Leading the way in retinal cameras.

In the rapidly developing technology of digital cameras, retinal imaging techniques advance quickly towards higher resolution and newer methods. New diagnostic modes and procedures require versatility, precision and reliability more than ever before. The Topcon TRC-50DX, as well as the TRC-50DX(Type IA), improves on the unsurpassed quality of Topcon retinal cameras, incorporating new functions that enhance their versatility and operational ease. The camera can be used with a variety of photo devices, from 35mm camera backs to super-high resolution digital cameras.
A newly developed control panel, equipped with a touchscreen, allows for a quick and easy change of settings while the Small Aperture function facilitates focusing and enhances sharpness.

Further enhancing its adaptability, the TRC-50DX (Type IA) can perform Auto Fluorescence studies, expanding its diagnostics aptitudes and application availability.

An adaptable filter mechanism lets the user add or exchange filters of his or her choice for different procedures or research projects.
Auto Fluorescence

This new diagnostic technique allows for a more in-depth study of the Retinal Pigment Epithelium (RPE) without the need of an injection of a contrast media, enhancing patient comfort and cooperation. This feature is available as the default component in TRC-50DX type IA.

Split Image Focusing

This convenient feature minimizes out-of-focus images and allows even less experienced operators to obtain clear, sharp images with minimal effort.

Compact Design

Minimized design helps to check patient’s reaction and to open eye beyond the unit.

Flash Intensity Control

Conveniently illuminated for use in subdued light, the flash intensity control has 21 levels and can be used in full or half steps. Sensitive membrane buttons permit total control on the image brightness.

External Fixation Target

The newly designed fixation target guides the patient’s eye to any desired position with a brilliant LED that shines in red or green light, changing automatically according to the study mode.
Touch Panel Control

Designed with user convenience in mind, the TRC-50DX features a Touch Panel control that allows the operator to change the camera settings with a single touch. All adjustments are at the photographer’s fingertips.

Small pupil mode

The Small pupil mode permits imaging through pupils as small as 4.5mm diameter.

Aperture adjustment

The "Small" setting of the aperture produces a sharper, easier to focus image with enhanced depth of field. It offers remarkable effect in peripheral photography. Furthermore, its enhanced range of focus helps when using high resolution camera which requires severe focus aligning.

<table>
<thead>
<tr>
<th>Off-focus</th>
<th>Peripheral</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="Small" alt="Small" /></td>
<td><img src="Small" alt="Small" /></td>
</tr>
<tr>
<td><img src="Large" alt="Large" /></td>
<td><img src="Large" alt="Large" /></td>
</tr>
</tbody>
</table>
Optional Accessories

Relay Lens

**OR-2 (1X Relay Lens)**

The OR-2 enables conventional color photography and fluorescein angiography on film.

**Triple Mount TV Relay Lens**

Triple mount TV relay lenses enable integration of 3 CCD cameras to the top part.

**Double Mount TV Relay Lens**

Various double relay lenses meet the requirement of attaching CCD cameras to the top part.

**Single Mount TV Relay Lens**

Single mount TV relay lenses make up simple and economical systems for color photography and fluorescein angiography.

Retinal camera

**TRC-50DX:**

- 35mm Film Camera
- OR-2 (1X Relay Lens)
- 1/2 inch 3 CCD
- 11 MP Digital CCD
- Filter Attachment
  - Auto Fluo
  - (Green)
- Double Mount TV Relay Lens
- 2MP-6MP digital CCD
- 6MP-12MP Digital SLR Camera
- Single Mount TV Relay Lens
- 1/2 inch CCD for ICG alignment

*All cameras are other manufacturer’s products.*
IMAGEnet i-base™ Digital Imaging System

Using comprehensive software for capturing, processing, archiving and consulting, IMAGEnet I-base expands the abilities of the TRC-50DX into a digital imaging analysis system for clinical applications. IMAGEnet I-base detects the filter settings and CCD camera in use from the TRC-50DX and sets the capture screen to the corresponding procedure automatically.

A variety of options conveniently priced fit the needs of the single practitioner or the multi-discipline health institution with powerful diagnostic tools. The smart electronics of the TRC-50DX and the convenience of USB connections provide a seamless interface with any of the IMAGEnet I-base programs.
## Specifications

<table>
<thead>
<tr>
<th>Capture mode</th>
<th>TRC-50DX</th>
<th>TRC-50DX (type IA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Fluorescence</td>
<td>Color/Red-Free/FA</td>
<td>Color/Red-Free/FA/ICG/Auto Fluo</td>
</tr>
<tr>
<td>Angle of Coverage</td>
<td></td>
<td>Option*</td>
</tr>
<tr>
<td>Photographic Magnifications</td>
<td>50°/35°/20°</td>
<td>O</td>
</tr>
<tr>
<td>Working Distance</td>
<td>With 35mm camera at zero diopter; 1.84x at 50°, 2.45x at 35°, 4.28x at 50°</td>
<td>39 mm</td>
</tr>
<tr>
<td>Diopter Compensation</td>
<td>0 -10D to +6D</td>
<td>-23D to -9D</td>
</tr>
<tr>
<td>Range for patient’s eye</td>
<td>- +5D to +23D</td>
<td></td>
</tr>
<tr>
<td>Diopter Compensation at finder</td>
<td>A +22D to +41D</td>
<td></td>
</tr>
<tr>
<td>Split Focus</td>
<td>-6D to +5D</td>
<td></td>
</tr>
<tr>
<td>Internal Fixation</td>
<td></td>
<td>O°</td>
</tr>
<tr>
<td>Counter</td>
<td>Option*</td>
<td>O°</td>
</tr>
<tr>
<td>Optical Head tilt</td>
<td></td>
<td>O°</td>
</tr>
<tr>
<td>Light Source</td>
<td>Up 15° / Down 10°</td>
<td></td>
</tr>
<tr>
<td>Power supply</td>
<td>For photography: Max 300WS Xenon</td>
<td>100-120 V, 200-240V / 50-60 Hz</td>
</tr>
<tr>
<td>Power Consumption</td>
<td></td>
<td>1500VA</td>
</tr>
<tr>
<td>Dimensions / Weight</td>
<td>340 mm(W) x 505 mm(D) x 506-715mm(H) / Aprox. 35 Kg</td>
<td></td>
</tr>
</tbody>
</table>

* Is not available in all countries

### Optional Accessory

- **Adjustable Instrument Table AIT-16**
- **Topcon IS-425 table**

* 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.