

# PB-507

## Advanced Analog & Digital Electronic Design Workstation



The PB-507 contains the following modules:

DC Power Supply\*

AC Power Supply

Function Generator\*

Pulse Generator\*

Frequency Counter\*

Logic Indicators

Logic Probe

Hex to 7 Segments Decoder

Debounced Pushbuttons

Logic switches

SPDT switches

BNC connectors

Potentiometers

Speaker

\*Active module that functions with LCD

### Features:

- LCD displays the settings from each active module
- USB connection enables viewing and controlling from a PC
- Choose your power source: 6.3/12.6 V AC power, 5 V DC or variable  $\pm 20$  V DC
- Draw power from banana plug connections or the tie-point power supplies above each breadboard bus strip
- Powerful 1 MHz bandwidth Function Generator with sine, triangle, and square wave outputs
- Pulse Generator operates like a second, independent Function Generator where you can modify the duty cycle between 10 to 90%
- Frequency Counter module reports on the output of your own specially designed circuits
- Flush-mounted, removable circuit breadboard with over 4,100 contact points

### Overview:

The PB-507 Advanced Analog & Digital Electronic Design Workstation, is a powerful, versatile tool for circuit designers, engineers, technicians, students, and hobbyists. All digital controls, USB port, and a wide choice of built-in circuit accessories allow rapid and accurate construction of virtually any type of analog or digital circuit.

New on the PB-507 is an LCD that displays the settings for the active module selected. Simply touch a control element and the LCD switches to that module and displays its settings. Use the USB connection on the PB-507 to control or view the module's values from a PC. Using this feature you can project the controls to a large viewing screen for a classroom to observe and follow.

The breadboard area is the largest in our trainer family and is removable for easy replacement.

The PB-507 is designed to withstand the toughest treatment. It is constructed with the highest quality components for many years of reliable service. The all-digital circuitry allows for easy function verification and calibration.

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1-800-517-8431

99 Washington Street  
Melrose, MA 02176  
Phone 781-665-1400  
Toll Free 1-800-517-8431

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## Included Accessories:

PC Software

Manual

Power Cord

USB Cable

Calibration Adaptors

## Specifications:

<b>Power</b>	3-wire AC Input with 110 V/220 V Selector Switch
<b>Power Supplies</b>	Fixed 5 VDC @1 A Variable DC - Positive: 0 V to +20 V @0.5 A Variable DC - Negative: 0 V to -20 V @0.5 A Fixed AC - 12.6 V Center-tapped @ 100 mA
<b>Computer Interface</b>	USB 2.0
<b>Function Generator</b>	0.1 Hz to 1 MHz selectable in 7 ranges Output Voltage: 0 to + 10 V (20 Vp-p) Output Impedance: 600 $\Omega$ Output Waveforms: Sine, Square, Triangle, TTL
<b>Pulse Generator</b>	Frequency Range: 0.1 Hz to 1 MHz in 7 ranges Output Output Mode: TTL or CMOS (switch selectable) Output Voltage: 0 to 15 Vp-p Duty cycle range: 10 to 90%
<b>Frequency Counter</b>	Frequency Range 0.1 Hz – 1 MHz
<b>LCD Display</b>	LCD Display: Reads Volts, Amps & Frequency
<b>7 Segment Display</b>	(2) BCD to 7 Segment Display Circuits
<b>Logic Indicators</b>	8 Bicolor LEDs: Red (High) and Green (low)
<b>Logic Probe</b>	TTL/CMOS compatible Logic Probe
<b>Logic Switches</b>	(8) Individual Logic Switches
<b>Speaker</b>	0.25 W, 8 $\Omega$
<b>Debounced Pushbuttons</b>	(2) Open Collector Output Pulsers
<b>Switches</b>	(2) Single Pull Double Throw (SPDT)
<b>BNC Connector</b>	(2) BNC Connectors
<b>Potentiometers</b>	1K & 10K Uncommitted
<b>Breadboard</b>	4150 tie points, removable
<b>Voltage Distribution Bus</b>	Tied directly to Power Supply Outputs
<b>Dimensions</b>	5.5" x 16.5" x 12.75" (H x W x D)
<b>Weight</b>	14.5 lbs
<b>Warranty</b>	Limited three-year warranty

Specifications subject to change without notice. Go to [globalspecialties.com](http://globalspecialties.com) for the latest update.

## Optional Accessories

**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 adaptors

**GSPA-K1:** Surface mount to DIP adaptor kit, 6 adapter boards

**GSPA-K2:** Surface mount to DIP adaptor kit, 11 adaptor boards

**GSA-3185:** Minipro Test Clip Set



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