

SS39L BREADBOARD

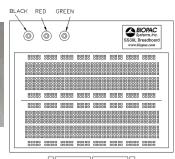
The Bioengineering Breadboard Lab consists of circuitry hardware and eight projects (with schematics and design notes) that demonstrate a very important subset of circuit design for recording and processing physiological signals. Students will use the MP36/35/45 and BSL *PRO* software to evaluate their designs. See Lessons H25, H26.

Project Book includes schematics for:

- Lab 1: Square Wave Oscillator
- Lab 2: Instrumentation Amplifier
- Lab 3: High Pass Active Filter
- Lab 4: Active Gain Block and Low Pass Filter
- Lab 5: Notch Filter for 50/60 Hz Rejection
- Lab 6: QRS Detection: Band Pass Filter
- Lab 7: QRS Detection: Absolute Value Circuit
- Lab 8: QRS Detection: Low Pass Filter and Overall System Test

Circuitry Hardware

- Breadboard
- Signal/Power Cable:
 - o 3 x Power Plugs: Green -5 V, Black GND, Red +5 V
 - o 2 x Signal Wires: White-Signal, Black-GND
 - o Built-in automatically resettable fuse
- Signal Cable: 2 x Signal Wires: Red–Signal, Black–GND
- Electrode Lead Interface: enables use of SS2L Lead Assembly
- Accessory Kit: capacitors, diodes, resistors, jumper wires, and other circuitbuilding components





ACCESSORY OPTIONS

BSL-BMEACC BREADBOARD ACCESSORY KIT

Use to add work stations for the SS39LB Breadboard. Students can build a lab and rotate the power and signal cables from the SS39LB to connect to the Biopac Student Lab software and test the design.

Includes: breadboard, capacitors, diode, ic, ic quad OP-AMP, jumper wire kit, and resistors.

SS60LB SIGNAL CABLE FOR SS39LB BREADBOARD



Use this signal cable to add signal inputs to the SS39LB Signal Processing Breadboard, which ships with one combination power/signal cable.

BSL-TCI22 ELECTRODE LEAD INTERFACE



The electrode interface connects the SS2L Shielded Lead Assembly to the SS39LB Breadboard for circuit configurations that require electrodes. One BSL-TC122 is shipped with the SS39LB; SS2L not included.

NOTE: SS39L previously included cable SS39LA and SS60LA; current customers can use those older cables to run lesson set H25-H26 but upgrading cables to SS39LB and SS60LB is strongly recommended to run lesson set H40 EMG-Controlled Robotic Arm or future BME breadboard lessons.

