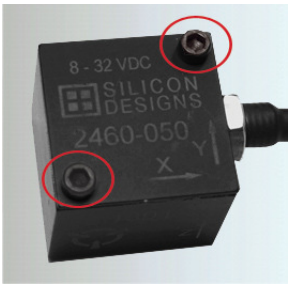
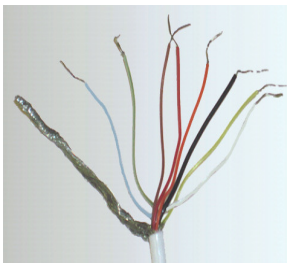
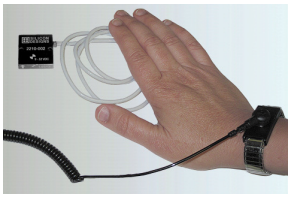
Accelerometer Quick Start Guide

Silicon Designs, Inc.





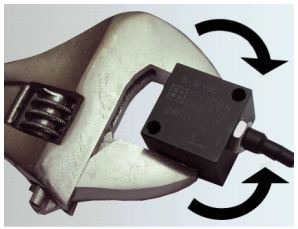
1. **IMPORTANT:** Before removing unit from antistatic bag, attach a ground strap to protect your accelerometer. Antistatic handling precautions are **HIGHLY** recommended. The accelerometer will arrive in an ESD bag – we suggest keeping this bag for reference and future use.
2. Attach your module to its intended location. The surface must be very flat and free of debris. Your options include:
   a. Glue and epoxy
   b. Attach directly to the surface with screws and bolts
   c. Attaching it to a block or stud-type mount with screws or bolts
      - ! *Make sure not to over-torque when using screws or bolts.*
      - ! *It is best to follow the recommendations of the manufacturer of the fastener for the proper bolt torque specification.*
      - ! *If they do not have a recommendation then use the specifications in the Torque section here.*
3. Connect the accelerometer's wiring. This must be done with care.
   a. Step 1: Make certain all equipment is turned off.
   b. Step 2: Connect the signal wires
      i. Differential mode - Use the positive & negative output wires
      ii. Single ended mode - Use the positive output wires ONLY & cut off all negative output wires
   c. Step 3: Connect power & ground wires
      i. Be absolutely certain that your power supply is correct for your accelerometer to avoid damage.
      ii. Connect the power (red)
      iii. Connect ground (black)



4. Set the data acquisition system to the appropriate range (+/- 4 volts in differential mode, or .5 to +4.5 in single ended mode).

To Remove an Accelerometer

1. **IMPORTANT:** Before removing unit from antistatic bag, attach a ground strap to protect your accelerometer. Antistatic handling precautions are **HIGHLY** recommended.
2. Turn off power and wait a few seconds for power to discharge.
3. Disconnect all wiring.
4. Dismount module using care not to damage or contort the housing.
   a. If removing from a glued location, **do not pry off.** Twist off with a crescent wrench.
5. Store individually in an ESD bag, such as the accelerometer's original packaging.



Torque Guide

Use the following dry torque values for non-plated screws.

* Screw size #4-40 coarse thread / 4.9 in-lbs = 78 in-oz
* Screw size #4-40 coarse thread / 10 in-lbs = 160 in-oz
* Screw size 3 mm coarse thread / 6.2 cm-kg = 86 in-oz
* Screw size 3 mm coarse thread / 112.7 cm-kg = 176 in-oz
* Screw size 1/4-20 (for 2230 mounting block) / 6 ft-lbs
* Screw size M6x1 (for 2230 mounting block) / 100 kpsi

Tips:

* For fine thread, increase these values by 9%
* For plated screws decrease torque to 66% of these values
* If lubricating oil is used, decrease torque to 40% of these values

Accelerometer Power Requirements

+5 Volts DC ONLY	+8 to +32 Volts DC	+9 to +32 Volts DC
2010, 2012, 2422	2260, 2270, 2460, 2470	2210, 2220, 2240