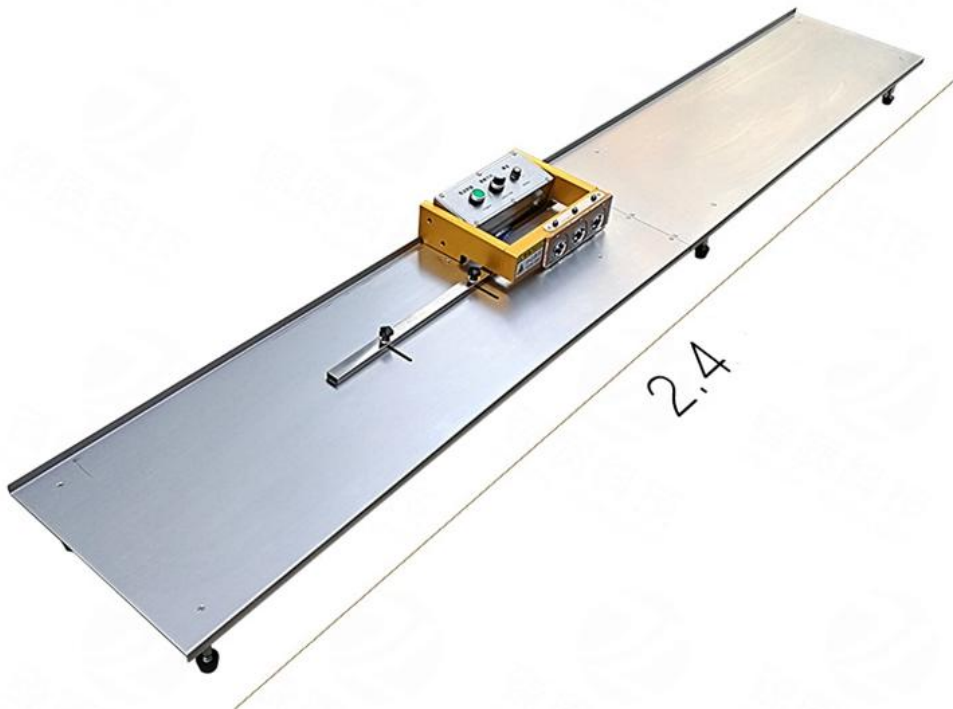




# LED Aluminum Separator

## Operation Manual



### Notes

- Please read this user manual carefully before operating.
- Any case, must not removed the blade protective plate and guide plate , to avoid danger.
- The machine is designed only for separate line boards V-cut,not for other purposes.
- When operated this machine, do not wear too loose clothes,and tied long hair to avoid being involved in the machine.

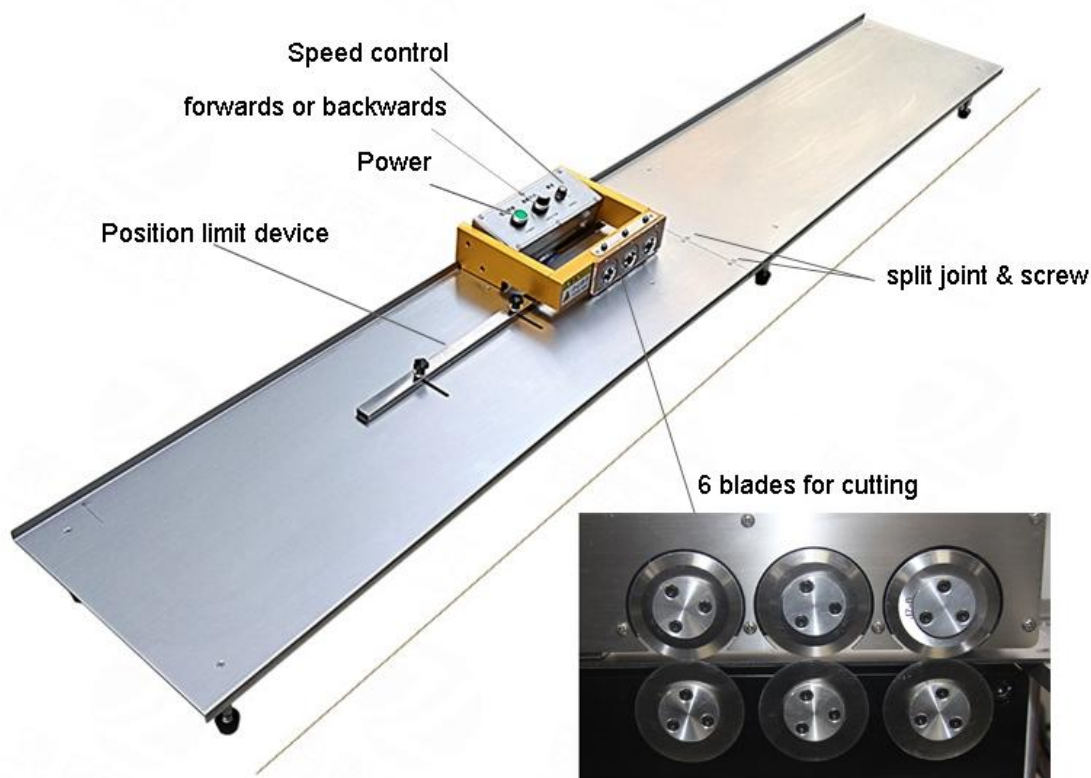
## 1. Preface

- Three groups of circular knife type "V" groove points plate to plate quality has further improved, machine speed, is the market only a lamp article points machine with high efficiency, especially for PCB board and aluminum plate, bo qian board/copper substrate/split flat very flat after deformation, do not twist does not become warped, edge smooth, split quantity is little at a time So in the process of cutting stress generated by the small.
- Customer first, quality first" is our tenet, we continuously improve the quality of our products and improve product performance to meet user needs, at the same time, we pay attention to after-sales service, welcome the masses of users put forward valuable advice.

## 2. Main features

- The circuit board cut done by six pieces of blade, two piece for a set, make a cutting
- unit. Respectively is A, B, C, three groups. The whole cutting process is divided into three stages, group A blade cutting boards 40% first, then B blade again from A slot of the blade cut over, again to complete 40% of the cutting quantity, and finally by the blade cut the last group C and 20% of the light, since each cutting quantity is small, so the cutting process of stress than traditional way of A cut down more than 80%, break up good circuit board edge level off is smooth, board face is very smooth, not twisted up.
- Because of the multiple cutting, the cutting process is very smooth, greatly improving the V -their ability to localize the CUT slot CUT even V - CUT slot shallow circuit board, also won't appear V - CUT slot from guide knife out, avoid adverse.
- Due to the blade cutting force is small, with Sweden import high speed steel material, blade durability is greatly increased, split aluminum plate blade life can reach more than a year, reduce the use cost.
- All cutting blade adopting double-frequency laser interference measurement instrument calibration, make sure that the knife can accurately in the slots of the knife before continue to cut. Point to beat no greater than 0.02 mm. To ensure a perfect cutting quality.

### 3. PART DESCRIPTION



### 4. TECHNICAL INDICATORS

Maximum board length	Unlimited length
Board thickness	0.5~3mm
Cutting speed	0-100 mm/s
Blade material	high speed steel
Power Supply	110V/50HZ, 60W
Be cut board material	Aluminum substrate, copper substrate, FR1~4, glass fiber board
Hostsize	800mm(length)*380mm(width)*240(height)
Feed/disk installed after the over all size	2600mm(length)*380mm(width)*240(height)
Weight	40kg

## 5. PREPARATION BEFORE USING

① Check the box of objects, including the following several parts: host machine, plate outside one piece, file a material plate one piece, specifications, one of this article, the power cord, one of a, adjust the foot switch with a hexagonal wrench set.

② Remove the packaging machine, place to the strong worktable, away from the power socket should not be too far.

③ In order to prevent electrostatic damage to parts on the circuit board, the machine should be reliable grounding, if the ground wire is reliable effective inside the power socket, is when the electric machine has reliable grounding.

④ Wipe the machine anti-corrosive grease on the blades.

⑤ According to the attached sheet (figure 1) shown in machine installation, machine. Installed outside the plate first, tighten the three fixed screw, under normal circumstances, the outer plate height of about 1 mm lower than the leading to the blade tip height. Outside the fixed plate, twisted the outside of the outer plate two adjustable feet, make the outer plate lateral get reliable support. Then according to the figure, the discharge of a plate with screw holes outside the plate on the right side, tight after three fixed screw, then adjust the discharging plate height adjustable machine on foot, make it the same height.

## 6. MACHINE ADJUSTMENT AND OPERATION

① Confirm the circuit board component does not touch the body, on the machine on the related dimensions on page images, height should not exceed the scope of graphic on the circuit board parts.

② **Guide knife position adjustment sheet**

V groove on whether the circuit board along the board correctly into the machine within the division, depends on the height of the guide plate on the adjustment is correct, excessive circuit board cannot correctly along a V - cut grooves into the machine cutting boards will jump out from V - cut slot, circuit board or blade damage; Too low is circuit board move difficult, it is difficult to into the machine, impact efficiency. Therefore before use should be according to the divided PCB thickness and plate V groove depth, to guide knife position adjustment, the method is as follows: Turn off the machine power supply, remove need integral circuit boards, flat on the plate. Circuit board V - cut slot card in leading to the sword, to the direction of the cutting blade, driven into the machines until met round blade. Loosen the fixed knob guide on

the knife, guide knife can be easily adjusted. Guide knife on the adjustment to the right height, the V groove on the circuit board had been guide knife stuck up and down, can correct orientation, be about to appear, and able to slide along the guide flexible.

### ③ The blade spacing adjustment



Circuit boards along the guide into the machine inside, can clean are separately blade and points in the process of plate stress to A minimum, depending on A, B, C three groups on the knife and the knife spacing is appropriate. So should be based on partitioned PCB thickness and material, to adjust the blade spacing. In order to achieve the best results. The basic principle of adjustment are as follows:

Group A first blade cutting boards the residual thickness of 30 ~ 50%, the next B blade from group A blade cut slot again run over, again to complete the 30-40% of cutting quantity, finally by group C blade cutting last 10 ~ 20% cutting and trimming smooth incision.

Blade spacing adjustment, measured with a feeler two blade spacing value now, and our target to compare difference calculation. Adjust, loosen operation fixed screw, can be twisted blade height on the index plate blade height adjusting screw, adjust the blade height. The blade height adjusting screw clockwise to increase the height of the blades.

Along the counterclockwise, can increase the height of the blades. Scale plate on every little scale 0.01 mm, a large lattice is 0.1 mm, screw twist is the number of the corresponding, the blade is floating up and down the corresponding level. After adjustment, tighten the knife block set screws. Then, manual cut circuit boards along the guide into the machine to try, if no north separate circuit board, you should lower the blade height.

④ **Plate speed adjustment**



After completion of the adjustment, can be manually to the trial division circuit boards along the guide into the machine, and if the segmentation effect is ideal, can open the machine power switch, the blade will turn up, automatically circuit board into the machine in the segmentation, the machine plate speed was divided into 1-4, a total of 4 gears, corresponding plate feeding speed is respectively 80, 120, 200, 120 mm/SEC, the user can according to the working habit and technological requirements, speed adjusted score board. In general, the board of V groove deep or skilled optional high-speed operation, choose low-speed conversely.

⑤ **Blade replacement: the machine after use for a long time, if the blade is damaged, please press play replacement.**

A) according to the above mentioned in point 3, will improve the 0.5 mm on the blade.

B) loosen the blade clamping screw blade shaft inside and completely removed, then the screw turned back to the original screw hole 2-3 laps. Screw head lightly, the blade can be completely removed (including central axis). Remove the set of all the adjusting shim on the blade shaft, set on the new blades, can be put back in and remove the opposite order. Blade in place after installation, check and remove the blade tip is not aligned, if not together, will be to remove the blade, increase or reduce the number of TAB, until the blade and blade alignment. Alignment and then tighten the blade clamping screw.

## 7. MACHINE MAINTENANCE

Machine maintenance work in the process of using are pretty simple, need to keep the machine itself clean, and regularly to the up and down.

The blade, guide plate rust-proof oil daub can up and down. Shall appoint someone who's in charge of the operation and maintenance, in order to ensure the machine precision, do not use where the temperature is too high or too low or saved.

## 8. Warranty Card

Name of user:	_____	Address of the user:	_____
Type of machine:	_____	Telephone of user:	_____
Date of purchase:	_____		
User instructions:	_____		

I. Warranty 1 year for the machine since the date of purchase, and lifetime maintenance.

II. The following situations are not covered under warranty:

- (1) The machine is damaged due to the improper operation, negligent use or natural disasters.
- (2) The components of the machine fail due to the abnormal operation.
- (3) The machine has been disassembled or repaired by the people other than the technical personnel of the company.
- (4) The damages are due to the consumables or parts not provided by the company.
- (5) The damages are due to the use of the voltage not prescribed by the company.

III. In addition to the warranty, the company will not recognize the warranty card issued by any other enterprise or person.

IV. Please well keep this card and the formal purchase receipts, and render them to the company's personnel for review. Then the card and receipts are valid.

V. If the card contains no business seal or date of purchase, it will be deemed as invalid.