

Keeler Catalogue

All Keeler products are designed to offer the ultimate in professional performance.

They are the result of the constant pursuit of perfection, combining the aesthetic and ergonomic.





Keeler - almost a Century of innovation

When you buy a Keeler instrument – What are you buying? Almost a century of experience in optics! Keeler has been manufacturing ophthalmic instruments since 1917. We continue to lead the market with our innovative instruments. This has been achieved through our continuous program of customer involvement in the design process to ensure our instruments meet the rigorous demands of daily practice.



UK manufacturer

We still manufacture and assemble our instruments in the UK. Combining optical precision, high quality illumination, ergonomic design and lightweight, durable materials to provide you with the best possible choice of equipment.

Reliability

To confirm our commitment to quality, Keeler manufactured devices carry up to three years warranty; please see our website or individual user instructions for full details.

Service

Keeler Technical Services will carry out repairs and routine maintenance to your equipment on your premises or in our workshop in Windsor – whichever is more appropriate.

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Indirect Ophthalmoscopes

Since the launch of the Keeler Fison Indirect Ophthalmoscope in 1957, Keeler has established its reputation for providing the most durable and reliable Indirect Ophthalmoscopes available today. The introduction of wireless technology, bright, white, LED illumination and our new ground breaking Vantage Plus Digital, designed to capture still or dynamic images on your PC, are just some of our latest innovations. Read on to find out more.

New Vantage Plus Digital Ophthalmoscope

As the world leader in binocular indirect technology we lead the way again with the first digital binocular indirect system. Not old analog video but true digital imaging.

New LED exclusively on Vantage Plus, Spectra Plus and now All Pupil II

The LED cooler colour provides a brighter, whiter illumination providing greater detail, allowing you to find retinal pathology that is not visible with Xenon illumination.

Comfort and balance

Lightweight materials with soft cushioning and a non slip contoured shaped headband maximise comfort and balance, particularly important during long examinations.

Clear, sharp images – enclosed KeeView Optics™

Our optics are specially coated and individually laser aligned to provide the sharpest, clearest images every time.

Adjustable brilliant illumination

Why have all of the controls on the wall when the instrument is on your head? On the All Pupil II and Vantage Plus the illumination rheostat is located on the headband providing easily accessible fully controllable light. Keeler indirects have the brightest illumination that can be turned down to as low as 2% of maximum if required.

Wide angle diffuser

The Keeler wide angle diffuser eliminates shadows on the edge of the condensing lens expanding the field of view significantly, particularly useful during difficult and peripheral examinations. There is also less discomfort for the patient because the light is softer.

Apertures and filters

Red Free - This filter is used to examine blood vessels in fine detail. By filtering out the red light, blood vessels are silhouetted black against a green background.

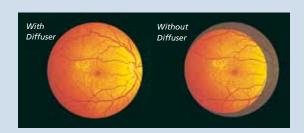
Cobalt Blue - This filter is used with fluorescein dye for

Large Aperture - Ideal when examining fully dilated pupils.

Intermediate - Ideal for children and sensitive patients.

Small Aperture - Ideal for undilated pupils.

Diffuser







Vantage Plus Digital

As the world leader in binocular indirect technology we lead the way again with the first digital binocular indirect system. Not old analog video but true digital imaging. Utilise the Vantage Plus Digital Wireless in your office, operating room, and teaching facility or anywhere you want to capture digital images.

Keeler Software

The intuitive, easy to use, Keeler Software allows you to use your PC to provide still or dynamic images, which aid in the documentation and diagnosis of your patient.

Compatible with Windows 7 and Windows XP.

Increase your practice profile

Educate your patients and their family with digital dynamic imaging in your office.

USB interface

Plugs into your PC to record examinations in digital format.

Vantage Plus LED Slimline Wireless

Built on the number one selling LED and wireless slimline system.

Part number

1205-P-5010 Vantage Plus Digital Indirect Ophthalmoscope











Vantage Plus Digital Technical Specifications

Camera

Interface USB 2

Supply Taken from USB 2 interface

Resolution To test pattern 6 of group 2 on the 1951 USAF

TEST PATTERN (conforms to MIL-STD 150A standard), when used in combination with a

20D lens

Lead To connect camera to PC, Keeler recommends

a maximum of 5m long USB 2.0A to mini 5 pin

(sometimes packaged as USB 2.0A to mini B lead)

Convergence

Range The camera image can be adjusted ±7 degrees

Working distance

Range Nominal working distance of 440mm.

The resolution value given above will be maintained at 350mm to 650mm distance from instrument to the eye under examination

with a 20D lens

Operating System

Use with Windows 7 and Windows XP

Vantage Plus

Controls All controls and features of the Vantage Plus

have been maintained

Adjustment

Vertical The vertical adjustment is achieved by rotating

adjustment the adjustment screw on the mirror holder.

The image should be adjusted such that the

light patch is in the centre

Horizontal Factory set

adjustment

Depth of ±35mm @ 440mm

Field

Physical

Size The Vantage Plus Digital is approx. 50mm

longer than the standard Vantage Plus

Weight The total weight of the complete Vantage Plus

Digital is 662g (Vantage Plus is 596g)



Note: The distance and range will vary with differing refractive errors of the user. To maximise performance of this product, the user should use refractive error correction aids and adopt a working distance of around 450mm (front of instrument to eye under test) when used with a 20D lens.







Vantage Plus LED Convertible Choice of illumination

We are delighted to present the new, exclusive Vantage Plus LED Convertible. When you purchase the Vantage Plus LED you will automatically receive a Xenon Bulb so you can decide which illumination you prefer without any extra cost!

Natural LED cooler colour

The natural LED cooler colour provides brighter, whiter illumination, longer battery life, freedom from purchasing bulbs and a life expectancy of up to 10,000 hours.

Clinically, the superior optics combined with the natural LED illumination could provide greater detail, allowing you to find retinal pathology that was not visible with the Xenon bulb.



New Slimline Lithium Polymer battery

Our new Slimline Lithium Polymer battery weighs only 53 grams and is as light and as small as the new mini iPod.













- Comfortable and perfectly balanced
- Wireless technology allows you to move from room to room
- Combined natural LED and Lithium Polymer battery can provide up to 6 hours of use on a single charge

Quality and efficiency

The new high contrast optics combined with the new natural LED or Xenon light source offer brighter high definition retinal images -PLUS you get more life from whichever Keeler battery (Metal Hydride or Lithium) you use.

15% lighter

Advanced textured engineering materials provide a lighter, smaller and more compact instrument without compromising the renowned Keeler reputation for robustness, reliability and quality.

Filters and Apertures

IR/UV filters are built into the optics of the Vantage Plus with optional filters and a choice of 3 apertures plus a soft light diffuser.



Vantage Plus LED Convertible

Unique - Intelligent Optical System (IOS) (Patented)

At last - now when you change the aperture the optics and mirrors automatically adjust for you, without the need to flip another lever! Keeler has designed this unique one step movement to make your examinations easier and faster. The (IOS) mechanism (patented) means that when you select the small, medium or large aperture the optics automatically adjust, providing 3 dimensional stereoscopic views of the retina through all pupil sizes.

Large Pupil

When looking through a large fully dilated pupil the optics are separated and the light source remains in the upper position, achieving maximum stereopsis.

Intermediate Pupil

The viewing optics and light sources are in a 'mid position' for maximum stereopsis.

Small Pupil

When looking through a small pupil the viewing optics and light source are converged to allow you to view the retina through the smallest pupils stereoscopically.



Unique - The new HiMag™ lens just slides on and off with ease

This unique feature is only offered with the Vantage Plus indirect. It gives you 1.6X additional magnification than with a condensing lens alone, providing superb stereoscopic images. Scratch resistant coated optics guarantee high quality images at all times and HiMag™ can be simply flipped out of view when not required.

Teaching mirror slides on and off with ease

Allowing two observers to view the retina at the same time.

Part numbers

1205-P-1020	Wireless Vantage Plus LED Convertible
1205-P-1010	Wired Vantage Plus LED Convertible
Accessories	
1202-P-7205	Vantage Plus Teaching Mirror
1202-P-7192	Vantage Plus Hi Mag Lens
1012-P-7006	Vantage Plus Bulbs (pack of 2)
1299-P-1028	Video Vantage including Camera in Carrying Case
3412-P-7000	Vantage Plus Carrying Case
1201-P-6075	Small Depressor
1201-P-6067	Large Depressor





For Wired Power Supplies see page 13





All Pupil II

The All Pupil II is based on the design of the number one selling All Pupil indirect. Look out for the new features designed to make your examinations easier and more comfortable.

Go Wireless patented technology

Leaves you free to move around without any wire or cord constraints.

Outstanding brightness for difficult examinations

With 2000 lux of light, which can be turned down to 2% of total illumination when necessary, the All Pupil II offers maximum illumination with total control.

Lightweight and comfortable

Weighing just 520 grams with extra padded materials.

Simple controls

The All Pupil II has a unique single control to change aperture size and position in one movement to view through all pupil sizes.

IR and UV barrier

There is a built in full time IR and UV barrier which guarantees improved patient protection and safety.











New All Pupil II LED light source

Plugs simply into the back of the All Pupil II for brighter, whiter illumination and freedom from purchasing bulbs. The LED life expectancy is up to 10,000 hours and it has a 5 year warranty.

r di c mambers	
1204-P-3041	Wireless All Pupil II Kit A with Power / Accessories
1204-P-3043	Wireless All Pupil II with Lithium Battery and Holder
1204-P-3038	Wired All Pupil II Kit A with Power / Accessories
1204-P-3036	Wired All Pupil II without Power
Accessories	
1205-P-5014	All Pupil II LED
1202-P-7117	All Pupil II Teaching Mirror
1012-P-7003	All Pupil II/All Pupil/Vantage Bulbs (pack of 2)
3412-P-7000	All Pupil II Carrying Case
1201-P-6075	Small Depressor
1201-P-6067	Large Depressor



Spectra Iris

Spectra Iris has been specifically designed as a compact, lightweight and portable indirect with big benefits for professionals on the move. It can be tucked away in its neat carrying case or hung around your neck when not in use. Plus now, just like the iris in your eye, you can adjust the size of the aperture at the touch of a slider.

LED long lasting illumination

No more bulbs, just a long lasting white homogenous light patch that can be used for up to 4 hours continuous on time.

New Adjustable Aperture Slider for all pupil sizes

Now you can adjust the aperture simply by moving the slider. Slide to the right to increase aperture size and to the left to decrease. The aperture range is from 20mm to 60mm.

Variable PD

No restrictions. Just adjust your pd when you need it.

Fits neatly and simply over your spectacles

Spectra Iris can fit over the top of your spectacles so no need to remove your correction.

Great Lightweight Lithium ion Battery

Simply clips on to your belt and can be stored in its charger when not in use. It provides up to 4 hours continuous use on time.

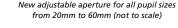
New single movement hinge

The new hinge allows the Spectra Iris to sit closer to your eyes for a better view and a more comfortable fit.

Spectra Iris systems are supplied with a lithium battery, charger, indirect and black Keeler Sport Frame.

1205-P-2012	Spectra Iris Indirect on Small Keeler Sport Frame
1205-P-2010	Spectra Iris Indirect on Regular Keeler Sport Frame
1205-P-2011	Spectra Iris Indirect on Large Keeler Sport Frame
Accessories	
3412-P-7002	Spectra Iris Carrying Case
1205-P-7000	Spectra Iris Teaching Mirror
1919-P-5215	Spectra Iris Battery
1941-P-5385	Spectra Iris Lithium Charger
1201-P-6075	Small Depressor
1201-P-6067	Large Depressor













Slimline Lithium Polymer Battery



Slimline Wireless Charger

Wireless Power Supplies

Keeler wireless technology allows you to move from room to room without any constraints. The chargers are either desktop or wall mountable and store an extra lithium battery as a back up, should you need it.

New Slimline Lithium Polymer Battery

The New Slimline Lithium Polymer battery can give you up to 6 hours of use, weighs only 53 grams, and is nearly 70% lighter than the standard battery. It is also much smaller and can fit nicely into the palm of your hand.

New Slimline Wireless Charger

The new wall mountable charger remains as durable as the Standard Wireless battery charger with the facility to store your extra battery in the top compartment. The charger has an easy release button to remove your extra battery.



Slimline Lithium Polymer Battery



Standard Lithium Battery

Standard Lithium Battery

Our original lithium battery lasts up to 11 hours of use and fits neatly into the charging unit.



Standard Wireless Charger

The Standard Wireless Charger can be wall or desk mounted with space for a spare battery, which means you will always have a back up. An LED indicates when the battery needs charging.



1919-P-5338	Slimline Lithium Polymer Battery
1945-P-5012	Slimline Wireless Charger
1919-P-1013	Standard Lithium Battery
1941-P-1384	Standard Wireless Charger

Wired Power Supplies

Whether your power supply needs to be stationary or portable Keeler Wired Power Supplies are robust and reliable.

SmartPack

SmartPack is a stylish power supply system that combines 3 options in one product. No longer will you need to purchase a portable system for domiciliary use, another system for mounting on your wall and another for tabletop use.

Fast charge and long life

Nickel Metal Hydride technology provides a genuine long life and a fast charge. Instruments can be used when battery is charging. LEDs indicate when battery life is low, charging or fully charged.



SmartPai

WallPack

Alternatively, if your power supply needs to be stationary you can purchase the WallPack which fits neatly on the wall. Your indirect can be mounted on the bracket it comes with.

Which system is right for you?

Vantage Plus Usable Life		
Power Source	Natural LED	Bulb
Slimline Battery	6 hours*	1.5 hours*
Standard Battery	11 hours*	2.5 hours*
SmartPack	17 hours*	4.25 hours*

^{*} This measurement is based upon the illumination being used at normal examination power

Part numbers

1945-P-1001	SmartPack
EP39-22079	SmartPack Battery
1945-P-1000	WallPack



For Volk Indirect Lenses see pages 61-65





Direct Ophthalmoscopes

A combination of optical perfection, superb ergonomics and versatile features make Keeler direct ophthalmoscopes the ideal choice. Whatever your requirement from basic examination to detailed diagnosis, there is a Keeler ophthalmoscope for you. The next couple of pages will guide your choice but first read on to discover the benefits shared by all Keeler ophthalmoscopes as standard.

Keeler optical system – the more you see the better the diagnosis

Keeler's wide angle light beam and individual mirror alignment ensures that whatever the patient's pupil size, you will see the clearest view of the retina.

Comfort and fit

With curved surfaces and subtle patient side marking, the contoured, curved ophthalmoscope head guarantees an optimal viewing angle and the smooth line surfaces ensure a patient friendly non-threatening instrument.

Slimline handles

Keeler hand helds are supplied on a slimline, lightweight robust handle.

Light, tough and built to last

Keeler ophthalmoscopes are built from resilient, lightweight materials to give you many years of trouble free service. High impact resistant covers combined with a strong, rigid chassis protect the carefully aligned optics.

Controllable light for bright, clear images

The bright white Halogen or Xenon illumination is fully adjustable from zero. This ensures the comfort of your patients and the best possible diagnosis for you.

Reflex free images

Individually controlled optics reduce the effect of corneal reflex whilst minimising shadows and providing clearer retinal visualisation.



Apertures, graticules and filters

- Wide Angle Illuminates the largest area of fundus for the best general diagnosis through a dilated pupil.
- Intermediate Easier access through undilated pupils and in peripheral examination. Ideal for paediatric examination.
- Macular For examination of the macular region of the fundus where a larger beam would create excessive pupillary reaction or patient discomfort.
- Slit To determine retinal elevations and depressions, can also be used to assess anterior chamber depth.
- Glaucoma Projects a graticule onto the retina to assess the optic cup/disc ratio as an aid to glaucoma diagnosis
- Fixation Cross Projects a graticule onto the retina for assessment of the degree and direction of eccentric fixation.
- Red Free and Fixation Cross is for vessel examination with a fixation cross for assessment of eccentric fixation.
- Red Free Used to examine blood vessels in fine detail. Blood vessels are silhouetted black against a dark green background.
- Cobalt Blue Use with fluorescein dye for the examination of corneal scars and abrasions.







Specialist

We recognise that illumination is of fundamental importance to good diagnosis. The re-engineered optics give 30% more Xenon illumination and because it is longer lasting, that means fewer bulb changes giving greater peace of mind.

30% more illumination

Re-engineered optics give 30% more illumination to get through, for example, cloudy media and cataracts.

Lightweight and well balanced

Almost 50% lighter, the Specialist combined with the slimline handle is perfectly balanced.

Expanded dioptre range

The most comprehensive lens range available in a direct ophthalmoscope, +44D to -45D lens range guarantees optimal diagnosis in any situation.

Slimmer optics

Slimmer and enclosed viewing optics enable you to get closer to the eye providing a wider field of view.













Premium hand made optics

The Morton Lens Track system, made up of individually ground glass lenses ensures an optimal view.

New Cobalt Blue filter

The new blue filter can be used in conjunction with fluorescein dye for the detection and examination of corneal scars and abrasions.

Pupillometer gauge

The pupillometer disc allows quick and easy estimation of pupil size.

Specialist/Vista Ophthalmoscope bulb

1132-P-1157	3.6V Specialist Ophthalmoscope on Slimline Handle
1132-P-1149	2.8V Specialist Ophthalmoscope on Slimline Handle
Accessories	
1011-P-7034	Pack of 2 Vista 20/Specialist Ophth. Bulbs 3.6V Xenon
1011-P-7042	Pack of 2 Vista 20/Specialist Ophth. Bulbs 2.8V Halogen



Professional

The Professional Ophthalmoscope has been designed to ensure ultimate control. Lenses, graticules and filters can all be introduced at the touch of a fingertip without the need to pull away from the patient.

Positive action maywheel and comprehensive lens range

The positive action, easy access, maywheel not only allows you to dial up the required lens quickly, but also gives you total control of where you are in the lens range making each exam quicker and easier.

The extensive range of +29D to -30D in single dioptre steps ensures easy examination of all ocular structures and covers a wide range of patient/user prescriptions. A quick step swing of +/- 20D helps speed up diagnosis.

Xenon illumination

The Professional also uses Xenon illumination for a brighter and whiter long lasting light. Giving you more power and fewer bulb changes.















Swing over filter

The red free filter for enhanced vessel examination can be used in conjunction with any of the 6 diagnostic beams.

Brow rest

The integral soft brow rest allows for easy positioning and protects your lenses if you are a spectacle wearer.

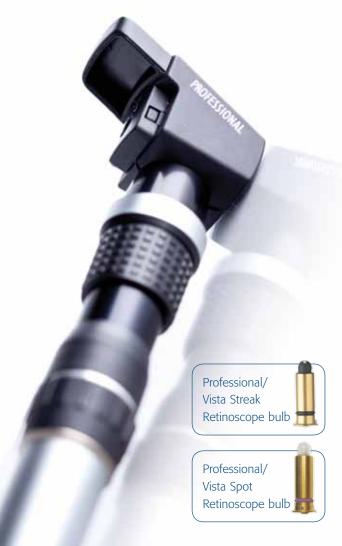
> Professional Ophthalmoscope bulb

Part numbers

1011-P-7114	Pack of 2 Professional Ophthalmoscope Bulbs 3.6V Xenon
Accessories	
1128-P-1013	2.8V Professional Ophthalmoscope on Slimline Handle
1128-P-1014	3.6V Professional Ophthalmoscope on Slimline Handle

1011-P-7106 Pack of 2 Professional Ophthalmoscope Bulbs 2.8V Xenon







Professional Combi Retinoscope

Optimised for outstanding performance with either a Streak or Spot beam with a simple bulb change.

600 lux of brilliant halogen illumination

The Professional Combi Retinoscope guarantees you enough light to refract even the most difficult eyes.

Neutralisation check (Patented)

The only Retinoscope allowing rapid confirmation of neutralisation. In both Streak and Spot modes you can change the beam from divergent to convergent enabling you to cross check the accuracy of the neutral point. The ability to double check neutralisation in the upper position guarantees the assessment is correct every time.

Precision magnetic control (Patented)

Improved 360° access to a single control for both rotation and convergence adjustments. The precision movements are achieved by use of rare earth magnet technology.

Two position aperture

A simple finger movement allows a choice of 4mm or 1.7mm aperture to optimise brightness or resolution of the retinal reflex.

Unique spectacle bar

An interchangeable soft pad is available for spectacle wearers.

1302-P-1011	Professional Streak Retinoscope 3.6V	
1302-P-1009	Professional Spot Retinoscope 3.6V	
1302-P-1010	Professional Streak Retinoscope 2.8V	
1302-P-1008	Professional Spot Retinoscope 2.8V	
Accessories P	rofessional Combi Retinoscope Bulbs	
1013-P-7009	Pack of 2 Professional Streak Retinoscope bulbs 3.6V	
1013-P-7011	Pack of 2 Professional Spot Retinoscope bulbs 3.6V	
1013-P-7008	Pack of 2 Professional Streak Retinoscope bulbs 2.8V	
1013-P-7010	Pack of 2 Professional Spot Retinoscope bulbs 2.8V	
Vista Retinoscope Bulbs		
1013-P-7009	Pack of 2 Semi Reflector or Full Aperture Streak Bulbs 3.6V	
1013-P-7007	Pack of 2 Semi Reflector or Full Aperture Spot Bulbs 3.6V	
1013-P-7008	Pack of 2 Semi Reflector or Full Aperture Streak Bulbs 2.8V	
1013-P-7006	Pack of 2 Semi Reflector or Full Aperture Spot Bulbs 2.8V	



Ophthalmoscope/Retinoscope Sets and Wall Units

Ophthalmoscope/Retinoscope Sets

You can purchase your Ophthalmoscope and Retinoscope in a slimline double handle case and add in a Lithium Double Charger.

Part numbers		
Specialist Opl	nthalmoscope/Retinoscope Sets	
1427-P-1063	Specialist & Professional Streak Ret. Set 3.6v Lithium Battery	
1427-P-1065	Specialist & Professional Spot Ret. Set 3.6v Lithium Battery	
1427-P-1062	Specialist & Professional Streak Ret. Set 2.8v Dry Cell Battery	
1427-P-1064	Specialist & Professional Spot Ret. Set 2.8v Dry Cell Battery	
Professional (Ophthalmoscope/Retinoscope sets	
1427-P-1059	Professional Ophth. & Streak Ret. Set 3.6v Lithium Battery	
1427-P-1061	Professional Ophth. & Spot Ret. Set 3.6v Lithium Battery	
1427-P-1058	Professional Ophth. & Streak Ret. Set 2.8v Dry Cell Battery	
1427-P-1060	Professional Ophth. & Spot Ret. Set 2.8v Dry Cell Battery	
1941-P-1368	Lithium Double Charger	
1999-P-7308	Wall Bracket for above	

Wall Units

Keeler's anti-theft designed Ophthalmoscopes and Retinoscopes have a lockable head and handle fitting so you'll always find them where you left them.

- Strong coiled tangle-free cable permits instrument use up to 3 meters from the transformer
- The robust construction is ideal for busy working conditions
- Automatic illumination when instruments are removed from cradle. With LED confirmation

1964-P-2001	Double Cord handle power supply
1132-P-1050	3.6V Specialist Ophthalmoscope head only
1128-P-1004	3.6V Professional Ophthalmoscope head only
1132-P-1042	2.8V Specialist Ophthalmoscope head only
1128-P-1003	2.8V Professional Ophthalmoscope head only
1302-P-1007	3.6V Streak Retinoscope head only
1302-P-1005	3.6V Spot Retinoscope head only
1302-P-1006	2.8V Streak Retinoscope head only
1302-P-1004	2.8V Spot Retinoscope head only



Ophthalmoscope/Retinoscope Set







Accessories

Colour Coded Grips

Add a bit of colour to your diagnostic area with colour coded grips. Available in four colours these new grips are not only fun but functional too!

Available individually or as an assorted pack of four, choose from pink, green, blue or black.

Near Point Cards for Retinoscopy







Keeler Slimline Handles

Spare handles for your instruments available in 3.6V Lithium rechargeable (red base) or 2.8V Battery (blue base) options.



Part numbers	
Colour Codeo	l Grips
1901-P-7028	Pink
1901-P-7036	Green
1901-P-7044	Blue
EP29-05365	Black
1901-P-7052	Pack of Four Assorted Colour Coded Grips
Near Point Ca	ards for Retinoscopy
1321-P-7021	Near Point Cards for Retinoscopy
Keeler Slimlin	ne Handles
1911-P-1201	3.6V Slimline Handle
1901-P-1101	2.8V Slimline Handle



Chargers and Upgrade Kits

A two hour fast charge and over 2 hours continuous use means your instrument is always ready for use. Choose between the Lithium-ion Double or Mini Chargers.

Over 2 hours of continuous use

Ideal for long examinations especially while first learning with your instrument.

LED displays

LEDs indicate when battery life is low, charging or fully charged.

Lithium-ion Double Charger

The compact charger takes two handles and fits neatly into your immediate testing environment, allowing easy access to your hand held instruments. It can be desk or wall mounted.

Lithium-ion Mini charger

Can be connected quickly and simply to the base of your

Keeler handle, making it the perfect

choice for domiciliary visits or practitioners on the move.

Your instruments can still be used whilst the battery is charging.

Upgrade Kits

Keep your existing heads and upgrade to Lithium-ion. The Double Lithium Upgrade Kit (pictured) includes 2 x handles and a Lithium-ion Double Charger.

The Mini Charger Upgrade Kit includes 1 x handle and a Lithium-ion Mini Charger.

Part numbers

1941-P-1368	Lithium-ion Double Charger	
1941-P-1341	Lithium-ion Mini Charger	
Upgrade Kits		

1911-P-1228 Lithium-ion Double Charger and 2 Handles (Upgrade Kit)

1911-P-1236 Lithium-ion Mini Charger plus Handle (Upgrade Kit)

Lithium Battery

EP39-18918 Lithium Battery







Cryomatic

Reliability doesn't happen by accident. Superior mechanical and pneumatic engineering is at the heart of this premium quality cryosurgery unit designed and built to withstand the rigours of modern usage. The Cryo engine is a design masterpiece of interconnecting tunnels and chambers controlled by a series of microprocessor managed solenoid valves that results in reliable freeze after freeze after freeze.

Surgeon not included

The advanced technology is activated as soon as you start the system, and its test procedures work quickly, meaning your Cryomatic is ready to use within minutes.

First it will interrogate the probe you have attached for specific information regarding optimum performance, and then the Cryomatic will clean and purge the probe to ensure all impurities are removed. Finally it will test the probe and adjust the gas flow automatically to ensure its optimum performance.

It really is as simple as attaching the Carbon Dioxide or Nitrous Oxide gas bottle and the probe and turning the system on – your Cryomatic will do everything else – all you need is the surgeon and a patient.

New Disposable Cryo Probes

The single use sterile retinal cryo probe is the perfect answer when a sterile probe is demanded at short notice.

Lightweight and comfortable to use, the single use probe is a must to manage your infection control processes and cut sterilisation time and costs.



Cryomatic Console and Accessories

Keeler, the first name in Ophthalmic Cryo Surgery. Designed for ease of use and built to the highest standards, we manufacture the Cryomatic and Keeler probes in our Windsor factory.

Reliable and easy to use

The Keeler Cryomatic System including the probes, results from a complete re-engineering process aimed at producing greater reliability and a better freeze, as well as simplicity of set-up and operation, all of which combine to make it uniquely superior.

Cylinder adaptors

Your Cryomatic can be used with either Carbon Dioxide (CO₂) or Nitrous Oxide (N₂O) gas from non-syphonic bottles via one of the Pin Index Yokes (PIY) or screw thread adaptors.



Adaptor for F Size Carbon Dioxide Gas Cylinder





E Cylinder Dimensions 50cm x 15cm, Gr. Weight 7kg F Cylinder Dimensions 86cm x 14cm, Gr. Weight 18kg







rait iluilibeis	
2509-P-1000	Cryomatic Cryo Console with footswitch
Accessories	
2508-P-7016	Adaptor for F Size Carbon Dioxide Gas Cylinder
2508-P-7015	Pin Index Yoke (PIY) for E Size Carbon Dioxide Gas Cylinder
2508-P-7018	Adaptor for F Size Nitrous Oxide Gas Cylinder
2508-P-7017	Pin Index Yoke (PIY) for E Size Nitrous Oxide Gas Cylinder
2509-P-8015	Probe Sterilisation Boxes (for Cryomatic Probes Only)
2508-P-7005	Cryo Trolley



Cryomatic Probes

The best freeze in ophthalmic cryo-surgery.

Keeler quality you can trust

Whilst retaining classical tip configurations, the probes and their manufacturing processes have been fundamentally redesigned to minimise blocking due to impurities in the cryogen gas or from moisture resultant from sterilising.

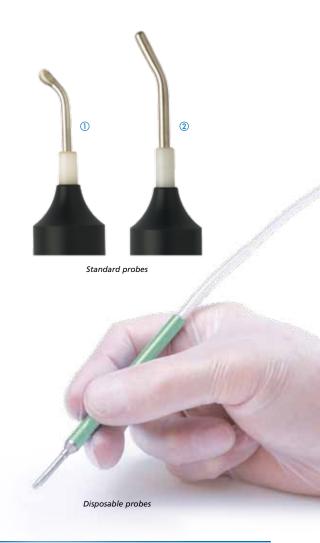
- Rock solid reliability
- Fast freeze and defrost
- Simple set-up
- No need to set the gas pressure

Disposable Cryo Probes - no more sterilisation concerns

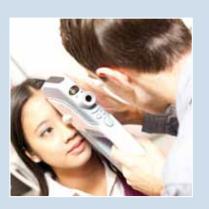
The single use sterile retinal cryo probe is the perfect answer when a sterile probe is demanded at short notice. Lightweight and comfortable to use, the single use probe is a must to manage your infection control processes and cut sterilisation time and costs. Just throw them away.



Disposable Cryosurgical Probes	
2508-P-7022	2.5mm Standard Retinal Probes, Box of 10
2508-P-8026	Cryomatic Disposable Probe Adaptor
Cryomatic Sta	andard Probes
2509-P-8000	2.5mm Standard Retinal Probe
2509-P-8001	2.5mm Extended Retinal Probe
Cryomatic Sp	ecial Order Probes
3 2509-P-8002	2.5mm Mid-reach Retinal Probe
2509-P-8005	3mm Glaucoma Probe
5 2509-P-8004	1.5mm Curved Cataract Probe
6 2509-P-8003	0.89 mm Intra-Vitreal Probe
2509-P-8006	4 x 10mm Collins Trichiasis Probe







Keeler Tonometers

For over 90 years Keeler has continued to innovate, design and manufacture world class ophthalmic instruments.

In 1986 the Pulsair Tonometer revolutionised non contact tonometry with it's unique hand held and portable system bringing a new dimension to patient care and the management of space and time.

Pulsair and tonometry are synonymous – the 5th generation intelliPuff hand held model combines contemporary style together with new technologies and the new Pulsair Desktop brings the Pulsair name to those requiring a chinrest desktop device.

Applanation Tonometry is a widely practiced and respected technique; the Keeler Applanation Tonometer (KAT®) will match that level of respect with our exceptional build quality and manufacturing consistency.







Pulsair Desktop

The Pulsair Desktop has a small and space saving footprint that combined with the elegant, slim optical mainframe allows it to blend seamlessly into the clinical environment. The openness of the design increases the confidence of both patient and clinician.

Comfort and Speed

Less is more. Pulsair Desktop is uncomplicated and therefore quick to use for the novice and professional alike.

Taking control of tonometry has never been easier or faster. Clear user controls and a colour video alignment screen combine to set a new standard in usability.



Sophisticated technology

Keeler Pulsair tonometers use advanced optical and sensor technology for positional detection and puff control.

Pulsair Desktop and Pulsair intelliPuff have software controls to manage the measurement data; if two consecutive readings are within +/- 1mmHg of each other the Pulsair will inform the user that sufficient readings may have been taken for that eye, saving precious time and increasing patient comfort.

2417-P-2000	Pulsair Desktop Tonometer
3104-L-8201	Chinrest Papers
2208-L-7008	Printer Paper



Pulsair Desktop Technical Specifications

Calibrated range	5mmHg to 50mmHg
Displayed accuracy	Display accuracy to 1 decimal place e.g. 12.3
Displayed scale	Single line 16 character alphanumeric display
Illumination system	LED infra red
Working distance	20mm
Dimensions	475 x 410 x 245mm (H x D x W)
Weight	16kg
Complies with	Electrical Safety (Medical) BS EN 60601-1:2006. Electromagnetic compatibility EN 60601-1-2:2007. Ophthalmic instruments - fundamental requirements and test methods ISO 15004-1:2006. Optical radiation hazard ISO 15004-2:2007
Power Supply Unit	Switch mode, (110 – 240V)+/- 10% multi plug type compliant to EN 60601-1 EN 61000-6-2, EN 61000-6-3
Power supply output	30 VA (12V DC 2.5A)
Frequency	50/60 Hz
Printer	Thermal line printer







Pulsair intelliPuff

Pulsair intelliPuff brings versatility to tonometry; wall mounted or desk mounted the lightweight hand held optical mainframe allows the clinician to measure all patients with equal comfort and respect. The flexibility of use and space saving makes this instrument virtually unbeatable for performance and value.

Hand held and wall mounted

Being hand held, the Pulsair intelliPuff avoids the need to position the patient in a chinrest removing an entire process from the patient journey – fast and easy to use while the patient is already seated in an examination chair, space and time under control.



Engineering and design excellence

Pump, solenoid control valves, plenum chamber and optical mainframe are all designed to function optimally leading to efficient and fast measurement. LED illumination provides a constant and reliable light source for the alignment camera and the positional detection systems.

Quietly cost effective, the Pulsair tonometers require no sterile consumables, printing is under your control so ongoing costs are managed.

2414-P-2001	intelliPuff unit
2208-L-7008	Printer paper roll
EP79-43563	12V Car Socket Power Adapter



Pulsair intelliPuff Technical Specifications

Calibration range	5mmHg to 50mmHg
Measurement scale	mmHg (millimetres of mercury)
Displayed accuracy	0.1mmHg
Display	4 character dot matrix scrolling
Firing system	Automatic and objective
Illumination system	LED infra red
Working distance	20mm
Mounting system	Table/desktop/wall
Base unit dimensions	260 x 215 x 220mm (H x D x W)
Base unit weight	2.465Kg
Handpiece dimensions	315 x 150 x 46mm (H x D x W)
Handpiece weight	0.890Kg
Umbilical cord length	2.0m
Printer	Thermal line printer







KAT® - Keeler Applanation Tonometer

Reliable and repeatable applanation tonometry, the Keeler Applanation Tonometer (KAT®) is a perfect example of British manufacturing experience delivering great quality and value. We have applied 21st Century design techniques to an old established principle to deliver a premium quality instrument.

Goldmann applanation principle

The Goldmann applanation principle is widely acclaimed as the most common and direct method of assessing IOP.

The KAT® is made with precision machined components, subject to stringent quality controls pre, during and after assembly to add reliability and repeatability to an established technique.



KAT T type on Slit Lamp



KAT R type on Slit Lamp

T type, R type or BQ type

The take-away T type KAT® is fitted to the guide plate on the optical axis for the microscope and illumination unit arm. The fixed R type is mounted on a post fitted to the microscope optical body.

The BQ KAT® is designed specifically to fit the Haag Streit BQ, BP and BX Slit Lamps and fits directly to the optics support arm.

Robust and reliable

Our all metal parts, manufactured to a high precision engineering design will withstand the test of time and deliver reliable results year after year.



2414-P-2030	KAT – Keeler Applanation Tonometer T type
2414-P-2040	KAT – Keeler Applanation Tonometer R type
2414-P-2020	KAT BQ type Tonometer

KAT® Technical Specifications

By leverage weight
Fitted to the guide plate on the optical axis for the microscope and illumination unit arm
Mountable on a post fitted to the microscope optical body
0 - 80 mmHg (0 - 10.64 kPa)
Standard divergence: $0.49 \text{ mN} \le 3s \le 1.5\%$ of nominal value
from 10°C to 35°C
≤ 0.49 mN
0.41 kg (without accessories) 0.69 kg (without accessories) 0.712 kg (without accessorie

KAT® Accessories

The T type and R type KATs® are supplied with a reusable doubling prism, the calibration check bar and either the R type post or the T type aluminium guide plate for Slit Lamp use.

Protective case

To protect your investment when travelling or for when the instrument is not in use, our high quality aluminium carrying case will ensure your tonometer is always stored and protected.



T type guide plate

R type mounting post

AT Aluminium carrying and storage case
AT doubling prism
AT T type guide plate
AT R type mounting post
libration arm assembly
ν.





Protective carrying case





Slit Lamps

Quality without compromise. One of the most important optical diagnostic devices in ophthalmology and optometry is your Slit Lamp. Making the right choice will pay dividends for years to come.

Beautifully Crafted

Desktop Slit Lamps remain the mainstay of the busy clinic or consulting room.

Introducing the new Keeler Slit Lamp – quality design and leading technology with a contemporary design.

It's very simple. We set ourselves the task of designing a Slit Lamp to exceed performance expectations. Our exemplary attention to detail has helped us to achieve just this.

The result is the new Keeler Slit Lamp combining intricate performance with practical elegance.



PSL Portable Slit Lamps

The PSL provides the clinician with a fully featured, top quality hand held Slit Lamp. Ideal for examining children, larger patients, those with mobility issues and many other patient groups.





New Keeler Slit Lamp

Keeler is known for exceptional design ability. We have combined classic beauty with modern technology, resulting in the perfect blend of style and substance. Our new Slit Lamp provides the functionality and performance you want, need and expect.

Elegant design

Keeler

Our design flair gives the product a sleek, beautiful profile. The controls are perfectly placed for ease of use, without compromising the clean and elegant lines of the product.



Exceptional optics

Keeler is renowned for market-leading optics and has been dedicated to optical design and manufacture for nearly 100 years. Our customers have absolute confidence in the quality, accuracy and reliability our optical design delivers.

Our advanced design and manufacturing techniques give the new Keeler Slit Lamp the advantage of quite simply stunning optical performance.

3020-P-2007	Slit Lamp 40H LED, Standard Set complete with Table Top
3020-P-2006	Slit Lamp 40H LED, Refraction Unit Set
3020-P-2008	Slit Lamp 40H LED, Standard Set complete on Table Leg
3020-P-2000	Slit Lamp 40H, Standard Set complete with Table Top
3020-P-2003	Slit Lamp 40H, Refraction Unit Set
3020-P-2002	Slit Lamp 40H, Standard Set complete on Table Leg
3020-P-7000	Table leg, multi voltage IEC input, twin IEC output socket, electric elevation, with castors

Beautifully Crafted

Refraction and Combi-unit ready

Attaching the Slit Lamp to your unit couldn't be easier. We've kept the technician front of mind when developing the fitting mechanics to ensure you can be up and running in no time.

Our unique Slit Lamp power management system allows input from both DC (direct current) and AC (alternating current) sources to give a 6V DC, 12V DC or a constant current (CC) output.

Input	Output
12v DC	6V DC, or CC
24V DC	6V DC, 12V DC or CC
12V > 16V AC	6V DC, 12V DC or CC

Integrated Yellow Filter

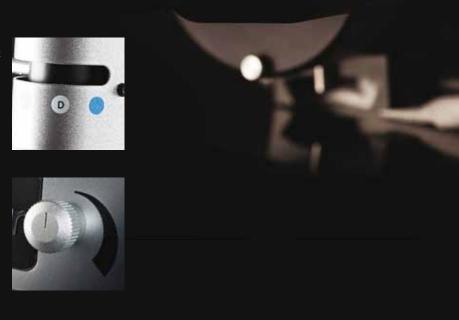
Ease of use is key to Keeler's product development. This is why our designers have integrated the all-important yellow filter into the optical body. You simply need to 'drop it in' when you are looking to detect subtle corneal staining - no more fumbling around with hand held wratten filters.





The new Keeler Slit Lamp has been built with an integrated diffuser in the filter wheel. Another nice design touch – instant access to a diffuse light which gives an improved general overview of the eye under examination.

On board illumination control
The illumination control panel has
been placed close to the joystick,
giving you convenient and
constant access to this
vital control.





LEDs and Lenses

Let there be LEDs

50 years ago, the LED was leading edge technology. Today it comes as an optional, simple to replace light source for the new Keeler Slit Lamp, which comes with a Halogen Lamp as standard, but offers the powerful LED module if that's your preferred light source.

Our LED has been carefully selected for its performance, with a colour temperature of 3,800k, and a truly homogeneous light patch. The imperceptible increase in blue light levels will increase efficiency when fluorescence is required and give increased detail to small structures, such as the endothelium.

Most halogen lamps have a life of around 100 hours. Typically, a Keeler LED will provide 10,000 or more hours, giving you 100 times the life of your halogen lamp. A small additional initial investment will reap significant lifetime cost benefits.

Keeler Lenses and Optics

As you'd expect from Keeler, brilliant stereoscopic imagery, high chromatic correction and crisp clarity come as standard with the new Slit Lamp. We use high anomalous dispersion glass within the 15 element optical system to achieve this.

Combining top quality materials with our superior optical design enables us to achieve remarkably low field curvature and low optical distortion levels.

And to further enhance the optical performance, all glass to air surfaces are multi-layer coated to improve light transmission.

Motorised Instrument Table

The Keeler table comes with castors as standard and a virtually silent motor. Two IEC female power outlets and a switch mode power input make the Keeler table the perfect partner for your new Keeler Slit Lamp.



Part number

3020-P-7000 Table leg, multi voltage IEC input, twin IEC output socket, electric elevation, with castors







Keeler Slit Lamp Technical Specifications

Optical system

Туре	Galilean converging binoculars @ 8°
Magnification	Rotating drum change x6, x10, x16, x25 & x40
Eyepiece	x12.5
Field of view	34, 22, 14, 8.5 and 5.5 mm
Interpupillary distance	49.0 to 77mm
Objective lens focal distance	107mm
Objective lens convergence angle	13°

Slit Projection system and base

0-12mm continuously variable
12mm (1mm – 12mm continuously variable)
0.2, 1mm square, 2, 3, 5, 9 and 12mm
Clear; red free; neutral density; diffuser; blue; IR heat
absorbing filter permanently installed
+/- 90° continuous
+/- 180° with reference scale
0°, 5°, 10°, 15° & 20°
25mm Z-axis, 107mm X-axis, 110mm Y-axis
12mm
405 x 500mm
LED
LED / 6V 20W Halogen lamp

Protection against Ingress IPxo

Class II ME Equipment

Insulation between mains parts and the functional earth provide at least two means of protection

Power supply		Part Number
Power supply unit	Switch mode, (110V – 240V input) +/- 10% multi plug	3020-P-5040/
	compliant to EN60601-1 EN 61000-6-2, EN 61000-6-3	3020-P-7017
Power supply output	12V DC: 2.5 amps must be IEC/EN 60601 compliant	
Complies with	Electrical Safety (Medical) BS EN 60601-1	
	Electromagnetic compatibility EN 60601-1-2	
	Ophthalmic instruments - Fundamental	
	requirements and test methods ISO 15004-1	
	Ophthalmic instruments - Optical radiation	
	hazard ISO 15004-2	

Environmental

	Temperature	Humidity	Pressure
Use	+10°C to +35°C	30% to 90%	800 hpa to 1060 hpa
Storage	-10°C to +55°C	10% to 95%	700 hpa to 1060 hpa
Transport	-40°C to +70°C	10% to 95%	500 hpa to 1060 hpa



PSL Portable Slit Lamps

Versatility and portability are key benefits of the Keeler PSL one and PSL Classic Slit Lamps. Keeler designed and manufactured with the strength to withstand the daily traumas of the demanding ophthalmic environment, the PSL is lightweight, durable and robust.

Advanced optics: 10x magnification, PSL one 10x and 16x magnifications, PSL Classic

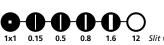
Top quality multi-layered glass is crafted into our Keeler multi-element and multi-layer coated optical system to give maximum performance. Clarity is guaranteed.

Controllable illumination

Proven halogen illumination system. Illumination levels are controlled by a rheostat giving you control of your examination parameters. From zero to maximum, you choose.

Big Slit Lamp features, portable usability

Unique features such as the fixation targets, and the 1mm square light patch for assessing anterior chamber flare set the new standard for Portable Slit Lamps.









Filter wheel: Red free, Blue, Neutral density (0.8) and Clear

Carrying Case

Protect your investment with a rugged aluminum carrying case - perfect when your Slit Lamp is not in use or when you are travelling.





PSL Classic



3010-P-2002	PSL Classic with charger base, case and iPhone adapter
3010-P-2000	PSL Classic with charger base
3010-P-2001	PSL one with iPhone adapter



PSL iPhone 4 imaging adapter PSL Specifications

Apple iPhone 4 PSL imaging adapter for the PSL Portable Slit Lamp.

• Instant imaging capability for your Keeler PSL

• Easily attached or removed, takes seconds

• Affordable, efficient and a powerful clinical recording tool



Accessories Part numbers

3010-P-7010	Keeler Portable Slit Lamp iPhone 4 imaging adapter
3010-P-7000	Carry case
1030-P-7187	Spare lamp
EP39-70737	Test bar
3010-P-7004	Eye caps (2)

	PSL classic	PSL classic	PSL one
Part number	3010-P-2002	3010-P-2000	3010-P-2001
Magnification	10x and 16x	10x and 16x	10x
Charging base	Yes	Yes	No
Direct charging	Yes	Yes	Yes
Colour	Blue and White	Blue and White	Blue and Black
iPhone adapter	Yes	Option	Yes
Aluminium Case	Yes	Option	Option

PSL Technical Specifications

Slit type	Rotating Slit wheel selection Slit Lamp	Power supply unit	Switch mode, (110V – 240V)
Slit length	12mm		+/- 10% multi-plug
Slit widths	0.15mm, 0.5mm, 0.8mm and 1.6mm slits, 12mm circle and a 1mm square	Power supply output 30VA (12V DC 2.5A)	
Filters	Red free, Blue, Neutral density 0.8	Biomicroscope	
	and Clear	Туре	Binocular Hand held
IR protection	Inbuilt IR cut filter		Biomicroscope Slit Lamp
Slit angle	+/- 60°	Optics	Converging binoculars at 13°
Illumination control	Continuously variable from low to full brightness	Magnification	10x and 16x lever change (PSL Classic) 10x (PSL one)
Fixation targets	LED system, double click of trigger	Objective lens working distance @ 10x	16mm







Keeler eye shop

Keeler offer a wide range of practice essentials for everyday use. Choose from our high quality Cross Cylinders to our robust Four Sided Test Types. Whatever your practice essential need you will find it on our Keeler eye shop range.

Oculus Trial Frames

The Keeler eye shop offers a wide range of Oculus Trial frames including the new Children's frame. Oculus frames are lightweight, comfortable and robust with user friendly controls.

A comprehensive range of Trial Lens Sets are also available.

Volk Lenses

Volk produce the finest quality lenses and imaging systems available. Known worldwide as the premier designer and manufacturer of precision diagnostic and laser lenses.

Volk's unmatched image quality can be appreciated across the comprehensive range of imaging products available through the Keeler eye shop, including Slit Lamp, Indirect Ophthalmoscope and Gonio Lenses.





Test Types

Keeler slimline, internally illuminated, remote controlled test types and accessories.

Finesse Test Type

The Keeler Finesse is an all purpose, internally illuminated, infrared, remote controlled indirect test type.

The Keeler Finesse Elite comes with additional Fan and Block for measurement of astigmatism.

- Interchangeable Panel
- Motorised Drum
- Mallet Fixation Disparity Test
- Concentric Circles
- Duochrome Test

Finesse Single Sided Test Type

An internally illuminated panel with Spot light available to test at 6 or 3 metres.

- This product is supplied with a Direct Test panel
- Various other panels are available for purchase, please call 01753 857177 for further details

Finesse Test Type		
2204-P-2306	Keeler Finesse	
2204-P-2322	Keeler Finesse Elite with additional Fan and Block	
Finesse Single	Sided Test Type	
2204-P-2429	Single Sided Test Type 3 Metre Direct	
2204-P-2410 Single Sided Test Type 6 Metre Direct/Indirect		



Test Types

Finesse Four Sided Test Types

Depending on your size of examination area you can choose a direct test type which tests at 6 metres or an indirect test type which tests at 3 metres. Three movement options are available; Manual, Motorised and Infrared Remote Control.

Internally illuminated with four upper Snellen panels and four lower panels.

- Spot light
- Duochrome
- Friend
- Worth 4 Dot

LogMAR Test Type

LogMAR is the new method of testing visual acuity. It tests at 4 metres with 14 rows of LogMAR letters.

It can be wall mounted or an optional lower base is available.

Additional charts are available.

Finesse Four S	Sided Test Types
Direct Test Ty	pes
2204-P-2402	Four Sided Test Type Manual
2204-P-2381	Four Sided Test Type Motorised/Air Switch
2204-P-2349	Four Sided Test Type Infra Red Remote Control
Indirect Test	Туреѕ
2204-P-2365	Four Sided Test Type Manual
2204-P-2357	Four Sided Test Type Motorised/Air Switch
2204-P-2349	Four Sided Test Type Infra Red Remote Control
Accessories	
2204-P-7393	Floor Stand for Four Sided Test Types
2204-P-7406	Wall Bracket for Four Sided Test Types
LogMAR Test	Туре
2204-P-2437	LogMAR 4 Metre Test Type
2204-P-2445	Base for LogMAR Test Type
2204-P-2461	Letter Chart
2204-P-2453	Number Chart



Finesse Four Sided Test Types



LogMAR Test Type





Trial Frames

Oculus Universal

The Oculus Universal is a lightweight, comfortable and robust Trial Frame with easy clean, user friendly controls. It can hold 5 pairs of lenses.

Oculus Standard

The Oculus Standard is of strong metal construction with a full range of adjustments and can hold 5 pairs of lenses.

Trial Frame Specifications					
Features	Oculus Universal	Oculus Standard	Oculus Adult ½ Eye Adjustable	Oculus Children ½ Eye	
Pair of lenses	5	5	3	3	
Adjustable bridge	Yes	Yes	Yes	No	
Bridge material	Rubber	Rubber	Plastic	Plastic	
Lens rotation control	Yes	Yes	No	No	
Adjustable PD	Yes	Yes	Yes	Yes	
Adjustable side length	Yes	Yes	Yes	Yes	
Adjustable side angle	Yes	Yes	No	No	
Vertex measurement	Yes	Yes	No	No	
Colour	Grey	Black	Grey	Grey	
Frame Material	Plastic	Metal	Plastic	Plastic	

Oculus Half Eye Trial Frames

The Oculus Half Eye Trial Frames are lightweight, comfortable and robust with easy clean, user friendly controls. Available as an Adult or Children's Half Eye Trial Frame.



Oculus Children's Half Eye

Oculus Adult Half Eye

2 207-P-1173	Oculus Universal	
2207-P-1114	Oculus Standard	
2207-P-1149	Oculus Adult Half Eye with adjustable nose rest	
2207-P-1130	Oculus Children's Half Eye with adjustable nose rest	



Children's Trial Frame and Trial Lens Set

New Children's Trial Frame

A lightweight UB5 Trial Frame, designed specifically for children. The new nose rest is made from soft, skin friendly material for extra comfort.

- PD range 40 to 72mm
- Requires Children's Trial Lens Set 2201-P-1172

Trial Lens Set for Children's Trial Frame

The Children's Trial Lens Set has lenses with a diameter of 28mm to fit into the Children's Trial Frame.

Contents:

- 20 pairs each +/- sph. Lenses 0.25 12 dpt
- 10 pairs each +/- cyl. Lenses 0.25 3.00 dpt
- 5 prism lenses
- 2 coloured lenses
- 1 occluder
- 1 pinhole
- 1 maddox cylinder red



2207-P-1202	Children's Trial Frame
2201-P-1172	Children's Trial Lens Set



Premium Trial Lens Sets



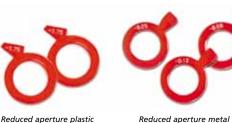
Trial Lens Set in vinyl brief case

Trial Lens Sets

Premium Trial Lens Sets

In the Premium Trial Lens Sets all lenses are marked on both sides so you don't need to think about right and left lenses.

- Cylinder lenses have axis markings on the lenses
- Supplied in solid wooden case with removable tray



Reduced aperture plastic



Full aperture metal

Trial Lens Sets in vinyl brief case

The widest range of lenses available that are easy to fit and remove from trial frames with clear markings and a removable tray.

Part numbers				
Premium Tria	Lens Sets			
2201-P-1228	232 Reduced aperture plastic lenses in wooden case			
2201-P-1236	232 Reduced aperture metal lenses in wooden case			
2201-P-1244	232 Full aperture lenses in wooden case			
Trial Lens Set	in vinyl brief case			
2201-P-1121	Reduced Aperture Trial Lens Set in vinyl case (232 lenses)			
2201-P-1148	Full Aperture Trial Lens Set in vinyl case (266 lenses)			



Occluders and Accessories

ABDO Pocket Rule

Offers an Interpupillary distance and measures distance between lenses. Designed to measure most specifications relating to spectacles.

Fixation Bar

An ideal orthoptic aid for children. Policeman and coloured budgie on one side. Two reduced Test Types plus N5 text on reverse.

Green and Red Maddox Rods

Ideal for muscle balance examination.



Romanes Occluder

Clip on Occluder

City Rule

Designed to take frame and multifocal measurements. Designed to BS3521 – 1991 (latest version).



City Rule

2299-P-1217	ABDO Pocket Rule
2301-P-1014	Fixation Bar
2299-P-1049	Clip on Occluders
2299-P-1233	Romanes Occluder
2203-P-1184	Green Maddox Rod
2203-P-1176	Red Maddox Rod
2299-P-1305	City Rule







Keeler Cross Cylinders in Case

Cross Cylinders, Twirls and Confirmation Tests

Keeler Binocular Confirmation Tests

Useful sliding lens system that allows the PD to be adjusted to your patients requirements.

Keeler and Jackson Cross Cylinders and Confirmation Tests Clearly marked high quality lenses.

Keeler Monocular Confirmation Tests



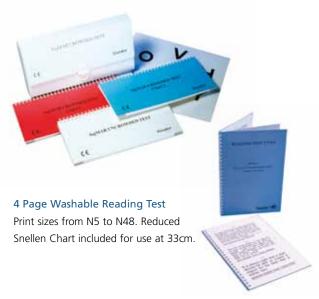
Keeler Binocular Confirmation Tests				
22203-P-1299 Confirmation Test (4 lenses, 2 Pairs Each +/-0.25D)				
2203-P-1096	Confirmation Test (4 lenses, 2 Pairs Each+/-0.50D)			
2203-P-1109	Confirmation Test (4 lenses, 2 Pairs Each +/-1.00D)			
2203-P-1117	Confirmation Test (4 lenses 2 Pairs one +/-0.25D, one +/-0.50D)			
Keeler and Jac	ckson Cross Cylinders and Confirmation Tests			
2203-L-1318	Keeler Cross Cylinder 0.25D			
2203-L-1326	Keeler Cross Cylinder 0.50D			
2203-P-1029	Pair of Keeler Cross Cylinders in case			
2203-P-1205	Jackson Cross Cylinder +/-0.25D			
2203-P-1213	Jackson Cross Cylinder +/- 0.50D			
2203-P-1221	Jackson Cross Cylinder +/-0.75D			
2203-P-1248	03-P-1248 Jackson Cross Cylinder +/- 1.00D			
Keeler Monoc	ular Confirmation Tests			
2203-L-1350	Monocular Spherical Twirl +/- 0.25D			
2203-L-1369	Monocular Spherical Twirl +/-0.50D			

Children's Tests and Near Vision Reading Tests

LogMAR Crowded Test

More subtle definition of changes between acuity ranges specifically in amblyopic children.

Ideal for testing acuity of children from 3 years of age. 3m working distance. 4 letters at each acuity level from 6/3 to 6/38. Laminated and washable.



Thomas the Tank Engine Reading Test

Designed specifically for children.

Colour pictures encourage full child participation. Print size N5 to N24.

Sheridan Gardiner Test

Well established test designed for children but suitable for disabled people, those with learning difficulties or patients who do not share a common language with the examiner.

2204-P-1231	231 LogMAR Crowded Test			
2205-P-1014	Vocational 4 Page Reading Test			
2205-P-1022	4 Page Washable Reading Test			
2205-P-1065	Thomas the Tank Engine Reading Test			
2205-L-1004	Peter Rabbit Test			
2205-P-1057	Jaeger Reading Test			
Sheridan Gardiner Test				
2204-P-1004	Sheridan Gardiner Test without Orthoptic booklets			
2204-P-1063	P-1063 Sheridan Gardiner Test with Orthoptic booklets			



Thomas the Tank Engine, Peter Rabbit and Jaeger Reading Tests



Sheridan Gardiner Test without Orthoptic booklets



Sheridan Gardiner Test with Orthoptic booklets



3rd Edition City University Colour Vision Test and Recording Charts



38 and 24 Plate Ishihara Colour Vision Test

Colour Vision Tests

3rd Edition City University Colour Vision Test

This test displays normal protan, deutan and tritan colours, differentiation is stronger in the red/green.

Significant tritan defects may be detected if used in conjunction with the Ishihara. The test includes a screening option.

Recording Charts for City University Test

38 and 24 Plate Ishihara Colour Vision Test

Ideal for commercial/industrial colour screening. Tests for protan and deutan defects.

Patients must identify numbers or patterns formed in a matrix of small coloured dots varying in colour and intensity (pseudo-isochromatic plates).

Two editions available: 38 plate for detailed investigation – 24 plate for guick screening.

3rd Edition City University Colour Vision Test				
2206-L-1057	City University Colour Vision Test			
2206-L-7125	Recording Charts for City University Colour Vision Test			
38 and 24 Plate Ishihara Colour Vision Test				
2206-P-1008	08 38 Plate Ishihara Colour Test			
2206-P-1016	24 Plate Ishihara Colour Test			

General Tests

Mallett Near Vision Unit

A lightweight and compact Near Vision test unit that incorporates a comprehensive range of Mallett near tests.

The unit supplied is rechargeable and the tests are controlled by a switch located on the side of the unit. High contrast and definition on all charts. A matching polarising visor is included.

RAF Binocular Gauge

Useful device for determining the objective and subjective convergence points, measuring accommodation and determining the dominant eye.

Lightweight bar, 500mm in length on which a sliding four sided drum is mounted with different tests on each panel.



Wirt Stereo Fly Test

The fly dramatically demonstrates presence of stereoscopic vision.

Two supporting tests enable estimation of level of stereoscopic vision.

Maddox Wing Test

Convenient hand held quick and efficient near test for heterophoria which is measured on the red vertical scale. Esophoria and exophoria are measured by the white horizontal scale. Cyclophoria may be assessed by moving the red arrow pointer parallel to the horizontal scale.

Mallett Near Vision Unit			
2205-P-1110	10 Mallett Near Vision Unit 90/180° (UK)		
2205-P-1137	Mallett Near Vision Unit 45/135° (USA)		
General Tests			
2301-L-1020	RAF Binocular Gauge		
2406-L-1000	Wirt Stereo Fly Test		
2301-P-1022	Maddox Wing Test		





Wirt Stereo Fly Test



Maddox Wing Test



General Tests

Keeler Horizontal/Vertical Prism Bar

Comes complete in it's own case. A unique integrated design with no need for two separate bars.

Optical surfaces are recessed for optimum protection. Extensive prism power 1,2,3,4,6,8,10,15,20,25,30 and 36 dioptres.

Keeler Retinoscopy Rack

An excellent tool for fast objective refraction, particularly with uncooperative patients and children.

Comes complete in its own carrying case.

There are 24 lenses, 13mm diameter –6D to +6D in 0.5D steps.

Mounted in tough, yet light alloy frame.

Amsler Manual

Assists in early recognition of changes in the macula and foveal areas.

Only 6 patient responses required for diagnosis of functional disturbances, from small scotoma to distortions. Full instructions include the interpretation of results.

2203-P-1002 Keeler Horizontal/Vertical Prism Bar			
2202-P-1000 Keeler Retinoscopy Rack			
Amsler Manu	al		
2215-P-1034	Amsler Manual		
2215-P-7057	Amsler Recording Charts		









Volk Digital Slit Lamp Lenses

Digital High Mag Lens™

The Digital High Mag Lens™ provides highest resolution, high magnification imaging of the central retina, providing topographical views of the nerve fibre layer and outstanding stereopsis allows detection of optic disc swelling, cupping and macular serous fluid.

Digital Wide Field Lens®

The Digital Wide Field Lens® gives the highest resolution pan retinal examination and the advanced double aspheric design provides enhanced imaging. The ultimate 90D lens with similar magnification and widest field of view past the vortex.

Digital 1.0x Imaging Lens

The ultimate lens for Digital Slit Lamp photography. The Digital 1.0x Imaging Lens provides the highest resolution flat plane imaging of the posterior pole and the high index, high resolution glass provides improved stereopsis and image clarity.

Digital Slit Lamp Lens Set

You can now purchase the Digital Wide Field Lens® and the 1.0x Imaging Lens as a handy set.

Volk Digital Slit Lamp Lens Specifications				
Lens	Field of View	Image Mag.	Laser Spot Size	Primary Application
Digital High Mag Lens™	57° / 70°	1.30x	0.77x	Highest Resolution, High Magnification Imaging of the Central Retina
Digital Wide Field Lens®	103° / 124°	.72x	1.39x	Highest Resolution Pan Retinal Examination
Digital 1.0x Imaging Lens	60° / 72°	1.0x	1.0x	High-resolution diagnosis of the posterior pole and reduced glare and reflections

2105-L-1816	Digital High Mag Lens™
2105-L-1787	Digital Wide Field Lens®
2105-P-2060	Digital 1.0x Imaging Slit Lamp Lens
2105-L-1808	Digital Slit Lamp Lens Set



Volk Super Series Slit Lamp Lenses

SuperField® Lens

Its small 30.2mm diameter housing proves to be highly useful for dynamic fundoscopy, allowing the lens to be more easily manipulated, which in turn effectively increases its dynamic field of view to 116°.

Super 66® Lens

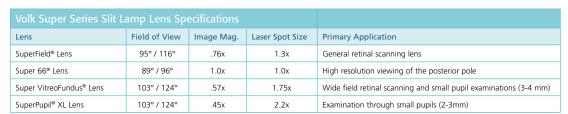
The Super 66® lens provides an expansive 96° dynamic field of view. Ease of use and working distance are comparable to that of the 78D lens but with higher resolution, image clarity and enhanced depth perception.

Super VitreoFundus® Lens

Ultra wide-field viewing and outstanding small pupil properties for quick comprehensive fundus examinations at the slit lamp. Delivering an incredible 124° dynamic field of view with ample .57x magnification.

SuperPupil® XL Lens

The widest pan equatorial fundus view of any non contact lens available with over 100° field visible in a single view! Allows detailed inspection of the posterior pole as well as peripheral lesions including retinoschisis and retinal detachments.



2105-P-1121	SuperField® Slit Lamp Lens
2105-P-1199	Super 66® Slit Lamp Lens
2105-L-1541	Super VitreoFundus® Slit Lamp Lens
2105-L-1517	Super Pupil® XL Slit Lamp Lens















Volk Classic Slit Lamp Lenses

60D Lens

The 60D lens provides the highest magnification of the non contact slit lamp lenses and is ideal for detailed disc and macular viewing. The 31mm ring diameter facilitates easy handling with the orbital area.

78D Lens

The patented Double Aspheric 78D lens is an excellent general diagnostic laser treatment lens offering an ideal .93x image magnification and wide 97° dynamic field of view.

90	D(Lens

The original Volk 90D lens features a small 26mm diameter ring design which is outstanding for dynamic fundoscopy and has good small pupil capabilities, making it ideal for a quick look at the posterior pole.

Volk Classic Slit Lamp L				
Lens	Field of View	Image Mag.	Laser Spot Size	Primary Application
60D Classic Lens	68° / 81°	1.15x	.87x	High magnification views of the posterior pole
78D Classic Lens	81° / 97°	.93x	1.08x	General diagnosis and treatment
90D Classic Lens	74° / 89°	.76x	1.32x	General diagnosis / small pupil examinations

2105-P-1084	60D Classic Lens	
2105-P-1009	78D Classic Lens	
2105-L-1103	90D Classic Lens	



Volk Digital Indirect Ophthalmoscope Lenses

ClearField Digital Lens

Highest resolution pan retinal examination lens.

The advanced double aspheric design provides wide field imaging previously unattainable with the indirect method of examination.

Low dispersion[™] glass delivers enhanced resolution whilst reduced ring diameter and working distance facilitate lens manipulation.

ClearMag Digital Lens

Highest resolution high magnification optic disc and posterior pole examination lens.

The advanced double aspheric design provides high magnification imaging previously unattainable with the indirect method

Low dispersion[™] glass delivers enhanced resolution whilst reduced ring diameter and working distance facilitate lens manipulation.

Volk Digital Indirect Ophthalmoscope Lens Specifications				
Lens	Field of View	Image Mag.	Laser Spot Size	Primary Application
ClearField Digital Lens	55° / 72°	2.79x	0.36x	Highest Resolution Pan Retinal Examination
ClearMag Digital Lens	38° / 49°	3.89x	0.26x	Highest Resolution High Magnification Optic Disc and Posterior Pole Examination

MITAL CLEARFIELD



2105-L-1240	ClearField Digital Indirect Ophthalmoscope Lens
2105-L-1859	ClearMag Digital Indirect Ophthalmoscope Lens







Volk Indirect Ophthalmoscope Lenses

15D Lens

The 15D lens provides high magnification along with optimised working distance from the cornea. With its 4.11x magnification, it is also well suited for optic disc and macular observation.

20D Lens

The 20D lens is perfectly corrected for field curvature, astigmatic aberrations and coma – delivering the best retinal image of any 20 Dioptre lens on the market. Its advanced Double Aspheric

design further maintains linear image magnification and perfect image clarity across the entire field of view for unsurpassed fundus examinations.

Pan Retinal® 2.2 Lens

The Pan Retinal® 2.2 lens uniquely combines magnification nearly that of the 20D lens with a field of view approaching that of the 30D lens. It is excellent for virtually every examination procedure, including small pupil examinations.

Volk Digital Indirect Ophthalmoscope Lens Specifications					
Lens	Field of View	Image Mag.	Laser Spot Size	Working Distance	Primary Application
Macula Plus® 5.5 Lens	36° / 43°	5.50x	.18x	80mm	Ultra-high resolution viewing of the posterior pole
14D Large Lens	36° / 47°	4.30x	.23x	75mm	High magnification viewing of the posterior pole
15D Large Lens	36° / 47°	4.11x	.24x	72mm	High magnification viewing of the posterior pole
20D Large Lens	46° / 60°	3.13x	.32x	50mm	General diagnosis and treatment
Pan Retinal® 2.2 Lens	56° / 73°	2.68x	.37x	40mm	General diagnosis and treatment

2105-L-1218	15D Indirect Ophthalmoscope Lens
2105-K-1159	20D Indirect Ophthalmoscope Lens
2105-P-1017	Pan Retinal® 2.2 Indirect Ophthalmoscope Lens

Volk Indirect Ophthalmoscope Lenses

28D Lens

This lens provides exceptional resolution and fundus scanning capability. Excellent for small pupil diagnosis and treatment.

30D Lens

The 30D lens is designed to provide the practitioner with a wide field of view, shorter working distance and it is excellent for use with small pupils.

40D Lens

The 40D lens is ideal for paediatric ophthalmoscopy and other examinations requiring expansive fundus visibility.



Volk Digital Indirect Ophthalmoscope Lens Specifications						
Lens	Field of View	Image Mag.	Laser Spot Size	Working Distance	Primary Application	
25D Large Lens	52° / 68°	2.54x	.39x	38mm	Median field diagnosis and treatment	
28D Large Lens	53° / 69°	2.27x	.44x	33mm	Small pupil diagnosis and treatment	
30D Large Lens	58° / 75°	2.15x	.47x	30mm	Small pupil diagnosis and treatment	
40D Large Lens	69° / 90°	1.67x	.6x	20mm	Paediatric ophthalmoscopy / veterinary applications	

2105-L-1568	28D Indirect Ophthalmoscope Lens
2105-L-1250	30D Indirect Ophthalmoscope Lens
2105-L-1234	40D Indirect Ophthalmoscope Lens











Volk Indirect Diagnostic Laser Contact Lenses

High Resolution Wide Field Lens

Extreme wide field examination and PRP treatment lens that has advanced double aspheric design which provides unparalleled field views. It has a superior low dispersion™ glass design that eliminates distortion, ensuring the highest resolution imaging to the extent of the viewing field.

SuperQuad® 160

The ultimate PRP lens! Volk's SuperQuad® 160 offers the widest field of view of any lens ever produced. Its ideal .5x magnification provides simultaneous visualisation of the posterior pole to the peripheral retina, providing a greater margin of safety during pan retinal photocoagulation. The SuperQuad® 160 is the ideal lens for visualisation and treatment of proliferative diabetic retinopathy, ischemic retinal vein occlusion and peripheral retinal holes and tears. Laser beam transmission and fundus image quality are sharp and undistorted to the full extent of the viewing field.

Volk Indirect Diagnostic Laser Contact Lens Specifications					
Lens	Field of View	Image Mag.	Laser Spot Size	Primary Application	
High Resolution Wide Field Lens	160° / 165°	.5x	2.0x	Extreme wide field examination and PRP treatment lens	
SuperQuad® 160 Lens	160° / 165°	.5x	2.0x	Extreme, wide angle pan-retinal photocoagulation	
Equator Plus® Lens	114° / 137°	.44x	2.27x	Small pupil diagnosis and treatment	
Quad Paediatric Lens	100° / 120°	.55x	1.82x	ROP and other paediatric conditions	

2105-L-1891	High Resolution Wide Field Lens
2105-L-1525	Super Quad® 160 Indirect Contact Lens

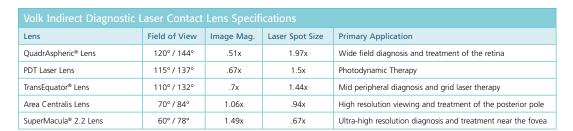
Volk Indirect Diagnostic Laser Contact Lenses

QuadrAspheric®

The original 130° QuadrAspheric® lens is the preferred wide field fundus laser lens. Its sleek 28.6mm diameter housing provides a definite advantage over competitive wide field lenses for peripheral retinal viewing, reflection displacement and ease of use. This lens is excellent for small pupil fundus examination and as a general diagnostic/laser lens delivering a quality combination of wide field viewing, image magnification and manoeuvrability in the orbit.

Area Centralis®

The Volk Area Centralis® lens is excellent for critically evaluating and treating subretinal neovascularization and changes from macular degeneration, retinal vascular occlusions, diabetic macular oedema, proliferative diabetic retinopathy and other retinal conditions. It is ideal for focal laser treatment of these conditions providing excellent magnification combined with a good field of view.



2105-P-1076	QuadrAspheric® Indirect Contact Lens
2105-P-1164	QuadrAspheric® Lens (NF)
2105-P-1113	Area Centralis® Indirect Contact Lens
2105-P-1148	Area Centralis® Lens (NF)











Volk Direct Contact and Laser Treatment Lenses

Centralis Direct®

Volk's Centralis Direct® laser lens provides a direct upright image of the posterior segment of the eye. Utilising a unique solid methyl methacrylate optic with a bonded protective glass LaserWindow® exterior, this special optical design eliminates filament reflection common to other lower profile fundus lenses. The Centralis Direct® lens also features an aspheric corneal contact design for improved fit and manoeuvrability, visible wavelength and laser beam transmission exceeding 99% and the convenience of a knurled grip area extending beyond the orbital margin for easier handling.

Fundus Laser Lens

An advanced Fundus laser lens designed with Volk's patented Double Aspheric optics for superior high magnification viewing and treatment of the optic nerve head and macula.

	Volk Direct Contact and Laser Treatment Lens Specifications					
	Lens	Field of View	Image Mag.	Laser Spot Size		
	Centralis Direct® Lens	22° / 26°	.9x	1.11x		
	Fundus Laser Lens	35° / 40°	1.25x	.8x		
	Iridectomy Lens	N/A	1.7x	.58x		
	Capsulotomy Lens	N/A	1.57x	.63x		

State-of-the-art computer designed aspheric optics provide improved performance over existing fundus lens designs. The Volk Fundus laser lens comes standard with LaserWindow® for optimal laser beam transmission and imaging element protection. This unique feature also creates a "closed" system - protecting the imaging element from dirt, oils and debris - ensuring precise laser placement.

Capsulotomy Lens

Laser capsulotomy procedures are now greatly improved with Volk's patented Double Aspheric Capsulotomy laser lens. This new lens promotes precise and focused laser beam placement at the capsular bag. This new aspheric design comes standard with a LaserWindow® for optimal laser beam transmission.

2105-L-1728	Centralis Direct® Lens
2105-L-1736	Fundus Laser Lens
2105-L-1592	Capsulotomy Lens

Volk Direct Contact and Laser Treatment Lenses

Iridectomy Lens

Volk's patented Double Aspheric Iridectomy lens provides superior treatment capability of all basal and peripheral iridectomy procedures.

This new aspheric design comes standard with LaserWindow® for optimal laser beam transmission and imaging element protection.

Blumenthal Suturelysis Lens

The New Volk Blumenthal Suturelysis lens assists in suture removal after glaucoma surgery enabling you to cut sutures that were inaccessible with prior suturelysis lens designs.

The lens magnifies the suture appearance 2 to 3 times – allowing enhanced visibility for difficult situations as well as smooth suturelysis in routine cases. The pointed tip provides a strong compressive force that adds to the stabilisation of the treated area. This feature provides particular benefit in patients with a thick Tenon's layer of a subconjunctival haemorrhage.





Volk Direct Contact and Laser Treatment Lens Specifications				
Lens	Field of View	Image Mag.	Laser Spot Size	
MagPlus Iridectomy Lens	N/A	1.6x	.63x	
Fundus 20mm Laser Lens	25° / 30°	1.44x	.7x	
Blumenthal Suturelysis Lens	N/A	2x - 3x	.50x33x	

2105-L-1605	Iridectomy Lens
2105-L-1744	Blumenthal Suturelysis Lens





Volk Gonio Lenses

3 Mirror Lens

The 3 Mirror lens incorporates 3 mirrors angled at 60°, 66° and 76°. It is ideal for anterior chamber as well as central and peripheral fundus viewing and treatment. The retinal viewing mirrors are accurately angled and spaced to eliminate "gaps" in the visualised fundus. The central portion of the lens also provides direct observation of the central portion of the posterior pole. Available in Volk's exclusive 18mm ANF (Advanced No Fluid) contact design, or the 15.5mm "No Flange" version for use on infants and patients with narrow palpebral fissures. Please specify coating for Diagnostic/Laser lenses or the uncoated diagnostic version.

Volk Gonio Lens Specifications				
Lens	Field of View	Image Mag.	Laser Spot	Contact Diam.
3 Mirror Lens (no flange)	60° / 66° / 76°	1.06x	.94x	15mm
3 Mirror Lens (ANF+)	60° / 66° / 76°	1.06x	.94x	18mm
G-1 trabeculum Lens	62°	1.5x	.67x	15mm
G-1 trabeculum nf Lens	62°	1.5x	.67x	8.4mm
G-2 trabeculum Lens	60° / 64°	1.5x	.67x	15mm
G-2 trabeculum nf Lens	60° / 64°	1.5x	.67x	8.4mm
G-4 High Mag Lens	4x64°	1.5x	.67x	15mm
G-4 High Mag Lens (no flange)	4x64°	1.5x	.67x	8.4mm

G-4 Glass High Mag Lens

A new lens that gives the crispest, clearest views with high magnification to appreciate details previously unattainable with Gonio lenses. The all glass design provides superior clarity and durability compared to acrylic lenses.

4 precisely angled mirrors provides 360° views of the anterior chamber. This is a no flange design which does not require interface solution allowing guick eye contact.

2105-L-1656	Volk G-3 Gonio Fundus
2105-L-1883	G-4 Glass High Mag Lens

Volk Gonio Lenses

G-4 Goniolaser and G-4 Gonio NF (No Flange)

The G-4 Goniolaser lens features 4 precisely angled 64° mirrors to deliver a complete view of the anterior chamber angle with slight rotation. The standard fluid design (flanged glass contact element) provides a stable platform during laser treatment of the anterior segment.

The NF design features a small 8.4mm radius contact surface that's ideal for both static and dynamic gonioscopy while eliminating the need for viscous interface solutions such as methylcellulose. Four NF models are available, including: small hand held (25.5mm diameter), large hand held (29mm diameter), extended handle (3½" straight handle) or angled handle (3½" 45° angled handle).

Volk Gonio Lens Specifications				
Lens	Field of View	Image Mag.	Laser Spot	Contact Diam.
G-3 Goniofundus Lens	60° / 66° / 76°	1.06x	.94x	15mm
G-3 Goniofundus NF Lens	60° / 66° / 76°	1.03x	.97x	11.4mm
G-3 mini Goniofundus NF Lens	60° / 66° / 76°	1.0x	1.0x	9.6mm
G-4 Goniolaser Lens	4 x 64°	1.0x	.67x	15mm
G-4 Gonio NF Lens	4 x 64°	1.0x	.67x	8.4mm
G-6 Six-Mirror Gonio Lens	6 x 63°	1.0x	1.0x	8.4mm

New 2-in-1 handle

The new 2-in-1 handle can be removed or re-attached to create a straight or angled handle design.

G-6 Six-Mirror Glass Gonio Lens

The six mirror Gonio lens provides the most comprehensive sweeping views of the anterior segment. With no gaps between the mirrors, you can appreciate a true 360° view, reducing examination time by 25% or more.

- Six closely aligned mirrors eliminate gaps providing a true 360° panoramic view
- Simpler to locate position and scan across mirrors
- Reduces need to maneuver slit lamp
- A taller, narrower body easier to hold within the orbit
- No flange/fluid design simplifies the examination

2105-L-1664	G-4 Gonio Fundus Lens
2105-L-1795	G-4 Gonio Fundus 2-in-1 Handle
2105-L-1998	G-6 Six-Mirror Glass Gonio Lens
2105-L-2003	G-6 Six-Mirror Glass Gonio Lens on a handle





All Volk lenses are listed but not shown - for details on other Volk lenses, please contact Keeler on 0800 521251.





Volk Pictor

Volk Pictor is a truly portable digital imaging device that provides a variety of imaging capabilities with interchangeable modules. This versatile hand held device is available with the option of four key imaging modules for examination: ophthalmic - posterior and anterior segment, dermatoscopic and otoscopic.

Improved Patient Care

Digital still and video images created with the Pictor provide accurate first diagnosis and planning for consistent follow up treatment.

Simple Integration

The Pictor is easily adopted into daily examination routines. Connecting to any patient database system providing standard jpeg image files enables fluent image data storage and sharing that may be used for consultation purposes.

Maximum Portability

Lightweight and portable, the Pictor is easily used in field conditions outside the office to examine convalescing patients and for geriatric or pediatric care. It also has an adapter to mount to a slit lamp if needed.







Volk Pictor

Two easily interchangeable modules provide high resolution retinal (non-mydriatic) or external eye imaging. Two further modules for otoscopic and dermatoscopic examination are also available.

Retinal Module

Pictor retinal imaging enables non-mydriatic eye fundus examination with a 45° field of view. With digital still and video images, the appearance of optic disc, macula and retinal vasculature can be screened and documented for ocular lesions and anomalies.



- Reflection free imaging with ten illumination levels
- Image targeting and capture using infrared or white light
- Not necessary to dilate pupils (minimum pupil size 3.5mm)
- Automatic focusing
- Silicone rubber eye cup for support and comfort
- Image resolution 1920 x 1440 pixels
- Diopter compensation -20D to +20D

Anterior Module

Pictor anterior imaging provides high resolution digital image data of the surface of the eye and areas directly surrounding the eye. The cobalt blue LED light allows fluorescent imaging to detect a dry eye or any cuts or rashes on the surface of the eye.



- White and blue LED light for image targeting and capture
- Silicone rubber eye cup for support and comfort
- 6x digital zoom
- Image resolution 2560 x 1920 pixels
- Autofocus and optional manual adjustment



3108-P-1013	Volk Pictor with Posterior Module
3108-P-1014	Volk Pictor with Posterior and Anterior Modules
3108-P-1015	Volk Pictor with Posterior, Anterior and Otoscopic Modules
3108-P-102	Volk Pictor with All Modules

Volk Pictor Technical Specifications

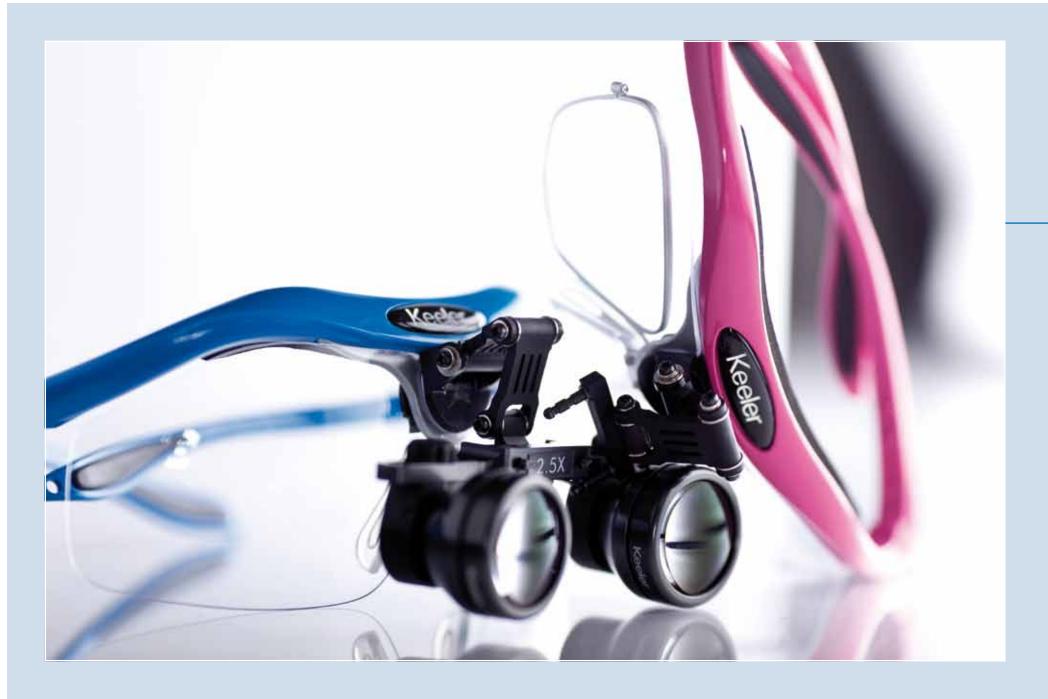
82 x 166 x 66mm (W x H x D)
400 g
Rechargeable Ni-MH battery
For fixed image capture
2.4" TFT-LCD, anti-reflective coating
2 GB SD memory card
For optics modules attachment
For general imaging (without module)
1hr 30 minutes continuous use

User Interface Features Patient folders Image preview

Imaging	
Image Sensor	CMOS 5.0 megapixel
Image format	JPEG
Video format	MPEG-4 and MPEG-1
Resolution	2560 x 1920 pixels in general mode
Focusing	Automatic
Connectivity	
Hardware	Computer with USB port – no driver installation needed
Software	Patient data management software provided with sales package









Surgical Loupes

Magnification allows you to do a better job. If you can't see it, you can't work on it. The benefits of Keeler loupes are immediately clear: improved working posture, reduced eye strain and now, with the new Keeler Loupe Light, your working view is even clearer.

Laser aligned optics for magnification of superb optical quality, a lightweight aluminium assembly and a precise pupil alignment system make Keeler loupes the perfect choice for dental, surgical and veterinary professionals.

Let Keeler loupes take the strain

Keeler loupes are comfortable to wear and work with, helping to reduce eyestrain. By bringing your patients closer, you can improve your posture and avoid stooping.

Recommended working distances

Your Height	Sitting	Standing
< 5' 7" (150cm - 170cm)	34cm	34cm
5′ 7″ - 5′ 10″ (170cm – 178cm)	34cm	42cm
5′ 10″ – 6′ 0″ (178cm - 183cm)	42cm	46cm
> 6' 0" (183cm)	46cm	50cm

Patient comfort

Patients will feel more comfortable and at ease with increased personal space as you will work from a greater distance.

Multiple magnification levels

Keeler loupes offer performance matched to your requirements. Multiple magnification levels enable you to see more, spot problems earlier and offer even higher levels of precision treatment.





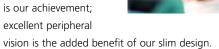
Mini Loupes



New Mini and Standard Loupes

New Mini Loupes Delivering 2.5x magnification.

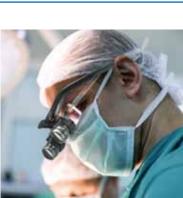
Mini Loupes are designed to be ultra light and comfortable with minimal compromise in field of view. Absolute comfort is our achievement; excellent peripheral



Standard Loupes

Delivering 2.0x, 2.5x and 3.0x magnification.

The true benefit of this system is ease of use. Movement whilst maintaining focal clarity is possible due to superior depth of field. The lightweight aluminium bar with individual pupillary adjustment provides the mounted loupes with stability and optimal focal alignment, eliminating headache and eyestrain.



rait liulibeis	
Mini Loupes	
2.5x Magnific	ation
2112-P-1064	Mini Loupe 2.5x @ 34cm working distance
2112-P-1065	Mini Loupe 2.5x @ 42cm working distance
2112-P-1066	Mini Loupe 2.5x @ 46cm working distance
2112-P-1067	Mini Loupe 2.5x @ 50cm working distance
Standard Lou	pes
2.0x Magnific	ation
2112-P-1002	Standard Loupe 2.0x @ 34cm working distance
2112-P-1003	Standard Loupe 2.0x @ 46cm working distance
2.5x Magnific	ation
2112-P-1010	Standard Loupe 2.5x @ 34cm working distance
2112-P-1011	Standard Loupe 2.5x @ 42cm working distance
2112-P-1012	Standard Loupe 2.5x @ 46cm working distance
2112-P-1013	Standard Loupe 2.5x @ 50cm working distance
3.0x Magnific	ation
2112-P-1022	Standard Loupe 3.0x @ 34cm working distance
2112-P-1023	Standard Loupe 3.0x @ 42cm working distance
2112-P-1024	Standard Loupe 3.0x @ 46cm working distance
2112-P-1025	Standard Loupe 3.0x @ 50cm working distance



Hi-Res Loupes and Keeler Sport Frames

Hi-Res Loupes

Delivering 3.0x magnification.

Keeler have designed a new high resolution loupe which exceeds the standards previously attained. The 5 element loupe gives a true 3x magnification with a 15% increased field of view and a visually flat field from edge to edge.





Protective Caps

Keeler Sport Frames

All Keeler loupes are available on the Keeler Sport Frame. Stylish, comfortable and attractive, the new Keeler frame is available in a choice of bright colours as shown. The frames will fit over many styles of glasses, or with the free insert, can be easily adapted to all prescriptions.

Sport Frames are available in the following finishes





2112-P-8057 +1D Near distance Caps







Sky Blue

Part numbers	
Hi-Res Loupes	;
3.0x Magnific	ation
2112-P-1050	Hi-Res 3.0x @ 34cm working distance
2112-P-1051	Hi-Res 3.0x @ 42cm working distance
2112-P-1052	Hi-Res 3.0x @ 46cm working distance
2112-P-1053	Hi-Res 3.0x @ 50cm working distance
Accessories	
2112-P-8049	Protective Caps



Hi-Res Loupes



Keeler Sport Frames





Prismatic Loupes

Delivering 3.5x, 4.5x and 5.5x magnification.

Higher magnification for advanced surgical procedures. Prismatic quality guarantees a true image. Edge to edge clarity and precise colour rendition are ideal for intricate applications. The Prismatic Loupe's precision lenses are treated with an anti-reflective coating to produce a superior image.



Part numbers	
Prismatic Lou	pes
3.5x Magnific	ation
2113-P-2004	Prismatic Loupe 3.5x @ 34cm working distance
2113-P-2005	Prismatic Loupe 3.5x @ 42cm working distance
2113-P-2006	Prismatic Loupe 3.5x @ 46cm working distance
4.5x Magnific	ation
2113-P-2008	Prismatic Loupe 4.5x @ 34cm working distance
2113-P-2009	Prismatic Loupe 4.5x @ 42cm working distance
2113-P-2010	Prismatic Loupe 4.5x @ 46cm working distance
5.5x Magnific	ation
2113-P-2012	Prismatic Loupe 5.5x @ 34cm working distance
2113-P-2013	Prismatic Loupe 5.5x @ 42cm working distance
2113-P-2014	Prismatic Loupe 5.5x @ 46cm working distance



New Keeler Loupe Light

The New Keeler Loupe Light is one of the smallest and lightest available today. The LED illumination gives 34000 Lux of homogenous white light, ideal for both surgical and dental use, while coaxial illumination ensures shadow free viewing.

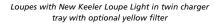
An optional yellow filter avoids the premature hardening of composites whilst power is provided by a Lithium-ion battery which will give up to 4 hours continuous use before a recharge is required.

Designed for comfort

Choose between the Keeler Sport frame or a headband mounted system to mount your loupes. Adaptable to all prescriptions.



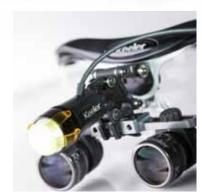


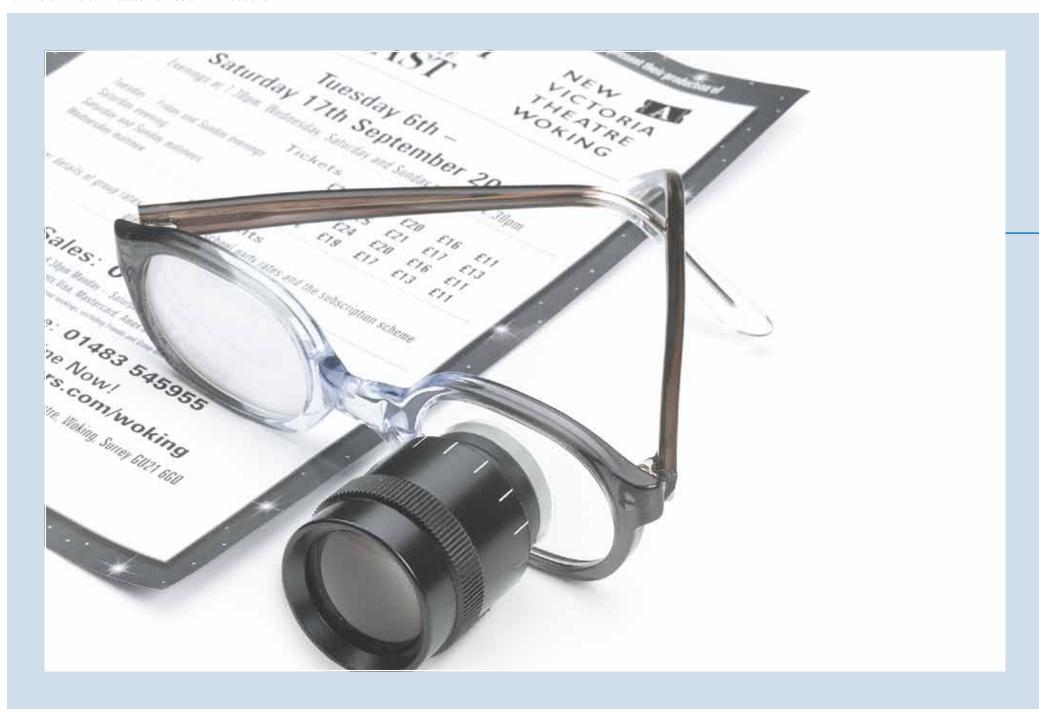


Part numbers Keeler fit

2004-P-1007	Loupe Light Standard, 2 batteries and twin charger tray
2004-P-1008	Loupe Light Standard, 1 battery and twin charger tray
2004-P-1012	Loupe Light Portable, 1 battery and single charger tray



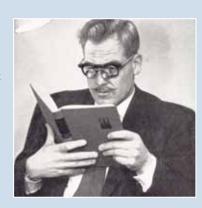




Low Vision Aids and Assessment Sets

As a world leader in optical instruments, Keeler has long believed that it can and should use its renowned optical skills to make a major contribution to the quality of life of low vision patients.

The involvement of Charles H Keeler OBE in this field began when an Ophthalmologist based at Moorfields Eye Hospital asked him to observe the problems of people with low visual acuity in the 1950's.



The original series of magnifying lenses characterised by accurate assessment of required magnification has been developed into the widest, most versatile range available today.

Low Vision Aids

Keeler are now delighted to introduce a new range of Low Vision Aids that are uniquely interchangeable and can be quickly and easily upgraded year after year as your eyes change.

Whether you want a magnifier to help you to read and write, watch television or go to the theatre, Keeler can offer you the full range that you can fit onto your existing frame or on a Keeler frame.

Low Vision Assessment Sets

A new range of Assessments with something to suit every practitioner and every patient. Each set can add a service to your practice, whether prescribing simple Low Vision Aids or offering full Low Vision Assessments.







Read-Write Mag



Near Vision Range of Magnifiers

Read-Write Mag (LVA21)

Magnifications: 2x, 3x, 4x, 5x

- Ideal for reading and writing
- Can be used for either one eye or both eyes
- Longer working distance

New Wide-Vu Mag (LVA22)

Magnifications: 2x, 3x, 4x, 5x, 6x, 8x

- Ideal for reading
- Extra wide field of view which is ideal for checking statements or bills
- The 2x and 3x can be mounted for one eye or both eyes

LVA21 Read-V	Write Mag
2180-P-1105	Bar type 2x Telescope (LVA 21-2x Mag)
2180-P-1113	Bar type 3x Telescope (LVA 21-3x Mag)
2180-P-1121	Bar type 4x Telescope (LVA 21-4x Mag)
2180-P-1148	Bar type 5x Telescope (LVA 21-5x Mag)
LVA22 Wide-\	√u Mag
2180-P-1156	Full Field 2x Mag Telescope (LVA 22-2)
2180-P-1164	Full Field 3x Mag Telescope (LVA 22-3)
2180-P-1172	Full Field 4x Mag Telescope (LVA 22-4)
2180-P-1180	Full Field 5x Mag Telescope (LVA 22-5)
2180-P-1199	Full Field 6x Mag Telescope (LVA 22-6)
2180-P-1201	Full Field 8x Mag Telescope (LVA 22-8)

Near Vision Range of Magnifiers

New Hi-Mag Illuminated and Non Illuminated (LVA9)

Magnifications: 10x, 12x, 15x, 20x

- Perfect for credit cards statements or utility bills
- Non illuminated is available with clear housing to take advantage of natural light
- Illuminated housing is powered by two batteries

New Stedi-Fit Mag (LVA10)

Magnifications: 6x, 8x

- Ideal for patients with tremor or focusing problems
- New lens curvature gives improved clarity and image flatness

Bifocal Mag (LVA12)

Magnifications: 2x, 3x, 4x, 5x, 6x, 7x, 8x, 9x, 10x

• Discreet and lightweight

 Full segment bifocal near vision magnification



LVA9 Hi-Mag	
2180-P-1076	LVA 9-10x Mag
2180-P-1084	LVA 9-12x Mag
2180-P-1092	LVA 9-15x Mag
LVA10 Stedi-F	it Mag
2185-P-1091	LVA10-6x Magnifier + Distance Piece LVA 10-6
2185-P-1104	LVA10-8x Magnifier + Distance Piece, LVA 10-7
LVA12 Bifocal	Mag
2185-P-5308	2x Segment (12-21)
2185-P-5316	3x Segment (12-22)
2185-P-5324	4x Segment (12-23)
2185-P-5332	5x Segment (12-24)
2185-P-5340	6x Segment (12-25)
2185-P-5359	7x Segment (12-26)
2185-P-5367	8x Segment (12-27)
2185-P-5447	10x Segment (12-31)
2185-P-5439	12x Segment (12-32)



Hi-Mag Illuminated and Non Illuminated









Multi-Cap

Sports Mag

Intermediate and Distance Telescopes

New TV Mag (LVA50)

Magnification: 1.9x

- Lightweight and ideal for watching television
- Large 23° field of view at infinity
- Rapid focusing from 42cm to infinity

Sports Mag (LVA40)

Magnification: 2.5x

- Ideal for open areas such as sporting events or theatre
- Galilean optics with working distance of 70cm to infinity
- Choice of one eye or both eyes

Multi-Cap (LVA51)

- Interchangeable caps for near and distance vision
- Near cap: choice of magnifications 2x, 3x or 4x
- Distance telescope: magnification 1.75x
- Extra cap for 0.5m and 1m working distance

2185-P-1112	LVA50 TV Mag
2103-P-7028	LVA40 Sports Mag
2180-P-1228	LVA51 Multi-Cap 1.75x Magnification
2180-P-1236	LVA51 Multi-Cap 2x Magnification
2180-P-1244	LVA51 Multi-Cap 3x Magnification
2180-P-1252	LVA51 Multi-Cap 4x Magnification

Intermediate and Distance Telescopes

Multi-Range Mag (LVA53)

Magnification: 2.8x, 4.2x - Field of Views 12.5°

- Ideal for use while outdoors or shopping
- Available on a frame or finger ring
- Working distance of 20cm to infinity

Hand held Multi-Range Mag (LVA53)

Magnification: 8.25x - Field of View 7°

- Hand held telescope that fits into pockets for travelling and outdoor use
- Working distance of 30 cm to infinity



Multi-Range Mag



Hand held Multi-Range Mag

2181-P-1000	LVA53 Multi-Range Mag 2.8x Magnification
2181-P-1035	LVA53 Multi-Range Mag 4.2x Magnification
2181-P-1051	LVA53 Hand held Multi-Range Mag 8.25x Magnification



Advanced Assessment Set



Basic Assessment Set

Advanced and Basic Assessment Sets

Advanced Assessment Set

This set offers a range of Keeler Magnifiers and Telescopes enabling you to provide your patients with a full Low Vision Service including:-

- 1.9x Distance Magnifiers
- 10 Near Magnifiers from 2x to 12x
- 3 pairs of binocular telescopes 2x, 3x and 4x magnification
- Near and distance testing charts
- Keeler LVA standard frame and PD bars
- Trial Clip and Clip on occluder

Basic Assessment Set

Designed as an introduction to Low Vision and the Keeler Telescope System.

- 1.9x distance magnifier
- 7 near telescopes from 2x to 12x
- Near and distance testing charts
- Small, medium and large Keeler frames
- Trial clip and clip on occluder

2280-P-1153 Basic Assessment Set	2280-P-1161	Advanced Assessment Set
	2280-P-1153	Basic Assessment Set

Redi-fit Assessment Set and Tool Kit

Redi-fit Assessment Set

A simple testing set for prescribing aspheric spectacle magnifiers includes:

- Testing lenses from 2x to 8x magnification
- Lenses that fit left or right eye
- 3 Keeler frames in small, medium and large sizes
- 'A' series reading chart for assessment of magnification requirements

Redi-fit lenses are available for instant dispensing which are cut and edged to fit our standard LVA frame.

Tool Kit

Provides the tools required to mount Keeler telescopes onto spectacle lenses using the advanced method:

- Telescopes can be fitted directly onto plano or prescription lenses (CR39)
- Any suitable frame may be used
- Spectacle mounted aids can be assembled in practice, saving time and money
- Assembly instructions are included for both monocular and binocular mounting



Due to the specialist nature of the Keeler Low Vision range we prefer to sell / dispense via distributors. For details of these distributors please refer to the Low Vision section of our website www.keeler.co.uk

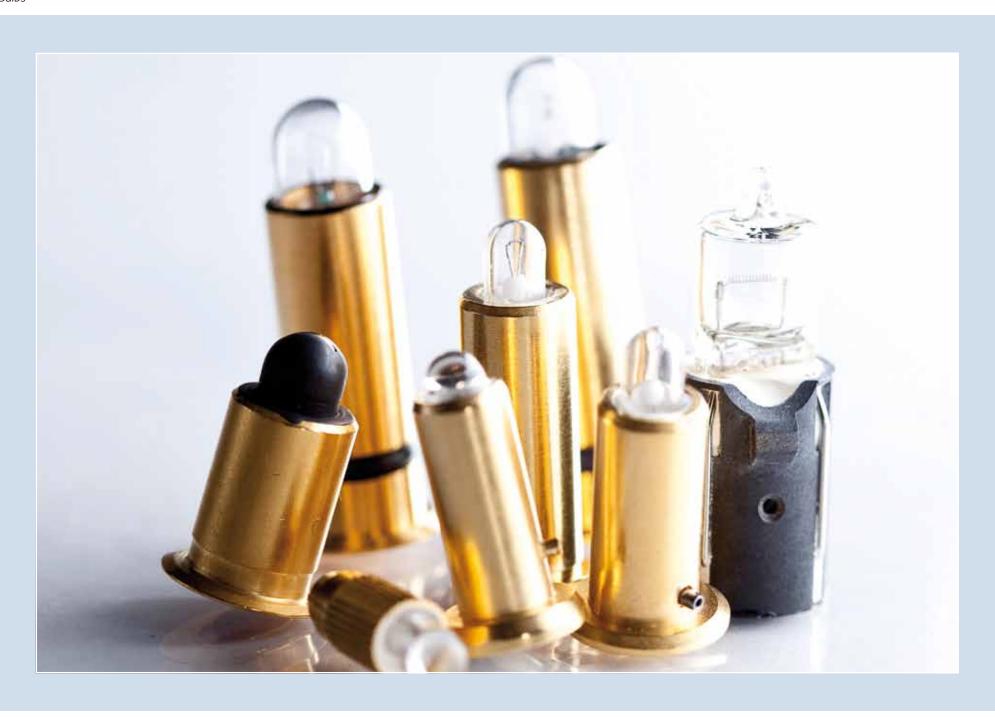
2280-P-1065	Redi-fit Set
2280-P-1102	LVA Tool Kit for assessment sets

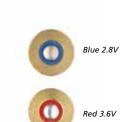


Redi-fit Assessment Set



Tool Kit





Bulbs

All Keeler instruments use genuine Halogen and Xenon technology, yielding a brighter, whiter illumination and a longer life. Look at the bottom of your bulb to identify if your instrument is 2.8V (Dry cell battery) or 3.6V (Rechargeable battery).

Pocket Ophthalmoscope Bulb



Professional/ Vista Streak Retinoscope Bulb, 35mm length



Professional Ophthalmoscope Bulb



Professional/ Vista Spot Retinoscope Bulb, 35mm length



Specialist/Vista Ophthalmoscope Bulb



All Pupil and Vantage Bulb



Part numbers

1011-P-7050	Pocket Ophthalmoscope Bulb
1011-P-7106	Professional Ophthalmoscope Bulb 2.8V
1011-P-7114	Professional Ophthalmoscope Bulb 3.6V
1011-P-7042	Specialist/Vista Ophthalmoscope Bulb 2.8V
1011-P-7034	Specialist/Vista Ophthalmoscope Bulb 3.6V
1013-P-7008	Professional/Vista Streak Retinoscope Bulb, 35mm 2.8V
1013-P-7009	Professional/Vista Streak Retinoscope Bulb, 35mm 3.6V
1013-P-7006	Professional/Vista Spot Retinoscope Bulb, 35mm 2.8V
1013-P-7007	Professional/Vista Spot Retinoscope Bulb, 35mm 3.6V
1012-P-7003	All Pupil and Vantage Bulb
1030-P-7160	Halogen Bulb 6V 20W
1030-P-7152	Halogen Bulb 12V 30W
2402-P-2155	Javal Keratometer Bulb
2402-P-2163	Javal Keratometer Bulb





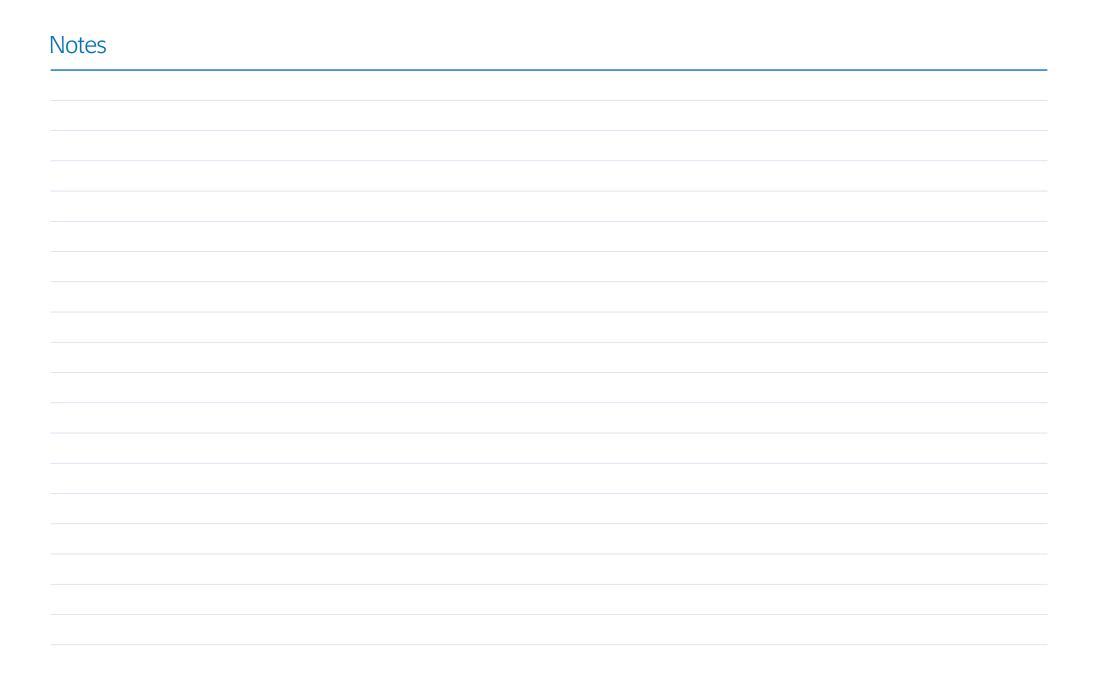
Javal Keratometer Bulbs



2402-P-2155 2402-P-2163

All bulbs are supplied in packs of 2







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