
Innovatint version 4 Supported Spectrophotometers

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1. Spectrophotometers

BYK 3Angle	HunterLab UltraScan XE
BYK Auto-Match III	Macbeth 2020
BYK Auto-Match IV	Macbeth 2020+
BYK Mac	Macbeth 2025
BYK-Gardner Spectro Guide (45/0)	MACBETH COLOR-EYE 2145
BYK-Gardner Spectro Guide (d/8)	MACBETH COLOR-EYE 2180
BYK-Gardner Spectro2Guide (d/8)	MACBETH COLOR-EYE 3000
BYK-Gardner Spectro2Guide (45/0)	MACBETH COLOR-EYE 7000
BYK-Gardner Spectro2Guide Pro 45/0	MACBETH COLOR-EYE 7000A
BYK-Gardner Spectro2Go XS	MACBETH COLOR-EYE XTH
Chroma Sensor 3 (45/0)	MCS500: DC/Zeiss 45
Chroma Sensor 3 (d/8)	Minolta CM-2002
Chroma Sensor 45	Minolta CM-23d
Chroma Sensor 5	Minolta CM-2300d
Datacolor Adam	Minolta CM-25d
Datacolor 20D	Minolta CM-2500d
Datacolor 110	Minolta CM-26d
Datacolor 110P	Minolta CM-2600d
Datacolor 200	Minolta CM-3220d
Datacolor 245	Minolta CM-3600a
Datacolor 400	Minolta CM-3600d
Datacolor 500	Minolta CM-3610a
Datacolor 500UV	Minolta CM-3610d
Datacolor 550	Minolta CM-3700a
Datacolor 600	Minolta CM-3700d
Datacolor 650	Minolta CM-36d
Datacolor 800	Minolta CM-36dG
Datacolor 850	Minolta CM-36dGV
Datacolor ColorReader Spectro*	Minolta CM-503c
Datacolor Spectro 55	Minolta CM-503i
Datacolor Spectro 700	Minolta CM-508c
Datacolor Spectro 700UV	Minolta CM-508d
Datacolor Spectro 750	Minolta CM-508i
Datacolor Spectro 750UV	Minolta CM-512 m3
Datacolor Spectro 1000	Minolta CM-525i
Datacolor Spectro 1050	Minolta CM-600d
Datacolor 45IR	Minolta CM-700d
Datacolor 45G/45	Nix Spectro 2
Datacolor CHECK and CHECK 3	Variable Spectro 1
Datacolor Elrepho	Variable Spectro 1 Pro
Datacolor Elrepho 3000	X-Rite 552



INNOVATINT SUPPORTED SPECTROPHOTOMETERS

Datacolor Elrepho 450	X-Rite CF57
Datacolor M2009	X-Rite CFS57 (2x)
Datacolor Mercury	X-Rite CF58
Datacolor Microflash 200d	X-Rite CFS58
Datacolor Microflash 45	X-Rite Ci4100
Datacolor Microflash 45 IR	X-Rite Ci4200
Datacolor Mixflash	X-Rite Ci4200UV
Datacolor R9800	X-Rite Ci51
Datacolor Simulus 2000 ++	X-Rite Ci52
Datacolor Spectraflash 300	X-Rite Ci61
Datacolor Spectraflash 300 UV	X-Rite Ci61 +RTL
Datacolor Spectraflash 350-X	X-Rite Ci62
Datacolor Spectraflash 450	X-Rite Ci64
Datacolor Spectraflash 450-X	X-Rite Ci7500
Datacolor Spectraflash 500	X-Rite Ci7600
Datacolor Spectraflash 600	X-Rite Ci7800
Datacolor Spectraflash 600+	X-Rite Color i5
Datacolor Spectraflash 600-X	X-Rite Color i7
Datacolor Spectraflash 650-X	X-Rite i1Paint
Datacolor Textflash 2000	X-Rite RM400
Datacolor Textflash 3880	X-Rite RM425
Datacolor Textflash 3881	X-Rite RM61
Datacolor Textflash 3890	X-Rite SP52
Datacolor Uniflash	X-Rite SP62
Dataflash 100	X-Rite SP64
Dataflash 110	X-Rite VS205
Dataflash 2000	X-Rite VS450
Dataflash 250 RS	X-Rite VS3100
Dataflash 80	X-Rite VS3200
HunterLab LabScan XE	Simulation (Vibrantz simulation spectro)

** Known limitation: Connectivity issues related to Bluetooth communication with Datacolor ColorReader devices may occur depending on the hardware setup. Such issues are outside the scope of Innovatint software and its responsibility.*



2. Colorimeters

Colorimeter	Connection type	Operating system
Datacolor Select	Cable	Windows
Datacolor ColorReader Pro*	Bluetooth	Windows
X-Rite Capsure	Bluetooth	Windows
Colorix Color Catch3	Cable	Windows
Colorix Nano	Bluetooth	Windows
Colorix Nano2	Cable	Windows
NIX	Cable	Windows
NIX Pro	Cable	Windows
NIX Pro 2	Bluetooth	Windows

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3. Color Data Classes and Device Compatibility in Innovatint

Measurement Devices in Innovatint

Innovatint can be connected to different types of color measurement devices:

- **Sphere spectrophotometers (d/8° or similar geometry)**
- **45/0 spectrophotometers**
- **Colorimeters**

Although all these devices measure color, they do not measure it in the same way. For this reason, Innovatint treats measurement data from different device types separately.

What Is a Color Data Class?

In Innovatint, all measurement data is stored in the database according to a **color data class**.

A color data class defines:

- The measurement geometry (e.g., Sphere, 45/0)
- The physical measurement principle (spectral vs. colorimetric)

Each device type is assigned to its own class:

- All **Sphere spectrophotometers** share a common Sphere class.
- All **45/0 spectrophotometers** share a common 45/0 class.
- Each **colorimeter** has its own individual class.

Color data from one class is not automatically compatible with data from another class.



Why Classes Cannot Be Used Interchangeably

Spectrophotometers (Sphere and 45/0)

Spectrophotometers measure **spectral reflectance data** across the visible wavelength range

Although Sphere and 45/0 geometries differ, their data is relatively close in structure. Innovatint includes a proprietary conversion model that allows:

- **45/0 measurements to be converted into Sphere data**
- Gloss level must be provided for accurate conversion

This conversion makes it possible, in most cases, to use 45/0 devices in systems that rely on Sphere reference data.

Colorimeters

Colorimeters do **not** measure full spectral data. Instead, they measure color values through filtered sensor responses designed to approximate human vision.

Because of this:

- Colorimeter data is not spectral data.
- It cannot be converted into spectrophotometer data.
- Each colorimeter model behaves differently.
- Each colorimeter therefore requires its own dedicated class.

For these reasons, colorimeter measurements cannot be used interchangeably with spectrophotometer measurements.



Impact on Search Closest Color

For the **Search Closest Color** function in Innovatint to work:

- The database must contain **reference measurements**
- These reference measurements must be stored in the **same class** as the measuring device
- Reference data must be entered using Innovatint LAB software

Spectrophotometers

- If the database contains Sphere reference data, Sphere devices will work directly.
- 45/0 devices can:
 - Use their native 45/0 class (if reference data exists), or
 - Convert to Sphere (if gloss is provided), provided Sphere reference data exists.

Colorimeters

With colorimeters:

- **Color matching is not possible**
- Only **Search Closest Color** is available
- Search Closest Color works only if:
 - **The database contains reference data in the specific class of that colorimeter model**

If no reference data exists in that specific class, no results will be found.



INNOVATINT SUPPORTED SPECTROPHOTOMETERS

Summary of Differences

Feature	Sphere Spectrophotometer	45/0 Spectrophotometer	Colorimeter
Measures spectral data	Yes	Yes	No
Own data class	Sphere class	45/0 class	Individual class per device
Convertible to Sphere	—	Yes (with gloss)	No
Color matching possible	Yes	Yes	No
Search Closest requires matching class data	Yes	Yes	Yes