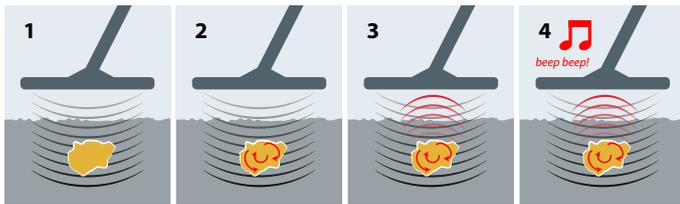


PRO-FIND Series DIF Technology Explained

DIF Minelab's Detector Interference Free (DIF) technology significantly reduces interference with an operating metal detector, when the pinpointer is switched off, by disengaging the pinpointer coil's magnetic field. Therefore DIF eliminates many of the false signals and noise caused by other pinpointers not having this functionality.

How metal detectors work (basic principles)



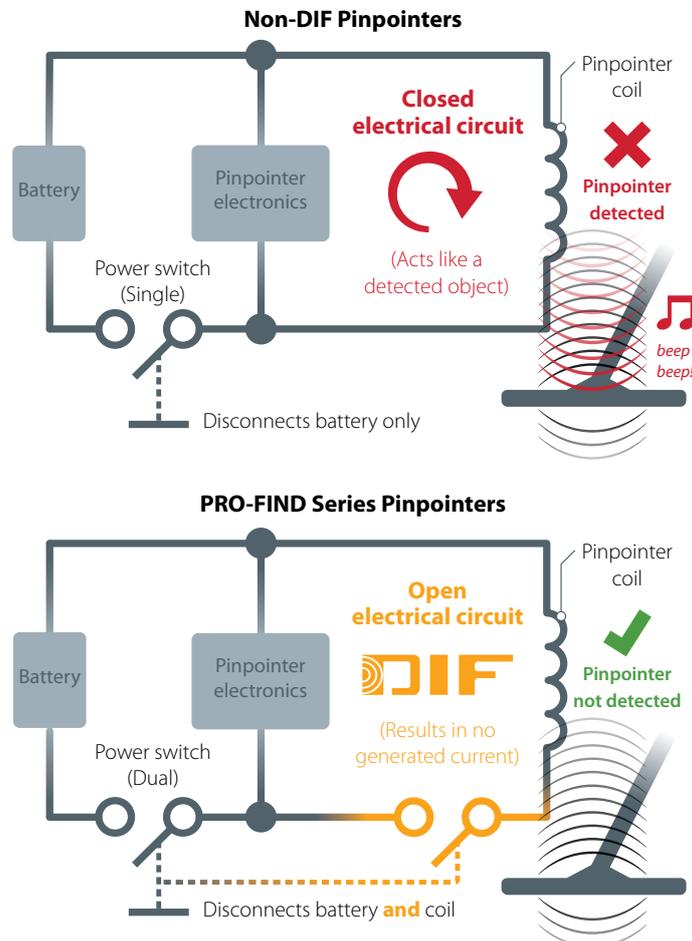
(1) Metal detectors transmit a primary electromagnetic field into the ground via the transmit coil winding. (2) When this field reaches metal objects of a large enough size, circular currents (called eddy currents) are generated within the object itself. (3) These currents cause a secondary electromagnetic field to be emitted from the object that is then sensed by the detector receive coil winding. (4) This signal is processed, with the detector providing an associated audio (and sometimes visual) response.

A pinpointer is large enough to generate its own circular currents when it passes through a detector coil's transmit field. This causes extraneous signals that the detector will sense. With DIF technology this is no longer a problem because circular currents do not flow, and false signals do not occur.

Equivalent pinpointer circuit comparison (simplified)

This comparison is important for understanding how DIF greatly reduces the potential for these false signals to be generated by a pinpointer that is within detection proximity of the search coil (either above or below). It's somewhat similar to leaving your TV on standby and operating it with your remote control, compared to turning off the power completely at the main switch or wall outlet.

The more powerful a detector is, the more important it is to have a pinpointer with DIF e.g. when using a Minelab GPX Series or GPZ 7000 detector.



Read the Treasure Talk blog by Gordon Heritage on the Minelab website.

Watch the video demonstration on the Minelab Metal Detectors YouTube channel.

