



Diagnostic Instruments

For Medical Students



WelchAllyn®

You want to start as early as possible perfecting your clinical assessment skills.

The physical exam is key in every patient encounter

Your responsibility to physically assess a patient, will be a major characteristic differentiating yourself from others in the healthcare field. In addition, insurance companies billed require appropriate documentation of your clinical observations, and the medical necessity of the procedures performed.



Many clinicians believe over 80% of diagnoses come from the history and physical assessment of the patient

There will be increasing pressure on physicians to pay close attention to the high cost of healthcare, and payers will insist on well-documented evidence that advanced care or testing is required. Although great advances have been made in medicine, approximately 80% of your diagnoses will still come from basic history and physical assessment.

So why invest with Welch Allyn?

When purchasing your first diagnostic instruments, it's important to understand this is an investment for your future. The medical equipment presented here will be critical tools to your success when gaining physical diagnosis skills that are fundamental to clinical practice. Invest in Welch Allyn diagnostic equipment, and get a head start on the opportunities it will provide you to practice and perfect these skills on your peers, family members and friends.

From our beginnings in 1915 with the invention of the world's first hand-held direct illuminating ophthalmoscope to our latest innovations like the PanOptic™ Ophthalmoscope and the MacroView™ Otoscope, Welch Allyn has long been the leader in diagnostic instruments. Want proof? Ninety-five out of 100 physicians in the United States own Welch Allyn instruments—and count on them daily to help diagnose and treat patients.

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Welch Allyn PanOptic Ophthalmoscope Head shown with Lithium Ion Handle

Revolutionary technology for a

3.5 V PanOptic™ Ophthalmoscope

The fundamental challenge in ophthalmoscopy is to get a good view of the fundus in order to make a sufficient assessment. Let the Welch Allyn PanOptic Ophthalmoscope help you meet this challenge.

Patient eyecup: Establishes and maintains proper viewing distance, provides image stability, serves as a pivoting point for panning around the retina, helps with orientation, and screens out ambient light. The eyecup is cleanable and reusable

Soft grip handle: Ergonomically designed for maximum comfort, balance, and access to controls

Patented Glare Extinguishment System: Prevents interference from unwanted glare and reflections



Lens dynamic focusing wheel: Continuous, smooth action for more precise control and optimum view. Focusing range is -20 to +20 diopters

Aperture dial: Allows you to select from micro, small, and large spot sizes, slit aperture, red-free and cobalt blue filters



What is the ophthalmoscope and what can be seen with it?

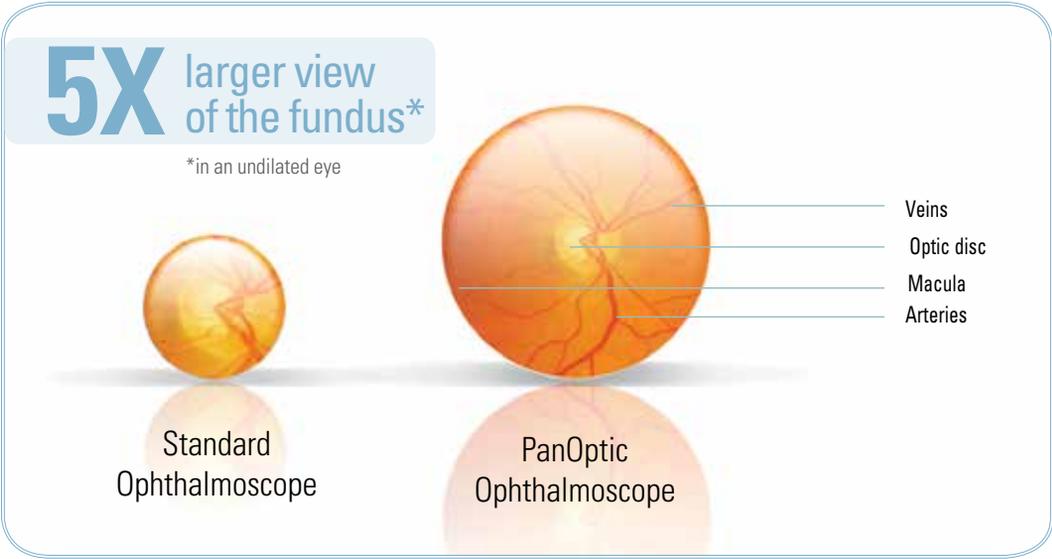
The ophthalmoscope is used to view the back of the eye, commonly called the fundus. This is the only place where arteries, veins, and nerves can be seen without surgically entering the patient.

A good view of the fundus will not only give an indication as to the health of the eye, but can also tell you a lot about the patient's overall health.

Why ophthalmoscopy is an important diagnostic skill

Help to Detect Prevalent Disease States	Specialty
Diabetic Retinopathy > nearly 40% of patients with diabetes do not receive their recommended annual eye exam	Internal Medicine Family Medicine Nephrology
Hypertensive Retinopathy > useful in finding undetected hypertension > helps monitor control and management of disease	Internal Medicine Family Medicine Nephrology
Papilledema/Head Trauma > patient complains of headaches	Internal Medicine Family Medicine Nephrology Emergency Medicine
Central Nervous System Problems > manifestation commonly seen in retina	Neurology
Shaken Baby Syndrome > can visualize retinal hemorrhages consistent with syndrome	Pediatrics Family Medicine Emergency Medicine
Foreign Bodies/Corneal Abrasions	Internal Medicine Family Medicine Emergency Medicine Pediatrics

difference you can see

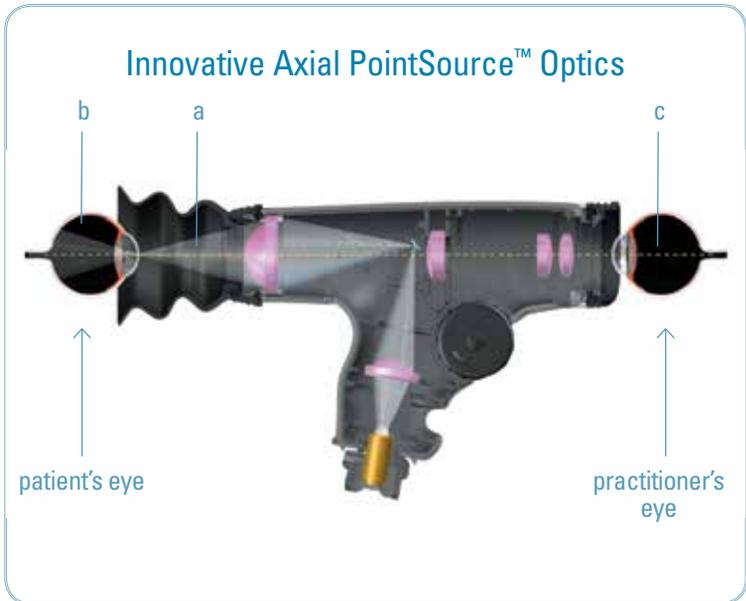


Advantages When Using the PanOptic Ophthalmoscope

- > Fast, easy entry into undilated pupils—the entire optic disc and surrounding vessels should be visible
- > 25° field of view vs. the standard 5° field of view
- > Greater working distance improves comfort for both practitioner and patient

What You See—Clinical Applications

Direct viewing of the fundus through the PanOptic can reveal valuable clinical observations. Systemic diseases such as diabetes mellitus and hypertension leave footprints in the retina and aid the practitioner in the evaluation of these and many other diseases.



The practitioner is actually viewing the fundus through the mirror that directs illumination into the eye, maximizing the alignment of the viewing axis with the illuminated areas.

How it works

- Converges the illumination to a point at the patient's cornea, allowing easy entry into small pupils
- Then diverges the illumination pathway to the patient's retina, illuminating a very wide area of the fundus
- Simultaneously enables the practitioner to view the illuminated area on virtually the same axis, creating the widest field of view attainable



Welch Allyn Coaxial Ophthalmoscope Head shown with Lithium Ion Handle

Traditional quality, reliability and performance

3.5 V Coaxial Ophthalmoscope

Welch Allyn Coaxial Ophthalmoscopes provide benefits over standard ophthalmoscopes including easier entry into the eye, a larger field of view, reduced glare, and bright, long-lasting LED light.



Aperture selection dial: Offers six apertures, including the micro-spot

Triple-sealed ophthalmoscope: Keeps dust from reaching optics

Cross-linear polarizing red-free filter: Eliminates unwanted reflections

Compact head design: For ease of use; convenient access to all controls

Lens selection disc: Offers easy, fast, one-hand selection of 28 focusing lenses

Apertures (programs of light) commonly used during a patient exam

The majority of the time you will use the small aperture as the standard aperture for the examination of an undilated eye. The other two apertures you will use most often are the micro-spot and the large.

Small Aperture: Provides easy view of the fundus through an undilated pupil. Always start the examination with this aperture and proceed to micro-spot aperture if pupil is particularly small and/or sensitive to light.

Micro-Spot Aperture: Allows easy entry into very small, undilated pupils, and light-sensitive eyes.

Large Aperture: For dilated pupil examination of the eye.

Red-Free Filter: Excludes red rays from examination field for easy identification of veins, arteries, and nerve fibers.

Cobalt Filter: Used with fluorescein dye to view small lesions, abrasions, and foreign objects on the cornea.

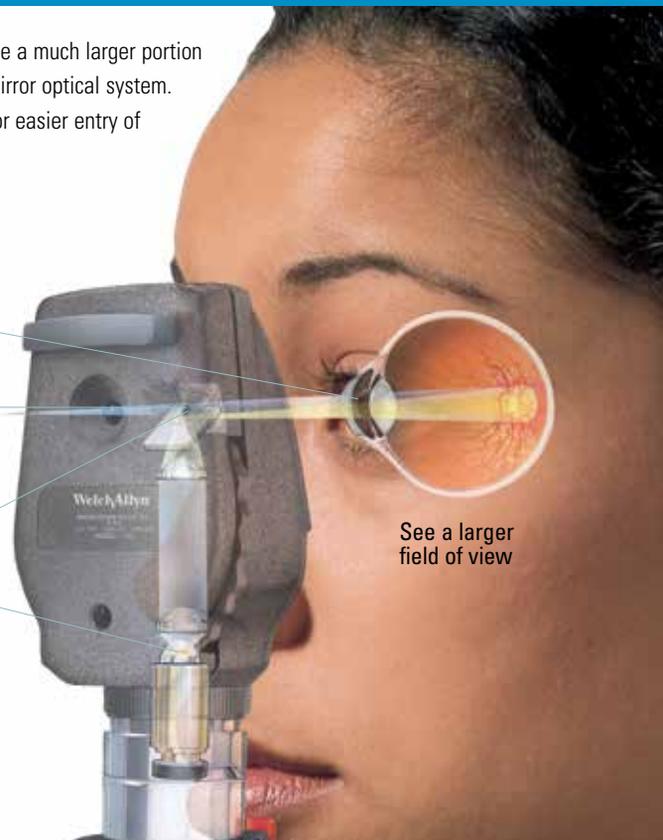
The Welch Allyn Coaxial Vision System: makes learning easier

- Virtually eliminates shadowing, allowing you to see a much larger portion of the fundus when compared to a standard flat-mirror optical system.
- Brings the lines of vision and illumination closer for easier entry of light into the pupil and a larger field of view.

More readily enter even the smallest pupils

The doctor looks through the notch in the mirror directly along the pathway of the light, seeing a larger area of the retina

The exclusive curved-filament lamp and notch in the mirror are the patented enabling features of the Coaxial Vision System



See a larger field of view



Welch Allyn MacroView Otoscope Head with Throat Illuminator shown with Lithium Ion Handle

Bigger, better, sharper view of the tympanic membrane

MacroView™ Otoscope

This instrument is a significant advance in hand-held otoscopy, to provide an improved view for enhanced learning and decision making.

Tip grip: Ensures ear specula are fastened securely and easily

Adjustable focus: Ability to zoom in or out to fine-tune the view

Choose between disposable or reusable ear specula made of the highest quality construction for an unobstructed, glare-free view

Insufflation port: Creates closed system for pneumatic otoscopy to assess middle ear disorders. Apply positive and negative air pressure and view tympanic membrane using an insufflator bulb

Default focus: Optimal setting for most ear examinations

2-in-1 Throat illuminator: Provides light with a handy built-in penlight

Field of view

Delivers almost twice the field of view at higher magnification compared to standard otoscopes, making it easier to visualize the auditory canal and tympanic membrane.

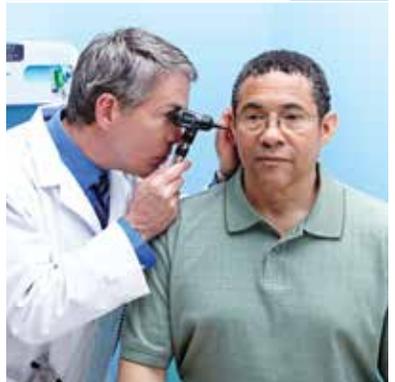


Standard Otoscope



MacroView™ Otoscope

2X
Larger View





Welch Allyn 3.5 V Lithium Ion Handle

3.5 V Lithium Ion Power Handle

The Welch Allyn Lithium Ion Handle powers any 3.5 V instrument head for 110 minutes—twice as long as a conventional handle. This “Smarter” lithium-ion battery technology also means no memory effect, often found with NiCad batteries.



3.5 V Convertible Handle

Traditional chrome-plated brass construction for durability and long life.



Recyclable battery.

Please return expended rechargeable batteries to Welch Allyn for recycling.

© CYCLOLOY is a registered trademark of General Electric Company

Accessories

Bivalve Nasal Speculum

Adjustable speculum facilitates removal of foreign bodies, autoclavable for complete sterilization.



26035 Bivalve Nasal Speculum Only—for use with the diagnostic otoscope/throat illuminator

26038 Bivalve Nasal Speculum—complete with illuminator base

Insufflator Bulb

Attaches to port for pneumatic otoscopy.

Not made with natural rubber latex



23804 Insufflator Bulb for MacroView™ Otoscope

Pneumatic Otoscope

Includes powerful Halogen HPX™ lamp and rotating lens with ultra-seal for pneumatic otoscopy.



20200 Pneumatic Otoscope

Operating Otoscope

Features powerful Halogen HPX lamp and convenient open system.



21700 Operating Otoscope

LED Replacement Lamps

Upgrade to LED lamps for longer life, high efficiency, and SureColor™ LED technology that reduces glare while preserving the color and clarity of the view.



- 03100-LED** Traditional Diagnostic Oscopes
- 06500-LED** MacroView Diagnostic Oscopes
- 04900-LED** Traditional Ophthalmoscopes
- 03800-LED** PanOptic™ Ophthalmoscopes

Disposable Universal KleenSpec® Specula

2.75 mm and 4.25 mm disposable specula to help eliminate cross-contamination.



52432-U, 52434-U Disposable KleenSpec Specula

Corneal Viewing Lens

Replaces the patient eyecup on the PanOptic Ophthalmoscope to provide extra magnification for exams of the cornea.



11875 Corneal Viewing Lens

Fiber-Optic Nasal Illuminator

Provides superb view of nasal passages.



26535 Fiber-Optic Nasal Illuminator Section—for use with diagnostic otoscope/throat illuminator

26538 Fiber-Optic Nasal Illuminator—complete with illuminator base

Fiber-Optic Finnoff Transilluminator

Helps to reduce patient discomfort in transillumination of frontal and maxillary sinuses.



41100 Fiber-Optic Finnoff Transilluminator

Patient Eyecup

Package of 5 reusable eyecups for PanOptic ophthalmoscope.



11870 Patient Eyecup



LED Replacement Lamps



30X Longer Life

- Tested to 30X halogen lamps
- Guaranteed 7 years

Halogen LED

Energy Efficient

- 3X the on-time vs. halogen with Welch Allyn 3.5 V rechargeable handles
- Lower operating temperature intended for greater patient/clinician comfort

Halogen LED

30X the Lamp Life of a traditional halogen lamp in just one LED lamp.

- 7-year guarantee
- 80% cost savings over the life of the lamp



Welch Allyn 3.5 V Diagnostic Set

Traditional quality, reliability and

3.5 V Diagnostic Set Components

All Welch Allyn student diagnostic sets come with the following components:



#97800-MS

What is a diagnostic set?

A basic diagnostic set consists of an ophthalmoscope for examination of the eye, an otoscope for examination of the ear, and a battery handle to power these instruments.

Why should I consider purchasing a Welch Allyn diagnostic set?

Owning your own diagnostic instruments will ultimately support your ability to be proficient. And, your proficiency with these diagnostic tools is essential for your goal of becoming a licensed practitioner.

Welch Allyn has the features, optics, and durability that make your job of learning how to examine the eyes and ears easier. This is important because you are investing in equipment that represents the fundamentals of your profession, and which will serve you throughout your education and career.

Service is always local and prompt; Welch Allyn has the most extensive distributor network, and your equipment is unconditionally guaranteed while you are a student or resident.



Hard Case

Leather-grained black vinyl with molded inserts, lays flat displaying instruments for easy access.



Soft Case

Made of durable corduroy with interior pockets for instruments, this smaller profile case fits right in your lab coat.

performance



#97200-MS

Diagnostic Sets

SET CONTENTS & ORDER NUMBERS						
Ophthalmoscope		Otoscope	Handle		Cases/Part Number	
						
PanOptic 11820	Coaxial 11720	MacroView 23820	NiCad 71000-C	Lion 71900	Hard	Soft
•		•		•	97800-MS	97801-MS
•		•	•		97800-MC	97801-MC
	•	•		•	97200-MS	97201-MS
	•	•	•		97200-MC	97201-MC

When selecting the set that is right for you, consider which of these diagnostic components best fit your needs:

OPHTHALMOSCOPE			
PanOptic™ Ophthalmoscope, page 4		Coaxial Ophthalmoscope, page 6	
POWER HANDLE			
Lithium Ion Handle, page 8		Convertible NiCad Handle, page 8	



Tycos DS58 Classic Hand Aneroid

Tycos® DS58 Classic Hand Aneroid

With gear-free DuraShock™ technology, you can count on the classic aneroid to remain in calibration longer than traditional aneroids, providing more accurate readings over time.



Gear-free design withstands a 60" drop for more accurate readings over time

Thumbscrew air-release valve provides constant deflation and is positioned for use in either hand



Laser-engraved dial face is computer-matched and calibrated to the movement inside for accuracy

Lifetime calibration warranty

Jeweled movement to reduce friction, ensuring long life

* Not made with natural rubber latex

Multi-cuff Kits available separately for DS58 and DS66 models.



Welch Allyn DS66 Trigger Hand Aneroid

The Trigger Hand Aneroid features a modern, ergonomic design to fit perfectly in the right or left hand. This aneroid makes taking accurate blood pressure measurements easy and comfortable.



Why is it important to invest in a sphygmomanometer (aneroid)?

Taking a patient's blood pressure is one of the most frequent diagnostic tasks you'll perform throughout your medical career. High blood pressure (hypertension) affects nearly one in three Americans and plays a major role in deaths due to cardiovascular disease. The sphygmomanometer is your tool for early detection of this silent killer and will be used on nearly all of your patients.

It is vitally important to be well trained in blood pressure measurement technique and to have an accurate, reliable instrument to properly diagnose and determine treatment options. Owning your own sphygmomanometer will allow you to practice and gain competency in blood pressure measurement.

Large, easy-to-read dial face

15-year calibration warranty

Gear-free design withstands a 30" drop for more accurate blood pressure readings over time

Trigger deflation valve: Provides smooth and easy control of pressure deflation



* Not made with natural rubber latex

Welch Allyn DS45 Integrated Aneroid

Welch Allyn's DuraShock™ Model DS45 offers quality and accuracy in an easily affordable system. It features a traditional thumbscrew design, and the gauge clips onto the cuff and bladder. It is also shock-resistant to 30 inches, lightweight and is backed by a 10-year calibration warranty.



Harvey™ Cardiology Stethoscopes

Harvey DLX and Elite stethoscopes were developed during a 30-year association with the preeminent Dr. W. Proctor Harvey, MD—the first and only “Master” of cardiology bestowed by the American College of Cardiology. He designed these stethoscopes to accentuate important high-frequency heart sounds like clicks, murmurs and ejection sounds.

Harvey™ DLX Double-head Stethoscopes

Comfort sealing eartips:

Allow you to effectively seal the ear, while also providing sufficient comfort

Rotatable binaurals

Adjustable triple-leaf spring for optimum comfort

Dual-lumen, 28" latex-free tube: provides sufficient reach

Low-frequency bell:
Detects lower-frequency sounds and murmurs at 20-100 Hz

Multihead brass chestpiece:
Includes bell and flat diaphragm

High-frequency diaphragm:
Detects higher-frequency heart and lung sounds at 100-1,000 Hz



* Not made with natural rubber latex



Harvey DLX Stethoscope



What should I look for in a stethoscope?

You want to be sure that the stethoscope fits correctly. If you can't get sound past the eartip to your tympanic membrane, all other features are unimportant. The more custom the fit, the easier the sounds travel to your ear.

As a student, you must consider the versatility of the scope. Remember you will be doing rotations, including pediatrics and cardiology. The Harvey DLX and Elite, for example, adapt easily for pediatrics, and the bell is essential for cardiology.

Every Harvey DLX and Elite stethoscope comes with a free copy of **Harvey Heart Sounds Sampler**, an interactive CD for learning heart sounds and a Cardiology Accessory Kit.

Cardiology Accessory Kit Includes:
 Pediatric Diaphragm Assembly
 One Pair Medium Soft Eartips
 One Pair Large Hard Eartips
 One Pair Extra Large Hard Eartips

Harvey™ Elite® Stethoscopes

Comfort sealing eartips

Rotatable binaurals for optimal fit

Dual-lumen, latex-free tube

Low-frequency bell

Stainless steel chestpiece

Adjustable triple-leaf spring for optimum comfort

Name tag

High-frequency diaphragm with non-chill rim for patient comfort

Easy to change diaphragm

Dual-bore, one-piece PVC tubing

* Not made with natural rubber latex



Warranty Information

For Medical Students

Our diagnostic instruments are rugged, durable, and dependable. We are so confident of the quality of our products, that no matter what you buy—whether it's a stethoscope, ophthalmoscope, otoscope, or even the lamp inside—we give you an enhanced warranty for the time you're a student through your first two years of residency. The only thing we do not cover is loss or theft.

If it breaks, we'll repair or replace it. That's our guarantee, plain and simple.



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WelchAllyn[®]

Please use this sheet as a guide as you make decisions on the
Equipment you'll invest in for your career.

1

Every diagnostic set starts with our exclusive MacroView™ Otoscope



2

Pick your Ophthalmoscope (please check one box in each step)



11820 PanOptic™ Ophthalmoscope—
5X field of view for textbook image of fundus
and fast easy entry into small undilated pupils.



11720 Coaxial 3.5V Ophthalmoscope—
Full-featured traditional ophthalmoscope.

3

Pick your Power Source



71900 Lithium Ion Handle—
Lightweight & portable with twice
the on time of our NiCad handle. No
memory—cell phone battery technology.



71000-C Convertible Handle—
Accepts rechargeable or alkaline C-cell batteries.
Useful for overseas travel when it's difficult to
find electricity.

4

Pick your Carrying Case



Hard Case—
Keeps your instruments in place,
organized, and protected.



Soft Case—
Lightweight, portable and durable protection.

SET CONTENTS & ORDER NUMBERS

DIAGNOSTIC SETS	Otoscope	Ophthalmoscope		Handle		Cases/Part Number	
MacroView 23820	PanOptic 11820	Coaxial 11720	L. ion 71900	NiCad 71000-C	Hard	Soft	
•	•		•		97800-MS	97801-MS	
•	•			•	97800-MC	97801-MC	
•		•	•		97200-MS	97201-MS	
•		•		•	97200-MC	97201-MC	

Not an order form. Product selection, availability varies by sale. Please check with your local distributor or Welch Allyn on-site representative to place an order.



5

Pick your Stethoscope



Harvey DLX Premium Cardiology Stethoscope—

Brass chest piece for superior sound transmission, student bonus accessory kit (additional ear tips & pediatric diaphragm), 10-year warranty.



Harvey Elite Cardiology Grade Stethoscope—

Stainless steel chest piece, student bonus accessory kit (additional ear tips & pediatric diaphragm), 10-year warranty.

STETHO-SCOPES	CARDIOLOGY GRADE STETHOSCOPES		
	Harvey DLX (Brass)	5079-XXX	Colors: Black (325), Burgundy (328), Green (327), Navy (326)
Harvey Elite (Stainless)	5079-XXX	Colors: Black (125), Burgundy (270), Green (284), Navy (271)	

6

Pick your Blood Pressure Device



DS58 Hand Aneroid—

Traditional thumbscrew style air release valve, adult & child cuff or family practice set available, lifetime calibration warranty.



DS66 Hand Aneroid—

Trigger air release valve, adult cuff or family practice set available, 15-year calibration warranty.



DS45 or DS44 Integrated Aneroid—

Integrated design with inflation system, adult cuff, 5-year calibration warranty (DS44) or 10-year calibration warranty (DS45).

* All models above are shock-resistant.



Hand Aneroid, Cuff Kits for DS66 and DS58

With child print, adult, and large adult inflation systems in a dual-compartment zippered case.

BLOOD PRESSURE	BLOOD PRESSURE		
		ADULT CUFF	MULTI-CUFF KIT
	DS58 Thumbscrew	DS58-11	DS58-MC
	DS66 Trigger	5098-27	5098-30
	DS45 Integrated Aneroid	DS45-11C	DS45-MC

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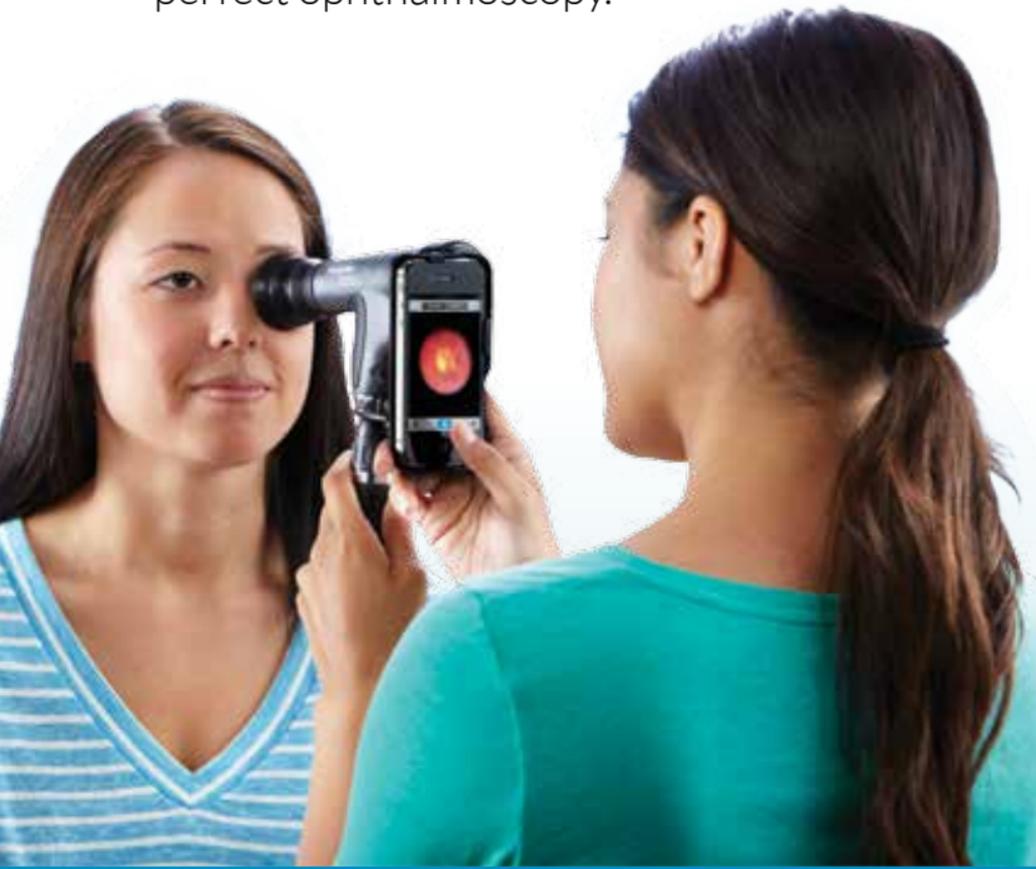
WelchAllyn®

iEXAMINER™

EYE IMAGING ON YOUR iPhone®

*COMPATIBLE WITH IPHONE 4 AND IPHONE 4S

Our innovative iExaminer facilitates education, allowing you to document and study fundus images as you perfect ophthalmoscopy.



The complete iExaminer system consists of three core components:



PanOptic™
Ophthalmoscope



iExaminer
Adapter



iExaminer
App



Take a peek at
this amazing medical
breakthrough in action.



NEW

WelchAllyn®

iEXAMINER™

EYE IMAGING ON YOUR iPhone®

- iExaminer adapter works with the Welch Allyn PanOptic Ophthalmoscope, and through your iPhone,* and the iExaminer app to create a mobile digital imaging device
- Rapid capture of fundus images on your iPhone for easy eyeground documentation
- Document and study images in any clinical environment
- Share and consult with peers across the continuum of care at a moment's notice