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Quick Start Guide

DF 110

datacolor 

Dataflash™ Quick Start (September 2003) Part #4230-0385M ENG

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Dataflash 110

The Dataflash is among the newest generation of bench top color measuring instruments, incorporating state-of-the-art CMOS integrated circuit technology in the instrument design. It is intended for use as a device for measuring, specifying, and evaluating color in both laboratory and retail (Point-of-Sale) settings.

Below is a summary of the features included with Dataflash instruments:

- Pulsed xenon light source
- Automated specular port
- Drawer for storage of calibration tiles



WARNING

Refer to the "Electrical and Environmental Requirements" section of the Dataflash 110 User's Guide before connecting your Dataflash instrument.

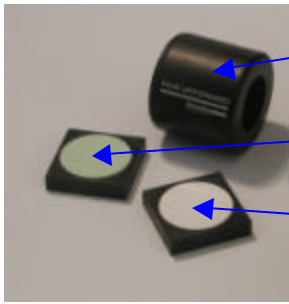
Summary of Specifications

FEATURE	DESCRIPTION	PURPOSE/BENEFIT
Integrating sphere	Barium coated sphere.	Industry standard.
Measurement Geometry	D/8° geometry, specular component included (SCI) or excluded (SCE).	Provides for more uniform measurement of samples with irregular surfaces.
SP2000 Spectral Analyzer	Proprietary dual-channel holographic grating. 256-photodiode linear arrays used for both the reference and sample channels.	Dual channel design provides continuous monitoring of sample illumination and compensates for changes. 256-photodiode array enhances the precision of the measurement.
Light source	Pulsed xenon flash lamp	Filtered to provide D65 illumination including UV component.
Wavelength Resolution	2nm	Reflectance/transmittance data is measured at 2nm intervals from 400nm – 700nm.
Effective Bandwidth	10nm	10nm data enhances the measurement precision and the accuracy of the results.

Accessories & Aperture Plates

Accessories

All models come with the following standard accessories:



Black Trap

Green Tile

White Tile

Power cable

Serial cable

USB cable



Aperture Plates

Each unit is fitted with a single aperture, chosen from among three sizes. See *Dataflash 110 User's Guide* for aperture specifications.



Cables

The Dataflash requires the use of two cables: a power cable and a cable (either Serial or USB) that connects the instrument to the computer. The connections for these cables are found on the back of the instrument.

USB Cable



Serial Cable

USB Cable Connections



Serial Cable Connections



Cable Connections

A six-foot power cable is provided with the instrument. Power is supplied to the back of the unit via a 3-prong male connector.

1. Plug the female end of the power cord into the power receptacle on the rear panel of the instrument.
2. Insert the plug into a standard AC outlet.
3. Connect the male connector on the instrument cable to the female connector on the rear panel of the instrument. This is done using either the serial cable or USB cable.
4. Connect the instrument to the computer.



NOTES

USB Cable. To use a USB port, you must load software onto the computer. See the insert and the CD USB Drivers and Documentation, included with the instrument, for the required files and installation instructions.

Serial Cable. If you are using a serial cable and there is more than one serial port on the computer, make a note of the port being used. You may need to enter this information into the program.

5. Tighten each connection securely to ensure proper signal.

Refer to the Dataflash User's Guide - Appendix for a description of the RS-232C connector pin assignments, and for instructions on connecting to a USB port.

Powering Up

The status panel for the Dataflash 110 is shown at the right.

- **Ready.** Instrument is ready for use.
- **Spec Inc.** The specular port is closed, and all measurements include the specular reflection from the sample.

To start using the Dataflash, do the following:

1. Verify all cable connections have been made. The AC power cord should be plugged into an outlet. Either the USB or serial cable should be attached to the instrument and host computer.
2. Turn on the power switch. This is the red switch located on the back of the instrument. When power is applied, all mechanisms are automatically reset. The lights on the status panel will flash briefly.



NOTE

If the instrument power is not turned on before a Datacolor program is launched, you may receive an error message.

3. When the *Ready* light remains on, your instrument is ready to use.
4. Launch a Datacolor program.
5. Prepare to calibrate the instrument. You will need the black trap, white calibration tile, and green diagnostic tile.

Instrument Calibration

A black trap, white tile and green tile are provided with the instrument.



- The black trap and white tile are used each time the instrument is calibrated.
- The green tile is used to perform an optional diagnostic test.

NOTE

We recommend that you calibrate the instrument every 8 hours. *Please refer to your software documentation for specific calibration instructions.*

The documentation for the Datacolor applications program you are using includes instructions regarding software setup and instrument calibration procedure.