



HEINE Indirect Ophthalmoscopes



OMEGA 500

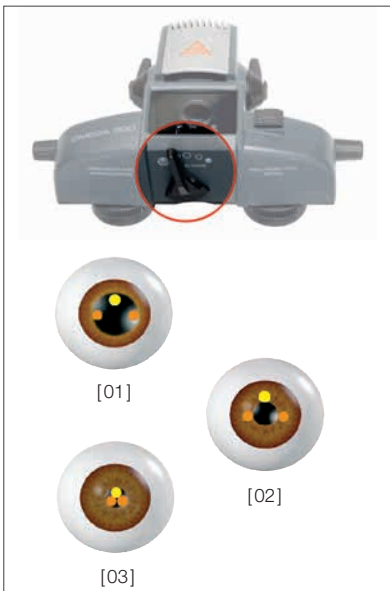


SIGMA 250 SIGMA 250 M2

- Synchronized
- Separate
-
-
-
- Diffusor
-
-
-
- LED-Illumination
- XHL-Illumination
- Headband
- S-FRAME
- Teaching mirror
- On the Instrument
- On the power source
- Headband-mounted battery
- mPack UNPLUGGED
- mPack
- mPack LL
- EN50 Table- or / Wall Transformer
- Mains Transformer

Convergence and Parallax Adjustment		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Apertures		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	optional	optional
Filters		
<input type="checkbox"/>	optional	optional
<input type="checkbox"/>	optional	optional
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Versions		
optional	<input type="checkbox"/>	<input type="checkbox"/>
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optional	optional	optional
Brightness control		
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Mobile power supply		
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Stationary power supply		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Page



Synchronized Convergence and Parallax Adjustment System

The advanced One-Step Small and Variable Pupil Control maximizes stereopsis in dilated pupils and allows for the instant adjustment of the optical system to ensure fully illuminated, stereoscopic views through pupils as small as 1 mm in diameter.

- **Dilated Pupil.** In the case of a dilated pupil, the HEINE Synchronized Convergence and Parallax Adjustment System adjusts the left and right observation paths as far apart as possible (large angle of Convergence) providing for maximum stereopsis (depth perception). The illumination beam is automatically positioned as high as possible relative to the observation plane (creating a large angle of parallax) in order to maximize illumination and minimize unwanted reflections [01].
- **Undilated Pupils and viewing in the Periphery.** In cases of pupils that can not, or should not be dilated, a binocular view with full illumination is not possible without adjustments of the optical system [02]. By adjusting the Small and Variable Pupil Control Lever located on the bottom of the OMEGA Series instruments, the angle of convergence between left and right observation paths is reduced and the angle of parallax (light path) is automatically reduced in one, simple step. The observer can now enjoy a fully illuminated, binocular view with excellent stereopsis [03] even through a pupil as small as 1 mm in diameter, or in cases where the pupil appears as an ellipse as a result of viewing the periphery.

HEINE OMEGA® 500 Binocular Indirect Ophthalmoscope

Quality with LED or XHL Xenon-Halogen Lamp illumination



With its XHL Xenon-Halogen-Technology and perfect colour rendering, the OMEGA500 has set the standard for reliability and performance.

- ⚡ **Unique “Synchronized Adjustment of Convergence and Parallax”** for high quality, stereoscopic fundus images through any pupil size. Precise selection of the observation and illumination optics for small pupils down to 1.0mm.
- ⚡ **Excellent optical performance due to the multi-coated illumination system.** Exact vertical alignment of the illumination with the observation path further minimising the reflections.
- ⚡ **Due to the mounting of the optics on an aluminum chassis,** the OMEGA500 is solid, long lasting, and is guaranteed to be dustproof.
- ⚡ **The HC50 L Headband Rheostat controls the LED illumination as well as the XHL Xenon-Halogen illumination.**

Technical Specifications:

- ⚡ **Apertures and Filters:** Can be “locked” into a desired position.
- ⚡ **Adjustment Levers:** Also feature a “Friction-Clutch” (“Safety-Clutch”) to protect mechanisms from forced adjustment while in the “lock” position.
- ⚡ **Increased PD Range:** From 46 – 74mm.
- ⚡ **Soft Touch Controls:** All key adjustment controls feature soft touch surfaces for precise and positive adjustment control.

⚡ LED- or XHL-Technology

⚡ Unique Synchr. Adjustment

⚡ Dustproof



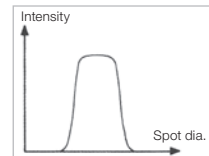
Separate fine-tuning of the illumination beam $\pm 4^\circ$ in addition to synchronized convergence and parallax adjustment.



HEINE Diffuser, 3 integrated Spot Sizes: Small spot, medium and large. 3 integrated Filters: Red-free, Cobalt Blue and Yellow filters.



Synchronized adjustment of convergence and parallax.



The HEINE diffuser can be selected to provide soft light, simplifying the examination and reducing glare and reflexes but maintaining excellent light intensity. Can be combined with all filters.



LED NOW IN HEINE QUALITY.

LED-Technology for HEINE OMEGA® 500:

LED now in HEINE quality. The sophisticated LED^{HQ} system provides for longer operation time, exact dimmability and excellent colour rendering.

- ⚡ **LED thermal management** by means of high-quality heat conducting materials, such as copper, guarantees consistent light output for the whole working life of the LED, up to 20,000 hours.
- ⚡ **State of the art LED illumination system** produces absolutely homogeneous, uniform illumination and up to 100% more light in comparison to the XHL-Technology. The CRI value, whose maximum is 100, indicates how exactly colours are reproduced in comparison with daylight. The following technical data of the OMEGA500 allow an exact diagnosis: colour temperature 4000K, CRI value >90.
- ⚡ With the **Rheostat HC50 L** the light intensity can be precisely adjusted – especially in the range of low light intensities.
- ⚡ **Convert your XHL Xenon Halogen OMEGA500 to LED:** With an upgrade kit the OMEGA500 can easily and quickly be adapted to the new technology.



HEINE OMEGA® 500 Headband

with unique features



- ∴ **Articulating Hinge** provides vertical adjustment of the rear band of the headband for individual placement. Secure and perfect fit for all shapes and sizes.
- ∴ **Ergonomic design** for optimal weight transfer across the surface of the entire headband (no pressure points).
- ∴ **Softer, malleable material.** Provides even and comfortable fit of the headband.
- ∴ **Calibrated Overband Position** ensures optics are in true horizontal position for precise adjustment and alignment.
- ∴ **Integrated cables** in overband eliminates the usual “cable loop” from instrument to headband.
- ∴ **Registered Design.**



[01]



[02]

Technical Specifications:

- ∴ **HC50 L Headband Rheostat:** Easily mounted on the left or right sides of the headband [01].
- ∴ **Integrated flip-up adjustment:** To raise optics out of the line of sight. Can be mounted on the left or right side of the headband. Optics can be flipped and locked at 0°, 12.5°, 47.5°, 60° degrees [02].
- ∴ **Mechanically reinforced adjustment mechanisms:** For durability and precise adjustment of the headband.

HEINE OMEGA® 500 Binocular Indirect Ophthalmoscope

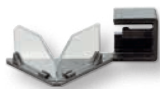
Optimum performance and quality



[01]



[02]



[03]

OMEGA500 Ophthalmoscope	XHL – 6V	LED – 6V
with XHL Xenon Halogen bulb (5W) on Headband (not including HC50L Headband Rheostat)	C-004.33.500	
on Headband with HC50 L Headband Rheostat and Connecting Cord UNPLUGGED-Cinch	C-004.33.507	C-008.33.502
XHL Xenon Halogen spare bulb 6V, 5W, standard equipment	X-004.88.111	
Extension Cord Cinch-Cinch, 2m [01]		C-000.33.510
Connecting Cord UNPLUGGED-Cinch to EN50 charger/mPack/plug-in transformer for HC50L, 1,6m [02]	X-000.99.667	
HC50L Headband Rheostat (without plug-in transformer)	X-095.16.325	
Plug-in transformer for HC50 L Headband Rheostat	X-095.16.330	
Teaching mirror [03]		C-000.33.209

HEINE OMEGA® 500 Kits



XHL OMEGA 500 LED Conversion Kits.

With these kits, a XHL illumination OMEGA500 can be converted to LED illumination.

Upgrade-Kits OMEGA 500	LED – 6V
Upgrade-Kit OMEGA500 with LED-module [01] and HC50 L [02]	X-008.16.325
LED-module for OMEGA500 [01]	X-008.87.200

OMEGA 500 Kits

Recommended Product Order Configurations to ensure the most flexibility the OMEGA500/EN50 System has to offer. The following kits include main system elements but no carrying cases or ancillary accessories.



OMEGA 500 Kits	XHL – 6V	LED – 6V
Consists of OMEGA500, HC50L Headband Rheostat, Connecting Cord UNPLUGGED-Cinch		
Kit 1: with plug-in transformer for HC50 L	C-004.33.537	C-008.33.531
Kit 2: with EN50 transformer complete (incl. EN50 Rheostat Control Module, Extension Cord Cinch-Cinch 2m, 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

HEINE OMEGA® 500 Sets



Set complete with **OMEGA 500 Head-worn Indirect Ophthalmoscope**

1 Scleral depressor large, 1 Scleral depressor small, A.R. 20D Ophthalmoscopy-lens, Pad with 50 fundus charts, Teaching mirror, 1 spare bulb if with XHL illumination, in hard case with:

OMEGA 500 Sets	XHL – 6V	LED – 6V
HC50 L Headband Rheostat with plug-in transformer (incl. Connecting Cord UNPLUGGED-Cinch)	C-283.40.320	C-283.41.320
EN50-m Charger with mPack , HC50L Headband Rheostat (incl. Connecting Cord UNPLUGGED-Cinch, 90° Angled Adaptor, 2m Extension Cord Cinch-Cinch, Instrument Support)	C-283.40.302	
mPack with plug-in transformer , HC50 L Headband Rheostat (incl. Connecting Cord UNPLUGGED-Cinch, 90° Angled Adaptor)	C-283.40.670	C-283.41.670



HEINE OMEGA® 500 UNPLUGGED

with headband battery mPack UNPLUGGED



- ∴ 100% freedom of movement
- ∴ Low weight
- ∴ Charge status indicator



100% freedom of movement – no cable connections!

The OMEGA500 Ophthalmoscope with mPack UNPLUGGED rechargeable battery allows one-of-a-kind mobility without restriction or hindrance caused by cables, cords, or similar connections.

- ∴ **Rechargeable battery integrated on the headband.** No interfering cable connections.
- ∴ **Lightweight with balanced weight distribution.** High level of comfort. Lightweight and compact.
- ∴ **mPack UNPLUGGED rechargeable battery.** Charging time 2 hours. Operating time 8 hours with LED-Illumination, 2 hours with XHL-Illumination (with standard lamp 6V, 5W).
- ∴ **Charge Status Indicator.** Indication of remaining operating time.
- ∴ **Can be recharged by wall charger or plug-in transformer.**
- ∴ **Intelligent charging system.** Automatic changeover from operating to charging mode (in the wall unit). Battery-friendly charging.
- ∴ **Direct operation possible while charging** through the use of the mobile plug-in transformer.
- ∴ **Top safety standards.** Integrated charge and performance checks during operation. Lithium polymer technology. UL-compliant.
- ∴ **System compatibility** with mPack for even greater capacity.

OMEGA 500 UNPLUGGED Kits	XHL – 6V	LED – 6V
Consists of OMEGA500, HC50L Headband Rheostat, without case:		
Kit 5: with plug-in Transformer UNPLUGGED, 1 x mPack UNPLUGGED	C-004.33.541	C-008.33.535
Kit 6: with Wall unit EN50 UNPLUGGED charger, 2 x mPack UNPLUGGED	C-004.33.542	C-008.33.536
NEW! Kit 7: with Wall unit EN50 UNPLUGGED charger, 1 x mPack UNPLUGGED		C-008.33.537
XHL Xenon Halogen Spare bulb 6V, 5W, standard	X-004.88.111	
Extension Cord from plug-in transformer UNPLUGGED to mPack UNPLUGGED, 2m		X-000.99.668

HEINE OMEGA® 500 UNPLUGGED Set



Set complete with **OMEGA 500 UNPLUGGED**, 1 Scleral depressor large, 1 Scleral depressor small, A.R. 20D Ophthalmoscopy-lens, Pad with 50 fundus charts, Teaching mirror, 1 spare bulb in case of XHL illumination, in hard case with:

OMEGA 500 UNPLUGGED Set	XHL – 6V	LED – 6V
mPack UNPLUGGED and plug-in transformer UNPLUGGED	C-284.40.670	C-284.41.670

HEINE Video OMEGA® 2C

Binocular Indirect Video Ophthalmoscope

The only Binocular Indirect Video Ophthalmoscope designed and developed entirely for video applications. Ideally suited for teaching, research, patient clarification, digital patient history and telemedicine.



- ⌘ **Fully integrated camera system.** No external brackets or prisms.
- ⌘ **Compact.** Lightweight camera design (65 g, camera head without cable, complete 250 g).
- ⌘ **Water-proof camera head.** Can be placed in disinfectant solution (but cannot be autoclaved).
- ⌘ **100 % dustproof system.** No maintenance required.
- ⌘ **Optics specially-developed.** Maximum brightness.
- ⌘ **High-resolution A-Cam camera.** CCD 470,000 Pixel, 460 lines.
- ⌘ **Image sensor.** 1/2" CCD, color.
- ⌘ **Focus adjustable for any working distance.** From 250 to 800 mm.
- ⌘ **Automatic white balance.**
- ⌘ **Automatic light metering at the center of the image.** Reduction in reflections.
- ⌘ **Automatic light boost.** Boost function for examinations with low lighting.
- ⌘ **Brilliant image with an S-VHS monitor.**
- ⌘ **FBAS (composite) and Y/C (SVHS) outputs.** Extensive compatibility and high image quality.
- ⌘ **Optional PAL or NTSC format.** Please specify when ordering.
- ⌘ **Connecting cable.** 3 m.
- ⌘ **Processor will connect to various output devices, such as: VCR's, digital printers, PC's with image capture software.**
- ⌘ **Video OMEGA2C can be supplied without a camera for users' own C-mount CCD cameras.**



Monitor not included.

Video OMEGA 2C Sets	6V
Video OMEGA2C, optics, headband and bulb, A-Cam camera and processor, Video cable, S-VHS cable, EN50 Transformer with Rheostat Control Module, extension Cord Cinch-Cinch 2m, large and small scleral depressors, AR20 D lens, XHL Xenon replacement bulb and carrying case.	C-175.40.618
Video OMEGA2C, optics, headband and bulb, without accessories. Instrument with C-Mount, without A-Cam camera and processor.	C-004.33.214
Video OMEGA2C, optics, headband and bulb, without accessories. Instrument with A-Cam camera and processor.	C-004.33.212
A-Cam camera with processor (available systems: PAL or NTSC, please specify when ordering).	C-000.33.223
XHL Xenon Halogen spare bulb	X-004.88.068

More information available on request.

HEINE SIGMA® 250 Binocular Indirect Ophthalmoscope

Spectacle-mounted Ophthalmoscope – now in LED^{HQ}

⚡ Ultra light

👁 For any pupil size

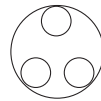
💡 LED HQ

LED HQ
LED NOW IN HEINE QUALITY.

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**. The illumination beam can be adjusted by $\pm 3^\circ$ to eliminate reflexes.

- ⚡ **Extremely light**, 110g without frame. Light and comfortable.
- 💡 **LED in HQ** – the new standard in LED illumination defining optimal light intensity, homogeneity and colour rendering for each individual examination situation.
- 👁 **Carbon fiber frame**. Perfect combination of durability and light weight.
- 💡 **Illumination beam adjustable $\pm 3^\circ$** . Eliminates reflexes.
- 👁 **Integrated red-free filter**. Improves contrast.
- 👁 **Detachable blue and yellow filters**. For Fluorescence Angioscopy.
- 👁 **Large and small apertures**.
- 👁 **Dust proof**. Maintenance-free.
- 👁 **PD selection from 47 to 72 mm**. Suits any user.
- 👁 **Optics on swivel mount**. Unrestricted view.
- 👁 **Optional clip-in correction frame** for prescription lenses.
- 👁 **mPack LL with Lithium-ion battery technology** – for 23 hours of continuous ON time at full power.

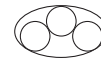
Simplified diagram of various beam configurations:
Large pupil – Small pupil – Peripheral view



Large pupil

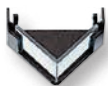


Small pupil



Peripheral view

HEINE SIGMA® 250 Accessories



[01]



[02]



[03]



[04]



[05]



[06]

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

HEINE SIGMA® 250 Kits



LED HQ
LED NOW IN HEINE QUALITY.



SIGMA 250 Kits		Without Power Source	With mPack LL
SIGMA 250 Kit with S-FRAME			
SIGMA 250 S-FRAME Retaining Cord Cleaning Fluid		C-008.33.340	C-008.33.341
SIGMA 250 M2 Kit with S-FRAME and Micro Spot Aperture (instead of small aperture)			
SIGMA 250 M2 S-FRAME Retaining Cord Cleaning Fluid		C-008.33.345	C-008.33.346

HEINE SIGMA® 250 Sets



LED HQ
LED NOW IN HEINE QUALITY.

SIGMA 250 Sets		With mPack LL
SIGMA 250 Set with S-FRAME		
SIGMA 250 S-FRAME mPack LL with plug-in transformer Scleral Depressor Small Scleral Depressor Large A.R. 20 D Ophthalmology Lens Teaching Mirror Blue and Yellow Filters Diffusor Retaining cord Cleaning Fluid Carrying Case		C-281.41.671
SIGMA 250 M2 Set with S-FRAME		
SIGMA 250 S-FRAME mPack LL with plug-in transformer Scleral Depressor Small Scleral Depressor Large A.R. 20 D Ophthalmology Lens Teaching Mirror Blue and Yellow Filters Diffusor Retaining cord Cleaning Fluid Carrying Case		C-279.41.671

Hand-held Indirect Ophthalmoscope, MONOCULAR

Compact monocular ophthalmoscope

An unusually compact instrument, which is recommended for visits and mobile use.

- ∴ **Durable metal construction.** Long working life.
- ∴ **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.
- ∴ **Can be used with one hand.** Easy to reach all the controls with the thumb.
- ∴ **+ 3 D lens attachment.** An aid to accommodation, magnifies the image.
- ∴ **Add-on binocular attachment available.** Instrument can be up-dated for binocular use.



[01]

Monocular Hand-held Indirect Ophthalmoscope	3.5V
with + 3 D lens attachment and orbit rest extension	C-002.33.001
XHL Xenon Halogen spare bulb	X-002.88.050
+ 3 D lens attachment only [01]	C-000.33.101
Orbit rest extension, for spectacle wearers only	C-000.33.104

Hand-held Indirect Ophthalmoscope, BINOCULAR

The addition of the binocular attachment to the Hand-held Indirect Ophthalmoscope makes stereoscopic examination possible. PD selection from 54 to 74 mm.

- ∴ **Symmetrical PD selection.** Quick and easy to adjust.
- ∴ **Multi-coated precision optics.** Exceptional image quality.



[01]

Binocular Hand-held Indirect Ophthalmoscope	3.5V
with + 3 D lens attachment and orbit rest extension	C-002.33.002
XHL Xenon Halogen spare bulb	X-002.88.050
Binocular attachment only [01]	C-000.33.106

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.

- ∴ **Refractive error** can be set to any value in steps of 0.5 dpt from -7 to +6 dpt.
- ∴ **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.

- ∴ **Refractive error.** Can be set in 1-dpt. steps from -10 to +10 dpt.
- ∴ **Diameter of pupil.** Variable 2, 3, 4, 5, 6, 8 mm.
- ∴ **Aspheric optical glass lens.** Focal length F = 18mm. 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



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, 54 mm dia.	C-000.17.225
A.R. 20D, 50 mm dia.	C-000.17.228
A.R. 30D, 46 mm dia.	C-000.17.231

Scleral-Depressor



Scleral-Depressor

Scleral-Depressor, large*	C-000.17.300
Scleral-Depressor, small*	C-000.17.301

*autoclavable

Fundus-Charts



Fundus-Charts

pad with 50 pcs.	C-000.33.208
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Combi-Case



[01]



[02]

Combi-case respectively hard case for head-worn indirect binocular ophthalmoscopes. Features a deep, dense foam insert to protect instruments, and can be worn over the shoulder or as a backpack (removable straps included).

Combi-case/Hard case

Combi-case [01] for indirect ophthalmology sets C-162, C-276, C-278, C-283, C-284	C-079.03.000
Hard case [02] for indirect ophthalmology sets C-162, C-276, C-278, C-283, C-284	C-079.00.000