

NeoDen4--- Desktop Pick and Place Machine with Vision System(with internal rails)

### **NeoDen4 Introduction**

NeoDen4 is a pick and place machine of components flexibility, PCB flexibility and production flexibility. It is equipped with dual CCD cameras, auto rails, auto electronic feeders and 4 placement heads, which could support to mount 0201, BGA, QFN. Especially, with its Internal rails, it is applicable for 0.8m/1.2m/1.5m LED strip.

NeoDen4 is the best choice to satisfy all demands of high precision, high capacity, stable performance and low cost. This is a huge breakthrough not only for NeoDen, but also for small and medium-sized enterprises, those who want to improve placement accuracy and speed up PCB assembly with a limited budget.

Check out video on YouTube: <https://www.youtube.com/watch?v=4P7DDSTXIQo>

### **Spotlights**

#### 1. Vision system

An up-looking camera and a down-looking camera identifies and calibrates the different components simultaneously, and tremendously improves the accuracy of placement from 0201 to BGA

#### **Dual-Vision system**

**Dual high speed industry cameras can recognize and align different component for four mounting heads.**

#### 2. Four precision heads

4 high-precision placement heads with  $\pm 180^\circ$  rotation that adopts suspended, fully symmetric and high degree of coupling way, to ensure it can mount components with higher space, more gentle and more accurate

#### 3. Auto Electronic Feeders

Adopts feeding error corrections technique to help smooth the picking and reduce the deviation

#### 4. Auto Rails Achieve Continuous Placement

1.5m auto rails could be connected with universal conveyors to achieve continuous placement

#### 5. General conveyor is supported

With a conveyor port, One-Stop SMT production line can be setup, which is more time-saving and labor-saving

#### 6. Supports remote system upgrade

NeoDen will provide a life-long technical service and system upgrade

#### 7. Industrial PC motherboard

32G solid state drives, read/write faster and more stable, with power-off protection function

**Specification**

Model	NeoDen4	
Machine style	Single gantry with 4 heads	
Alignment	Stage Vision	
Placement Rate	Vision on	5,000CPH
	Vision off	10,000CPH(Optimum)
Feeder Capacity	Tape feeder:48(all 8mm)	
	Vibration feeder:5	
	Tray feeder:5	
Component Range	Smallest Size	0201
	Largest Size	32x32mm (Lead Pitch 0.5mm)
	Max Height	5mm
Rotation	±180°	
Placement Accuracy	±0.02mm	
X-Y Repeatability	±0.02mm	
Board Dimension(mm)	Maximum	310 x 1500mm
		140 x1500mm(With 1 waffle Tray)
Main Control	GUI	
Electricity Supply	110V/220V	
Power	180W	
External Dimensions(mm)	Machine size	870(L)x680(W)x480(H)
	Packing size	940(L)x740(W)x600(H)
Weight	Net Weight	60kgs
	Gross weight	80kgs

**Standard accessories list**

- 1) Pick and Place Machine NeoDen4: 1
- 2)Nozzle:Totally10(XN07=3,XN14=3,XN40=2,XN22=2)
- 3) 8G Flash Drive: 1
- 4) Power Cord(5M): 1
- 5) Video training course: 1
- 6) Double Sided Adhesive Tape: 2
- 7)Allen wrench Set:5
- 8)Tool Box:1
- 9)Reel holder stand:1

10)Vibration Feeder:1

11)Rail Parts:4

12)User Manual:1

Warranty

The guarantee period is 2 years from the time of purchase and lifelong service support as well as a long-term factory price supply. NeoDen will provide online Q/A and troubleshooting support and technical advice service.

## Why choose us

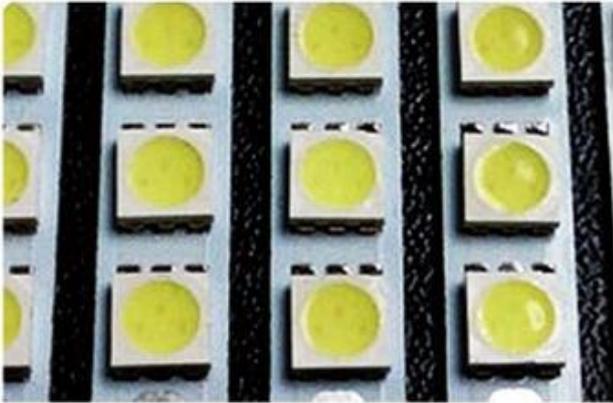
- 1.Light weight body,occupy small area
- 2.User friendly interface,no need professional SMT engineer,entry-level device
- 3.High integrated,no need extra pump or any supporting facility
- 4.High accuracy and reliability,make up the defection of manual work
- 5.Low cost,reduce expense to own a professional automatic SMT production line
- 6.International express with door to door service,3-5 working days delivery
- 7.Especial for laboratory research and development,samples,to avoid any patents and designs revealment

## Certificate

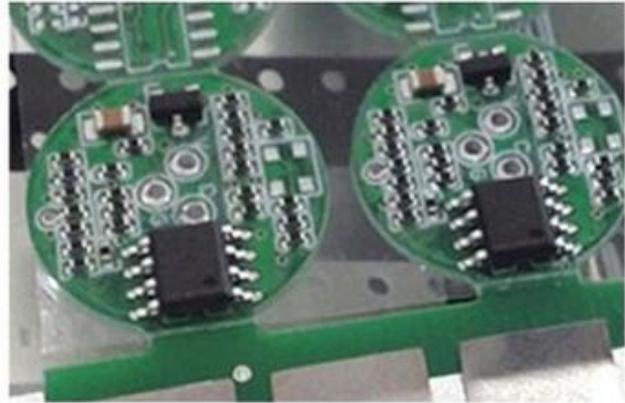


Established in 2010, NeoDen Technology Co.,Ltd., is a high-tech corporation located in Hangzhou, China. Our primary products are desktop automatic pick and place machines. In China, we are the leader in this technology with CE and more than 30 patents registered.

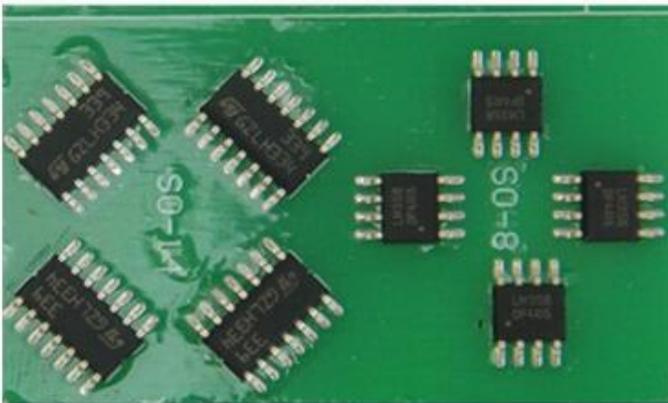
## Mounting effect



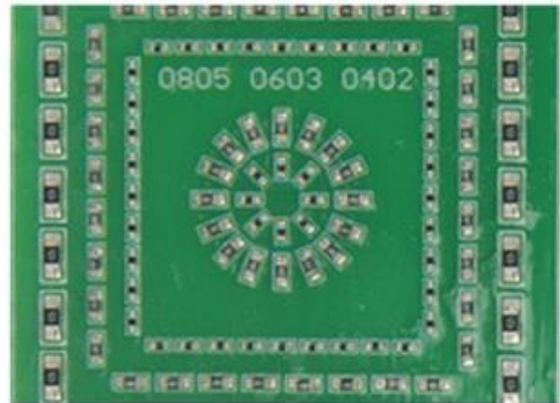
Kinds Of Led Lamps Mounting



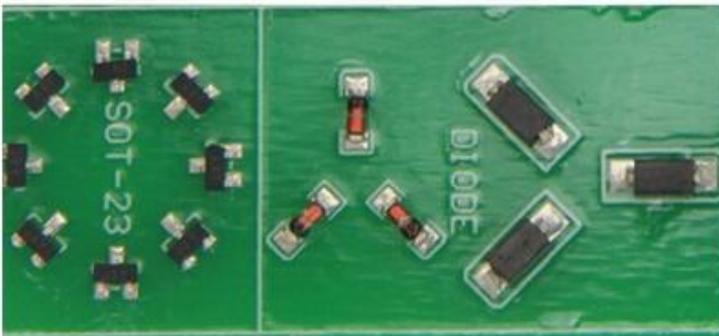
Mix Mounting Of Resistance-Capacitance IC



Each Angle Mounting Of IC



Each Angle Mounting Of 0402 0603 0805



Each Angle Mounting Of Diode & Transistor



Mix Mounting Of Resistance-Capacitance IC

Spare Parts

## Standard Package of NeoDen4(With Internal Rails)



Rail Extension Parts



Tool Box



Power Cord  
(US,Europe,Standard)



Nozzles



**NeoDen4**



Allen wrench Set



Vibration Feeder



8G Flash Drive



Double Sided  
Adhesive Tape



Reel holder stand