Canon

CR-10

Digital Retinal Camera

Full Auto
Non-Mydriatic Camera

CR-10
Full Auto Non-Mydriatic Retinal Camera

Introducing Effortless Retinal Imaging

Get ready to take your retinal imaging to the next level with our full
Auto Non-Mydriatic Retinal camera. Equipped with Canon
high-resolution imaging technology, a fast and efficient image
acquisition system, and a compact, user-friendly design, this camera
is the ultimate retinal imaging solution for eye care professionals.

Small Footprint and Flexible Layout

The CR-10 is the perfect solution for any space, offering a compact design that can easily fit in a corner or
against a wall. Its small footprint allows for efficient use of space without compromising on functionality.
Additionally, the flexible layout of the CR-10 allows the operation touch screen to be conveniently placed
on any side of the device, ensuring optimal usability and ease of use for all users.

Auto Focus with Next Generation technology

Our innovative auto focus technology represents the next generation of focusing capabilities. With lightning fast speed and unparalleled accuracy, it can easily and efficiently focus, even on small pupils. Say goodbye to blurry retinal images and hello to crystal clear clarity with our CR-10 auto focus solution.
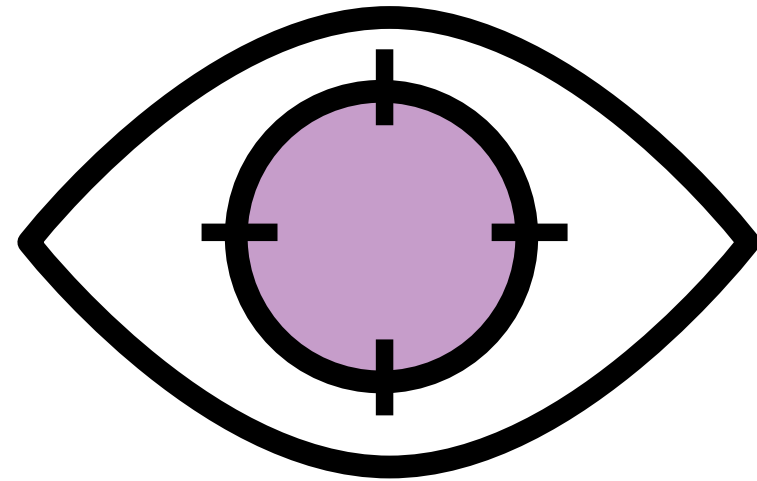
One-Touch Operation

Effortless Examination with One-Touch Operation

With our CR-10, you can simply tap on the screen and the examination for both eyes will be completed automatically and in a very short time.

External Eye Auto Alignment and Tracking

Our advanced Canon technology ensures that the CR-10 automatically finds and maintains the correct center position for accurate observations.

Photometric Auto Exposure

Experience optimal observation conditions with our unique Photometric Auto Exposure feature. It intelligently adjusts the intensity of the observation light and flash in real time, based on the reflected light from the retina. This means you will always have correct exposure, regardless of your ethnicity or pupil size. Enjoy consistent and accurate imaging results every time.

Audio guidance

The CR-10 offers audio guidance to help guide the patient through the entire examination process, starting from the initial alignment until the retinal image is captured. The optional feature of audio guidance ensures a smooth workflow and helps both the patient and the operator navigate through the procedure with ease. Furthermore, the device supports multiple languages, allowing for easy communication and usability with patients from different linguistic backgrounds. This versatility makes the CR-10 a highly suitable choice for various eye care clinical settings.

Please place your chin and forehead.	After select patient while in capturing screen.
Please fixate on the internal dot and keep your eyes open.	At time of starting alignment.
You can blink while the device moves to the other eye.	After left eye completed and just before move to right eye in Sequence Auto mode.
Checking the results. Please, wait.	Just before result of study is displayed.
The examination is finished.	At study completion.

32.5 MP Purpose-built digital EOS camera

Canon is a well-known leading camera manufacturer that has created a unique digital camera called the EOS Retina, which is specifically designed for ophthalmic photography. This camera is integrated with a DIGIC image processor that uses dedicated algorithms to provide optimal image parameters for retinal imaging. As a result, the EOS Retina delivers the best possible retinal image with accurate representation of true colors.

In the CR-10, this camera is now part of the optical system, which further enhances the quality of the retinal images captured. Canon EOS Retina advanced technology being integrated into the latest CR-10 to improve eye care diagnostic capabilities and patient outcomes.

Excellent ergonomics

The CR-10 is designed with excellent ergonomics in mind. The forehead rest features a five-degree tilt to make it more comfortable for the patient to maintain their forehead against the rest. This helps to reduce any discomfort and improve patient collaboration during the imaging process, resulting in a more efficient and successful retinal imaging. The thoughtful design of the CR-10 is just one of the ways that Canon prioritizes patient comfort.


Simplified Connectivity

Say goodbye to complicated setups and multiple cables. The CR-10 offers a hassle-free connection experience with its USB-C cable. With just one cable, you can easily connect the CR-10 to your PC, simplifying both PC requirements and installation. Enjoy a streamlined and efficient workflow with our simplified connectivity solution.

High definition image quality
See more than ever before with the Canon EOS 32.5 MP digital camera and very latest high quality optics.
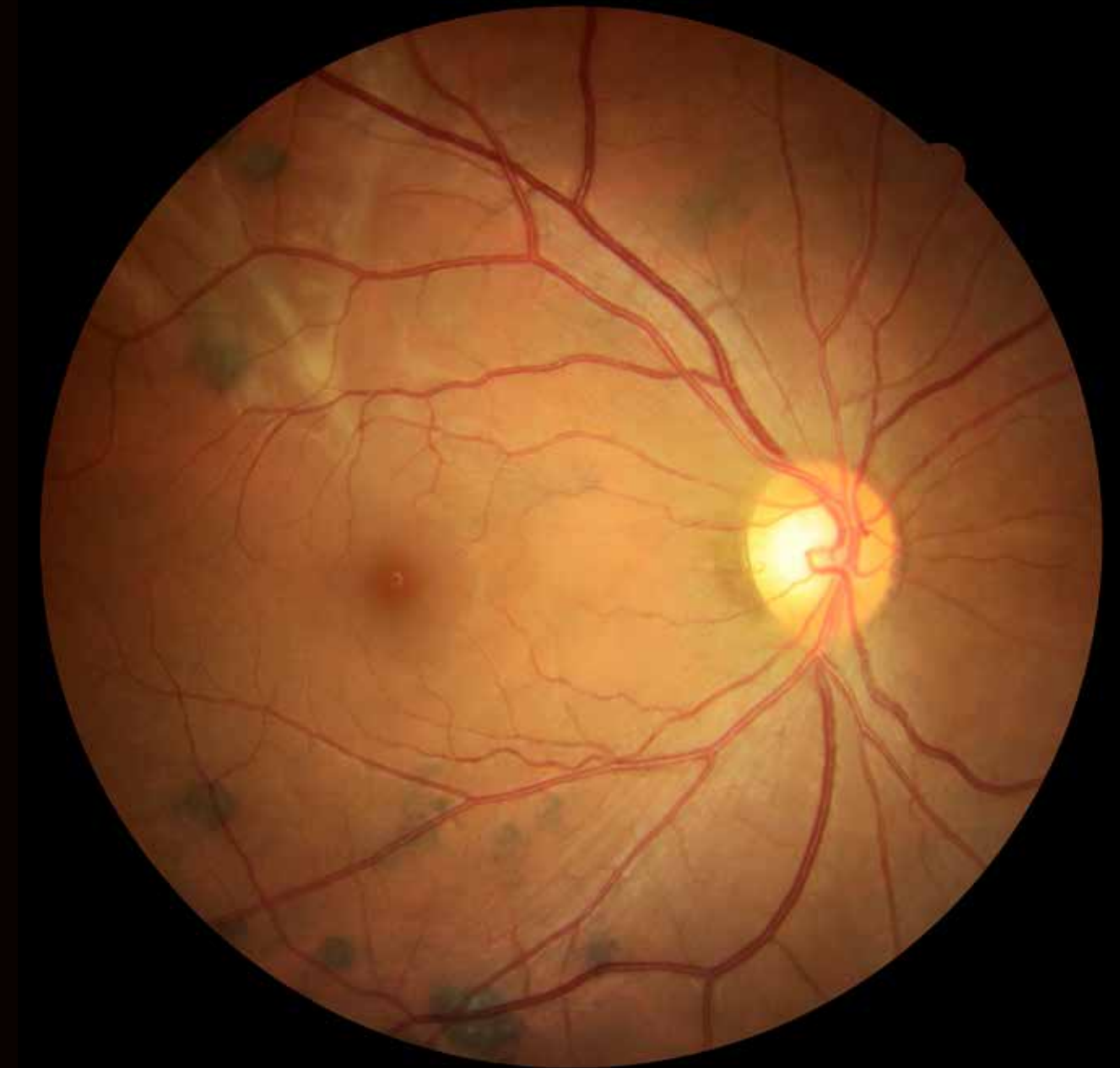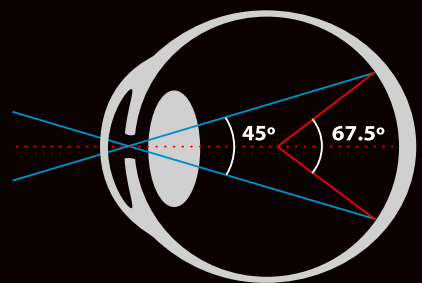
Extensive Photography Modes

To cover your various imaging requirements

45 degrees images

The imaging standard for retinal screening (67.5 degrees when using center of eye as reference). Additionally a X 2 magnification (30 degrees) is available.

Digital Red Free and Cobalt imaging

The images will be automatically generated from the raw color image data. So no additional capturing of images is required. Canon's proprietary image processing provides an image quality fully comparable with optical filters.
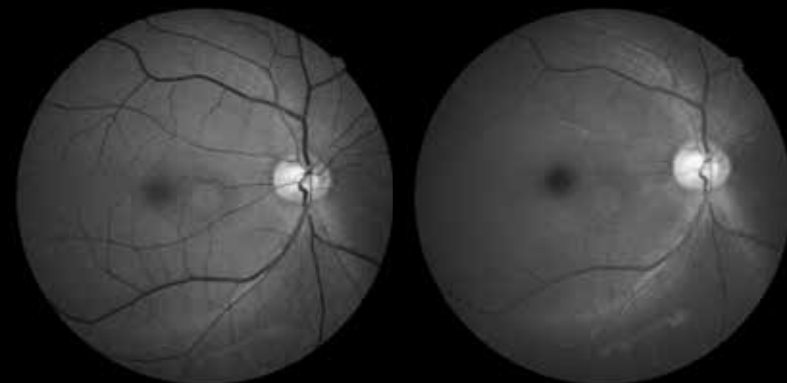
Digital Redfree   Digital Cobalt

Anterior Photography

Quick and easy anterior segment photography to document the cornea, pupil, eyelid and sclera.

Canon Opacity Suppression

Ocular opacities can obstruct image clarity, by scattering light and blurring the edges of blood vessels, and reducing the difference in brightness of the retina. Furthermore, a cataract can cause images to appear more yellow, thereby hindering the clarity of structures.

With our unique and sophisticated Canon Opacity Suppression software tool, the original brightness and color of the retina will be restored. Our technology is designed to reduce the effect ocular opacity for a clearer view of the blood vessels. This results in more accurate diagnoses as obscure structures become more recognizable for diagnostic purposes.
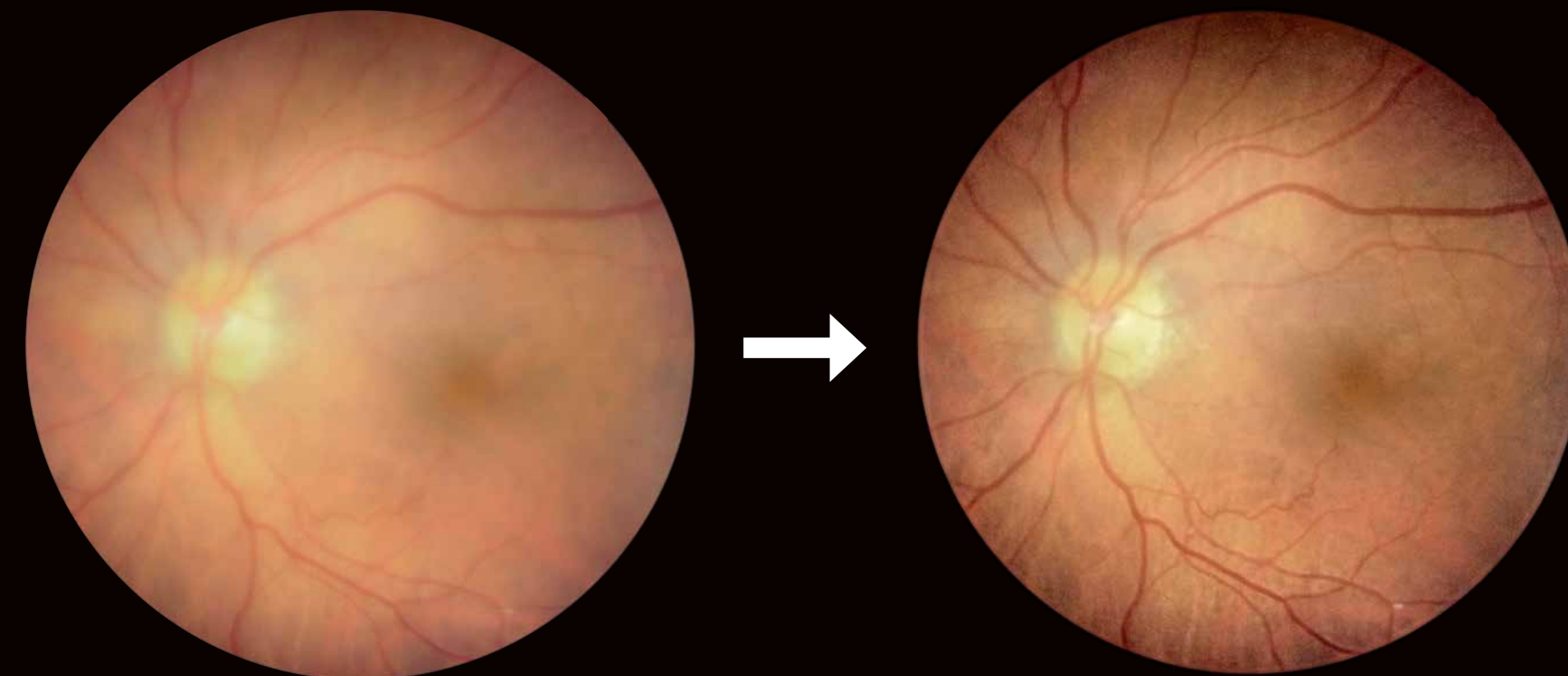
Clinical gallery

Idiopathic Intracranial Hypertension

Massive papilledema with pericapillary cotton wool spots and haemorrhage in the nerve fibre layer.

Branch Arterial Occlusion

Pale retinal area inferior to the fovea, in the first bifurcation of the lower retinal artery, a cholesterol embolus can be seen.

Central Venous Occlusion

Flame shaped retinal haemorrhages along with tortuous and dilated veins.

Tuberous Sclerosis

Mulberry-like white tumors of the optic disc and retina.

Wide Field Imaging

Combine up to 20 images into a wide field mosaic image covering an area of up to 100 degrees. The operator is assisted by automatic fixation light guidance. Press the OK button after capturing the image to move to the next fixation position, or press NG to retake the image.
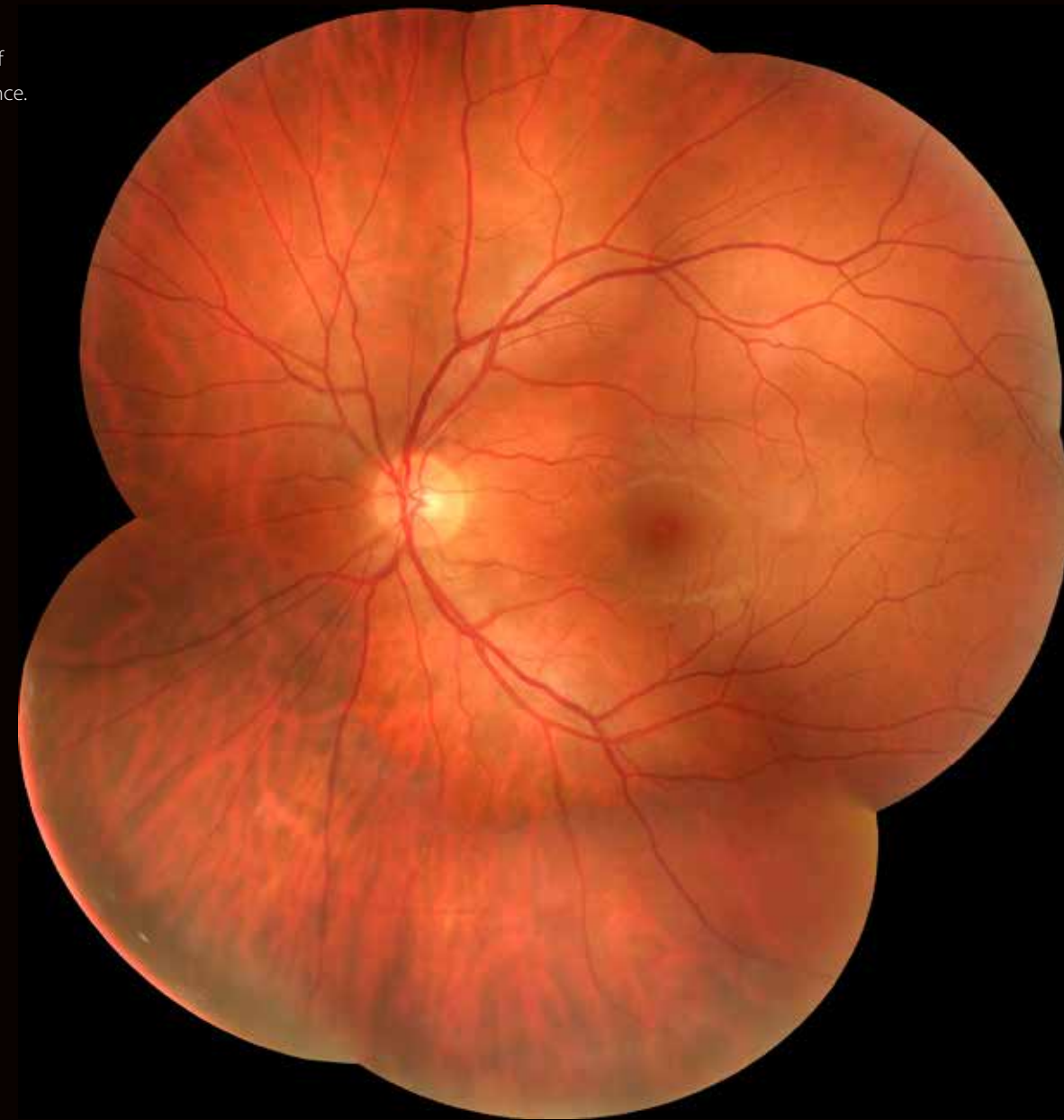

Retinal Expert software

The Graphic User Interface (GUI) of Canon's RX software is designed to be very intuitive and user-friendly. It is optimized for touch screen operation, with generously dimensioned and clear icons that make navigation effortless.

CR-10

The retinal camera capture screen provides a comprehensive live view of the anterior eye, posterior retina. Large windows allow for easy monitoring of the imaging capture, ensuring precise and accurate results. Even in full auto mode, the RX software offers full control over the CR-10 device, giving the operator the flexibility and assurance they need for an efficient imaging outcome.
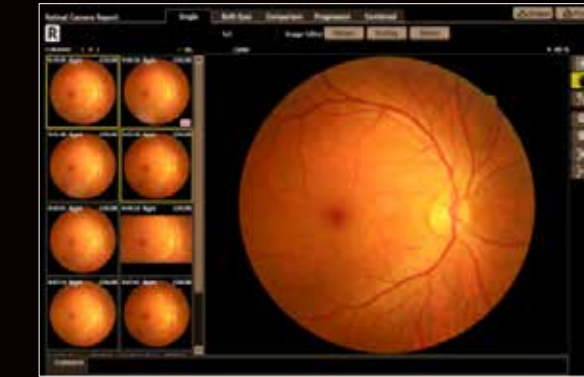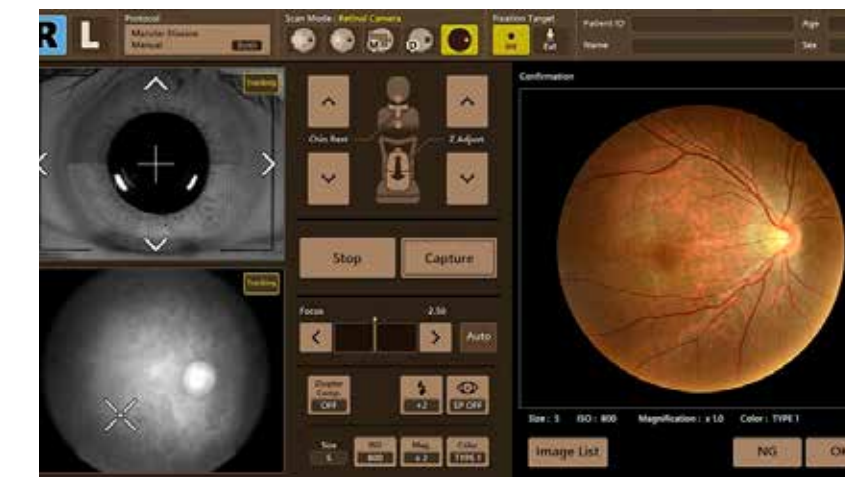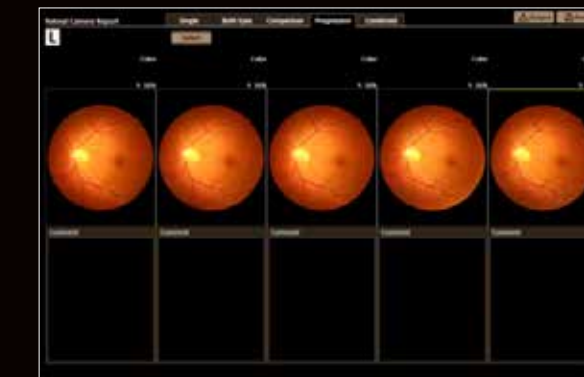

Single eye

Offers various ways to display multiple images of the same examination. With the Color/RGB button, the color image also can be displayed in separate RGB channels.

Comparison

Compare result with a previous study. With the overlay functions, changes of the retina can be observed more clearly


Progression

Select up to five previous studies to observe progression over time.

Efficient Patient Data Management with Retinal Expert Software

The RX software eliminates the need for time-consuming manual input of patient data. It offers the convenience of importing patient lists directly from the practice management system or through a modality worklist in a DICOM environment. This streamlines the workflow and reduces the chance of errors in data entry.

With the cache functionality feature, recent studies are stored on the capture station. This significantly speeds up access to previous examinations as there is no longer a need to wait for downloads due to limited network speed. Clinicians can quickly retrieve and review previous reports, enhancing efficiency and saving valuable time.

RX software seamlessly integrates with your practice software. This means that with just a click, the RX software can automatically open on the specific patient, allowing for easy capturing of new images or reviewing of existing reports. This integration enhances workflow efficiency and ensures a smooth transition between different clinical tasks.
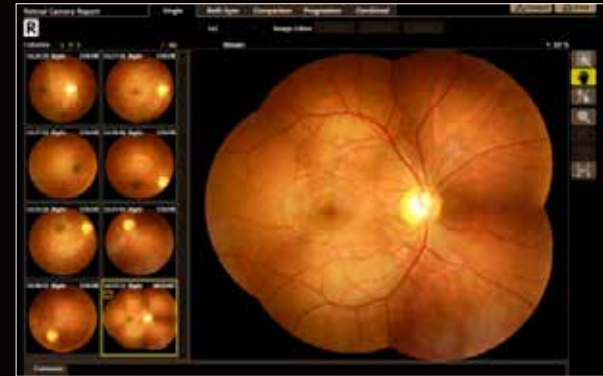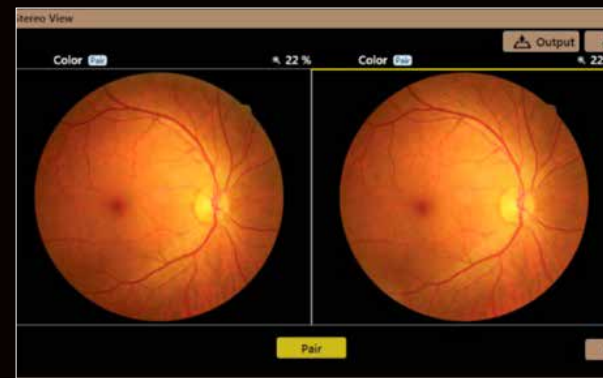

Mosaic
Automatic stitching of up to 20 images for a very wide combined image
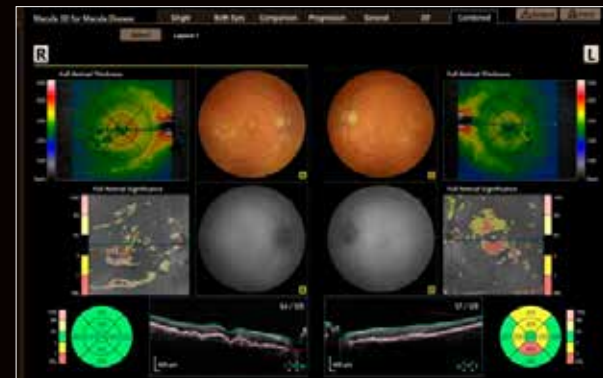
Combined report
Combined analysis results of retinal images, accompanied with OCT scans (from a Canon OCT).

Stereo view
Pairing and viewing 2 images.

Extensive software tools

RX Software offers an impressive arsenal of tools to assist your diagnosis and to create a clear and complete report. Use the emboss function on a retinal image, change its gamma value, adjust its brightness and contrast, change its color balance, add annotations to it, and analyze its C/D ratio. Images can also be rotated, flipped and mirrored.
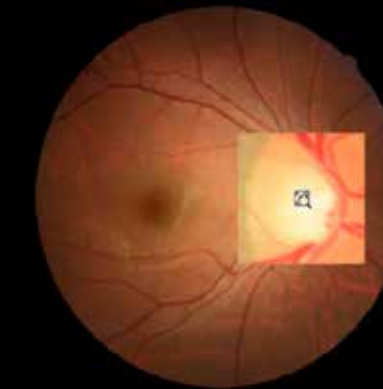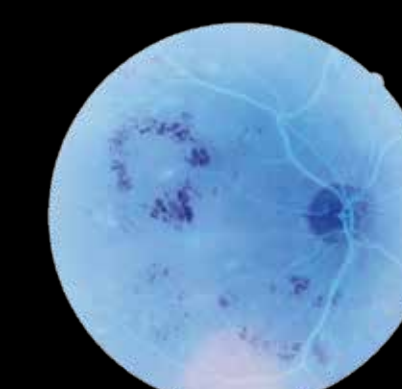
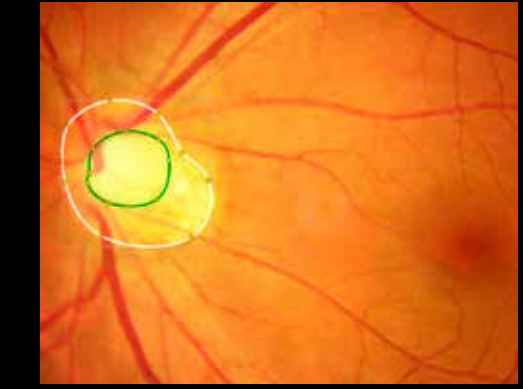### Loupe function
Zoom in on pathology.

Annotations
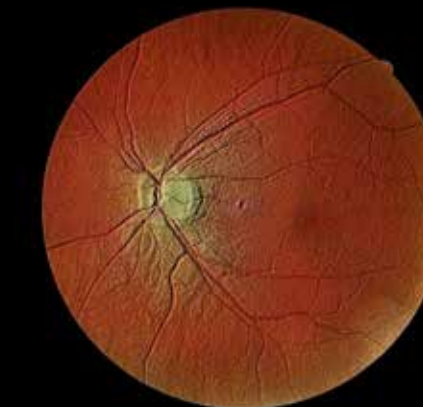Add a shape or texts to a captured image.

Invert
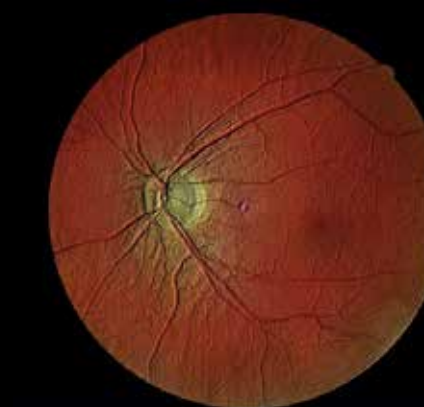Inverts the color of an image to assist diagnosis.

Cup/disc measurement
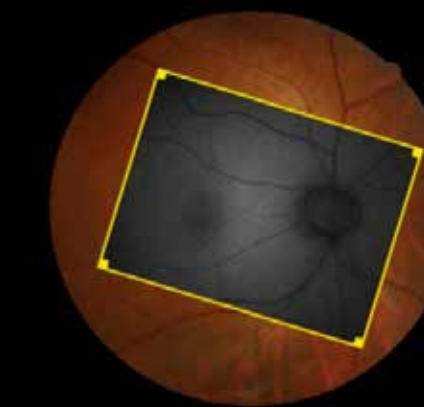Measure the optic nerve papillary area.

Emboss Negative
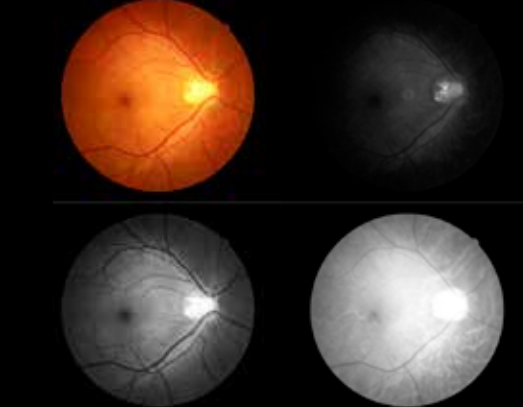The blood vessels stand out

Emboss positive
The optic disc stands out.

Overlay
Overlay 2 images to see differences and changes in pathology over time.

RGB Channel view
View separate RGB channels.

A scalable IT solution to match all your patient data and connectivity requirements

Canon Medical's Retinal Expert (RX) Ophthalmic Software Platform ranges from stand-alone installations to server-based multi-access solutions, combining Canon's retinal cameras and OCTs. The multi-modality platform is designed for seamless integration into your existing EMR system or practice management software and also offers cloud based storage solutions. RX Software is fully DICOM compliant - included as standard.

With comprehensive anonymization tools, central account and user management, as well as advanced logging capabilities, Canon's RX software is fully GDPR compliant. The software protects the privacy of your patients and allows you to properly document your studies.
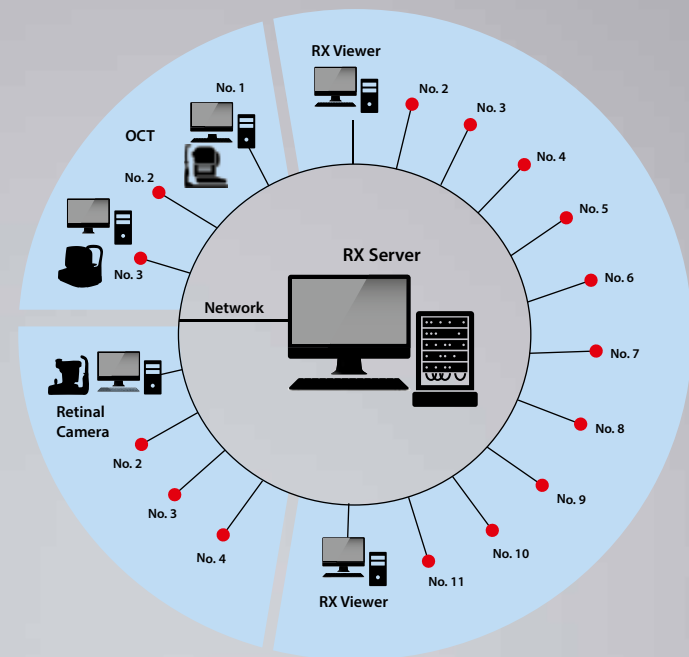
Stand alone

The RX Capture software is fully integrated with Canon retinal cameras and enables capturing, reviewing and reporting in stand-alone mode. It also serves as a database including archiving.

Viewing station

RX Viewer software allows you to access all patient data for reviewing and reporting from remote locations while the database remains on the RX server.

Server solution

With the RX server software you can connect multiple modalities and viewers while storing all images and patient data on a centralized server.

Specifications

Photography angle	45 degrees / 30 degrees digital
Required Pupil	4.0 / (3.3) mm
Diopter range	-13D ~ +12D (standard) -31D ~ −10D +11D ~ +33D
Resolution	32.5 MP / Center resolution : 63 lines/mm or more
Photography Mode	Color/Digital Red-free/Digital cobalt Anterior
Working Distance	35 mm
Internal fixation lamp	LED Dot matrix
Observation light source	IR LED
Photo light source	White LED
Operation	Touchscreen
Observation light source	IR LED
Dimensions W x D x H (mm)	335 x 490 x 473
Weight	20 kg

Option: EL-1F Fixation target

This device is intended for presentation and demonstration purposes only
and will be available after the compliance with Regulation (MDR) EU/2017/745.

Canon

https://eu.medical.canon

Made For life