

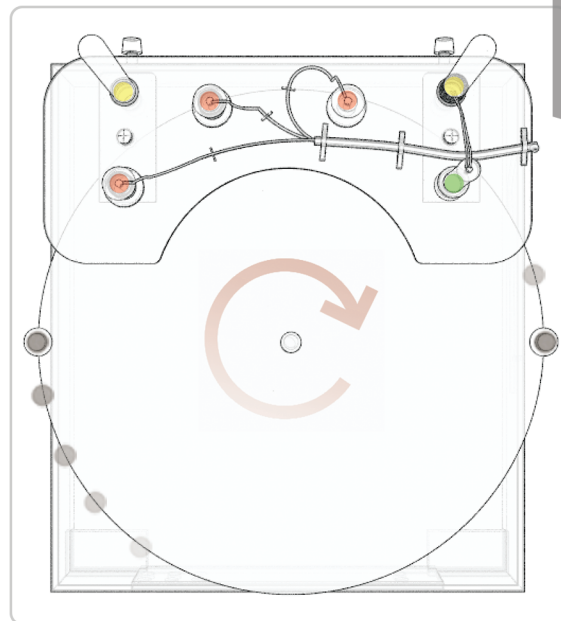
The experiment

- A simple setup to explore magnetic fields, flux, and electromagnetism.
- Understanding Faraday's laws of electromagnetism.
- Disk magnet mapping using a Hall probe.
- Investigating discrepancies between theoretical predictions and experimental observations.
- Calculating uncertainties.

How does it work?

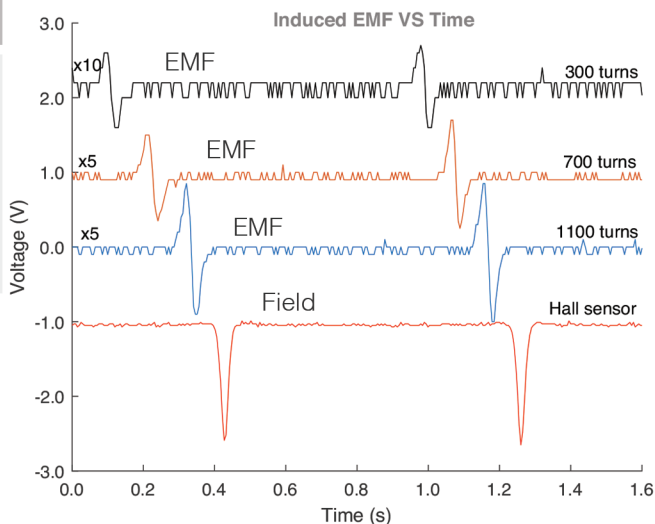
The experiment setup comprises a rotating disk, assembly of solenoids, a Hall probe, and all these connected to Qosain scientific's Physlogger. Beautiful signals of emf can be observed on the PC when the magnet carrying disk is rotated, and also, the field of the magnet as it approaches and recedes from the Hall Sensor. As solenoids are connected to the differential channel of Physlogger, floating signals of emf are logged by the Physlogger. This apparatus is used to, but not limited to:

- finding the magnetic field.
- the magnetization of a disk magnet.
- verifying Faraday's law of electromagnetism.
- showing that emf induced in the solenoid depends on number of turns in the pick-up coil, the speed and direction of rotation.

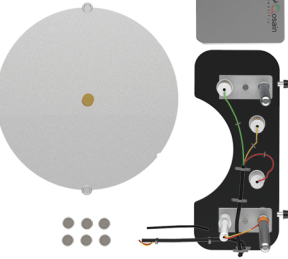
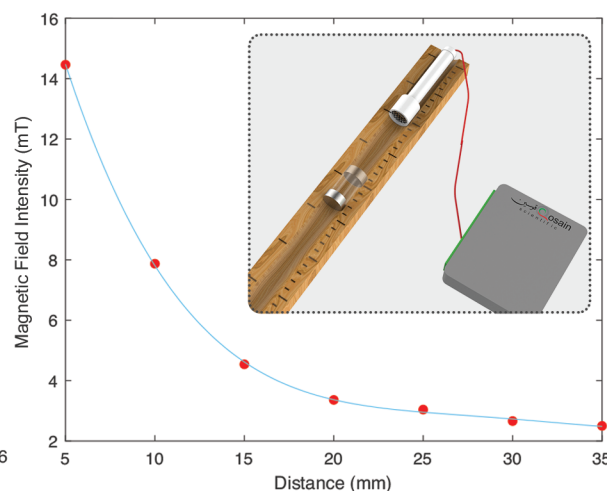


Parts Included:

- Rotating disk and assembly of solenoids
- Hall probe
- PhysLogger
- Magnets
- Wooden scale
- Connecting wires



Variation of Magnetic Field Strength with Distance



Parts not Included:

- Computer

