



# PCB Prototype Machine

Nvis 72



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

## Features

- Versatile PCB prototyping
- Auto depth adjustment
- Position Selection facility
- Light for work area
- Micro drilling & milling
- Pause/Resume option
- Process Logging
- Design two layer PCB
- Emergency Stop and Play
- PC based Software with interactive GUI
- PCB Viewer
- Software support extended Gerber files from all CAD Software
- Rugged and fully protected
- Simple and Easy to operate
- Step by Step execution
- Chemical free operation
- USB Interface
- Energy efficient

## Technical Specifications

<b>Working area(X x Y x Z)</b>	: 230x200x15mm
<b>Minimum drill hole size</b>	: 0.3 mm
<b>Minimum cutting trace/space</b>	: 0.2mm (8mil)
<b>X/Y Resolution</b>	: 0.006 mm
<b>Spindle speed (MAX. RPM)</b>	: 25000 rpm
<b>Spindle Motor</b>	: BLDC Motor
<b>Depth sensing and adjustment</b>	: Automatic, Software controlled
<b>Tool change</b>	: Manual
<b>Tool holder</b>	: 1/8 inch
<b>Auto Bit protection</b>	: available
<b>X/Y/Z driver</b>	: Stepping Motor
<b>Dimensions (W x H x D)</b>	: (432x320x455) mm
<b>Weight</b>	: 28kg (approximately)
<b>Power consumption</b>	: 110/220VAC, 50W
<b>Sound/Dust Enclosure</b>	: Integrated
<b>Operating System</b>	: Windows XP/7/8/10 (32/64 bit)



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

- High power PCB
- Analog PCB
- Digital PCB

### Included Accessories

- Software CD -1 No.
  - Nvis 72 Software
  - USB Drivers
  - 40+ circuits and PCB examples (TINA and Eagle)
  - Eagle setup (Evaluation version)
  - PPT on how to use TINA and Eagle 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 pliers -1 No.
- Power cord -1 No.
- Nvis 72 Power Supply -1 No.
- USB cable A to B (with filter) -1 No.
- Patch cord 8" (2mm) -1 No.
- Tool Drill bits
  - Router Bits -2 Nos.
  - Engrave bits (90°) -2 Nos.
  - Engrave bits (45°) -1 No.
  - Engrave bits (0.5 mm) -2 Nos.
  - Engrave bits (1.5 mm) -1 No.
  - Drill bits -16 Nos.

### Optional Accessories

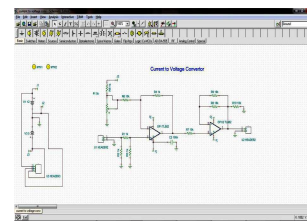
- TINA Design Suit Single user
- TINA Design Suit Ten user
- Tinning liquid (125ml)
- Tinning liquid (500ml)
- PTH (Plated Through Hole) process
- Industrial Vacuum cleaner
- Copper clad boards (single side 140 x 140mm) pack of 10
- Copper clad boards (double side 140 x 140mm) pack of 10
- Standard Tool and Drill bit set(20bits):
  - Tool bits:
    - Router bits 1.2mm -2nos.
    - Engrave bits 0.2mm (90°) -2 nos.
    - Engrave bits 0.15mm(60°) -2 nos.
    - Engrave bits 0.128 (45°) -1 No
    - Engrave bits 0.5mm -2 nos
    - Engrave bits 1.5mm -1 no.
  - Drill bits:
    - 0.6mm Drill bit -1 no.
    - 0.7mm Drill bit -2 nos.
    - 0.8mm Drill bit -2 nos.
    - 0.9mm Drill bit -1 no.
    - 1.0mm Drill bit -2 nos.
    - 1.1mm Drill bit -1 no.
    - 1.25mm Drill bit -1 no.
    - 3.00mm Drill bit -1 no.
- Tool set:
  - Milling bits 0.2mm (90°)
  - Milling bits 0.15mm (60°)
  - Engrave bits 0.128 (45°)
  - Engrave bits 0.5mm
  - Engrave bits 1.5mm
  - Router bits 1.2mm
- Drill bits:
  - 0.3mm, 0.4mm, 0.5mm, 0.6mm, 0.7mm, 0.8mm, 0.9mm, 1.0mm, 1.1mm, 1.25mm, 2.0mm, 3.00mm

### Nvis discovery series (Optional) Electronics

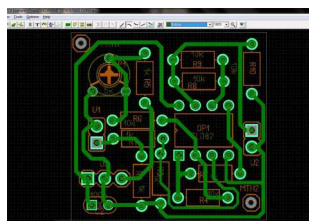
- Nvis 01D: Water Level Indicator
- Nvis 02D : Clap Switch
- Nvis 14D: Power Supply Failure Alarm
- Nvis 15D: Temperature Indicator
- Nvis 08D: Light Control System
- Nvis 20D: Fire Alarm
- Nvis 21D: LASER Switch
- Nvis 23D: Simple Electronics Bell
- Nvis 25D: Simple Musical Bel
- Nvis 03D: Flashing LED's
- Nvis 04D: Water Pump Controller cum Motor Timer
- Nvis 05D: Traffic Light Controller
- Nvis 06D: Audio Level Indicator
- Nvis 07D: Binary to Decimal Display
- Nvis 18D: Burglar Alarm
- Nvis 13D: BCD to 7-Segment Display
- Nvis 19D: Touch Bell
- Nvis 24D: IR Switch
- Nvis 26D: Infrared Remote Switch
- Nvis 27D: Binary to Dot Matrix Display
- Nvis 09D: Timer
- Nvis 10D: Temperature Indicator using Micro controller
- Nvis 11D: Stepper Motor Controller
- Nvis 12D: Stopwatch
- Nvis 17D: Magnetic Field Indicator
- Nvis 29D: RPM Meter with LCD
- Nvis 31D: Ultrasonic Distance Meter
- Nvis 31D: Frequency Meter with LCD
- Nvis 32D: Bidirectional Visitor Counter
- Nvis 33D: Code Lock System with LCD
- Nvis 35D: Arduino Fio Based Zigbee
- Nvis 36D: IR Counter with LCD

### Software Window

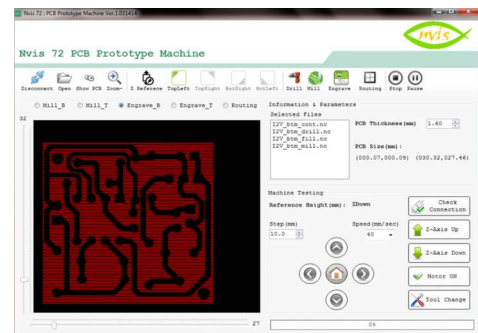
TINA Schematic



TINA PCB Layout



### Nvis 72 Software



Subject to Change

Designed and Manufactured in India by -

## Nvis Technologies Pvt. Ltd.

141-A, Electronic Complex, Pardesipura, Indore-452010, India.

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