
Datacolor

Datacolor CHECK II

Quick Start Guide



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Datacolor CHECK II

Introduction

Datacolor CHECK II is a portable spectrophotometer, intended for use as a device for measuring, specifying and evaluating color in both laboratory and production settings. It is offered in three different configurations: Datacolor CHECK II, Datacolor CHECK II^{PLUS} and Datacolor CHECK II^{PRO}, which differ in hardware, software and storage capacity.

Datacolor CHECK II incorporates a PDA, customized with color management software, as its interface. It also employs wireless communications technology to transfer measurement data to desktop computers.

In addition to its stand-alone functions, Datacolor CHECK II can be connected, or “tethered” to a Desktop PC to be used as the primary measuring instrument for other Datacolor programs.

Datacolor Portables Desktop Program

The Datacolor Portables Desktop program is included as part of the Datacolor CHECK II package. This program is used to transfer or *synchronize* data between a stand-alone instrument, and a Datacolor CHECK II database created on the computer. *See Datacolor CHECK II User's Guide for detailed information regarding the features and operation of this program.*

Documentation

In addition to this guide, a comprehensive reference manual, Datacolor CHECK II User's Guide, is provided as a PDF file on the Datacolor Portables CD.

Accessories

Standard accessories for Datacolor CHECK II include the following:



**Spare stylus/
reset tool**

Stapler Foot Assembly
*See Stapler Foot Installation
for instructions.*



Hex Driver

Power Adapter / Power Cord



Communications Cable

(Serial Cable)



(USB Cable)



In addition, you will find a Datacolor CHECK II User Guide, and four CDs:

- **Palm® CD.** You must install this software to transfer data between the Datacolor CHECK II and the Datacolor Portables Desktop software on a Desktop PC.
- **Datacolor Portables Desktop CD.** This contains the Datacolor Portables Desktop software. You must install this program to transfer data between the Datacolor CHECK II™ and the Desktop PC.
- **Instrument Driver CD.** Required to use the Datacolor CHECK II as a measuring device for other Datacolor programs
- **USB Drivers and Documentation CD.** If you will be connecting the Datacolor CHECK II to a USB port, you must install this software.

Calibration Data

If the calibration data is deleted from the instrument, or if you received a replacement calibration tile, you must install the white tile data. This requires the data CD. See *Datacolor Portables Program, Installing White Tile Data* for detailed instructions to install this data.

WARNING

If you have changed the white calibration tile, you must install the measurements for the new tile you are using. If you do not, the instrument calibration and any measurements made *are not valid*.

General Information

Operation

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

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Power Source

The unit must be used with the power adapter or lithium ion batteries, provided only by Datacolor.

Power adapter (Datacolor part no. 4050-0065) has a maximum output of 6.5 volts DC, 1.5 amps.

The power cord supplied ***must*** be used.

Replaceable lithium ion batteries (Datacolor part. no. 1200-1299) are the only batteries compatible with Datacolor CHECK II. **Do not use any other rechargeable or non-rechargeable batteries.**

The battery is fully charged before it leaves the factory. However, it may lose some of its charge by the time it arrives at your location.

Connect the Datacolor CHECK II to the power adapter as soon as you receive the unit. See "Instrument Cable" for instructions on how to attach the power adapter to the unit.

Running from Power Adapter

Whenever Datacolor CHECK II is connected to the power adapter, it automatically recharges the battery at the same time it is providing power to the unit. You can make measurements while the battery is recharging. When the battery is totally discharged, it takes approximately 4 hours to fully recharge it.

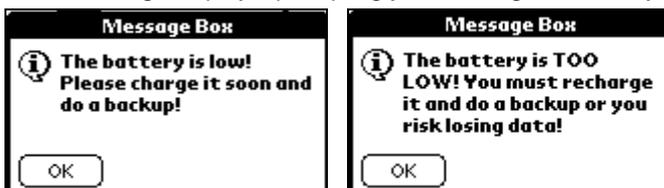
NOTES

When you connect the unit to the external power adapter, the instrument will not recharge if the instrument is asleep (the LED indicator on the front is not lighted). Press the **Measure** button on the back of the unit to activate the instrument.

The instrument will never enter *Sleep* mode while it is connected to the external adapter. The PDA will time out, but the instrument will remain active (the LED indicator on the front of the unit will be lighted).

Running from the Internal Battery

When the battery icon contains a single bar, the battery level is low, and a text message displays, prompting you to charge the battery.



When the remaining power drops to a critical level, a second “low battery warning” displays, and the battery icon will not contain any bars.

When this message displays you have battery power remaining for approximately 30 measurements. **BACK UP your data NOW, if you have not already done so. If you do not, you will not have enough power to complete the backup process.**

When the LED indicator on the front of the unit *repeatedly* cycles through the green/red/amber color sequences the unit is ready to shut down. You DO NOT have enough power to complete a backup. You should immediately connect the unit to the external power adapter.

WARNINGS

When the battery is totally discharged, **everything on the PDA interface is lost!!!** Back up your data regularly to the flash memory card so that you do not lose any important information.

If the LED indicator remains amber or red for an extended period of time, the instrument needs to be reset. To reset, press the **Measure** button on the back of the unit until the light goes out. You can then resume using the instrument.

Sleep and Active Mode

To conserve the internal battery power, both the instrument and the PDA are programmed to timeout, or go into *Sleep* mode when no activity is detected over a specified time period.

The *Sleep* function is controlled separately for each component. As a result, the instrument can remain active (“awake”) while the PDA is asleep, and the PDA can remain active (“awake”) while the instrument is asleep.

Replacement Parts

This instrument uses high voltage during operation, and should only be serviced by qualified personnel.

Labels

There are several labels on the unit including the following.

The  **WARNING** symbol indicates that the user should refer to the documentation before using the instrument.

Datacolor CHECK II instrument model and serial number.

Safety Warnings

Light Source. Do not stare directly into the open port located at the bottom of the instrument, when a measurement is in progress. Staring directly into the light source can result in eye discomfort similar to that of staring at a camera flash.

CAUTIONS

- (1) Disconnect all power before servicing.
- (2) The power cord supplied must be used.
- (3) There are no user serviceable parts for this system.

Instrument Maintenance

There are no user-serviceable parts for this equipment.

Instrument Controls and Indicators

Front View



Back View



Measure Button

When you press the **RED Measure** button on the back of the unit (see above photo) the instrument automatically makes a measurement without prompting you for any information.

Instrument Cable

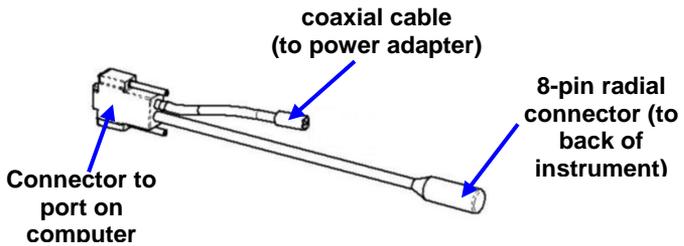
A custom cable is included with the instrument. This cable comes as 3 separate components that you must assemble.

It is used for two functions:

- To connect the Datacolor CHECK II™ to its power adapter.
- To connect Datacolor CHECK II to a port on a PC.

Cable Components

When assembled, the Datacolor CHECK II cable has 3 connectors on it. One connects to the instrument, one connects to a port on the computer, and one connects to the power adapter.

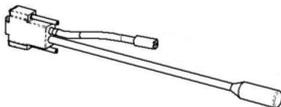


NOTE

Two communications cables are supplied with the instrument.

One is used to connect the unit to a serial port, and the other is used to connect to a USB port. **You will only use one of these cables,** based on the type of communications port available on your computer.

Serial
Communications Cable



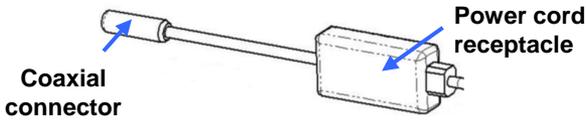
USB
Communications Cable



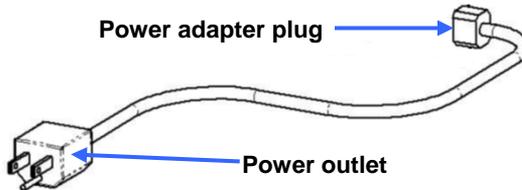
NOTE

If you will not be using the Datacolor CHECK II with other Datacolor software programs, you can use either communications cable.

Power Adapter. This component includes a coaxial connector, and a power adapter with power cord receptacle.



Power Adapter Cord. Includes plugs to power outlet and to power adapter.



CAUTION

The power cord supplied with the unit *must* be used.

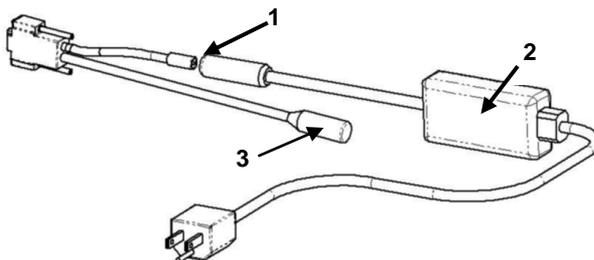
Cable Assembly

WARNING

Disconnect the power adapter from the wall outlet before connecting Datacolor CHECK II to the adapter or PC.

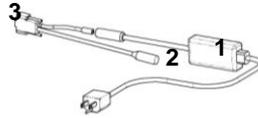
1. Plug the coaxial connector from the Datacolor CHECK II connector (1) into the coaxial connector from the power adapter (1).
2. Insert the adapter power cord into the adapter (2).
3. Plug the radial connector (3) into the port on the back of the Datacolor CHECK II.

When assembled correctly, your cable should look like the diagram below:



Cable Connections

- DC adapter (1)
- Connector to instrument (2)
- Connector to port on PC (3)



The 8-pin radial connector (2) plugs into the port on the back of the instrument. The USB/Serial connector (3) connects to a port on a computer.

Serial Port Cables

The serial D connector is used to connect to the serial port on a computer.



LEFT. 8-pin Serial D Connector
(to serial port on computer)



RIGHT. 8-pin Radial Connector
(to back of unit)

Back of Datacolor CHECK II

USB Port Cables

The USB connector is used to connect to a USB port on the back of the computer.



LEFT. USB Connector
(to USB port on computer)



RIGHT. 8-pin Radial Connector
(to back of Datacolor CHECK II)

**Back view of
Datacolor CHECK II**

NOTE

To use Datacolor CHECK II with a USB port, you must install software onto the system. *For instructions to install the USB drivers, see Datacolor CHECK II User's Guide*

Connecting the Instrument to the Power Adapter

The cable must be completely assembled in order to run Datacolor CHECK II from the power adapter.

1. Insert the 8-pin radial connector into the port on the back of the instrument. Looking at the rear of the instrument, the flat edge of the connector shield faces to the right.
2. Plug the power cord into an outlet.

Connecting the Instrument to a Desktop PC

The Datacolor CHECK II can be connected to a desktop PC for use as the measuring instrument for other Datacolor programs, and for data synchronization.

- For use as a color measuring device, you must connect the instrument using a cable, to either a serial or USB port.
- For data synchronization, you can use either a wired or wireless connection. If you use a wired connection, you can use either a serial or USB port. *See Datacolor CHECK II User's Guide to configure the unit and perform this data transfer.*

Serial Port Connection

1. Insert the radial connector into the port on the back of the Datacolor CHECK II. *Looking at* the rear of the instrument, the flat edge of the connector shield faces to the right.
2. Insert the serial D connector into the serial port on the back of the computer.

USB Port Connection

You must install software to allow communication between the Datacolor CHECK II and the USB port. *See Datacolor CHECK II User's Guide for USB software installation instructions.*

1. Insert the radial connector into the port on the back of the instrument. *Looking at* the rear of the instrument, the flat edge of the connector shield faces to the right.
2. Insert the USB connector into the USB port on the back of the computer.

Stapler Foot and Aperture Selection

Dual Aperture Units

There are three possible aperture sizes available on Datacolor CHECK II. A dual aperture unit includes any two of the selections listed below:

| Aperture Selection | Aperture Plate at Port | Switch Identification | Stapler Foot Assembly ID |
|------------------------------|------------------------|-----------------------|--------------------------|
| Large Area View | LAV | L | LAV |
| Small Area View | LAV | S | SAV |
| Ultra-Small Area View | LAV | U | USAV |
| Extra-Ultra Small Area View* | LAV | U | XUSAV |

*Extra-Ultra Small Area View uses the same switch position as Ultra-Small Area View. The only difference is the size of the viewing area targeted by the stapler foot for XUSAV. The switch position used is U (Ultra-Small Area View), and the stapler foot used is XUSAV.

Dual aperture instruments have an aperture switch on the back of the unit.



Aperture Switch

If you have a single (fixed) aperture unit, there is no aperture switch on the back.

The stapler foot is attached to the bottom of the unit.

It is used to target the area measured. The aperture size is clearly identified on the stapler foot, and should always match the aperture switch setting you are using.



Stapler Foot Installation

A stapler foot assembly is provided for each aperture. This is attached to the bottom of the unit.

WARNING

Exercise caution when installing the stapler foot.

Below are pictures of the stapler foot assembly and the bottom of the unit where it is installed.

Bottom of Unit



Sphere Opening

Stapler Foot Assembly



Locking Key

Slides left/right to lock/unlock jaw of stapler foot.

Aperture ID. The aperture size is clearly identified on the stapler foot

Red Dot (not shown)

Used to align foot with instrument during installation.

To install the stapler foot, do the following:

1. Slide the locking key on the stapler foot to the right to close it.
2. Orient the stapler foot assembly so that the front of the stapler foot assembly is parallel to the front of the unit.
3. Align the red dot on the stapler foot with the gray dot on the instrument.



4. Turn the stapler foot clockwise to lock it into position. The red dot on the stapler foot will line up with the red dot on the instrument.
5. To remove the stapler foot from the unit, turn the stapler foot counterclockwise.



6. Turn the aperture switch to the selection that matches the stapler foot installed on the unit.



Aperture Selection

1. Install the stapler foot assembly, using the instructions in this guide.
2. Dual aperture units are fitted with a silver switch on the back of the unit.



3. Turn the switch to the position that matches the stapler foot aperture size.



4. Calibrate the instrument. Following calibration, the aperture icon on the PDA screen should match the switch position on the back of the unit, and the aperture identification on the stapler foot assembly.

| Aperture Setting | |
|------------------|-----------------------|
| § | Small Area View |
| L | Large Area View |
| U | Ultra-Small Area View |

NOTE

When you change the aperture selection, the aperture icon on the display is not updated until you make a measurement.

Interface Features

Below is the Datacolor CHECK II user interface. It is composed of three sections:

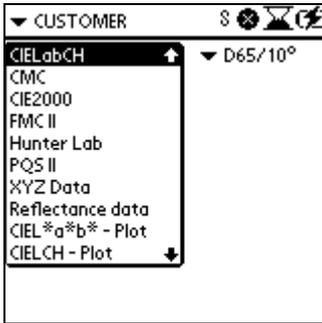


Datacolor CHECK II utilizes many standard PDA navigation conventions. Some of these functions have been customized to accommodate features specific to Datacolor CHECK II.

Display Screen

| | | | | | |
|-------------------|-----------|---------------------|---|---|---|
| ▼ CUSTOMER | 8 | Ⓢ | Ⓜ | Ⓜ | Ⓜ |
| ▼ CIEL*a*b* | ▼ D65/10° | | | | |
| ▼ COIL SAMPLES | | | | | |
| ▼ DK BLUE STD | | | | | |
| ▼ DK BLUE BAT -1A | | | | | |
| DL* | -0.15 | Batch is darker | | | |
| Da* | -1.44 | Batch is more green | | | |
| Db* | 0.72 | Batch is less blue | | | |
| DE* | 1.62 | | | | |

Input fields. Tapping the ▼ displays the choices for the relevant field:



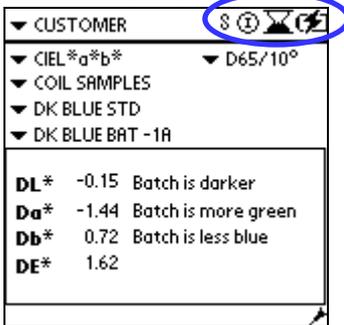
To change your selection, tap a different choice in the list. The screen information is updated immediately to reflect the change you have made.

WARNING

Use the stylus provided with the unit or your finger to make screen selections. **DO NOT APPLY ANY TYPE OF SHARP OBJECT TO THE SCREEN.** Applying pen or pencil tip, or other similar implements can damage the screen.

Persistent Icons

Along the top right row of the screen are a series of icons that are continuously displayed.



Each indicates the status of a particular instrument condition. The conditions are updated each time a measurement is made.



| | |
|---------------------------------------|--|
| Aperture Selection | |
| Specular Port Status | |
| Specular included | |
| Specular excluded | |
| Gloss | |
| Remaining Calibration Interval | |
| Backlight | |
| Remaining Battery Life | |
| Running on Battery | |
| Plugged into Adapter and Charging | |
| Battery Status Unknown | |

Aperture Selection. Indicates the current setting for the aperture. For single aperture instruments, this icon never changes.

L = Large Area View ()

S = Small Area View ()

U = Ultra Small Area View ()

NOTE TO XUSAV USERS

To enable XUSAV, the switch on the back of the unit should be in the USAV position, and the XUSAV stapler foot assembly should be attached to the instrument. There is no XUSAV icon.

Specular Port Status.

- **Specular Included.** The specular component is included in the reflectance measurement.
- **Specular Excluded.** The specular component is NOT included in the reflectance measurement.
- **Gloss.** The Gloss condition requires that two measurements are made for each sample. *See Datacolor CHECK II User's Guide for a detailed explanation of the gloss feature.*

Calibration Interval. Indicates the time remaining before next instrument calibration.

When the top of the hourglass is black, there is time remaining before next calibration. When the top of the hourglass is white, the calibration interval has lapsed.

NOTE

If you change the aperture setting, the amount of time remaining may change.

Battery Life. Identifies the power source currently used. When the battery is operating, it indicates the amount of power available.

-  Instrument is running from the battery. Also identifies battery status. When fully charged, four vertical lines appear in the battery. Each time you charge the battery pack, the unit is available for approximately 1,000 measurements.
-  Instrument is connected to the power adapter and the battery is charging. You can continue working with the unit and recharge the battery simultaneously. The battery is fully recharged in 4.5 hours.
-  The battery status is unknown. This indicates there is no communication between the instrument and the PDA.

Backlight.  Touching this icon turns PDA back light on/off.

NOTE

The backlight can only be seen when the screen is viewed in a dark room with no ambient light.

PDA Graffiti Pad and Control Panel

Directly below the screen are additional icons and buttons that are used to navigate through the program. This is the graffiti pad.



The icons on the graffiti pad are activated by touch. The active icons include:

- **Home.** When the Datacolor CHECK II software is open, touching this at any time will display CHECK II main menu.
- **abc/123** (keyboards). Touching this displays a keyboard you can use to name your samples.
- **Graffiti area.** Use the stylus to write the name in the center of the graffiti area. The characters will appear in the field as you write them. *See the PDA documentation for instructions on the use of the graffiti pad.*

NOTE



The row of icons at the bottom of the display includes standard options for the PDA. With the exception of the wireless communication status icons, these features are not used by the Datacolor CHECK II program.

Control Panel



At the bottom of the PDA are five (5) buttons called the “control panel”. Below are the functions:



Select/Measure Standard. Used to retrieve or measure a **standard**. Also used to enter a standard name BEFORE measuring the sample.



Print. Prints the active evaluation screen. *See Datacolor CHECK II User's Guide, for details on printer setup.*



Diskette (Save). Used to save data when the *Autosave* option is disabled.



Select/Measure Batch. Used to retrieve or measure a batch. Also used to enter a batch name BEFORE measuring the sample.



Return/Scroll Button. The silver button in the center includes three controls:

- Press the **top** button to *scroll forward* through the screens included in the display set.
- **Return.** Press the **inside** button to display the last evaluation screen.
- Press the **bottom** button to *scroll backward* through the display set screens.

See Datacolor CHECK II User's Guide for details on the display set feature.

NOTES

Routine Functions

Overview

This section covers instrument calibration, sample measurement, and color evaluations.

Instrument Calibration

When calibrating, you must simulate the conditions under which you are making measurements. If you are measuring with the stapler foot in place, it must be attached during calibration, and the black trap and white tile must be positioned against the bottom of the foot.

NOTES

When the calibration interval has fully elapsed, the instrument must be recalibrated to make a measurement.

See Datacolor CHECK II User's Guide, for instructions to calibrate the adjustable UV filter included with the Datacolor CHECK II PRO model.

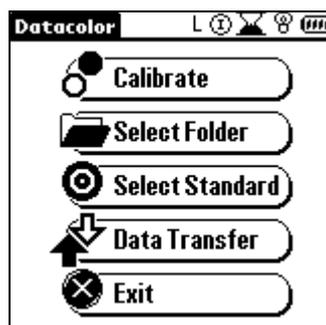
Calibration Requirements

- You will need the black trap and white tile to perform the calibration routine.
- If you are using the stapler foot assembly, you must attach the stapler foot to the instrument before calibrating.

Calibration Procedure

To start the calibration routine, do the following:

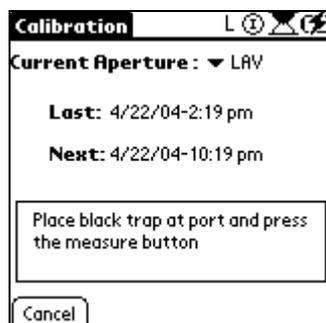
1. Tap the **Home** icon on the graffiti pad, to display the Datacolor CHECK II main menu.



TIP

The **Calibrate** option is only available from the Main Menu.

2. Tap the **Calibrate** option. The following screen displays.



3. Cover the black trap with the port opening, and press the **Measure** button. When it is finished, you are prompted to place the white tile over the port.

NOTE

The serial number on the screen should match the serial number of the white tile you are using.

4. Cover the white tile with the port opening, and press the **Measure** button. When finished, you will see a message that calibration was successful.

Calibration Interval

The hourglass icon  at the top of the screen indicates elapsed/remaining time for the calibration. The same information is also displayed in a text message when you open the calibration option.

WARNING

When the calibration interval has completely lapsed, **YOU WILL NOT BE ABLE TO MAKE A MEASUREMENT UNTIL YOU RECALIBRATE THE INSTRUMENT.**

This information refers to the aperture condition **currently selected**. You may need to recalibrate the instrument when you change the aperture selection.

Measuring Samples

Pressing the **Measure** button on the back of the unit at any time will immediately trigger a measurement, regardless of the program option currently active.

The measurement procedure is as follows:

- Position the stapler foot over the area to be measured. The color must completely fill the circle in the center of the stapler foot.
- Press the **RED** Measure button on the back of the instrument.

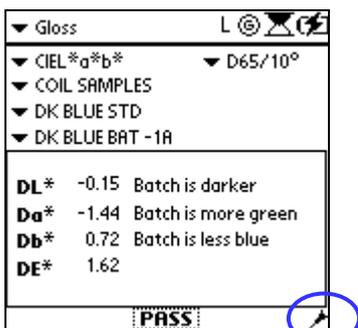
Measure Standard/Measure Batch

The **Measure/Select Standard**  and **Measure/Select Batch**  buttons on the Control Panel have several functions.

- To assign a name to the sample **before** the measurement is made.
- To retrieve a standard/batch previously stored.
- To override the next sample type in the measurement sequence. See “Sample Type” for details.

Sample Type

Each time you press the **Measure** button, the system automatically assigns a sample type, standard or batch, to the measurement. An icon in the lower left corner of the screen identifies the sample type that will be assigned to the next measurement.



: Indicates the next sample will be a Standard.

: Indicates the next sample will be a Batch.

Use the **Measure/Select Std** and **Measure/Select Batch** buttons on the Control Panel to override the measurement type to be assigned to the next sample. Below is an example:

- System expects next measurement to be a *Std*. You want to re-measure the last *batch* to be sure it is correct.
- Press the **Select Batch** button on the Control Panel.
- Remeasure the sample. It will be stored as a new *batch*. Results will be updated to use this measurement.

Sample Names

Every sample must have a name. The program automatically assigns a name to the sample **before** the measurement.

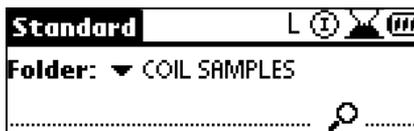
- Standards are numbered sequentially within a folder (STD 1, STD 2, STD 3, etc.).
- All batches assigned to a single standard are numbered in sequence (BAT 1, BAT 2, BAT 3, ...).

You can assign a custom name either before or after the measurement is made.

Naming Samples before Measurement

To name a Standard *before* measuring, do the following:

1. Press the **Measure/Select Standard** button  on far left of the Control Panel.



2. Activate the cursor on the name line by touching the line.
3. Tap the **abc** or **123** icon in the graffiti pad to display the keyboard, and enter a name.
4. Tap the **Close** icon in the bottom right corner to close the keyboard.



5. Place the stapler foot over the sample, and press the **Measure** button. The name you entered will be displayed for the standard.

To name a batch before measuring:

- Press the **Measure/Select Batch**  on the Control Panel, and repeat the procedure.

Naming Samples after the Measurement

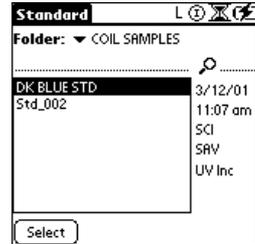
Sample names can be edited at any time. See *Datacolor CHECK II User's Guide*, for detailed instructions.

Storing and Retrieving Samples

Autosave is the default condition and every measurement is stored, in the folder that is *currently selected*. All batch measurements are attached to the standard that is active at the time of the measurement.

The information stored includes:

- Sample name
- Sample type
- Date/time of measurement
- Instrument settings (aperture setting, measurement condition (SCI, SCE or Gloss), etc.
- Spectral and colorimetric data
- Tolerances



Performing Color Evaluations

Overview

The evaluation screen is where you will do most of your work. At the right is a color evaluation screen.

TIP

If the evaluation screen is not displayed, press the **Return** button on the Control Panel to return to the last active evaluation screen.

From this screen, you can do the following:

- **Measure new samples.**
Simply press the **Measure** button.
- **Change the color evaluation being displayed.** Tap the down arrow (▼) next to **CIELab** for a list of selections. Tap on an evaluation in the list.
- **Change the Illuminant/Observer combination.** Tap the down arrow (▼) next to **D65/10** for a list of selections. Tap on an Ill/Obs combination in the list.
- **Change the standard or batch used.** Tap the arrow (▼) next to **DK BLUE STD** to retrieve or measure a different standard. Tap the arrow (▼) next to **DK BLUE BAT -1A** to change the batch selection.



Color Difference Results

Color Differences/Descriptors

Each color coordinate is identified by a letter—e.g., L*, a*, b*, etc. In this example, CIEL*a*b* color differences are displayed.

- The component color differences reported will indicate if the difference is positive (+) or negative (-).
- The exception is DE, which is always a positive number.

| | | |
|-------------------|-------|---------------------|
| ▼ CUSTOMER | | L ⓘ ⚙ ⚡ |
| ▼ CIEL*a*b* | | ▼ D65/10° |
| ▼ COIL SAMPLES | | |
| ▼ DK BLUE STD | | |
| ▼ DK BLUE BAT -1A | | |
| DL* | -0.15 | Batch is darker |
| Da* | -1.44 | Batch is more green |
| Db* | 0.72 | Batch is less blue |
| DE* | 1.61 | |
| PASS | | |

Pass/Fail

The Pass/Fail message indicates whether the batch falls within all of the color difference tolerances set for the standard.

Tap on **Pass/Fail**, to see the tolerance details.

Pass/Fail tolerances can be assigned to folders and standards

See *Datacolor CHECK II User's Guide*, for additional information on the Pass/Fail feature.

| Pass / Fail Details | | | |
|---------------------|------|------------------|-------|
| CIELAB | PASS | | |
| CIELAB D65/10° | | | |
| CIEL*a*b*-D65/10° | | | |
| | Max | Min | Batch |
| DL | 1.25 | -1.25 | -0.15 |
| DA | 1.50 | -1.50 | -1.44 |
| DB | 1.20 | -1.20 | 0.72 |
| DC | 1.10 | -1.10 | -0.08 |
| DH | 1.65 | -1.65 | -1.60 |
| DE | 1.65 | ---- | 1.61 |
| ----- | | | |
| Done | | Font: A A | |

Other Types of Evaluations

Spectral Data

At the right is an example of the spectral data output. The wavelengths of the visible spectrum, 400 – 700nm, are reported at intervals of 10nm. Next to each wavelength is the measured reflectance.

| ▼ CUSTOMER | | L ⓘ ⚙ ⚡ | |
|--------------------|-------|---------|-------|
| ▼ Reflectance data | | | |
| ▼ COIL SAMPLES | | | |
| ▼ DK BLUE STD | | | |
| ▼ DK BLUE BAT -1A | | | |
| NM | STD | BATCH | DELTA |
| 400 | 15.74 | 14.70 | -1.04 |
| 410 | 18.00 | 16.70 | -1.30 |
| 420 | 18.55 | 17.31 | -1.24 |
| 430 | 19.02 | 17.96 | -1.06 |
| 440 | 19.48 | 18.66 | -0.82 |
| 450 | 19.70 | 19.18 | -0.52 |

Indices

Datascolor CHECK II includes a large choice of indices that are used by specific industries. Typically, an index will evaluate one aspect of a sample such as *whiteness*, and calculate a value based on that property. The index options include whiteness, yellowness and gray scales, metamerism indices, optical density and contrast ratio (opacity).

See *Datascolor CHECK II User's* for a detailed specification for each index option.

Evaluation Screen Legend

This section provides a legend for all of the fields that appear on the evaluation screen. The selections in the fields displaying (▼) can be changed without leaving the screen.

The screenshot shows the evaluation screen with the following fields and controls:

- Display Set:** CUSTOMER
- Current Evaluation:** CIELabCH
- Active Folder:** COIL SAMPLES
- Active Standard:** DK BLUE STD
- Active Batch:** DK BLUE BAT 1L
- Illuminant/Observer:** D65/10°

| | STD | BATCH | DELTA |
|-----|--------|--------|--------|
| L* | 39.37 | 67.22 | 27.85 |
| a* | -8.22 | -40.42 | -32.20 |
| b* | -19.42 | -31.45 | -12.04 |
| C* | 21.08 | 51.22 | 30.14 |
| h | 247.05 | 217.89 | -16.55 |
| DE* | | | 44.25 |

Controls below the table: SR GC

Callouts from the left:

- Batch specular ≠ Std specular
- Strength Adjustment Enabled
- Gloss Compensation Enabled
- Next Sample Type to be Measured

Display Set. A display set is a group of preprogrammed evaluation screens.

Current Evaluation. Identifies the evaluation displayed. Tap the down arrow to view the available choices.

When you select a different evaluation, it is displayed using the current standard and batch data.

Active Folder. Identifies the folder open currently. When you select a different folder, the standard and batch selections are cleared.

The screenshot shows the evaluation screen with the dropdown menu for Current Evaluation open, displaying the following options:

- CIELabCH
- CMC
- CIE2000
- FMC II
- Hunter Lab
- PQS II
- XYZ Data
- Reflectance data
- CIE L*a*b* - Plot
- CIE LCH - Plot

Active Standard. The standard used in the current evaluation. When you select a different standard, no color differences will be displayed until you select a batch.

Active Batch. The batch used in the current evaluation. When you select a different batch, the data displayed are based on the new batch selection.

NOTE

You can only display the evaluation data for one batch at a time.

Illuminant/Observer. Identifies the Illuminant and Standard Observer data used for the evaluation displayed.

Next Sample Type. This identifies the sample type, standard or batch, to be assigned to the next measurement.



Next sample will be labeled a standard.



Next sample will be labeled a batch.

You can override this assignment by pressing the **Select/Measure Standard** or **Select/Measure Batch** buttons on the Control Panel.

Gloss Compensation Enabled. The evaluation is based on measurements corrected for gloss differences (*when disabled this icon does not display*).

Strength Adjustment Enabled. The evaluation is based on a batch measurement that has been adjusted for strength (*when disabled this icon does not display*).

Batch Specular \neq Std Specular. The specular port settings (SCI/SCE/Gloss) for the standard and the batch must be the same in order for the color evaluation to be valid. When the specular port selection for both samples is not the same, this icon displays as a warning that the evaluation displayed ***is not valid***.