



MEDICAL

Otosopes + Ophthalmoscopes

Working toward better care.



As healthcare continues to shift, providers are rethinking the importance of using the latest diagnostic instrument technologies for the early detection and observation of diseases. That's why we partnered with HEINE®, a world leader in high-quality primary diagnostic instruments, to bring you best-in-class, German-engineered instruments.





In healthcare,
even the smallest
detail **can have a
big impact.**

The general practitioner is typically the first point of contact for a number of symptoms and diseases. Since improving patient outcomes has been a central focus of many healthcare organizations, providers are relying on better diagnostic equipment to help improve the quality of ambulatory care.

OPHTHALMOSCOPES

Engineered for precise diagnostic examination of the eye, we combine superior optics, high-quality LED illumination, a dustproof design and exclusive aspherical optics, resulting in high-resolution, crisp, glare-free images of the fundus.

OTOSCOPES

Unmatched magnification, high-quality LED illumination and even light distribution allow providers to make fast, accurate assessments of the ear. Stronger magnification and German optics allow you to see more detail, helping improve early detection, diagnosis and treatment.



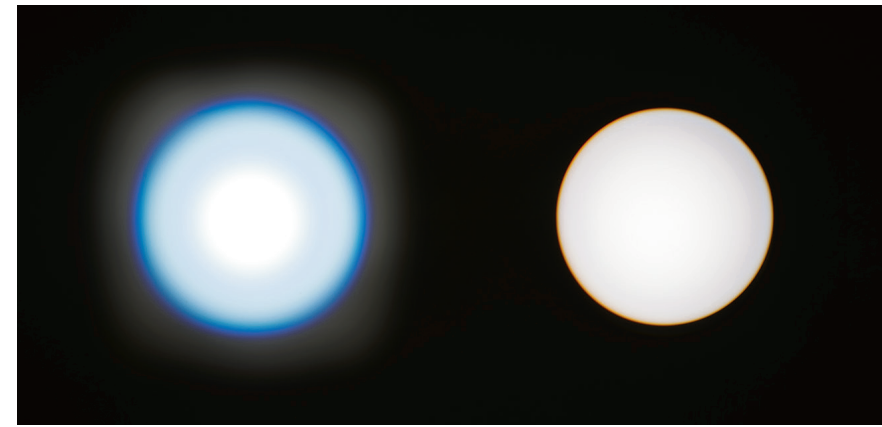
When every detail counts, you need LED in HQ.

It may surprise you to learn the true rate of errors and the impact they can have on clinical outcomes and patient satisfaction. One report shows that **47% of clinicians encounter diagnostic errors at least monthly**, and **16% of errors are due to an inadequate physical examination**.¹ Missing something subtle during the exam phase can have a tremendous impact on diagnosis, treatment and ultimately the outcome. Misdiagnoses and missed diagnoses happen for many reasons—one of the less obvious being the instruments used.

To accurately assess anatomical structures and make accurate diagnoses, you need a clear, well illuminated view. HEINE® is the first company to replicate halogen color-rendering index (CRI) properties with the lifelong capabilities of LED. **Our instruments give you continuous brightness adjustment, exceptional CRI, even light distribution and long product life with exclusive LED^{HQ} illumination technology.**



LED^{HQ}
LED NOW IN HEINE QUALITY.



Conventional vs. HEINE

EVEN LIGHT DISTRIBUTION

The superior optical system ensures even distribution of light across the entire field of view, including the edges. The result is high-contrast, distortion-free images with no distracting reflexes, shadows or disturbing hot-spots.



Conventional vs. HEINE

COLOR-RENDERING INDEX

CRI indicates how exactly colors are reproduced in comparison with daylight. The closer this number is to 100, the more accurate the lighting system. Our instruments have exceptionally high CRI values at greater than 97, a special index for red colors (R9: >93) and a color temperature of 3,500 K.

LIGHT INTENSITY

Each instrument has been engineered to provide the optimal illumination needed for each application. The LED is either preset to the optimum brightness or the light intensity can be continuously adjusted.

DURABILITY

LED technology results in diagnostic instruments that stand the test of time, even in a clinical environment. LEDs help reduce costs and maintenance with approximately 100,000 hours of bulb life and no bulb exchanges.

RELIABLE ILLUMINATION FOR A LIFETIME

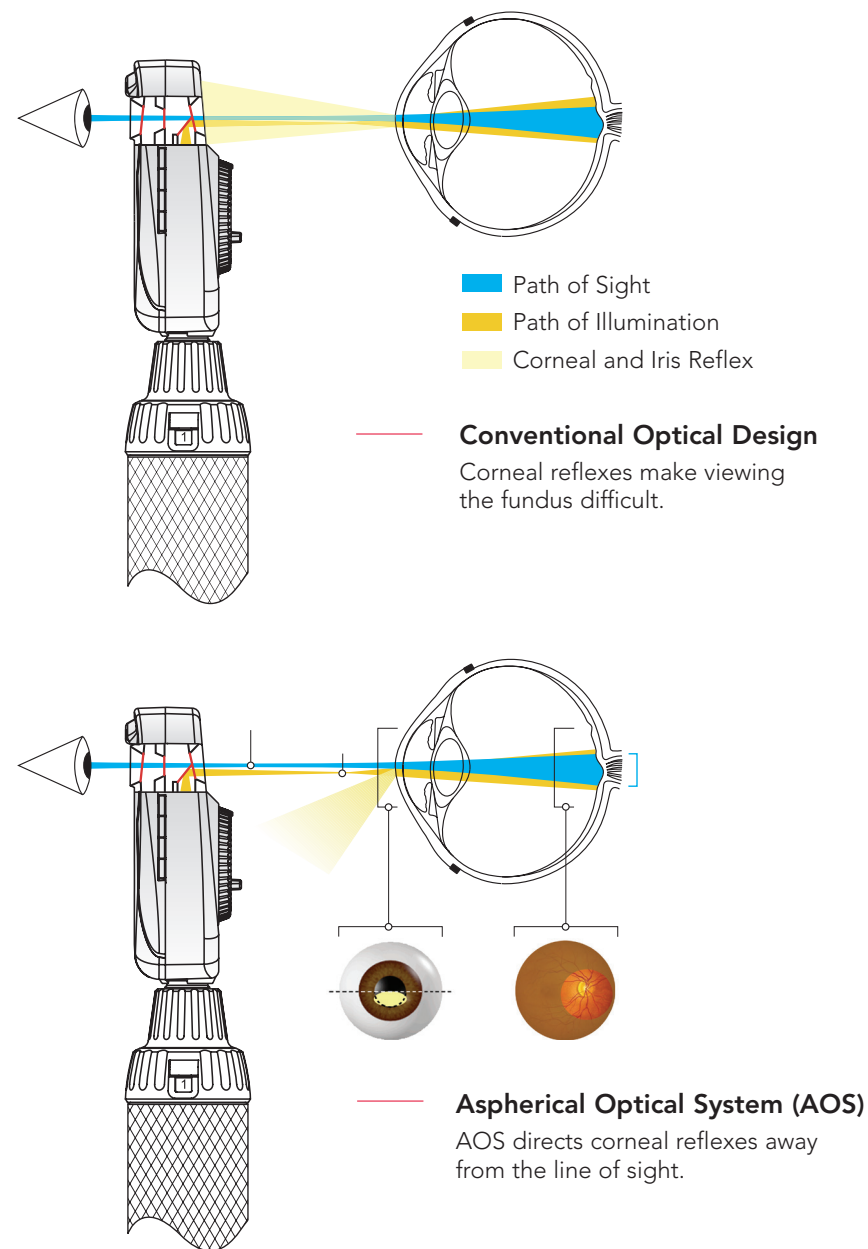
LEDs perform at their optimum level in very specific temperature ranges. Our instruments are designed to ensure the LEDs operate at the ideal temperature to prevent damage and changes in color over time.



Source:
1 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3786666/>

Exclusive Aspherical Optical System (AOS)

Superior aspherical optics redirect corneal reflections away from the examiner's path of sight, providing a crisper, clearer view of the fundus for improved diagnosis. AOS eliminates the need for filters or other systems that reduce resolution and compromise your ability to see important details.



BETA® LED Ophthalmoscope

More than 70 years of experience and rugged, German engineering bring you our best ophthalmoscopes yet.

- 01 CONTINUOUS BRIGHTNESS CONTROL**
Control brightness from 3% to 100% with the touch of a finger.
- 02 METAL FRAME**
Optical components are flush-mounted on a cast-aluminum frame inside the device, helping make the instrument shock-resistant.
- 03 27 DIOPTER SETTINGS**
A lens range of -35D to +40D for precisely focused images for examinations.
- 04 SCRATCH-RESISTANT GLASS**
The multi-coated viewing window is built using scratch-resistant glass to help keep your view clean and free of distractions for improved diagnosis.
- 05 6 APERTURES**
Six apertures are available with red-free filter: slit, fixation star, cobalt blue filter, large spot, pinhole and hemispot.
- 06 DUSTPROOF DESIGN**
The dustproof design protects the optical components from dust and helps ensure maintenance-free operation.
- 07 INFECTION PREVENTION**
Designed with features that simplify cleaning and disinfection.

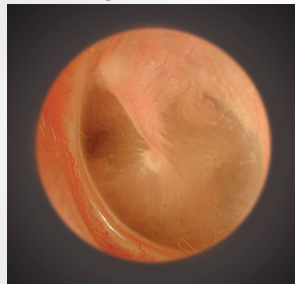


Exclusive 4.2x Magnification

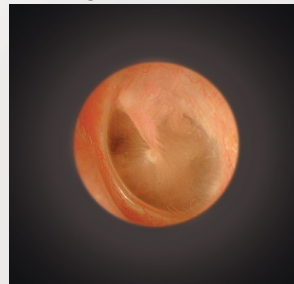
The BETA 400 delivers increased magnification for more detail of anatomical structures and easy recognition of foreign bodies. It also gives you an exceptional depth of field and provides sharp spatial images in a convenient working range with a large field of view.



4.2x Magnification



3x Magnification



Higher magnification and a large field of view make even the finest details or slightest variations in structure easier to detect with less strain or movement. Conventional otoscopes use 3x or lower magnification.

BETA® LED Otoscopes

The best and brightest HEINE® Otoscopes based on more than 70 years of experience and exclusive LED^{HQ} Technology.



- 01 CONTINUOUS BRIGHTNESS CONTROL**
Control brightness from 3% to 100% with the touch of a finger.
- 02 METAL HOUSING**
The durable metal structure helps ensure a long product life and a sleek appearance.
- 03 FLIP-UP VIEW WINDOW**
The permanently attached viewing window flips up for instrument use and cleaning of the instrument head.
- 04 SCRATCH-RESISTANT GLASS**
While conventional otoscopes come with a plastic viewing window, BETA Otoscopes use scratch-resistant glass to help keep your view clean and free of scratches and other obstructions.
- 05 PRECISION OPTICS**
Multi-coated, precision optics deliver high-resolution, distortion-free spatial images with exceptional depth of field in a convenient working range with a large field of view.
- 06 INFECTION PREVENTION**
Designed with features that simplify cleaning and disinfection.

Power Options

Wall Kits



EN 200 WALL TRANSFORMER

The EN 200 is designed to easily mount directly to the wall or on an optional wallboard for ultimate flexibility in a space-saving, easy-to-clean design.

- **Two handles** can be used simultaneously.
- **Handles switch on and off automatically** when placed into the charger and are ready to remove as soon as you want to use them at your desired brightness level.
- **Integrated anti-theft system** helps prevent unauthorized removal of instrument heads, ensuring they are always available where they are needed and reducing replacement costs.
- **Improves hygiene and reduces risk of cross-contamination** with a flat, space-saving housing—no opening and no on/off switch.

Desktop Kits



BETA® NT 4 DESKTOP CHARGER + RECHARGEABLE HANDLE

The BETA NT 4 Desktop Charger and NT 4 Rechargeable Handle is the next generation in energy management with a flexible desktop design.

- **Rechargeable handles** with lithium-ion batteries provide a longer operating time with shorter recharging times.
- **Handles switch on and off automatically** when placed into the charger and are ready to remove as soon as you want to use them at your desired brightness level.
- **Metal handles** for durability and ease of disinfection.
- **Deep discharge protection** prevents batteries from completely draining, protecting the battery and prolonging its lifetime.
- **Low battery warning light** turns yellow when the battery has less than 30% operating time remaining.
- **Fast charging time on the market**—charging to 70% capacity in just two hours.
- **Ready-to-use function** allows you to set your brightness level once and it stays every time you use the instrument.
- **No risk** of the instrument staying on for extended periods of time.

K180™ Otoscopies



3X MAGNIFICATION

Allows for more detail of anatomical structures and easy recognition of foreign bodies.

FIBER OPTIC ILLUMINATION

Ensures homogeneous, bright illumination and an unobstructed view of the ear canal and tympanum.

POLYCARBONATE HOUSING

Durable and shock-resistant for a long product life.

XENON HALOGEN ILLUMINATION (XHL)

Provides a bright, white light in truer color. Our instruments have exceptionally high CRI values at greater than 97, a special index for red colors (R9: >93) and a color temperature of 3,300 K.

SWIVELING VIEW WINDOW

Viewing window is permanently attached to avoid being lost or broken, and swivels for instrument use and complete cleaning of the instrument head.

K180™ Ophthalmoscopes



SPHERICAL OPTICS

Precision HEINE® optics with proprietary glare-mitigating coatings for crisp, clear images of the fundus.

XENON-HALOGEN ILLUMINATION

Provides a bright, white light in truer color. Our instruments have exceptionally high CRI values at greater than 97, a special index for red colors (R9: >93) and a color temperature of 3,400 K.

27 DIOPTER SETTINGS

Lens ranges from -35D to +40D for precisely focused images in all examining situations.

5 APERTURES

Choice of five apertures: large spot, small spot, red-free, fixation star and grid, and slit.

DUST-RESISTANT DESIGN

Protects the optical components and ensures maintenance-free operation.

POLYCARBONATE HOUSING

Durable and shock-resistant for a long product life.

KIT OPTIONS

EN200 Wall Kits	NT4 Desktop Kits	Otoscope			Ophthalmoscope	
A-095-12-208-166	A-853-24-420-166	BETA400 LED			BETA200 LED	
A-095-12-209-166	A-832-24-420-166		BETA200 LED		BETA200 LED	
A-095-12-210-166	A-879-23-420-166			K180 XHL		K180 XHL

BETA200 Otoscope available with 3x magnification. Halogen options also available.

Wall Kits

Includes EN200 Wall Transformer and selected diagnostic instruments with polycarbonate, 11.5 ft (3.5 m) corded handles

EN200 Specifications

Main Power Supply:
100 – 240 VAC / 50 – 60 Hz
Current Consumption: 300 – 150 mA
Output (USB): typ. 5 V
Output (AV): typ. 1.6 V – 3.6 V
Class: II
Protection Class: IP 40
Dimensions: 7.1" x 9.2" x 3.9"
(18 cm x 23.4 cm x 9.9 cm)
Weight: 2.1 lb (0.94 kg)
Regulatory Compliance:
IEC 60601-1 Edition 3.1

Desktop Kits

Includes NT4 Table Charger and selected diagnostic instruments with BETA NT 4 Lithium-ion rechargeable handles

NT4 Specifications

Main Power Supply:
100 – 240 VAC / 50 – 60 Hz
Current Consumption: max. 205 mA
Output: max. 6 V / 0.9 A
Fuse: Integral overload protection
Charging Time: max. 6 h
Class: II
Protection Class: IP 20
Dimensions: 5.6" x 2.4" x 2.6"
(14.2 cm x 6.1 cm x 6.6 cm)
Weight: 0.52 lb (0.24 kg)
Regulatory Compliance:
IEC 60601-1 Edition 3.1

Otoscope Specifications

Nominal Voltage: 3.0 V – 3.7 V
Nominal Current: XHL: max. 760 mA;
LED: max. 350 mA
Class: Internally powered
Device Classification According to IEC 62471: Exempt
Applied Part: Type BF

Ophthalmoscope Specifications

Nominal Voltage: 3.0 V – 3.7 V
Nominal Current: XHL: max. 760 mA;
LED: max 350 mA
Class: Internally powered
Device Classification According to ISO 10942: Group B
Device Classification According to ISO 15004-2: Group 2

Options

Wallboards
X-095-12-006-166
(For device combination of EN200 + tip dispenser - without instruments)

X-095-12-007-166
(For device combination of EN200 + tip dispenser + Gamma™ XXL Sphygmomanometer - without instruments)

I1X.XXX
(for device combination of EN200 + tip dispenser) Instruments not included.

12X.XXX
(Device combination of EN200 + tip dispenser + GAMMA XXL)
Product not included.

AllSpec Tip Dispenser
B-000-11-149-166

Supplies

Rechargeable Lithium-ion Battery
X-007-99-383-166

AllSpec Disposable Tips 4 mm
B-000-11-127-166 (Box of 1,000)
B-000-11-137-166 (10 boxes of 1,000)

AllSpec Disposable Tips 2.5 mm
B-000-11-128-166 (Box of 1,000)
B-000-11-138-166 (10 boxes of 1,000)

XHL Xenon-Halogen 3.5 V Bulb,
Otoscope X-002-88-078-166 (6 per box)

XHL Xenon-Halogen 3.5 V Bulb,
Ophthalmoscope X-002-88-070-166
(6 per box)





Designing better care.®

HEINE is an ISO 13485 Certified Company.

For more information, contact your Midmark dealer
or call: 1.800.MIDMARK

Outside the USA call: 1.937.526.3662 or
visit our website: midmark.com

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007-10391-00 Rev. B1 (1/23)

