Technology for Life Science

Kowa VX-10α QUICK MANUAL :Basic photography

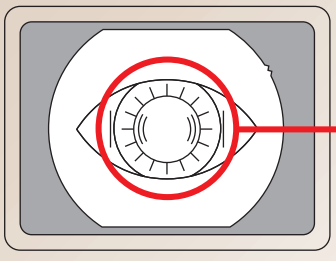
Non-mydriatic photography
(See INSTRUCTION MANUAL on page 3-2.)

1. Select the Non-mydriatic switch.

2. Select the desired photography mode:Electronic picture or 35 mm.

3. Select a fixation index.

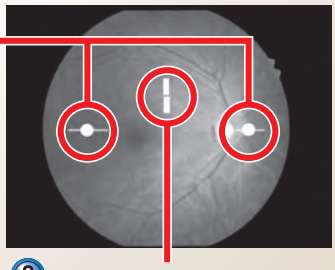
4. Insert "Anterior area of the eye" lens by "Anterior area of the eye" switch.



5. After checking the pupil's diameter, remove "Anterior of the eye" lens.

6. Match the flash intensity with the examined eye.

7. Insert the correct diopter lens.



8. Align the luminous dots with their adjacent lines.

9. Align the split-line focus bars.

10. Press the shutter button for taking photographs.

Mydriatic color photography
(Mydriatic fluorescein angiography)
(See INSTRUCTION MANUAL on page 3-6.)

1. Select the "Color" switch.
(To perform fluorescein angiography, select "F.A." switch.)

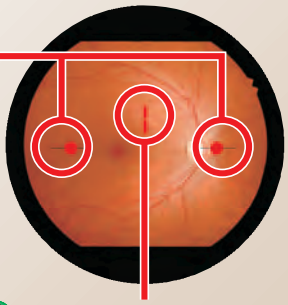
2. Adjust ocular diopter.

3. Select the desired photography mode: Electronic Picture or 35mm.

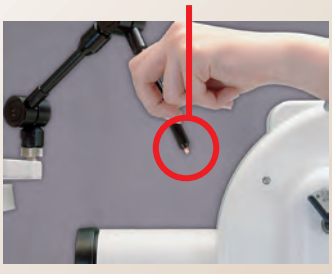
4. Match the flash intensity with the examined eye.

5. Insert the corrrect diopter lens.

6. Align the luminous dots with their adjacent lines.



7. Correctly position the external fixation target.



8. Align the split- line focus bars.

9. To start fluorescein angiography, press the timer switch.
10. Before performing fluorescein angiography, insert the fluorescein filter.

11. Press the shutter button for taking photographs.

Technology for Life Science

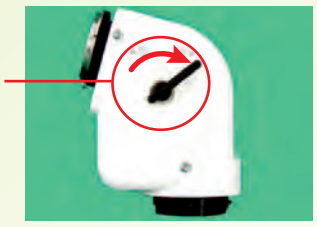
Kowa VX-10α

QUICK MANUAL : Other practical photography

Photography of enlarged image(See INSTRUCTION MANUAL on page 4-1.)

① Operate following the instructions per "Basic photography" until you finish inserting the diopter lens.
② If the video camera adapter is in use, switch the picture angle to 30°(27°).
③ Perform the adjustment of alignment and focusing at the picture angle of 50° (45°).
④ In photographing enlarged image, align a part to be photographed such that it comes in the center of the picture angle.
⑤ Switch the picture angle to 30°(27°) by the picture angle Knob.
⑥ Perform fine adjustment of alignment.
⑦ Press the shutter button for photographing.

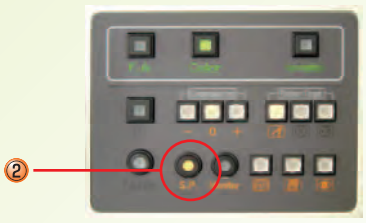
Video adapter's picture angle change-over lever.



Main unit's picture angle change-over lever.

Small pupil photography (operable only when in mydriatic mode)(See INSTRUCTION MANUAL on page 4-1.)

① Operate as far as step ⑤ following the paragraphs about mydriatic photography under "Basic photography."
② Before starting alignment, press "S.P." switch.
③ Adjust alignment and focusing.
④ Guide the examined eye line of sight.
⑤ Press the shutter button for photographing.



Photography in TV monitoring mode (operable only when in mydriatic mode)(See INSTRUCTION MANUAL on page 5-1.)

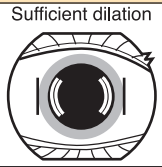
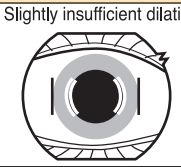
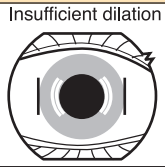
① Operate as far as step ⑤ following the paragraphs about mydriatic photography under "Basic photography."
② Press "TV monitoring" switch before starting alignment.
③ Adjust alignment and focusing.
④ Press the shutter button for photographing.

A tip for a single point

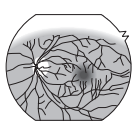
1 How to guide in observation light (See INSTRUCTION MANUAL on page 3-1.)

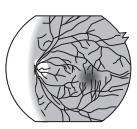
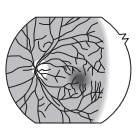
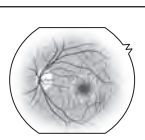
① Look into the examined eye from the side of the objective lens.
② Move the base longitudinally and laterally with the control lever upright such that a rough image of illumination ring-slit focused on the cornea of the examined eye can be obtained.
③ Then while looking into the viewfinder, perform alignment.

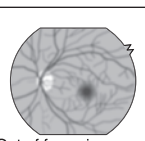
2 Small pupil's diameter and compensation for flash intensity (See INSTRUCTION MANUAL on page 3-3.)

○ Pupil sufficiently dilated	△ Pupil's slightly insufficiently dilated	× Pupil's insufficiently dilated
Sufficient dilation 	Slightly insufficient dilation 	Insufficient dilation 
Photography enabled at flash intensity of 0	Correct the flash intensity in a range of +1 to +3 before starting photography.	Insufficiently dilated. Photography with uniform exposure disabled

3 Fundus picture troubleshooting (See INSTRUCTION MANUAL on page 3-9.)

Photograph	Recommended remedy
 White reflection at top	Camera positioned too high.
 White reflection at bottom	Camera positioned too low. Eyelid of examined eye overhanging. Instruct the patient to open the eyes.
 Circular or line-shaped blur in white	Eyelash of examined eye overhanging. Or the objective lens is not clean.

Photograph	Recommended remedy
 White reflection at left	Camera positioned too leftward.
 White reflection at right	Camera positioned too rightward.
 White flare in peripheral	Camera too close to examined eye.

Photograph	Recommended remedy
 Shadow in peripheral	Camera too far from examined eye.
 Shadow in locals	Examined eye insufficiently dilated.
 Out of focus in general despite fine focusing	• Too much tear wetting on the cornea ofexamined eye, or the cornea is too dry. Instruct the patient to blink a couple of times. • Incorrect optical viewfinder diopter. Correct the optical viewfinder diopte or use luminous spots for focusing detection.

See the INSTRUCTION MANUAL for details.

Kowa Kowa Optimed. Inc.

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