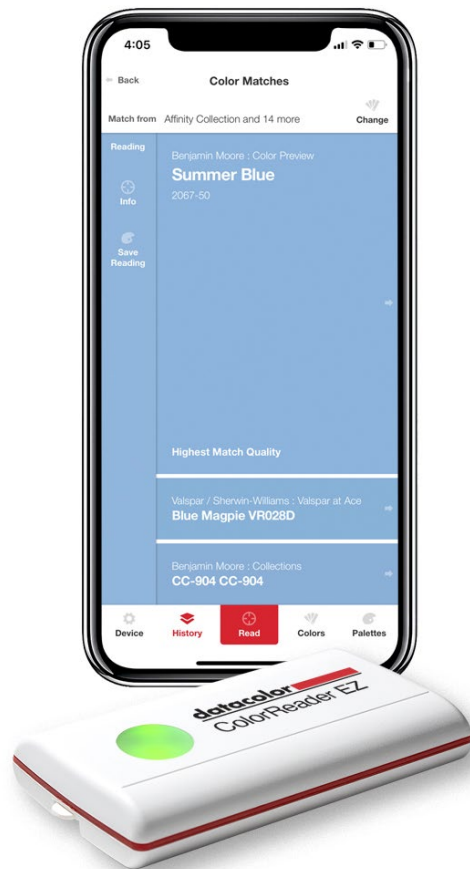# datacolor

ColorReader EZ
User Guide

datacolor ▬▬▬

Rev A, August 2020

All efforts have been made to ensure the accuracy of the information presented in this format. However, should any errors be detected, Datacolor appreciates your efforts to notify us of these oversights.

Changes are periodically made to this information and are incorporated into forthcoming versions. Datacolor reserves the right to make improvements and/or changes in the product(s) and/or program(s) described in this material at any time.

To obtain information on local agents visit our website at www.datacolor.com

Contact Us

Please contact our service department by email for questions or issues.

goto.datacolor.com/colorreadersupport

In urgent cases you can contact us by phone.

Europe: 00800 700 800 70   USA: 800-438-2585

Contents

Introduction

Datacolor ColorReader EZ Model DC10-3 is an accurate color reader designed to measure an inspiration color and report the nearest reference color from a proprietary color system.

You can use Datacolor ColorReader EZ to quickly and accurately measure samples, and find the closest color match in a fan deck collection stored on the mobile application.

Bluetooth connectivity works with the Datacolor ColorReader mobile application when installed on portable devices including cell phones and tablets. Using this mobile application you can easily store, recall, and examine project color information in real time.

Requirements

The requirements to run the Datacolor ColorReader mobile application include:

Mobile Device	Operating System
iPhone®	iOS® v. 9.3 or higher
iPad®	iOS® v. 9.3 or higher
iPod Touch®	iOS® v. 9.3 or higher
Android®	v. 6.0 or higher
Bluetooth®	v. 4.0 or higher

Included

The packaging includes:

- the Datacolor ColorReader EZ measuring device
- two installed CR2032 lithium batteries
- welcome card with product information and link to goto.datacolor.com/getcrez

Getting Started

Install the Mobile Application

1. Go to your mobile device's settings menu and turn on Bluetooth.
2. Ensure your Datacolor ColorReader EZ contains two working CR2032 lithium batteries.
3. Install and open the Datacolor ColorReader mobile application from the Apple App Store or Google Play Store.

4. Follow the on-screen instructions to turn on and connect your ColorReader EZ unit, select your region, then complete the registration screen.
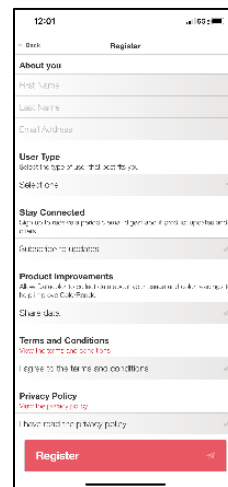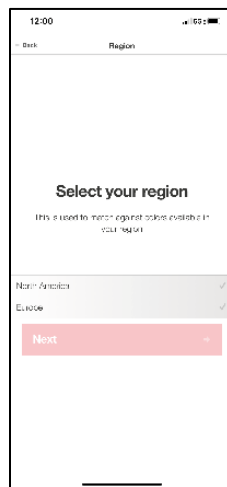
Calibration

Calibrate the unit every 8 hours to account for any changes over time. This ensures that the readings remain consistent. The Datacolor ColorReader mobile application will remind you when calibration is required.

1. Tap the yellow notification, or tap 'Device' and navigate to the 'Calibration' tab.

2. Follow the on-screen instructions to position the calibration tile.
3. Tap 'Calibrate' on the screen. The application will confirm calibration success.
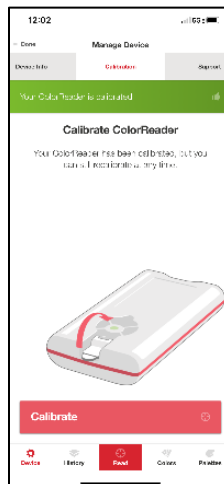
Take Readings

When you find a color you want to capture, use the ColorReader EZ to take a reading and find the color data or closest matches from popular color collections on the mobile application.

1. Ensure the calibration tile is flipped back to expose the aperture.
2. Place the aperture over the area you want to read. The area should be flat and the solid color completely fills the aperture area.
3. Tap 'Read' on the screen or press the ColorReader EZ button. The mobile application will show the results.

On the left you will see the reading color.
On the right you will see the three closest matches to the reading within the color collections available on your mobile application.
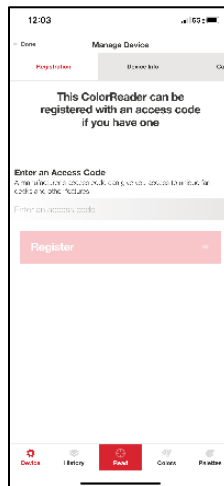
Mobile Application

From any menu, tap 'Done' to return to the main screen.

Device Menu

This menu allows you to manage your device.

Registration

Use this tab if you are given an exclusive access code to change your available color collections to find matches for your readings
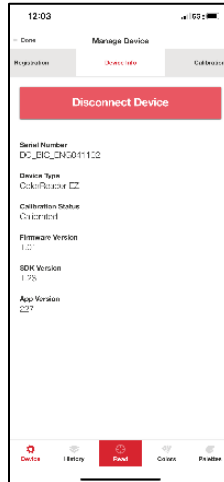

1. Enter the access code you were provided.
2. Tap 'Register'. The mobile application will ask you to confirm then automatically update your color collection list.

If you already entered an access code, this tab will have your access code information.

Device Info

Use this tab to disconnect your ColorReader EZ and confirm technical information about your unit.

Calibration

Use this tab to see the current calibration status or run a new calibration.

Calibrate the unit every 8 hours to account for any changes over time. This ensures that the readings remain consistent. The Datacolor ColorReader mobile application will remind you when calibration is required.
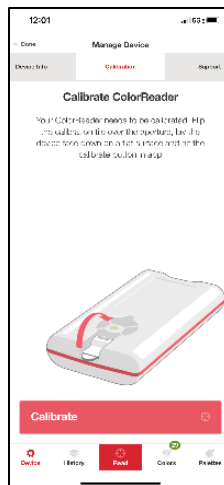
1. Follow the on-screen instructions to position the calibration tile.
2. Tap 'Calibrate' on the screen. The application will confirm calibration success.

Support

Use this tab to be sent directly to the online support site where you can submit a ticket or call our representatives for any issues you may be experiencing.
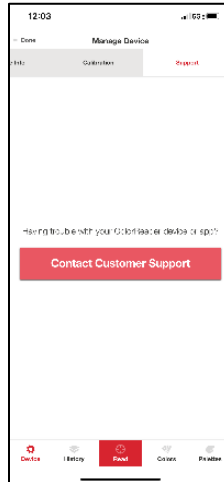
History Menu

All your measured readings are saved to be viewed at any time.

Reading Info

Tap one of your previous readings in 'History' to see the color data in CIE L*a*b, RGB, and HEX values. (Note: The L*a*b* values are valid for D65/10* Illuminant/Observer)
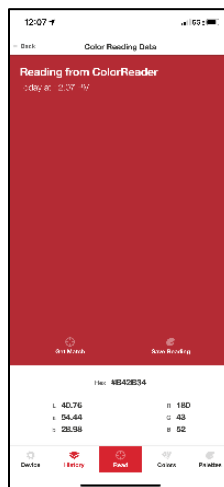
Get Match

After selecting a previous reading from 'History', tap 'Get Match' to find the 3 closest matches within your color collections.
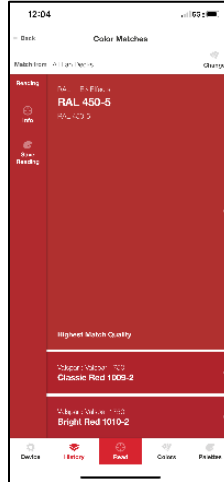
Save Reading

After selecting a previous reading from 'History', tap 'Save Reading' to save to a palette.

Read Menu

When you find a color you want to capture, use the ColorReader EZ to take a reading and find the color data or closest matches from popular color collections on the mobile application.

1. Ensure the calibration tile is flipped back to expose the aperture.
2. Place the aperture over the area you want to read. The area should be flat and the solid color completely fills the aperture area.
3. Tap 'Read' on the screen or press the ColorReader EZ button. The mobile application will show the results.
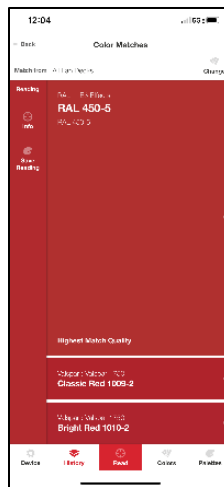
Reading Info

After taking a new reading, tap 'Info' to see the color data in CIE L*a*b, RGB, and HEX values. (Note: The L*a*b* values are valid for D65/10* Illuminant/Observer)
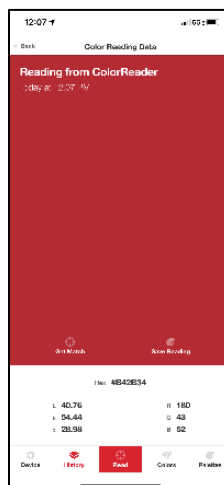
Save Reading

After taking a new reading, tap 'Save Reading' to save to a palette.

Change Match From

After taking a new reading or tapping 'Get Match' on a previous reading, you can change the color collections used to find the three closest matches.

1. Tap 'Change' to view the full list of color collections available on your mobile application.
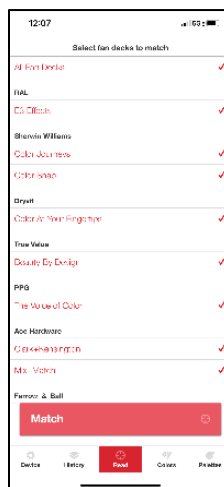
2. Tap on each color collection to activate or deactivate from the search. The color collection name will be red if it is activated or gray if deactivated.
3. Tap 'Match' and the three closest matches will change to options from your activated color collections.

Closest Matches

After taking a new reading or tapping 'Get Match', you will see the three closest matches to the reading within the color collections available on your mobile application. Tap on a swatch to see more information.

View Fan Deck

After selecting a swatch, tap 'View Fan Deck' and the selected swatch will be highlighted in a visual atlas of the colors in the full collection.
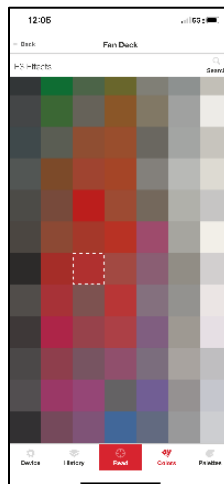
Coordinate Colors

After selecting a swatch, tap 'Coordinate Colors' to view four colors that combined with your selected swatch create *Complimentary*, *Triad*, *Analogous*, and *Monochromatic* color schemes.
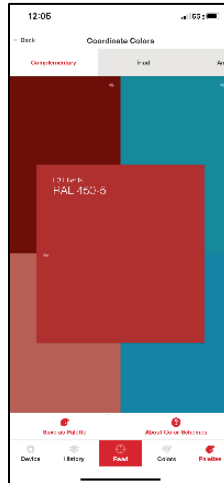
For more information on color schemes, tap 'About Color Schemes'.

You can tap any of the recommended colors to find their three closest color matches or reading info.

You also have the option to tap 'Save as Palette' to automatically create a new palette. The original swatch will be saved in the 'Swatches' tab, and the four additional recommended colors will be saved in the 'Readings' tab.

Save Swatch

After selecting a swatch, tap 'Save Swatch' to save to a new or existing palette.

Color Data

After selecting a swatch, tap 'Color Data' to see the color data in CIE L*a*b, RGB, and HEX values. You may also see notes the manufactures has added. (Note: The L*a*b* values are valid for D65/10* Illuminant/Observer)
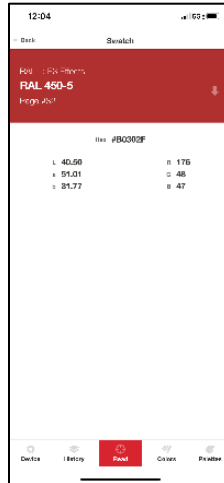
Colors Menu

Color Collections

All your color collections available on your mobile application are listed here.
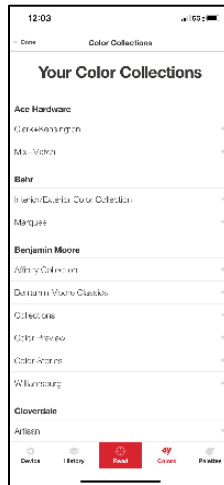
View Fan Deck

After selecting a color collection, you will see a visual atlas of the colors in the full collection. You can then tap any color to view the swatch.

Search

After selecting a color collection, you can type in a specific color name or color number in the search bar to quickly find a specific color. You can then tap any color to view the swatch.

Palettes Menu

When you save a reading or swatch they are stored in a palette. (Note: You can only create a new palette when saving a reading or swatch)
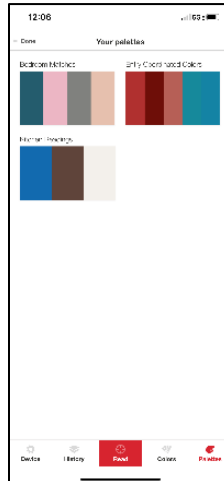
To view the colors saved in a palette, tap the palette you want to review.

You can label a palette by tapping the palette label and typing a new label.

To delete a palette and the colors saved within, tap 'Delete' and confirm.

Swatches

This tab shows your saved swatches in the selected palette. Tap the color to view the swatch.
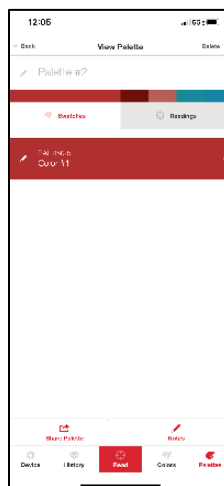
You can tap the pencil icon next to the color to assign a label.

To delete a color, tap the pencil icon next to the color you want to delete a tap 'Delete' and confirm.

Readings

This tab shows your saved readings in the selected palette. Tap the color to view the reading info.
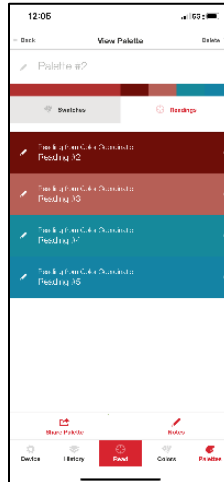
You can tap the pencil icon next to the color to assign a label.

To delete a color, tap the pencil icon next to the color you want to delete a tap 'Delete' and confirm.

Notes

You can add additional notes to your palette by tapping 'Notes'.

Share Palette

After you have completed creating a palette, tap 'Share Palette' to create a unique link that will display the selected palette's swatches and readings with your labels and notes. Then choose the application that you want to share/send the link with.

Device

Controls & Indicators

On Button/Read Button

Aperture & Calibration Flip Tile

On Button

Press the button on the device to activate.

Battery Information

Datacolor ColorReader EZ is equipped with two replaceable CR2032 lithium batteries. With fresh batteries, the device is good for 300 measurements.

To replace:

- Pull out the battery tray inserted in the back end of the device.
- Remove the old batteries and replace with two new CR2032 lithium batteries.

- Push the battery tray back into the device until it is locked in place.

LED Indicator

An LED indicator identifies the current state of the unit:

LED Color	Instrument State
Off	Device is not powered
Green	Device is on

Sleep Mode

Datacolor ColorReader EZ will power off to sleep mode when it is inactive for more than 5 minutes.

When the device is in sleep mode and you try to access to it through the mobile application, it will ask you to wake the unit. Press the button on the unit.

General Information

Power Source

Datacolor ColorReader EZ Model DC10-3 has two replaceable CR2032 lithium batteries. The batteries are inserted in the back end of the device.

Operation

This product is to be used only as specified by the manufacturer, and according to the instructions for operation and maintenance provided herein.

Wireless Communication Capability

Datacolor ColorReader EZ is Bluetooth®-capable (4.0 or higher)

Optical Configuration

45*/0* type

Colorimetric Data

1976 CIE L*a*b* coordinates; Illuminant D65; 10* Standard Observer

Device Markings

Several markings on the bottom of the unit include the following information:

- Instrument Model
- Ratings
- Compliance and certification information

Serial Number

The serial number is programmed into the Datacolor ColorReader EZ and is displayed on the back of the packaging and in the mobile application under the device tab.

Instrument Maintenance

There are no user-serviceable parts for this equipment.

Safety Warnings

Caution

If any of the following conditions exist, turn off the device:

- The device is exposed to water or other excess moisture.
- The device is dropped or damaged.
- The device needs service.

The protection of the device may be impaired if used in a manner not specified by the manufacturer.

To insure operational safety:

- Keep the device away from sources of liquids such as sinks, tubs, showers, etc.
- Protect the device from excess moisture.
- Follow all instructions and warnings provided with the unit.
- Read all instructions carefully before turning on the device.

Manufactured

At Datacolor location DS001

Datacolor Suzhou

288 Shengpu Road

Suzhou, Jiangsa

P.R. China 215201

Appendix

Instrument Specifications

Measuring Geometry	Proprietary
Warm-Up Time	None
Measurement Time	<3 seconds
Interface	Bluetooth LE
Aperture Size	4mm
Number of Sensors	1
Battery	Two replaceable CR2032 lithium batteries. 300 measurements per battery replacement.
Power Requirements	6V DC, 235mA
Dimensions	Width: 44.3mm Length: 83.4mm Height:14.5mm Weight (batteries included): 45.6g
Environmental Requirements	Operating Temperature: +5* +40* C Relative Humidity (Non-condensing): 85% Maximum Altitude: 2,000m
Agency Compliance	SGS, cSGS, C-Tick, CE

Compliance Statements

FCC Compliance Statement

WARNING

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with these instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning equipment off and on, the user is encouraged to try and correct the interferences by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Pursuant to Part 15.21 of the FCC rules, any changes or modifications to this equipment not expressly approved by Datacolor may cause harmful interference and void the FCC authorization to operate this equipment.

See also the following Federal Communications Commission publication, available from the U.S. Government Printing Office, Washington, D.C., 20402:

How to Identify and Resolve Radio/TV Interference Problems

Stock No: 004-000-00345-4.

Japan Radio Law Compliance Statement

Certification has been granted to this product for compliance with the technical standards specified in Article 38 Clause 24 Paragraph 1 of the Japan Radio Law.

Anatel Homologation Compliance Statement

00248-18-10688

DC10-2 (ColorReader) Contains ANATEL approved module # 00248-18-10688

Specifications are subject to change without notice.

为满足中国《电器电子产品有害物质限制使用管理办法》的相关规定和要求，
Datacolor公司对其所生产及销售的产品中有毒有害物质，按部件分类，声明如下：

设备：Datacolor ColorReader Express　校色仪

部件名称	有害物质 Hazardous Substances					
	铅及其化合物 （Pb and its compounds）	汞及其化合物 （Hg and its compounds）	镉及其化合物 （Cd and its compounds）	六价铬 （Cr（VI））	多溴联苯 （PBB）	多溴二苯醚 （PBDE）
电路板组件	O	O	O	O	O	O
电缆线	O	O	O	O	O	O
塑料/其它部件	O	O	O	O	O	O
玻璃部件	O	O	O	O	O	O
金属部件	O	O	O	O	O	O
本表格根据SJ/T 11364的规定编制。 O：表示该有毒有害物质在该部件所有均质材料中的含量均在GB/T 26572标准规定的限量要求以下。 X：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572标准规定的限量要求。 注：产品的环保使用期限受产品使用环境条件影响，标注值为产品在正常的工作温度和湿度下的环保使用期限。						

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