

MODULE
TPS-3712

POPULAR ELECTRONICS & TECHNOLOGY TRAINING SYSTEM



Objectives

This course introduces the student to analog and digital electronic systems, based on a problem-solving approach: Switches and sensors, Driver and loads, Gate applications, Timers & Counters, System control, Power regulation, Amplifiers, Measurements in electronic systems, Challenging exercises.

Description

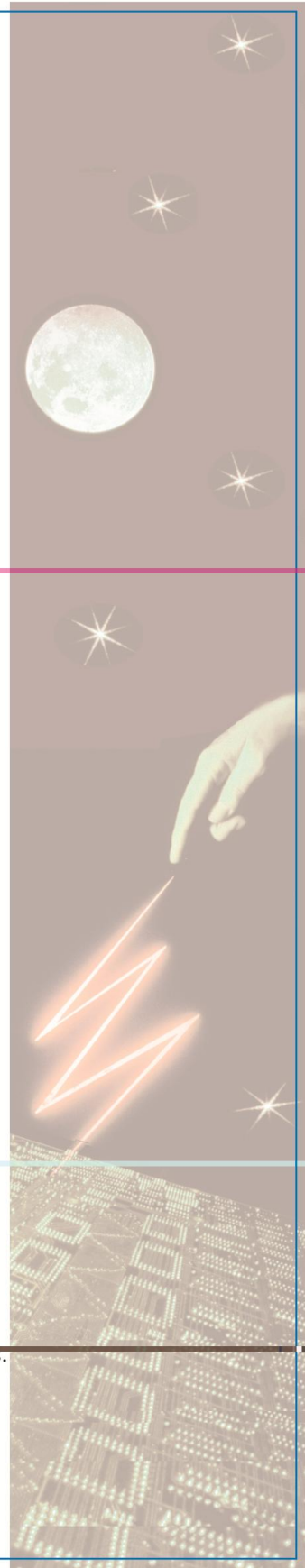
The system is stand-alone, containing all the necessary electronics components needed for performing the experiments.

The course is built for self-studying and experimenting, while the theory is integrated into the experiments in a very unique way.

The course is divided into 5-6 two-hour sessions.

No previous scientific or technological knowledge is required, and the system is eminently suitable for students from junior high school level and upwards.

ScienTech 3000
Science and Technology



M O D U L E

TSP-3712

Popular Electronics & Technology
Training System

Technical characters

The trainer is in a metal case with a wide experiment platform printed circuit board (22X36 cm), which ensures easy handling and good visibility of the components.

The components are located on the board with silk screen print of the analytical circuit and component symbols. The central part of the experimenting board includes all the circuit block drawings and the all the hands on components, test points and banana sockets.

The protected components are located on the top side of the board panel, clearly visible to the student and covered by a sturdy transparent protecting cover.

The system includes a built in power supply with +12V, +5V and variable DC voltage outlets. An included low voltage external AC power adapter feeds the system.

- Sensors: touch, wet, light, magnetic, temperature.
- Loads: Lamp, motor, electromagnet, buzzer, relay
- Gates: AND, OR, NOT, NAND, NOR.
- Latch, counter, timer, pulse generator
- Driver, amplifier, potentiometer.
- SES Lab unit with two-channel scope and function generator, which communicates with a PC for controlling the function generator and displaying the scope's signals including spectrum analysis.

Experiments

This system enables the student to perform several experiments based on a problem-solving approach and covers the following topics:

- Switches and sensors
- Driver and consumers
- Gate applications
- Timers & Counters
- System control
- Power regulation
- Amplifiers
- Measurements in electronic systems
- Challenge exercises

A student experiment manual accompanies the system.

ScienTech 3000
Science and Technology



Scientific Educational Systems