

Switch Machine Interface: Edge Connector Size

It is well known that Tortoise™ switch machines do not have an industry standard card edge connection. While the terminal-to-terminal spacing matches the standard 0.156" (3.96 mm) spacing, the overall width of its board is less than the standard.

Tortoise™ width: 1.30" (33 mm)
Standard edge connector width: 1.42" (35.8 mm)

From this, a Tortoise™ is 0.12" narrower than a standard connector.

To ensure the contact terminals line up properly, the SMI has a pair of 0.06" styrene spacers installed to the edge connector, with one on each end of the slot, as shown in **Figure 1** below.

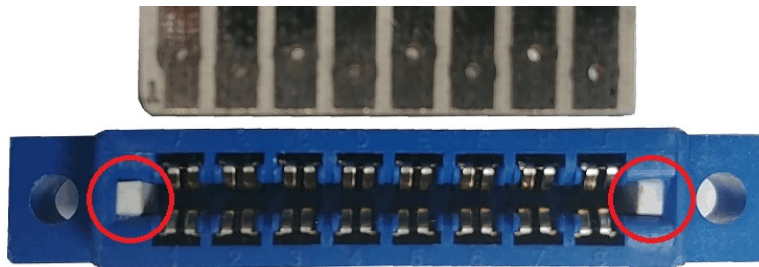


Figure 1: Spacers on edge connector

New Tortoise™ Switch Machines

Circuitron has announced on their website that they have recently changed the circuit board on their Tortoise™ switch machines. One of the changes involves making the connection flange wider, matching the industry standard.

The new models have a circuit board made of FR-4 epoxy laminate and are green on both sides. This makes them easily to identify compared to the legacy models.

If using the SMI with the new Tortoise™ switch machines, it will be necessary to remove the two spacers. They are held in place by a tiny amount of cyanoacrylate adhesive (super glue) and this bond is usually easy to break by prying the spacer away from the edge of the connector with a tiny screw driver or knife blade.

If ordering the SMI, either as a ready-to-use product or kit, you can email us ahead of time if you would like some or all of your order to have edge connectors **without** the spacers.