### Specifications

<table>
<thead>
<tr>
<th>Internal fixation light</th>
<th>Central/macula/choroidal/peripheral</th>
</tr>
</thead>
<tbody>
<tr>
<td>External fixation light</td>
<td>Red/green LED</td>
</tr>
<tr>
<td>Exposure</td>
<td>Appropriate exposure is automatically set based on the 27-steps (0.695 to 300WS) of field angle, filter, and photography mode</td>
</tr>
<tr>
<td>Camera</td>
<td>Higher than 12 megapixel CMOS sensor</td>
</tr>
<tr>
<td>Monitor</td>
<td>7 inch wide-screen touch LCD</td>
</tr>
<tr>
<td>Adjustment range</td>
<td>Frangrid/center/grid/filter, incorporation approx. 17.5mm (focus/highlight grid/center/ incorporation approx. 17.5mm) (up/down) 30mm (tilt: elevation 11°, depression 15°) (fixation height: 30°)</td>
</tr>
<tr>
<td>Recording medium</td>
<td>CF memory card</td>
</tr>
<tr>
<td>Interface</td>
<td>USB / Wi-2 connection</td>
</tr>
<tr>
<td>Power saving function</td>
<td>Yes</td>
</tr>
<tr>
<td>Power supply</td>
<td>Input: AC 120/220V 50/60Hz Power consumption: 230 VA/1500 VA (Max.)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>360(W) x 540(D) x 720(H)mm</td>
</tr>
<tr>
<td>Weight</td>
<td>39kg/86lbs</td>
</tr>
</tbody>
</table>

## Options

- **Internal fixation target**
  - Grip
  - Auxiliary forehead rest
  - FAF filter set

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Innovative design in full pursuit of retinal camera, both patient-friendly and easy-to-use for operator.

**Enhanced photography features 5 photography modes including FAF**

In addition to the non-mydriatic color, mydriatic color, fluorescein fundus angiography (FA), Red-free (RF) modes, fundus autofluorescence (FAF*) mode is added to allow 5-modes photography. Also, the SP mode that allows photography of 3.5 mm of small pupils is equipped.

**Updated design providing stress-free diagnosis**

75mm reduced height of examined eye from our previous model (“VX-10” series), allowing photography in a relaxed posture.

**Instant image filing software is equipped.**

The instant image filing feature allows ID management of images, browsing, and direct output to the external printer. In addition, images can be output to every electric medical records of any manufacturers through the network, not to mention by connecting to the image filing system Kowa VK-2.

**Optical variable 2 angles**

Field of view can be switched between 45°/27° in non-mydriatic mode or between 50°/30° in mydriatic mode by a simple pressing of a button.

**Fundus can be observed through the optical viewfinder.**

In mydriatic mode, the fundus can be observed through the optical viewfinder, allowing photography of images exactly as viewed. This feature is particularly helpful for photographing peripheral part of the retina.
VX-20, simple operation with various useful features, supporting smooth daily medical practices!

Design: Chin rest
- Eye level indication can be easily seen even in the darkroom.
- Stable chassis that makes it easy to assist in eyelid opening.

Design: Tilt angle
- The downward tilt angle has been expansion to 11 degrees.
  Thus, facilitating upward-angle shoots, which have been difficult with the conventional models.

High resolution photography
- The special digital camera built-in.
- The easy image storage.

Wide-screen touch LCD monitor
Wide-screen touch LCD monitor is employed, on which the image is displayed in the center with touch panel icons effectively placed along both sides of the screen. It also provides easier operation with the easy-to-see touch LCD monitor.

Focusing on design for operability
Only usable switch buttons are illuminated according to each photography mode, enabling smooth and quick photography even in the darkroom. Moving chin rest up/down and switching field of view are electrically performed, that can be operated at hand.

SP (Small Pupil) photography mode
In mydriatic mode, either 4.5mm or 4.0mm can be selected. In non-mydriatic mode, 3.5mm is available.

* The SP mode is not supported in RF mode.
* With 3.5mm photography, some eyes may cause a flare around their circumference.

Fixation light switching
Central/disc/macula/peripheral, and external fixation light can be switched with a single touch of a button.

Custom buttons
Photographic sensitivity, diaphragm, and photographic intensity can be set by the user. Depending on the patient, photographic settings can be easily adjusted with simple operations, for example, by increasing the sensitivity to allow patient-friendly photography or to compensate the insufficient light intensity for the FA later phase.

Photography with monitor observation
In mydriatic color, FA, RF, and FAF modes, photography under the monitor observation that can reduce the photophobia of the patient is also possible, in addition to the normal viewfinder observation.
Instant image filing function

Capture mode
The capture mode allows the user to input IDs and display the alignment images or images just captured.

1. Viewer button
   - Used to switch from the capture mode to the viewer mode.

2. ID input button
   - Used to input the ID. Pressing this button to display the ID input screen.

3. Fixation light selection button
   - Used to select the fixation light. Pressing this button to display fixation light buttons to allow selection.

4. Custom buttons
   - Used to select user-set photographic conditions.

*When connecting to the image filing system Kowa VK-2, the image just captured is displayed on the monitor of the image filing system.

Viewer mode
The viewer mode allows the user to browse the images saved in the selected ID, and print or delete the displayed image.

1. Capture button
   - Used to switch to the capture mode.

2. ID input button
   - Used to input the ID. Pressing this button to display the ID input screen.

3. Review button
   - The previously captured image will be displayed.

4. View button
   - The next captured image will be displayed.

5. Multi-button
   - 4 images in the same ID will be displayed.

6. Print button
   - Print out the displayed image.

7. Trash button
   - Delete the displayed image from the CF memory card.

*When connecting to the image filing system Kowa VK-2, the viewer mode is not available.

Example of System Configuration

Stand-alone
- Equipped with the instant image filing function using a touch panel.
- ID input from the card reader is possible.
- Multiple-image display (4 images).
- Photography data is saved in the CF memory card.
- Allows direct printing to the printer.

Network
- Direct connection with the intranet via LAN.
- ID input from the Kowa VX-20 is possible.
- Photographic data can be saved in the network terminal.
- Allows direct printing using the preview display.

Connecting to the image filing system Kowa VK-2
- All the captured images can be freely saved and managed.
- Data sharing on the intranet is possible.
- Equipped with the multi-timer function for FA photography.

Options
- Automatic mosaic merge function
- Photo Stress University
- PST irradiation area calculation support software