



Benjamin Moore®

THE REDBOOK

How To Produce
Accurate Color
Reference Guide

2023 V4 U.S.

Introducing The Red Book

Welcome to the Red Book “How To Produce Accurate Color Reference Guide.” Following these guidelines will ensure that we provide our customers with the colors and quality they want. Using this guide will not only keep your equipment in good condition, it will also reduce the cost of mistints.

Contents

Colorant Dispenser General Maintenance Guidelines	3
Paint Department Daily Maintenance Check List	4
Paint Department Weekly/Monthly Maintenance Check List	5
Hero Daily Recommended Maintenance	6
Fluid Management Daily Recommended Maintenance	7
Corob™ Daily Recommended Maintenance	8
Working with Half Pints	9-10
Half Pint Accessories for Corob™ dispensers and shakers	11
Half Pint Accessories for Fluid Management shakers	12
Half Pint Accessories for Radia shakers	13
Half Pint Accessories for Hero mixers	14-16
X-Rite MetaVue Recommended Maintenance	17
X-Rite iVue Daily Recommended Maintenance, Tips and Supplies	18-19
X-Rite iPaint Daily Recommended Maintenance	20
BYK auto-match IV Recommended Monthly Maintenance	21
Datacolor® 45G Recommended Monthly Maintenance	22
Introduction To Color Matching	23
Evaluating Dispenser Accuracy	24
Gennex® Waterborne Color Technology	25
CustomerSupport	26

Colorant Dispenser General Maintenance Guidelines

Following these maintenance guidelines will keep your dispenser working to its full potential. Consult the owner's manual or additional pages in this guide for specific details.



Daily Maintenance

- Clean nozzles with appropriate tool.
- Open the nozzle cover, inspect, clean and moisten sponge.
- Empty and clean nozzle drip area.
- Purge colorant nozzles and visually inspect that colorant is dispensing properly.
- Refill humidification tank if applicable (use distilled water).
- Add colorant as needed per equipment manufacturer's or colorant manufacturer's instructions.
- Check and adjust colorant levels in software to match canister fill.
- Shake colorants for 5 minutes before adding to the dispenser.
Allow dispenser canisters to agitate after the addition of colorant.
- Clean outside surfaces with a mild cleaning solution or damp cloth.



Weekly Maintenance

- Visually inspect for obvious problems. (i.e., mold, leaks, spills, drips).
- Check that all canister motors are agitating.
- Clean all spill trays.
- Dispense one ounce of any colorant that has not been used in a week.
Can be dumped back into canister.



Monthly Maintenance

- Check and adjust colorant levels in software to match canister fill.
- Replace sponge insert.
- Grease automatic shelf and automatic nozzle closer as recommended by the manufacturer.
- Check calibration as per manufacturer.

Paint Department Daily Maintenance Check List

Standardized checklists serve as a quick reference to maintenance steps and facilitate its use. You may print the samples below, or create your own.

- Post sheets near the equipment, or make available in a binder or clipboard.
- Train staff to initial the appropriate box when a task is completed.
- Collect and review with staff.

Spectrophotometer								
Task	Frequency	SUN. Completed by	MON. Completed by	TUE. Completed by	WED. Completed by	THU. Completed by	FRI. Completed by	SAT. Completed by
Spectrophotometer (CF57) cleaned and calibrated	Daily							
Spectrophotometer (MetaVue) calibrated	Daily							

Dispenser								
Task	Frequency	SUN. Completed by	MON. Completed by	TUE. Completed by	WED. Completed by	THU. Completed by	FRI. Completed by	SAT. Completed by
Visually check Colorant levels	Daily AM/PM							
Add Colorant if needed (O1, etc)	Daily AM/PM or as required							
Update Colorant levels in COLORx® software	Every time colorant is added							
Clean nozzle tips	Daily AM							
Clean sponge & add water	Daily AM							
Purge Colorants	Daily AM							

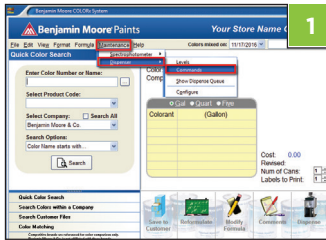
Paint Department Weekly/Monthly Maintenance Check List

Spectrophotometer								
Task	Frequency	Completed by	Completed by	Completed by	Completed by	Completed by	Completed by	Completed by
Spectrophotometer (iVue) cleaned and calibrated	Weekly							
Spectrophotometer (MetaVue) cleaned	Weekly							

Dispenser								
Task	Frequency	Completed by	Completed by	Completed by	Completed by	Completed by	Completed by	Completed by
Clean spill trays around the canisters	Weekly							
Visually inspect unit for any obvious problems	Weekly							
Check all agitation motors are working	Weekly							
Dispense extra colorant of less frequently used colorants	Weekly							
Clean all surfaces with soap and water	Weekly							
Compare & update colorant levels in software with what is in canisters	Monthly							
Examine and replace sponge insert	Monthly							
Examine nozzle closer and maintain if needed via manufacturer's recommendation	Monthly							

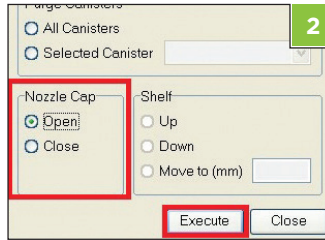
Dept manager - collect and review each week

Hero Daily Recommended Maintenance



Open COLORx

- For Automatic machines using COLORx
- Select **Maintenance**>
Dispenser> **Commands**
- If asked to Purge click **No**



Open Nozzle Closer

- Select **Open** Nozzle Cap
- Click **Execute**



Remove Cup Holder from Nozzle Closer

Automatic caps:

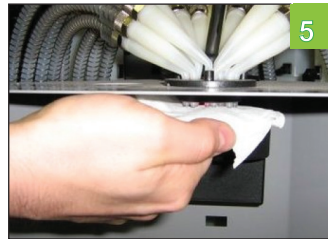
For automatic caps:

- With the capper in the open position lift the cup up to release it.



Clean the Cup

- Wash cap in sink with warm water
- Clean sponge and replace inside cap



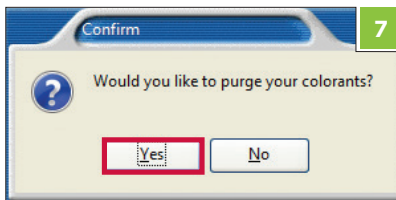
Clean Nozzle Tips

- Dab nozzle ends with moistened paper towel
- Remove any dried or dripping colorant
- Do not push nozzles up**



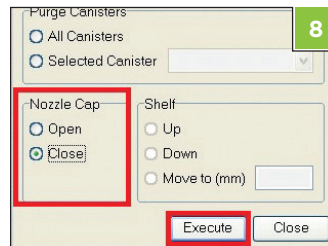
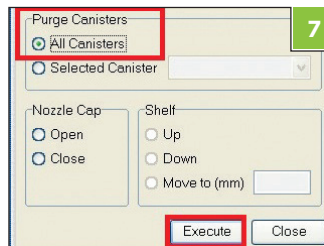
Replace Cap and Sponge Insert

- Moisten sponge with water
- Replace cup holder into closing bracket making sure the cup, cup cap and moisture ring are sealed.



Purge Colorant

- Select **Maintenance**>**Dispenser**>**Commands**
- If asked to Purge, click **Yes**
- Select **All Canisters**
- Click **Execute**



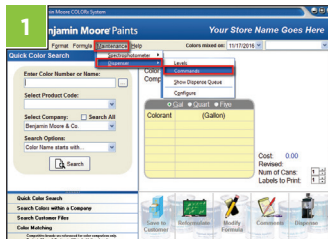
Close The Nozzle Cap

- Close Nozzle Cap until you hear a click
- Select **Close** Nozzle Cap
- Click **Execute**

Fluid Management Daily Recommended Maintenance

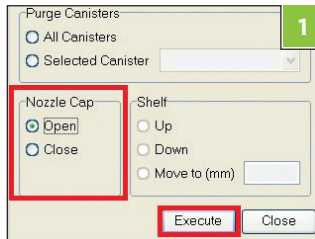


Daily Nozzle Cleaning Instructions:



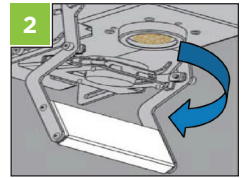
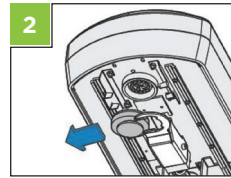
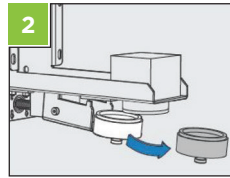
Open COLORx

- For Automatic machines using COLORx
- Select **Maintenance>Dispenser>Commands**
- If asked to Purge click **No**



Open Nozzle Closer

- Select **Open Nozzle Cap**
- Click **Execute**



Remove Cup Holder From Nozzle Closer

For semi-automatic caps:

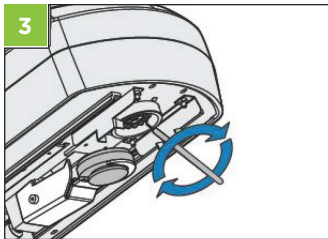
- Unscrew wing-nut on bottom of cap

For automatic caps:

- Lift cap straight up, then over to the left

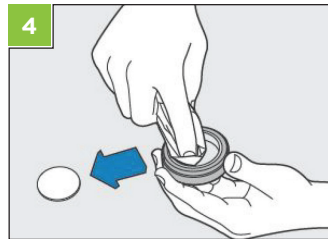
For manual AT1500's

- Remove container and release lever to open position



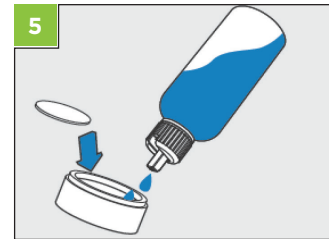
Clean Nozzle

- Clean each opening with included nozzle cleaning pick
- Use a circular motion to make sure opening is clear



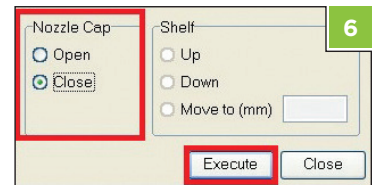
Clean Cup

- Remove sponge insert
- Clean inside of cup liner with water and paper towel



Replace Sponge

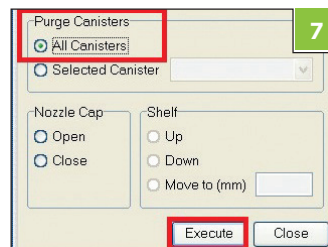
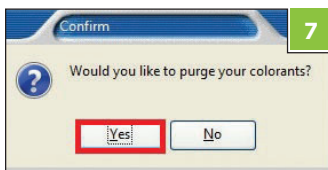
- Replace sponge insert
- Moisten sponge with water
- Replace cup holder to closer bracket



Close Nozzle Closer

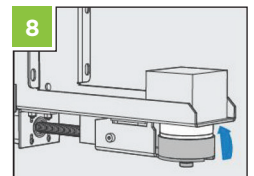
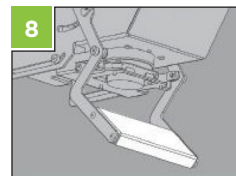
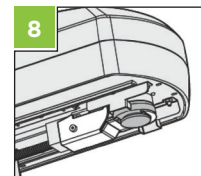
For Automatic machines:

- Select **Maintenance>Dispenser>Commands**
- Click **Close Nozzle Cap**
- Click **Execute**



Purge Colorant

- Select **Maintenance>Dispenser>Commands**
- If asked to Purge, click **Yes**
- Select **All Canisters**
- Click **Execute**

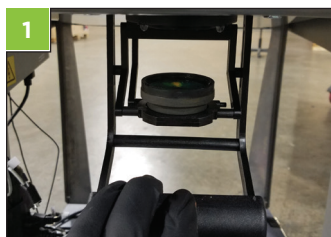


Close Nozzle Closer

For AT1500's

- Remove container and release lever to closed position

Corob™ Daily Recommended Maintenance



Open Nozzle Closer D300 (manual only)

- Add purge container and push lever to open position



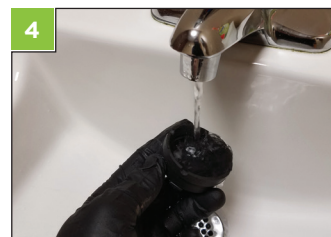
Remove Cup Holder From Nozzle Closer

- Grasp cup and twist 1/4 turn counterclockwise



Clean Nozzle

- Examine for dry colorant on tips
- Clean with a paper clip



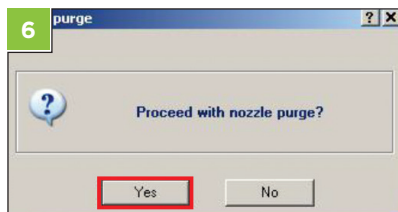
Clean Cup

- Remove insert and sponge from nozzle closer
- Clean the sponge
- Clean inside of cup liner with water and paper towel



Replace Sponge

- Replace sponge insert
- Moisten sponge with water
- Replace cup holder to closer bracket



Purge Colorants Through Corob™ Driver

- Open Corob™ Driver
- Click **Yes** to proceed with dispenser initialization
- Place purge can under nozzle
- Click **Yes** on Purge button
- Remove can after purging



Close Nozzle Closer (Corob)

- For D300's
- Remove container and release lever to closed position



Verify Water Reservoir

- Verify water reservoir is filled between minimum and maximum settings
- Fill with distilled water if needed

Working with Half Pints

There are several accessories available for shaking the half pint Color Samples, depending on the type of shaker you have in your store.

Recommended Minimum Shake Times:

2 minutes - All platform shakers.

3-4 minutes - Shaker inserts.

Or the recommended shake times as provided by the individual manufacturer.

Note: Platform shakers were shown to be more efficient at shaking half pints.

Vendor	Phone	Email	How to Order
Fluid Management Spare Parts Support	800-462-2466 (Ext 2)	FUSORDEREntry@IDEXCORP.com	Email completed order form to: FUSORDEREntry@IDEXCORP.com
Radia	800-221-1083	Orders@RadiaProducts.com	Orders@RadiaProducts.com (When ordering from Radia, have your Ben Moore dealer # ready for additional discount)
Hero	800-494-4376	CustomerCare@hero.ca	Email completed order form to: CustomerCare@hero.ca or call 800-494-4376
COROB	704-588-8408 (Ext 3)	Spareparts.NorthAmerica@Corob.com	Email completed order form to: Spareparts.NorthAmerica@Corob.com or call 704-588-8408 (Ext 3)

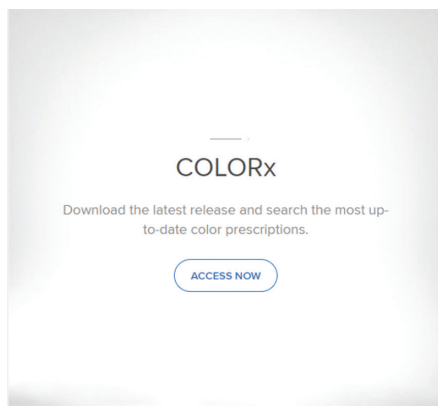
Please Note:

Order forms, for dispenser stands and inserts for shakers, can be found on our Retailer Gateway or you may order by contacting the vendor directly.

To access the order forms on the Benjamin Moore Retailer Gateway:

Sign on to the Benjamin Moore Retailer Gateway,

Scroll all the way down to COLORx and choose **Access Now**



Working with Half Pints

Choose (1) **Ordering Tools**, then (2) **Approved Equipment**

Find your shaker/dispenser form from the options below.

Choose SAVE to have the form saved to your Downloads directory.

Use the proper, corresponding form to order your equipment from the vendor.

The screenshot shows the Benjamin Moore website interface. On the left is a sidebar with a list of links: Product Resources, Product Documentation, COLORx, Ordering Tools (highlighted with a red box labeled '1'), Profit Margin Calculator, Financial Ratios, and Gross Margin Return on Investment. The main content area has a dark header with 'Welcome, JANE'. Below this, the 'ORDERING TOOLS' section is active, displaying a list of links: Standard Paint & Coatings Order Form, 2022 Applicator Program, and Approved Equipment (highlighted with a red box labeled '2'). Under 'Approved Equipment', there is a description and a grid of links for various equipment forms, including BYK, COROB, DATACOLOR G45, FM DISPENSERS, FM MIXERS/SHAKERS, FM HALF PINT, HERO DISPENSER, HERO MIXERS/SHAKERS, HERO HALF PINT, and RADIA MIXERS/SHAKERS, each with US and SPANISH versions.

Product Resources	Welcome, JANE
Product Documentation	ORDERING TOOLS
COLORx	Below are the forms and websites for ordering paint and coatings, sundries, equipment, color tools and merchandise.
Ordering Tools	Standard Paint & Coatings Order Form
Profit Margin Calculator	2022 Applicator Program
Financial Ratios	Approved Equipment
Gross Margin Return on Investment	Order the approved electronic equipment you can use for reliably matching colors and mixing product.
	BYK ORDER FORM - US
	BYK ORDER FORM - SPANISH
	COROB ORDER FORM - US
	COROB ORDER FORM - SPANISH
	DATACOLOR G45 ORDER FORM - US
	DATACOLOR G45 ORDER FORM - SPANISH
	FM DISPENSERS ORDER FORM - US
	FM DISPENSERS ORDER FORM - SPANISH
	FM MIXERS/SHAKERS ORDER FORM - US
	FM MIXERS/SHAKERS ORDER FORM - SPANISH
	FM HALF PINT ORDER FORM - US
	FM HALF PINT ORDER FORM - SPANISH
	HERO DISPENSER ORDER FORM - US
	HERO DISPENSER ORDER FORM - SPANISH
	HERO MIXERS/SHAKERS ORDER FORM - US
	HERO MIXERS/SHAKERS ORDER FORM - SPANISH
	HERO HALF PINT ORDER FORM - US
	HERO HALF PINT ORDER FORM - SPANISH
	RADIA MIXERS/SHAKERS ORDER FORM - US
	RADIA MIXERS/SHAKERS ORDER FORM - SPANISH

Half Pint Accessories for Corob™ dispensers and shakers

Half Pint Tray for EVOSHAKE 500:

- Part number A5995S
- Guaranteed to fit the COROB EVOSHAKE 500
- Fits up to 16 half pint sample paint cans
- Size: 13.5" x 12.25" x 3" (34.3 x 31.1 x 7.6 cm)



Quart/Pint/Half Pint stand for COROB Dispensers:

- Part Number 200153
- Fits all COROB dispensers
- Sized for Quart, Pint and Half Pint containers



Quart/Pint/Half Pint adapter for VORMix 1:

- Part Number 6783756
- Fits COROB VORMix 1 gallon vortex mixer
- Sized for Quart, Pint and Half Pint containers



Half Pint Accessories for Fluid Management shakers

1. 8 oz Sample Tray for 5G Shaker

P/N: 32044



2. Quart Adaptor & Foam Sleeve

Adaptor

P/N: 25090



Foam Sleeve

P/N: 39278



Half Pint Accessories for Radia shakers



Half Pint Foam Insert for Quart adapters

- Fits 1 or 2 half pint sample paint cans
- Fits inside quart adapter

6786133 Half Pint Foam Sleeve



Half Pint Tray for 5995 AGITAR

- Fits 4 to 16 half pint sample paint cans
- Size 13.5" x 12.25" x 3"

A5995S Half Pint Tray

Half Pint Accessories for Hero mixers

5 GALLON MULTI-MIX SHAKER S2700 MODEL



S2700



Riser

Each S2700 vibrational shaker models includes a riser (see picture above) which elevates smaller cans including ½ pints to allow for secure clamping with the top clamping plate. Shaking times for ½ pints is the same as for pint and quart containers.

ONE GALLON VORTEX MIXER



S2450

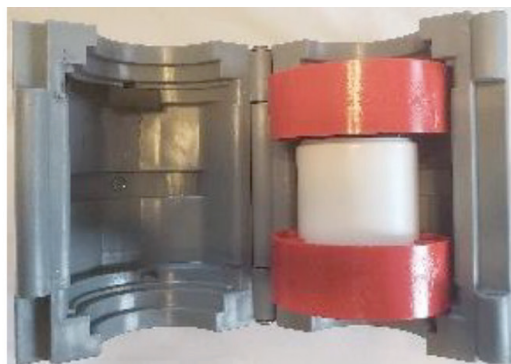
Half Pint Accessories for Hero mixers



QUART



PINT



HALF PINT

Each 'S' Series one gallon vortex mixer includes the adapter (pictured above).

Contact the vendor for current pricing and additional information.

Hero HALF PINT SAMPLER RE-SALE ACCESSORIES

QUART -PINT -HALF PINT BOOSTER SEAT (FOR A961 DISPENSER) Part# AT60208
For Hero MODEL A961



ADAPTER - QUART-PINT- HALF PINT (FOR S2700 SHAKER) Part# HL1101-1000



Half Pint Accessories for Hero mixers

This item is offered separately

RED ADAPTER KIT FOR PINTS and HALF PINTS (2PCS) FOR ALL 24XX SERIES

Part# HL350-A26



This item is offered separately

ADAPTER ASSY * STANDARD QUART ADAPTER GREY (FOR ALL 24XX SERIES)

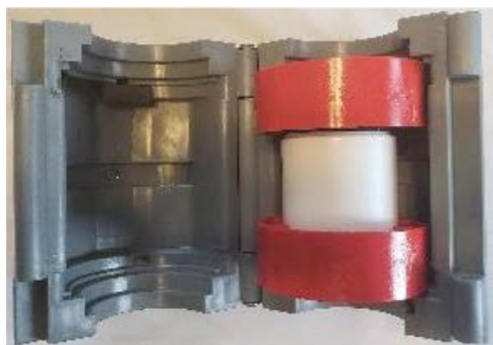
Part# HL350-A11



Or as a two (2) piece kit

QUART ADAPTER KIT * GREY & 2 PCS RED PINT- HALF PINT (FOR ALL 24XX SERIES)

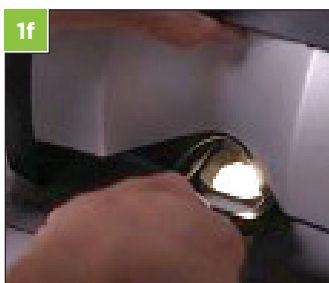
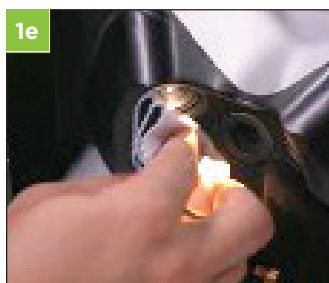
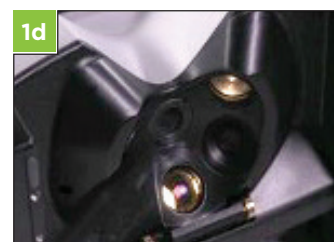
Part# HL350-A27



X-Rite MetaVue Recommended Maintenance



The MetaVue is a breakthrough non-contact imaging spectrophotometer introducing a new level of accuracy to a wider variety of customer samples.



1. Cleaning

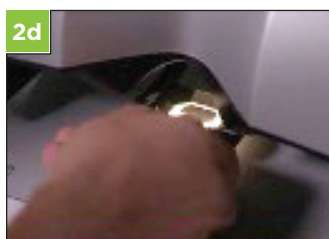
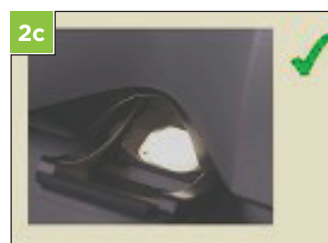
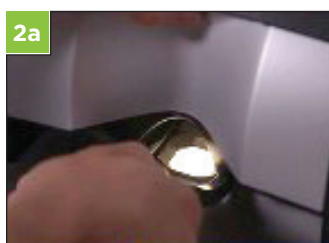
- To clean, place the MetaVue (1a) on its back so that the lenses are facing you (1b).
- Push the measurement slider into a completely retracted (1c) position so that the lenses are now exposed (1d) and can be cleaned with optic lens wipes.
- Clean all of the lenses (1e) and the calibration plaque (1f).

Use **only** optic lens wipes to clean your MetaVue. Do not use any all-purpose cleansers. Any time you clean your device, you should calibrate it again before taking any measurement.

2. Calibrating

Calibration must be done once per day. The MetaVue displays a red light if the instrument needs to be calibrated.

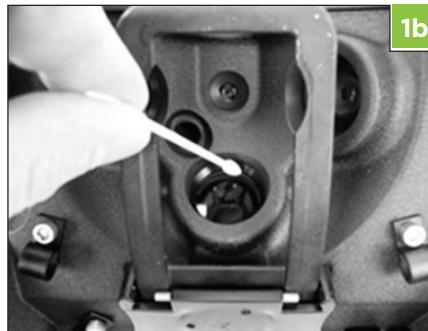
- To calibrate your device's white point, first, locate the slider on the bottom of the device. Make sure the slider is locked in place by fully pulling it upward towards yourself (2a).
- The software will then prompt you to measure with a measurement button. If the measurement button is disabled, it means the white plaque is not positioned correctly (2b). A green check mark will appear on the screen once your measurement is complete (2c).
- After calibrating the white plaque, you will be prompted to calibrate the targeting window. Locate the target window on the bottom of the device and slide it in the measurement position (2d).
- The software will then prompt you to measure with a white measurement button. A green check mark will appear on the screen once this measurement is complete (2e).



X-Rite iVue Daily Recommended Maintenance



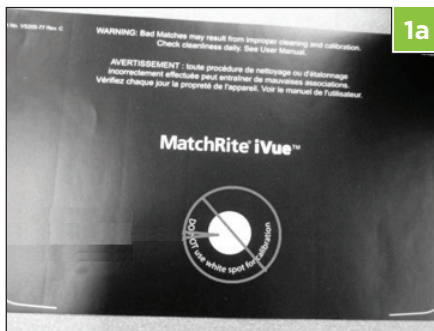
The iVue is a precision instrument that provides excellent color matching results when properly maintained.



1. Cleaning

The iVue's optics are protected by lenses. The lenses and calibration plaque must remain clean.

- Clean the four lenses (**1a & 1b**) and calibration plaque (**1c**) with supplied lens tissues and cotton swabs at least once per week.
- After cleaning, always calibrate the iVue.
- Use proper cleaning materials to ensure no residue is left on lenses or calibration plaque after cleaning. (See 4. Ordering page 12)



2. Calibrating

Calibration must be done once per week but may be done more frequently.

Important: Do Not calibrate to the white dot on black mat (**2a**) or to the white dot on 6mm Small Sample Holder.

- Ensure iVue lenses and calibration plaque are clean before calibrating. (See Cleaning above)
- Slide Calibration plaque forward (**2b**) on the rail beneath the targeting ring (**2c**) before calibrating.

X-Rite Recommended Tips and Supplies

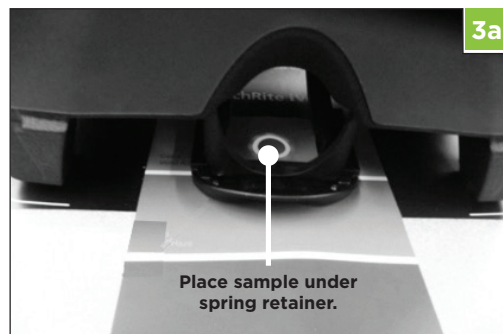
Large Sample Method



3a



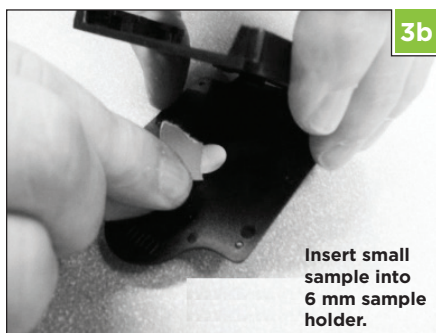
3a



3a

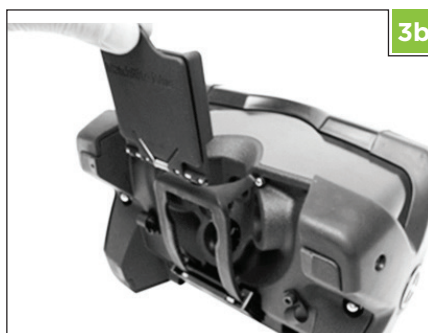
Place sample under spring retainer.

Small Sample Method



3b

Insert small sample into 6 mm sample holder.



3b



3b

3. Measuring

The iVue has two aperture sizes indicated by large and small green target rings. Color matching accuracy will be improved by keeping the samples flat. The Spring Retainer and 6 mm Sample Holder are designed to flatten card stock so there are no curves or bends on the sample to measure.

Large Samples

- When the solid color sample is more than 1/2 inch use the Spring Retainer (3a). Slide the Spring Retainer onto the instrument rail and place the sample under the Spring Retainer. The large green target ring must be used when measuring large samples.

Small Samples

- When the solid color sample is less than 1/2 inch use the 6 mm Small Sample Holder (3b). Place sample in the Holder and verify the sample fills the entire hole. Slide the 6 mm Sample Holder onto the instrument rail. The small green target ring must be used when measuring with this Holder.

Black Mat - 12 Pack PN# VS205-77-Kit



Cleaning Kit PN# VS205-81-Kit



Maintenance Kit PN# VS205-85-Kit



4. Ordering

iVue Maintenance Kits

- Black Mat - 12 Pack VS205-77-Kit
- Cleaning Kit - VS205-81-Kit
- Maintenance Kit - VS205-85-Kit
- Tel: 800.572.4626

X-Rite i1Paint Daily Recommended Maintenance



The i1Paint is a precision instrument that facilitates a one-hand operation with a portable lightweight design. This instrument has no power supply and can read samples as small as 8mm.



1. Cleaning

1a A clean white reference ceramic tile is essential for providing accuracy of your measurements. **1b** The protection cover should always be closed when the white reference ceramic tile is not in use. If necessary you can clean the white reference ceramic tile with isopropyl alcohol and a soft clean cloth

General Maintenance

1c Do not touch the diffuser disc of the ambient light limiting aperture.

Do not store or operate the i1Paint device in dirty, greasy or dusty environments. Do not use the i1Paint in environments with temps higher than 35° C (95°F) or less than 10°C (50°F). The i1 Paint device is sensitive to mechanical shocks. To avoid damage during transport, the i1 Paint must always be shipped in its original packaging.



2. Calibrating

In the center of the calibration plate is a slider to protect the white calibration tile. **2a** Open this protective slider until it clicks into place to access the white tile on this calibration plate. **2b** Place the i1 Paint measurement device on the calibration plate. **2c** The device must sit firmly on the calibration plate.

Start the calibration mode in the software. Once the device is successfully calibrated the status indicator light pulsates white. If the calibration fails the status indicator light pulsates red and then returns to solid white.

When the calibration is finished you should close the protective slider for the white reference ceramic tile.

Note: If you own multiple devices, make sure that the serial number on the front and back of the calibration plate matches the serial number of your i1 Paint device.

BYK auto-match IV

Recommended Monthly Maintenance



The BYK auto-match IV spectrophotometer can color match in all existing Benjamin Moore® products. Small and compact, standards are integrated into the sample clamp. This unit provides temperature stable results without constant calibration. Comes with a three (3) year guarantee on the instrument, ten (10) year on the light source.



1



2



3

1. Keeping the BYK auto-match IV clean

When not in use keep the paddles in place in front of the measurement port. This protects the calibration standards as well as limits the amount of airborne particles entering the measurement port, which can affect accuracy.

During measurement the grey tile closest to the measurement port may be used as a sample clamp. Do not use the other paddles in this way as it may lead to dirty standards and inaccurate calibration.

If the calibration tiles become dirty they may be cleaned using isopropyl alcohol and a lint free cloth. If the auto-match fails calibration or produces inaccurate results, try cleaning the standards and calibrating again.

2. Calibrating the instrument

Calibration is performed using the paddles attached to the front of the instrument.

First: Pull back the sample holder and slide the two attached discs to the right. Gently return the plunger back into position and initiate the reading of the 'black trap'.

The picture above shows the black trap which is found furthest from the measurement port.

3. White calibration tile in place

Second: Pull back the sample holder once again and slide the middle disc back into position and then initiate the reading of the 'white tile'.

The white calibration standard is in the middle of the three paddles.

The third paddle, closest to the measurement port, is a grey tile and is there for protective purposes only. This tile is not utilized in the calibration process.

Preventive Maintenance or Repairs

For preventative maintenance or repairs contact BYK-Gardner's service department at 800-343-7721 option 2.

Datacolor® 45G

Recommended Monthly Maintenance



The Datacolor® 45G is a 0/45 spectrophotometer that can color match in all existing Benjamin Moore® products. This instrument is also portable and can be used to perform remote measurements and then download them to COLORx.



1. Cleaning the Sphere

Do not allow anything to fall into the measuring port opening. When the instrument is not in use, store it in the case or face down on a flat surface to avoid any dust buildup. Never allow liquids to enter the measuring port opening.

Never wipe the inside of the measuring port opening with anything. If there is a dust buildup, you could try to vacuum the dust out by holding a vacuum in front of the measuring port opening.

Never measure wet samples. If needed, you can promptly use a damp cloth to wipe down the outside of the unit if anything gets on it. If there is a dust buildup on the outside, you could wipe with a damp cloth as well.



2. Handling the Tiles

Make sure to keep your tiles in the case that comes with the instrument. Handle calibration tiles with extreme care. Do not drop them, or scratch the glazed surface. Always grasp the tile using its edges.

3. Cleaning the Tiles

Wipe each tile clean with a soft, lint-free cloth before each use. In the event your tiles come into contact with inks, paints or other coatings, you may use a soft cloth moistened with isopropyl alcohol or Propan-2-ol to clean off the residue.



4. Cleaning the Black Trap

The black trap should be kept dust-free. To keep the black trap dust-free, when it is placed on the counter top, keep the opened end facing down.

Dust accumulating in the black trap should be blown out with moisture free compressed air.

5. Calibrating the instrument

Once the unit is untethered it needs to be calibrated. The calibration includes the utilization of the black trap, along with the white calibration, and black gloss tiles.

Introduction To Color Matching

The following is for the person new to color matching.
Please use with guidance from an experienced color matcher.

Best Practices:

1. Practice on mistints (with store permission).
2. Listen and learn from the best color matcher(s) in your store.
3. Learn the various strengths of colorants (as stated above).
4. Understand that there are no set quantities of 'how much to add.'
5. Understand how complex colors are affected by their environment, substrate and lighting.

Where to Start?

Begin with an existing Benjamin Moore color that is visually close to the color you are trying to match. Reduce the formula by at least 20% while also holding out the white and black.

Helpful hints:

- Always do your best to adjust the color using the original COLORx formula.
- Avoid opposite colorants when adjusting a color.
- Have a color wheel on-hand and know how to use it.
- Adding white does not lighten a color significantly (especially in light colors) and if you use too much in a dark color it will make the color milky.
- Adding black will make a color muddy (toning) and muted.
- **REMEMBER** use baby steps when adding colorant! If you put too much in you generally cannot bring the color back.
- When doing a custom match, always brush out and dry a sample each time you add colorant (never try to match a wet sample to a dry sample).
- Always use the appropriate tinting base and do not overfill, as the can must have at least two ounces worth of air space to allow the colorant to disperse properly.
- Daylight is the best light for viewing color matches.



Evaluating Dispenser Accuracy

50% of all mistints are not caused by the color formula.
This test will help you to determine if the mistint is related to your dispensing equipment, an employee error or the color formula.

1. Verify you have the latest version of COLORx® on your dispenser computer. (To download, sign on to the Benjamin Moore Retailer Gateway, scroll down to COLORx and choose Access Now, then choose Download.)
2. Perform daily maintenance.
3. Follow the 3-step process indicated below:
 - **Step 1:** Identify which colorant is causing the mistint.
 - **Step 2:** Use recommended base product.
 - **Step 3:** Use the following colors (*COLORx® version 6.38.1000 or higher).

Step 1	Step 2	Step 3
Dispensing Issue	Use Product	Use Color*
Too little or too much B1	200	767
Too little or too much G1	200	767
Too little or too much M1	200	1347
Too little or too much O1	200	2014-40
Too little or too much R1	200	983
Too little or too much R2	200	1347
Too little or too much R3	200	2097-30, OC-16
Too little or too much S1	200	OC-16, 2097-30, 983
Too little or too much S2	200	767
Too little or too much W1	200	2097-30
Too little or too much Y1	W105 Qt. or N401 Qt.	2029-40
Too little or too much Y2	200	2014-40
Too little or too much Y3	200	OC-16, 983

4. Shake the can 6 minutes.
5. Dry the color on a white unlined note card.
6. Retrieve selected color chip from chip rack (chips dated 5/2015 or newer).
7. Visually compare your color to the chip using natural light, if the colors do not match.
8. Contact your dispenser company to have service performed.
9. If the colors match, it may be a color formula problem. Follow the Color Complaint Process.

Gennex® Waterborne Color Technology

Colorant Preparation for Canister

Optimizing colorant performance, in canister, is also essential to maximizing the performance of your Gennex colorant system. Use the following steps to properly prepare the colorant before filling:



Shake Times

To ensure proper color development, paint shaking is an important process. Shake times, for example, are dependent not only on the colorant and base, but also on the shaker itself. The following chart represents shake times for various vendors:

RADIA (RED DEVIL)			
CLASSIC (Cradle Model)	1025 RED D (Vortex Model)	SPEED DEMON 1 (Gyro Model)	5025 ROLLER LOAD (Gyro Model)
5 minutes	4 minutes	6 minutes	6 minutes

HERO		
S2850M Fusion Manual Clamp 5 gal.	S2450 1 gal. Multi Mix counter top	S2700 5 gal. Mega Mix platform
6 minutes	4 minutes	4 minutes

ULTRA BLEND	
TRUMIX 1 (Gyro Model)	TRUMIX 1 by Hero (Gyro Model)
5 minutes	4 minutes

FLUID MANAGEMENT	
HARBIL 5G (Platform case)	VR1 (Vortex Model)
4 minutes	4 minutes

These guidelines are based on extensive testing completed by Benjamin Moore, incorporating multiple equipment vendors using both interior and exterior products.

Customer Support

If you have a tinting-related issue that you cannot troubleshoot, contact customer support as follows.

Customer Support Contacts			
Issue	Model	Contact	Phone
Dispenser machine not operating properly	Fluid Management All	Fluid Management	1-800-462-2466
	Corob All	Corob	1-800-728-8408 x52
	Hero All	Hero	1-800-494-4376
Spectrophotometer not operating properly	MatchRite CF57U MatchRite iVue MatchRite i1 Paint MetaVue Datacolor 45G BYK auto-match IV	X-Rite	1-800-572-4626
		Benjamin Moore	1-800-809-9213
		Datacolor	1-800-982-6496
		BYK	1-800-343-7721
COLORx software not operating properly		Benjamin Moore	1-800-809-9213
Benjamin Moore color issues		Benjamin Moore	1-800-809-9213
Seiko Smart Label not printing correctly	Seiko Smart Label Printer 650	Seiko	1-800-757-1011
Dymo label writer not printing correctly	Dymo 330,400,450	Benjamin Moore Color Technology	1-800-809-9213
Dymo label writer not printing correctly	Dymo 330,400,450	Dymo Sanford	1-877-724-8324



Benjamin Moore®

©2020, 2023 Benjamin Moore & Co. Benjamin Moore, COLORx, Gennex, and the triangle "M" symbol are registered trademarks licensed to Benjamin Moore & Co. All other marks are the property of their respective owner. 9/23