





Color shades will no longer be a guessing game !

# THE PRODUCT

- Rayplicker COBRA spectrophotometer
- Rayplicker Vision software
- Borea Connect platform

Two type of information are essential to transmit to the laboratory for a perfect fitting in the mouth:

- The optimal **dimension** is scanned using your intraoral scanner.
- The **color** is now recorded and then transmitted thanks to the spectrophotometer and the Rayplicker Vision software.

# THE RESULT

For the first time, you benefit from an all-digital workflow and its many advantages.

# **OTHER BENEFITS**

The instantaneous transmission of the color into the patient file of the Rayplicker Vision software, its **reliability** and its **reproducibility** make Cobra an essential tool for everyone.

The easy communication with your laboratory via the free Borea Connect platform ensures simple and quick follow-up of your dental prosthesis orders.



RAYPLICKER

Borea Connect

The Rayplicker COBRA module Vhy choose Rayplicker?

# A VALIDATED ADN APPROVED TECHNOLOGY THE SPECTROPHOTOMETRY

A spectrophotometer allows the acquisition of spectral data at any point of the tooth.

The wavelengths are analyzed and then compared to a database in order to deduce the color of a tooth.

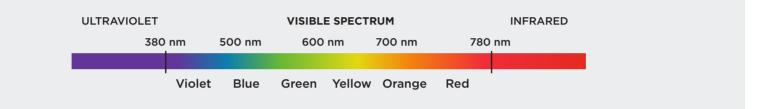
The Rayplicker Cobra performs an analysis in the visible spectrum of 380 nm and 780 nm.

# "

« Intraoral scanners (...) remain unreliable because they have a narrow choice of colors an yield results that are significantly different from those of spectrophotometers. As a result, they should not be used for deciding the shade for a final restoration.

Spectrophotometers are the best-adapted tools for shade matching since they record the L\*, a\*, and b\* values of one color.

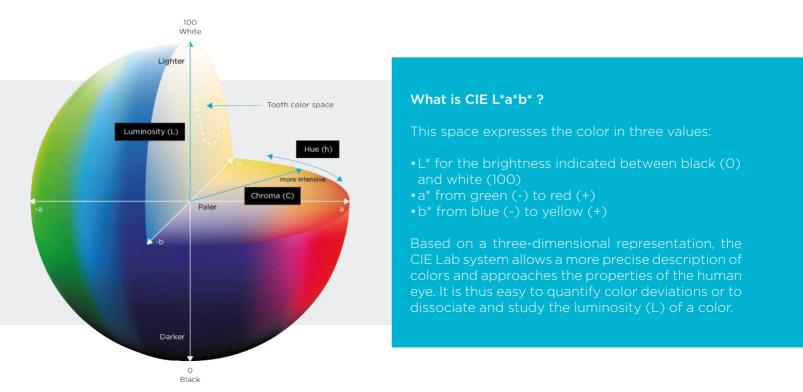
«A comparative in vivo study of new shade matching procedures» The International Journal of Computerized Dentistry



## THE COLOR COORDINATES CIE L\*a\*b\* et L\*C\*h

CIE L\*a\*b\* coordinates are a colorimetric standard defined by the Commission Internationale de l'Éclairage (CIE) in 1976. It allows a multitude of functionalities and standardized communication with your laboratory.

- Calculation of colorimetric differences (ΔE).
- Quantification of bleaching treatments.
- Editing help.
- Comparison of natural tooth and prosthesis in the mouth.
- Compatibility with manufacturing recipe applications.

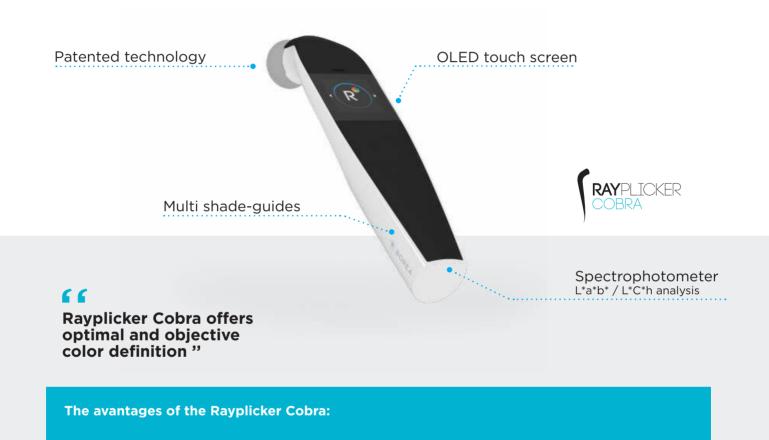


Why choose Rayplicker?

# BECOME OBJECTIVE AND GAIN IN COMFORT WITH AN ACCURATE AND REPEATABLE SOLUTION

From the simplest monochrome prosthesis to the superb multi-layered set, Rayplicker Cobra potentiates each of your choice of materials and optimizes your aesthetic experience to transmit **true information** to your laboratory in a single simplified gesture.

A multipoint spectrophotometer ensures working comfort and serenity. Indeed, manual shade guides, although mostly used, have many limiting factors. An analysis performed with a shade guide is influenced by **human characteristics** and **external factors**. This act is subjective because it depends on the ocular physiology, the experience and the interpretation of each one. Added to this is the influence of the surrounding light, the color of the walls and even the clothes of your patients.



- Ergonomics: Light weight and compact autocalibrated device. Remote video stream.
- Accuracy: Multispectral analysis. Cmos sensor 648 x 648 px.
- Digital: 100% integrated, objectivity and traceability.
- Hygienic: Sterilizable tips, induction charging.
- Educational: Easy communication with your patients.



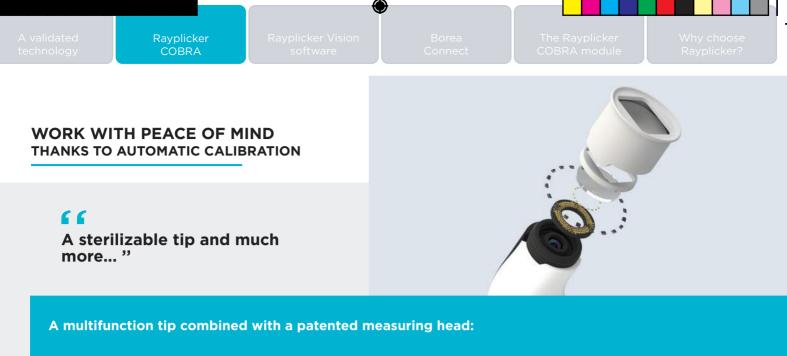
Realize a complete shade taking in a few seconds!



Delete scraps for color defects



Optimise your time and return on investment



- Accuracy: It allows automatic control of all your acquisitions.
- Objective: It frees from all external light disturbances.
- **Assisted:** It ensures precise positioning of the device on the tooth and control of the working distance for perfect acquisition.
- Hygienic: It eliminates all cross-contamination and is designed for 100 sterilization cycles!

# A COMPLETE MAPPING OF THE TOOTH IN ONE ACQUISITION



### Shade analysis under different stratifications:

Polarized photo, global analysis, three-part, nine-part, detailed mapping.

Instant conversion to different reference shade-guides:

- VITA classical A1-D4®
- VITA Toothguide 3D-MASTER® with Bleached Shades
- VITA Bleachedguide 3D-MASTER<sup>®</sup>
- IVOCLAR Chromascop
- SHOFU Vintage
- KURARAY Noritake
- ...





# **PRODUCT HIGHLIGHTS:**

- Positioning assistance with a live video on the device screen and on your computer screen.
- A real didactic and motivational experience with your patients.
- Improve the brand image of your dental clinic.



## **RAYPLICKER VISION SOFTWARE** ANALYSIS, MANAGEMENT, TRACEABILITY

The **Rayplicker Vision** software allows the recovery, analysis and archiving of shade cases obtained with the Rayplicker Cobra.

This complementary tool to the spectrophotometer makes it possible to centralize patient aesthetic data (shade analysis, photos, comparison and bleaching reports, etc.).

This software is installed in the dental office and/ or the laboratory in order to deepen the study and analysis of the most relevant data for the production of dental prostheses (**luminosity**, **chromaticity**, **hue**, **translucency**). "

Realize colorimetric analyzes and optimize your patient data management.

## The avantages of the Rayplicker Vision:

- Free and open software available to everyone (dental office and laboratory).
- No additional cost of operation or update.
- The possibility of **multi-station access** (server for a network installation).
- Classification per patient for simplified data management.
- Easy editing of complete shade, comparison or bleaching reports in pdf format.



Rayplicker Vision software Borea Connect

### SIMPLY ACCESS MANY TOOLS FOR AN IN-DEPTH ANALYSIS

## **Translucency analysis**



- Easily view a tooth translucency mapping.
- A gray scale indicates the presence of translucency on a scale from 0% to 100%.

## **Black and white analysis**



- Convert color polarized photo to grayscale
- Change brightness and contrast settings.
- Bring out the distribution of dentin, enamel, characterize the surface condition, highlight the remarkable characteristics of the analyzed tooth.

## **Measuring tool**



• Locate and measure remarkable characteristics of a tooth.

### CIE L\*a\*b\* / L\*C\*h analysis



- Determine pixel-by-pixel color coordinates according to CIE L\*a\*b\* or L\*C\*h standards.
- Easily calculate to the pixel the colorimetric difference «Delta E or  $\Delta$ E» between the actual shade of the tooth and the closest shade according to the reference shade guide.



# **PRODUCT HIGHLIGHT:**

Easily describe the overall aesthetic context with the «Rayplicker Pics App Solution»

Free download from the Apple store and Play store

The Rayplicker COBRA module Why choose Rayplicker?

# SIMPLY MAKE COLOR COMPARISONS AND EDIT REPORTS IN A FEW CLICKS

The Rayplicker Vision software allows the comparison between several acquisitions. This shade comparator allows a visual and colorimetric comparison (L\*a\*b\*) with the referenced shade guides.

It is the ideal tool to evaluate and quantify bleaching treatments but also to help with correction by allowing you to adjust your achievements based on objective criteria.

**Easily create bleaching reports and improve communication with your patients!** 





# JOIN THE BOREA CONNECT COMMUNITY

SIMPLIFIED COMMUNICATION BETWEEN THE PRACTICE AND THE LABORATORY



RMPLIDE

Simplified access to color information while optimizing the management of your orders.



## What is Borea Connect?

BOREA

- A free platform for creating and managing orders (Dental practice and laboratory access).
- Easy sending of your aesthetic data presciprion with shades, patient photos and digital impression.
- Total accessibility from an internet browser on computer, smartphone, tablet.

## Integrate Borea Connect community:

- Follow the progress of your prosthesis orders in real time.
- Receive native files and generate complete pdf order forms.
- Benefit from a free and regularly updated platform.
- Bring visibility to your activity on a community platform where everyone can be visible at their convenience.



The Rayplicker COBRA module

Why choose Rayplicker?

# BENEFIT FROM A 100% DIGITAL WORKFLOW

**C** The shade scanner is the unique

complement to your intraoral scanner for a 100% digital workflow!

- Shade-taking reports are compatible with all scanners and management software (.pdf).
- Native Rayplicker Cobra files (.rpk) are compatible with the majority of intraoral scanner platforms (Medit, Planmeca, Carestream, 3DISC...).
- Directly import your digital impressions on the Borea Connect for an independent workflow.



# A device designed for integration into the unit

- Shade taking becomes available at your fingertips.
- Compatibility with all screens available in the dental office.
- The association with intra-oral scanners allows a complete digital workflow.

MADE IN FRANCE



# CHOOSING THE RAYPLICKER SOLUTION MEANS:

### JOIN THE RAYPLICKER COMMUNITY

A validated and recognized solution, take advantage of the experience of the Rayplicker Handy and the new features provided by the Rayplicker Cobra.

## AIMING FOR QUALITY WITHOUT ADDITIONAL COST

Our products have a 2 years warranty, parts and labor. Our solution includes the handpiece, the Rayplicker Vision software and the Borea Connect platform. No hidden costs, no annual fees.

### ENJOY MEDICAL GRADE MANUFACTURING & KNOW-HOW

Our products are medical devices made in France. We favor local and national suppliers. Our mission: to develop, innovate and design in compliance with quality standards. BOREA is ISO 13485 certified.

### MASTER THE TECHNOLOGY

BOREA is made up of a team of experts who work on possible developments to offer you the best of technology. BOREA has also patented all its innovations.

DISCOVER RAYPLICKER COBRA IN VIDEO



### Technical specifications Rayplicker Cobra wireless:

Spectrophotometer: measuring range 400-700 nm Screen: OLED touch screen 1,5" Resolution: 128 x 128 RGB CMOS sensor: 648 x 648 px Battery: Lithium-Ion Dimensions of the handpiece: L. 200 x L. 42 x H. 35 mm Dimension of the measuring head: L. 76 mm Diameter of the measuring head:  $\emptyset$  25 mm Dimensions of the docking station: L. 80 x l. 75 x. H. 55 mm Weight of the handpiece: 169 g Weight of the docking station : 124 g

Processor : IMX6 Quad cores 1 Ghz Communication : Wifi 202.11 b/g/n Supply : 5V 2Ah/Micro usb type B

### **Technical specifications Rayplicker Cobra chair unit:**

Spectrophotometer: measuring range 400-700 nm Screen: OLED touch screen 1,5" Resolution: 128 x 128 RGB CMOS sensor: 648 x 648 px Supply : Wired 5V 2A Dimensions of the handpiece: L. 200 x L. 42 x H. 35 mm Dimension of the measuring head: L. 76 mm Diameter of the measuring head: Ø 25 mm Weight of the handpiece: 169 g Processor : IMX6 Quad cores 1 Ghz Communication : Wifi 202.11 b/g/n

### **Compatibility** :



Rayplicker Pics App Solution : Free download



#### **Recommended computer configuration**

Operating system: Windows 10 64 bits Processor : Intel Core i7 RAM : 8 Go Hard disk: SSD 500 Go Screen resolution : 1080 p Internet : High speed connection

### Package content :

Rayplicker Cobra shade taking device Docking station Dongle Charger Calibration Tips x6 (Sterilisable) Disinfection and sterilization procedures Quick Start Guide Microfiber wipe

#### Rayplicker Cobra is a class I medical device.

It bears the CE mark in accordance with the European Medical Device Regulation (EU) 2017/745. CE marking: 2022. Made in France by BOREA. For professional use only. Not reimbursed by health insurance funds. Read the instructions carefully before use.

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BOREA - ESTER Technopole, 6 allée Duke Ellington, 87100 Limoges, FRANCE Tel : +33 (0)5 44 00 01 70 / contact@borea-dental.com / www.borea-dental.com

