

# MAMBO

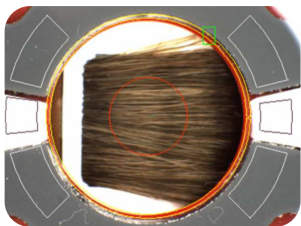
## Calibrated Hair Color Measurement



Instant Color  
Matching



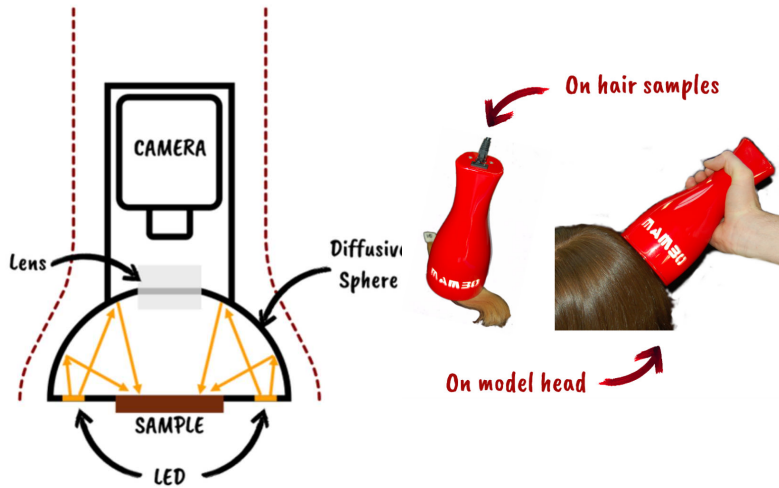
Auto-calibrated  
Measurement



Hand-held  
System



Whether it be for covering grey hair or improving your hair style, coloration has been on a growing trend for the past few years. With it came the development of hair care treatments that would preserve the coloration against external damages and improve color retention. Measuring the hair color with precision is a necessity to quantify the efficiency of all of those products.



The **MAMBO** takes advantage of its specific geometry – a diffusive sphere and a stable LED illumination - to always take color measurements in the same and repeatable conditions. Moreover, the color calibrated 12-bit camera enables a high precision comparison of the color of the hair fibers measured and those in its databases without any subjectivity.

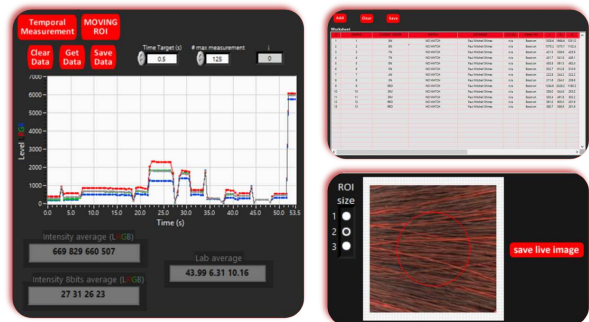
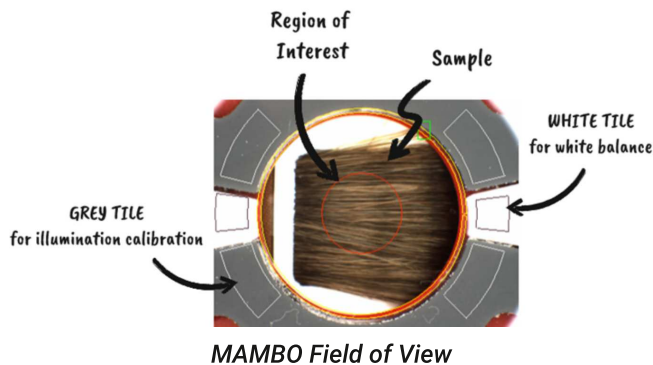
## SPECIFICATIONS

<b>VISION</b>	GigE Color Camera 12-bits depth Color Calibrated White LED Diffusive sphere
<b>TARGET</b>	On Head or on Swatch Require a minimum of hair density
<b>SOFTWARE</b>	MAMBO Software
<b>ACQUISITION</b>	Instantaneous measurement Region of Interest diameter = 10 mm In-vitro or In-vivo Automatic and in-real time calibration
<b>DATA</b>	Personalized color database RGB color values CIE* Lab 1976 color values DE* comparison Excel Export
<b>SYSTEM</b>	Size : 12" x 4"x 4" (30 cm x 10 cm x 10 cm) 110/220 VAC 50/60 Hz

## MAMBO SOFTWARE

A specific calibration allows the **MAMBO** software to directly measure the  $L^*a^*b^*$  color values. It is then possible to calculate the  $DE^*$  value that quantifies the perceived distance between 2 colors. This tool is of great use as a metric to measure, for example, hair color degradation.

You can also input your own personalized color database to adapt the analysis provided to your own products.



With the **MAMBO** Software, you can easily :

- Get an instantaneous color measurement of your hair swatch in RGB and CIE\*Lab
- Compare your sample color to a database or a color reference using the  $DE^*$  values
- Input your own color database
- Export all your data including images, graphs and tables