## Canon



## **CR-2 PLUS AF**

DIGITAL NON-MYDRIATIC RETINAL CAMERA

AutoFunctionality *plus* Fundus AutoFluorescence.

### CR-2 PLUS AF



The Canon CR-2 PLUS AF Digital Retinal Camera is designed to help you consistently capture and analyze truly superb images—quickly, efficiently, and automatically. Designed around the legendary Canon EOS optics and advanced CMOS image capture technology, the CR-2 PLUS AF Digital Retinal Camera provides a remarkable set of advanced features specifically designed to enhance, capture, and analyze all fundus images.

Canon is the only brand that offers a digital fundus camera that incorporates its own premium front lens, internal camera lenses, and CMOS camera sensor. The result is less chromatic distortion and spherical aberration. This, in turn, allows the camera to provide excellent color reproduction and extraordinary image detail. Reds, greens, and blues all remain just as Canon intended. And, because the optical pathway is entirely manufactured by Canon and free of aberration, the CR-2 Plus AF's digital filter set is able to provide very precise and consistent views of the various layers of the retina.

The CR-2 PLUS AF Digital Retinal Camera delivers stunning, high-resolution, 18 megapixel images—the highest resolution available in any digital retinal camera today—with extraordinary speed, detail, contrast, and color fidelity.

# HELP MAKE YOUR PRACTICE MORE EFFICIENT.

The Canon CR-2 PLUS AF Digital Retinal Camera is extremely flexible and comes with a comprehensive set of standard features designed to help you quickly capture and analyze data. Some of the camera's more noteable features include:

#### **AUTO-FOCUS WITH MANUAL ALIGNMENT OVERRIDE**

Automatically focus the eye by partially depressing the joystick, or easily switch to manual focus with a twist of the focus ring.

#### **AUTO-CAPTURE**

Automatically captures the image once the eye is properly focused.

#### **AUTO-EXPOSURE**

Automatically measures the volume of infrared light at the retina and adjusts the flash intensity.

#### **AUTO-FUNDUS**

Automatically switches from the external eye to retinal observation mode when the eye is properly aligned.

#### **IMAGE ERROR DETECTION**

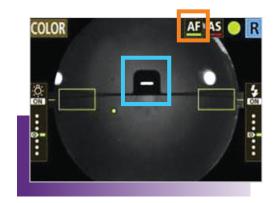
Advanced software automatically confirms both correct alignment and focus.

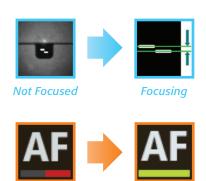
#### **OUICK PREVIEW**

Preview image directly on the dedicated EOS camera immediately after the image is captured.

#### **LOW FLASH INTENSITY**

Low flash increases patient comfort and reduces miosis for a faster exam. The CR-2 Plus AF supports a wide range of low ISO speeds, including ISO 200, 400, 800, 1600, 3200, and 6400.





Auto Focus Error

Correct Focus

# FUNDUS AUTOFLUORESCENCE (FAF).

The CR-2 PLUS AF Digital Retinal Camera also features Fundus AutoFluorescence (FAF) capability. At the touch of a button, the CR-2 PLUS AF provides instant access to this valuable diagnostic tool, enabling you to document changes in the Retinal Pigment Epithelium (RPE), which may be an early indicator of vision problems, including AMD, glaucoma, diabetic retinopathy, and geographic atrophy.

#### SEE LIPOFUSCIN BUILD-UP

### AT AN EARLY STAGE.

In the non-mydriatic FAF mode, the CR-2 PLUS AF Digital Retinal Camera enables you to assess and monitor the condition of the Retinal Pigment Epithelium (RPE). The CR-2 PLUS AF's infrared alignment light allows patients with pupils as small as 3.3mm to be easily photographed without dilation drops. FAF is especially effective in identifying and monitoring subtle changes in the areas of lipofusion, even before there's structural change or vision is affected. These changes may be pre-cursors to vision problems, such as diabetic retinopathy, AMD, glaucoma, and geographic atrophy, among others.

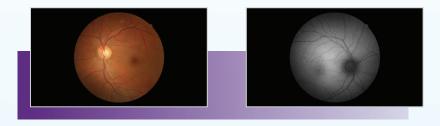
#### **▶ DIABETIC RETINOPATHY**



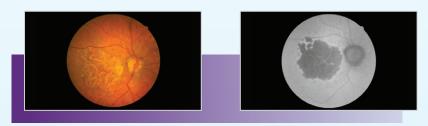
#### ► AMD



#### **▶ GLAUCOMA**



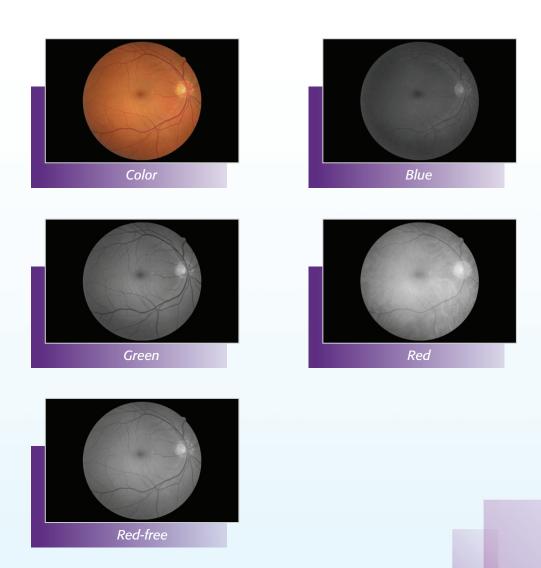
#### ► GEOGRAPHIC ATROPHY



# COUNT ON EXTENSIVE DIGITAL FILTER PROCESSING CAPABILITIES.

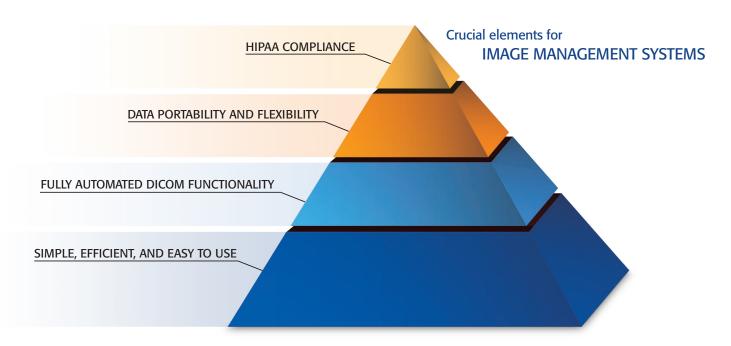
The CR-2 PLUS AF Digital Retinal Camera produces ultra-high-resolution, 18-megapixel, wide-angle views with excellent color, detail, and contrast. To further enhance your retinal exam capabilities, the CR-2 PLUS AF has a full set of blue, green, and red filters to extract more in-depth information from each image.

The blue filter provides an excellent view of the retinal nerve fiber layer, the internal limiting membrane, retina folds, cysts, and epiretinal membranes. The green filter enhances the view of the retinal vasculature and highlights common findings such as hemorrhages, drusen, and exudates. The red filter is useful for pigmentary disturbances, choroidal ruptures, choroidal nevi, and choroidal melanomas. And the red-free filter is used for evaluating the Retinal Nerve Fiber Layer (RNFL) and the vascular structure of the retina as it relates to glaucoma, diabetic retinopathy, and hypertension.



# WITH CANON imageSPECTRUM, YOU'LL MANAGE IMAGES WITH PEACE OF MIND.

To meet the needs of today's rapidly changing healthcare environment, an eye care image management system must excel in four key areas in order to keep your life simple and to help keep data safe and secure.



imageSPECTRUM is not only simple, efficient, and easy to use, but it also incorporates data portability and advanced security features absolutely necessary to help you become—and stay—fully HIPAA compliant.

#### SIMPLE, EFFICIENT, AND EASY TO USE

imageSPECTRUM employs a sleek and intuitive graphical user interface that's easy for you and your staff to use. The system communicates with major eye care modalities and is designed to optimize imaging workflow while simplifying the entire image management process.

#### **FULLY AUTOMATED DICOM FUNCTIONALITY**

imageSPECTRUM can easily be configured to support virtually any practice network, small or large. Designed with your growing practice in mind, imageSPECTRUM is readily scalable. This means the system not only supports the needs of your current practice, but it's also capable of easily expanding as your practice grows or your needs change. An automated DICOM® system can help increase practice efficiency by eliminating extra steps and chances for error while streamlining workflow and enabling higher levels of communication (i.e., Modality Worklist).

#### DATA PORTABILITY AND FLEXIBILITY

imageSPECTRUM's advanced architecture allows you to store and manage your image management files from within a single database or as a part of a multidatabase/multiarchive system requiring only high-speed Internet access. The system is designed to communicate well with most EMR systems and support practices of all sizes. It also allows clinical case data to be quickly and securely viewed from just about anywhere in the world.

#### **HIPAA COMPLIANCE**

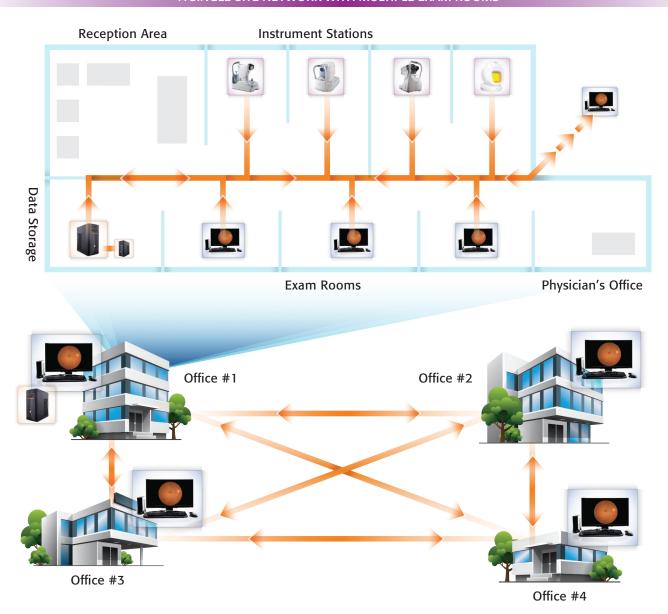
Designed with patient protection, the Affordable Healthcare Act, HIPAA/HITECH, and future reforms foremost in mind, imageSPECTRUM uniquely provides high-level image security and availability through features such as Role-based Access Control, Aging Password, Auto-logoff, Advanced Encryption, and Complete Audit Log Recordkeeping, to name a few.

### imageSPECTRUM EASILY FITS INTO

### **NEARLY ANY BUSINESS ENVIRONMENT.**

imageSPECTRUM can be easily configured to support virtually any practice network, small or large. Designed with your growing practice in mind, this system is readily scalable. This means that imageSPECTRUM cannot only support the needs of your current practice, but it can also easily expand as your practice grows or your needs change.

#### ▼ A SINGLE-SITE NETWORK WITH MULTIPLE EXAM ROOMS ▼



### CR-2 PLUS AF

DIGITAL NON-MYDRIATIC RETINA CAMERA Specifications

#### **GENERAL**

Туре	Digital Retinal Camera, Non-Mydriatic
Type of Photography	Color, Digital Red-free, Digital Cobalt, Fundus AutoFluorescence (FAF)
Angle of View	45° (35° SP Mode)
Magnification	2X Digital
Minimal Pupil Size	4.0mm (3.3mm SP mode)
Focus Adjustment Type	Split-Line Adjustment
Patient Diopter Compensation Range	Without Compensation Lens: -10 to +15D
	With "-" Compensation Lens: -31 to -7D
	With "+" Compensation Lens: +11 to +33D
Light Source	Observation: Infrared
	Photography: Xenon Tube
Canthus Mark	420mm From Base
Internal Eye Fixation	LED Dot Matrix
External Eye Fixation	White LED (Sold Separately)
Working Distance	35mm
Working Distance Adjustment	Anterior Observation: Double Image Match Method
	Fundus Observation: Working Distance Dots
Sensor Resolution	18.0-megapixels
Camera	Dedicated EOS Camera for CR-2 PLUS (Bundled)

3.0-inch Color LCD Monitor
External Monitor (Optional)
Automatic Exposure
Front and Back: 70mm
Side to Side: 100mm
Up and Down: 30mm
60mm

## POWER Supply AC 100-240V, 50/60Hz

Operating Environment

Temperature: 50° to 86° Fahrenheit
(10° to 35° Celsius)

Humidity: 30% to 90% RH (No Condensation)

Atmospheric Pressure: 800 to 1060 hPa

#### **PHYSICAL CHARACTERISTICS**

Dimensions (H x W x D)	20.2" x 12" x 19.7" (513mm x 305mm x 500mm)
Weight	43.9 lb. (19.9kg)

## COMMITMENT TO SERVICE: MAINTAINING YOUR INVESTMENT IN EXCELLENCE.

The CR-2 PLUS AF Digital Retinal Camera is backed by Canon Inc., a \$40B global microprocessor-based optical company with 75 years of experience. Each and every CR-2 PLUS AF Canon Camera is backed by the Company's superb customer service and support organization, which is ready to answer your needs 24/7/365.

This common sense approach to service allows you to purchase a service plan that suits your specific needs—and your budget. The Canon service program is built on a solid, customer-oriented foundation that includes three key components:

- 100 direct service centers throughout the U.S.
- Responsive, on-site service when you need it most
- Phone support that's available on a 24/7/365 basis

The Canon service program can help you avoid costly instrument downtime while also helping to keep your vital patient images and information accessible, safe, and secure.



► To schedule a demo or for additional information, call 1-800-970-7227 or visit www.usa.canon.com/eye-care.

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