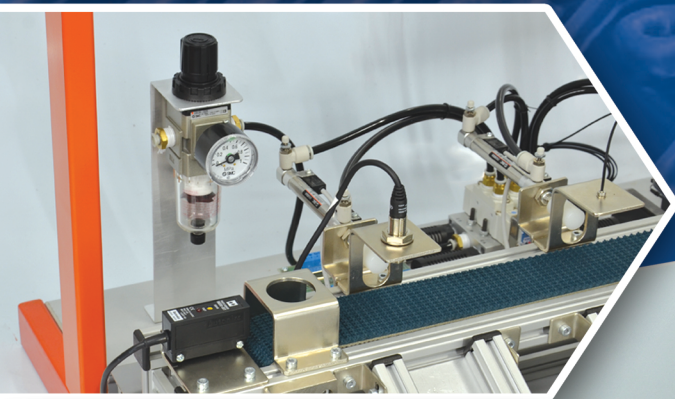


Training Panel System

*The System that
Creates the Future
Skilled Engineers*

INCLUDE NEW PRODUCTS 2015





Head Office Puduk Scientific, Jalan Puduk No. 4 Bandung



The Company

Pudak is a name of typical Javanese flower known for pleasant odor and one of many special flowers of Indonesia.

Pudak Scientific was founded in 1978 in Bandung. Bandung is a city with conducive environments which are premises for various industries, numerous schools, prominent universities and research institutes and in return provides qualified human resources for up to date development.

From the beginning Pudak Scientific directed itself as a partner in educational equipment which develops, manufactures and distributes various educational products and systems for general schools, vocational and training schools, higher education institution and universities.

In our 5 hectares plant area and approx. 30.000 m² buildings for administration, manufacturing, warehouse facility and R&D department, our 400 highly qualified staffs and experts combined with modern manufacturing process and management produce high quality products and services with competitive price.



CNC Machining



Plastic Production



TPS Modules Assembling



Storage & Distribution



Sales & Marketing



Vocational Workshop

Training Panel System

The System that Creates the Future Skilled Engineers

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Training Panel System

The World needs knowledgeable and skilled Engineers

In this decade, electrical, electronics and control devices have permeated all aspects of human life all over the world and by fact there is great demand and need for skilled and competent engineers to answer the challenge.

To acquire such diversity of knowledge and skills, we need training and learning processes which are :

- Understandable
- Well designed and systematic
- Correct learning hierarchy



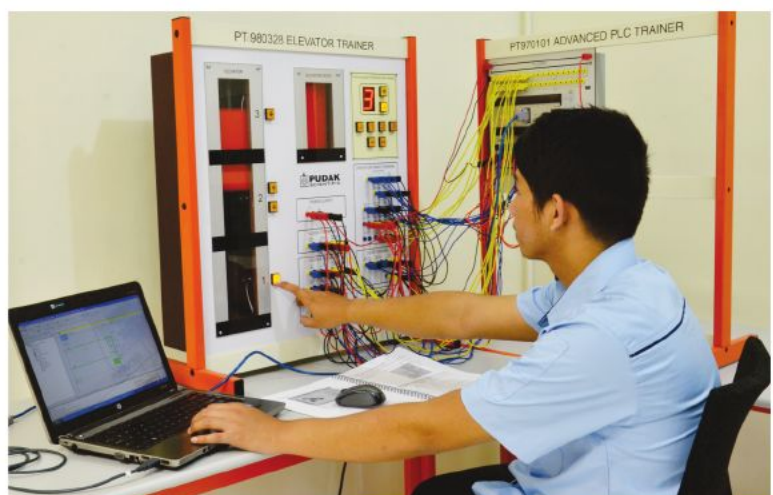
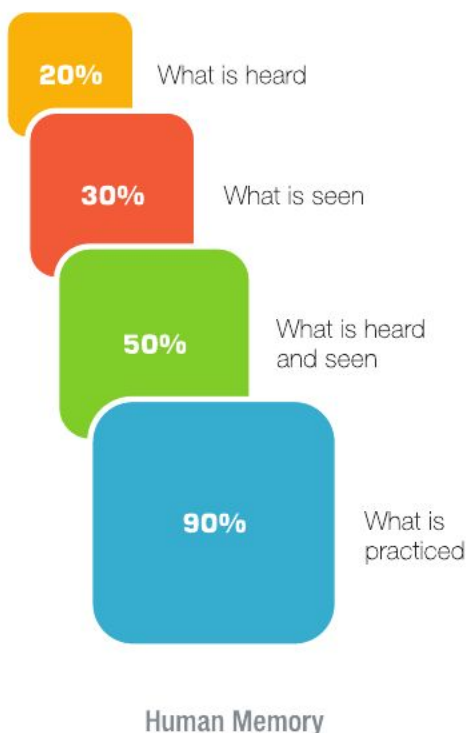
Training Panel System in Lab. Setting

Put more hands-on experience in your education system

Knowledge, especially skills cannot be acquired by only reading books or simply listening to verbal explanation. It is always easier for students to learn something actual rather than in the form of words and abstract ideas. And this is where educational and training equipment plays big role in the efforts towards effective training.

To achieve basic and advanced training goals in various fields, Pudak Scientific has been developing the Training Panel System (TPS) for years, which are comprehensively designed according to technical principles and in order to match the didactical and methodical requirements.

TPS provides direct and active approach in learning by doing. Creating an easy teaching demonstration setup or experiments conducted by trainee or student in systematical way to learn and discover basic to complex concept, theoretical and functional principles of technology and other skills.



Experiment with Elevator Trainer



Mounting the Module

Pudak Training Panel System (TPS)

Comprises mostly in panel type, different experimental systems are designed according to their applications and subjects of matters. Topics are based on reality and the use of original industrial components to ensure the closeness to reality and highly practical training results.

From simple up to complex experiments can be done simply by placing the TPS modules in the aluminum frames and connected with connecting leads and bridging plugs or plug-in elements. The whole system can be broken down into several basic modules, allowing students to understand details of the sub systems. Displayed and secured on the frames in vertical position, enables experiments and demonstration visible from every angle in laboratories or classes.

Why We Need TPS

Clear & Brief

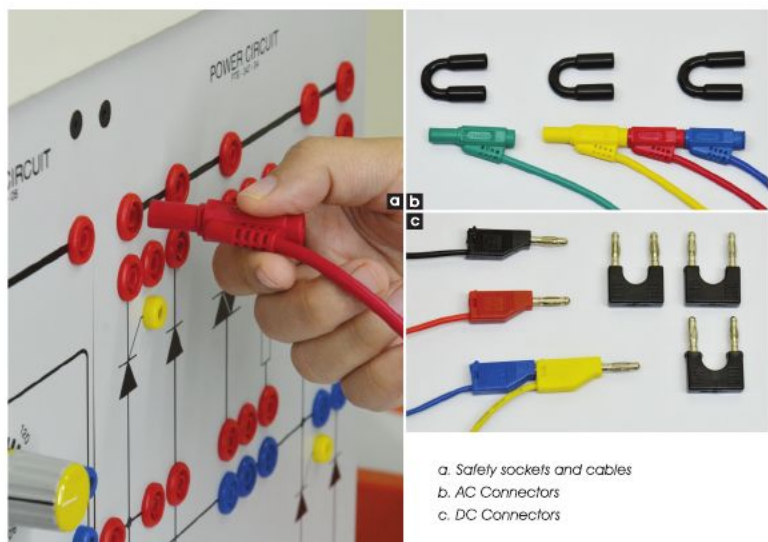
The light grey panels provide a neutral background for circuit, schematic and block diagrams which describes the module function, thus making it easier to recognize the functions and operations of even the most complex circuits and experiments. Printed with black color epoxy-base printing process. The modules are also equipped with brief indicators such as LED or Lamp that indicate the status of the module. Some are even complete with fault simulation system to train troubleshooting skills.



Modules with clear printed symbols

Safety Features

We take good considerations of safety to ensure safe handling and experiment. We use standard 4 mm socket with 19 mm interval connector for low voltage connection and the use of safe-type connecting leads and connectors for high voltage connection. Each high voltage (AC) supply system is complete with ELCB fuse and each module of the trainer is fused protected.



a. Safety sockets and cables
b. AC Connectors
c. DC Connectors

Training Panel System

Material & Construction

TPS has been carefully designed and developed using high quality materials and components to achieve high quality equipments with robust construction.

The panel itself is made of 5 mm double-side coated phenolic resin, with excellent electrical insulation and definite shape stability, standard width sizes of 114 mm and 228mm and height of 297 mm.

Special enclosure is designed to securely mount the panel, printed circuit boards, components and back covers without any fastening screw in front of the panels to ensure safety and clearness. Incidental repair and fuse replacement are easily carried out by removing the back cover fasteners.

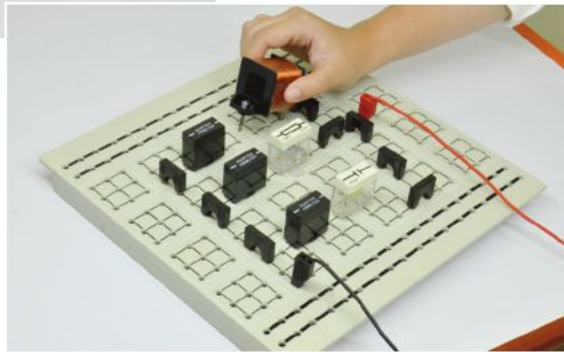
The frames construction is knock down system. The rails are made of special extruded aluminum profile with brush strips to insure the panels to be securely seated in the frames. Stands and feet are made of rectangular steel pipe with 2mm wall thickness to ensure rigidity, finished with powder coated in orange color.



Extruded aluminium
Frame & Stands



Plug-in Elements



Plug-in Board assembly

The component of plug-in elements adopting 4 mm socket and 19 mm interval is housed in transparent, impact resistant polycarbonate plastic and circuit symbol is printed on the top plastic cover.

Double layer epoxy glass Printed Circuit Boards are used generally for the circuits to maintain the small size and quality.

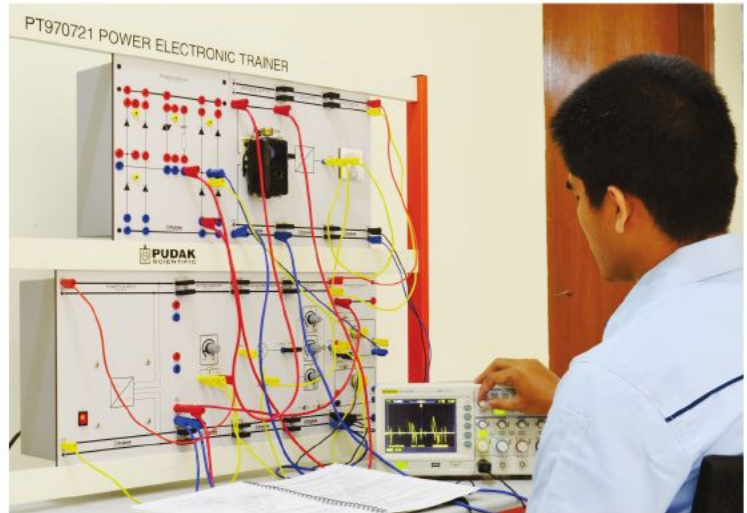
All critical parts, components and modules are carefully tested for functionality, durability and compliance with our quality standards.



Modules assembly

Continuous Development

The fact that education is an everlasting activity, our R&D department is intensively working to develop and improve the equipment, software and brainware. We also collaborate with famous universities and teachers in upgrading the equipments. New technology and techniques are immediately implemented in the development of new training panels.



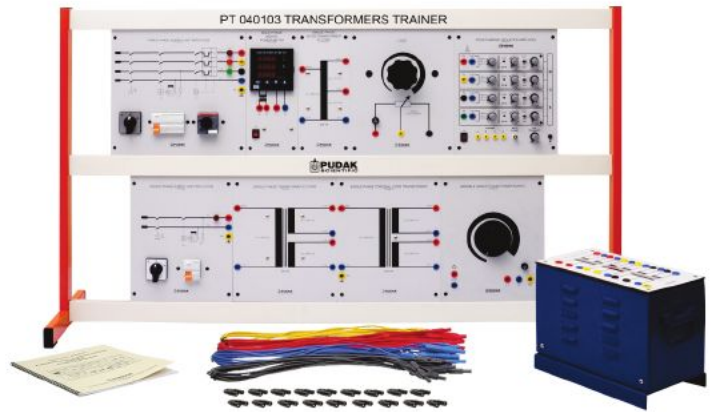
Experiment with Power Electronic Trainer



Experiment with Microcontroller Trainer



PT 030100 Electro Pneumatic Trainer



PT 040103 Transformer Trainer

Training Panel System

Competitive & Cost Effective

The highly in-house manufacturing process of components and products in our well managed factory, combined with cost effective manufacturing process ensure the consistence of high quality products and cut our production cost, which in return provide competitive price advantages for the customer.

Our factory is equipped with CNC machining, plastics injection, sheet metal working and processing, and assembly line.



Experiment Manual Books

Carefully compiled manuals are one of the fundamentals for the optimal use of TPS. The manuals are prepared in step by step instructions to guide the student in conducting the experiment, and help the student to develop his/her understanding of the topic. The manuals help to reduce preparation time in conducting experiments and ensure successful and effective results.

Services

All of our TPS components and products are covered by 1 full year product guarantee and 5 years availability of the service. Repairs are carried out in the factory or on-site with guided self repairing.

Regarding vast requirements of the customers, we strive to provide customer fulfilment with the following services:

1. In house training or on-site training courses of using of the TPS.
2. Technical support of TPS.
3. Product requirement consultation and project procurement.
4. Special courses of technical teacher and instructors.

Upon request, we provide training course in our tutorial facility or in customer's premises.