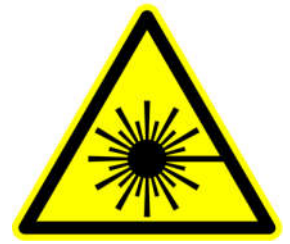


## Warnings

Laser class 2

Max. Output power < 1 mW

Wavelength 650 nm (red)



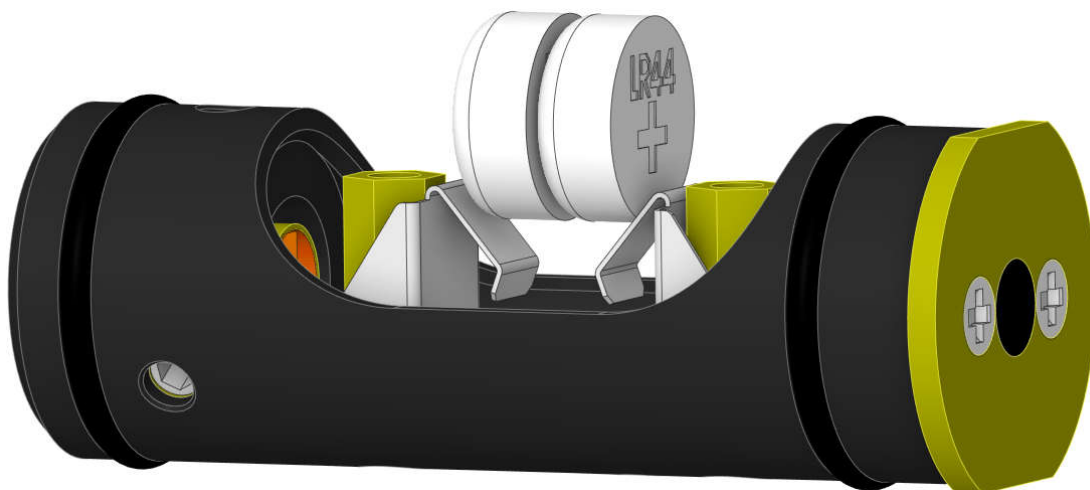
- Never point the barrel insert at people or animals!
- Never point the laser beam at smooth reflective surfaces (mirrors, etc.)!
- Never look directly into the laser beam or with optical instruments!
- Keep the barrel insert out of the reach of children.
- Do not continue to use or tamper with the barrel insert if it is damaged.
- Only pass the laser cartridge on to third parties together with these instructions for use.

## Operation

With the laser cartridge, a shotgun can be used for laser shooting training. The cartridge is inserted into the shotgun and is triggered by the sound of the firing pin. When inserting the cartridge, the recesses in the bottom can be positioned in such a way that the extractor cannot grip and thus does not eject the cartridge every time it is cocked. Since the firing of the laser of the cartridge is acoustic, a single cartridge can be triggered by both firing pins, a double shotgun. However, this assumes that the second trigger can be triggered even if no cartridge has been ignited from the first. In addition, it is recommended to insert a buffer cartridge into the second barrel to protect the firing pin.

## Installing the batteries

The laser cartridge works with two LR44 button cells. For insertion, the cover plate is unscrewed. When inserting, the polarity must be taken into account. The negative poles must point forward.



## Switching on and off

The laser cartridge is switched on by a short press on the one on the underside. The supplied 1.5 mm hex key is suitable for operating the button. This is indicated by a brief flash of the laser. The laser cartridge switches off automatically as soon as no more shots have been detected for a period of about 7 minutes. When switched off, the batteries can remain in the laser cartridge for a longer period of time without being discharged.



## Continuous Laser Mode

If the button is pressed for more than one second, the laser cartridge goes into continuous laser mode. In this case, the laser shines permanently, but with reduced power to avoid a possible hazard. Nevertheless, the warnings at the beginning of this guide should also be observed in continuous laser mode. With a short press on the button, the laser cartridge returns to normal operating mode. If, on the other hand, the button is pressed again for a long time, the laser cartridge switches to the setting mode.

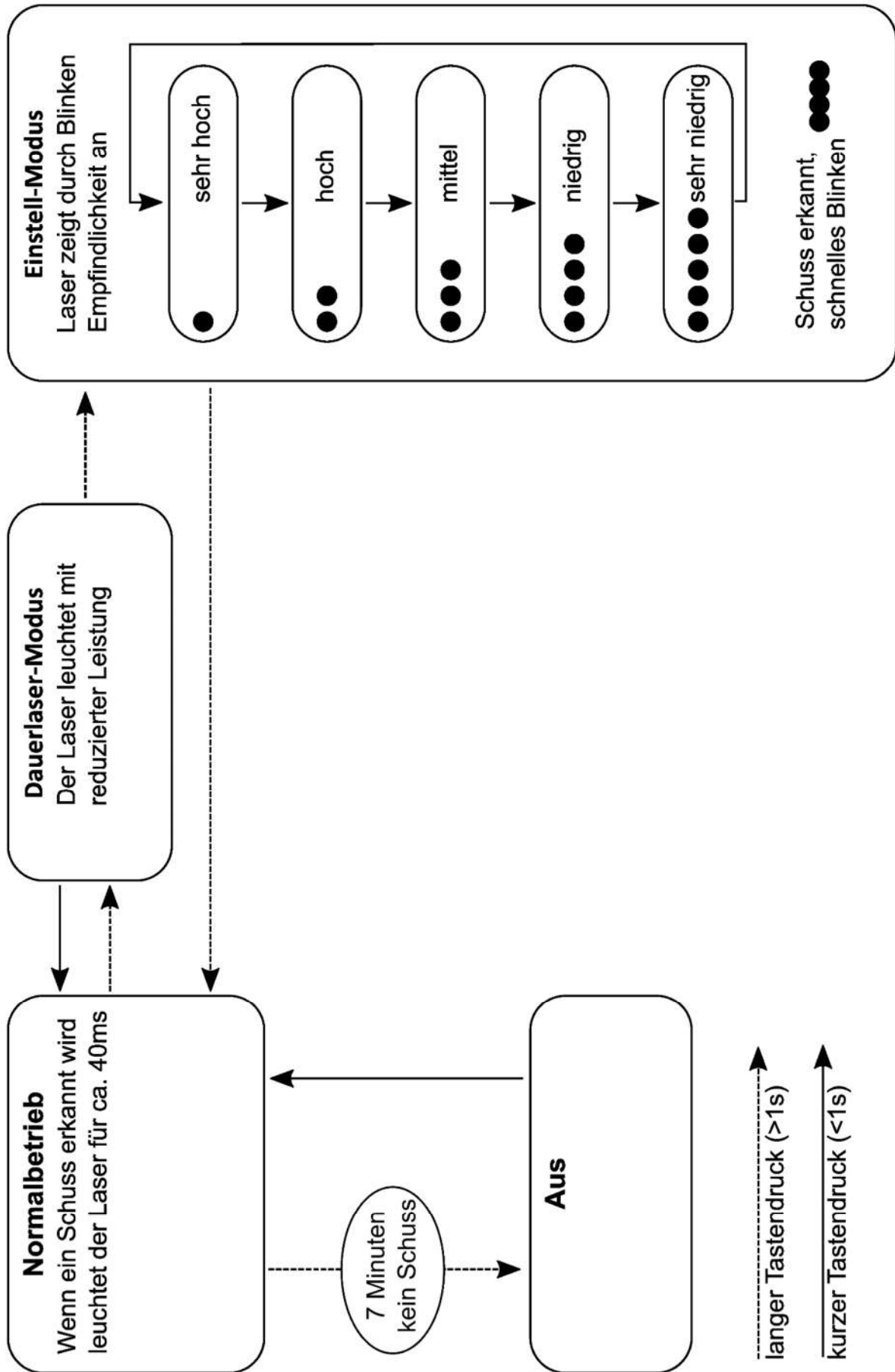
## Setting the Trigger Sensitivity

The volume at which a sound triggers the laser pulse can be adjusted in 5 steps. It should be chosen in such a way that when the trigger is pulled, the laser is reliably activated, but other noises that occur when handling the weapon are ignored. To adjust, the laser cartridge must be put into adjustment mode. To do this, it must first be brought into continuous laser mode by a long press on the button and then put into setting mode by another long press of the button.

In setting mode, the laser cartridge indicates the currently set sensitivity by means of a flashing pattern. It emits a sequence of short laser pulses about every 2 seconds, the number of which is indicated by the sensitivity level. A single pulse indicates the highest sensitivity, at which even very faint noises activate the laser. A sequence of 5 pulses represents the lowest sensitivity, at which the laser cartridge only responds to louder sounds. The other 3 settings are displayed accordingly with two, three or four pulses in a row.

To change the setting, you have to press the button briefly in the setting mode. In this case, the barrel insertion changes to the higher setting or, if it is already at level 5, back to level 1. If a sound is detected as sufficiently loud in the setting mode, the laser cartridge emits a short sequence of very fast pulses. This makes it possible to check whether the current setting is suitable without having to leave the setting mode.

When the correct setting has been found, the setting mode can be exited by a long press of a button. The laser cartridge then stores the selected sensitivity and returns to normal operating mode.

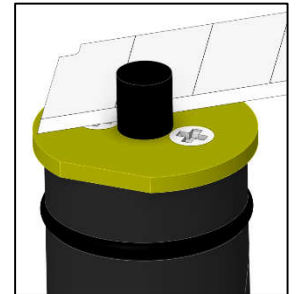


## Adjusting the fit

The chamber of shotguns is naturally subject to a certain tolerance. The laser cartridge is designed to fit in any shotgun suitable for 12 caliber. The rubber rings are supposed to ensure that it is firm enough and centered in the chamber. However, if the chamber of the shotgun is a little wider, it may be that it is too loose. In this case, the rubber rings can be removed and some of the enclosed narrow tape can be glued into the groove. The rubber ring is then replaced. The process can be repeated until the desired fit is reached.

## Replacing the rubber bumper

To protect the firing pin, there is a piece of hard rubber in the bottom of the cartridge. When this is worn out, it can simply be replaced. To do this, the worn piece is first removed with a needle or pointed tweezers. The enclosed rubber cord is then inserted into the hole as far as it will go and cut flush with a sharp knife.

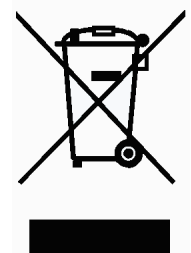


## Adjusting the laser

The laser beam is precisely aligned in the direction of the central axis of the cartridge and does **not need to be adjusted**. If it is ever adjusted, it can be adjusted by the 3 grub screws with a 1.5 mm hexagonal wrench. To move the laser in one direction, you need to loosen the grub screw a little on the corresponding side and then tighten the other two grub screws. The laser is centered if rotating the cartridge does not change the position of the laser point.

## Disposal

Electrical and electronic equipment that falls under the "ElektroG" law is marked on the right and may no longer be disposed of with residual waste, but can be handed in free of charge at municipal collection points, e.g. recycling centres.



As an end user, you are legally obliged (Battery Ordinance) to return used batteries and accumulators. Batteries containing harmful substances are marked on the right. Disposal with household waste is prohibited. Used batteries/accumulators can be handed in free of charge at the municipal collection points, e.g. recycling centers or wherever batteries are sold!

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