Datacolor ColorReader Spectro

Model CRS100

User Guide

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Datacolor ColorReader Spectro

Introduction

The Datacolor **ColorReader Spectro** model number CRS100 is an affordable, handheld, Bluetooth connected device designed for paint retailers.

You can use Datacolor ColorReader Spectro to quickly and accurately measure samples to produce custom color matches.

Easy integration with Datacolor Paint software or your own POS software, this solution reduces your cost of operation and increase your profitability.

Manufactured:

Datacolor Technology (Suzhou) Co., Ltd. No. 288

Shengpu Road, Suzhou Industrial Park Export

Processing Zone B.

Suzhou, Jiangsu 215021

P.R. China

Datacolor ColorReader Spectro General Information

Power Source

Datacolor ColorReader Spectro Model DC10-1 has a rechargeable lithium battery. The battery is charged using the micro USB cable included in the package.

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 Optical Configuration Colorimetric Data Replacement Parts Device Markings

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

45°/0° type

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

White calibration slide

Several markings on the outside diameter of the unit includes the following information:

- • Instrument Model

- • Ratings
- • Compliance and certification information

Serial Number

The serial number is programmed into Datacolor ColorReader Spectro and is displayed on the side panel display during product startup.

Instrument Maintenance Safety Warnings

There are no user-serviceable parts for this equipment.

Caution

If any of the following conditions exist, disconnect the USB cable:

- The USB cable is damaged.
- 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 connecting the device to charge.
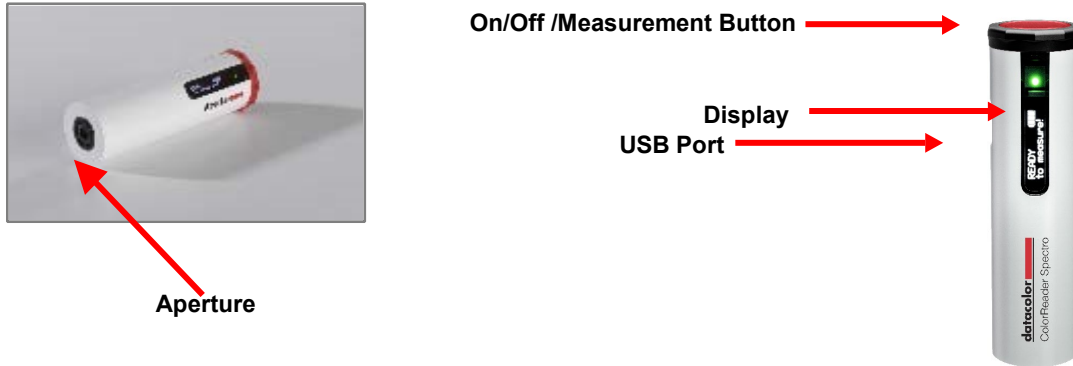
Getting Started

What's in the Box?

The product includes the measuring device and a carrying case that houses the accessories.

Accessories

USB charging cable

Calibration Slide
(located in sleeve inside the case)

Instrument Controls and Indicators

This section identifies all controls and indicators on the device,

On/Off /Measurement Button

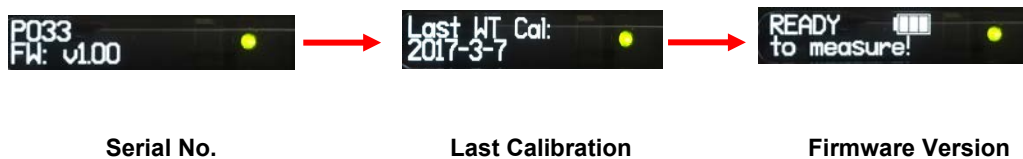**Display**
USB Port

Aperture

On/Off and Measurement Button

- Press the button to activate the device. The aperture at the bottom will flash.
- Press the button to measure a color.
- To turn off the device, press and hold the button until the display goes blank.

Display

At start-up, the screen briefly displays the serial number, the firmware revision number, and date of the most recent calibration. If the calibration has not elapsed, it will report that it is ready to measure.

Serial No.   **Last Calibration**   **Firmware Version**

Battery Information and LED Indicator

Datacolor ColorReader Spectro is equipped with a rechargeable lithium battery. A micro-USB cable is provided to charge the unit. When fully charged, the charge is good for 500 measurements.

A battery icon displays the remaining battery life. A lightning bolt appears next to the battery icon when the device is connected with the USB cable to a power source.

An LED indicator displays the current state of the device. *See Status LED for details.*

Cable Connections and Instrument Charging

Datacolor ColorReader Spectro has a micro USB port and a micro USB cable for charging To charge:

- Plug the small end of the USB cable into the device.
- Plug the other end into a USB port on a computer or adapter.

Status LED

An LED indicator identifies the current state of the unit. Below is a list of possible instrument states:

LED Color	Instrument State
Off	• Device is not powered and is not charging
Green	**Solid** • Device is **On** and battery life is *greater than 10%* • Device is charging (refer to battery icon for charge level when unplugged).
Amber	**Slow blink** • Device is not being charged and battery life is *less than 10%*

Sleep Mode

Datacolor ColorReader Spectro will go to sleep when it is inactive for more than 5 minutes.

Calibration

Calibrate the device every 8 hours to account for any changes in the device over time. This ensures that the measurements remain consistent over time. The Datacolor ColorReader Spectro is calibrated through the attached software (please see software for calibration procedures).

Appendix

Instrument Specifications

	ColorReader Spectro
Instrument Type	45/0 Spectro
Geometry Output	45/0 Mode or d8 SCI Mode
Spectral Analyzer	8 Channel sensor with dual illumination
Repeatability (Max on White Tile)	0.03 SD / 0.10 Max CIE2000
IIA *(32 Master Standards)* *Based on typical results to Datacolor Master Instruments*	45/0 Mode IIA CIE2000 0.3 avg / CIELAB 0.4 avg SCI Mode IIA CIE2000 0.4 avg / CIELAB 0.6 avg
Wavelength Range	400nm - 700nm
Aperture Size	6 mm
Reporting Interval	10 nm
Battery Type & Capacity	Lithium Polymer Rechargeable Capacity more than 500 measurements 5 to 40 degrees Celsius up to 85% RH, non-condensing
Dimensions	Height 105.2 mm / Diameter 30.2 mm
Data Interface	Bluetooth