Canon

CX-1

Digital Retinal Camera

Mydriatic/Non-Mydriatic

Redefining True Versatility

The multifaceted CX-1

The CX-1 is a Mydriatic Retinal Camera with full Non-Mydriatic functionality. Besides color photography, the CX-1 is equipped with high quality optical filters for FLUO, Red Free, Cobalt and standard even with FAF photography.

The CX-1 can be changed into a NM camera by a simple push of a button. The Non-Mydriatic mode is essential for non dilatable patients such as glaucoma suspects. Children and photosensitive patients will also benefit from the non invasive IRED observation light.

All photography modes can be performed in the MYD and NON MYD mode. This provides exceptional versatility and enables diagnosis, screening and monitoring of all major eye diseases.

MYD mode
Observation by viewfinder
Visible observation light
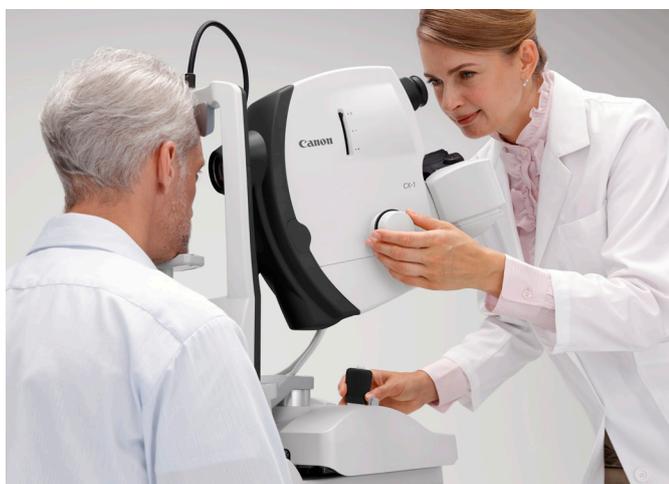
NON MYD mode
Observation by EOS screen
Invisible IR observation light

Dedicated EOS camera

Canon has used their expertise in digital camera technology to create a unique digital EOS camera dedicated to ophthalmic photography: Completely integrated with the functions of the CX-1 to assist in easy image acquisition.
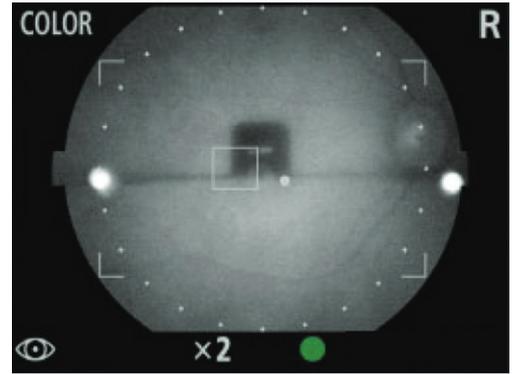
Vari-angle LCD screen

For ergonomic observation.

Easy panning and tilting

For working around central obstructions (cataracts, vitreous hemorrhages) and imaging the peripheral retina for creating large mosaic images effortlessly.

Easy Operation

Compact device
For maximal patient interaction.
Easy to observe patient.

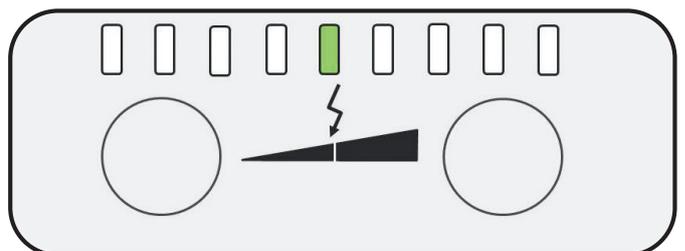Short reaching distance for easy opening patient's eyelid.

Motorized filters; easy to operate and protected from dust.

Motorized chin rest for easy adjustment.

Automatically optimized flash range
The CX-1 has an automatically optimized flash range, adjusted to the different photography modes and ISO settings.

Extensive Photography Modes
Sophisticated Optical Filters for Highest Image Quality

All photography modes are available in MYD or NON-MYD mode.

Color
Base Line

Cobalt
Visualizing Nerve Fiber Layer, important for checking for Glaucoma

Fluo
Checking retinal flow for occlusions and leakages

Red free
Useful for checking the condition of the blood vessels, important for detecting Diabetic Retinopathy

FAF
FAF Imaging for the diagnosis of retinal disease is a relatively new diagnostic technique that provides more information on the health of the retinal pigment epithelium. FAF has proven to be very useful for the early detection of age related Macula Degeneration (AMD), one of the leading causes of visual impairment. Recent studies indicate that FAF Imaging can also aid in the diagnosis of a variety of other diseases and even in the detection of intraocular tumors.

Diabetic retinopathy	**Occlusion**	**AMD**

Unrivalled Image Quality

Dedicated 32.5 Mega Pixel EOS camera

Canon's own EOS camera technology, with its renowned image processing capabilities, is adapted exclusively for Canon retinal cameras, it provides optimal retinal imaging.
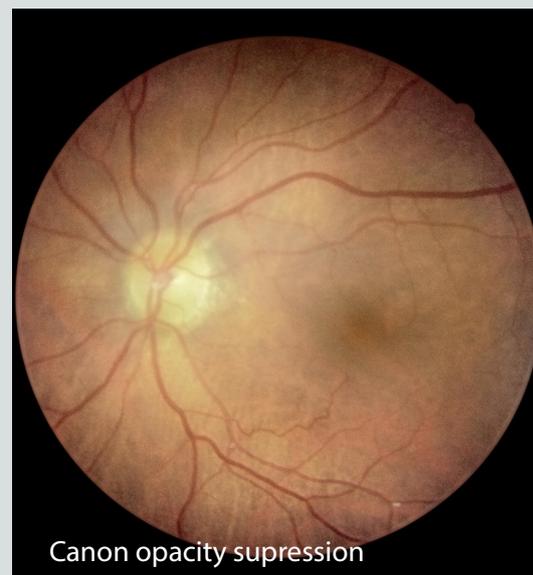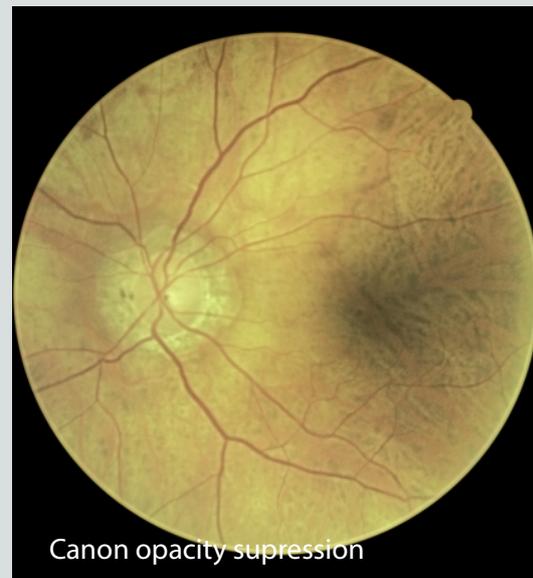
Canon Opacity Suppression

When obtaining retinal images, ocular opacities can cause several problems. Canon opacity suppression tool is a unique and sophisticated software tool, that based on information from the EOS CMOS sensor will largely suppress the effect of ocular opacities on color images.

Ocular opacities

- The scattering of the light will make the edges of the blood vessels appear blurred
- The difference in brightness of the retina will be reduced, making it very difficult to distinguish between structures
- A cataract eye will cause images to appear more yellow

With Canon Opacity Suppression

- The original brightness and color of the retina will be restored
- The blood vessels will appear much clearer

Original image

Canon opacity supression

Original image


Canon opacity supression

With Canon Opacity Suppression (COS) the effect of ocular opacities will be largely suppressed: previously unsuitable images could now provide you with essential clinical information.

Canon Retinal Expert software RX

The new software platform for Canon retinal cameras and OCT. Designed for seamless integration and connectivity with patient management systems.
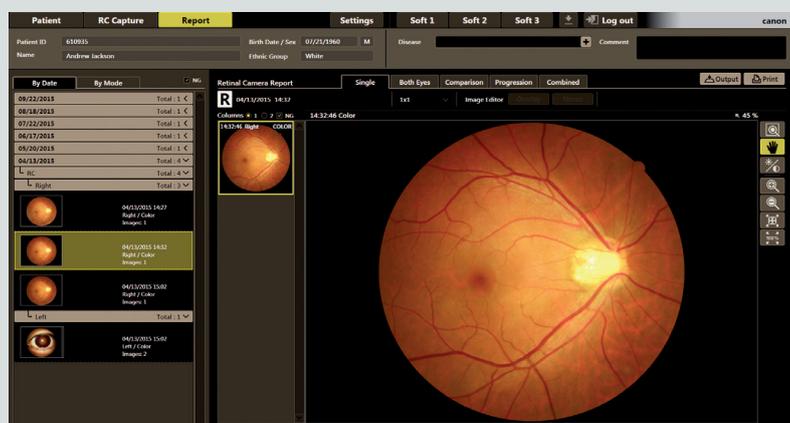
Extremely intuitive user interface

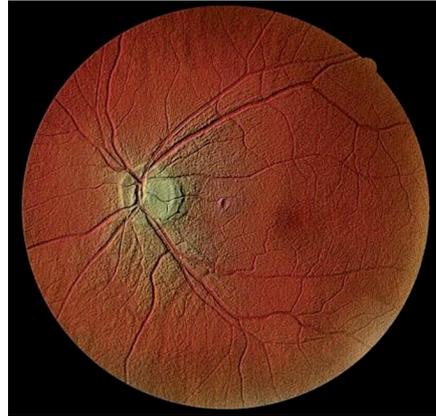**Compare both eyes or studies from different dates**
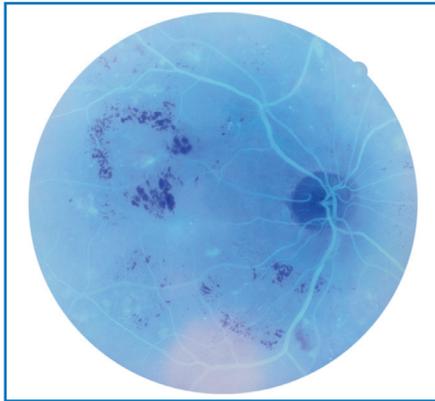
Observe progression; select up to 5 past examinations
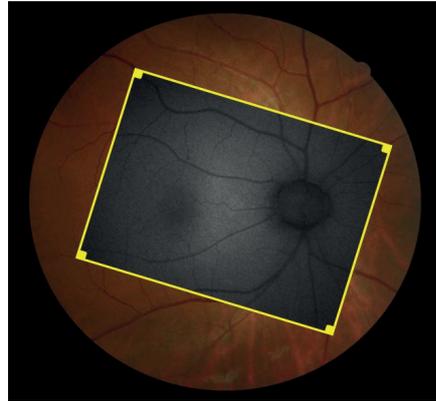
Extensive Software Tools

Emboss Negative
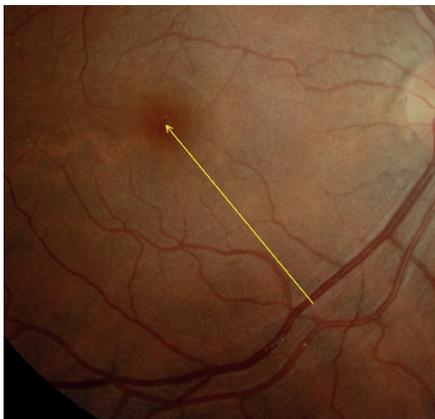The blood vessels stand out.

Emboss Positive
The optic disc stands out.

Inversion
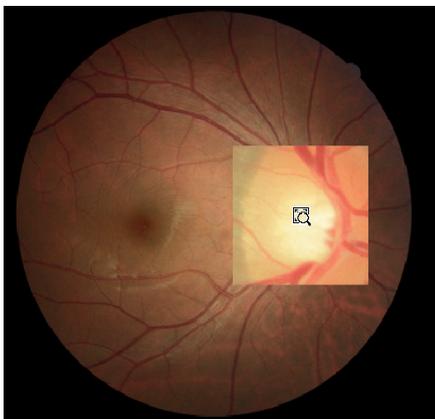Inverts the color of an image to assist diagnosis.

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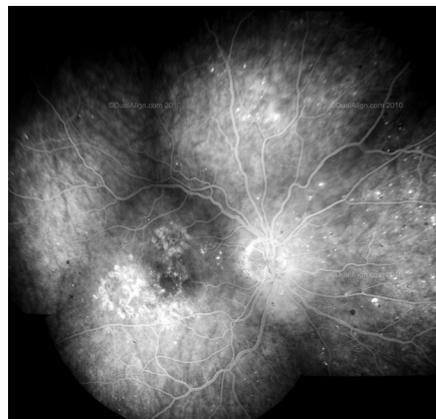Overlay 2 images to see differences and changes in pathology.

Annotations
Add shapes and texts to a captured image.

Cup/disc measurement
Measure the optic nerve papillary area.

Loupe function
To assist diagnosis.

Mosaic function
Up to 20 images can be combined (optional feature).

Canon Retinal Expert Software Platform RX

RX

Stand alone configuration

All-in one system. Capturing, viewing and database.

RX Capture
• Capturing
• Reviewing and reporting
• Database and archive

RX Viewer
• Reviewing
• Reporting

RX Viewer
• Reviewing
• Reporting

Optional
RX Viewers can be connected over the network and access the database of the device.

Up to 2 RX viewers can access the database at the same time.

A CX-1 could be added to a Canon OCT in a standalone configuration, sharing the same PC and database. Analysis results of both devices can be combined in one combined report.

Network configuration

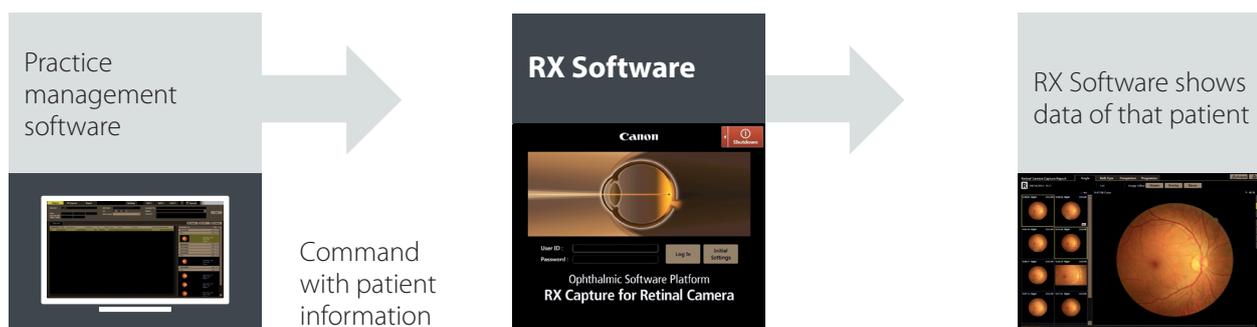With RX Server up to 5 systems can be connected with maximum 10 concurrent viewers.

RX Capture   **RX Capture**   **RX Capture**
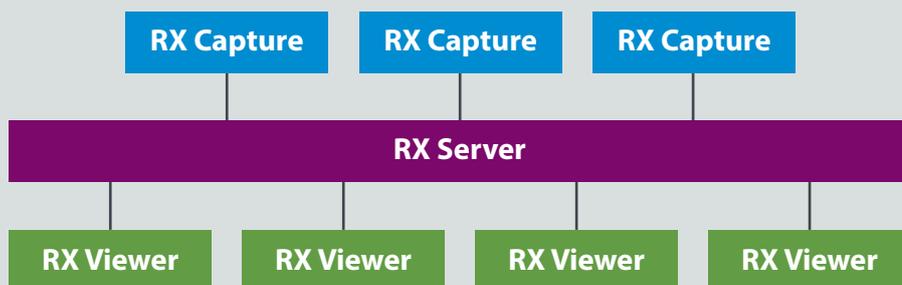
RX Server

RX server and RX viewers have to be purchased separately.

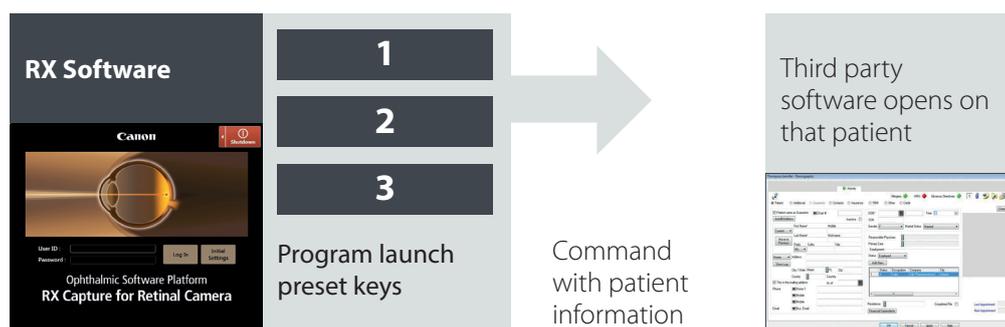**RX Viewer**   **RX Viewer**   **RX Viewer**   **RX Viewer**

Seamless Integration with Patient Management Systems

The Canon RX software can automatically start the patient management software on the selected patient and vice versa. (Command Line Interface)

Third party software can start the Canon RX software

Practice management software

→ Command with patient information →

RX Software

Canon

Ophthalmic Software Platform
RX Capture for Retinal Camera

→

RX Software shows data of that patient

Canon RX software can start third party software

RX Software

Canon

Ophthalmic Software Platform
RX Capture for Retinal Camera

| 1 |
| 2 |
| 3 |

Program launch preset keys

Command with patient information →

Third party software opens on that patient

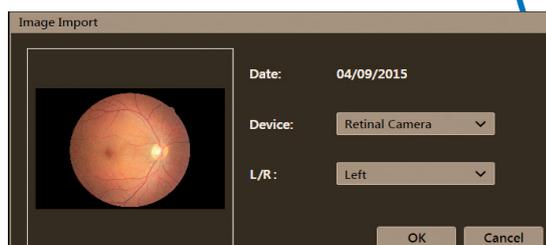### Versatile Patient data input possibilities for optimal integration

- Input data manually
- Import a list from the practice management system
- Use a Modality worklist (in a DICOM environment)

Image Import

Import images from other devices and save them into the database together with the other diagnostic information of the patient.

Image Import

Date: 04/09/2015
Device: Retinal Camera
L/R: Left

OK   Cancel

DICOM
Digital Imaging and Communications in Medicine

RX software is fully DICOM compatible

Specifications CX-1			
Dimensions	320 W x 531 D x 577 H mm, 26 kg	**Focus Adjustment**	Split Lines
Angle of view	MYD: 50 degrees, Non-Myd: 45 degrees 2 X magnification (digital)	**Working distance**	Corneal Reflection dots adjustment
Minimum pupil size	Myd: ø 5.1mm (SP mode ø 4.3 mm) Non-Myd: ø 4.3 mm (SP mode ø 3.8 mm)	**Panning and Tilting**	30 degrees to the left and right tilting range 15 degrees up, 10 degrees down
Working Distance	35mm	**Light sources**	Xenon tube for photography Halogenlamp for observation (Myd mode) IRED LED for observation (Non-Myd mode)
Photography modes	Color /FA /Red Free/Cobalt and FAF		
Mounted camera	Dedicated digital EOS camera (32.5 MegaPixel for current model) HDMI Output for external monitor Full HD resolution	**Fixation targets**	External Internal LED dot matrix for Non-Myd mode (70 points) Internal fixation target for Myd mode (optional)
Patient's diopter	−31D ~ −7D, −10D ~+15D (standard) compensation +11D ~+33D	**Optional accessories**	Internal eye fixation (CX-IF) Chin rest paper (500 sheets)

To schedule a demo or for additional information, call (833) 521-3937 or visit our website.

Made For life