



Dumor!

**Value !
Quality !
Innovation !**

EASYCUT 46



USER MANUAL



Thank you for purchasing a Dumor paper cutter

The paper cutter is a precision engineered machine and will give years of service if used within spec and when regularly maintained.

What the machine is designed to do:

The EASYCUT 46 is designed to cut paper and light card up to 455 mm wide and 460 mm long.

- The max pile height is ca 5 cm
- Last cut is 45 mm
- Accuracy ± 0.2 mm on backgauge when new

It is not designed to cut plastic, litleply or laminates, or synthetic paper like Tyvek®
Spongy paper will not cut as accurately as regular paper.

The machine is not a industrial cutter but an office cutter and is designed for intermittent use of 30 min use, 30 min off meaning a 50% duty cycle.

The cutter body is shipped in a crate and bolted to the skid, 2 strong persons will be needed to set up the machine to open the crate undo all the screws that hold the top hat to the skid and lift off the top hat.

1 Build the stand

The stand comes in a flat package.
There are 2 kinds of screw to hold the stand together.
Assemble the upper and lower cross bars to the side panels first using the larger screws.
Then assemble the rear cover and the zinc plated floor pan using the smaller screws.
The swing door clips in using the shot pin.

2 Undo the screws holding the cutter body to the skid and place on the stand

Using 2 strong persons with fingers in the handles, lift the body and place it front side over the swing door.
Note that there are 4 feet under the body that will precisely locate into the hollow sections of the stand frame.
The cutter is now fully assembled



Familiarization of the functional parts

Cutter stand

Cutter body

Bag of small parts with the following inside:

- Paper knocking up handle
- Long allen key for adjusting the blade end of travel
- Small allen key set
- Manual
- Hook for pulling out stick
- Allen key to remove the blade
- Blade change handles
- Machine installation and service log book supplied by the installing dealer

Cutter parts

- | | |
|--|--|
| A Lightbars left and right | G Side lays |
| B Front table
Led illuminated cut line | H Lock and key |
| C Control panel | I Overload differential cut out switch |
| D Paper press | J Push buttons for pressing and cutting |
| E Blade | K Push buttons for pressing only |
| F Backgauge | L Reset button |
| | M Lcd display |
| | N Keyboard |





Operational principle

The cutter will cut paper with a swing cut to the left.

This means that the paper needs to be stacked against the left side lay (G).

Do not slam the paper against the backguage as you may drive it out of position.

Use the knocking up tool to get it square against the lays.

The backguage will position itself automatically according to the programmed set cut length.

If you program a sequence of cuts. *The cuts should always be programmed longest first then shorter and shorter.*

If you want a square result the paper that is put into the machine needs to have at least *1 decently straight reference edge to put against the left side lay.*

Its is best practice to always start the cutting short edge first.

Once you have a decent reference edge you can start to square up the paper with end 2 cross cuts and then a final side cut.

Hazard warning

The cutter has a very sharp blade.

The edge of the blade is obscured by the paper press that is always lower than the cutting edge of the blade

There are 2 kinds of hazard using this machine.

1 crush hazard using the press

2 cut hazard using the blade

Both hazards are guarded but the following interlocks for one man operation; ***do not use the machine using 2 or more persons!!!!***

Safety functions:

Level 1: Dual push button operation with 0.5 sec contact interval.

If the buttons are not pressed at exactly the same time the machine will not start.

Level 2: Self checking lightbars that cut the motor power with they are obturated.

Note that there is a 30 mm opening under the curtain to front table to allow very long overhanging paper to be cut.

Level 3: Cut motor with brake with 0.1 sec sensor reaction time and 0.2 sec to full stop.

If the motor stops part way into a cut cycle the machine needs to be reset to re- commence the cycle from the beginning.

Level 4: Mechanical hold back pawl in case of motor brake failure and overrun.

If the pawl is hooked a message will appear blade hooked and the machine will need to be reset.

Level 5: Hi friction worm drive that acts as a supplementary motor brake.

If the motor power is cut the worm drive will brake the motor in about 2 revolutions even if the motor brake had failed.

Level 6: Cut out switch on hold back pawl that cuts out all power in the case the pawl is engaged due to overtravel.

User training by a professional certificated person

Important: you need to be trained and signed off on how to use this machine by a certificated cutter repair / service engineer before your use the machine yourself

Regular inspections

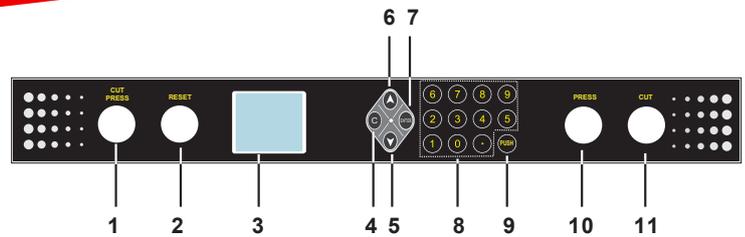
The laws in certain countries vary but usually a 6 month or yearly inspection is required to ensure safety at work conformity.

An installation log and service log is available for this machine.

Control panel

Buttons:

Where they are, and, what they do



From left to right

PRESS / CUT button nr 1 serves to initiate a press and or cut cycle if pushed at the same time as the other button. (1)

RESET button nr 2 needs to be pushed for the machine to reset to home position *before first use and after a stop mid cycle.* (2)

DIGITAL Display (3)

C = clear (4)

UP and DOWN arrows for scrolling the display and or manual backgauge control in 0,1mm steps (5, 6)

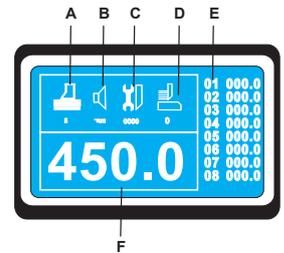
ENTER = validation of input data or to access a function / menu (7)

KEYBOARD (8)

PUSH button = backgauge will push out paper pile by 6 cm and return to last known position (9)

PRESS only button nr 10 used simultaneously with button nr 1. (10)

PRESS and CUT full cycle button nr 11 used simultaneously with nr 1. (11)



LCD DISPLAY information

PRESS icon = pressing force 1 to 9 steps usually 5 or above, less for light paper to avoid indentation. (A)

Note for very tender paper a magnetic false clamp plate can be used but it will reduce the last cut spec

BEEPER selection ON/OFF, usually set in OFF position. (B)

SPANNER icon = blade changing program access. (C)

BLADE icon = Backgauge measurement behind the blade (normal setting) or in front of the blade for longer paper (custom setting) (D)

CUT steps and values per step. (E)

To turn on the machine

Circuit breaker reset off (note if the reset is out the breaker switch will not stay up).

Circuit breaker to up position.

Key switch turned ON.

Display lights up and says=> *Please reset*

Press reset to make the machine backgauge go to home position (duration ca 10 sec) and return to last known position.

Note the backgauge always will overtravel back and then come forward to take up any play in the drive screw.

Setting pressing force icon lit

Press ENTER (7)

Using the UP/ DOWN button (5, 6) scroll menu to pressure setting desired and then press ENTER to confirm/ set the value.

Setting the measurement units mm or imperial (inches + decimals) icon lit.

Press ENTER and scroll to the word unit.

Press ENTER and toggle using the up and down arrows , press enter to confirm.

Beeper ON / OFF icon lit.

Press ENTER and scroll to the icon beeper

Press ENTER and toggle ON / OFF , press ENTER to confirm.

Blade change program (Partly lowered blade to allow access to blade mounting screws) icon lit.

Press ENTER and scroll to the icon spanner/ wrench).

Press ENTER, toggle ON / OFF, press ENTER to confirm.

On the next cut impulse the blade will stop part way down, this is not an error!

Once the blade is changed reset the icon to off to re -commence full cuts.

Attention!!! You may need to raise the blade travel if a new blade is fitted to lower the travel if a re- ground blade is fitted.



Programming a single cut value

With the display in the ready to use state
Enter the length value + decimal and press enter
The backgauge will move to the position selected

Programming multiple cuts (max 80 values, min step 0.1 mm, last cut 45 mm)

With the display in the ready state
Enter the first (longest) value + enter
The cursor will move to the next step(backlit = active)
Repeat the process and many times as needed
Press enter twice to end the programming sequence and return to 1st value

*To access any step use the UP AND DOWN arrows(backlit = active), then press ENTER and clear overwrite the value as needed
Press ENTER twice to exit.*

Selection of a program memory (80 available)

Press the ENTER button and scroll to the program nr is flashing/ backlit, press ENTER, use the UP / DOWN button to scroll to the program required, press ENTER to access
The programs are not namable

Pressing only/ gauging the cut position

Set the cut length.
Put the paper into position and knock it up square.
Press the PRESS button and right side cut button simultaneously.
The lightbars are now live and the front table guarded.
The press clamp will descend and clamp the paper according to the press force that is pre-set.
If the position is correct the 2 cut buttons can be pressed to make a cut.
Or if the position is not correct press reset to raise the press clamp to home position.

Pressing and cutting in 1 step

Set the cut length.
Put the paper into position and knock it up square.
Press the 2 CUT buttons simultaneously.
The lightbars are now live and the front table guarded.
The press will descend and clamp the paper.
Then the blade will descend and cut the paper.
You need to press both buttons for the full cut cycle or the cycle will be interrupted part way through and cannot be re-commenced part way through.

What if i interrupted the cut cycle?

You need to press RESET and the blade will raise to home position and then the press will raise to home position.
Then you can start again a cut cycle

Adjustment of blade end of stroke

This can be adjusted by using the long allen key in the hole in the top cover.
It is only to be used after the blade is re- ground (lowered), or replaced (raised), it is not to be used to compensate for a dull blade not cutting the paper !!!
A fraction of a turn is all that is needed.
If you lower the blade too much you may jam the machine and break it !!!

Levelling the blade

If the blade is cutting on one end and not the other the blade needs to be re- levelled by loosening the blade screws, then using the small allen screws in the carrier bar, then re- tightening the blade screws



Stick replacement

The stick can be pulled out using the hook into the end of the stick.

The stick can be rotated on 4 sides and turned to give a total of 8 wear surfaces, its a tight fit into the groove.

Blade replacement

Replacing the blade is not covered here as it is to be done by a cutter technician.

Pawl engaged

What to do if the hold back pawl is engaged (blade hooked on display).

- 1- Find out why the motor overran.
- 2- Once this is solved then restart the machine and press reset for 2 sec.
The motor should reverse to home position leaving the pawl free.

Owner service items

- 1- Always use a sharp blade.
- 2- Always use a new cutting stick.
- 3- Using spray grease spray the blade carrier guides and press guides and backguage drive screw and guides each 2 months.

Backguage apparent length error correction

After some use the backguage may be positioned slightly too long or short.

This can be corrected if the error is < 5 mm by the keyboard.

For a longer error the home position sensor may need to be adjusted by a technical engineer.

How to reset:

Machine OFF

Press button 1+ 2 at the same time and turn ON.

The display will say input calibration value.

Press ENTER and encode the actual value you have measured and press ENTER.

Turn OFF to memorize the new setting.



For Technical Service Personal only

Backguage adjustment



1. The verticality of ruler stand, pusher and blade were adjusted before leave factory, it fit JB/ T8115. 1- 2000 standard requirement.
2. If there is deviation caused by shipment, it need to adjust the pusher.
3. Loose the two bolts of ruler stand and back cover, adjust the pusher vertical with square. Tighten the bolts.

Blade change and adjustment

A. Blade adjustment

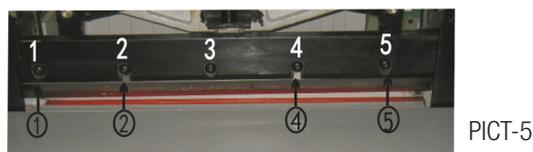
1. If the paper can not be cut off, adjust the cutting depth or change the blade side.
2. Adjust the depth of blade via M6 inner hexagon spanner in the hole on the top right corner of the machine. PICT-2



3. If replace or sharpen the blade, when install the blade, and the depth of two ends are not same, Adjust the balanced depth of blade through the three screws (PICT-3)
4. Adjustment step: turn the blade around the mid position, power off the machine, loosen the five screws (PICT-5), do not lock too tight.
5. Make the blade move to the lowest point and adjust the 3 screws by M3 inner hexagon wrench on the blade frame, usually it should be regulated to 0.3- 0.5mm. or put a paper on the table and turn the blade to the lowest position then power off the machine, adjust the three screws to see if the blade can cut the paper in balance (PIC- 3), if the left of paper can not been cut, then adjust the screw on left of the blade

B. Blade replacement

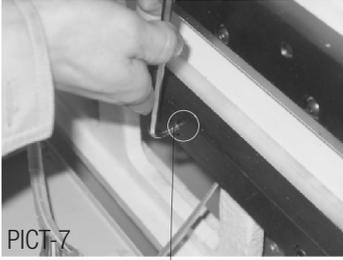
1. Despite correctly set the cutting depth, and new blade stick it is not possible to achieve a clean cut, the blade should be sharpened or replaced. (Usually the blade need sharpen after 2000 times of cutting).
2. The blade can be sharpened and reused for so many times.
3. When replace the blade, loose the screws of the cover, and take off the cover.
4. Make the blade move to the middle and turn off the power, remove the screw 1, 2, 4, 5 (PICT





- 5: Press the reset button, the blade return to its origin position, insert the replace blade handle to the 2, 4 (PICT- 6)
- 6: Having fixed the handle, then remove the 3 screw(put a book below the blade before loose the screw, to avoid damage by blade drop) , grasp the handle, take the blade downwards out of the machine, replace the blade or sharpen it.
7. When install the blade, and the depth of two ends are not same, Adjust the balanced depth of blade through the three screws.
- 8.Turn to the professional operators to sharpen the blade.
9. To install the blade please opposite to the steps above.

Blade stick replacement



1. The blade stick can state eight times.
2. If the blade stick is worn, just turn the shape to another unused side, or replace.
3. Take back the blade to the height point, power off the machine.
4. Open the front cover, loose the inner hexagonal bolt, then adjust or replace the stick (PICT-7)
5. Stick should rely on the left, then tight the inner hexagonal bolt, close the cover.

The solution for pawl is hooked

This is the blade lock key, the pin catch the holdback pawl (blade lock safety device locked blade)to use this Key. In normal use, if the cutter is not cutting down the display prompted the safety device has been touched, the blade locked (the pin catch the holdback pawl).



Reset/Blade Lock

Deal with as follows:

1. Press twice reset button. (PICT- 8) blade will automatically to rebound, it can be normal operation.
2. If the above operation (press twice reset button), the blade still can not go rebound,please check the blade zero limit sensor if this sensor is broken,please replace the zero limit sensor, and then operating according to method 1.

Note: If you press twice the reset button, the blade does not rebound, is strictly prohibited continuous repeatedly press the reset button, be sure to first check the zero limit sensor.

Chapter 3 LUBRICATION AND MAINTENANCE

Lubrication

1. You should lubricate the machine once a month.
2. Turn off the power, open the housing to lubricate the relevant parts. Be caution not to drop the oil on to the circuit board or electric elements.
3. Decelerating gear of main motor should be clean and oil one time each year.

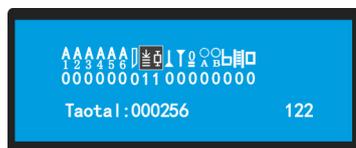
Maintenance

1. Must not put the non- cut material on the machine when the machine is working, which is to avoid the hard material mangling the blade, and should also avoid the staple mangling the blade when cutting the binded books.
2. When finishing the cutting each day, you should clean up waste, put the wax on the blade, and turn off the power.



Chapter 4 INSTRUCTION FOR AUTO CHECKING AND CONNECTING OF MAIN BOARD

1. Self-Checking



Before the machine is turned on, press "CUT" and "PRESS" co-using button and turn on the power at the same time, then the machine will be under self-check condition, the objects to be checked are :each single button, sensors, motor, etc.

The detailed information is as follows:

Instructing picture of operation, each time press "RESET" button, the cursor will shift between blade reset, press reset, press motor, pusher's front-limited sensor, pusher's back-limited sensor, when choosing the content you want to check, at the same time press "CUT" or "PRESS" or "CUT" button to check, the other can be checked separately or self check.

Code	Checking content	Operating ways	Judging ways	Slowing ways	Remarks
A1 0	Press, cut co-using Button	Press the "cut-press" co-using button	If the code in digital window change from "0" to "1", which means the button works normally, if it doesn't change to "1", which means there is something wrong with the button	If the digital window still display "0", which means the button has been damaged, it need to be changed or be mended, u can also check the connection of the button	
A2 0	Reset button	Press the "reset" button	If the code in digital window change from "0" to "1", which means the button works normally, if it doesn't change to "1", which means there is something wrong with the button	If the digital window still display "0", which means the button has been damaged, it need to be changed or be mended, u can also check the connection of the button	
A3 0	Push button	Press the "push" button	If the code in digital window change from "0" to "1", which means the button works normally, if it doesn't change to "1", which means there is something wrong with the button	If the digital window still display "0", which means the button has been damaged, it need to be changed or be mended, u can also check the connection of the button	Only V
A4 0	Press button	Press the "press" button	If the code in digital window change from "0" to "1", which means the button works normally, if it doesn't change to "1", which means there is something wrong with the button	If the digital window still display "0", which means the button has been damaged, it need to be changed or be mended, u can also check the connection of the button	Only V & B
A5 0	cut button	Press the "cut" button	If the code in digital window change from "0" to "1", which means the button works normally, if it doesn't change to "1", which means there is something wrong with the button	If the digital window still display "0", which means the button has been damaged, it need to be changed or be mended, u can also check the connection of the button	
A6 0	Reserve code				
	Blade reset sensor	Press the "reset" button to shift the cursor to the "0" position, then press the "cut-press" co-using button and "press" button, the blade will cut down, when it came down, press "cut-press" co-using button and "cut" button at the same time, the blade will come back to the highest position.	When the blade in the half-down position, the code in digital window change from "0" to "1", which means the sensor works normally, if it doesn't change to "1", which means there is something wrong with the sensor.	If the code "0" doesn't change, which means there is something wrong with the sensor system, it needs to be mended or changed, if the magnetic slice hasn't sensed, which will also display "0", so you'd better check the magnetic slice to see if it is shifted or fall off.	



Code	Checking content	Operating ways	Judging ways	Slowing ways	Remarks			
	reset sensor of presser Front-limited sensor of the p	Press “reset” button to shift the cursor to “	Remark usher					
	Back-limited sensor of the p usher	Press “reset” button to shift the cursor to “	Main board “0” voltage signal	Press “reset” button to shift the cursor to “	Encoder signal	When under the self-checking condition, the signal will check itself, no need people to operate	When under the self-checking condition, the digital window will display “ <td></td>	
	Safety cover sensor	Rotating the hand-wheel of the pusher	When rotating the hand-wheel of the pusher, the code “ <td></td>					
	Infrared wall sensor							
	Reserving sensor	Use some objects to cover the infrared wall	If the code “	Potentiometer of the hand-wheel				
	Knob5	Rotating the hand-wheel of the pusher	If the code “knb5” on digital window shifts between “1-9”, which means the potentiometer works normally, if the code hasn’t changed, which means that there is something wrong with the potentiometer.	Change the potentiometer				

ZERO POSITION AND SIZE-ADJUSTMENT



Pic-1

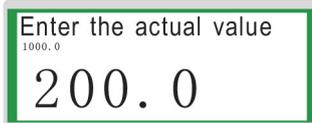
Zero sensor

Press

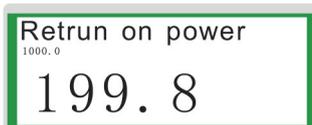


(Pic-2)

Cut



(pic-3)



When the paper-pushing zero position sensor has problem, and you replace the new one, if the cutting size is still not in accord with the showing size, please do the adjustment as follow:

Step 1:

Zero Position Adjustment: turn on power and press “RESET” button, after machine completes reset, please input size “450mm”, the paper-pushing reel will stop automatically, then put one piece of paper to cut, to see the paper size is 450mm or not. If it is less than 450mm, please move the zero position sensor backward a little (see pic 1), if the size is more than 450mm, then just reverse the operation.

After the adjustment, then restart the machine, and repeat the operation above till the cutting size exactly is 450mm. At then, zero position adjustment is completed.

Note: the sensor adjustment is complete every time, please remove the pusher(backguage) out to the sensor sensing area, and then return on machine for test.

Step 2:

Precision calibration: Size adjustment must follow zero position adjustment. Input 200mm on the panel, then put one piece of paper to cut, if the real cutting size is 199.8mm, which is not in accord with the setting size(200mm), please press buttons “PRESS” and “CUT” at the same time (see pic 2), then the display screen will show “*please input the real cutting size to adjust*” (see pic 3), then you input the real cutting size 199.8mm, and press button “ENTER”, the machine will do the size adjustment automatically. The display screen then will show “*please turn off and restart*” (see pic 4).

Just restart the machine.

Note: Precision calibration adjustment range of +/- 2mm.



TROUBLE SHOOTING

Trouble and phenomena	Solution	Related component
Turn on the Power but without any display	<ol style="list-style-type: none"> 1、 check the voltage 2、 check the power cable,socket,breaker 3、 check the power connection. 	Power cable,socket,breaker
Exceed the min cutting size	The input cutting size not reach 50mm	
Exceed the max cutting size	The input cutting size exceed 450mm	
The safety system has been touched.	<ol style="list-style-type: none"> 1.check if there are foreign things on workbench. 2.check the cable connection between infrared wall and mainboard. 	
Clamper top sensor abnormal	<ol style="list-style-type: none"> 1、 check the clamper position 2、 check the magnet on the clamper 3、 check the clamper sensor and mainboard electricity connection 4、 check the sensor 	
Ejector abnormal	<p>step motor error</p> <ol style="list-style-type: none"> 1、 check the step motor electricity connection 2、 check the forward/back limit sensor 	
The ejector and blade not parallel	Adjusting the two M5 screws rule gauge	
The blade can't cut off whole paper	<ol style="list-style-type: none"> 1、 replace a blade stick. loose the 4 M6 screws which fixing the blade stick to take out. 2、 adjust the cutting depth. loose the 3 M4 screws on the blade rack to regulate. 3、 check the turbo. 	Replace the blade stick, or shift to another side
The blade stick during operation	If the motor work normal and not ex-heat, replace the blade.	Replace the blade



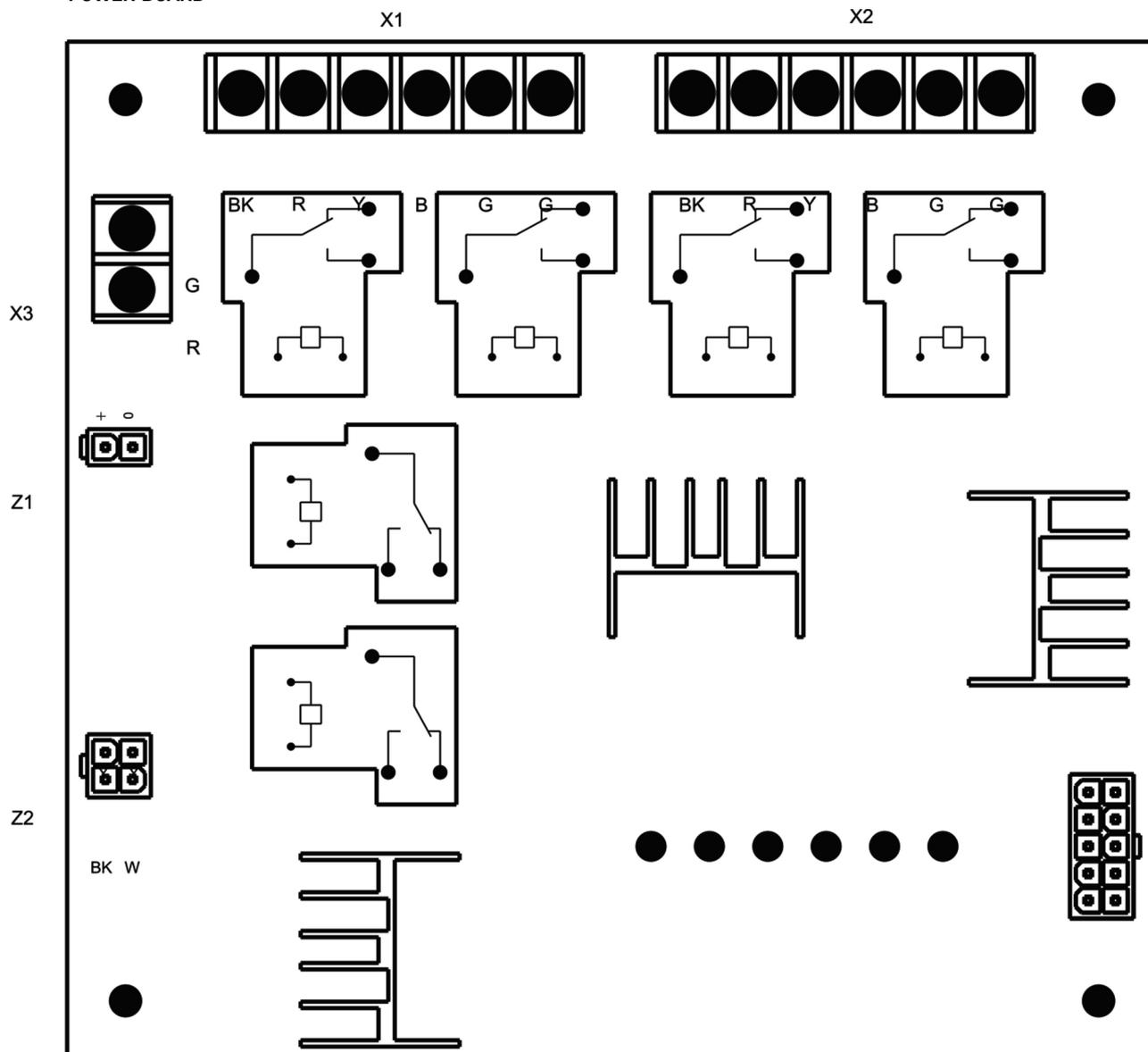


CABLE OUTLET INDICATOR

No.	Explan	Picture	Remarks
Z1	Power of drive		1:+ 2:-
Z2	Transformer		1 3 Out:12V 2 4 Out:30V
Z3	Power board to main board (10pins)		Corresponds to the motherboard 10-pin cable
X1	Main(cutting) motor		BK: motor + R: motor - Y: block+ B: block- G: block AC G: block AC
X2	Press motor		BK: motor + R: motor - Y: block+ B: block- G: block AC G: block AC
X3	Power input		R: breaker L G: breaker N



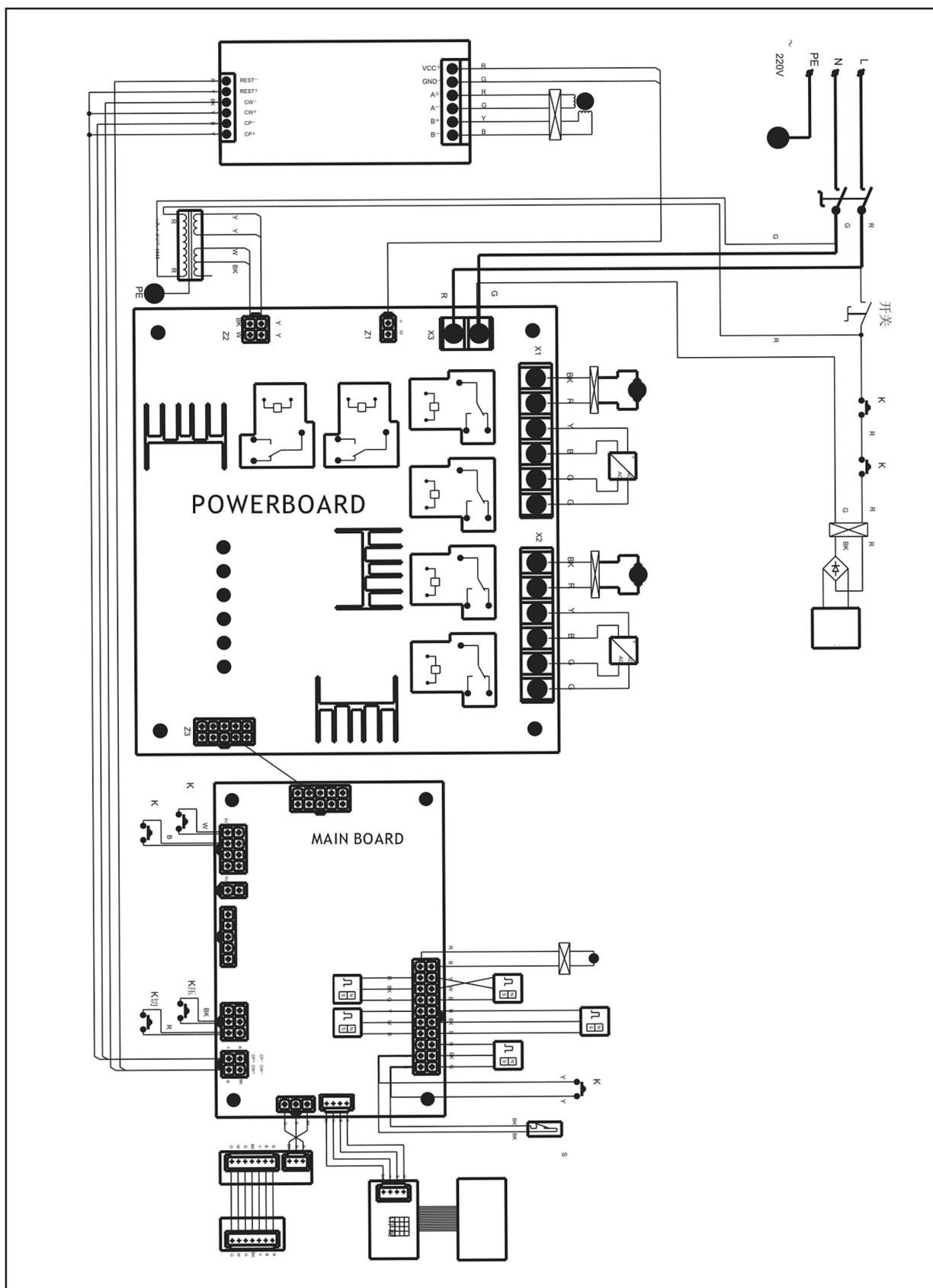
POWER BOARD





CABLE OUTLET INDICATOR

No.	Explan	Picture	Remarks
Z1	Power of drive		1:+ 2:-
Z2	Transformer		1 3 Out:12V 2 4 Out:30V
Z3	Power board to main board (10pins)		Corresponds to the motherboard 10-pin cable
X1	Main(cutting) motor		BK: motor + R: motor - Y: block+ B: block- G: block AC G: block AC
X2	Press motor		BK: motor + R: motor - Y: block+ B: block- G: block AC G: block AC
X3	Power input		R: breaker L G: breaker N





DUMOR!

**Value !
Quality !
Innovation !**