

User Manual

Neoden 4

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Structure of NeoDen 4



Each part mentioned above can be disassembled and tested.

Procedure for making a programming file



Note: The basic procedure of making a programming file for manual programming or direct PCB file is similar, but there are two different parts: chip list and mark point setting. Please find the detailed operation steps of the differences on relative page.

Edit on the Operation Interface

hirormation Feeder settings										
PCB feed settings	Chip 1	st	1	1			1	1		
Tray fixed Detect X: 334.93 - Forward	Chini	reeder	Nozzie	Po	Value 10F	Pootprint 0805	256.91	Y 101.09	Rotation Skip Pe	_
Kail Unce Detect 7: 136.44 BackWard Kail Nulti F Elect front Align Feed	Cittyr			~~	104	0000	100.0	. 101.00	0.0 40 41	Manual
										File
Panelized FCB first chip setup:										Import
Right Ten: 0.00 + 0.00 + 815m										
Left Top: 0.00 ± 0.00 ± Align										Nev
Left bottom: 297.23 ± 81.52 ± Align										
PCB angle: 0.00Deg Angle detect										Delete
Create panelized list										
X Y Rotation Skip Position										Up
Panel1 256.90 101.08 0 No Align										
										Down
Bad heard detection: 10.00 1 10.00 1 Alism										
PCB mark settings										
Gingle ○ Panelized □ Manual Manual										
Mark List:										
Mark1 260.07 78.10 Align										
Mark2 345.86 78.51 Align										
	1								,	

I. Edit on the Interface

See below Fig · Edit Interface

1.PCB Feed Setting



Function:Used to confirm the feeding place, first edit item in manual program Introduction of function keys:

(1) Tray Fixation:Once selected tray fixation, the setting items of board feeding will be closed. We only need use the positioning column to fix the board.

(2) One-off rail feed:First need ensure there are rails for your machine,then select one-off rail feed,the setting items will be open corresponding.

Operation Step:First should adjust the width of the rail to ensure the PCB can move smoothly

O Adjust the position of the board in rail via clicking items"Rail forward" and "Rail backward".

D Click "Position Align" and into below interface(See fig.2), then adjust the position of

camera until to the limited place by clicking the image(See fig.3).Click "Save" item to save the setting, return to the main page to finish the setting.



(3) Multiple rail feed:

(4) Eject PCB front-side:Once selected this item, the PCB will eject at front side when finish mounting. If don't select, the PCB will eject at back side.

2.Setting Panelized PCB & first chip(manual is the same as automatic download)

Function: This is mainly to determine the first component on single or panelized PCB of manual programmed or imported file. The principle is to collect and calculate the data of each board's relative spacing, in order to achieve the effect of the actual placing.

Operation introduction

(1) Single PCB: Only need to enter "1" in the row and column, some other useless function will turn grey. The "left bottom" is functional, which means the first PCB. Then you can press "align" to go to the screen of vision and get the coordinate of first component, see image 2-2.



After saving the coordinate, the screen will automatically turn back to "PCB information". Click "Create panelized list" to get the information of "Panel 1". Now we've finished setting of first component of PCB.

(2) Panelized PCB: the sequence is same to single PCB, but please pay some attention to several points below.

O The row and column is determined by the positioning of PCB on working area. The direction along the rails is the column. Enter data in the row and column.

D About the data collection of "left bottom", "left top" and "right top", we should take the "left bottom" as the basic, and then go to set "left top" and "right top". Once all the data is collected, the machine can calculate and process the information of panelized PCB. Please refer to the data collecting method of each position information as following:

- ③ The data of "left bottom" is collected according to first component in programming file. Press "align" find the left bottom panel which is nearest to the feeding position, after saving the data, it will return to the "PCB information" automatically.
- ③ The data of "left top" is collected according to component (its position is same to that on "left bottom"). Press "align" find the left top panel which is furthest to the feeding position, after saving the data, it will return to the "PCB information" automatically.
- ③ The data of "right top" is collected according to component (its position is same to that on "left bottom"). Press "align" find the right top panel which is furthest to the feeding position, after saving the data, it will return to the "PCB information" automatically.

After setup, click "create panelized list", the data will be generated accordingly in the blank. PCB angle correction Bad board detection

PCB mark settings • Single • Panelized Manual Mark List: X Y Position Mark1 260.07 78.10 Align Delete Mark2 345.86 78.51 Align Delete Fig.3-1 Fig.3-1 Fig.3-1 Fig.3-1 Fig.3-1

3. PCB mark point setting

Function: After completing setup of the mark points, with which the machine can locate the position of PCB and identify the set up mark points, so that the next step can be followed Operation method:

(1) Mark point on single PCB: this mainly applies on single PCB or a whole board that consists of a few boards (take them as a single board).General we need to set 2-3 mark points.

(2) Panelized PCB: this mainly applies on multiple PCB(we need to set mark points on each PCB)

(3) Manual alignment: if there is no mark point on PCB, you can use some positioning holes or some other referential points as subsidies to locate the PCB.





Import coordinate: according to the PCB schematic, we get the coordinate of mark and write down manually.

- ③ Manual programming: when it's in Manual Programming status, the function "Alignment" of Mark will be effective. Click on it, the camera will go and collect the coordinate of mark (see image 3-2), save it and go back. (Note: if the mark point is far away, please use Overall movement to find it)
- ③ No mark exists: Generally we will choose a component that is far away from the first component as a mark, which will make placement effect better.

(4) Add mark point: the function of adding mark point

Delete mark point: the function of deleting mark point can be used when there is needless mark point or error point.

4. Component list settings

	Feeder	Nozzle	Name	Value	Footprint	X		Y	Rotation	Skip	Position	
Chip1	1	1	R9	10K	0805	256.	92	101.08	0.0	No	Align	🔽 Manual
												File
												Import
												New
												Delete
												Սր
												Down

Function: to display the sequence, footprint and other information of components. There are two ways to add these information: manual programming and import mounting file.

Operation:

(1) Manual programming: firstly, check the box of manual programming. There is a sample line of the first component, please modify this line firstly.



Find and confirm one component's coordinate by using the function of "Movement Mode"-Click to move (Visual field/Overall Workbench).Once clicked the "Save" item,the interface will automatic back to main page,then input the corresponding values(Designator refer to the location,Specification refer to the value of resistance,Footprint refer to the normal package info,I.e.0603,0805,1206,Etc.Angle value should be set according to the required direction on the PCB and polarity ,horizontal direction(0 or 180 degree),vertical direction(90 or -90 degree).the value should be integer.The first component have been completely created after set all above values.The next step is click "New"item and will popup one line(completely copy the previous line),then click "Align" to find and confirm second component(same operation as before)

(2) Import PCB BOM File

 \bigcirc First generate the coordinates from PCB diagram and put the PCB file on the USB Flash Disk,then insert it to the machine(There are many kinds of PCB designer software,the only request is can generate the coordinates from them,file format(.csv)-support use Excel to edit \bigcirc Remove tick mark before the item"Manual Program"and then click "Import PCB BOM File",will popup one small dialog,select the required PCB file and then click "Save"item,all data will be automatic imported to Chip List .(Turn to the "Feeder configuration"interface to do next operation).See fig.4-2

File:NewFileName1		
PCB information Feeder settings		
PCB Information Peeer settings PCB feed settings Tray fixed Detect X: 334.05 S Forward Rail Mult P Eject front Align Peed Panelized PCB first chip setup: Rows: 1 Columns: 1 S Right Top: 0.00 0 0.00 Align Left trop: 0.00 0 0.00 Align Left trop: 0.00 Angle detect Create panelized 11st X Y Rotabon Skp Poston Paneli 255.00 101.08 0 No Algn	- Chip list Reeder Nozzie Name Value Pootprint X Y Eotation Skip Chip] 1 1 R9 10X 0805 256.92 101.08 0.0 Mo File Operation Pile Operation Pile Start Start Pile Operation Pick Files for DBD.cov Pick Files for DBD.cov Pick Files for DBD.cov Save Save Start Pile Start Start Save Start Pile Start Start Save Save Start Pile Start Start Save Save Start Pile Start Start Save Start Pile Start Start Start Pile Start Start Start Start Pile Start Start Start Start Pile Start Start Start Pile Start Start Start Start Start Start Pile Start Star	Manual File Import New Delete Up Down
Bad beard detection: 10.00 10.00 Align PCB mark settings • Single • Canciled • Ramal • Mark 15st: • Mark 250.07 78.10 • Mer • Mark 2965.96 78.51 • Delete Merecenter		
Save	<< Cancel	
	Fig.4-2	

5. Feeder configuration

Leit leeders		Right feeders
Chip Spec.		Chip Spec
Feeder48		Feeder19
Feeder4/	(ADDIA)	Feeder18
Frederito	Feeder no.:	Feeder17
Feedered	Nozzle information Feed-box information	Feeder16
England?	F Norzie 1 Align Height test Pick test Peel strength: 10 -	Feeder13
Feeder42	E Numbe 2 difer Weight does Rick does Reeding rate: 2	Feeder13
Feeder41	Rozzie 2 Arigin Reight test Fick test	Feeder12
Feeder40	Nozzle 3 Align Height test Pick test	Feeder11
Feeder39	Field test	Feeder10
Feeder38		Feeder9
Feeder37	The day have been store	Feeder8
Feeder36	Feeder basic information Iray feeder information	Feeder7
Feeder35	Pick X: 0.00 🚍 Pick height: 0.0 🚽 Rows: 5 🗄	Feeder6
Feeder34	Pick Y: 0.00 Pick delay: 0 🛱 Columns: 5 🗄	Feeder5
Feeder33	Align Poist height: 0.0 - Right Top X: 10.00 -	Feeder4
Feeder32	Right Turst Augnt, O.O.	Feeder3
Feeder31	Pick Angle: 0.0 + Paist delay: 0 + Right 100 1. 10.00 +	Feeder2
Feeder30	Footprint: 0402 🔽 🔽 Vacuum dete 🔄 Align	Feeder1 10K
Feeder29	Nove Speed: 10 💌 Vacuum Value: -10 🛨 Start X: 1 🛨	
Feeder28	Vision No. Action	Special feeder
Feeder27	Alignment: You average Y	Chip Spec
Feeder26		Feederso Enodor#7
Feeder25	Reeder exchange: Reeder 1	Feeder56
Feeder24		Feeder55
Feeder23		Feeder54
Feeder22		Feeder53
Feeder21	Alloute Chin to Frederic Academ Sector and secole Restanded Minana	Feeder52
Feeder20	Allocate chip to requer Assign feeder and hozzle Footprint library	Feeder51
		Feeder50
		Feeder49

Functions:All components' configurations will be set here for every working file,I.e.(Nozzle selection,Feeder selection,Pick up position,Correction setting and other parameters)

(1) Feeders Arrangement:Left Feeders (Feeder 20-48), Right Feeders (Feeder 1-19), Special Feeders (Feeder 49-58). Above feeders' setting is under the ideal situation. According to the Required Tape's width from customers, the quantities maybe be cut down. For example, if there are a lot of components' information under the "Chip List" item, choose the feeder number and you will find the drop-down symbol, will display all components' specifications by click it. Select one specification and one less in drop-down list, can do same operation in every feeder.

(2) Feeder Configuration:Select one feeder,tick the item"Apply",all configurations will be unlocked for this feeder,then can do amendment.Total have five items:Nozzle information,Feed-box information,Feeder basic information,Tray feeder information,Feeder exchange.One item will be always locked for Feed-box information and Tray feeder information according to the differences of components.Operation sequence: Feed-box information(Tray feeder information)—Feeder basic information—Nozzle information—Feeder exchange(used if placed wrong tape).

③ Feed-box information setting

Peel strength:	10 🚍
Feeding rate:	2 🛨
Feed strength:	10 븣
	Feed test

Function: Adjust the value for feed and peel box

Peel Strength:Support do adjustment according to different components' required strength,default value 100

Feed rate:Adjust the feed & peel distance by changing the value Feed strength:Adjust the feed strength by changing the value,default value 60 Feed test:After finishing above steps,can click this item to test the feed status

③ Tray feeder information

5 💼	Rows:
5 🛨	Columns:
10.00 🚊	Right Top X:
10.00 主	Right Top Y:
Align	
1 🚊	Start X:
1 👘	Start

Function:Use to set the components' information from tray and tube packages,complete picking up operation for special feeders by changing the values

③ Feeder basic information

Feeder basic information	Lamer with Product Rathership
Pick X: 0.00 - Pick height: 0.0 -	
Pick Y: 0.00 Pick delay: 0	lita Allament setted:
Align Paist height: 0.0 🛨	Reals 3 Reals 3 Reals 4
Pick Angle: 0.0 🛨 Paist delay: 0 🛨	Continues H3.68.106.1
Footprint: 0402 💌 🗆 🗆 Vacuum dete	Deets
Move Speed: 10 💌 Vacuum Value: -10 芸	in the second seco
Vision No Action 💌 🔽 Skip	Cusci
Allgiment.	
Eig 5 1	
1'12.3-1	F1g.5-2

(1) Pick position X/Y:First have to lock the position of component on the feeder(See fig.5-2), once saved the modification, the XY date will automatically change to the ones after alignment.

2 Pickup Angle: The initial default angle is 90 degrees, support to do modifying the value in order to change the mounting angels for wholly feeder if needed.

③ Footprint:Select corresponding footprint,when use the function"Vision Alignment", will refer to the values in date base.

- ④ Placement speed:Control the placement speed for the feeder by adjust the speed values.
- (5) Vision Alignment: Choose corresponding alignment method under this item.

6 Pick height:Control the pick height by dragging the sideward slider.Placement height:Set the value according to the component's actual thickness.

- ⑦ Placement/Pick delay:set a little value or 0 both ok.
- (8) Total have two detection methods, Vacuum Detection and Vision Detection.

Vacuum Detection:Once set one vacuum value which help judge if qualified or not before placement.Once the actual vacuum won't reach this range,the machine will drop away this components and re-pick one.

9 Pet-name ruby chose this material after skip pasted on the station all the material will be skipped, generally will not choose.

Skip:Once select this item, will skip all placement for this feeder.

3 Nozzle Information

Peeder no.:			
Nozzle informa	ation —		
□ Nozzle 1	Align	_Height test	Pick test
□ Nozzle 2	Align	Height test	Pick test
□ Nozzle 3	Align	Height test	Pick test
□ Nozzle 4	Align	Height test	Pick test

Function:Select corresponding nozzles(one or more than one all acceptable)according to the components and the nozzle have set on the machine,then the machine will automatic assign to each feeder in order to meet the requirements pf single head work or multi heads working together.Also have detect functions on this item.

Position Align:The nozzle will align to the component's upside on corresponding feeders when click this item

Height Test:After clicking this item,the nozzle will go down and check whether the pick height is ok. Support do adjustment of pick height on feeder information item if needed.

Pick test:After clicking this item, the corresponding nozzle will pick one component and check whether pick position is ok. Support do adjustment of pick position on feeder information item if needed.

After finish setting of all above feeders information, then click "assign feeder and nozzle to Chip list", then chip list will automatic to be changed correspondingly.

II. File Mounting

31 No	1 2 2 1	1	B1	R	0402	•		Rocacion Skip	
	2 1	2				29.42	20.32	0.0 No	
			CI.	R	0603	32.72	20.32	0.0 No	
	3 3	3	D1	R	0805	36.53	20.32	0.0 No	
	4 2	1	B2	R	0402	29.18	22.09	15.0 No	
	5 1	2	C2	R	0603	32.37	22.95	15.0 No	
	6 3	3	D2	R	0805	36.05	23.94	15.0 No	
	7 2	1	B3	R	0402	28.50	23.75	30.0 No	
	8 1	2	C3	R	0603	31.36	25.40	30.0 No	
	9 3	3	D3	R	0805	34.66	27.31	30.0 No	
	10 2	1	B4	R	0402	27.41	25.17	45.0 No	
	11 1	2	C4	R	0603	29.74	27.50	45.0 No	
	12 3	3	D4	R	0805	32.44	30.20	45.0 No	
	13 2	1	BS	R	0402	25.99	26.26	60.0 No	
	14 1	2	CS	R	0603	27.64	29.12	60.0 No	
	15 3	3	D5	R	0805	29.54	32.42	60.0 No	
	16 2	1	B6	R	0402	24.33	26.94	75.0 No	
	17 1	2	C6	R	0603	25.19	30.13	75.0 No	
	18 3	3	D6	R	0805	26.17	33.81	75.0 No	
	19 2	1	B7	R	0402	22.56	27.18	90.0 No	

1.Method to mount one file:

First select one file, click"mount", then you will enter into one mounting page, above picture is an example of one file in mounting.

(1) On the top-left corner shows mounting process, chip list---by the variation of blue line, you can track process of mounting constantly.

- (2) On the bottom-left corner shows some feedback during mounting process.
- (3) One the top-right corner shows the status of picking and picking alignment
- (4) On the bottom-right corner shows some control information
- ③ Air pressure of 4 nozzles
- ③ Placement speed, can be changed by manual during mounting
- ③ Non-stop mount, this is used in one-stop smt production line, add conveyors in front and behind,
- ③ Auto-eject PCB once finished, when select this option, after finished mounting task, PCB will eject its working area automatically
- ③ Another control information,Continuous/Step/Pause/Eject PCB front-side manually/Stop Continuous, The machine will obey its order and work constantly

Step, The machine will work one single step

Pause, The machine will stop its work instantly

Eject PCB front-side manually, In order to catch the PCB, after PCB assembly, click this option, PCB will eject from its feeding position. Kindly notice: After pause the machine then you can carry out this order.

Stop, before click this option, you need to click "pause" first

III. Manual Test

ft feeders	Placement head	. Right feeders
ted-box48 ted-box47 ted-box47 ted-box47 ted-box46 ted-box46 ted-box44 ted-box44 ted-box44 ted-box44 ted-box42 ted-box42 ted-box42 ted-box42 ted-box42 ted-box40 ted-box4	Norzie 2 Norzie 2 Norzie 3 Turn left Turn right Pressure1:1 Norzie 4 Dom Pressure3:3 Flash lamp Photograph Pressure4:3	Regin receive Feed-box18 Feel-box19 Feed-box18 Feel-box17 Feed-box17 Feel-box17 Feed-box18 Feel-box17 Feed-box13 Feel-box17 Feed-box13 Feel-box18 Feed-box13 Feel-box12 Feed-box13 Feel-box12 Feed-box13 Feel-box12 Feed-box13 Feel-box12 Feed-box14 Feel-box12 Feed-box15 Feel-box12 Feed-box16 Feel-box12 Feed-box17 Feel-box12 Feed-box18 Feel-box12 Feed-box19 Feel-box12
leed-box37 Peel-box36 leed-box36 Peel-box36 leed-box35 Peel-box35 leed-box34 Peel-box33 reed-box32 Peel-box33 reed-box32 Peel-box33 reed-box32 Peel-box33 reed-box33 Peel-box33 reed-box31 Peel-box33 reed-box30 Peel-box30 reed-box30 Peel-box30 reed-box32 Peel-box30 reed-box32 Peel-box30	Rails control Forward Rails status: busy T Vibration feeder	Feed-box8 Peel-box8 Feed-box7 Peel-box7 Feed-box6 Peel-box6 Feed-box6 Peel-box8 Feed-box7 Peel-box8 Feed-box8 Peel-box8 Feed-box9 Peel-box8 Feed-box1 Peel-box2 Feed-box2 Peel-box2 Feed-box1 Peel-box1
ied-box27 Peel-box26 ied-box26 Peel-box26 ied-box25 Peel-box25 ied-box24 Peel-box24 ied-box22 Peel-box22 ied-box22 Peel-box22 ied-box22 Peel-box23 ied-box22 Peel-box24 ied-box24 Peel-box22 ied-box21 Peel-box21 ied-box20 Peel-box20	Backward Flash lamp Feed command X Y recover Speed 10% • Photograph Buzzer XY Initialize	₩ Feed peel Synchronous

Function: Used for testing the basic functions, connection between software and hardware is the mainly function, details about testing as below:

1.Placement head

Nozzle 1	Blow	Suck	Pressure1:1	
Nozzle 2 Nozzle 3	Turn left	Turn right	Pressure2:1	
Nozzle 4	Down		Pressure3:3	Head move
4 11	Flash lamp	Photograph	Pressure4:3	

Choose nozzle 1, nozzle 2, nozzle 3, nozzle 4 to test separately

- ③ Blow, after click this option, air will blow-off from selected nozzle
- ③ Suck, after click this option, suction action will appear from selected nozzle
- ③ Turn left& Turn right, selected nozzles will turn
- ③ Down, after click this option, selected nozzle will descend slowly
- ③ Down Looking Camera light, after click this option, Led light besides the camera will turn on
- ③ Down Looking Camera Photograph, after click this option will take a picture
- ③ Air pressure 1, 2, 3, 4,Based on the testing of nozzles, you can see pressure value of each nozzle.
- ③ Head move, after click this option, you will enter into " head move " page, click to move (Overall Workbench) you can test to move in a wide range.

2. Rail control

Forwar	rd
Backwar	rd
Speed 10%	

Function, test rail PCB feeding, forward PCB feeding, backward PCB feeding and feeding speed

3. Hose control

Start but	ton: off XY s	tatus: idle
Rails status	s: busy 🗖 Vi	bration feeder
Flash lamp	Feed command	X Y recover
Photograph	Buzzer	XY Initialize

Function, test each function key

- ③ Start button status, on the left side of machine, it has one start button, press this button the status will change
- ③ Vibration feeder, after select this option, vibration tray will vibrate
- ③ Up looking camera light, after click the light will turn on
- ^③ Up Looking Camera Photograph, after click this option will take a picture
- ③ Send PCB feeding command, after click this option, PCB will feed forward
- ③ Buzzer, after click this option some sound will appear
- ③ X Y step out recover&X Y Initialize, after click this, machine will recover to its original position and coordinates in system will initialize.

4. Feeder test

eed-box48	Peel-box48		D 1 1 10
eed-box47	Peel-box47	Feed-box19	Peel-box19
ed-box46	Peel-box46	Feed-box18	Peel-box18
Feed-box45	Peel-box45	Feed-box17	Peel-box17
Feed-box44	Peel-box44	Feed-box16	Peel-box16
Feed-box43	Peel-box43	Feed-box15	Peel-box15
Feed-box42	Peel-box42	Feed-box14	Peel-box14
Feed-box41	Peel-box41	Feed-box13	Peel-box13
Feed-box40	Peel-box40	Feed-box12	Peel-box12
Feed-box39	Peel-box39	Feed-box11	Peel-box11
Feed-box38	Peel-box38	Feed-box10	Peel-box10
Feed-box37	Peel-box37	Feed-box9	Peel-box9
Feed-box36	Peel-box36	Feed-box8	Peel-box8
Feed-box35	Peel-box35	Feed-box7	Peel-hox7
Feed-box34	Peel-box34	Feed-box6	Peel-box6
Feed-box33	Peel-box33	Feed-box5	Peel-hox5
Feed-box32	Peel-box32	Feed-box4	Peel-box4
Feed-box31	Peel-box31	Feed-box3	Peel-box3
Feed-box30	Peel-box30	Feed-box2	Peel-box2
Feed-box29	Peel-box29	Feed-box1	Peel-box1
Feed-box28	Peel-box28	Jreed Doxi	JI COL DOXI
Feed-box27	Peel-box27		
Feed-box26	Peel-box26	Feed neel	Synchronous
Feed-box25	Peel-box25	i con poor	
Feed-box24	Peel-box24		
Feed-box23	Peel-box23		
Feed-box22	Peel-box22		
Feed-box21	Peel-box21		
Feed-box20	Peel-box20		
Feed-box26 Feed-box25 Feed-box24 Feed-box23 Feed-box22 Feed-box22 Feed-box21 Feed-box20	Peel-box26 Peel-box25 Peel-box24 Peel-box23 Peel-box22 Peel-box21 Peel-box21 Peel-box20	☞ Feed peel	Synchro

Function, test each feeder's matching and feed box & peel box's function. First, select" Feed-box and peel-box linkage", then test function of feed box and peel box.

(1) click any feeder randomly, feed box and peel box will appear corresponding actions

IV. Factory settings

Function, this part arm at machine ' global parameter settings, any modified parameter will influence all mounting files, when modify this part please consider seriously. Especially the last page system settings, we suggest after using a period of time or under the guidance of our engineers then change its parameter.(Notice, before our machines leave factory, all parameter already be set and no need to change). This user manual just introduce all setting functions briefly, more details about parameter modification please refer to comments from our engineers.

eor	Jei	1	T I	ICK	aı	iu i	lace machine	
e oper	ation	Haa	nual test	Syst	em setuj			
eeder o	config	urati	on Fee	d-box co	nfigura	tion P	el-box configuration System configuration	
	x	Y	Position	Feed-box	Peel-box	Feed test		
Feeder 1	410.65	87.22	Click to align	1	1	Click to test		
Feeder2	412.96	100.64	Click to align	2	2	Click to test		
Feeder3	410.96	114.23	Click to align	3	3	Click to test		
Feeder-1	410.93	127.90	Click to align	4	4	Click to test		
Feeder5	411.12	141.07	Click to align	5	5	Click to test		Save
Feeder6	410.95	154.64	Click to align	6	6	Click to test		
Feeder7	410.76	168.26	Click to align	Z	7	Click to test		Config pwo
Feeder8	411.73	249.43	Click to align	8	8	Click to test		
Feeder9	411.32	266.75	Click to align	9	9	Click to test	Confirm password	
Feeder10	411.41	285.69	Click to align	10	10	Click to test	Flease input password:	Modily Feed
Feeder11	410.85	307.25	Click to align	11	11	Click to test		
Feeder12	410.79	324.22	Click to align	12	12	Click to test	OK Cancel	Version upgr
Feeder13	411.77	337.52	Click to align	13	13	Click to test		
Feeder14	412.72	351.10	Click to align	14	14	Click to test		Chinese
Feeder15	410.72	382.01	Click to align	15	15	Click to test		
Feeder16	411.12	377.73	Click to align	16	16	Click to test		Current versio
Feeder17	411.12	391.80	Click to align	17	17	Click to test		V0.9.4.0
Feeder18	409.00	251.00	Click to align	18	18	Click to test		
Feeder19	409.00	264.00	Click to align	19	19	Click to test		
Feeder20	25.01	23.22	Click to align	20	20	Click to test		
Feeder21	24.96	36.77	Click to align	21	21	Click to test		
Feeder22	24.83	50.43	Click to align	22	22	Click to test		
Feeder23	25.03	63.83	Click to align	23	23	Click to test		
Feeder24	23.11	77.27	Click to align	24	24	Click to test		
Feeder25	22.17	90.93	Click to align	25	25	Click to test		

As pic show, function description of button on right side

- ③ Save configuration: click it for saving after modify the parameters
- ③ Modify password: click it, put into the password, then finish change the fourth page which is also the System interface.

③ Set up feeder ID: click and show as pic above. This is for modifying of feed-box ID. Feed-box is different from peel-box, feed-box ID is saved in feed-box itself . E.g.: Feeder of feed-box 1, it will be identified feed-box 1 no matter which port matched. So we will mark it. New feed-box default ID are all No.50, it need you to change them here by yourselves.

- ③ Version upgrade: After receiving our new version file, you can upload it with clicking "version upgrade" to finish.
- ③ ENGLISH: Change to the English version.

1. Feeder configuration

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eeder19 409.00 2 eeder20 25.01 2	251.00	Click to align	18	18 Click to t
eeder20 25.01 2	264.00	Click to align	19	19 Click to t
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eeder25 22.17 9	90.93	Click to align	25	25 Click to t
eeder26 24.80 1			26	26 Click to t

As figure show: parameters setting for all feeders.

First list on left side is feeder No.

X,Y parameters is setting the feeder's pick position.

Click button of "click of align" in the list of "position", then go into interface as below,



Save after setting well the pick position of the feeder. Same way as in the file.

"Feed-box" setting

It is used to set the feed-box ID. E.g., if you insert the feed-box 2 in the port 1, then it need to set the feed-box ID to be 2

"Peel Box"setting

"Peel box" is different from "Feed box", the ID for peel box is corresponding to the port. For example, no matter which "Peel box" you connect, the ID always be No.1.

Above setting can help set the serial number of the stack in power supply port on the machine, See below fig.



For example, the default port ID for Stack 33 is 33, if the port 33 is broken and want to change to port 34, can set in this item

"Feed test"

Once clicked this item, then the machine will start Feed test, feed one component and help check whether the feed is normal

2. Feed setting

le opera	tion Manu	ual test	Syste	m setup
eder co	onfiguratio	n Feed	d-box co	nfiguration
	Feeding rate	Strength	Test	Calibration
eed-box1	4	50	Click to test	Click to calibrate
Feed-box2	4	50	Click to test	Click to calibrate
Feed-box3	4	50	Click to test	Click to calibrate
Feed-box4	4	50	Click to test	Click to calibrate
Feed-box5	4	50	Click to test	Click to calibrate
Feed-box6	4	50	Click to test	Click to calibrate
Feed-box7	4	50	Click to test	Click to calibrate
Feed-box8	4	50	Click to test	Click to calibrate
Feed-box9	4	50	Click to test	Click to calibrate
Feed-box10	4	50	Click to test	Click to calibrate
Feed-box11	4	50	Click to test	Click to calibrate
Feed-box12	4	50	Click to test	Click to calibrate
Feed-box13	4	50	Click to test	Click to calibrate
Feed-box14	2	50	Click to test	Click to calibrate
Feed-box15	4	50	Click to test	Click to calibrate
Feed-box16	4	50	Click to test	Click to calibrate
Feed-box17	4	50	Click to test	Click to calibrate
Feed-box18	4	50	Click to test	Click to calibrate
Feed-box19	4	50	Click to test	Click to calibrate
Feed-box20	4	50	Click to test	Click to calibrate
Feed-box21	4	50	Click to test	Click to calibrate
Feed-box22	4	50	Click to test	Click to calibrate
Feed-box23	4	50	Click to test	Click to calibrate
Feed-box24	4	50	Click to test	Click to calibrate
Feed-hox25	4	50	Click to test	Click to calibrate
Fred haven	4		Chall has hered	Chale has and has the

Function:Used to setting values for all stacks

Feed rate: The distance between two components, default value 4mm, for 0402, should set 2mm.

Strength Setting: Motor torque of feed for the stack(Normally no need to change).

Test: The machine will do feed test separate after clicking this item, peel box won't work during above test

Alignment: Click peel box, the motor idling several rings to do the initial position of the calibration.

Used if there are problems during peel operation, then can click this item to repair. Normally no

need to click.

3. Peel Configuration

	tion Manual 1	est Syste	em setup
eeder co	nfiguration	Feed-box co	nfiguration
	Feeding rate Stre	ngth Test	Calibration
Feed-box1	4 50	Click to test	Click to calibrate
Feed-box2	4 50	Click to test	Click to calibrate
Feed-box3	4 50	Click to test	Click to calibrate
Feed-box4	4 50	Click to test	Click to calibrate
Feed-box5	4 50	Click to test	Click to calibrate
Feed-box6	4 50	Click to test	Click to calibrate
Feed-box7	4 50	Click to test	Click to calibrate
Feed-box8	4 50	Click to test	Click to calibrate
Feed-box9	4 50	Click to test	Click to calibrate
Feed-box10	4 50	Click to test	Click to calibrate
Feed-box11	4 50	Click to test	Click to calibrate
Feed-box12	4 50	Click to test	Click to calibrate
Feed-box13	4 50	Click to test	Click to calibrate
Feed-box14	2 50	Click to test	Click to calibrate
Feed-box15	4 50	Click to test	Click to calibrate
Feed-box16	4 50	Click to test	Click to calibrate
Feed-box17	4 50	Click to test	Click to calibrate
Feed-box18	4 50	Click to test	Click to calibrate
Feed-box19	4 50	Click to test	Click to calibrate
Feed-box20	4 50	Click to test	Click to calibrate
Feed-box21	4 50	Click to test	Click to calibrate
Feed-box22	4 50	Click to test	Click to calibrate
Feed-box23	4 50	Click to test	Click to calibrate
Feed-box24	4 50	Click to test	Click to calibrate
Feed-box25	4 50	Click to test	Click to calibrate
Fred barrow	4 50	chala sa sa a	

Function:Peel configuration as above figure show,used to set the values for all peel boxes Feed rate:Similar meaning in Feed box part,mean length of rotation each time Strength:Torque setting of Peel motor(Plastic tape will be difficult strip away in the case of being affected with damp, can adjust bigger values of motor torque here)

Test: The machine will do peel test separate after clicking this item, feed box won't work during above test

4. System setting

eoDen 4 Pi le operation Manual test	ick _{Syste}	al m setu	nd ≖∣	Place Machine	Power off
eeder configuration Feed Placement spee Defoult parameters 50	-box car d Worstin SS	nfigur n\nfeed	ation er frequenc	Prest-box configuration Ventuon ideators trength ©	Save
					Config pwd Modify Feed ID Version upgrade
	x	Y	Position		
Nozzles jointly alignment	388.17	197.39	lick to align		Chinese
Nozzle s individually alignment	399.15	208.30	lick to align		Current version
Nozzle 2 individually alignment	378.68	208.53	lick to align		¥0. 9. 4. 0
Vaccile 3 individually alignment	398.77	187.47	lick to align		
Vozzle 4 individually alignment	377.96	187.52	lick to align		
kozzle 3 and Cameralmeletive position	-10.03	35.99	lick to align		
Frash box position	400.00	10.00	lick to align		

Function: it is mainly for correction the position of suction nozzle.(Notice: In case change by mistake,we 've locked it by password. It can be changed by clicking the button of Password change and then insert password. Strongly recommend operating it under our engineer' s guidance).

- (1) Default parameters 1 setting:
- ③ Default speed: placement head movement speed under overall situation, priority is not as fast as speed set in stacks.
- ③ Vibration feeder frequency: setting the frequency of vibration feeder. Discharge state will be more stable if frequency high.
- ③ Vibration feeder strength: it depends on the component, if component too small and strength set high it will shake out the component easily, of course if strength small, the discharging speed will be slower.
- (2) Nozzle Jointly Alignment setting:

Click test button and go into interface below:



- ③ Click the central point among four nozzles under the shot can set the central point.
- ③ Another way is press CTRL button then click the mouse to make each nozzle to identify their own central point in the four quadrants.

(Notice: Please click the LENS ROTATION before setting the suction nozzle, then PnP machine will collect nozzle's 360 degree rotation photos to synthesize. After that, press CTRL button to set each nozzle's identification of central point.

③ Save it after finishing the setting.

(3) Correct nozzle 1~nozzle 4 separately. Click test and go into interface below:



Operation steps: 1.click the button of LENS ROTATION to let machine take photos of nozzle's 360 degree rotation . 2.click the central point of nozzle 3. Click the save button.

③ Relative position of nozzle 1 and camera: it is for the synchronism of nozzle and camera, setting it when placement position do not matched with the camera position.

Click setting then go into interface below:



- ^③ Move the nozzle to any place of PCB board, put one piece of carbon paper, then click REMAINS(MARK), placement head will rotate and leave a dot, after that click the button of Focus that dot and save, it will be done (show as photo above).
- ③ Trash box position: setting the position of dropping component, it depends.