

## ∴ Camera settings for photographic documentation with the HEINE DELTA 20® Dermatoscope and HEINE SLR Photo adaptor

Digital high-resolution photography is the method of choice for optimum image documentation in dermatology. Through observation and documentation, early biopsy can be avoided, and benign lesions can be checked and monitored over time. Digital images allow the doctor and patient to discuss a diagnosis and the accurate therapy together. The combination of the HEINE DELTA 20® and a digital SLR camera allows for consistent high quality photographs.

This step-by-step guide will show you how to connect a DELTA 20 to a Digital SLR camera, and which settings are optimal for your camera. For proper use please read the HEINE DELTA 20® user manual carefully.

**1.** The following digital SLR cameras can be used in connection with the HEINE DELTA 20®.

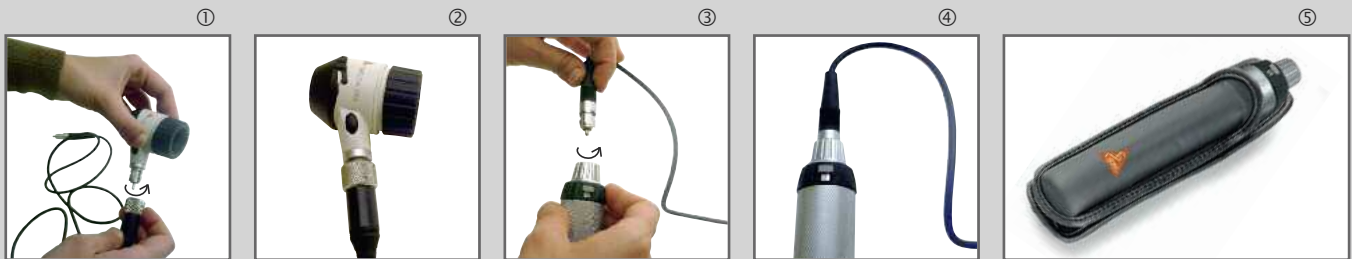
Manufacturer	Type	HEINE SLR Photo Adaptor
Canon	EOS 7D / 50D / 60D	K-000.34.185
	EOS 350D*/400D*	
	EOS 450D/500D/550D	
	EOS 600D/1000D/1100D	
Nikon	D 40* / D 80* / D 40X	K-000.34.186
	D 60 / D 90	
	D 200 / D 300S	
	D 700 / D 7000	
	D 3000 / D 3100	
	D 5000 / D 5100	
Olympus	E-450 / E-510	K-000.34.187
	E-520 / E-620	

\* no longer available

**2.** For best results, please assemble the following components: HEINE DELTA 20® Dermatoscope with contact plate and distance ring, BETA handle as power source, HEINE Photo Accessory Set consisting of HEINE SLR Photo adaptor (Canon, Nikon or Olympus) adaptor cord X-000.99.231, and belt clip.



**3.** Connect one end of the adaptor cord to the HEINE DELTA 20® Dermatoscope head and the other end to the BETA handle by slightly turning the head of the handle. (Put the handle into your belt clip, it will give you more freedom of movement).



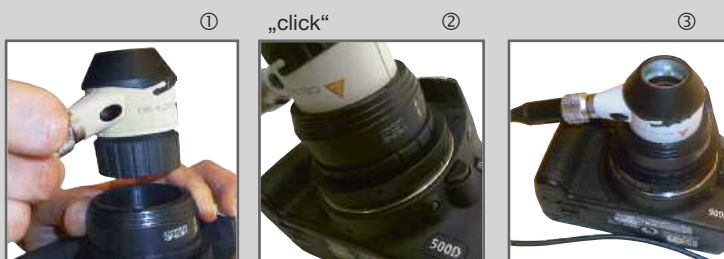
**4.** Connect the HEINE SLR Photo adaptor to the bayonet lock of the camera by placing the red or white spots on top of each other and twist to lock.



**5.** Connect the distance ring onto the line marked "CAMERA" on the focusing ring of the HEINE DELTA 20® Dermatoscope head. Once attached, tighten the focus ring down until it makes contact with the distance ring.



**6.** Connect the DELTA 20 to the SLR photo adaptor. Push the sliding ring of the adaptor with one hand down towards the camera and hold it in this position. With your free hand, insert the HEINE DELTA 20® Dermatoscope head into the adaptor until it clicks in the housing. Now release the sliding ring of the adaptor to lock the DELTA 20 onto the SLR photo adaptor. Check whether the dermatoscope can easily rotate on the adaptor and if it is locked in by gently pulling the head away from the camera body.



**7.** Adjust the settings on your camera to optimize image quality.

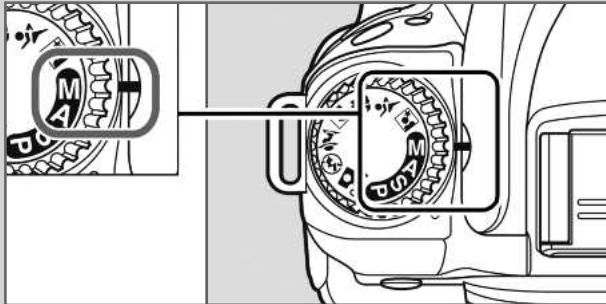
Following are instructions on how to make the proper adjustments for the Nikon D90 and the Canon EOS 550. (Please note that "auto" settings do not lead to good results.)



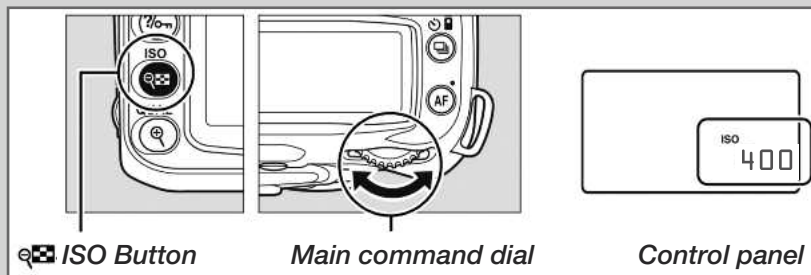
**Example: Nikon D90**

(pictures © Nikon)

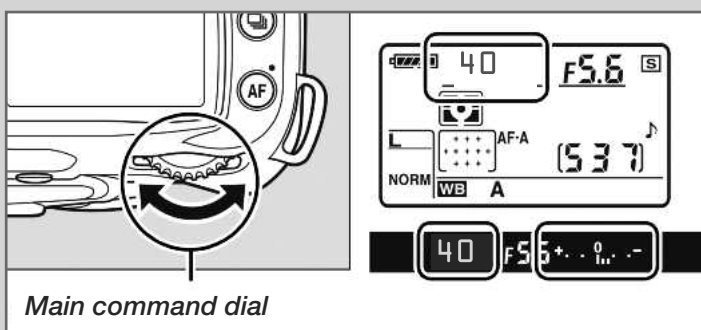
1. Please turn the mode dial to program "M".



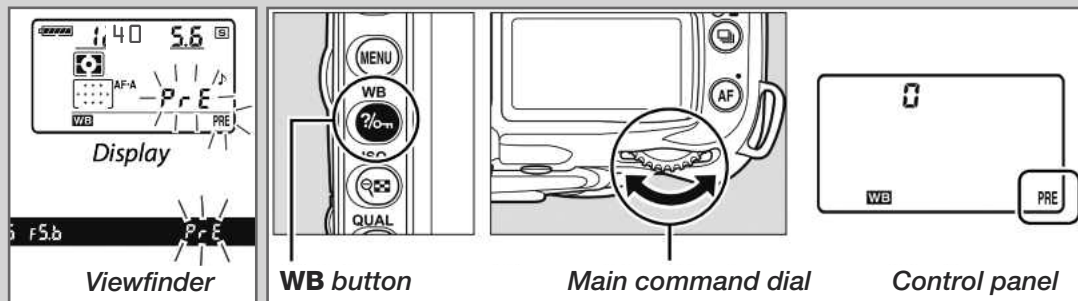
2. Set the ISO sensitivity to 400 by pressing the ISO-button while turning the rear main command dial until the correct value is displayed. The correct value appears on the bottom corner of the upper control panel.



3. Set the exposure time to 1/40s. Press the shutter-release briefly until the exposure time appears on the upper control panel. Adjust the value by turning the rear main command dial.

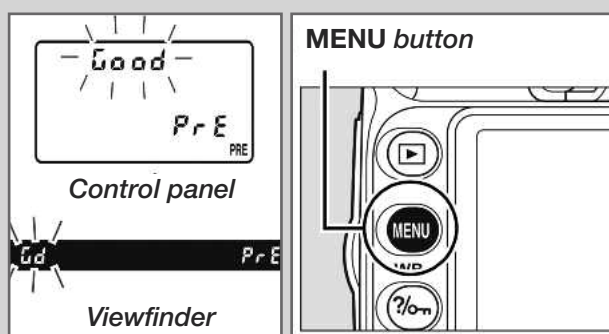


4. The white balance needs to be set once. To do this press the WB-button and turn the rear main command dial until "PRE" is displayed on the upper control panel.



Turn the WB button until the "PRE" symbol starts to blink.

Please point the camera with the adapted DELTA20 head (switched on) on a white or neutral gray object like paper and press the shutter-release button. The display will show "good" once the measuring was accurate. In all other cases please repeat the process.



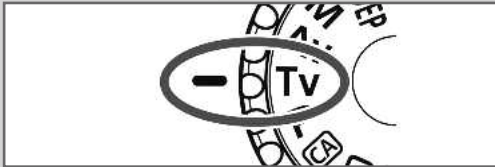
The manual white balance picture can be found in the menu. For using an already done white balance please also use the menu.

Please choose a white balance picture in the menu. We recommend naming the white balance picture taken with the HEINE DELTA20® accordingly.

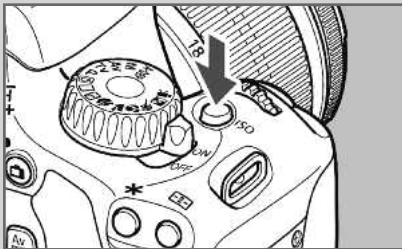
**Example: EOS 550D**

(pictures © Canon)

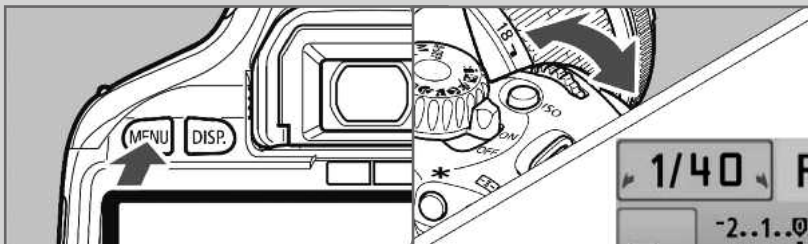
1. Please turn the mode dial to program Tv.



2. Set the ISO sensitivity to 400. To do this press the ISO-button and select the value over the display.

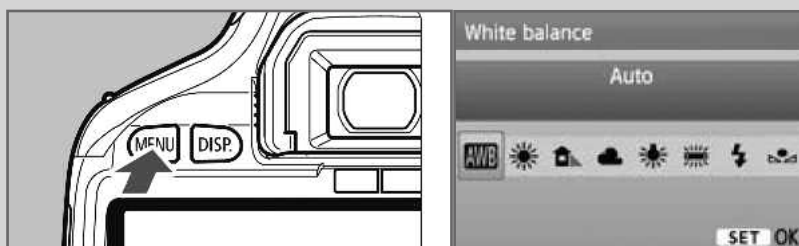


3. Adjust the exposure time to 1/40 s by pushing the menu button until the following menu appears:



The value can be set by turning the main dial (in the front)

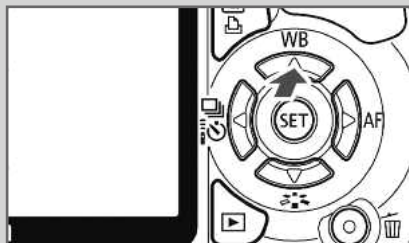
4. The white balance needs to be set once. To do this please press the menu-button until the following menu is displayed:



Press WB button, select the customer white balance on the display

and confirm with the “set” button.

Point the camera with the adapted DELTA20 head (switched-on) on a white object like paper and press the shutter button. To accept the white balance picture, please press the menu-button until the following screen is displayed.



Please select the custom WB with the set-button and confirm the chosen picture with the set-button. We recommend naming the white balance picture taken with the HEINE DELTA20® accordingly.

## Camera setup for Olympus SLR-Adaptor

- ISO: 400
- Program: S
- Exposure: 1/40 s
- White balance: manual

## Canon Camera Name Chart

Europe	USA	Japan	MPixel
Canon EOS 300D	Digital Rebel	Kiss Digital	6
350D	Rebel XT	Kiss N	8
1000D	Rebel XS	Kiss F	10
400D	Rebel XTi	Kiss X	10
450D	Rebel XSi	Kiss X2	12
500D	Rebel T1i	Kiss X3	15
550D	Rebel T2i	Kiss X4	18

