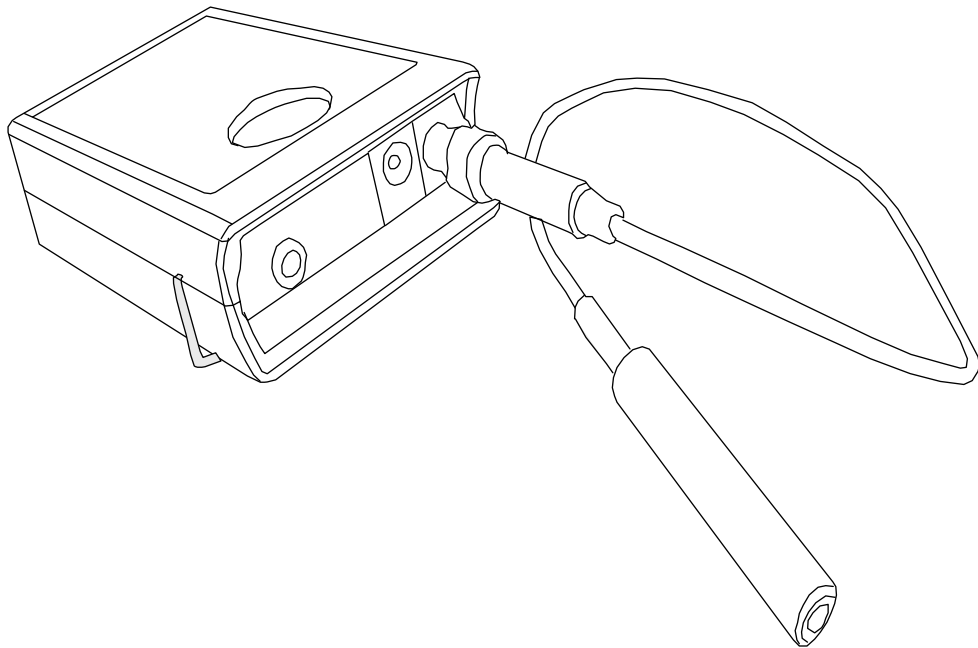


**GB**

# **Manual for Laser Pointer**



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# GB      **Manual for Laser Pointer**

## ***Introduction***

The laser pointer is a communication aid for disabled people who are unable to communicate using speech, writing or other methods. It consists of a laser and a battery unit. The laser is attached to the user's spectacles, headband, cap, or similar. The laser emits a red point of light that is used to point at various objects in the user's surroundings, such as texts, symbols, pictures and objects. This makes it possible for a user with disabilities to communicate in a simple manner. The light point is highly concentrated, which makes it visible at a long distance, even in situations with a high ambient light level.

## ***Facts about Laser Light***

Laser light is classified based on the output power of the light.

- Class 1 is laser light with an output power less than  $0.4 \mu\text{W}$ . This light does not produce a visible point in normal room lighting and is considered to be completely safe.
- Class 2 is laser light with an output power less than 1 mW. All lasers are approved for use as pointing devices in public situations, and they cannot damage skin. However, care shall be taken to avoid focusing the light source into the eye.

## **How strong is the light in the Laser Pointer?**

The laser pointer is a Class 2 laser with an output power of  $<1\text{mW}$ . The laser pointer has been tested and approved by SP Technical Research Institute of Sweden according to standard EN-60825-1-2001 and CFR 1040.10-2005.

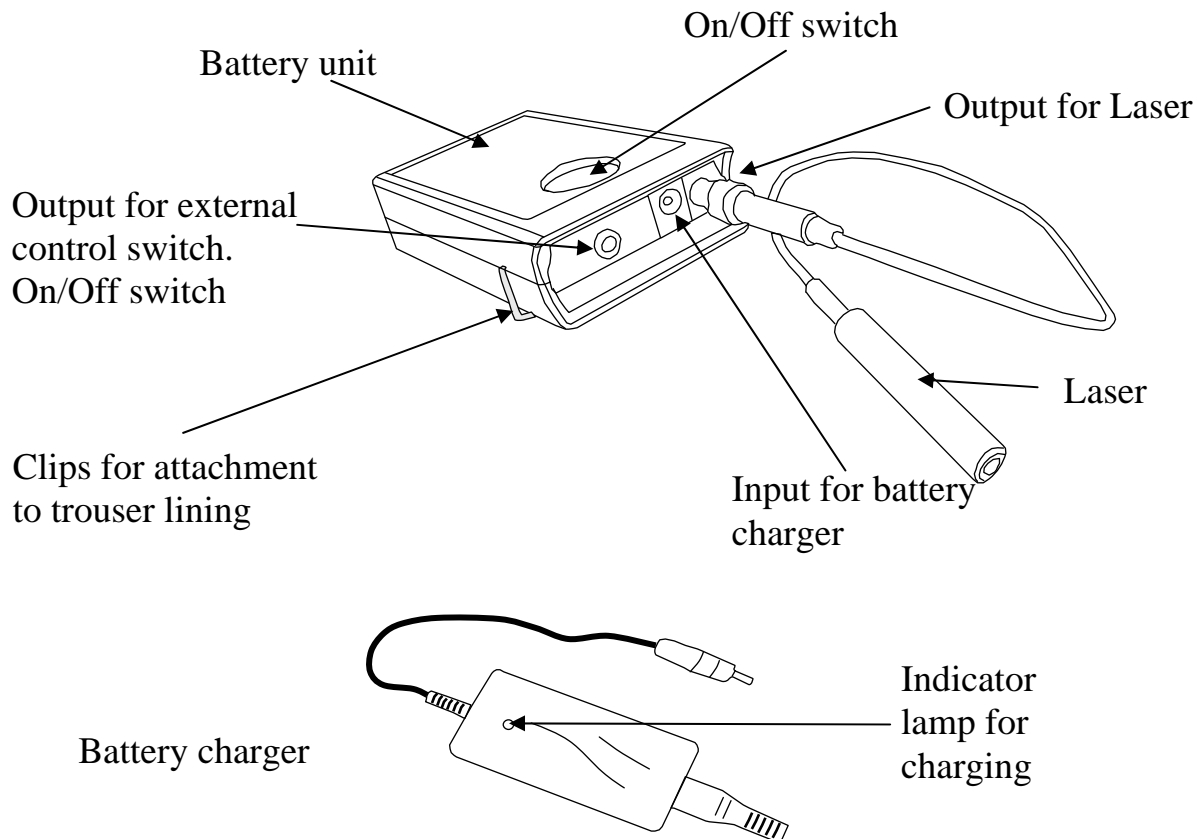


### **Warning!**

The laser pointer is not a toy, but it may be tempting to play with it. Make sure that children do not play with the laser pointer, and ensure that children are kept under supervision when the laser pointer is being used.

Never try to stare directly into the laser source!

## The Parts of the Laser Pointer



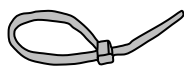
## ***Attaching the Laser***

There is no generally applicable method of attaching the laser to the user – an individual solution must be devised. Some different means of attachment that can be used are described below. These means of attachment are included with the laser.

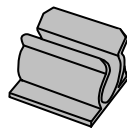
### **Attachment Items**



Plastic holder that is riveted in position. Used to attach the laser to a cap, for example.



Plastic ties, used to attach the laser to spectacles.



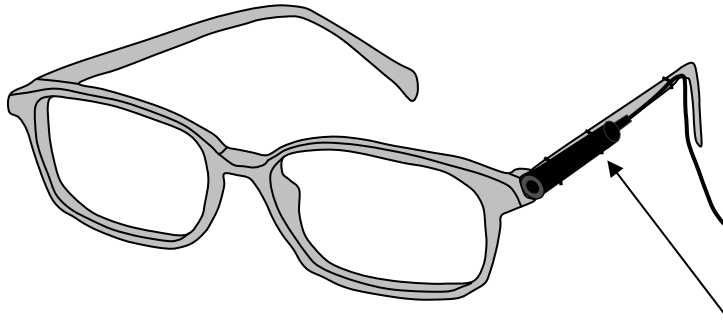
Self-adhesive plastic holders that can be opened. Can be combined with Velcro tape for attachment.



Velcro tape

## Spectacles

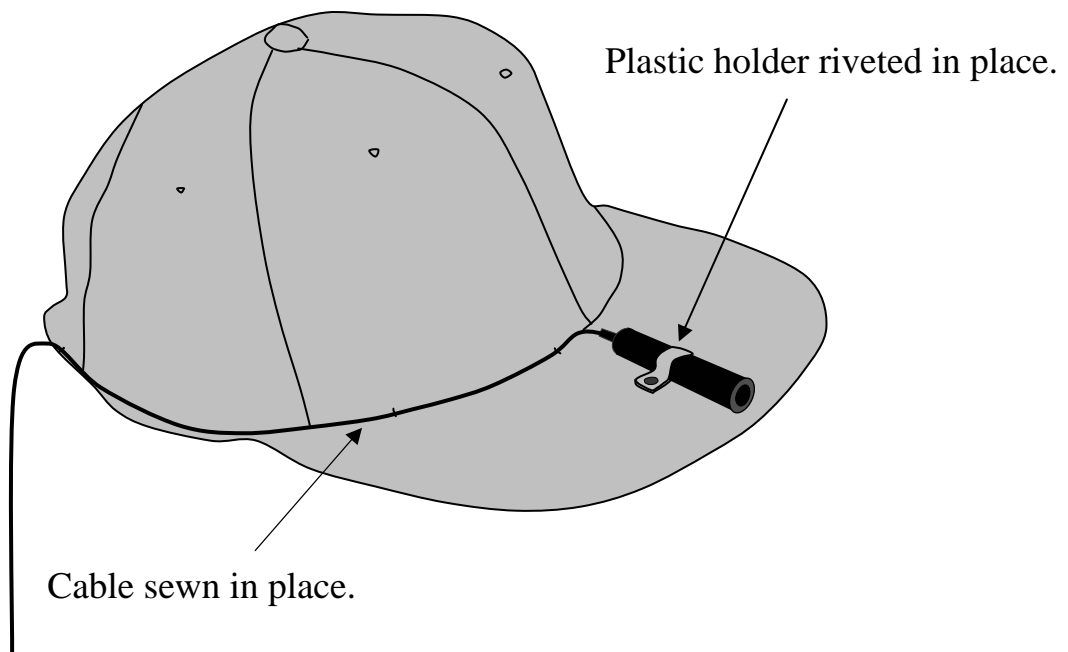
If the user wears spectacles, the laser can be attached to their frame. If the user does not normally need spectacles, it is possible to try out using spectacles with plain glass, using them only when the laser pointer is to be used.



The accompanying plastic ties are used to attach the laser to the frame. Plastic tape or rubber bands may also be used.

## Cap

The laser can be attached to the peak of a cap, for example. It may be an alternative to use a cap with an open upper part, if a normal cap is too warm.



## Helmet

The laser can be attached to a helmet if the user wears one. Use suitable attachment means in this case.

## Headband

The laser can be attached to a headband. In this case, the laser will be positioned at the side of the head. This works well if the user can hold the head reasonably steady.

## Charging

The laser pointer must be charged for at least two hours before it is used for the first time. This will ensure maximal lifetime for the batteries.

It takes approximately 2.0 hours to charge the batteries. The charger switches to maintenance charging at the end of this period. Charge the pointer regularly, preferably during the night. The pointer can operate for up to 20 hours with a fully charged, new battery.

## Indicator lamp and charge cycle

Indicator lamp	Mode
Yellow	Battery not connected
Yellow	Battery initialisation and analysis
Orange	Fast charge
Green with intermittent yellow flash	Top-off charge
Green	Trickle charge
Alternating orange - green	Error



### Warning!

Use only the accompanying rapid charger **Mascot NiCd/NiMH charger Type 2115**. Connection of an incorrect charger can result in the destruction of electronic circuits and batteries, and in the worst case, can cause fire.

The laser pointer cannot be used while the unit is being charged.

The laser pointer can be switched off with the switch or with the external control switch, in order to save battery power.

## Cleaning

The laser and the electronics unit can be cleaned with a lightly dampened cloth.

## ***Disposal***

The laser pointer contains nickel metal hydride batteries (NiMH). These batteries must be removed and disposed of in the proper manner for expired batteries, before disposal of the laser pointer. Other components are to be disposed of in the proper manner for electrical waste.

## ***Accompanying Items***

<b>Art. no.</b>	<b>Denomination</b>	<b>Quantity</b>
0406	Laser	1
0403	Battery unit	1
040510	Mascot NiCd/NiMH charger Type 2115	1
----	Plastic holders	2
----	Openable plastic holders	2
----	Velcro tape	50 mm
----	Ties	10
809070	User's manual	1

## ***Technical Specifications***

Type of battery charger:	Mascot NiCd/NiMH charger Type 2115
Current consumption:	30 mA
Type of chargeable batteries:	NiMH 3 x R6 1300 mAh (from serial no: 511730)
Operating time with fully charged batteries:	Up to 20 hours of continuous use
Laser dimensions:	54 x 10 mm
Electronics unit dimensions:	55 x 95 x 23 mm
Environmental conditions for use:	Indoor environment, dry
Laser power:	<1mW
Laser class:	2 (up to 1 mW)



**Gewa AB**

BOX 92, SE-191 22 SOLLENTUNA, SWEDEN

TEL: +46 (0)8-594 694 00 • TEXTTEL: +46 (0)8-594 694 18 • FAX: +46 (0)8-594 694 19

E-MAIL: [info@gewa.se](mailto:info@gewa.se) • WEB: [www.gewa.se](http://www.gewa.se)

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