

TRC-50DX

Retinal Camera



TOPCON'S PREMIER MYDRIATIC RETINAL CAMERA



Experience the Advantages of TRC-50DX

Rapidly developing technical advancements in digital cameras has led to retinal imaging with higher resolutions and newer capturing methods. Topcon's TRC-50DX retinal cameras incorporate latest generation sensors that enhance versatility, image quality and operational ease. The TRC-50DX offers multimodal fundus imaging including color, red-free and fluorescein angiography (FA) while the TRC-50DX (Type IA) can also perform indocyanine green (ICG¹) and fundus autofluorescence (FAF¹).

Optional filters can let the operator add or exchange them to accommodate different procedures.

Features



**High Quality
Fundus Image**



**Multimodal Fundus Imaging
(Color, Red-free, FA, FAF¹ and ICG¹)**



**Mydriatic
Retinal Camera**



**Comprehensive
Fundus Imaging Tool**



**High Resolution
Imaging Sensors**



**Connect with
IMAGEnet® 6**

1. FAF and ICG are only available on the TRC-50DX (Type IA)

Advantages

Easy to Operate

An intuitive, touch-screen control panel simplifies its use, allowing the operator to better concentrate on the patient. Ergonomically located adjustment knobs make the capture process effortless and comfortable.



Flash Intensity Control

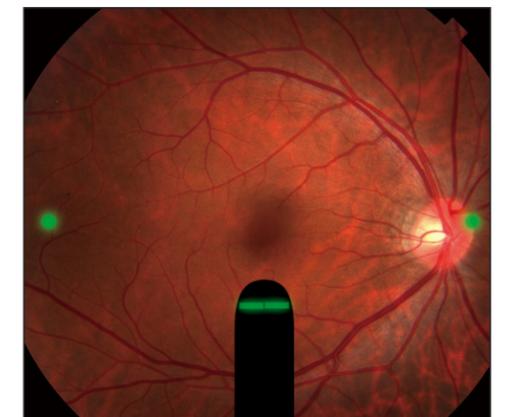
The Flash Intensity Control¹ has 21 levels and can be used in full or half steps. Sensitive membrane buttons permit total control of image brightness and are illuminated for use in subdued light.



¹Light Source: For photography: Max300ws Xenon

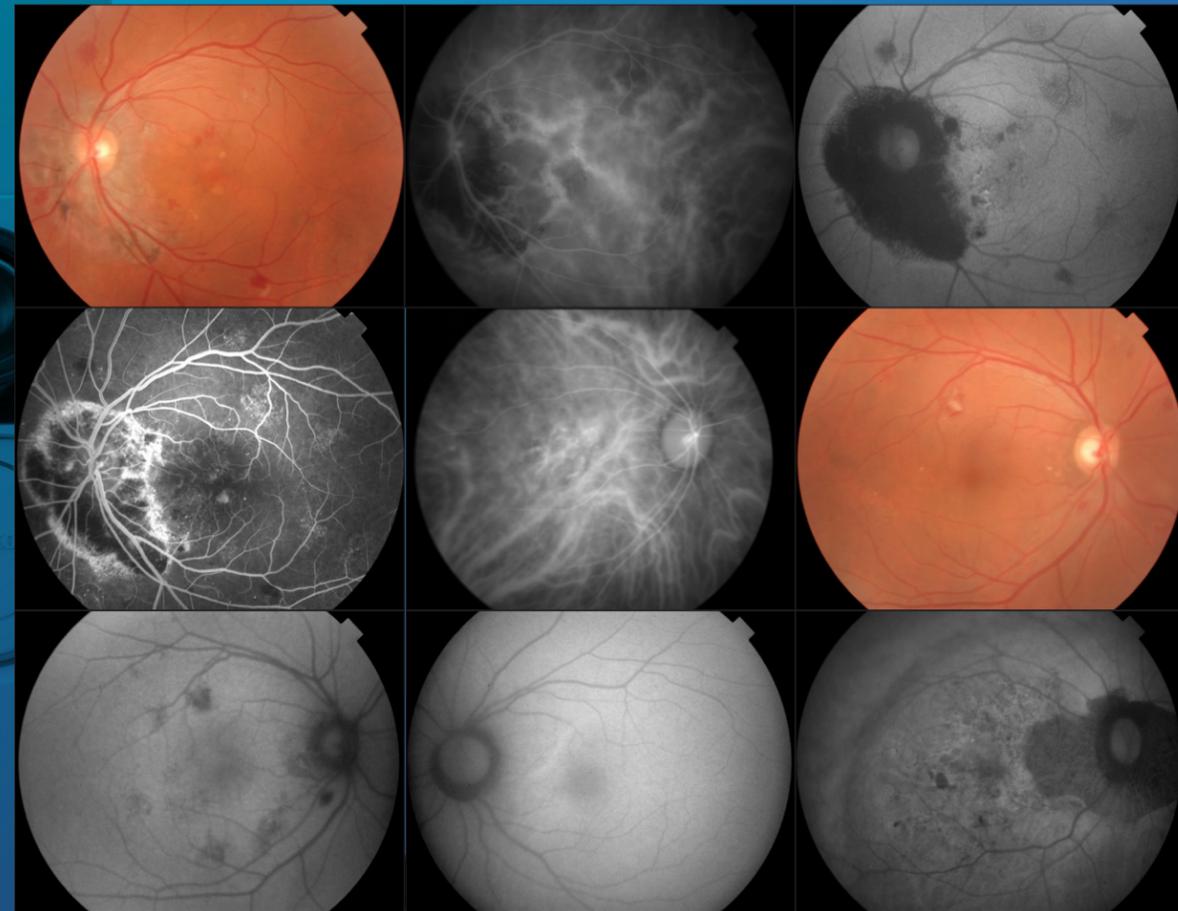
Working Distance Dots

Green alignment dots provide easy confirmation of working distance of the objective lens alignment. These dots are helpful for pre-injection positioning in fluorescein angiography (FA), red-free and color fundus photography.



High and Wide Eyepiece Viewing

The eyepiece of the TRC-50DX is designed for high and wide eye distance viewing making alignment and focusing fast, easy and comfortable.



* Image courtesy of Adachi Keiyu Eye clinic, Japan.

Fundus Autofluorescence

Fundus autofluorescence (FAF¹) is a non-invasive technique to acquire images of the retina by visualizing the autofluorescence of lipofuscin within the retinal pigment epithelium (RPE). The Topcon-exclusive, Spaide FAF filters² are optimized for the observation of lipofuscin deposits in the retina as they require 40% less illumination than conventional FAF¹ filters³. As an added benefit, Spaide filters do not stimulate fluorescein or ICG¹ and images can be taken during or post-angiography.

1. FAF and ICG are only available on the TRC-50DX (Type IA).
2. Richard F. Spaide, MD. Vitreous Retina Macula Consultants of New York.
3. "Optimized Filters for Fundus Autofluorescence Imaging" Reviewed by Richard Spaide, MD - Retina Today - April 2009.

Software Configuration

IMAGEnet® 6

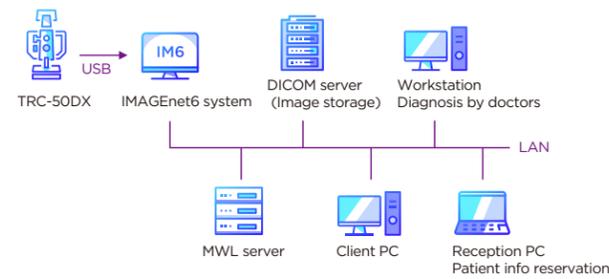
IMAGEnet 6 is a comprehensive digital imaging system capable of acquiring, processing, displaying and saving digital images obtained by a variety of Topcon devices.

IMAGEnet 6 allows the camera to detect the filter settings and CCD camera being used by the TRC-50DX and automatically sets the capture screen to the corresponding procedure.



DICOM

Full DICOM compliance allows IMAGEnet 6 to communicate with EMRS and servers, e.g. PACS, save data to remote locations, operate with modality work lists and save images in DICOM format.



Ez Capture

Ez Capture is the basic software used to capture and view images with the TRC-50DX. The live view feature within Ez Capture allows for direct observation of the retina in real time while performing ICG studies. You can easily operate ICG capture and direct view simultaneously on one monitor.



Sensor Specifications & Product Line-up

Product Line-up

	Color	Red-free	FA	FAF ¹	ICG ¹
 TRC-50DX	●	●	●	-	-
 TRC-50DX (Type IA)	●	●	●	●	●

1. FAF and ICG are only available on the TRC-50DX (Type IA)



Specifications

	TRC-50DX	TRC-50DX (Type IA)
Capture Mode	Color/Red-Free/FA	Color/Red-Free/FA/FAF ¹ /ICG ¹
Auto Fluorescence	-	○
Angle of Coverage	50°/35°/20°	
Photographic Magnifications	1.84x at 50°, 2.45x at 35°, 4.28x at 20°	
Working Distance	39.0 mm	
Diopter Compensation Range for Patient's Eye	0 : -10D to +6D - : -23D to -9D + : +5D to +23D A : +22D to +41D	
Diopter Compensation at Finder	-6D to +5D	
Optical Head Tilt	Upper 15° / Lower 10°	
Power Supply	100-120V / 200-240V / 50-60 Hz	
Power Consumption	1500VA	
Dimensions / Weight	340 mm(W) x 505 mm(D)x 506-715mm(H) / 35 Kg	

Sensor Information

	Color Sensor	Monochrome Sensor
Resolution	12.3MP	5MP
Image Sensor	1.1 inch	2/3 inch

1. FAF and ICG are only available on the TRC-50DX (Type IA)

CAUTION: Federal law restricts this device to sale by or on the order of a physician.

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* Not available in all countries, please check with your distributor for availability in your country
 * Subject to change in design and/or specifications without advanced notice

IMPORTANT In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.

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 SEEING EYE HEALTH DIFFERENTLY