED       1653 East Main Street         Rochester, New York 14609       Phone: 585.482.0300         Website: www.AppliedImage.com					
Copyright © 2013	3 APPLIED IMAGE, Inc.					

9. To deactivate the software license for use on another computer, select **Deactivate**. Note following changes:

- Software License changes from "Fully Activated" to "Not Activated"
- Activate button for software is enabled

Account Information				
Imaging Gauge <sup>™</sup> Account Management				
Current Status				
Internet Software License Image Count Software Edition				
Connected Not Activated				
Computer Registration Number Use Proxy Server				
12345-6789123-45678-912345				
Purchase Product Keys				
Purchase Software Key Online Purchase Image Keys Online				
Activate Using Product Keys				
12345678-XXXXX 98765432-ABCDEF				
Activate Deactivate Activate				
Sales Information: APPLIED 1653 East Main Street				
inaging-bauge@Appliedinage.com				
Copyright © 2013 APPLIED IMAGE, Inc.				

Account Information			
Ima	aging Gauge <sup>™</sup> /	Account Manag	gement
(	Curr	rent Status	
Internet	Software License	Image Count	Software Edition
Connected	Fully Activated	Images = 525	Deployment
Computer Registration Number		Use Proxy Server	
12345-6789123	-45678-912345		
Purchase S	Software Key Online	Purchase	e Image Keys Online
Sof	Activate Us	ing Product Keys	mages
12345678-XXXXXX		98765432-ABCDEF	
Activate Deactivate		Activate	
Sales In Phone: 585.482 FAX: 58 Imaging-Gauge@Applie	formation: APF 2.0300 x216 IMA 35.288.5989 IMA dImage.com Inc	PLIED 168 GE Pho We	33 East Main Street chester, New York 14609 one: 585.482.0300 bsite: www.AppliedImage.com

10. Select Activate to re-activate to software and continue to operate.

End of Account Management Tutorial

Company Information for APPLIED IMAGE, Inc.



APPLIED IMAGE is a world leader in the field of Custom Opto-Imaged components and Standard Calibration tools. We achieved this distinction because of our wide range of unique capabilities, many years of experience, and our quality assurance & control processes.

At APPLIED IMAGE, quality is assured at each stage of the production process from design & engineering through final production. This commitment to engineering excellence, combined with controlled environmental facilities, NIST traceable standards, and a highly qualified staff assures you that our products will meet or exceed your original specifications. And we've gone the extra step, using ISO Certification guidelines and National Laboratory Calibration Standards, to assure that our systems are in compliance with your unique needs.

Phone: 585-482-0300 x216 **FAX:** 585-288-5989 **Website**: <u>www.AppliedImage.com</u>

**Company Headquarters:** APPLIED IMAGE, Inc. 1653 East Main Street Rochester, New York 14609