BETA Otoscopes & Ophthalmoscopes

DIAGNOSTIC INSTRUMENTS

HEINE

MIDMARK®

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.

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, bright LED illumination and even light distribution allows providers to take 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.

LED NOW IN HEINE QUALITY.

It may surprise you to learn the true rate of errors and the impact they can have on clinical outcomes and patient satisfaction. A recent report shows* that 47% of clinicians encounter diagnostic errors at least monthly, and 16% of errors are due to an inadequate physical examination. 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 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.

*Source for Medical Errors: https://kaiserhealthnews.files.wordpress.com/2013/05/quantiamd_preventingdiagnosticerrors_whitepaper_1.pdf

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)

The 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 can be continuously adjusted in light intensity.

Durability

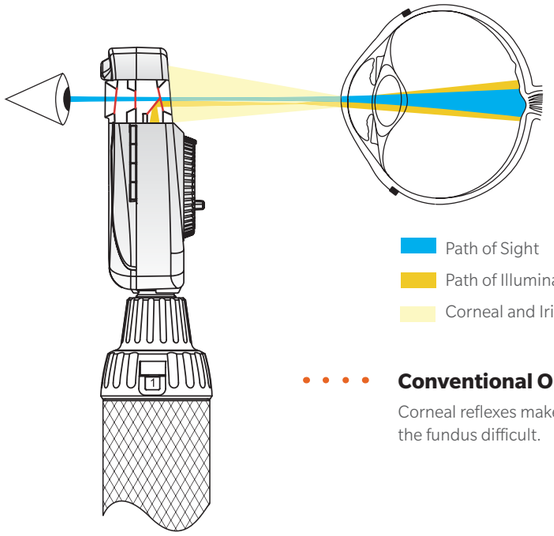
LED technology results in diagnostic instruments that stand the test of time, even in a clinical environment. LEDs help reduce costs and maintenance with approximately 100,000 hours of bulb life and no bulb exchanges.

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 a change in color over time.

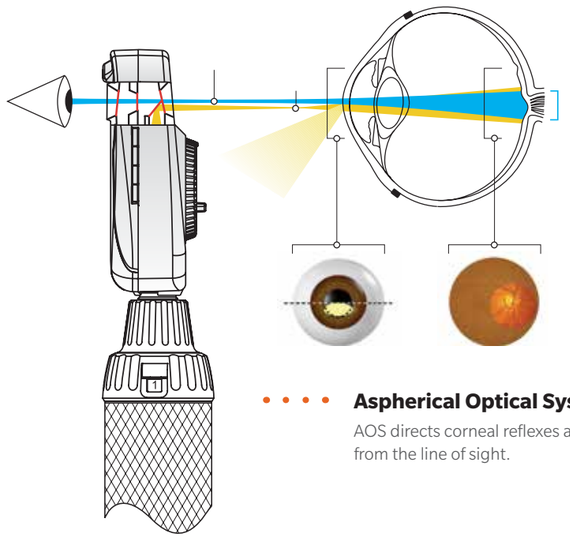
Exclusive Aspherical Optical System (AOS)

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.



Conventional Optical Design

Corneal reflexes make viewing the fundus difficult.



Aspherical Optical System (AOS)

AOS directs corneal reflexes away from the line of sight.

BETA® LED Ophthalmoscope

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

1. Continuous Brightness Control (Patent Pending)
Control brightness between 100% and 3% with one-finger operation.

2. Metal Frame
Optical components are flush-mounted on a cast-aluminum frame inside the device, making the instrument shock-resistant.

3. 27 Diopter Settings
Lens range from -35D to +40D for precisely focused images in all examining situations.

4. Scratch-Resistant Glass
The multi-coated viewing window is built using scratch-resistant glass to keep your view clean and free of distractions for improved diagnosis.

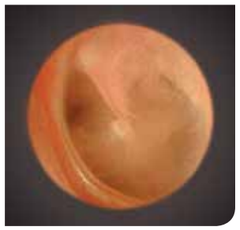
5. 6 Apertures
Six apertures available with red-free filter, including slit, fixation star, cobalt blue filter, large spot, pinhole and hemispot for all examination situations.

6. Dustproof Design
Protects the optical components from dust and ensures maintenance-free operation.

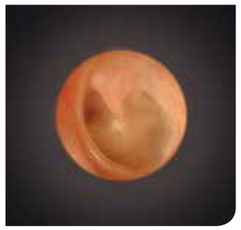
Exclusive 4.2x Magnification

The BETA400 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.

1. Continuous Brightness Control (Patent Pending)
Control brightness between 100% and 3% with one-finger operation.

2. Metal Housing
Durable metal structure for a long product life and a sleek appearance.

3. Flip-up View Window
Viewing window is permanently attached, and flips up for instrument use and the complete cleaning of the instrument head.

4. Scratch-Resistant Glass
Conventional otoscopes come with a plastic viewing window. We've improved upon this design using scratch-resistant glass to keep your view clean and free of obstructions for the life of your product.

5. Precision Optics
Multi-coated, precision optics deliver high resolution, distortion-free images with exceptional depth of field and a large field of view.

Flexible power options to meet your needs.

EN200 Diagnostic Center

The EN200 is easy to 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.
- **LED^{HQ} instruments** with 100,000-hour LED life reduces maintenance and service costs.
- **Improves hygiene and reduces risk of cross-contamination** with a flat, space-saving housing—no opening and no on/off switch.

BETA® 4 NT Rechargeable Handle and NT4 Charging System

The BETA 4 NT rechargeable handle and NT4 charging system 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.
- **Metal handles** for durability and ease of disinfection.
- **New 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.
- Fastest **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.

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-095-12-204-166	A-853-23-420-166	BETA400 XHL		BETA200 XHL
A-095-12-205-166	A-832-23-420-166		BETA200 XHL	BETA200 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 BETA4 NT 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)

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)

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For more information or a demonstration, contact your Midmark dealer or call: 1-800-MIDMARK
Outside the U.S.A. call: 1-937-526-3662
or visit our website at midmark.com

HEINE

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Because we care.