

# PCB Prototype Machine Nvis 72A







If you are an impatient circuit designer who wants to replicate software design on the PCB with high precision and accuracy, and also without investing much of your valuable time and efforts, we have an exciting solution for you.

Nvis 72A PCB Prototype Machine provides several features which can make your life easier. With this new electro mechanical utility, you can escape the cumbersome task of traditional PCB designing which involves time taking etching and drilling processes. Get rid of dealing with chemicals that often spoil your hands and are harmful for you and the environment. Provided with USB connectivity, Nvis 72A can print your desired circuit on the PCB within minutes. Accompanied design software provides a simple and elegant interface that is user-friendly, and can even be operated by novice Engineers and Students.

#### **Features**

- Automatic surface inspection and auto level.
- Silent motions and low noise.
- Light for work area.
- · Micro drilling & milling.
- Pause/Resume option.
- High-speed motors.
- Design two-layer PCB.
- Emergency stop and play.
- PC based software with interactive GUI.

- PCB viewer.
- Software support extended Gerber files from all CAD softwares.
- Rugged and fully protected.
- Simple and easy to operate.
- Step by step execution.
- Chemical-free operation.
- USB interface.
- Energy efficient.

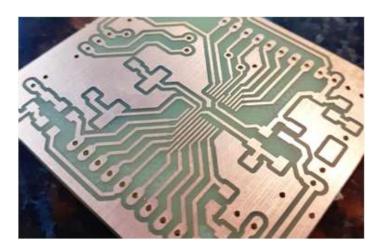


# PCB Prototype Machine

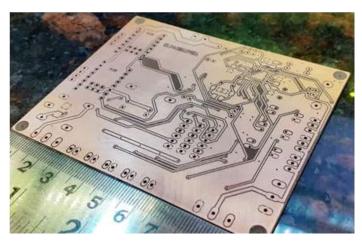
Nvis 72A

With the new surface inspection and silent mode feature Nvis 72A offers a more robust solution from education to industries with proper safety features.

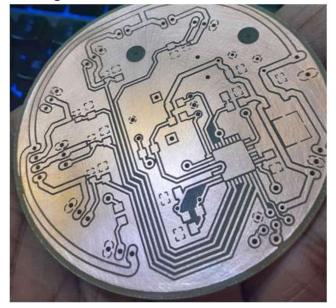
By probing the PCB in multiple places Nvis 72A can automatically compensate for the slight variations or unevenness on the surface of PCB resulting perfect PCB traces.



With the advanced stepper motor driver, Nvis 72A is faster and silent hence dampens vibrations. With surface inspection feature, it is quite easy and faster to make large form factor PCBs with great quality and fine details.



With the new motion planning algorithm, it is now possible to make different shapes in PCB's hence it is most suitable for antenna designs and cutting.





Spindle motor

# **PCB Prototype Machine**

Nvis 72A

# **Technical Specifications**

Working area(X x Y x Z) : 230 x 200 x 15mm

Minimum drill hole size : 0.3 mm

Minimum cutting trace/space:0.2mm (8mil)X/Y resolution:0.006 mmSpindle speed (MAX. RPM):25000 rpm

**Depth sensing and adjustment** : Automatic, Software controlled

Tool change:ManualTool holder:1/8 inchAuto level/surface inspection:available

Working bed : Cast Aluminum

Imports files : Gerber RS-247X files: Excellon Drill DXF and

G code files

**BLDC** motor

X/Y/Z driver : Stepping motor

 Dimensions (W x H x D)
 : (432 x 320 x 455) mm

 Weight
 : 28kg (approximately)

 Power consumption
 : 110/220VAC, 150W

Sound/dust enclosure : Integrated

Operating System : Windows 10 (32/64 bit)

# Nvis 72A PCB Prototype Machine is ideal to plot PCB for applications:

High power PCB

Analog PCB

Digital PCB

## **Package contains**

- Software CD-1 no.
  - Nvis 72A Software
  - USB Drivers
  - 40+ circuits and PCB examples (TINA)
  - Setup (Evaluation version)
  - PPT on how to use TINA software
- Brush-1 no.
- Allen key-2 nos.
- Adhesive tape-1 no.
- Copper clad boards (Single side 140 x 140mm)-10 nos.
- Copper clad boards (Double side 140 x 140mm)-4 nos.
- Nose plier-1 no.
- Power cord-1 no.
- Nvis 72A Power Supply-1 no.
- USB cable A to B (with filter)-1 no.
- Patch cord 8" (2mm)-1 no.

#### **Tool and Drill bits**

- -Router bit-2 nos.
- -Engrave bit (90°)-2 nos.
- -Engrave bit (0.5 mm)-2 nos.
- -Engrave bit (1.5 mm)-1 no.
- -Drill bits-16 nos.



# **PCB Prototype Machine**

# Nvis 72A

# **Optional Accessories**

- TINA Design Suit Single user
- TINA Design Suit Ten user
- Tinning liquid (125ml)
- Tinning liquid (500ml)
- PTH (Plated Through Hole) process
- Industrial Vacuum cleaner
- Copper clad boards (single side 140 x 140mm) pack of 10
- Copper clad boards (double side 140 x 140mm) pack of 10
- Standard tool and drill bit set (23bits):

### Tool bits:

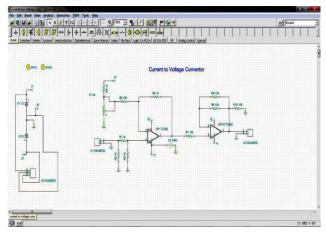
- Router bit 1.2mm -2nos.
- Engrave bit 0.2mm (90°) -2 nos.
- Engrave bit 0.5mm -2 nos
- Engrave bit 1.5mm -1 no.

### **Drill bits:**

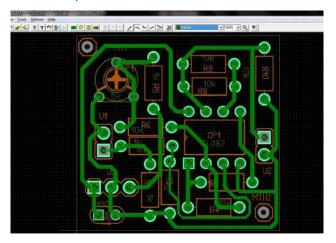
- 0.6mm Drill bit -2 nos.
- 0.7mm Drill bit -2 nos.
- 0.8mm Drill bit -2 nos.
- 0.9mm Drill bit -2 nos.
- 1.0mm Drill bit -2 nos.
- 1.1mm Drill bit -2 nos.
- 1.25mm Drill bit -2 nos.
- 3.00mm Drill bit -2 nos.

#### **Software Window**

#### **TINA Schematic**



#### **TINA PCB Layout**



## Nvis 72A Software

