

## Dear Parents and Supervising Adults,

Before starting the experiments, please read the manual together with your child and discuss the safety instructions.

Batteries should be inserted and replaced by an adult or under close adult supervision.

Protect the device from moisture.

Make sure to keep the packaging and instructions as they contain important information.

**WARNING!** Not suitable for children under 3 years. Choking hazard — small parts may be swallowed or inhaled.

### Contents



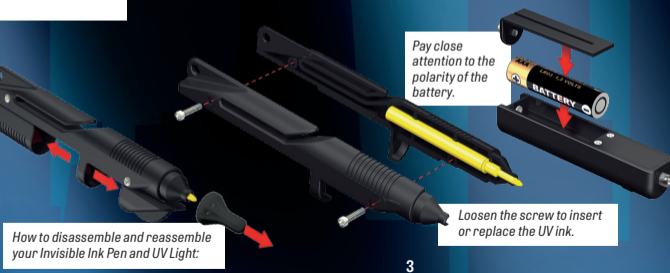
Invisible Ink Pen and UV Light

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## The Experiments

### Setting up your Invisible Ink Pen and UV Light

First, have an adult assist with inserting the battery into the UV pen. Use a Phillips-head screwdriver to loosen the screw on the battery cover and lift it off to expose the battery compartment. The screw will remain in the cover. Remove the old battery (if applicable) and insert a new AAA battery (1.5-volt, type LR03). Pay close attention to the correct polarity (+ and -). Close the battery compartment and screw the cover back on.



How to disassemble and reassemble your Invisible Ink Pen and UV Light:

Loosen the screw to insert or replace the UV ink.

Pay close attention to the polarity of the battery.

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To compose a top secret message, remove the cap from the invisible ink pen and write the message on a piece of paper. Your message is ready to send to the recipient along with the UV light.

**IMPORTANT!** When you're done composing your note, make sure to always put the cap back on, otherwise your pen will dry out.

To read the message, the recipient should shine the UV light onto the paper and the words will appear — almost as if by magic!

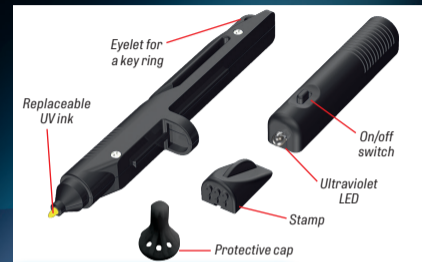
Don't be too conspicuous (which means to attract attention)! Sending someone a blank piece of paper might be a little suspicious, so take a normal pen or pencil and write or draw something non-confidential in an area where there isn't a secret message waiting to be revealed.

**WARNING!** Never shine the UV light into your eyes or the eyes of another person or animal!

**Tip:** You can also use the pen to mark your books, toys, or your other investigative equipment, so you can prove that they belong to you. You can write your initials using the UV pen, or you can use the stamp to mark your property. Just brush the UV ink

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to coat the stamp's surface and then press it onto the item. Now try shining the UV light on it!



### How Does the Invisible Ink Pen Work?

Ultraviolet (or UV) light surrounds us every day, but it can't be detected by the naked eye. When UV light bounces off of objects that contain phosphors, visible light is emitted, as the phosphors become excited and fluoresce (the scientific word for glow). The UV light that is emitted by your UV flashlight cannot be detected, but the light reflected back from the ink has less energy and falls within the visible range so you can see it.

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Have you ever been glow bowling? Did you notice that your clothes, teeth, and nails glow? The phosphors in them are reacting to UV light the same way the ink in your UV pen does. Phosphors can be found in many items! Shine the UV light on various items around your home to find out which ones fluoresce. For example, try it with your artwork, stickers, shoelaces, and toys. UV lamps also have many practical applications. Forensic experts (who use scientific techniques in the detection of crimes) use UV lights to examine crime scenes for evidence of bodily fluids. Law enforcement officers also use UV light to identify counterfeit (fake) money, and they even use them to determine if an antique or piece of art is a forgery (a copy).

## Attention Junior Detectives!



Everything a detective needs to investigate!

Ages 8 and up

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### Safety for Experiments with Batteries:

- An adult should insert and change the batteries.
- To operate the device, you will need one AAA battery (1.5-volt, type LR03), which could not be included in the kit due to its limited shelf life.
- Avoid a short circuit of the batteries. A short circuit can cause the wires to overheat and the batteries to explode.
- Different types of batteries or new and used batteries are not to be mixed.
- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc), or rechargeable (nickel-cadmium) batteries.
- Batteries are to be inserted with the correct polarity (+ and -). Press them gently into the battery compartment. See page 3.
- Non-rechargeable batteries are not to be recharged. They could explode!
- Rechargeable batteries are only to be charged under adult supervision.
- Rechargeable batteries are to be removed from the toy before being charged.
- Exhausted batteries are to be removed from the toy.
- The supply terminals are not to be short-circuited.
- Dispose of used batteries in accordance with environmental provisions, not in the household trash.
- Avoid deforming the batteries.
- Do not leave the device in direct sunlight or expose them to other sources of heat.
- IMPORTANT! Protect the device from moisture. Clean it with a damp cloth and allow it to dry thoroughly before using it again.

### NOTES ON DISPOSAL OF ELECTRICAL AND ELECTRONIC COMPONENTS

The electronic components of this product are recyclable. For the sake of the environment, do not throw them into the household trash at the end of their lifespan. They must be delivered to a collection location for electronic waste, as indicated by the following symbol:



Please contact your local authorities for the appropriate disposal location.

# SPY LABS INCORPORATED Invisible Ink Pen and UV Light



Exchange top secret info with your friends and fellow agents using this high-tech Invisible Ink Pen and UV Light! The pen uses a special ink that only becomes visible under ultraviolet light, like the one emitted by the flashlight on its opposite end. You can also use the UV light to find other objects and materials that glow.