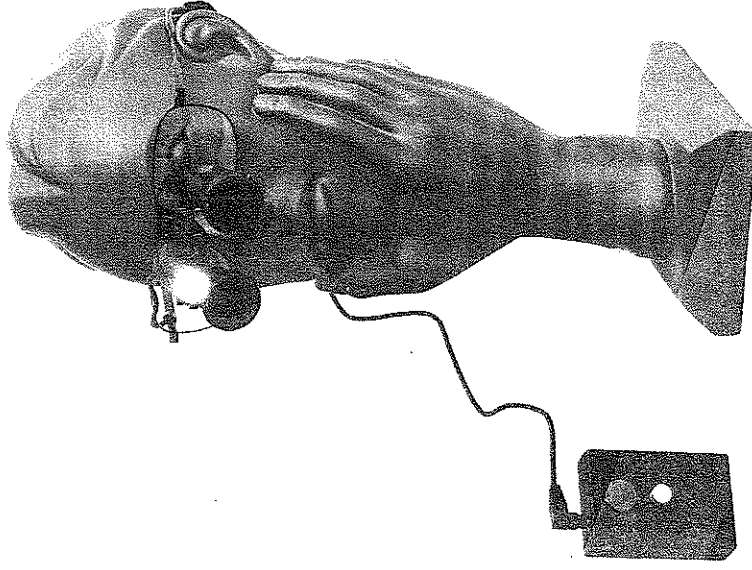


H60 LED Headlight Systems

Instructional Manual

NEW!



“Illuminate & Small!” —H60

- Advanced LED Technology, 50,000lux of bright, no replacement of the lamp!
- Unobstructed Co-axial Illumination!
- Flexibility, brightness control (0-100%)!
- Compact, Portable, lightweight (11g): Ensures perfect comfort!
- Headlamp Housing: Special thermal management system!
- The direction and angle of the illumination can almost be adjusted any way!
- Registered Design!

⚠ Before using the H60 LED Headlight, carefully read through these Instructions for use and keep them for later reference.

Features & Technical Specification

Headlamp Specification (Model: H60-HL1)		Battery Pack & Battery Specification (Model: H60-BP2)	
Size:	Diameter: 19mm, Length: 21mm	Input:	12VDC > 1.0A
Weight:	approx. 1.1g (including mount)	Output:	Variable, 0-4VDC/0-0.6A
Length of the cable:	1.5m	Weight:	approx. 110g (including battery)
Diameter of the light spot at a distance of 420mm:	approx. 80 mm	Dimensions(mm):	L*W*H: 75*52*21
Illumination(lux):	approx. 50,000Lux@250mm	Duration of use	approx. 4-5 hours at full load
Direction of illumination:	almost any adjustable direction	Charging Time:	approx. 4 hours
Operating time:	approx. 4-5h with H60-BP2	Battery efficiency:	>90%, ASIC
Light Source:	1W, Powerful white LEDs	Battery Type:	Rechargeable Polymer Li-Ion cells
Light Source Life:	30,000 hours (usage dependent)	Battery Capacity:	7.4V 1400mAh(approx.)
Color Temperature:	6,000K(CRT), purely white light	Battery Life:	approx. 500 charge/discharge cycles
Surface Temperature in use:	approx. 60°C (ambient temperature: 25°C)	Battery Protection:	Against over-charge and over-discharge

Battery Adapter Specification (Name: H60-BA2)		Environmental conditions:	
Input:	100-240VAC/50-60Hz, 0.3A	Operation:	From +10°C to +40°C
Input AC Plug:	Wall Plug (USA/Japan; EU)	Storage:	From -5°C to +45°C
Output:	12VDC > 1.0A	Transport:	From -20°C to +45°C
Output DC plug:	Mini USB 3PIN	Rel. Humidity:	10% to 75%
Length of the cable:	1.8m	Atmospheric pressure:	700hPa to 1060hPa
Applicable Standards:	UL/CUL/FCC/PSE/CE		

Warranty

Warranty Instead of the usual 12 months guarantee, including battery. We guarantee the proper function of the unit provided it is used as intended by the manufacturer and according to the instructions for use.

Any faults or defects which occur during the guarantee period will be repaired free of charge provided they are caused by faults in material, design or workmanship.

In the case of a complaint of a defect in the product during the guarantee period, the buyer must prove that any such defect was present at the time the product was delivered.

The usual legal guarantee and warranty do not apply to incorrect use, the use of non-original parts or accessories. (Especially bulbs, as these are designed with emphasis on the following criteria: Color temperature, life expectancy, safety, optical quality and performance.)

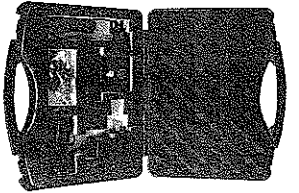
Also excluded are repairs or modifications made by persons not authorized by us or cases where the customer does not follow the instructions supplied with the product.

Further claims, in particular claims for damage not directly related to the product, are excluded.

For repairs, please contact your supplier, who will return the goods to us or our authorized agent.

Standard Package Contents

- 1 H60 LED Headlamp (Model: H60-HL1) with mounting clip, attached cables and so on
- 1 Battery Pack (Model: H60-BP2) (Polymer Li-Ion battery inside)
- 1 Battery Adapter (Name: H60-BA2) with wall plug
- 1 Accessory Kit (incl. fixing clip, spiral clip, garment clip, instructional manual and so on)



Carrying case (included)

Warning

General Warning: For applications of the Headlight in dental medicine: A yellow filter can be used to avoid premature hardening of composite material.

Do not shine light directly into the eyes to avoid dazzle; safety glasses is recommended.
Warning in use: Completely charged/discharge battery for first 3 cycles! Please charge the battery pack more than one time every month! This will optimize overall battery performance.

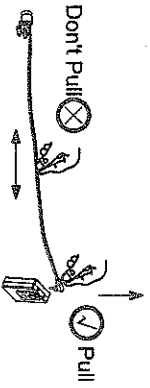
The battery pack must be charged by a special phase matching charger.

Never use, charge, or store battery pack in areas exposed to high temperature and high humidity, must be used indoors.

The Headlight System is not waterproof! Ensure it is completely dry and cool prior to use!

Avoid contact with metal housing while in use, headlamp housing heats up during operation.

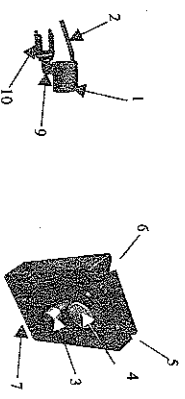
Avoid any strong mechanical loading or kinking of electric cables. For example:



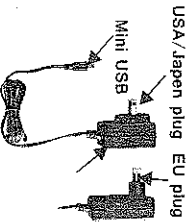
Range of applications

H60 Headlight is used for surgical, examination and during treatment, especially ideal for dental and ENT applications, intended for illuminating the field of view when used with the Loupes.

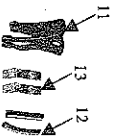
Installation and Operation



(Headlamp with mounting clip) (Battery Pack)



(Battery Adapter)

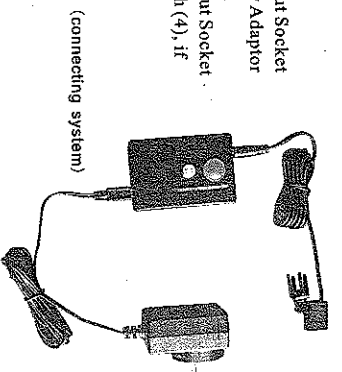


(Accessory)

1. Headlamp
2. Headlamp Cable
3. Brightness Control Knob
4. Operation Switch
5. Charge/Discharge Status Indicator (Red & Green)
6. Output Socket (connecting headlamp)
7. Input Socket (for charging)

8. Battery Adaptor
9. Articulating Arm
10. Mounting Clip
11. Fixing Clamp
12. Spiral Clip
13. Garment Clip

1. **Charging Batteries:** Plug the connector of adaptor into the Input Socket (7) on the bottom of the Battery Pack, and then connect the Battery Adaptor to wall socket for charging.
2. **Discharging:** Plug the connector of the Headlamp (1) into Output Socket (6) on the top of the Battery Pack, and turn on the Operation Switch (4), if the headlight does not light, adjust Brightness Control Knob (3).

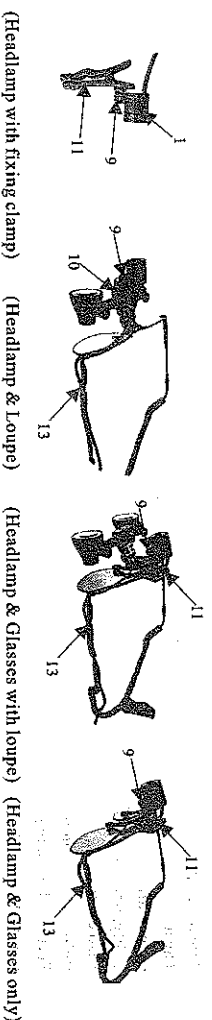


(connecting system)

The following light on the H60 Battery Pack indicate the battery charge & discharge status:

Charge indicators	Charge status
One red light.	The battery is being charged.
No light	The battery is fully charged. Remove from adaptor.
Discharge indicators	Discharge status
One green light.	The battery is power
No light	The battery is no power, need to be charged.
Charging and Discharging indicators	Charging and Discharging status
One red light, one green light. (Like orange)	The battery is being charged and discharging.

3. You can continuously control the brightness by adjusting Brightness Control Knob (3).
4. Adjust the direction of illumination: Adjust the light housing so that the illumination is centered on the area to be examined by the headlight' Articulating Arm (9), loosen or tighten the screws as needed.
5. Attach and adjust the Headlamp (1): Fit the Headlamp (1) to the loupes or glasses, by using the supplied Mounting Clip (10) or Fixing Clamp (11) at the base of the headlight' Articulating Arm (9). The Headlamp (1) has to fit between the eyes. (Fig.)



6. Route the cable appropriately: Attach the Headlamp Cable (2) to the loupes frames with the Spiral Clip (12); Use the Garment Clip (13) on the Headlamp Cable (2) to position the cord on your clothes as desired.
7. Clip the Battery Pack to your waist band or pocket.

Servicing and Cleaning

The headlight systems are not water- and dust-resistant.

Use a micro-fiber cloth to clean the lens, the instrument housing can be cleaned with a soft cloth moistened with alcohol or a non-aggressive disinfectant solution.

Do not soak or spray with disinfectant and water.
 The system cannot be autoclaved!