NaRiKa Peltier Cloud Chamber "Mistline ST"

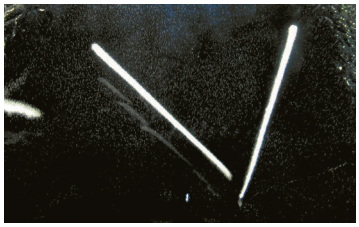
B10-7762-W0

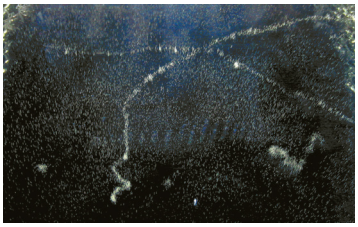
Observing Radiation Rays in a Cloud Chamber.
Although radiation is usually connected with accidents at nuclear power plants and atomic bombs, which has given it a negative image, it is also extremely useful in our daily lives for curing cancer, diagnosing disease and creating new substances, etc. Radiation comes from outer space and from certain radioactive substances on earth. The Narika Cloud Chamber converts invisible radiation rays into visible paths.

- Observing Method: Low Temparature Diffusion
- Semi-maintenance Free Type: With the air-cooling type Peltier module, suitable for school equipment.
- Stable & Easy Operation: Natural radiation becomes stably observed after the quick start-up in just 5 minutes.

Specifications

[Cooler] Air-cooled electronic freezer
(equipped with a high-performance Peltier module)
[Lighting] Ultra-bright white LEDs
[Power supply] AC240V / 300W
[Maximum Electrical Consumption] 300W
[Size and Weight] 430 x 300 x 237mm (excluding protrusions), 15kg
- Ethanol with a purity rate of 99.5% is required for experiments.





NaRiKa Cloud Chamber SML-01

B10-7760-W0

Compact cloud chamber maintaining Air-cooling type Peltier cooling unit. You can easily observe the track of radioactive ray anywhere/anytime. Equipped with the special power supply.

- Power supply (Out put : 15V, 5A) is additionaly needed to operate the peltier cooling unit.
- 99.5% ethanol has to be prepared separately.

Specifications

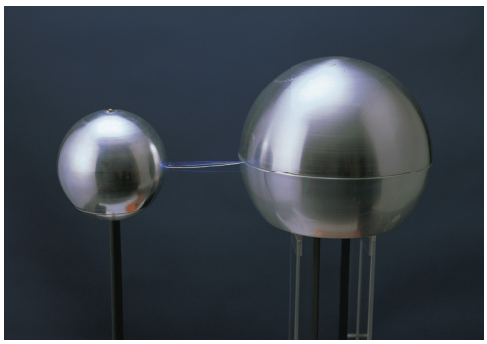
[Observation tank] ϕ80mm, Height 60mm
[Cooling unit] Water-cooling type
Peltier cooling unit
[Special power supply] Input AC100V, 3A
[Accessories] Observing hood with LED
(AC Adapter is not included.)

NaRiKa Van der Graph "Raijin"

B10-1323-W0

"Van der Graph" type high voltage static electricity generator.
High voltage static electricity is generated by collecting static electricity at the sphere generated by rubber belt friction. It works even in the humid season with the higher voltage compared to conventional products. Also, can be used for experiment of Hamilton's Flywheel or Electric umbrella.

- Easy maintenance : The roller or belt can be detached without using tool.
- Controller is apart from the main unit to prevent electrification in case of measurement adjustment.
- Built-in compact lamp for improving electric-generating capacity.



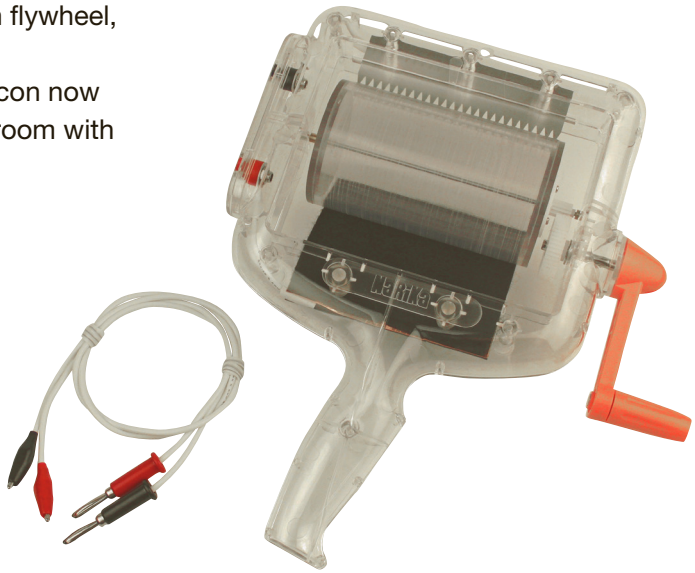
Specifications

[Generated voltage] 150,000V and more
[Electrical discharging distance (ca)]
Max 110mm (at the humidity of 40%), 60mm～(in the rainy season)
[Collecting sphere] ca ϕ215mm
[Discharging sphere] ca ϕ115mm
[Power supply] AC Adapter
[Size] ca 270 x 210 x 620mm (Collecting sphere),
ca 150 x 130 x 490mm (Discharging sphere)
[Weight] ca 5.6kg
[Accessories] Hamilton's Flywheel (Simplified ver.), Compact fluorescent tube (Three colors), Assembling kit for the Static rocket, Electric umbrella (Simplified ver.)

NaRiKa Static Genecon

B10-1324-W0

Replaces traditional "Van Der Graaf Generators" used for electrical discharge experiments.
Gently turn the handle to generate more than 10,000V of high voltage static electricity!
A wide range of static electricity experiments now possible without the use of a Van Der Graff generator!
Until now, high-voltage static electricity generators (Van Der Graff Generators) were required to carry out electrical discharge experiments between the Hamilton flywheel, the Moore motor and metal collecting electrodes.
The new, inexpensive Electrostatic High-Voltage Genecon now allows these experiments to be performed in the classroom with far greater ease and less cost.



Specifications

[Out Put] Max 10,000V
[Size] 223 x 244mm, Thickness 75mm
[Weight] 400g
[Cable] Red and Black each

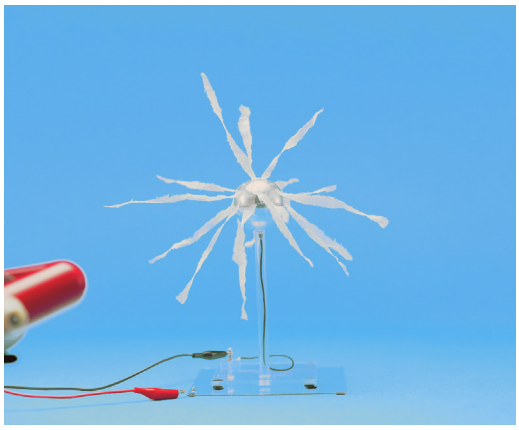
NaRiKa Aluminium Collecting Sphere (for Static Genecon) EG-03

B10-1324-W3

By sticking strips of moisture-resistant paper on top of the sphere, you will experiment and observe the paper strips levitating when turning the handle. User can estimate the direction of the electric lines of force by noting the direction of the floating strips. Use this product along with the Static Genecon for wider range of demonstration on static electricity!

Specifications

[Sphere] Aluminum（ϕ50 x 2mm）
[Base] Acrylic resin（100 x 100 × 5mm）
[Supporting rod] Acrylic resin（ϕ10 x 150mm）
[Weight] 115g



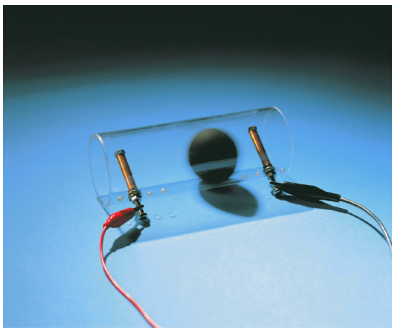
NaRiKa Electric Pendulum (for Static Genecon) EG-01

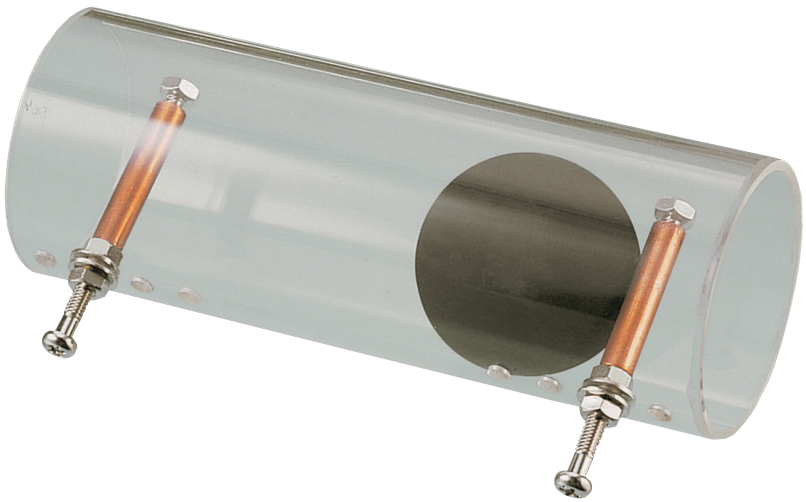
B10-1324-W1

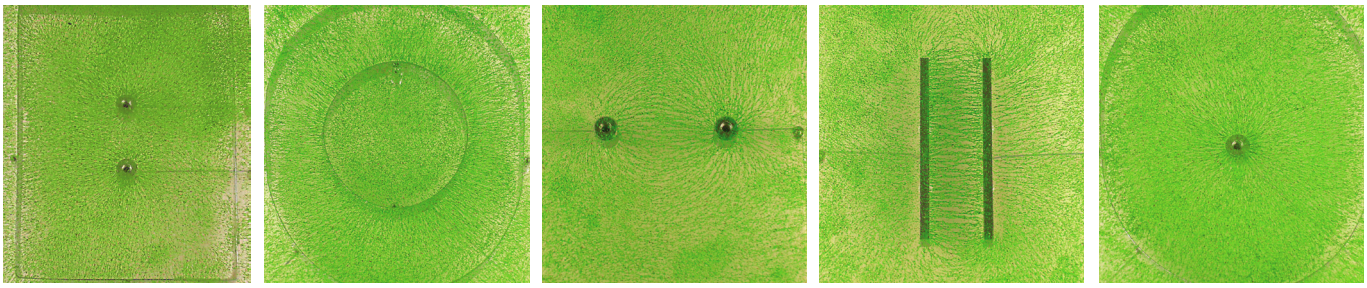
An experimental component used with the Static Genecon.
A black pendulum ball swings backward and forward between two electrodes to be electrically charged/discharged at high voltage.

Specifications

[Size] ϕ50mm
[Material] Body=Acrylic acid resin, Electrode=Copper
[Ball] Carbon Coated Plastic Ball（ϕ38mm）







NaRiKa Electrostatic Field Apparatus Set Ⅱ

B10-1492-W0

Enabales safe/repeatable visual observation for electric force line.
This unique apparatus is designed for the observation of electric lines of force.
Visible lines are generated by applying an external electric field to the plastic observation cell filled with a special solution.
Results will vary according to the 5 types of plates being used, as different lines of force can be observed.

ELECTRODE PLATES

1. Electrostatic shielding
2. Between 2 points of the same electrode
3. Between 2 points of different electrodes
4. Point charge
5. Parallel flat capacitor

Contents

- Observation Tank : Made of Acrylic
- Size of Cell : 160 x 105 x 7mm
- Electrode plates : 5 types of plates
- Supporting Frame : Made of Transparent Plastic
- Size of Frame : 195 x 115 x 28mm
- Power Supply : High-Voltage Generator
- Storage carrying case

NaRiKa Hand-held DC Generator : "Genecon DUE"

B10-2632-W1

The world's best-seller that has changed the image of science experiments and introduces children to the fun of actually generating electricity.
Turning the handle causes the motor to operate, which generates electric power. The Genecon DUE is an educational instrument perfectly suited to experiments that explain the mechanism of power generation in an easy and fun way. The clear body allows the mechanism to be seen while in use. The unit is equipped with a special high-quality Genecon motor. A wide range of modules are also available to broaden the scope of possible experiments.

Specifications

[Out Put] Max DC 12V
[Material] Polycarbonate resin
[Cable] 1m modified cable 1 pcs
[Size] 115 x 140 x 43mm
[Weight] 120 g

■ Genecon is the registerd trademark of NaRiKa Corporation.

NaRiKa Hand-held DC Generator for Primary School Students : "Genecon V3"

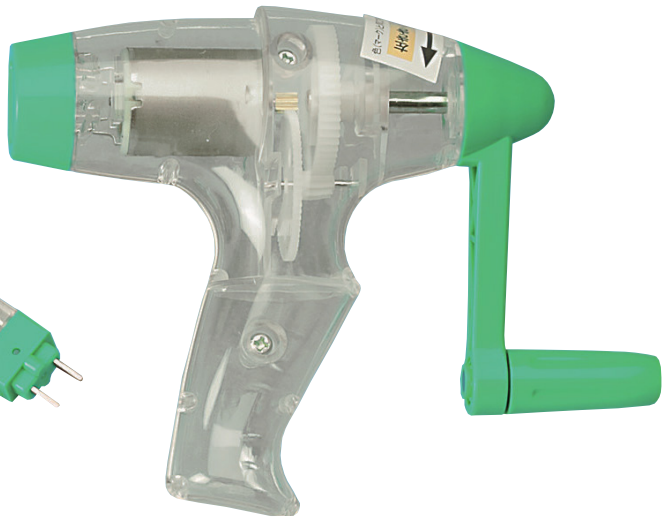
B10-2634-W0

Genecon specially designed for younger students in terms of durability and safety preventing possible breakage of any connected accessories（miniature bulbs, etc.）no matter how hard the handle is rotated. Combination with many types of adapters is also available in addition to the output lead specially designed for the user-friendliness to primary school students who are normally not manipulable enough.

Specifications

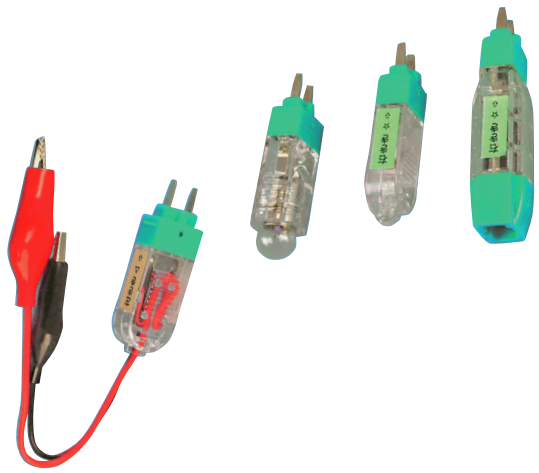
[Out Put] Max DC 3V
[Material] Polycarbonate resin
[Cable] 1m modified cable 1 pcs
[Size] 115 x 140 x 43mm
[Weight] 120 g

■ Genecon is the registerd trademark of NaRiKa Corporation.



NaRiKa Adaptors Set for Genecon V3

B10-2664-X0



This set includes three kinds of adapters (LED, Miniature bulb, Capacitor) for Genecon V3. These adapters are specially designed for suitable connection with Genecon V3 for students' experiment. Therefore, if they just connect the adapter with Genecon V3, students can easily carry out the experiment such as the comparison of consuming energy between the miniature bulb and LED bulb.

Contents

- Genecon V3 LED adaptor (Yellow) : x 1
- Genecon V3 Mini bulb adaptor : x 1
- Genecon V3 Capacitor adaptor : x 1

(Genecon V3 not included.)

NaRiKa Parallel Bulbs Base

B10-2631-W2

Parallel Bulbs Base has 4 sockets for miniature bulbs in parallel connection in the circuit. This base is better way to understand about "Generation and Works" for students, since they can feel changing the torque of handle of Genecon V3 by the number of connected bulbs.

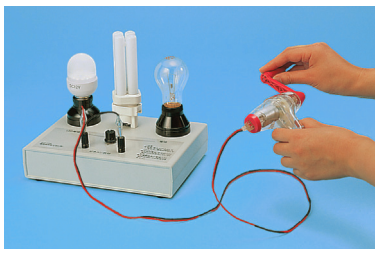
Specifications

[Base] Plastics, 4 miniature bulb socket with terminals
[Size] 180 x 80 x 25mm
[Mini bulb] 4 (3.8V, 300mA)

NaRiKa Genecon Light Box

B10-2640-X0

There are 3 kinds of lamps which are an incandescent lamp, a fluorescent lamp and LED lamp on the apparutus. The purpose of this apparatus is the comparison of energy consumption amongst three lamps by using Genecon DUE. Students understand which lamp can save the energy more efficiently by feeling the torque of handle of Genecon V3.



Contents

- Genecon Light Box : x 1
- Incandescent lamp : x 1 (12V, 20W)
- Fluorescent lamp : x 1 (11-16V, 18W)
- LED lamp : x 1 (10-15V, 2.5W)
- Genecon DUE : x 1
- Case : 1

Specifications

[Size] 245 x 175 x 100mm

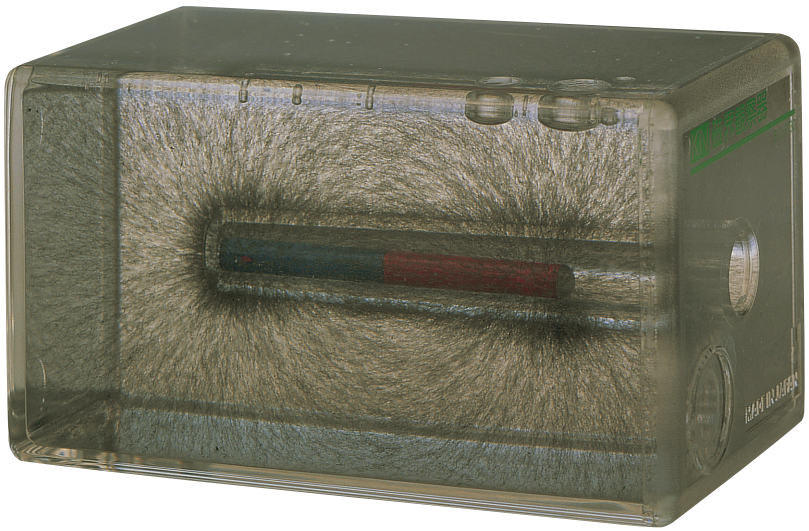
NaRiKa Electromagnetic Field Observation Box

B10-3730-W0

Magnetic Field Observation Box is the perfect way for students to observe magnetic force fields. Watch the creation of a magnetic field in 3 dimensions in your hand or via an overhead transparency.

Specifications

[Observation Tank] Clear Acrylic Resin
[Inside Material] Sillicon Oil and Iron Powder
[Size] 100 x 56 x 56mm
[Hole] ϕ8 x 75mm
[Weight] 320g
[Magnet] Alnico Magnet（ϕ7 x 50）1 pcs



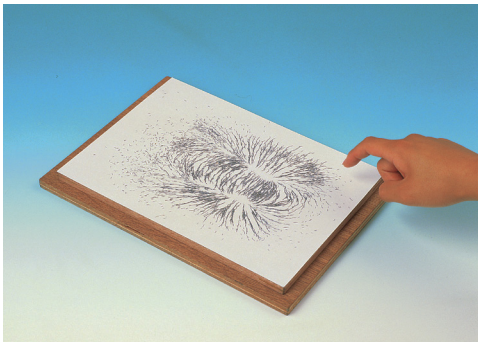
NaRiKa "Magchip" : Chips for magnet（6 in set）

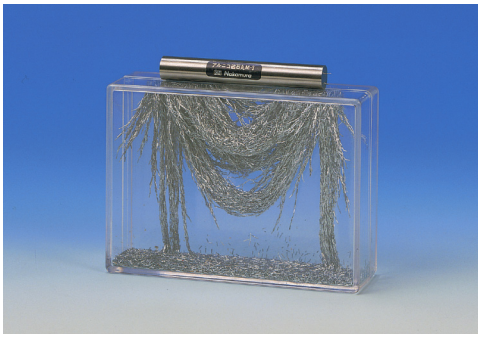
B10-3720-W0

Magchip is a tiny steel wire（ϕ0.3mm）with Zn coating for observing magnetic field. Compared with an iron sand or powder, it shows us clearer magnetic field lines.

Contents

- Content : ca 300g（50g x 6 containers）
- Tiny steel wire : ca 0.3 x 2mm with Zn coating

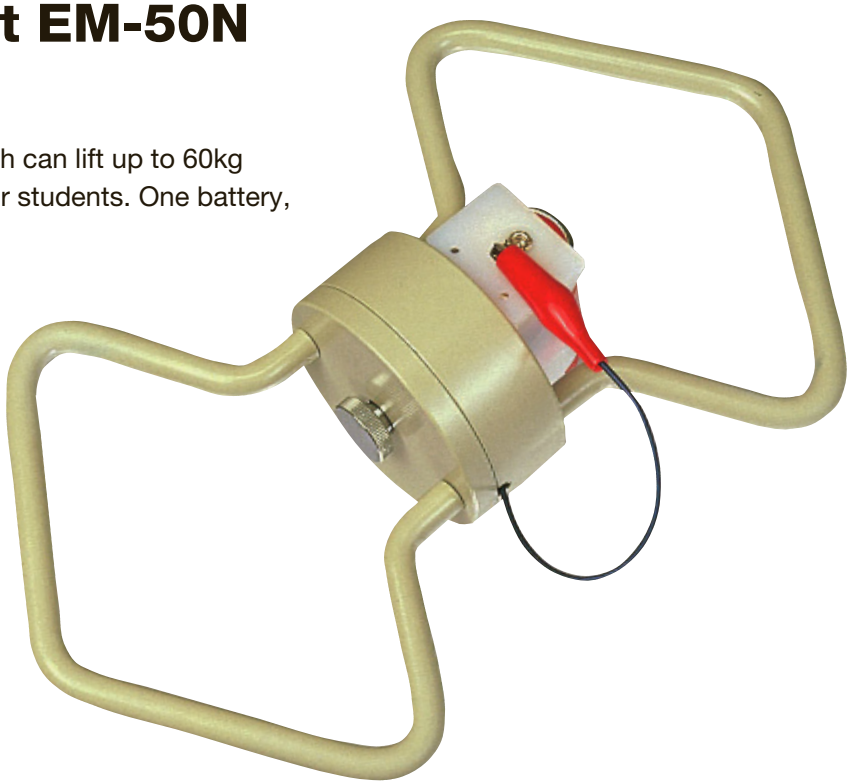




NaRiKa Electromagnet EM-50N

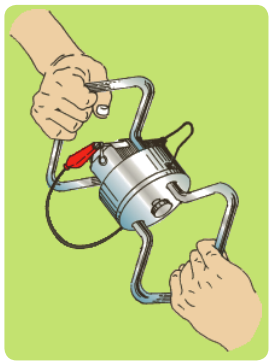
B10-3420-W0

This is a powerful electromagnet which can lift up to 60kg weight with the safety mechanism for students. One battery, 1.5V is needed for the experiments.



Specifications

[Acceptable weight] 60kg (Max.)
[Size dnd weight] ϕ80mm x 270mm; 1.4kg
[Other] Safety mechanizem



NaRiKa Coil Set for Electromagnet (3 sets)

S75-5606-W1

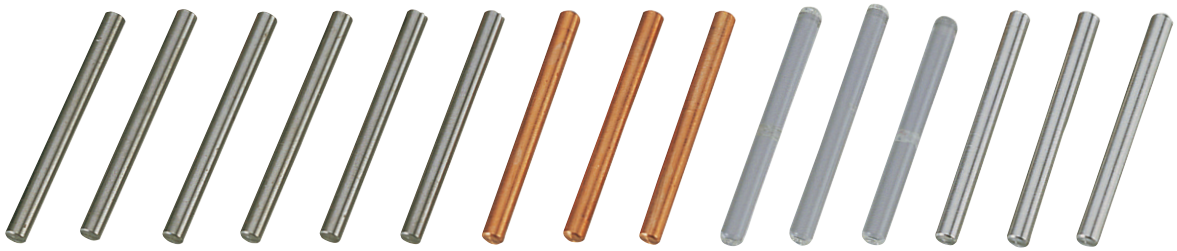
There are 2 kinds of coil and 4 kinds of core metal in a set.

Contents

- Coil 100 turns : x 3
- Coil 200 turns : x 3
- Core metal : Copper, Aluminum, Glass x 3 each
- Core metal : Steel x 6
- O-ring : x 15

Specifications

[Size] 17 x 48mm (Coil), ϕ5 x 55mm (Core metal)



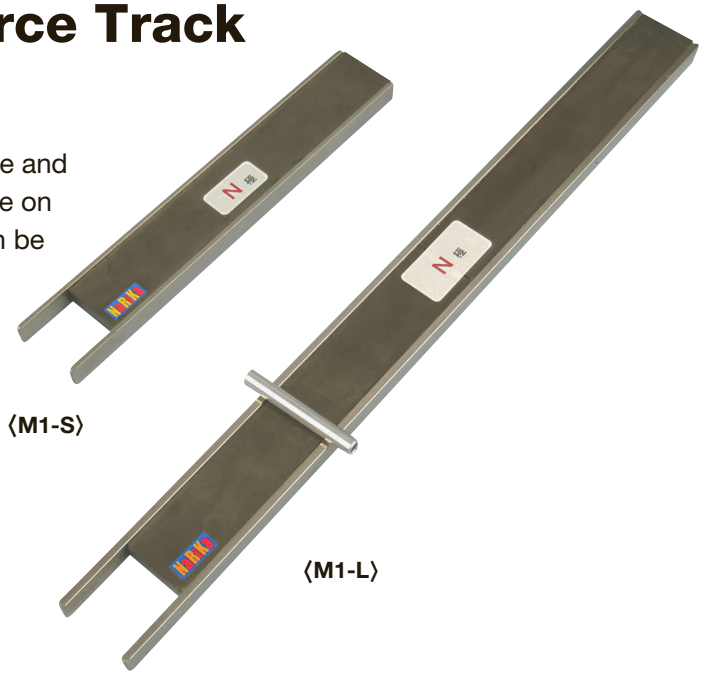
NaRiKa Electromagnetic Force Track

M1-S	B10-4705-W1	M1-L	B10-4705-W2

Suitable for the experiment of electromagnetic force and Fleming's left hand rule, by moving aluminum pipe on its rail by current. Genecon V3 and DUE as battery can be used in combination with the apps.

Specifications

●**M1-S**
[Size] 170 x 27 x 10mm
[Magnet] Ferrite magnet
[Material] Stainless SUS304 (rail)
[Accessory] Aluminum pipe
●**M1-L**
[Size] 320 x 27 x 10mm
[Magnet] Ferrite magnet
[Material] Stainless SUS304 (rail)
[Accessory] Aluminum pipe



〈M1-S〉
〈M1-L〉

NaRiKa Electromagnetic Force System

B10-4800-W0

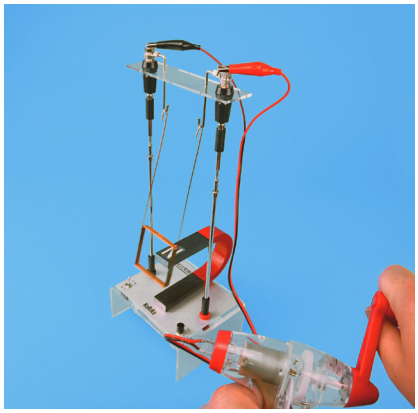
The system provides multiple experiments to students such as an experiment of the Right-hand Law, magnetic field of coil and motor's theory. It uses two batteries as the power source or Genecon DUE for those experiments.

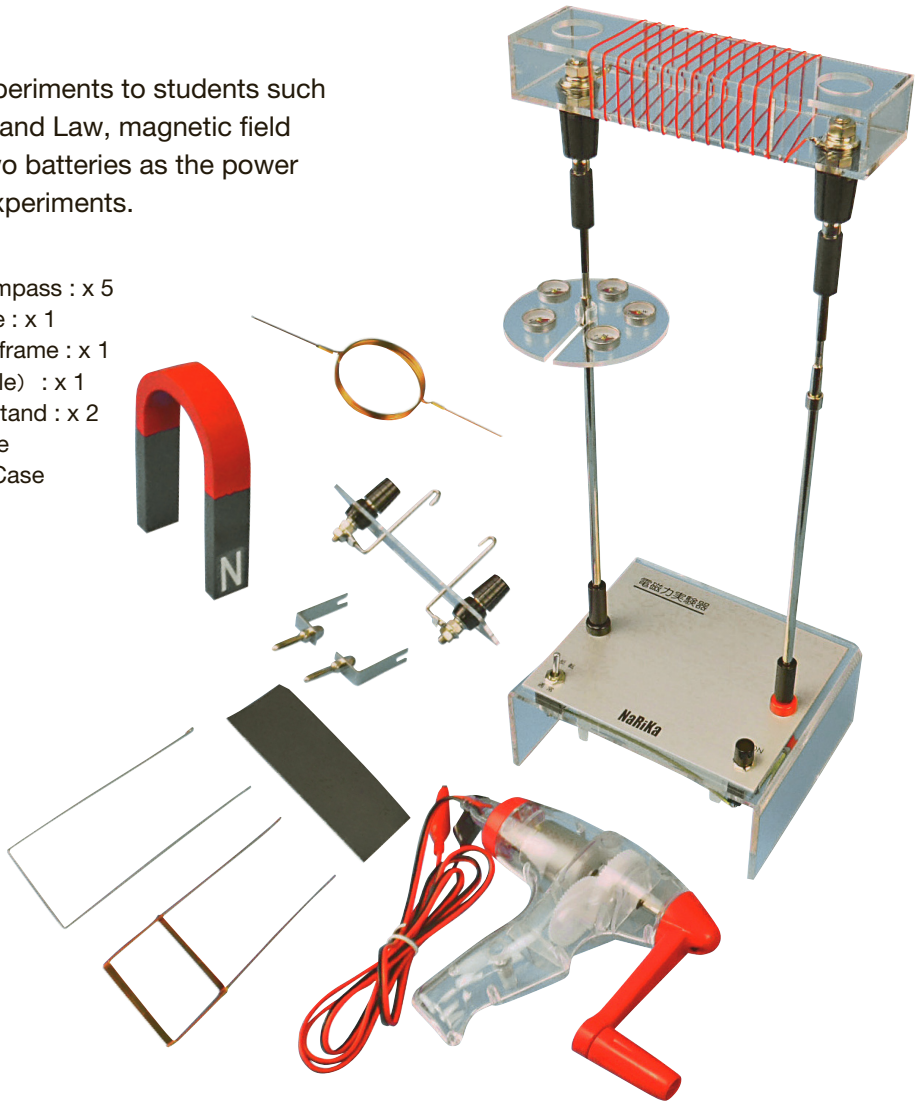
Contents

- Genecon DUE : x 1
- Power unit : x 1
- Pole : x 2
- U-shape magnet : x 1
- Swing (single) : x 1
- Swing (square coil) : x 1
- Hook for swing : x 1
- Small compass : x 5
- Disk plate : x 1
- Coil with frame : x 1
- Coil (circle) : x 1
- Bearing stand : x 2
- Sandpape
- Storage Case

Specifications

[Size] 140 x 100 x 315mm





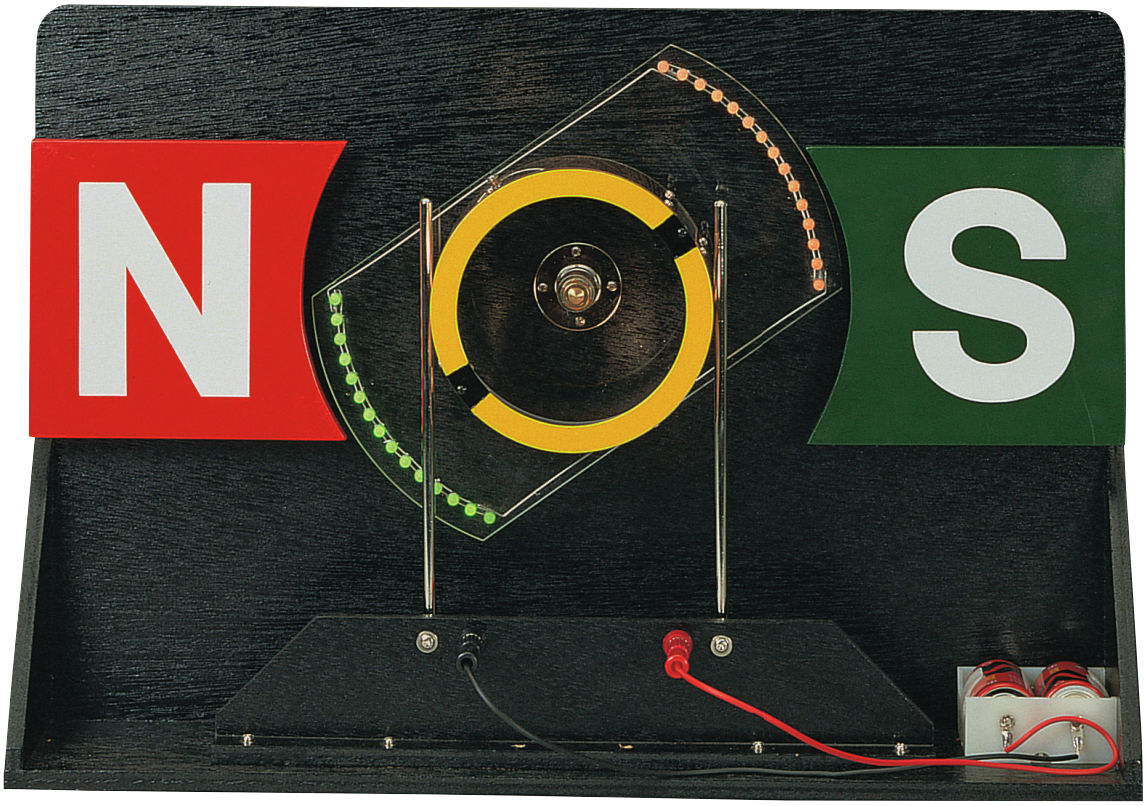
NaRiKa Explanation Kit for Motor's Principale

B10-5351-W0

This is a demonstrator of the motor mechanism, especially, armature mechanism. Since the armature has red and green LED on it, you will see color change of LED when the polarity of armature is reversed by the shaft rotation. You can explain to students regarding repulsion（N-N, S-S）and attraction（N-S, S-N）using colors of LED while turning the handle at the back side.

Specifications

[Body] (Wooden with coating), Plastic armature,
[Rectifier] (Copper), **[Brush]** (Brass), **[Field coil]** (N : Red, S : Green)
[Power Supply] Batteries x 2 , 3V
[Size] ca 520 x 165 x 300mm
[Weight] ca 2.3kg



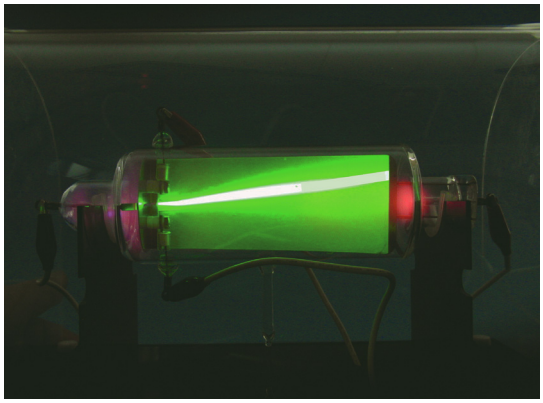
NaRiKa Cold Cathode Crookes Tube with Deflection Plate

with Deflection Plate	B10-7218-W0

Narika Crookes tubes have two purposes in the demonstration. The 1st one is to confirm the electron have a negative charge. And the 2nd one is to confirm the electron have behavior as particles.
Confirmation or demonstration that the electron has a negative charge（with deflection plate inside). Deflection plates are assembled at near by negative electrode, each of which plate is located upper and lower side of beam path inside the tube. In a dark room or box, the demonstration is shown as the behavior of electron beam depending on the deflection plates charging such as voltage or polarity.

Contents

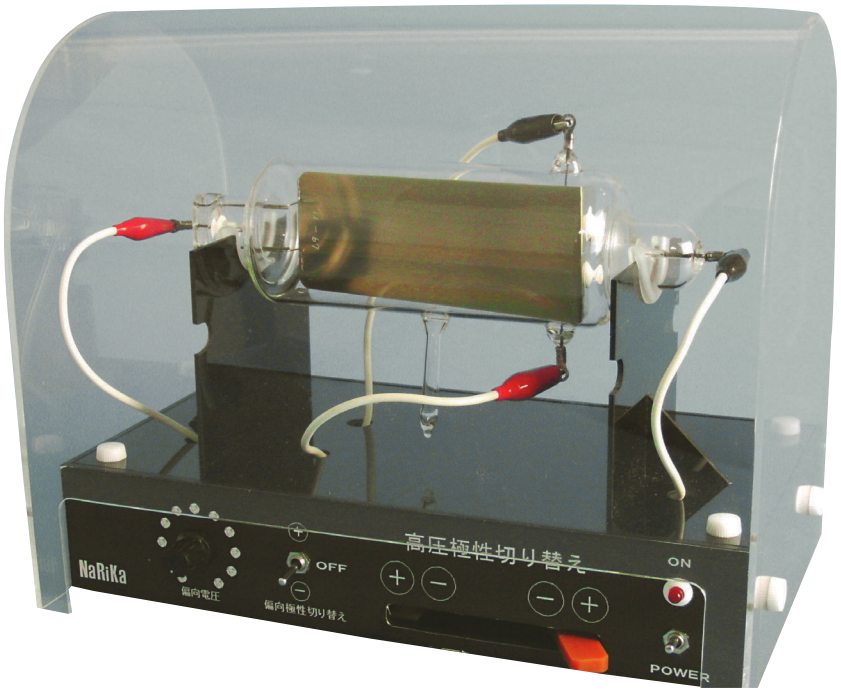
- Easy Operation;
  - Built-in Power Supllies
  - Used either by 4（AA）batteries or AC-DC adaptor
- Safe Operation;
  - No induction coils needed
  - Better shielding effect with the cover
    --> Radiation intensity drastically reduced
    compared to the conventional Narika products



Specifications

■ The operating voltage of tube does not require high voltage by an induction coil, it is just less than 5,000V by 4 batteries（AA）or AC Adaptor DC6V.

[Operating Voltage] Less than 5,000V
[Power] AC adaptor or 4 Alkari Batteries（AA）
[Size] 260 x 160 x 215mm
[Weight] 1.3kg



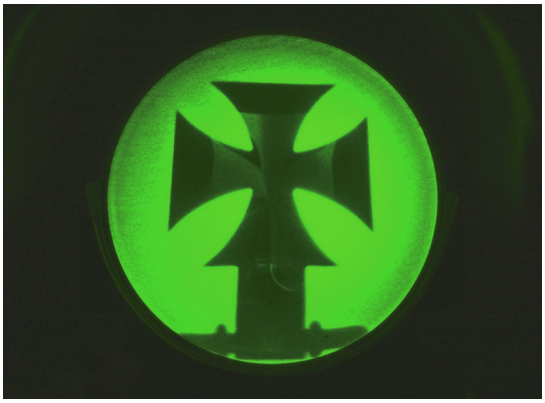
NaRiKa Cold Cathode Crookes Tube with Cross Plate

with Cross Plate	B10-7217-W0

Narika Crookes tubes have two purposes in the demonstration. The 1st one is to confirm the electron have a negative charge. And the 2nd one is to confirm the electron have behavior of particles. Confirmation or Demonstration of the electron's behavior as particles. The metal cross plate as a positive pole is assembled as movable plate like a tip-up one inside. And the inner surface of tube end at the back side of the metal cross plate is coated with fluorescence agent. When the emitted electron from the negative pole reaches at its inner surface of tube, the fluorescence agent on it becomes green luminous. When the part of emitted electron is trapped by the metal stands and the rest of emitted electron reaches the end of tube, a shadow of cross is projected onto the end of tube. Therefore the electron has particles behavior.

Contents

- Easy Operation;
  - Built-in Power Supllies
  - Used either by 4（AA）batteries or AC-DC adaptor
- Safe Operation;
  - No induction coils needed
  - Better shielding effect with the cover
    --> Radiation intensity drastically reduced compared to the conventional Narika products



Specifications

■ The operating voltage of tube does not require high voltage by an induction coil, it is just less than 5,000V by 4 batteries（AA）or AC Adaptor DC6V.

[Operating Voltage] Less than 5,000V
[Power] AC adaptor or 4 Alkari Batteries（AA）
[Size] 260 x 160 x 215mm
[Weight] 1.3kg