

# **Auto Search & Correct Web User Guide**

Version 1

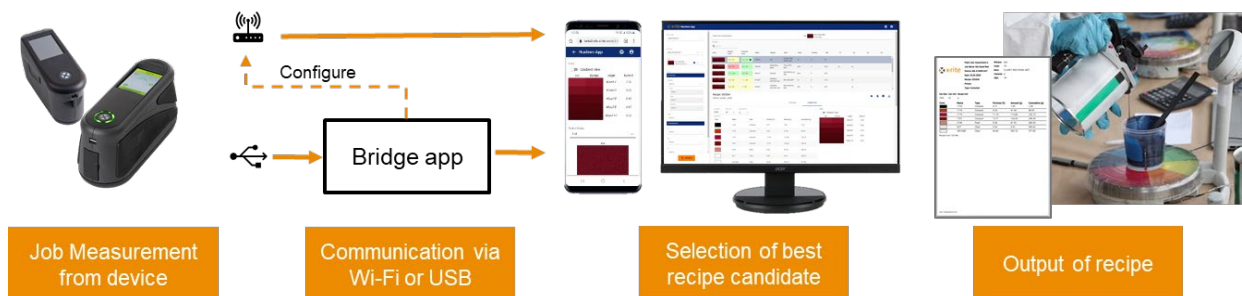


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### 1. Workflow Overview

Auto SC is designed for body shop users in the car refinish business, providing a fast solution that enables Search & Correction of solid and effect paints for the repair of damaged vehicles.



The Auto SC web app supports job measurements sent via Wi-Fi from the MA-3, MA-5 and MA-T5 devices. Jobs can also be sent through USB connection to a PC using the Bridge app for the same devices and the MA91.

The Bridge app is also used to configure the Wi-Fi connection for the device.

Search, recipe correction and selection of best recipe candidate is accessed in the Auto SC app through a Google Chrome or Microsoft Edge browser.

Paint recipes can be printed or sent to dispense or weigh.

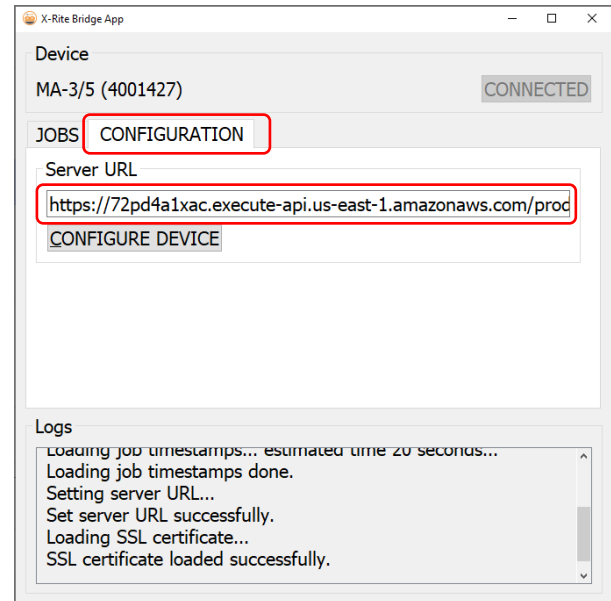
## 2. Connecting and Configuring your Device

Before you can send job measurements you must configure your device with a web site location.

1. Install the “X-Rite Bridge App” on your Windows PC.

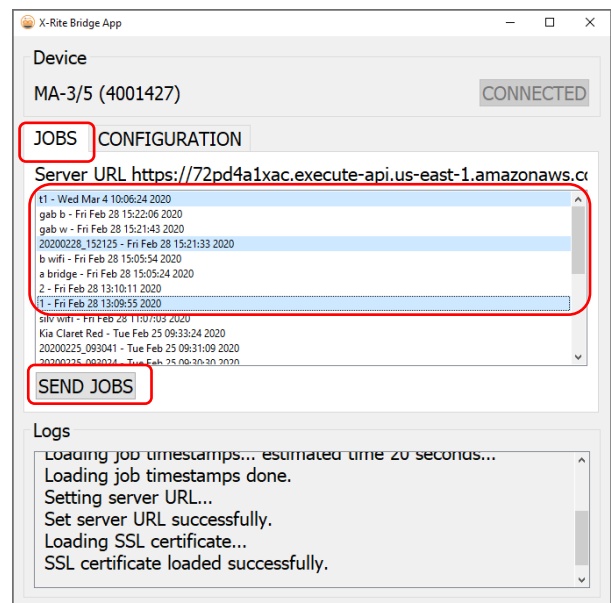
The application is set to run when you start your system. You can find the icon in your tool bar system tray. The application window will also open when you connect a device.

2. Enter the server URL in the **Configuration** tab. By default this will contain the URL for the X-Rite Cloud Measurement service:  
<https://72pd4a1xac.execute-api.us-east-1.amazonaws.com/prod/measurements>
3. Connect your device and it will be automatically configured with the specified URL.



## 3. Sending a Measured Job through the Bridge App


1. Plug your MA-3, MA-5, MA-T5 or MA91 via USB to your PC that has the Bridge app loaded.
2. Go to the **Jobs** tab where you find all the jobs currently stored in your device. The time to load depends on how many jobs you have stored.
3. Select the jobs that you wish to send, they can be selected by using Shift and Ctrl with your mouse to highlight one or multiple jobs.
4. Click **Send Jobs**.



#### 4. Sending a Measured Job via Wi-Fi

For devices with Wi-Fi capability (MA-3, MA-5 and MA-T5) measured jobs can be sent directly from the device to the web application.

1. Configure your device as described in section 2.
2. Connect your device to a Wi-Fi network (refer to the user guide of your device for further instruction).

3. Select a job or all jobs and click the cloud button  to send measurements.

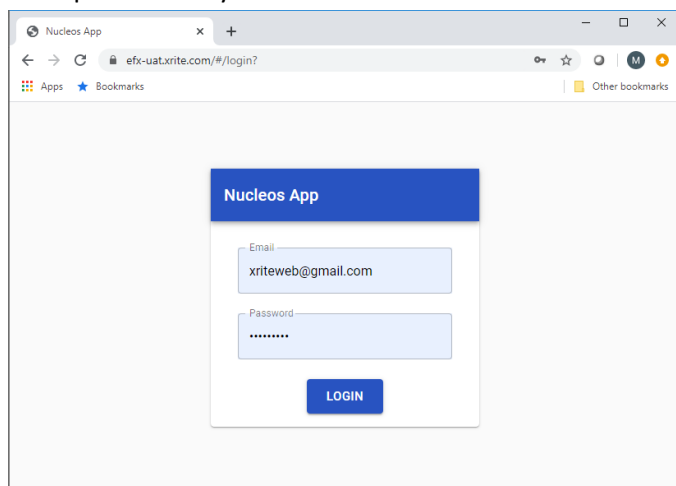


#### 5. Login into the web application

1. Open your Google Chrome™ or Microsoft Edge™ browser and navigate to the web application. Your paint brand specific URL will have been provided to you.
2. Enter your registered Email and Password. If required these can be obtained from your paint brand.

**Note:** The application can be opened on any device supporting Google Chrome running version 80.0.x.x or Microsoft Edge 44.18.x, or newer.

On smaller screens such as mobile phones, the layout is modified to improve readability.



Your account can be configured for different user levels, which will determine the features and functions available to the individual user:

- Admin (Paint Company) – highest user level, allowing full access to configuration settings.
- Local Admin (Bodyshop Admin) – mid level, allowing basic configuration settings that affect only local users.
- User (Bodyshop User) – lowest level, no access to configuration settings.

## 6. Selecting a Measured Job & Setting up a Filtered Search

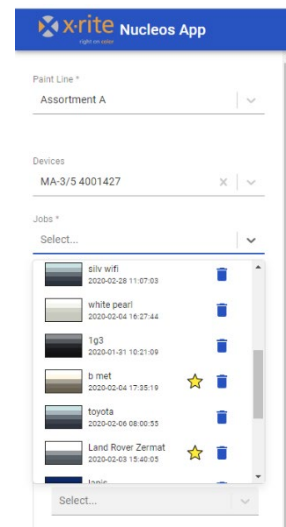
The Search section enables you to pick previously measured jobs, apply filters and start a search.

1. Select the “Paint Line” from the drop-down menu.
2. Select your device serial number.

**Note:** Entries can be selected by scrolling through the list. You can also enter a few characters to shorten the list.

3. Select the job you wish to work on. The name of the job matches what was stored and sent from the device. If no name was entered on the device a date and time of the measurement is automatically saved.

**Note:** The Yellow Star indicates this job has been worked on previously and has been saved with a preferred recipe.



After selecting a job, you can apply filters to help narrow your search results.

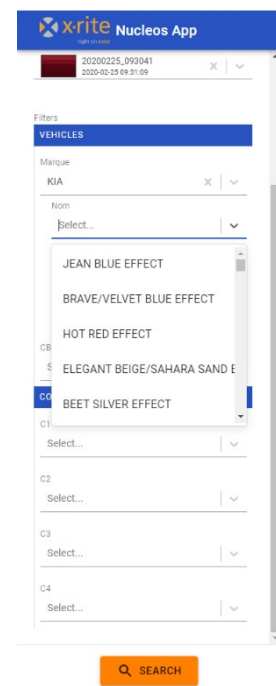
**Note:** The filters displayed depend on the paint database and will be different to those displayed in this example.

You can choose to apply a filter or proceed without.

**Note:** If you apply too many filters, you may not find any matching search results.

Filters can be helpful if you wish to restrict to a specific car brand, paint type (i.e. solid, metallic, pearl), or to a flake size/texture.

4. When you have selected your job and chosen your filters, click the Search button.



## 7. Search & Correction Results

Results are displayed and ranked based on the best color match, which are shown for the “Original” and “Corrected” recipes. The predicted quality for each recipe is highlighted:

- Green = Good
- Yellow = Satisfactory
- Orange / Red = Caution / Warning

Two numbers are displayed in each highlighted box, in this example 0.4 / 25








The first number “0.4” represents how close the color match is across the angles as a Delta E score. The smaller the value the better.

The second number “25” represents how well the spectral shape of job and recipe fit, this is an indication if the correct pigments are in your recipe, (Shape Fit, the smaller the number the better).

Paint Line: Assortment A

Recipes


Q Search

Color	Original Score	Corrected Score	Name	Marque
	2.62 / 22	0.4 / 25	352504	KIA
	6.29 / 66	0.44 / 37	350346	MERCEDES BENZ
	3.01 / 53	0.85 / 45	369487	GENERAL MOTORS USA
	8.37 / 33	0.99 / 48	369540	FIAT / LANCIA
	1.81 / 132	0.52 / 82	354637	NISSAN
	3.12 / 56	1.01 / 44	319387	GENERAL MOTORS USA
	3.34 / 14	1.96 / 15	369581	VOLKSWAGEN

Filters and categories displayed depend on the paint database used. It is possible to change the ranking order by clicking on the category header. You can also Search / Filter by entering text in the search box.

Recipes

Q Search

Color	Original Score	Corrected Score	Name	Marque	Nom	Code	Variante	CBA	C1	C2
	2.62 / 22	0.4 / 25	352504	KIA	CLARET RED PEARL MET	7P	0	7P		
	6.29 / 66	0.44 / 37	350346	MERCEDES BENZ	THULITROT MET	3541	0	3541	ok	ok

## 8. Selecting the Best Recipe Candidate

By selecting a recipe candidate, additional information is displayed for either the “Original” or “Corrected” recipe. Switch between them by selecting Original / Corrected.

Use the color swatch gradient view, Delta E, Spectral graph and LabCh tables that provide more detail to make your final recipe choice.

Save your preferred recipe by clicking the star icon.

The screenshot displays the Xrite Nucleos App interface. The top section shows a list of recipe candidates with columns for Original Score, Corrected Score, Name, Marque, Nom, Code, Variante, CBA, C1, C2, C3, and C4. The selected recipe is 352504, with a score of 0.4 / 25. Below the list, the detailed view for recipe 352504 is shown, including a color swatch gradient view, a table of colorants, a spectral graph, and LabCh tables. The 'ORIGINAL' and 'CORRECTED' tabs are visible, and a star icon is highlighted in a red box.

Color	Original Score	Corrected Score	Name	Marque	Nom	Code	Variante	CBA	C1	C2	C3	C4
	2.62 / 22	0.4 / 25	352504	KIA	CLARET RED PEARL MET	7P	0	7P				
	6.29 / 66	0.44 / 37	350346	MERCEDES BENZ	THULTROT MET	3541	0	3541	ok	ok		
	3.01 / 53	0.85 / 45	369487	GENERAL MOTORS USA	RED PASSION MET	26U	2	26U		ok		
	8.37 / 33	0.99 / 48	369540	FIAT / LANCIA	ROSSIO MARANELLO MICA	106/B	2	106/B L/B				

Colorant	Name	Type	Formula (%)	Amount (g)	Cumulative (g)
	1123	Colorant	0.77	7.49	7.49
	1174	Colorant	4.36	42.68	50.16
	1175	Colorant	11.40	111.42	161.59
	1701	Colorant	13.70	133.94	295.53
	3140	Pearl	8.67	84.75	380.27
	ACT	Clear	0.44	4.32	384.59
	H0160B	Clear	60.66	593.13	977.73




  

Job	Angle	L*	a*	b*	C*	N*	ΔL*	Δa*	Δb*	ΔC*	ΔH*
45sa15°		31.69	46.31	20.36	50.58	23.73	-2.47	-0.69	0.34	-0.49	0.59
45sa25°		23.52	39.12	18.92	43.46	25.81	0.22	1.77	0.38	1.76	0.42
45sa45°		16.14	32.59	17.30	36.89	27.96	0.27	0.37	0.15	0.39	0.05
45sa75°		13.87	30.39	16.18	34.43	28.04	-0.38	-1.16	-0.30	-1.16	0.28
45sa110°		12.07	28.09	14.22	31.48	26.85	0.10	-0.10	0.32	0.06	0.33

## 9. Print and Output your Recipe

Set the quantity and units of measure required.








Recipe: 352504  
Primer: Leneta - white

★   

ORIGINAL      CORRECTED

Can Size: 1000      Can Unit: ml      Recipe Unit: g






Colorant

Color	Name	Type	Formula (%)	Amount (g)	Cumulative (g)
	1123	Colorant	0.77	7.49	7.49
	1174	Colorant	4.36	42.68	50.16
	1175	Colorant	11.40	111.42	161.59
	1701	Colorant	13.70	133.94	295.53
	3140	Pearl	8.67	84.75	380.27
	ACT	Clear	0.44	4.32	384.59
	HI0160B	Clear	60.66	593.13	977.73




Recipe Cost: 98.45€

Color

Gradient view

Job	Recipe	Angle	Delta E
		45as15°	1.96
		45as25°	0.66
		45as45°	0.23
		45as75°	0.56
		45as110°	0.24




Recipes can be:

	Output to scales or dispensers (see how to setup file types in configuration)
	Printed with option of Full Report or Label
	Saved as a .json file for communication with other systems

**x-rite**

Paint Line: Assortment A      Marque: KIA  
 Job Name: Kia Claret Red      Code: 7P  
 Device: MA-3/S4001427      Nom: CLARET RED PEARL MET  
 Date: 25.02.2020      Variante: 0  
 Recipe: 352504      CBA: 7P  
 Primer:  
 Type: Corrected

Can Size   Can Unit   Recipe Unit  
 1000   ml   g

Color	Name	Type	Formula (%)	Amount (g)	Cumulative (g)
	1123	Colorant	0.77	7.49	7.49
	1174	Colorant	4.24	41.44	48.93
	1175	Colorant	11.74	114.80	163.73
	1701	Colorant	13.77	134.65	298.39
	3140	Pearl	8.38	81.92	380.30
	ACT	Clear	0.44	4.32	384.62
	HI0160B	Clear	60.66	593.18	977.80

Recipe Cost: 125.44€

User: madby@rite.com

**x-rite**

Paint Line: Assortment A  
 Recipe: 350815  
 Marque: RENAULT  
 Code: RNA  
 Job Name: 20191001\_170703  
 Date: 01.10.2019  
 Nom: EXTREME MACRE MET

Name	%	Amount (g)	Name	%	Amount (g)
1123	0.34	2.62	ACT	1.19	11.96
1123	1.31	13.18	ACT	5.78	11.84
1174	8.78	88.79	ACT	14.97	150.49
1175	13.75	138.22	ACT	6.60	6.06
1701	9.88	79.87	HI0160B	53.37	836.18



## 10.Texture Functions for MA-T5 users

The MA-T5 has added ability to measure and send texture images to the web service. This enables closer inspection of sample and recipe to ensure the correct effect pigments (e.g. metallic, pearl, colorstream, xiralllic, mica) are selected.

When either a measured job or a paint database contains image data this will be displayed after selecting a recipe.



Images for each angle can be displayed and compared by selecting from the drop-down list.

**Sparkle Grade** values are displayed for the specular angles. Matching these values helps to determine if your recipe contains the correct **type**, **size** and **concentration** of effect pigments.

**Coarseness** values are displayed for the 15d (diffuse) angle. Matching these values helps determine if your recipe contains the correct **size** and **concentration** of effect pigments.

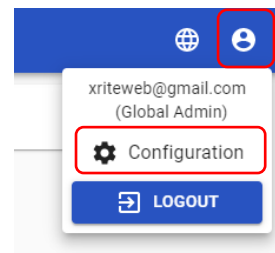
Clicking on a texture patch opens an enlarged view, allowing closer inspection of pigment particles.

**Note:** It is not possible to display an image for the "Corrected" recipe, as this does not have an image associated with it. The image from the "Original" recipe is displayed.

## 11. Configuration, Web Site and User settings

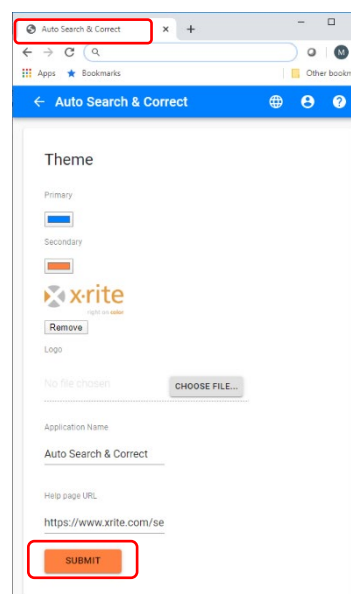
Access to the Configuration options is dependent on your user account access levels.

Access the Configuration settings through the user icon



The **Theme** section allows you to:

- Choose the color scheme
- Select a logo  
**Note:** .png files with transparent backgrounds are most effective
- Name the App and Browser window
- Define a link to help page (this maybe X-Rite or your custom help documents or videos).
- After making edits, click **Submit** to save changes



The **Engine Configuration** determines how recipes will be generated and sorted.

Consult an X-Rite applications specialist to help determine the best settings for your needs.

### Engine Configuration

Clear Fixed Amounts

Metallics fixed ratio

Precision for recipes  
2

Precision for score  
2

Precision for shape metric

Sort by shape metric or score  
Shape Metric

Upper Limit for Score  
3

Use the **Database** function to upload “.bcsqlite” files.

Administrators can use this function to update databases using the web application.

In the **Dispensers** section, you can configure different file outputs using the “.rfo” template format.

The “.rfo” template is a flexible solution that allows users to format output files that are compatible with weight scales and dispensers.

Use **Prices** to set up pricing for ingredients within each paint line.

**Note:** Administrators can set default pricing that is populated to all users. Local administrators can only modify pricing locally for the body shop users.

Use **Log File** to output reports showing activity and errors, assisting in bug diagnosis.

### Database

No file chosen

### Dispensers

Templates

Dispenser 1

dispenser 1

Add new template

Template Name

No file chosen

### Prices

Status: Default

Paint Line \*  
Assortment A

Recipe Unit  
g

Currency  
€

Color	Name	Type	Price
<input type="checkbox"/>	1100	Disorienter	0,01
<input type="checkbox"/>	1101	Opaque white	0,1
<input type="checkbox"/>	1102	Opaque white	0,1
<input type="checkbox"/>	1113	Opaque white	0,1
<input type="checkbox"/>	1120	Colorant	0,1
<input type="checkbox"/>	1121	Colorant	0,1

### Logs