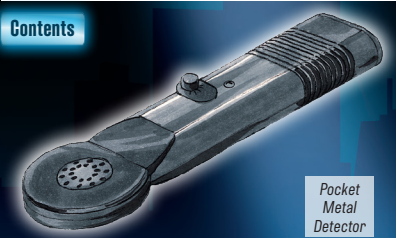
Dear Parents & Supervising Adults,

Before starting the experiments, please read the manual together with your child and discuss the safety instructions. Support your child with advice and a helping hand when performing the experiments outlined in the manual.
Protect the metal detector from moisture. Only adults should install and replace the batteries. 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

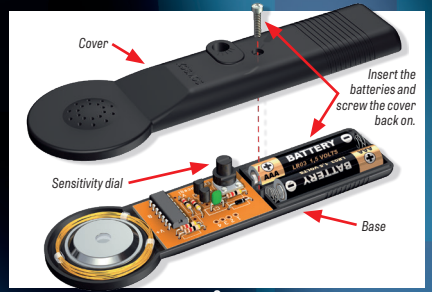


Pocket Metal Detector

Your Metal Detector

A Nose for Buried Treasures

A metal detector is an electronic instrument that can detect the presence of metal nearby. Metal detectors are useful for detective work, as they can help an investigator find metal items hidden within objects or buried underground (as long as they aren't too small or too deep). You can use your metal detector to find lost coins in the sand, or you can use it to detect any concealed metal, like a key in someone's pocket!



Getting Started

First, have an adult insert the two batteries into the device by following these steps:

1. Use a Phillips-head screwdriver to loosen the screw on the battery compartment and lift off the cover. The screw will remain in the cover.

2. Remove the old batteries (if applicable) and insert two new AAA batteries (1.5-volt, type LR03). Pay attention to the correct polarity (+ and –).

3. Close the battery compartment and screw the cover back on.

Now you can switch on the device. To adjust the sensitivity of the metal detector, turn the small dial on top. It will beep to indicate that it is ready for use. Keep turning the dial until the beeping stops, which means it has reached its most sensitive setting.

How Your Metal Detector Works

Your metal detector has two coils of metal wire in the circular end: the transmitter coil and the receiver coil. The batteries cause electricity to flow through the transmitter coil, causing a magnetic field to form around the transmitter coil. When you move the metal detector over a metal object, the moving magnetic field creates an electric current inside the metal object. This in turn creates a magnetic field all around the metal object. This magnetic field creates an electric current inside the second coil (the receiver coil) in the metal detector. The electric current then flows to a circuit with a loudspeaker, causing the alarm to sound. As the transmitter coil moves closer to the metal, the magnetic field around the object becomes stronger, which means more electricity flows to the speaker, making the alarm sound louder.

Most metal detectors work the same way. These devices are often used by treasure hunters, but they are also used at airports and important places or events to ensure that no one can sneak in any dangerous metallic items.

Let's test your metal detector. Look around for a metal object, like a key or a coin. Run it under the metal detector to see if it detects it. Try a few different objects, just in case the one you initially chose isn't real metal.

Once you've confirmed that it is working properly, start looking around and getting to know your metal detector. Sweep it over the ground, inside of a junk drawer, and over your friends' pockets. Where else do you suspect you can find some hidden metal items?

Make a game of it and ask someone to hide a metal object from you and see if you can use the metal detector to find it. Then switch and have the person look for an item that you have hidden.

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Additional illustrations: Dan Freitas and Ted McGuire
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Safety for Experiments with Batteries:

- An adult should insert and change the batteries.
- To operate the device, you will need 2 AAA batteries (1.5-volt, type LR03), which could not be included in the kit due to their 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.

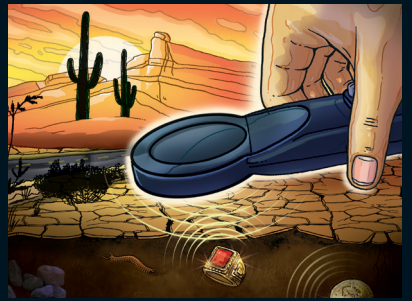
NOTES ON DISPOSAL OF ELECTRICAL AND ELECTRONIC COMPONENTS

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

Pocket Metal Detector



If any metallic clues or pieces of evidence are hiding nearby, your Pocket Metal Detector will help you find them. This Spy Labs tool will detect metal through other materials and alert you with an audible beep. Let the hunting begin!

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