DATACOLOR 45 Quick Start Instructions

Thank you for purchasing a Datacolor 45 series Portable Spectrophotometer (45G CT, 45G, or 45S). This Quick Start Guide has been provided to get you quickly familiarized with the Datacolor 45 instrument. Please refer to the User Guide CD for more in-depth information.

Introduction

The Datacolor 45 Portable Spectrophotometer can be used in the following configurations:

1. Stand-Alone

The instrument can be used as a stand-alone device without any connection to the Datacolor Tools program. In this configuration, you can calibrate the instrument and make measurements of samples to obtain color difference information.

2. Connected to Datacolor Tools

The instrument can be connected to the Datacolor Tools program and can be used in these 2 basic modes:

a) PC Access Mode – In this mode the instrument can send standard and batch data to Datacolor Tools and receive standard and tolerance data from Datacolor Tools. The instrument is used to gather data which will eventually be uploaded to the software.
b) Tethered Mode – In this mode, the Datacolor Tools program uses the instrument to measure samples (standards or batches) directly from the software with the data immediately available for analysis. The Datacolor Tools program controls the operation of the instrument.

This document will provide basic information on getting started with the Datacolor 45 in stand-alone mode. A complete User Guide in PDF form is contained on the CD accompanying this Quick Start Guide.

Charging the Instrument

Please make sure that the Datacolor 45 instrument is fully charged before using. The instrument does not charge through the USB connection, so it is necessary to use the AC Adaptor to charge the instrument.

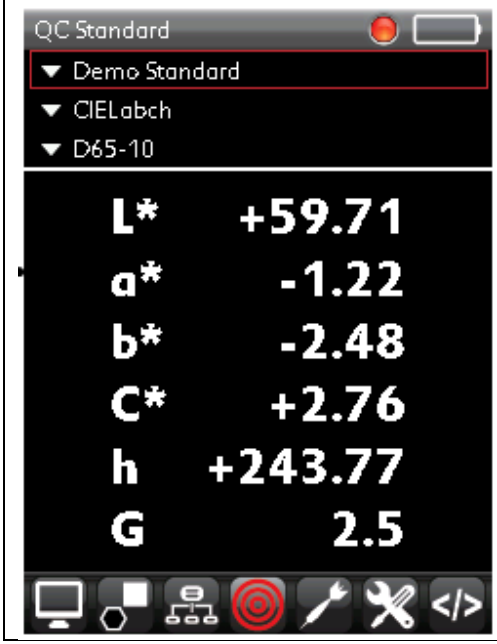
Each AC Adaptor comes with a collection of plugs for connecting to power supplies in different regions. Select the appropriate plug for your region and place it into the charger head by snapping the appropriate plug in place. Make sure that the plug is secure before plugging into your Power Outlet.

! NOTE: The Power Switch at the back of the instrument must be in the ON position to accept a charge. The instrument will not charge when turned OFF.

Stand Alone Operation

Starting the Instrument

To start the instrument, move the switch at the back of the instrument from the “0” position to the “|” position. The instrument will boot up and the following screen will be displayed:

	This is the main QC screen. The top section is the where you can select standards, output displays and the illuminant/observer. The middle section is where the output is displayed. In this start-up screen, the absolute CIEL*a*b* data for all models and gloss value for the 45G CT or 45G for the standard is displayed. The instrument will have one standard named “Demo Standard” stored. This display will change depending on whether you are in standard mode or batch mode. In standard mode, you will see absolute data and in batch mode you will see delta or difference data. The bottom section contains the “live bar” which contains a horizontal list of icons which control and start various program options. You can traverse the live bar by using the left and right arrows on the instrument.

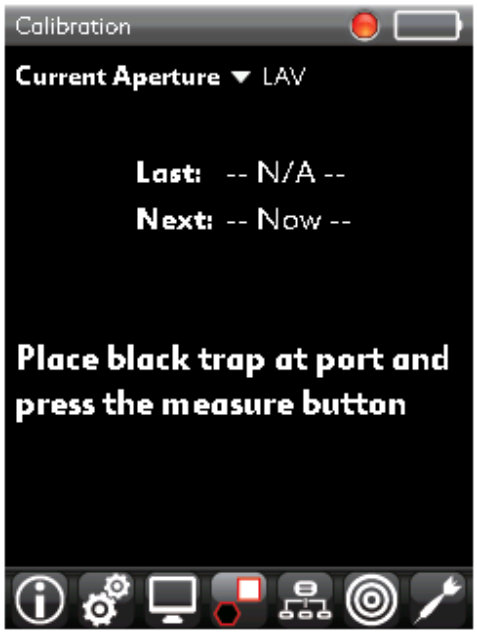
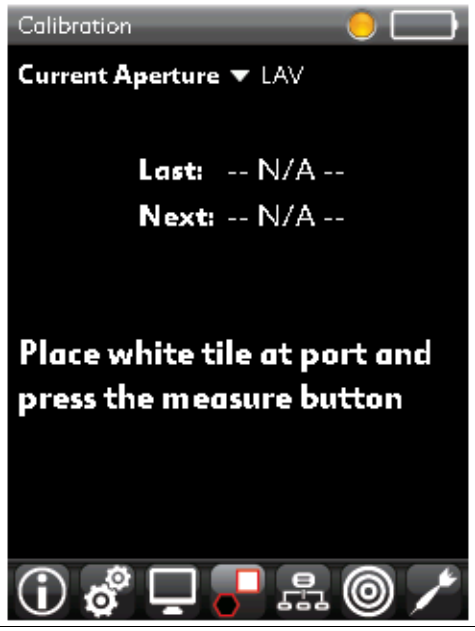
Standard Mode and Batch Mode

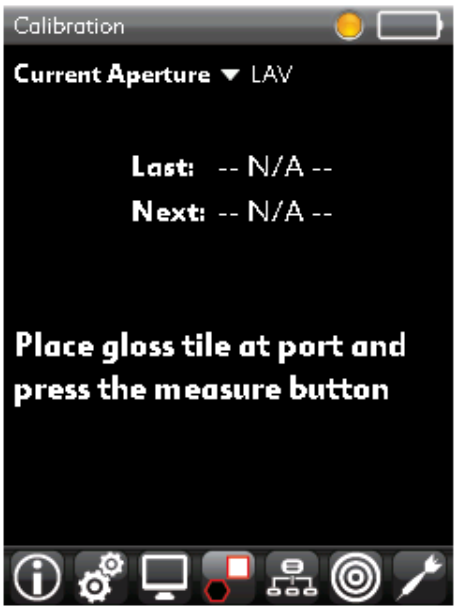
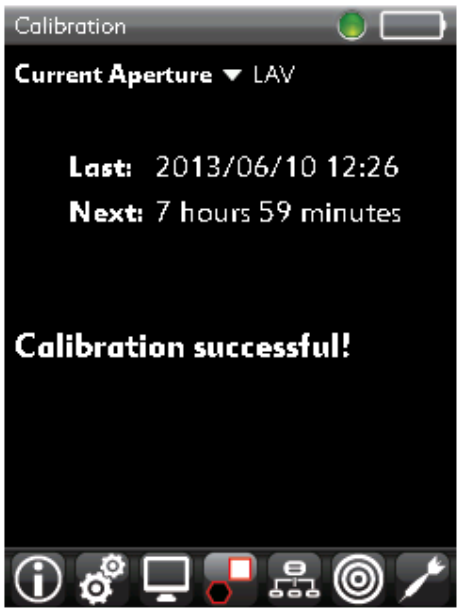
To simplify measurement the instrument has 2 basic modes for measurement. These are standard mode and batch mode.

	**Standard Mode** – The target icon represents standard mode. When this mode is selected on the live bar, all measurements taken will be considered to be standards.
	**Batch Mode** – The dart icon represents batch mode. When this mode is selected on the live bar, all measurements taken will be considered batches to the current standard.

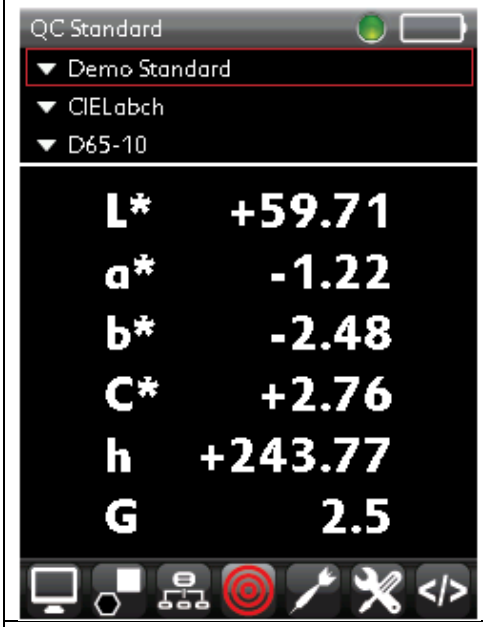
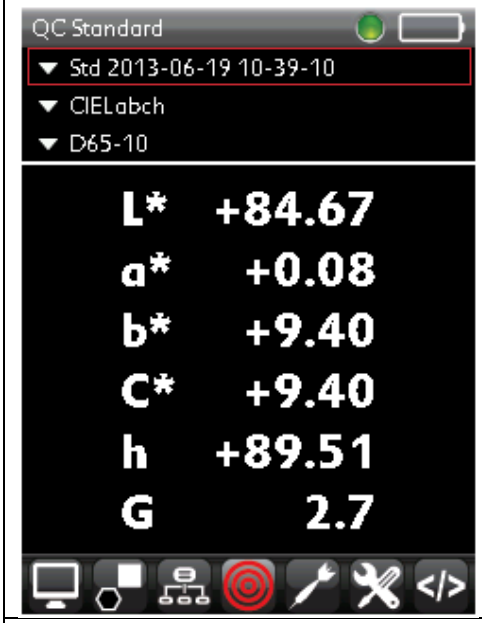
Instrument Calibration

The instrument must be calibrated before taking measurements. Calibration involves measuring a black trap, a white tile and for gloss units, a black tile. Each instrument also comes with calibration stand.

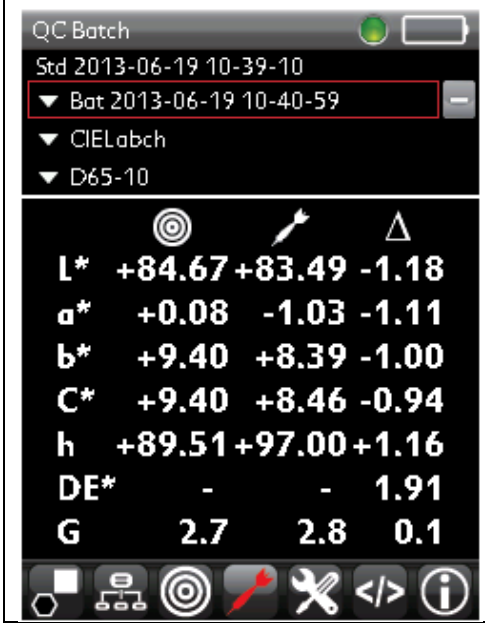
	Select the calibration option by selecting the calibration icon in the live bar.
	The calibration screen is displayed. Notice that the calibration indicator in the title bar is red indicating that the instrument is not calibrated. The last calibration time is shown as well as the time for the next calibration. To begin the calibration, either place the instrument on the black trap on the tray or position the instrument and black trap on the stand. Press either of the measurement buttons on the instrument to take the measurement.
	After the black trap is measured, the program will ask for the white tile to be measured. To measure the white tile, either place the instrument on the white tile on the tray or position the instrument and white tile on the stand. Press either of the measurement buttons on the instrument to take the measurement.

	If the gloss option is included (45G CT or 45G), the program will ask for the gloss tile to be measured. If the gloss option is not included (45S), this screen will not display. To measure the gloss tile, position the instrument and gloss tile on the stand. Press either of the measurement buttons on the instrument to take the measurement.
	If calibration is successful, the screen shown here will be displayed. Notice that the calibration indicator in the title bar is now green indicating that the instrument is calibrated. The last calibration date/time is the current date/time. The next calibration date/time is now shown. This is based on a calibration interval of 8 hours.

Measuring a Standard and a Batch

	To measure a new standard, select the standard icon from the instrument live bar.
	The screen will display the data for the current standard. If this is a new instrument, the current standard will be named "Demo Standard". The data displayed is the absolute L*a*b* data for the standard. To measure a new standard, place the instrument on the standard and press either of the instrument measurement buttons.
	After the measurement is taken, the display will update with the new standard's absolute L*a*b* data. The name of the new standard is "Std 2013-06-19 10-39-10" which is an auto name based on the current date and time. The standard naming method can be selected in the Options screen. If you want to measure another standard, place the instrument on the standard and press the measurement button. As long as you remain in standard mode, each press of the measurement button will measure and create a new standard.
	If you want to measure a batch to the current standard, you must select the batch icon in the live bar.

After selecting the batch icon, the batch measurement screen will display. To measure a batch to the current standard, place the instrument on the batch sample and press the measurement button.



After the batch has been measured, the output screen will be displayed.

This display screen shows the absolute colorimetric data for the standard and batch and also the delta or color difference data between the standard and the batch. If the unit has the gloss options, the gloss data will also be shown.

The batch name is “Bat 2013-06-19 10-40-59” which is an auto name based on the current date and time. The batch naming method can be selected in the Options screen.

To measure a second batch, place the instrument on the batch sample and press the measurement button. As long as you remain in batch mode, each press of the measurement button will measure and create a new batch.

For more complete information, and for operation with Datacolor Tools, please refer to the Datacolor 45 User Guide CD included with this package, or refer to our website at **www.datacolor.com**