
# PCB Workstation with Nano-Probes

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VIEW IN BROWSER

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## Summary

PCB Workstation with Nano Probes to work with electronic boards equipped with small components.

Hobby & Makers > Electronics

Tags: articulated electronics pcb needle workstation thingiverse pcbholder arms pcbvise printedcircuitboard testprobes pcbworkstation cranes testclip

The PCB Workstation with Nano Probes is the best solution to work with electronic boards equipped with SMD components that are very small and hard to access for many of the most used laboratory test probes.

**UPDATED: Now you can buy the much improved 2024 V2 kits at ingegnotech.com**

PCB Workstation reviewed on **SuperHouseTV YouTube channel**

As an exclusive feature, this tool uses acupuncture needles as test probes. Thanks to their excellent physical and mechanical properties, these thin needles allow the best electrical connection between tiny SMD electronic components and electronic laboratory instruments, such as oscilloscopes, logic states analyzers, ICs programmers and memory chip readers.

This tool also introduces a new base frame, having 8 slots for the PCB holders. In this way, the base allows accommodating PCBs even of irregular shape without problems. Moreover, it is more rigid and more stable allowing to work in the best conditions.

In addition to the double-sided PCB Holders, the new Flat PCB Holders are now also available, allowing an even larger electronic device to be held firmly in place on the base frame. The flat face must be covered with an adhesive soft rubber pad. The assembly of the PCB holders to the base requires wing nuts (5mm) and hex bolts (5×12mm).

The articulated crane arms have been completely redesigned. The base element has now a reinforced pivot through a screw to be screwed into the internal hole (use a self-tapping flat countersunk head screw 2.6x10mm). Moreover, the base element is provided with a handle to easily rotate the crane arm around its vertical axis. The vertical element has a lower height, thus allowing to put the whole PCB Workstation under a microscope to magnify the PCB working area. The horizontal element is provided with a special flexible holder for acupuncture needles that can be easily removed and replaced; moreover, it is provided with 4 cable holders instead of 2 to better accommodate the wire soldered to the needle. The assembly of the crane arms requires M4 wing nuts (4mm), hex bolts (4×10 mm) and flat washers.

**Notes:**

The "Needle Holders" need to be printed exactly as they are oriented in the original STL file, using a 0.3mm nozzle at a 0.14mm resolution.
The other parts can be printed with a standard 0.4mm nozzle at 0.19mm vertical resolution.

# Model files

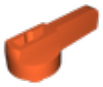
**needle_holder.stl**

**pcb_holder_large.stl**

**base_frame_18x18cm.stl**

**crane_horizontal.stl**

**pcb_holder_standard.stl**



**crane_base_with_handle.stl**

**crane_vertical.stl**



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