# HELPING the human EYE.

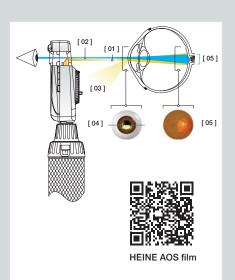




#### HEINE Direct Ophthalmoscopes



	BETA 200S	BETA 200	BETA 200 M2	K180 Opt. 1	K180 Opt. 2	mini 3000
Optical System	Aspherical	Asph	nerical	Conve	entional	Conventional
Illumination	XHL or LED <sup>HQ</sup>	XHL or LED <sup>HQ</sup>	XHL	XI	HL	XHL or LED <sup>HQ</sup>
Apertures						000
Corrective lenses	- 36 to +38 D, 74 single diopter steps, 28 Lenses	27 diopt	- 35 to +40 D, 27 diopter steps, 27 Lenses  - 35 to +40 D, 27 diopter steps, 27 Lenses		- 20 to +20 D, 18 diopter steps, 18 Lenses	
Dust protection	Dustproof	Dustproof		Dust protected		Dust protected
Frame system made of	Aluminium	Aluminium		Plastic		Plastic
Instrument size	Professional	Professional		Professional		Compact
Handle options / power sources	Battery handle (XHL only)  USB rechargeable handle Rechargeable handle with table charger  EN 200 / EN 200-1	Battery handle (XHL only)  USB rechargeable handle Rechargeable handle with table charger  EN 200 / EN 200-1		<ul> <li>Battery handle</li> <li>USB rechargeable handle</li> <li>Rechargeable handle with table charger</li> <li>EN 200 / EN 200-1</li> </ul>		Battery handle     Rechargeable     handle with table     charger
Catalogue page	035	037	/044	04	40	042



- "Aspherical Optical System" (AOS) exclusively from HEINE eliminates corneal and iris reflexes to provide large, crisp and glare-free fundus images.
- [01] Flat, elliptical illumination beam produced by HEINE's Aspherical Optical System.
- [02] Observation path.
- [03] Redirected iris and corneal reflexes.
- [04] The elliptical light beam enters through the lower half of the cornea. The illumination beam has been separated from the observation beam (Gullstrand-Principle). All reflexes are diverted away from the observation beam due to the curvature of the reflective cornea. Due to the flat, compressed form of the light beam, a maximum amount of light enters through the pupil.
- [05] Once past the anterior chamber, the light beam opens up dramatically to illuminate a large area of the retina.

#### HEINE BETA® 200S LED Ophthalmoscope

#### Superior aspherical optics with LEDHQ illumination

Exclusive dustproof design protects the precision optical components and ensures maintenance-free operation. The BETA 200/200S Ophthalmoscopes are the only instruments with an aluminium frame system. Optical components are flush-mounted on a cast aluminum frame, eliminating misalignment and making the instrument shock-resistant. The BETA 200S LED has virtually unlimited hours of working life. No need to ever replace bulbs. Maintenance-free for a lifetime.

- : Exclusive Aspherical Optical System (AOS).
- : There's LED. And there's LEDHQ. HEINE has set a new standard which maintains that only the best is good enough, from the selection of materials to processing, from light intensity to dimmability, and from thermal management to a colour rendering index as high as possible. That's what we call LED in HEINE Quality or LEDHQ.
- : Special optical interface to precisely integrate the LED illumination with the optical system to ensure bright, homogeneous light during examinations.
- : The BETA 200S Ophthalmoscope accommodates higher refractive errors with a 28 single lenses Rekoss Disc and features a 74 single step design on a non-continuous wheel avoiding extreme diopter jumps.
  - + in 1 D steps: +1 through +38 D
  - in 1D steps: -1 through -36D
- : Patented, unique, stepless dimming from 3 % to 100 % with practical one-finger operation.
- : No stray light due to the recessed, multi-coated viewing window eliminates distractions.
- : Precise one-hand control of the instrument. Ergonomic design offers flexibility while examining.
- : Suitable for large as well as small or undilated pupils.
- : Ergonomic design fits the orbita comfortably, and blocks out ambient light.
- : Full functionality of the BETA 200S LED is guaranteed with BETA Rechargeable Handles and the EN 200 / EN 200-1 Wall Transformers.
- : Also available with XHL Xenon Halogen illumination. Bright illumination and authentic colour rendering; for other technical specifications see BETA 200S LED Ophthalmoscope.



LED IN HEINE QUALITY.

BETA 200S with 7 apertures



Cobalt blue filter, fixation star with polar coordinates, large spot, small spot, pinhole, slit, hemispot



With red-free filter



#### HEINE BETA 200S Diagnostic Sets/Kits

#### With XHL or LED<sup>HQ</sup> illumination

#### Set includes: BETA 200S Ophthalmoscope,

1 spare bulb for XHL version, hard case.

		2.5 V XHL	3.5V XHL	LED
	BETA battery handle	C-261.10.118		
	BETA4 USB rechargeable handle with			
X	USB cord and plug-in power supply		C-261.27.388	C-261.28.388
	BETA4 NT rechargeable handle			
	with NT4 table charger		C-261.23.420	C-261.24.420



without case	Without	case
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BETA 200S Ophthalmoscope with	2.5V XHL	3.5 V XHL	LED
BETA battery handle	C-010.10.118		
BETA4 USB rechargeable handle with			
USB cord and plug-in power supply		C-010.27.388	C-010.28.388



**Set includes: BETA 200S Ophthalmoscope, BETA 200 Streak Retinoscope,** 1 spare bulb for XHL version, hard case.

	2.5 V XHL	3.5 V XHL	LED
BETA battery handle	C-262.10.118		
BETA4 USB rechargeable handle with			
USB cord and plug-in power supply		C-262.27.388	C-262.28.388
BETA4 NT rechargeable handle			
with NT4 table charger		C-262.23.420	C-262.24.420

: For further information on the HEINE BETA 200 Retinoscope, please see page 045.

#### HEINE BETA® 200 LED Ophthalmoscope

#### Superior aspherical optics with LEDHQ illumination

HO: LED IN HEINE QUALITY.



The ophthalmoscope with unique aspherical optics and all features of the BETA 200S LED, but:

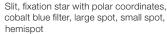
- : Without macula aperture (pinhole)
- : The BETA 200 Ophthalmoscope accommodates higher refractive errors with a 27 single lenses Rekoss Disc.

+ in 1 D steps: 1 - 10				
- in 1D steps: 1 - 10	15	20	25	35 D

- : Full functionality of the BETA 200 LED is guaranteed with BETA Rechargeable Handles and the EN 200 / EN 200-1 Wall Transformers.
- : Also available with XHL Xenon Halogen illumination. Bright illumination and authentic colour rendering; for other technical specifications see BETA 200 LED Ophthalmoscope.

#### BETA 200 with 6 apertures







#### HEINE BETA 200 Ophthalmoscope Sets/Kits

#### With XHL or LEDHQ illumination

#### Set includes: BETA 200 Ophthalmoscope,

1 spare bulb for XHL version, hard case.





Without case

	2.5 V XHL	3.5V XHL	LED
BETA battery handle	C-144.10.118*		
BETA4 USB rechargeable handle with			
USB cord and plug-in power supply		C-144.27.388	C-144.28.388
BETA4 NT rechargeable handle			
with NT4 table charger		C-144.23.420	C-144.24.420

 $<sup>^\</sup>star$ Available with large battery handle **X-001.99.120** (doesn't fit into hard cases). Please specify with your order.

BETA 200 Ophthalmoscope with	2.5V XHL	3.5V XHL	LED
BETA battery handle	C-011.10.118		
BETA4 USB rechargeable handle with			
USB cord and plug-in power supply		C-011.27.388	C-011.28.388



#### HEINE BETA 200 Diagnostic Sets/Kits

#### With XHL or LED<sup>HQ</sup> illumination



**Set includes: BETA 200 Ophthalmoscope, BETA 200 Streak Retinoscope,** 1 spare bulb for XHL version, hard case.

2.5 V XHL	3.5 V XHL	LED
C-145.10.118		
	C-145.27.388	C-145.28.388
	C-145.23.420	C-145.24.420
		C-145.10.118

: For further information on the HEINE BETA 200 Retinoscope, please see page 045.



Set includes: BETA 200 Ophthalmoscope, BETA 400 F.O. Otoscope,

1 set (4 pcs.) of reusable tips, 10 AllSpec disposable tips  $4\,\mathrm{mm}~\ensuremath{\emptyset}$ , one spare bulb each for XHL version, hard case.

	2.5 V XHL	3.5 V XHL	LED
BETA battery handle	A-153.10.118		
BETA4 USB rechargeable handle with			
USB cord and plug-in power supply		A-153.27.388	A-153.28.388



Without case

Also available as a kit with EN 200 Wall Transformer (page 129)

Kit includes: BETA 200 Ophthalmoscope, BETA 400 F.O. Otoscope, 1 set (4 pcs.) of reusable tips, 10 AllSpec disposable tips  $4 \text{ mm } \emptyset$ , one spare bulb each for XHL version.

	3.5V XHL	LED
2x BETA4 NT rechargeable handle		
with NT4 table charger	A-153.23.422	A-153.24.422

> For further information on the HEINE BETA 400 F.O. Otoscope, please see page 007.



#### HEINE BETA 200 Diagnostic Sets/Kits

#### With XHL or LED<sup>HQ</sup> illumination



#### Set includes: BETA 200 Ophthalmoscope, BETA 200 F.O. Otoscope,

1 set (4 pcs.) of reusable tips, 10 AllSpec disposable tips  $4\,\mathrm{mm}\,\varnothing$ , one spare bulb each for XHL version, hard case.

	2.5V XHL	3.5V XHL	LED
BETA battery handle	A-132.10.118		
BETA4 USB rechargeable handle with			
USB cord and plug-in power supply		A-132.27.388	A-132.28.388



Without case



#### Kit includes: BETA 200 Ophthalmoscope, BETA 200 F.O. Otoscope,

1 set (4 pcs.) of reusable tips, 10 AllSpec disposable tips  $4\,\mathrm{mm}$  Ø, one spare bulb each for XHL version, hard case.

	3.5V XHL	LED
2x BETA4 NT rechargeable handle		
with NT4 table charger	A-132.23.422	A-132.24.422

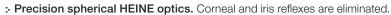
: For further information on the HEINE BETA 200 F.O. Otoscope, please see page 009.



#### HEINE K180 Ophthalmoscope

#### Standard direct ophthalmoscope

A full-featured instrument at an economical price.



- : XHL Xenon Halogen Technology. Bright, white light. Clear retinal image.
- : Range of lenses: 27 lenses from -35 D to +40 D. Brilliant image even at high corrections.

+ in 1 D steps: 1 - 10				
- in 1 D steps: 1 - 10	15	20	25	35 D

- : Ergonomical shape. The instrument fits the orbita comfortably.
- : Soft orbital rest. Steadies the instrument and protects your glasses.
- : Choice of 5 apertures. For both large and small pupils. Choice of fixation star or cobalt blue filter for corneal examination.
- : Dust resistant housing. Maintenance-free.
- : High-impact polycarbonate housing for durability.

#### K180 apertures



Aperture wheel 1:

Slit, red-free filter, fixation star with polar coordinates, large spot, small spot

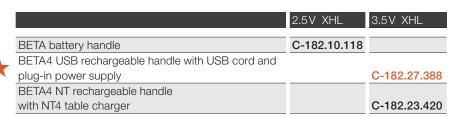


Aperture wheel 2: Slit, red-free filter, cobalt blue filter, large spot, small spot

#### HEINE K180 Ophthalmoscope Sets

Set includes: K180 Ophthalmoscope with aperture wheel 1, soft pouch.





**Set includes: K180 Ophthalmoscope** with aperture wheel 2, soft pouch.



	2.5V XHL	3.5V XHL
BETA battery handle	C-183.10.118	
BETA4 USB rechargeable handle with USB cord and		
plug-in power supply		C-183.27.388
BETA4 NT rechargeable handle		
with NT4 table charger		C-183.23.420

#### HEINE K180 Diagnostic Sets



**Set includes: K180 Ophthalmoscope** in standard version with aperture wheel 1, **K180 F.O. Otoscope,** 1 set (4 pcs.) of reusable tips, hard case.

	2.5 V XHL	3.5V XHL
BETA battery handle	A-279.10.118	
BETA4 USB rechargeable handle with USB cord and		
plug-in power supply		A-279.27.388
BETA4 NT rechargeable handle		
with NT4 table charger		A-279.23.420

: For further information on the HEINE K180 F.O. Otoscope, please see page 011.

HO:



#### HEINE mini 3000<sup>®</sup> Ophthalmoscope

#### Compact pocket ophthalmoscope with XHL or LED<sup>HQ</sup> illumination

Modern pocket ophthalmoscope with concentrated bright light for perfect illumination, a brilliant image and accurate colour rendering. Fixation star aperture with grey filter for reducing the light intensity. Excellent optics and best colour rendering in minimum dimensions, ideal for rounds and house calls. Can be used with the mini 3000 handle system. Available in black and blue.

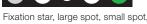
#### Features for both instruments (XHL and LED):

- : HEINE optics produce crisp, clear images of the whole area under examination and minimise reflections.
- : 5 different apertures. A full-function instrument incl. fixation star.
- :- Grey filter for light-sensitive patients.
- : Range of lenses: 18 lenses from -20 D to +20 D.

+	1	2	3	4	6	8	10	15	20D
_	1	2	3	4	6	8	10	15	20 D

- : Easy workflow, because ophthalmoscopy is possible without dilation of the pupils.
- : Attachment clip with integrated on/off switch. Switches off automatically when returned to the pocket.
- : Replaceable batteries. Size AA, or optional rechargeable battery with mini NT table charger.\*
- : 2-piece handle and head. Easy to maintain, flexible.
- : Award-winning design. Maximum quality with minimum dimensions.

mini 3000 apertures



hemispot, red-free filter

#### Special features of the LED instruments:

- : Maintenance-free, no need to ever replace the LED.
- : LED Thermal management for a consistent light output throughout the whole working life.
- : There's LED. And there's LEDHQ. HEINE has set a new standard which maintains that only the best is good enough, from the selection of materials to processing, from light intensity and thermal management to a colour rendering index as high as possible. That's what we call LED in HEINE Quality - or LEDHQ.
- : Exclusive Battery Performance Indicator: When the instrument is switched on, the maximum light intensity is shown, then the light intensity is regulated down to the level that corresponds to the current charge status of the battery so you know when your batteries need changing.
- : Fade-Out Feature: brightness reduces slowly even with low residual capacity, for even more efficient use of dry or rechargeable batteries.
- : Operation time typ. 10 hours. The batteries need to be changed less often and the rechargeable batteries last longer.



\*To upgrade to a rechargeable instrument with mini NT table charger, please see page 132.



HEINE mini 3000 pocket instruments – a complete range of quality diagnostic instruments for your pocket. Available in black or blue. Please specify the colour you prefer when ordering. If not otherwise specified, we will supply black instruments.

#### HEINE mini 3000 Diagnostic Sets/Kits



#### Set includes: mini 3000 Ophthalmoscope, hard case.

	2.5V XHL	2.5V LED
mini 3000 battery handle with batteries	D-852.10.021	D-885.21.021



	mini 3000 Ophthalmoscope with	2.5 V XHL	2.5 V LED
*	mini 3000 battery handle with batteries	D-001.71.120	D-008.71.120
	mini 3000 rechargeable handle		
	(please order mini NT table charger separately)	D-001.71.200	D-008.71.200



Set/Kit includes: mini 3000 Ophthalmoscope, mini 3000 F.O. Otoscope,

1 set (4 pcs.) of reusable tips, 10 AllSpec disposable tips 4 mm  $\varnothing$ 

2.5V XHL	2.5V LED
D-873.11.021	D-886.11.021
D-859.11.022	* D-860.11.022*
	D-873.11.021

<sup>\*</sup>with this Art. No. only available in black



Without case

: For further information on the HEINE mini 3000 F.O. Otoscope, please see page 012.



[03]

Set includes: mini 3000 Ophthalmoscope, mini 3000 Otoscope,

1 set (4 pcs.) of reusable tips, 10 AllSpec disposable tips  $4\,\mathrm{mm}\,\varnothing$ 

	2.5V XHL
2 mini 3000 battery handles with batteries	
with hard case [03]	D-873.21.021

: For further information on the HEINE mini 3000 Otoscope, please see page 016.



#### **HEINE Ophthalmoscopes**





BETA 200S Ophthalmoscope Head	2.5 V XHL	3.5V XHL	LED
without handle and without			
accessories	C-001.30.120	C-002.30.120	C-008.30.120





BETA 200 Ophthalmoscope Head	2.5 V XHL	3.5 V XHL	LED
without handle and without			
accessories	C-001.30.100	C-002.30.100	C-008.30.100





BETA 200 M2 Ophthalmoscope Head	2.5V XHL	3.5V XHL
without handle and without accessories		
Like BETA 200, except with pinhole instead of small spot		
and with fixation star aperture without polar coordinates	C-001.30.102	C-002.30.102





K180 Ophthalmoscope Head	2.5V XHL	3.5 V XHL
with aperture wheel 1, without handle and		
without accessories	C-001.30.206	C-002.30.206
with aperture wheel 2, without handle and		
without accessories	C-001.30.207	C-002.30.207

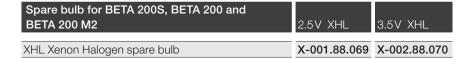




mini 3000 Ophthalmoscope Head	2.5V XHL	2.5 V LED
without handle and without accessories *	D-001.71.105	D-008.71.105

\*Available in black and blue. Please specify the colour you prefer when ordering. If not otherwise specified, we will supply black instruments.



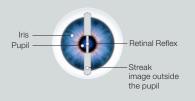




Spare bulb for K180	2.5 V XHL	3.5 V XHL
XHL Xenon Halogen spare bulb	X-001.88.084	X-002.88.086



Spare bulb for mini 3000	2.5V XHL
XHL Xenon Halogen spare bulb	X-001.88.106









#### Hand-held retinoscopes for objective refraction.

The BETA 200 Retinoscope is used for the exact measurement of the refractive error. Both myopia and hyperopia as well as astigmatism can be measured.

Two versions are available:

The Spot Retinoscope with a round light spot (available only as XHL variant) and the more widely-used Streak Retinoscope with a streak image which simplifies the examination.

#### \*HEINE ParaStop

The BETA 200 Retinoscope with ParaStop features the latest multi-coated optics for an exceptionally bright fundus reflex and easier detection of the neutralisation point. ParaStop was developed by HEINE for the easy, precise selection of a parallel illumination beam. ParaStop simplifies and speeds up the precise detection of cylinder axis. ParaStop also simplifies the verification of the cylinder correction after refraction.

#### HEINE BETA® 200 LED Retinoscope with HEINE ParaStop®

#### With LED illumination in HEINE Quality - LEDHQ





Homogenous LED illumination for precise streak image quality offers an easy and quick observation of the fundus reflex.

- : ParaStop. Precise, easy selection of a parallel beam\* (see above).
- : Brilliant, precise streak image with a line width of typically 1.1 mm (ISO 12865 Standard < 1.5 mm) and a line length of 35 mm for a very bright, readily visible fundus reflex.
- : There's LED. And there's LEDHQ. HEINE has set a new standard which maintains that only the best is good enough, from the selection of materials to processing, from light intensity to dimmability, and from thermal management to a colour rendering index as high as possible. That's what we call LED in HEINE Quality or LEDHQ.
- : Patented, unique, stepless dimming from 3 % to 100 % with practical one-finger operation.
- : Ergonomic shape. Protects the examiner's orbita from stray light.
- : Metal controls. Long-lasting.
- : Single control for vergence and rotation. Comfortable operation.
- : Maintenance-free. Dustproof. LED with virtually unlimited hours of working life.
- : Integrated polarisation filter. Eliminates stray light and internal reflexes for a brighter fundus reflex.
- : Detachable brow rest. Increased comfort and control during examination.
- : Holder for fixation cards (optional). For dynamic retinoscopy.
- : Full functionality of the BETA 200 LED is guaranteed with BETA Rechargeable Handles and the EN 200 / EN 200-1 Wall Transformers.
- : Also available with XHL Xenon Halogen illumination. Bright illumination and authentic colour rendering; for other technical specifications see BETA 200 LED Retinoscope.



#### HEINE BETA 200 Diagnostic Sets/Kits



#### Set includes: BETA 200 Streak Retinoscope,

1 spare bulb for XHL version, hard case.

		2.5 V XHL	3.5V XHL	LED
Е	BETA battery handle	C-034.10.118*		
E	BETA4 USB rechargeable handle with			
Į	JSB cord and plug-in power supply		C-034.27.388	C-034.28.388
Е	BETA4 NT rechargeable handle			
٧	vith NT4 table charger		C-034.23.420	C-034.24.420
_				

<sup>\*</sup>Also available with large battery handle X-001.99.120 (doesn't fit into hard cases). Please specify with your order.



Without case

BETA 200 Streak Retinoscope with	2.5 V XHL	3.5V XHL	LED
BETA battery handle	C-014.10.118		
BETA4 USB rechargeable handle with			
USB cord and plug-in power supply		C-014.27.388	C-014.28.388



#### Set includes: BETA 200 Streak Retinoscope, BETA 200S Ophthalmoscope,

1 spare bulb for each instrument for XHL version, hard case.

	2.5 V XHL	3.5V XHL	LED
BETA battery handle	C-262.10.118		
BETA4 USB rechargeable handle with			
USB cord and plug-in power supply		C-262.27.388	C-262.28.388
BETA4 NT rechargeable handle			
with NT4 table charger		C-262.23.420	C-262.24.420

: For further information on the HEINE BETA 200S Ophthalmoscope, please see page 035.



#### Set includes: BETA 200 Streak Retinoscope, BETA 200 Ophthalmoscope,

1 spare bulb for each instrument for XHL version, hard case.

	2.5 V XHL	3.5 V XHL	LED
BETA battery handle	C-145.10.118		
BETA4 USB rechargeable handle with			
USB cord and plug-in power supply		C-145.27.388	C-145.28.388
BETA4 NT rechargeable handle			
with NT4 table charger		C-145.23.420	C-145.24.420

For further information on the HEINE BETA 200 Ophthalmoscope, please see page 037.



#### HEINE HSL 150 Hand-held Slit Lamp

#### For the examination of the anterior segment



Compact and lightweight, the portable HSL 150 is ideal for situations where a full-size slit lamp is not available or convenient. For the examination of the anterior segment in Human- and Veterinary medicine.

- : Slit size adjustable from 0.2 mm x 10 mm to 4 mm x 14 mm.
- : 6x magnification.
- : Blue interference filter (FITC), can be selected for corneal examination.
- : Multi-coated optics for maximum light transmission.
- : 2.5V or 3.5V XHL Xenon Halogen Technology for bright, white light comparable with the brightness of a classic slit lamp.
- : The HSL 150 instrument head weighs just 70 g, the lightest slit lamp of its kind.

#### HEINE HSL 150 Hand-held Slit Lamp Sets



Set includes: HSL 150 Hand-held Slit Lamp, soft pouch.

2.5 V XHL
C-252.10.105



Set includes: HSL 150 Hand-held Slit Lamp, spare bulb, hard case.

	3.5V XHL
DETA 4 OLIMANIT	0.000.00.474
BETA4 SLIM NT rechargeable handle and NT4 table charger*	C-266.20.471

<sup>\*</sup>NT4 table charger incl. reducer insert

BETA SLIM battery handle



#### HEINE LAMBDA 100 Retinometer

#### For assessing potential visual acuity



The LAMBDA 100 Retinometer is the first compact instrument for assessing potential visual acuity of patients with cataracts and other opacities.

LAMBDA 100 – clinically tested with excellent results.\*

- : Simple, easy-to-use controls. Reliable diagnosis, easy to operate.
- : Compact, lightweight (100 g). Can be used anywhere even bedside.
- : XHL Xenon Halogen Technology and brightness control. Avoids patients discomfort from dazzle.

#### Three simple steps for assessing potential visual acuity with LAMBDA 100

- 1. Switch on instrument, select acuity, adjust pattern of lines, reduce ambient lighting.
- 2. Rest Retinometer against the patient's forehead. Scan the pupil with the red light spot to find a "window" through which the patient can recognise the pattern of lines.
- 3. Select progressively finer lines with different angles until the patient can no longer recognise the angle. The value of the last recognisable angle indicates potential acuity.









 $0^{\circ}$   $\text{isus} = 0.5 \quad \left(\frac{20}{40}\right)$ 





LAMBDA 100 Examples of various acuity grating patterns (visual angle 1°)

#### HEINE LAMBDA 100 Retinometer Kits



#### Kit includes: LAMBDA 100 Retinometer,

1 Patient card, BETA4 USB rechargeable handle with USB cord and plug-in power supply, spare bulb.

Kit 1: acuity scale 20/300 to 20/25 (scale 2)
Kit 2: decimal scale 0.06 to 0.8 (scale 1)

3.5V XHL

C-037.27.388 C-038.27.388



<sup>\*</sup> Validated by the study "Accuracy of the HEINE LAMBDA 100 Retinometer" in Investigative Ophthalmology & Visual Science, May 2008, Vol. 49, Southern College of Optometry, Memphis, Tennessee and the study "Reliability of predictable postoperative visual acuity of cataracts as measured by HEINE LAMBDA 100 retinometer preoperatively" by the Departamento de Oftalmologia, May – June 2010, São Paulo, Brasil.

#### HEINE Ophthalmic Examination Lamp

#### For examination of the anterior segment and cornea in focal light



- : 5 different apertures. Helps detect erosion, edema and foreign bodies on the cornea.
- : Apertures focused at 100 mm working distance.



#### Aperture combination



Slit, three different spots, cobalt blue filter for fluorescence examination

#### HEINE Ophthalmic Examination Lamp Kits



Without case

Ophthalmic Examination Lamp with	2.5 V XHL	3.5 V XHL
BETA battery handle	C-018.10.118	
BETA4 USB rechargeable handle with USB cord	0 0101101110	
and plug-in power supply [01]		C-018.27.388
BETA4 NT rechargeable handle		
(without NT4 table charger)		C-018.23.396



#### HEINE Finoff Transilluminator

#### For scleral transillumination

: Detachable Cobalt blue filter. Suitable for fluorescence examinations.



	Finor Transilluminator with	3.5 V XHL
	BETA4 USB rechargeable handle with USB cord	
7	and plug-in power supply [01]	C-019.27.388
	BETA4 NT rechargeable handle (without NT4 table charger)	C-019.23.396



Without case

#### **HEINE** ophthalmic instruments



BETA 200 Retinoscope Head	2.5V XHL	3.5V XHL	LED
without handle	C-001.15.353	C-002.15.353	C-008.15.353

#### Fixation cards for BETA 200 Retinoscope

Fixation cards with holder for dynamic retinoscopy, without instrument

C-000.15.360

3.5V XHL



#### Orange filter for BETA 200 Retinoscope with XHL illumination

C-000.15.359 Orange filter for the bulb, for light-sensitive patients



Spare bulb for BETA 200 Retinoscope	2.5V XHL	3.5V XHL
XHL Xenon Halogen spare bulb	X-001.88.087	X-002.88.089
XHL Xenon Halogen spare bulb		
to convert to Spot Retinoscope	X-001.88.088	X-002.88.090



HSL 150 Hand-held Slit Lamp Head	2.5V XHL	3.5V XHL
without handle	C-001.14.602	C-002.14.602



#### HSL10x Loupe Attachment for HSL 150

Loupe attachment with 10x magnification, without instrument C-000.14.606





LAMBDA 100 Retinometer Head	2.5V XHL	3.5V XHL
with acuity scale 20/300 to 20/25 (scale 2),		
without handle	C-001.35.015	C-002.35.015
with decimal scale 0.06 to 0.8 (scale 1),		
without handle	C-001.35.010	C-002.35.010

#### Patient card for LAMBDA 100 Retinometer

Patient card C-000.35.005

	Spare bulb for LAMBDA 100 Retinometer	2.5V XHL	3.5V XHL
HEINE XHI \$077 2.5V	XHL Xenon Halogen spare bulb	X-001.88.077	X-002.88.078



#### **HEINE** ophthalmic instruments









Finoff Transilluminator Head	3.5V XHL
Finoff for scleral transillumination, without handle [01]	C-002.17.080



#### HEINE Indirect Ophthalmoscopes







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	OMEGA 600	OMEGA 500	SIGMA 250 SIGMA 250 M2
Convergence and parallax adjustment	Synchronized	Synchronized	Separate
Apertures			
Integrated filters			Red-free filter is integrated in aperture row
Illumination	LEDHQ	XHL or LEDHQ	LEDHQ
Wearing options	Headband	Professional L Headband	S-FRAME Spectacle Frame
Further articles	<ul><li>Teaching mirror</li><li>Ophthalmoscopy lenses</li><li>Fundus charts</li></ul>	<ul><li>Teaching mirror</li><li>Ophthalmoscopy lenses</li><li>Fundus charts</li></ul>	<ul><li>Teaching mirror</li><li>Blue filter and yellow filter</li><li>Diffusor</li><li>Ophthalmoscopy lenses</li><li>Fundus charts</li></ul>
Product variants	-	With integrated camera	-
Brightness control	On the instrument; visionBOOST	On the instrument	On the power source
Mobile power supply / Operating time	Rechargeable battery integrates into the headband / typ. 8 hours.	Headband-mounted battery mPack UNPLUGGED / XHL typ. 2 hours, LED typ. 7 hours     mPack / XHL typ. 4 hours, LED typ. 13 hours	•mPack mini / LED typ. 11 hours
Stationary power supply	•CW1 wall charger •CC1 charging case •E4-USBC power supply	EN 50 Table- or / Wall transformer     Plug-in transformer	-
Catalogue page	054 – 055	056 – 057	058 – 059





## The new HEINE OMEGA 600 Indirect Ophthalmoscope

There is so much to discover inside the eye. And often tiny details can make a big difference. That's why we provide you with the best optics, the sharpest image, and reliable colours. Along with the capability to explore the whole retina, including the far periphery.

**New: visionBOOST for cataract patients:** more confidence in the diagnosis when examining patients with media opacities. Proven to deliver up to 20% better view of the retina in patients with cataracts\*: no matter what circumstances – always the ideal working brightness for both the patient and the user.

And there is even more: The new HEINE OMEGA 600 is the lightest high-end indirect ophthalmoscope. The new, extremely compact lithium polymer battery is a true lightweight that delivers absolutely top performance. With all cables and electronics integrated in the new headband, this ophthalmoscope is the state of the art. So discovering more has been made even more comfortable.



#### HEINE OMEGA® 600 Indirect Ophthalmoscope

The lightest high-end indirect ophthalmoscope worldwide

#### Discover more. With less weight.

### NEW!







Red-free, yellow and cobalt blue filters



Diffuser HEINE, small spot, medium and large



HEINE OMEGA 600 Operation film









#### Discover more. with less weight.

- : Best wearing comfort
- : Personalized fit
- Ergonomic positioning of controls and levers
- Adaptable for right and left handed users
- Flip-up optics unit

#### Most precise diagnostic, up to the far retinal periphery

- : Significantly better diagnostics due to unique visionBOOST even in dense cataracts
- : Sharpest fundus image due to superior glass optics
- ∴ Brightest fundus image with true colour rendering thanks to our unique LEDHQ now in even more natural colours
- : Best 3D imaging due to our unique Stereoscopic Adjustment Technology
- in dilated and undilated pupils
- even with prematures and newborns

#### Long-lasting investment due to its robust design

- : Maintenance-free, dustproof optics
- : Legendary HEINE durability
- : 5-year guarantee

#### Easy and effective disinfection thanks to smoothSURFACE

- : No openings
- : Integrated electronics



CB1 charging battery [06]

Flip-up function of the optics unit For more convenient patient interactions



\*Eyepieces
To best accommodate your
view, exchange the initially
mounted eyepieces +2 D with
the neutral lenses 0 D (supplied

with the instrument)



X-000.99.090

Width adjustment

OMEGA 600 sets	LED
OMEGA 600 wall charger set:	
Indirect Ophthalmoscope (with battery and +2D eyepiece), [01],	
E4-USBC [02], eyepiece 0D*, CW1 wall charger [03]	C-008.33.612
OMEGA 600 traveller set:	
Indirect Ophthalmoscope (with battery and +2D eyepiece)	
E4-USBC, eyepiece 0 D*, traveller bag [04]	C-008.33.613
OMEGA 600 student set:	
Indirect Ophthalmoscope (with battery and +2 D eyepiece),	
E4-USBC, eyepiece 0 D*, TM2 teaching mirror [05], traveller bag	C-008.33.614
OMEGA 600 charging set: CC1 charging case,	



#### HEINE OMEGA® 500 Binocular Indirect Ophthalmoscope

#### The predecessor of the OMEGA 600



With its LED<sup>HQ</sup> or XHL technology and perfect colour rendering, the OMEGA 500 has set the standard for reliability and performance.



#### Set includes: OMEGA 500,

HC 50L Headband Rheostat, connecting cord Cinch, A.R. 20D ophthalmoscopy lens, pad with 50 fundus charts, teaching mirror, in hard case.

	XHL-6V	LED-6V
Plug-in transformer for HC 50L Headband Rheostat	C-283.40.320	C-283.41.320
EN 50-m Charger with mPack		
(incl. 2 m extension cord Cinch-Cinch, 90° angled		
adaptor, instrument support)	C-283.40.302	
mPack with plug-in transformer		
(incl. 90° angled adaptor)	C-283.40.670	C-283.41.670



#### Kit includes: OMEGA 500,

HC 50L Headband Rheostat, connecting cord Cinch.



	XHL-6V	LED – 6V
Kit 1: with plug-in transformer for HC50 L	C-004.33.537	C-008.33.531
Kit 2: with EN 50 transformer complete (incl. EN 50		
Rheostat Control Module, extension cord		
Cinch-Cinch 2 m, 90° angled adaptor,		
instrument support)	C-004.33.538	
Kit 3: with mPack and plug-in transformer		
(incl. 90° angled adaptor) [01]	C-004.33.539	C-008.33.533



#### Set includes: OMEGA 500 UNPLUGGED,

HC 50L Headband Rheostat, A.R. 20D ophthalmoscopy lens, pad with 50 fundus charts, teaching mirror, 1 spare bulb in case of XHL illumination, in hard case.

	XHL-6V	LED - 6V
mPack UNPLUGGED and plug-in transformer		
UNPLUGGED	C-284.40.670	C-284.41.670

 $\textbf{Kit includes: OMEGA 500 UNPLUGGED,} \ \ \text{HC 50L Headband Rheostat.} \ \ \text{Without case.}$ 



	XHL-6V	LED – 6V
Kit 5: plug-in transformer UNPLUGGED,		
1 x mPack UNPLUGGED	C-004.33.541	C-008.33.535
Kit 6: Wall unit EN 50 UNPLUGGED charger,		
2x mPack UNPLUGGED	C-004.33.542	C-008.33.536
Kit 7: Wall unit EN 50 UNPLUGGED charger,		
1 x mPack UNPLUGGED [02]	C-004.33.543	C-008.33.537

#### HEINE OMEGA 500 with DV1 Digital Video Camera

#### High-resolution digital imaging of the fundus



- : 5 MP resolution. Capable of capturing high-resolution videos or still shots of examinations. No disturbing picture noise due to increased light sensitivity of the camera also suitable for the examination of premature babies. Perfect for sharing the examiner's view with a wider audience, educating patients on the diagnosis, recording techniques for presentations, and patient records.
- : Interface and software. Will plug into any laptop or computer via USB 2.0 interface. Supplied with software program for video recording and image capture.
- : Integrated camera design. The integrated camera system ensures precise alignment with the optical system of the Indirect Ophthalmoscope. Robust, dustproof design. No further adjustment of mirrors necessary for digital imaging.

For more information, please refer to www.heine.com/omega500dv1



HEINE OMEGA 500 with DV1 film

#### HEINE OMEGA 500 with DV1 Sets / Kits



#### Set includes: OMEGA 500 with DV1 Digital Video Camera,

HC 50L Headband Rheostat, USB 2.0 cord, A.R. 20 D ophthalmoscopy lens, pad with 50 fundus charts, 1 spare bulb if with XHL illumination, in hard case.

	XHL-6V	LED-6V
mPack UNPLUGGED and plug-in transformer	C-176.40.670	C-176.41.670



#### Kit includes: OMEGA 500 with DV1 Digital Video Camera,

HC 50L Headband Rheostat, USB 2.0 cord. Without case.

	XHL-6V	LED-6V
mPack with plug-in transformer	C-004.33.560	C-008.33.560
mPack UNPLUGGED with plug-in transformer	C-004.33.561	C-008.33.561
2x mPack UNPLUGGED with EN 50 UNPLUGGED	C-004.33.562	C-008.33.562



#### HEINE SIGMA® 250 Binocular Indirect Ophthalmoscope

#### Spectacle-mounted ophthalmoscope - with LEDHQ illumination

The spectacle-mounted indirect ophthalmoscope to suit any pupil size. Two separate controls for selecting the ideal setting of parallax and convergence guarantee completely illuminated stereo views in pupils up to 2 mm, as well as viewing in the periphery.

Power Source mPack mini – compact and light power source with USB charging option. With a weight of just 95g and dimensions of 44x23x101 mm, this mobile power source is now approx. 70% smaller and lighter than its predecessor. Typ. 11 hours in continuous operation at maximum power.

Please note: The SIGMA 250 is still compatible only with mPack mini.

- : Extremely light, 110g without frame. Light and comfortable.
- : There's LED. And there's LEDHQ. HEINE has set a new standard which maintains that only the best is good enough, from the selection of materials to processing, from light intensity to dimmability, and from thermal management to a colour rendering index as high as possible. That's what we call LED in HEINE Quality or LEDHQ.
- : Lightweight frame. High tensile carbon fiber construction is lightweight and has excellent stability.
- : Illumination beam adjustable ±3°. Eliminates reflexes.
- : Integrated red-free filter. Improves contrast.
- : Optional blue and yellow filters.
- : Large and small apertures.
- : Dust proof. Maintenance-free.
- : PD selection from 47 to 72mm. Suits any user.
- : Optics on swivel mount. Unrestricted view.
- : Optional clip-in correction frame for prescription lenses.



#### SIGMA 250 apertures

HO:

LED IN HEINE QUALITY.

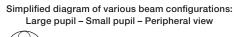


Large spot, small spot, red-free filter

#### SIGMA 250 M2 apertures



Large spot, pinhole, red-free filter





Large pupil Sr



Small pupil



Peripheral view



Parallax adjustment



Convergence adjustment



#### HEINE SIGMA 250 Sets / Kits



#### Set includes: SIGMA 250 with S-FRAME Spectacle Frame,

mPack mini with E4-USB plug-in transformer and USB cord, mPack mini Belt Clip, A.R. 20 D ophthalmoscopy lens, teaching mirror, blue and yellow filters, diffusor, retaining cord, case.

	LED
SIGMA 250	C-281.41.671
SIGMA 250 M2 (with micro spot aperture instead of small aperture)	C-279.41.671



#### Kit includes: SIGMA 250 with S-FRAME Spectacle Frame,

mPack mini with E4-USB plug-in transformer and USB cord, mPack mini Belt Clip, retaining cord.

	LED
SIGMA 250	C-008.33.341
SIGMA 250 M2 (with micro spot aperture instead of small aperture)	C-008.33.346



#### HEINE Hand-held Indirect Ophthalmoscope, MONOCULAR

#### Compact monocular ophthalmoscope





- : Built-in interference red-free filter. Improves contrast.
- : All optical components made of coated optical glass. Precise images and high light intensity.
- : Adjustable light beam. Useful for small pupils.
- : One hand operation. All control elements can be easily reached with the thumb.
- : +3 D lens attachment. An aid to accomodation, magnifies the image.

#### HEINE Hand-held Indirect Ophthalmoscope, MONOCULAR Kits I



Hand-held Indirect Ophthalmoscope, MONOCULAR with

BETA4 USB rechargeable handle with USB cord
and plug-in power supply

BETA4 NT rechargeable handle with NT4 table charger [01]

C-020.23.420

#### Model Eyes

#### **HEINE Skia/Retinoscope Trainer**



This model eye is ideal for teaching and practice. The pupil diameter and refractive error can be set exactly and are therefore reproducible. The front lens compartment holder accepts up to two trial lenses. The cylinder can be read from the graduated scale.

- : Scale: 0° 180° for cylinder determination.
- : Diameter of pupil. Variable 2, 3, 4, 5, 6, 8 mm.
- : Optics: Optical glass, achromatic lens, focal length F = 32 mm.
- : Trainer body. Made of metal Extremely stable and durable.
- : Angle of examination variable.

#### Model Eye

Skia/Retinoscope Trainer

C-000.33.011

#### Model Eyes

#### **HEINE Ophthalmoscope Trainer**



This model eye was developed for the teaching environment. It is the first adjustable model from HEINE to mimic the human eye. Precise, durable and with a multitude of uses, it simplifies the learning process and encourages the student to practice with the ophthalmoscope.

- : Diameter of pupil. Variable 2, 3, 4, 5, 6, 8mm.
- : Aspheric optical glass lens. Focal length F = 18 mm. Lens curvature matches that of the retina.
- : Trainer body. Made of metal Extremely stable and durable.
- : Angle of examination variable.

#### Model Eye

Ophthalmoscope Trainer

C-000.33.010

Opnthalmic Instruments



#### HEINE A.R. Aspheric Ophthalmoscopy Lenses

#### With anti-reflex A.R. coating



- : Advanced triple multicoating. Reduced reflection, excellent light transmission.
- : Lens curvature matches that of the retina. Perfect, distortion-free retinal image.
- : Large diameter. Significant increase in field of view without magnification loss.
- : Aspheric surfaces. Reduced distortion of the periphery.



Ophthalmoscopy lens	
with case	
A.R. 16D, Ø 54mm	C-000.17.225
A.R. 20D, Ø 50mm	C-000.17.228
A.R. 30 D, Ø 46 mm	C-000.17.231

#### Combi case / Hard case



Combi case respectively hard case for indirect binocular ophthalmoscopes. Features a deep, dense foam insert to protect instruments.

Combi case/Hard case	
NEW! OMEGA 600 traveller baq [01]	
(can be worn over the shoulder or as a backpack.)	C-080.00.000
Combi case [02] for OMEGA 500	C-079.03.000
Hard case[03] for OMEGA 500	C-079.00.000
Case for <b>SIGMA 250</b> (270 mm x 270 mm x 150 mm) [04]	C-000.32.553



#### Accessories for HEINE indirect ophthalmoscopes



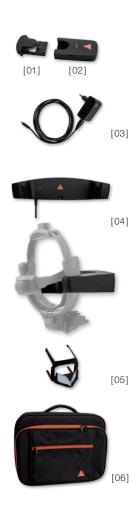
Fundus charts	
Pad with 50 pcs.	C-000.33.208

#### **HEINE** indirect ophthalmoscopes



OMEGA 600 Ophthalmoscope	LED
with battery and +2 D eyepiece, E4-USBC, eyepiece 0 D*	C-008.33.610

\*Eyepieces: To best accommodate your view, you can exchange the initially mounted eyepieces +2D with the neutral lenses 0D (supplied with the instrument).



Accessories OMEGA 600 Ophthalmoscope	
CC1 charging case [02]	X-000.99.091
CB1 charging battery [01]	X-007.99.687
E4-USBC power supply with cable [03]	X-000.99.300
CW1 wall charger (without OMEGA 600) [04]	X-095.17.320
TM2 teaching mirror [05]	C-000.33.212
OMEGA 600 traveller bag [06]	C-080.00.000



#### **HEINE** indirect ophthalmoscopes



OMEGA 500 Ophthalmoscope	XHL-6V	LED – 6V
on Headband (without HC 50L Headband Rheostat)	C-004.33.500	
on Headband with HC 50L Headband Rheostat		
and Connecting Cord Cinch	C-004.33.507	C-008.33.502
OMEGA 500 with DV1 and USB 2.0 cord	C-004.33.563	C-008.33.563



Accessories OMEGA 500 Ophthalmoscope	
XHL Xenon Halogen spare bulb for OMEGA 500, 6V	X-004.88.111
Upgrade-Kit OMEGA 500 with LED module [01] and HC 50L [02]	X-008.16.325
LED module for OMEGA 500 [01]	X-008.87.200
HC 50L Headband Rheostat (without plug-in transformer)	X-095.16.325
Plug-in transformer for HC 50L Headband Rheostat	X-095.16.330
Teaching mirror [03]	C-000.33.209
Extension Cord Cinch-Cinch, 2 m [04]	C-000.33.510
Connecting Cord Cinch to	
EN 50 charger/mPack/plug-in transformer for HC 50L, 1.6m [05]	X-000.99.667
Extension cord from plug-in transformer UNPLUGGED	
to mPack UNPLUGGED, 2m [06]	X-000.99.668
USB 2.0 cord for OMEGA 500 with DV1	X-000.99.206

#### **HEINE** indirect ophthalmoscopes



SIGMA 250 Ophthalmoscope	LED
SIGMA 250 with S-FRAME, retaining cord	C-008.33.340
SIGMA 250 M2 (with micro spot aperture instead of small aperture)	
with S-FRAME, retaining cord	C-008.33.345



Accessories SIGMA 250 Ophthalmoscope	
Teaching mirror [01]	C-000.33.302
Blue filter [02]	C-000.33.313
Yellow filter [03]	C-000.33.314
Diffusor [04]	C-000.33.315
Case for filters, empty [05]	C-000.33.316
Clip-in correction frame for prescription lenses [06]	C-000.32.309



Hand-held Indirect Ophthalmoscope, MONOCULAR	3.5V XHL
with +3D lens attachment and orbit rest extension, without handle	C-002.33.001

Accessories Hand-held Indirect Ophthalmoscope, MONOCULAR	
+3D lens attachment only [01]	C-000.33.101
Orbit rest extension, for spectacle wearers only	C-000.33.104
XHL Xenon Halogen spare bulb	X-002.88.050

