

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

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.

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 ± 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

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.

Included Accessories:

PC Software

Manual

Power Cord

USB Cable

Calibration Adaptors

| Specifications: | |
|---------------------------------|--|
| Power | 3-wire AC Input with 110 V/220 V Selector Switch |
| Power Supplies | 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 |
| Computer Interface | USB 2.0 |
| Function Generator | 0.1 Hz to 1 MHz selectable in 7 ranges Output Voltage: 0 to + 10 V (20 Vp-p) Output Impedance: 600 Ω Output Waveforms: Sine, Square, Triangle, TTL |
| Pulse Generator | 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% |
| Frequency Counter | Frequency Range 0.1 Hz – 1 MHz |
| LCD Display | LCD Display: Reads Volts, Amps & Frequency |
| 7 Segment Display | (2) BCD to 7 Segment Display Circuits |
| Logic Indicators | 8 Bicolor LEDs: Red (High) and Green (low) |
| Logic Probe | TTL/CMOS compatible Logic Probe |
| Logic Switches | (8) Individual Logic Switches |
| Speaker | 0.25 W, 8 Ω |
| Debounced Pushbuttons | (2) Open Collector Output Pulsers |
| Switches | (2) Single Pull Double Throw (SPDT) |
| BNC Connector | (2) BNC Connectors |
| Potentiometers | 1K & 10K Uncommitted |
| Breadboard | 4150 tie points, removable |
| Voltage Distribution Bus | Tied directly to Power Supply Outputs |
| Dimensions | 5.5" x 16.5" x 12.75" (H x W x D) |
| Weight | 14.5 lbs |
| Warranty | Limited two-year warranty |

Specifications subject to change without notice. Go to 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



WARRANTY



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