#### **Trainer Series**

#### Electronic Trainers

### PB-501 Logic Design Trainer

Use the PB-501 to construct a wide variety of experiments, including but not limited to:

Logic Gates & Boolean
Algebra
Combinational Logic
Circuits
Flip-Flops
Counters & Register
Circuits
Integrated Logic Circuits
TTL Logic
MOSFETS
CMOS
Interfacing CMOS & TTL
Medium Scale Integration
Decoders

**Encoders** 

Acquisition

Data Conversion &



#### Features:

- Ideal for digital logic circuit design and experimentation
- Compact design for easy storage
- Includes built-in Clock, Pulsers and Logic Switches
- Premium breadboarding area with 8 power rails
- 3-year warranty on all parts and workmanship.

The PB-501 Logic Design Trainer is a low cost portable trainer, which is capable of satisfying many requirements arising in the design and study of digital logic circuitry. The PB-501 can be powered-up via batteries, optional wall-mount power adapter, or by an external 5V power supply. The PB-501 can be utilized for the design and study of gates, counters, multiplexers and can even interface directly to a microprocessor. The PB-501 is housed in a tough molded plastic carrying case with an integral hinged cover which stacks conveniently for storage. Utilizing the PB-501, students will learn valuable hands-on breadboarding techniques and build a solid foundation in digital logic circuit experimentation, construction and analysis.

Global Specialties trainers provide the most complete platform required to enable engineers and technicians to train for careers in the rapidly growing field of electronics technology.





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# Logic Design Trainer

# **Specifications**

Model	PB-501
Input power Source	Battery - 4 "C" type 6VDC Adapter - Optional External Supplied 5V- Optional
Clock	Frequency - Fixed at 1Khz +/-50% Logic "1" output current 1.2mA @ 3.5V Logic "0" output current 1.2 mA @0.25V User variable with use of external capacitor
Pulsers	Fully debounced pushbuttons (2 each) with logic true and complementary outputs Logic '1" output current 400 µA @ 2.4V min Logic "0" output current 16mA max @ 0.4V max
Logic Switches	Dual Function: 8 switches buffered by two 4-bit tri-state buffers with separate enables Logic "1" output current 2.6mA max @2.4V min Logic "0" output current 24mA max @ 0.5V max Enables: Logic "1" input current 400µA @ 5V Logic "0" input current 20µ @ 0.2V
Logic Indictors	Dual Function: 8 LEDs driven by two 4-bit latches with separate enables Logic "1" input current 50µA @ 5V Logic "0" Input current not required
Breadboards	840 tie points with (8) 25 pin power rails and accommodates up to 8 (14 pin) ICs
Weight	1 lb, 6oz (Minus Batteries & Adapter) (0.5 kg)
Dimensions	10 x 7.5 x 2.6" (254 x 190 x 66 mm)

Technical data subject to change without notice.

#### **Optional Accessories**

PB-501 Adapter: 6V Wall Adapter WK-1: Jumper Wire Kit, 350 pieces WK-2: Jumper Wire Kit, 140 pieces WK-3: Jumper Wire Kit, 70 pieces WK-4: Wire Jumper Kit, 100 wires with

machined tips

**GSPA Series:** Prototyping Adapters **GSPA-K1:** Surface mount to DIP Adapter Kit, 6 adapter boards

**GSPA-K2**: Surface mount to DIP Adapter Kit, 11 adapter boards

GSA-3185: Minipro Test Clip Set



**Innovative Training Solutions**