

Haag-Streit

BA 904 Slit Lamp













Instruction Manual



HS CLEMENT CLARKE
OPHTHALMIC

 PLEASE READ INSTRUCTIONS BEFORE USING THE EQUIPMENT

Symbol Explanations

	Consult 'Instructions for Use'
	Caution, consult accompanying Documents
	Battery input charger
	On/Off - Brightness Control
	Type B Equipment
	Class II Equipment
	Year of Manufacture
	This product complies with the essential requirements of the medical devices directive (93/42/EEC).
	Do not dispose of with household refuse
 Storage	Storage
 Transport	Transport
	Continuous use recommendations, 10 minutes running / 20 minutes off.

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1. General Layout - Suitcase

Fig.1.

1. Bio-microscope
2. Slit Lamp Projection Unit
3. Brightness Control
4. Rotating Prism Boxes
5. Interchangeable Eyepieces
6. Lamp Cover
7. Mirror
8. Forehead Rest
9. Filter Control
10. Aperture Control
11. Slit Control
12. Joystick Platform
13. Chin-rest
14. Chin-rest Locking Knob
15. Joystick
16. Rise and Fall Control
17. Slit Lamp Mounting
18. Retaining Bracket
19. Locking Tubes
20. Eye Level Indicator
21. Battery Charger
22. Mains Power Supply
23. Energy Pack
24. Alternative Plugs
25. Spacer
26. Disc Focusing Rod
27. Bulb Extractor
28. Spanner
29. Spare Bulb
30. Spare Energy Pack

General Layout - Suitcase

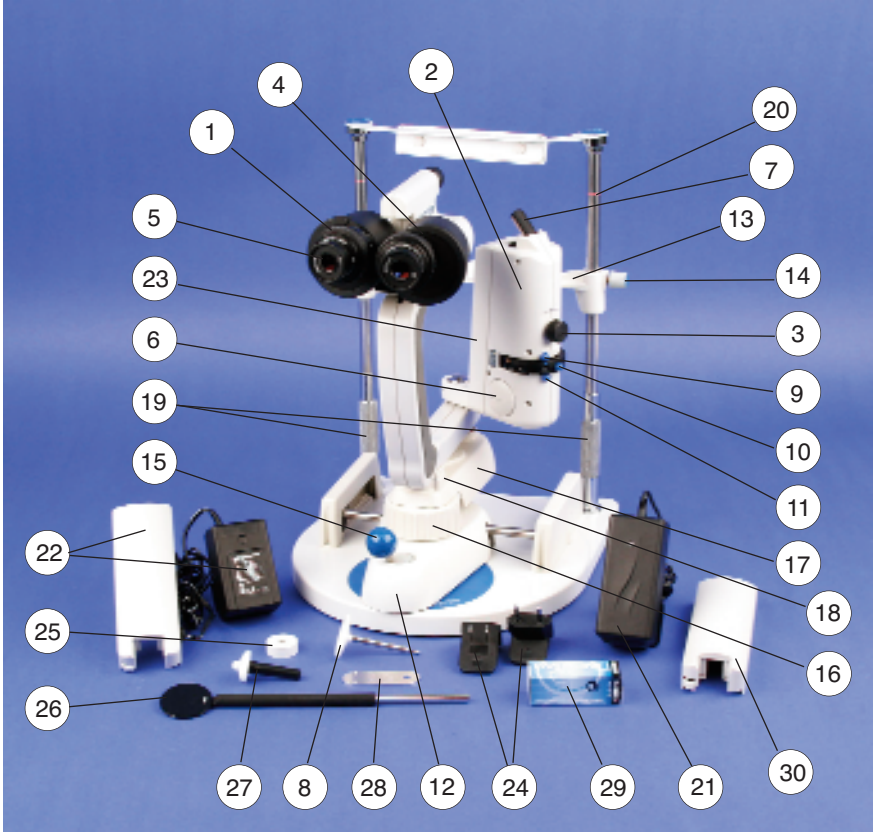


Figure 1

1.1 General Layout - Briefcase

Fig.2.

1. Bio-microscope
2. Slit Lamp Projection Unit
3. Brightness Control
4. Rotating Prism Boxes
5. Interchangeable Eyepieces
6. Lamp Cover
7. Mirror
8. Filter Control
9. Aperture Control
10. Slit Control
11. Forehead Rest
12. Parking Unit
13. Battery Charger
14. Mains Power Supply
15. Energy Pack
16. Alternative Plugs
17. Disc Focusing Rod
18. Bulb Extractor
19. Spanner
20. Spare Bulb
21. Spare Energy Pack

General Layout - Briefcase

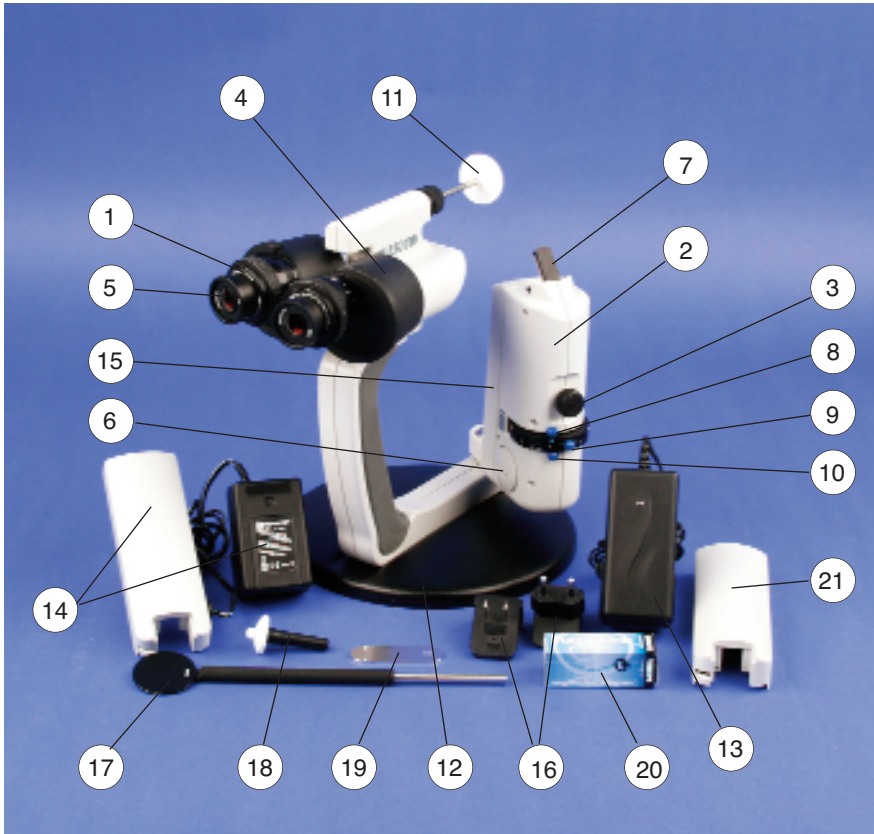


Figure 2

2. General Description

The BA 904 Slit Lamp may be used as a table-mounted joystick controlled model, or in a hand held mode. A general arrangement of the two systems is shown in Figure 1 and 2.

The BA 904 Slit Lamp consists of three basic components:

Suitcase:

- The Slit Lamp Bio-microscope
- The Joystick Platform
- Removable battery and mains power supply

Briefcase:

- The Slit Lamp Bio-microscope
 - Parking Unit
 - Removable battery and mains power supply
-

2.1 The Slit Lamp/Microscope (Refer to Fig 1)

The BA Slit Lamp bio-microscope consists of a conventional compound stereoscopic microscope (1) mounted on a light-alloy frame to which is attached the Slit Lamp Projection Unit (2) so that it rotates around the focal plane of the microscope.

The microscope consists of 1x objectives and 10x Kellner achromatic eyepieces (5). The objective lenses are fixed and the eyepieces are adjustable between at least -8 and +5 dioptres for optical correction of the user. All the microscope lenses are multi-layer anti-reflection coated.

The interpupillary distance is adjustable between at least 54mm and 94mm by rotating the prism boxes (4). The total magnification of the microscope is 10x using the 10x eyepieces, or 16x using the 16x eyepieces (supplied as an optional accessory). The stereoscopic angle of the microscope is 13°.

The Slit Lamp Projection Unit (2) consists of a halogen light source, located behind the lamp cover (6). The unit rotates about a central pivot which coincides with the focal plane of the microscope. This pivot has a central hole which accommodates the focusing rod (see Fig. 3) for checking the optics of the instrument when in the hand held mode.

2.1 The Slit Lamp/Microscope *continued*



Figure 3

The slit image is formed by a precision graticule operated by a slit control (11), which is projected onto the eye via a three-element projection lens and a mirror (7). Colour filters (blue for fluorescein examination, and yellow for elimination of blue light hazard) are built into the unit and are selected using the filter control (9).

The aperture height is controlled by the aperture control (10). The slit image has three widths at the eye: (0.12mm, 0.25mm and 0.5mm), allowing for fine and coarse slit examination. An aperture is also provided in the slit control (11), [setting 0] to allow different sized patches to be projected onto the eye. The slit has four heights available: 3, 5, 8 and 14 mm.

The light source is accessed through the lamp cover, but before removing this cover refer to Section 6 - Routine Care and Maintenance.

The BA Slit Lamp has a spring loaded shaft to which is fixed a forehead rest for stabilisation when used in the hand held mode (see Fig. 3).

2.2 The Joystick Platform

The joystick platform consists of a forehead rest and chin-rest (13), and a slit lamp platform with precise three dimensional positioning mechanism consisting of a joystick (15) and rise and fall control (16).

2.2 The Joystick Platform *continued*

The chin-rest has two positions so that either eye may be positioned centrally over the platform. The chin-rest height is adjustable by releasing and locking the two chin-rest locking knobs (14).

Horizontal movement of the platform (forwards and backwards, and from side to side) is performed conventionally using the joystick (15). Vertical movement of the platform is achieved by rotating the rise and fall control (16).

Before mounting the slit lamp bio-microscope onto the platform ensure that the platform is assembled as in Section 3 - Preparing the BA 904 Slit Lamp for use.

The BA Slit Lamp is assembled onto the platform using the spigot which is inserted into the slit lamp mounting (17). The slit lamp arm may be located in the retaining bracket (18) which will prevent the slit lamp arm from rotating. Or using the spacer, the slit lamp arm may be raised so that the slit lamp body clears the retaining bracket and is allowed to rotate freely (see Fig. 4).



Figure 4

Note 1

Care should be taken when using the spacer as the stability of the BA 904 may be affected when the Slit Lamp is swung over to one side or the other.

2.2 The Joystick Platform *continued*

Note 2

Rated load for the chin rest & components

Rated load is 5.9kg with a Tensile strength safety factor of 4

Head rest general assembly drawing 5606393

Part Nos Aluminium base - Aluminium Alloy 6082
Tensile strength 260 MPa

Upright assembly Stainless Steel AISI 302 - Tensile strength 860 MPa

Chinrest Assembly - Aluminium Alloy 2014-T6
Tensile strength 483 MPa


Headrest Support Assembly - Mild Steel 1090 16 SWG
Tensile strength 841 MPa

Tensile strengths greater than 23.6kg (4x5.9kg)

 The Joystick is of robust construction. The user should always mount the platform on a suitable and stable surface before operation.

2.3 The Complete Power Supply

The Mains Power Supply (Fig 5) is used to power the BA Slit Lamp from the mains.

 The BA Slit Lamp can be operated using the Energy Pack (Fig 6), once fully charged (see page 13), for portable use. When fully charged the battery will last for 45 minutes with continuous use, however it is not recommended to keep the Slit Lamp on for longer than 10 minutes, allowing 20mins before switching on again.

The Battery Charger (Fig 6), supplied with alternative plugs, is used to charge the Energy Pack.



Fig 5 - Mains Power Supply



Fig 6 - Energy Pack and
Battery Charger

Note

The power supply has a 2 year warranty, the green LED illuminated when the power supply is plugged into the mains, indicating operation functions normally.

The mains power supply should be unplugged from the power socket when not in use.

The power supply is part of the ME system.

3. Preparing the BA 904 Slit Lamp for Use

The BA 904 Slit Lamp may be supplied with or without the joystick platform. The Suitcase includes the Joystick Platform. The Briefcase includes the Parking Unit.(The parking unit is used for supporting the Slit Lamp when not in use.)

Operation of the Slit Lamp bio-microscope without the platform (i.e., in the hand held mode) is identical to its operation on the joystick platform with the inclusion of the forehead rest shaft (see Fig. 8).

3.1 For Normal Use

For operation with the joystick platform, remove the BA Slit Lamp and the joystick platform from the carrying case. Assemble the joystick platform by pivoting up the head and chin-rest (see fig.7). Lock the uprights in position by screwing down the locking tubes. Take the spigot and insert it into the slit lamp mounting hole. Now take the BA Slit Lamp microscope and mount it over the mounting spigot and locate the body of the BA Slit Lamp into the retaining bracket.



Figure 7

The microscope has conventional focusing eyepieces and rotating prism boxes to suit variations in the users' IPD and refractive correction. It is important that the microscope focus coincides with the slit image focus.

3.1 For Normal Use *continued*

Best optical performance will be achieved if the eyes are relaxed (i.e., accommodated at infinity), but providing any accommodation is constant, this is not important.

It is convenient to remember your own personal eyepiece settings in order to avoid having to set them up each time. Once the individual eyepieces are set, the interpupillary distance is adjusted (if not already done) to achieve a crisp stereoscopic binocular view. The BA 904 is ready for use.

Note

The microscope is factory set to allow a small amount of convergence through the microscope in order to achieve optimum stereopsis, in some users this convergence can induce a small amount of accommodation.

Important:

Switch off between uses.

Do not use the Slit Lamp continuously for longer than 10 minutes.

3.2 For Hand Held Use

Set up the microscope eyepieces and IPD as previously described. Screw the forehead rest into the forehead rest shaft, (see Fig.8). This shaft is spring loaded and helps reduce shake and wander while the BA Slit Lamp is in use.

When using the BA 904 Slit Lamp in the hand held mode, the forehead rest is placed on the patient's forehead and the lock released by turning the lock anti-clockwise. This will steady the instrument when it is moved towards or away from the eye for focusing. The forehead rest may be locked at any time, by turning the forehead rest lock clockwise.

3.2 For Hand Held Use *continued*

Connect the Energy Pack to the BA Slit Lamp as shown in fig 9. (when fitting for the first time you may need to push it down with some force to align the connectors). Switch on the power using the brightness control knob and the BA 904 is ready for use.

When detaching the Energy Pack, press the small knob, at the base, back and up to release Pack from unit, (see fig 10).



Figure 8



Figure 9

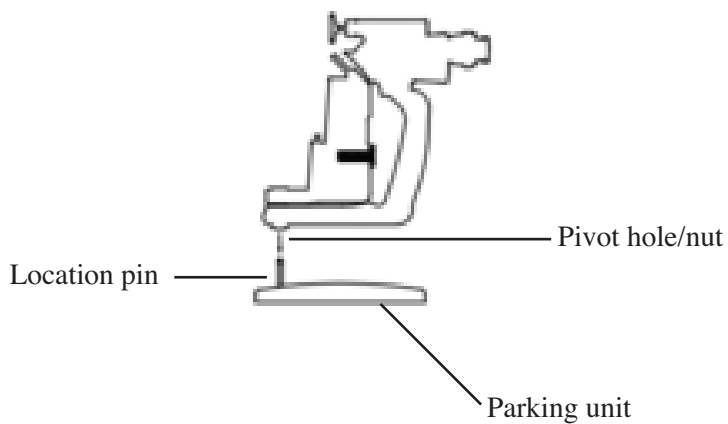


Figure 10



Figure 11

3.3 Mounting on to Parking Unit



Mounting the Slit Lamp to Parking unit :-

Locate the pivot hole/nut over the location pin on the parking unit

3.4 Transport/Packing for the Parking unit

1. Lift the Slit Lamp slightly to disconnect it from the parking unit
2. Place the Parking unit inside the brief case (above the 3 battery packs) with the location pin inserted into the cut out slot

4. Mains and Battery Operations

Mains Operation

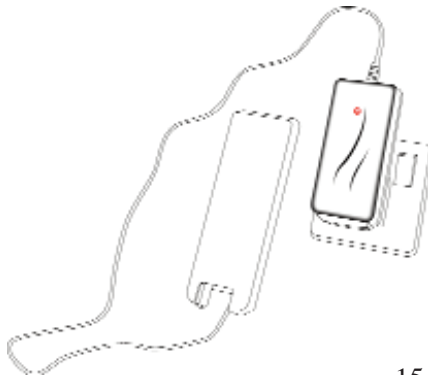
1. Attach Mains Adaptor to the BA Slit Lamp.
2. Plug the Mains Power Supply into the mains socket.
3. Switch on and use as normal.

Energy Pack Operation

For the first time, the Energy Pack will need to be fully charged
- charge for 5 hours:-

1. Plug the Battery Charger into the mains wall supply.
2. Plug the Battery Charger (jack plug) into the Energy Pack.
3. Switch on at the mains. The LED will be green before the fast charge starts, it then changes to orange.
The Energy Pack is fully charged when the LED turns green, with a short intermittent yellow flash.
(please refer to the charger on IFU for more information)
4. Subsequent charging will take approximately 4 to 5 hours.
5. Disconnect the Energy Pack from the Battery Charger.
6. Plug the Energy Pack onto the BA Slit Lamp.
7. The Energy Pack can be recharged at any time before the batteries are exhausted.

Figure 12



5. Using the BA 904 Slit Lamp

The BA 904 uses optics of the highest quality found only in the world's leading Slit Lamp. No compromise is made to image quality either through the microscope or slit projection system, thus the compact design delivers performance unsurpassed in any major Slit Lamp.

With the BA 904 Slit Lamp set up as previously described (Section 3 - Preparing the BA 904 Slit Lamp for use), position the patient's head on the chin-rest so that the eye to be examined is located centrally. Use the chin-rest locking knobs on the side of the chin-rest to raise or lower the patient's head so that the eyes are level with the eye level indicators on the uprights.

Switch on the illumination and with a slit image in position, focus this image sharply onto the sclera of the eye. (This is easiest done by not using the microscope at this stage, but by manipulating the joystick platform and using the naked eye.) Once a sharp image is formed on the sclera, use the microscope and joystick to obtain fine focus. Once this is achieved it is simple to transport the slit image across onto the cornea and into the optical media of the eye.

Note

It is assumed that the operator is generally familiar with Slit Lamp microscopy

The angle between the Slit Lamp and bio-microscope axis may be varied to achieve various perspective sections of the anterior chamber (or any other medium being viewed) by manually adjusting the angle, i.e., rotating the slit lamp arm manually.

The tension between the slit lamp arm and microscope arm is factory set at an optimum value to prevent the slit lamp arm rotating under its own weight (when used in the hand held

5. Using the BA 904 Slit Lamp *continued*

Once a satisfactory slit view is obtained, it may be desirable to decrease the slit width for finer sections. The BA 904 Slit Lamp has three slit widths operated by the knob on the lowest of three discs. The slit widths are 0.12, 0.25, and 0.5 mm. The selection position for each control is in the centre line of the Slit Lamp.

The quality of the BA 904's optics allow viewing fine detail, using the narrowest slit under normal lighting conditions. As for all Slit Lamps, however, the best results are obtained in darkened surroundings, but complete darkness is not necessary, and may have the disadvantage of making the patient uneasy.

The slit control also has a clear aperture for general field illumination. This clear aperture will illuminate a circle of approximately 14 mm diameter at the eye when used with the slit height setting of 14 mm in the aperture control immediately above the slit control.

The slit may be varied in height using the aperture control (see Fig. 1) immediately above the slit control. The available slit heights are 3, 5, 8 and 14 mm. When used with the clear aperture in the slit control, patches of these diameters are illuminated at the eye.

The filter control (above the aperture control) carries two filters - a blue light hazard filter, and a deep blue filter for use with fluorescein. There is also a clear aperture which allows the full white radiation to be transmitted.

Note

There is some concern over the possible damage caused by exposure of the eye, particularly the retina, to short wave-length (violet and blue) light and ultra-violet. For this reason it is safer to have the blue light hazard filter in place when examining the eye.

Note continued

This produces a yellow light which may not be satisfactory for some examinations, where a white light is preferred. However, it is strongly recommended that when possible the blue light hazard safety filter is used, particularly when this light may impinge on the retina. At all times the intensity of the light should be at the lowest level possible for satisfactory examination results.

If an oblique view is required from the microscope, the BA Slit Lamp must be raised (use the spacer, as described on page 8) so that the microscope arm may be rotated. Complete rotation of the microscope arm should be avoided to eliminate the possibility of instability.

Greater magnification from the microscope can be achieved using the 16x eyepieces (available as an optional accessory). The microscope needs no re-adjustment on changing eyepieces.

Important

The Slit Lamp illumination should be switched off when the BA 904 Slit Lamp is not in use.

6. Routine Care and Maintenance

6.1 Optics

The performance of all optical systems is dependent on the cleanliness of the optical components.

The BA 904 is assembled in a clinically clean area. However, inevitably during use the external optical surfaces may become soiled, particularly the outside surface of the eyepiece lens. Normally this is the only surface which will require regular cleaning. Treatment with a soft clean tissue (e.g., Kleenex) is sufficient to restore optical quality. However, if the microscope is used by more than one user, and cross infection is a concern, this surface may be cleaned using an alcohol wipe or a lint-free cloth dampened in a mild disinfectant (e.g., 10% Savlon or Dettol). Be sure not to wet the surface excessively, and always wipe afterwards with a dry, clean, soft tissue.

The projection lens of the BA Slit Lamp may collect some dust on its uppermost surface, as may the slit lamp mirror. If this is the case, use a lens cleaning airbrush or clean air aerosol jet to remove the dust. The mirror reflecting surface is exposed and could, in normal use, accidentally be handled, resulting in a finger print. In this case, clean the mirror with a soft tissue, taking care not to scratch the reflecting surface.

The microscope objectives, although exposed, are protected by the plastic microscope body. In normal use they should remain untouched, but if excessive dust accumulates this can be removed, using an air-brush or air aerosol.

6.2 Service and Maintenance

Service and maintenance should only be carried out by one of the following:

- The manufacturers service personnel, recommended agents or
 - Qualified persons authorised by, Clement Clarke Ophthalmic
-

6.3 Inspection

Before use check energy pack, main unit, stand and mains adaptor for any damage to cables, switches etc. This equipment should not be used until repaired by authorised method.

6.4 Calibration

This equipment does not require field calibration.

6.5 Technical Manual

Technical manual containing maintenance information and wiring diagrams etc is available from Haag-Streit UK.

6.6 Electrics

The electric circuitry has been designed using the latest technology to be reliable and durable. The Energy Pack has a finite life, but if it fails to hold a charge this could reflect a fault in one of the cells and the pack should be replaced.

Always switch off the Mains Power Supply and Battery Charger when the BA 904 is not in use or when it is not recharging.

When disconnecting the cables, always grasp the plug body and not the cable itself.

6.7 Replacement of the Lamp

The light source is a single quartz halogen filament lamp located in the lamp housing. Before attempting to access the lamp ensure that the Slit Lamp is disconnected from the mains power supply and the Energy Pack.

Important

Allow the lamp and its housing to cool down for at least 5 minutes after the lamp has been in use before attempting to remove the lamp.

Remove the lamp cover using a coin or the tool supplied, as shown in Fig.13. Insert the coin into the slot, or the tool into the holes, and rotate the cover one quarter turn counter-clockwise. Remove the cover and using the tool (see Fig.14), engage the lamp and pull it outward. Do not twist the lamp, but a gentle rocking motion may facilitate removal.

6.7 Replacement of the Lamp *continued*



Figure 13

Remove the replacement lamp from its box, taking care not to handle the quartz bulb. Remove any packaging and insert the lamp into the tool, (see fig 14), ensuring that the pins are horizontally orientated. Insert the lamp into its twin-pin socket in the lamp housing and push home. Release the tool from the lamp by pressing the plunger.

Look into the lamp housing and check that the lamp is visually central, if it is not, use the tool to position it centrally. Precise location of the lamp is not absolutely essential as the design of the condensing system compensates for slight eccentricity, but the lamp must be pushed fully home in its socket. Replace the lamp cover, re-connect the Slit Lamp to the power supply, and test the lamp.

6.7 Replacement of the Lamp *continued*



Figure 14

Important

When inserting the lamp, for the pins to locate in their socket they must be aligned horizontally.

6.8 Joystick Platform

No maintenance is required to the joystick platform. All bearings are precision sealed ball units requiring no lubrication.

The patient's forehead rest and chin-rest should be regularly cleaned. These mouldings are made from high density polythene or polypropylene. Cleaning should be with a mild disinfectant solution such as Savlon 10% or Dettol 10%. Always wipe dry after cleaning.

When storing away the joystick platform in its carrying case always release the chin-rest locking knobs before folding down the head and chin-rest. Once the joystick platform is folded up, the chin-rest knobs may be tightened for transportation. Cases for transportation of the BA Slit Lamp and joystick platform are available (see Fig. 15 and 16)

6.8 Joystick Platform [continued](#)



Figure 15
Briefcase



Figure 16
Suitcase

6.9 EMC (Electro Magnetic Compatibility) Declaration

With many electronic devices such as PC's and mobiles, medical devices in use may be susceptible to electromagnetic interference from these devices. Which may result in incorrect operation of the medical device and create a potentially unsafe situation. Medical devices should also not interfere with other devices.

In order to regulate the requirements for EMC with the aim to prevent unsafe product situations, the EN60601-1-2 standard has been implemented. This standard defines the levels of immunity to electromagnetic interferences as well as maximum levels of electromagnetic emissions for medical devices.

Medical devices manufactured by Clement Clarke International Ltd conform to this EN60601-1-2 standard for both immunity and emissions.

The medical devices should not be used adjacent to or stacked with other equipment. If adjacent or stacked use is unavoidable, the medical device should be seen to operate normally as it should in this situation.

Further guidance regarding the EMC environment (in accordance with EN60601-1-2) in which the device should be used is available at www.clement-clarke.com.

6.10 Transportation and Storage

The Slit Lamp should always be stored in its carry case when not in use.

Transport conditions:

Temperature	-10°C to 55°C
Relative humidity	10% to 95%
Atmosphere pressure	500hpa to 1060hpa

Storage conditions:

Temperature	5°C to 45°C
Relative humidity	10% to 95%
Atmosphere pressure	500hpa to 1060hpa

Operating temperature:

The maximum rated operating ambient temperature for the system is +40°C.

6.11 End of Life and Disposal

If Chin and head rest papers are used they should be disposed of as clinical waste; The battery may contain toxic or hazardous material and must be disposed of as Waste Electrical Electronic Equipment (WEEE).

For all applicable devices under the WEEE directive, which have reached their end of life, please contact Haag-Streit customer services on 01279 414969, who will instruct you how to return your device for disposal.

6.12 Notes on Usage

- Only qualified and trained personnel may operate the equipment
- The training of the operating personnel is the responsibility of the equipment user

 **NO MODIFICATIONS OF THIS MEDICAL EQUIPMENT IS ALLOWED**

7. Technical Data

7.1 Optics

The optical layout of the BA 904 is shown in Fig.16. All lenses, prisms and mirrors are made from the highest quality scientific glasses. There are no plastic optical components. All image forming elements are multi-layer anti-reflection coated.

The microscope consists of a stereoscopic ocular system of stereoscopic angle 13° . Each ocular contains an achromatic objective at approximately $f/4$, triple Porro-type erecting prism system, and a removable achromatised Kellner-type eyepiece assembly. Optional high power (16x) eyepieces are also available which are co-focal with the standard 10x eyepieces supplied.

The BA Slit Lamp contains a 6v 10W halogen light source with spherical retro-reflector and compensated double-element condensing system incorporating a heat filter. The slit image is provided from a chromium deposited precision graticule generating three optical slit widths and a clear aperture.

The slit height is controlled by a chemically etched mask with minimal clearance from the slit object plane. Filters are interposed (blue and blue hazard) at sufficient distance from the object plane not to affect image quality.

Spectral transmission characteristics of the filters are shown in Fig.17 (supplied in accordance with International and European Standards requirements). Projection of the slit image is through a triple element projection lens, which has been precision set for optimum focus. Reflection of the slit image onto the eye is via a plane front-coated mirror, optically flat. When the colour filters are not in use, projection is through an optical flat which ensures co-focality of the slit image at all times.

7.2 Mechanical

All structural members of the slit lamp microscope are CNC machined or precision investment cast from highest quality light alloy. The microscope body and ocular tubes are also metal as are all optical mounts. The prism box covers are precision moulded from glass reinforced high grade polymer. All bearings are brass or stainless steel.

The covers of the BA Slit Lamp are injection moulded in ABS and have a moulded rubber grip. The head and chin-rest uprights are stainless steel. The cross-slide runs on two precision ball bushings on hardened ground steel shaft.

The light alloy wheels run on moulded tracks. The joystick control itself uses a hard nylon ball running over a laminated pad. The rise and fall mechanism is a single helix-cut shaft (6mm pitch) running in a moulded guide. Thrust needle washers ensure minimal play in the mechanism.

7.3 Electrical

The electrical system is designed to conform to EN 60601-1.

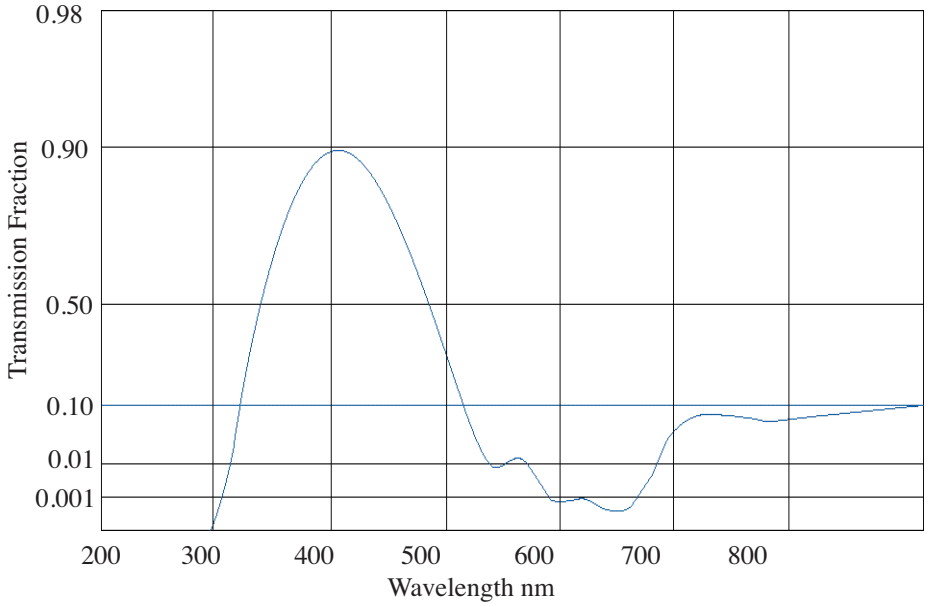
The power kit consists of:-

- A Mains Power Supply to be plugged into the mains.
- An Energy Pack with Battery Charger for portable use.

7.4 Spare and Replaceable Parts

- 6000310 - Lamp Philips 7387 low
- 5606474 - Energy Pack Assembly

Spectral transmission of blue filter



Spectral transmission of blue light hazard (Yellow) filter

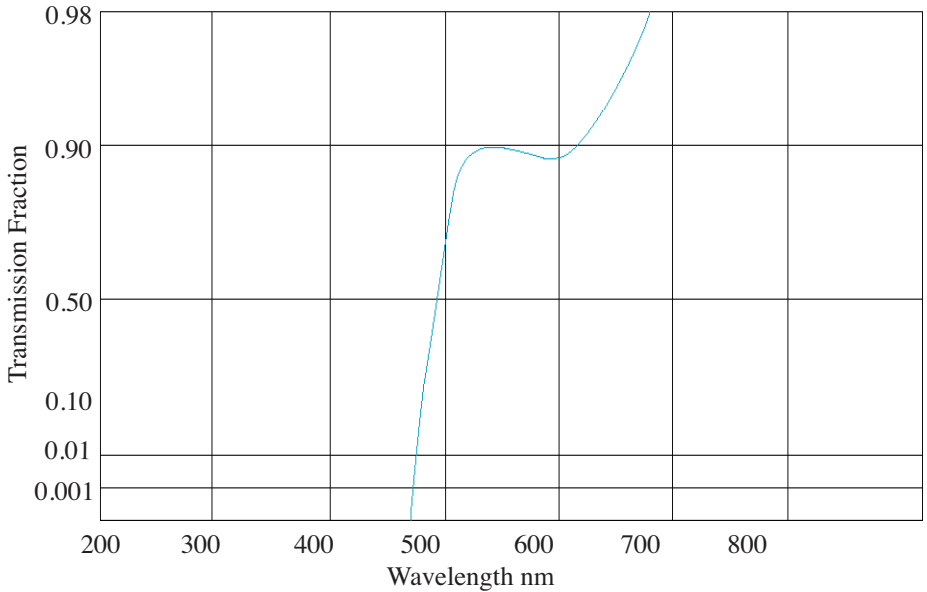


Figure 17

7.5 Technical Specifications Summary

Microscope Optics: Objectives: F/4 approx. Multi-coat achromats
Eyepieces: Kellner-type achromatised multi-coat (10x and 16x co-focal)
Prisms: Triple Porro system, single coat.
IPD: 54mm - 94mm
Field of View: 18mm (10x), 11mm (16x)

Slit Lamp Optics: Condenser: Refractor-reflector system
Double lens refractor multi-coat
Integral heat filter
Projector lens: Triple-element multi-coat

Filters: Flat corrector Spec. Bk7 Schott
Blue Hazard (yellow): Spec. GG495 Schott
Blue (cobalt equivalent): Spec. OB12 Schott

		Power Supply		Adaptor	
Mains Power Supply:	UK	use	5606170	+	5606171
Part No: 5606170	EU	use	5606170	+	5606175
(FRM015-S07-1)	USA	use	5606170	+	5606174

Medically approved s/mode power supply
Output Voltage Rating - 6Vdc
Output Current Rating: 2A
Mains input voltage: 100 - 240Vac 50/60HZ

Energy Pack: Cells: 5 x 'AA' Rechargeable nickel metal hydride
Recharging time: 4 - 5 hours. (with protecting circuit)
Use at max setting: 45 minutes approx.
Battery Charger: Use Haag-Streit Charger 2116
Output Power Rating: 6V 1Ah

Standards compliance:

- EN60601-1
- EN60601-2 (EMC)
93/42/EEC (Medical Devices)
- ISO: DIS 10939: Slit Lamps
- ISO: DIS 15004: Fundamental requirements for ophthalmic instruments

Battery (Energy Pack) Charger: Input voltage - 100- 240Vac
Part No: 5606480 Input current - 0.35A
(Haag-Streit 2116) Max Output Power 16W
Manufacture - Mascot 4-8 Cells 1A

For the full IFU (Instructions for use) see Haag-Streit UK website
www.haagstreituk.com/ifu

 Haag-Streit UK Ltd.,

Edinburgh Way,

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Catalogue number: 1902546

Issue: 7 03/15



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