CutterServer

User Manual

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Chapter 1: Introduction of Software

1.1 Introduction

CutterServer is a software to set tool parameters and edit cutting tasks. Customers use iBrightcut, iPlycut and Smartcut to edit cutting files and send them to CutterServer to control cutting.

1.2 Cutting Process



- **1.3 Software Installation and Operating Environment**
- 1.3.1 PC and DSP board requirement

CPU: 2.0GHz or above Memory: 4GB or above Graphics card: 256MB or above

Resolution: 1024×720 or above

DSP Version: 2.2.8 or above

FPGA Version: 1.3.7 or above

1.3.2 System and Software requirement

System: Windows 7, Windows 10 (32bit\64bit)

CutterServer Version: V 3.0.0.1

CutterServer Date: 2018.8.30.1

1.3.3 Software Installation

- ✤ <u>Note: WIN7, WIN10 need to run as administrator</u>
- Note: Please select Chinese or English installation package according to the system's language. As shown in Figure 1.



(Figure 1)



1.4 Software interface and function introduction

1.4.1 Configuration instruction

Before using the software, check whether the cutting equipment is a special model. If it is a dual-beam equipment, a multi-inverter equipment or a 1KW router equipment, please modify the parameters in the SysConfig configuration file in the program directory. The parameter modification method is as follows:

○ 1 Dual-beam: Modify the parameters in the SysConfig configuration file in the program directory, change the feeding mode to pull mode Push=1.

O 2 Multi-inverter or 1KW router equipment:

Use the shortcut key Ctrl+Shift+Alt+C to open the function configuration interface, as shown in Figure 2. Click [Other Function Settings] to modify the [Inverter Related Settings] parameter. If there are 3 inverters, the number of inverters is 3; 4 inverters, the number of inverters is 4.

[Router related settings], modify the router rotation direction, here the clockwise or counterclockwise is meaningless, it needs to be configured according to the rotation direction of the spindle. (Refer to the "1KW router instructions".)

<u>C</u> ommands	Function Configuration	Other functional settings	Knife holder configuration	
Speed Di	rection Of Milling Cutter	C	lockwise	
The numb	per of the frequency com	verter 1		
		Su	'e	
- U-				

(Figure 2)

1.4.2 Main interface introduction

Open the CutterServer software, the main interface is shown as Figure 3.

CutterServer		A REAL PROPERTY.
le(F) View(V) Configuration(T) Help(H)	ii 🎒 Task.	
	🗄 🎒 Previous tasks.	
		-
······································		
	Lorsing Tarkster / Gar Se	at / Suntan Dara /
and and a structure for the data the data and a structure the data based and a structure the data based as the	for the second second	-Arrent and



٦

1.4.3 Icon function introduction

ltem	lcon	Function Description
1		Start cutting icon: Clicking this icon after the cutting task is determined. Clicking this icon when you need to pause; click again to continue the cutting.
2		Cutting cancel icon: Clicking this icon when you need to cancel the current cutting task, the cutting task cannot continue if you click this icon



3

Preview icon: After clicking the preview icon, the cutting machine will show the cutting range by red light according to the size of the cutting task

ltem	lcon	Function Description
4		Conveyor icon: Click the conveyor icon. The cutting machine will automatically feed material according to the set feeding length (only for the machine with conveyor).
5		Vacuum pump switch icon: Click this icon to turn on the vacuum pump, and click again to turn it off.
6		Pump reverse blowing icon: control pump reverse blowing
7	ð	Machine zero point icon: Click this icon to return the cutting head to the zero point
8		Z-axis reset icon: select tool and click this icon, the system will automatically reset the selected tool in Z-axis.

9		Relative origin point icon: Click this icon and the head returns to the start cutting point of the last cut.
10) _	Automatically Knife Initialization
11	3	Manually Knife Initialization
12	1	film covering switch for GLS
13	۵DS	Switch to iBrightCut
14		Pressure cylinder switch, can be manually fed with the direction key (after pressing the pressure cylinder, move the machine head in the X direction, and then lift the pressure cylinder)

1.4.4 Auto Knife Initialization



• Select the cutting tool, then click AKI icon • The following dialog box pops up,

click [AKI]

Preset knife	POT		X:	190.0	mm
Present	33.30	mm	Y:	320.0	mm
🕅 Alterna	tive felt thickness	0.0	mm Rep	pair: 0.00	mm 🖈
Check Ph	notoelectric No Insti	ruction			

• Parameter Description:

Parameter	Description			
Pre-aligned tool holder	Display the currently selected tool name			
Current height	Current tool depth			
start testing	After checking, press any direction key, the machine			
	head will automatically move to the position of the			
	initialization point.			
initialization	Actual position coordinates of the AKI device			
point XY	(different parameters for different position)			
Spare felt	When using router tool, check the thickness of the			
	spare felt and fill in the thickness of the felt.			
	Compensate the error between the AKI device and the			
1 : 6 1	table. By the difference between the manual tool			
compensation	setting and the automatic tool setting, the			
1	compensation range is ± 5 mm (the first, second and			
	third holders can be inconsistent).			
modify	After the compensation is modified, must click			
mouny	Modify to make the compensation value take effect			
Initialization	After clicking, the machine starts the knife initializaton			
Initidiization	automatically			
Canaal	Click to terminate the knife initialization and exit the			
Cancel	interface			

• The common problems of AKI are shown in the following table



1.4.5 Manual Knife Initialization



- Select the tool firstly, click the Manual Knife Initialization icon.
- The following dialog box pops up

	-			
Height before adjust:	33.30			mm
Present height:	0.00		Ĩ	mm
Micro Adjust				
Step(mm)			Up	
0.01	m	m 🦲	Down	

• The up/down of the tool can be controlled by clicking the up and down arrow buttons in the dialog box. When the distance between the blade and the felt is large, you can use the keyboard keys Ctrl+down to speed up the drop. When the blade is close to the felt, press the button slowly to make the knife fall. When the blade just touches the felt, click OK to complete the initialization.As shown in Figure 4.



(Figure 4)

- Maximum falling depth limit
 - By manual knife initialization, the maximum falling depth is 260mm.
 - Resetting the model will clear the maximum depth for all the tools, all set to 10mm.

嚴大落刀深度 10,0000 mm 0,0000 260,0000

Auto Knife Initialization depth or Manual Knife Initialization depth plus 1mm is the maximum depth.

The maximum knife setting depth	33.300	mm	0.000 ~ 34.300	
---------------------------------	--------	----	----------------	--

When manually modify the depth of the tool, can not exceed the maximum depth of the tool, but can be less than the maximum depth of the tool. If need to change the maximum range, please perform the initialization again.

1.4.6 Tools Parameters



Select the tool to be set, right-click to pop up the tool property selection, and modify the parameter dialog box. At this time, you can modify the parameters of the tool. The parameter setting dialog box is shown in Figure 5.

Parameter item	Value	Unit	Range Of Value
SOCKET2	POT	_	
Positive angle of knife and X axis	0.000	limit	-360.000 ~ 360.000
Knife-up compensation	0.000	mm	-100.000 ~ 100.000
Knife-down compensation	0.000	mm	-100.000 ~ 100.000
Knife lifting angel	360.000	limit	0.000 ~ 360.000
X,Y movement speed	0.050	m/s	0.010 ~ 1.500
Knife-lower speed.	93.749	mm/s	0.010 ~ 1000.000
Knife lifting speed	93.749	mm/s	0.010 ~ 1000.000
Movement acceleration	0.050	G	0.010 ~ 1.500
Setting acceleration	0.025	G	0.010 ~ 1.500
The maximum knife setting depth	33.300	mm	0.000 ~ 34.300
Waiting time before setting	10.000	ms	0.010 ~ 10000.000
Waiting time before knife lifting	10.000	ms	0.010 ~ 10000.000
Waiting time after setting	10.000	ms	0.010 ~ 10000.000
Waiting time after knife lifting	10.000	ms	0.010 ~ 10000.000
Direction to rotate			
The distance between former knife poi	1.000	mm	-20.000 ~ 100.000
The distance between later knife point	1.000	mm	-20.000 ~ 100.000
Eccentricity enable			
X eccentric distance	0.000	mm	-100.000 ~ 100.000
V accontric distanca	0.000		1 270 - 1 270

(Figure 5)

1.4.7 Side toolbar

The side toolbar is mainly divided into four toolbars: task view, log view, machine parameters, and gas field settings, which can be displayed or masked by the viewing function.

1.4.8 Task view

The task view dialog box is shown in Figure 6.





- Executing a task: displaying the currently cut task
- Pending tasks: Display the tasks sent by the application software. Can send tasks, set the first task, delete tasks, simulate cutting operations, and so on. Right-click [Pending Task] and select [Analog Cut], as shown in Figure 7, the current data can be simulated and cut. For details, refer to 2.3.4 Simulated Cut.



(Figure 7)

- Completed task: Shows the task of cutting completed.
- Deleted Task: Shows deleted tasks.
- Historical tasks: Show tasks that have been completed before, and click to redo the task again.

 Note: After sending the file, you can add the cutting estimation time in the task information column. As shown in Figure 8.



(Figure 8)

1.4.9 Log view

Mainly used to view machine operation records, including alarm information, cutting information, etc. The log view dialog box is shown in Figure 9.

Time	Event	
16:37:07	Red Light Select	
16:36:40	MILL_1KW Select	
16:36:37	Pen. Select	
16:33:50	The change slot cover is not	
16:32:17	The change slot cover is not	
16:32:00	MILL 1KW Knife-lift.	
16:30:18	Have entered into cutting st	
16:30:12	Red Light Select	
16:30:06	Modify part of knife holder/t	
16:29:35	Initialization Cancel	
16:29:32	POT Select	
16:29:27	Red Light Select	
16:28:50	Pen. Select	
16:28:50	VCUT Select	
16:05:28	POT Knife-lift.	
16:05:28	Y axis motor error.	
16:05:24	POT Select	
16:05:23	Have entered into cutting st	
16:00:59	POT Select	
15:59:30	Red Light Select	
15:59:07	Pen. Select	
15:58:36	There is a barrier.	
15:57:49	EOT Select	
15:57:39	Red Light Select	
15:57:17	Pen, Select	
15:56:40	Pen. Select	
15:56:08	There is a barrier.	
15:56:05	Initialization Cancel	
15:55:56	EOT Select	
15:55:50	Red Light Select	
15:55:21	Pen, Select	
15:55:16	There is a barrier.	
15:54:55	There is a barrier.	
15:54:02	POT Select	
15:53:55	Red Light Select	
15:53:30	Pen. Select	
15:53:30	EOT Select	
15:45:48	Reboot Please(if write speci	
15:45:29	There is a barrier.	
15:45:12	Red Light Select	
15:44:02	Pen. Select	
15:44:01	Initialization Cancel	
15:42:34	POT Select	
15:42:09	Red Light Select	
15:41:41	Pen, Select	
15:38:27	Pen, Select	
15:37:45	Direction can not be reset	
15:37:24	Pen, Select	
Date 2019	9/ 8/30	Last page Next page

(Figure 9)

1.4.10 Machine Parameters

The machine parameter dialog box is as shown in Figure 10.

R	# # <u>\$</u>	
1	Cutting parameter	
	Feeding length(m)	1.000
	Feeding speed.(m/s)	0.090
	Cutting speed.(m/s)	0.600
	Idling speed(m/s)	0.800
	Cutting acceleration(m/s*s)	0.202

(Figure 10)

1.4.11 Gas field setting

The gas field setting function is mainly to modify the suction range and suction force of the air pump. The display interface is shown in Figure 11 and Figure 12.



(Figure 11)

	63 (Hz)	н
9	Π	
))		(

(Figure 12)

```
1.4.12 Status information
```

bar

Ready Red Light Select Cutting completed. Cutting completed. Empty cache 🔳 Serial port.COM3 🔳 Vac Coordinate: 0.00 * 0.00 C: 0.00, H: 0.00 Model BX1(Single Machine) 250cm * 210cm

The contents of the machine status information bar: machine current status, file sending status, communication light, hand-held device, coordinate status, model model, cloud service light.

Chapter 2: Software Operation

2.1 Menu bar operation

File(F) View(V) Configuration(T) Help(H)

2.1.1 File operation



Click the [File]-[Open] function to pop up the Select File dialog box and select the file you want to open. Click [OK] to open this file. An example is shown in Figure 13.

27		and the second second		x
← → ~ ↑ 🧾 > 此电脑 > 桌面 > file		✓ ✓ ⑦ 		P
组织 ▼ 新建文件夹			III 🔹 🛄	0
■ 图片 / 名称 ^	修改日期	类型	大小	
cutterserver iplycut 报告&报销 数件说明书worc ■ OneDrive 此电脑 ③ 3D 对象 圖 视频 ■ 观频 ■ 四 世	2019/6/15 11:25	PLT 文件	4 KB	
文件名(N):		(*.plt *.T	SK))) ??	

(Figure 13)

Click the [Exit] function to pop up the Exit dialog box, and then click [Yes] to exit CutterServer.

2.1.2 View operation

According to the user's needs, the toolbars of the interface can be hidden, ticked to display, and unchecked to be hidden. As shown in Figure 14.





2.2 System configuration operation

The system configuration function includes parameters, serial port configuration, language, background color, machine configuration and other options. As shown in Figure 15.



(Figure 15)

2.2.1 Parameter introduction

The parameter functions include modification, restoration of factory parameters, expansion, special, FZ1 board function configuration, external parameters, and saving to factory parameters. As shown in Figure 16.



(Figure 16)

2.2.1.1 Parameter settings

Click [Modify] to pop up the overall parameter dialog box of the cutting machine, as shown in Figure 17.

Parameter item		Value	Unit	Range Of Value	1
. P. 1	Measured length	1000.000	mm	0.000 ~ 200000.000	
Adjustment	Scheduled length	1000.000	mm	0.000 ~ 200000.000	
e 11	Length	2500.000	mm	0.000 ~ 2500.000	
Cutting scope	Width	2100.000	mm	0.000 ~ 2100.000	
0	X-axis offset	-145.000	mm	-500.000 ~ 2500.000	
Origin coordinates	Y-axis offset	-110.000	mm	-500.000 ~ 2000.000	
D	X offset	0.000	mm	-200.000 ~ 1000.000	
Pen offset	Y offset	0.000	mm	-200.000 ~ 1000.000	
n - 1 l'-1	X offset	0.000	mm	-200.000 ~ 1000.000	
Red-light position	Y offset	0.000	mm	-200.000 ~ 1000.000	
	X offset	28.500	mm	-200.000 ~ 1000.000	
Camera	Y offset	4 <mark>0.000</mark>	mm	-200.000 ~ 1000.000	
	Height	0.000	mm	0.000 ~ 300.000	
	Feeding length	1.000	m	-50.000 ~ 50.000	
Feeding	Feeding speed.	0.090	m/s	0.050 ~ 0.600	
	Material press time	3.000	s	0.000 ~ 100.000	
	Minimum speed	0.006	m/s	0.001 ~ 0.020	
	Cutting speed.	0.600	m/s	0.010 ~ 1.500	
	Idling speed	0.800	m/s	0.010 ~ 1.500	
Speed	Knife lifting speed	1250.000	mm/s	1.000 ~ 10000.000	
	Kaifa lower cread	1250.000	mmle	1.000 10000.000	i

(Figure 17)

 Note: The parameter setting dialog can be called up directly via the shortcut key. (shortcut is Shift+Ctrl+Alt+P)

[Reading parameter] : Automatically read the machine's own parameters

[Save (local)] : Save the cutting parameters to your local computer

[Import] : Import parameter configuration table

[Apply] : Apply the modified parameters and save them to the DSP

[Exit] : Exit the cutting overall parameter dialog

2.2.1.2 Extended parameter

Click [Extended Pa	arameter] to r	modify the	corresponding	parameters,	as
shown in Figure 18	8.				

Parameter item	Value	Unit	Range Of Value	2
Complete signal active low	Π			-
knife-set vibration speed	180.000	rev/min	0.000 ~ 4590.000	
Knife-lift vibration speed	18.000	rev/min	0.000 ~ 4590.000	
Sharpening vibration speed	2790.000	rev/min	0.000 ~ 4590.000	
Vacuum Pressure	-1.000	Кра	-25.500 ~ -0.200	
To keep the vacuum pressure	-1.000	Кра	-25.500 ~ -0.200	
Collecting material speed	0.010	m/s	0.000 ~ 50.000	
Drilling 1 Speed	3 <mark>0.000</mark>	rev/min	0.000 ~ 6000.000	
Drilling 2 Speed	30.000	rev/min	0.000 ~ 6000.000	
Normal pressure value	0.000	Кра	0.000 ~ 4000.000	
Mane felt independence mover	0.050	m/s	0.050 ~ 0.250	
Linkage beam movement spee	0.020	m/s	0.020 ~ 0.150	
Knife intelligent sensitivity	1	▪ Level		
Knife Smart Range	5	•		
Massive suction models	ΥК	•		
Smart Aspiration	From head to tail	-		
Smart inspiratory time	0.000	s	0.000 ~ 3.100	
The material pressing cylinder	0.000	S	0.000 ~ 1.500	
Backflush time	0.000	s	0.000 ~ 1.500	
Feeding compensation	0.000	mm	0.000 ~ 6000.000	
	0.100	1 1	0.000 05 500	

(Figure 18.)

2.2.1.3 Restore factory parameters

Restore the factory parameters, that is restore to the last saved factory parameters, as shown in Figure 19. Restore the original parameters of the machine if the factory parameters have not been saved. (Note: This feature is recommended only for data loss)



(Figure 19)

- Note: All parameters, including factory parameters, will be cleared when the model is reset. (need to reset factory parameters)
- Note: The machine needs to be restarted to restore the factory parameters. After resetting the model, the alarm message pops up as shown in Figure 20.

Alarπ	8B
Alarm	Reboot Please(if write specia
Probl	em analysis and Solutions
	Cause analysis and solution

(Figure 20)

2.2.1.4 Extended parameter

Since the V2.5.1.0 version has parameter classifications for different models, different models will display different parameters. The extended parameter dialog is shown in Figure 21.

Parameter item	Value	Unit	Range Of Value	
Width of cut				
The cutting direction	From big to small			
Cutting back and forth				j
The first knife 1				
The first knife 2				
The first knife 3				
The first knife 4				
Control mode	The level of single			
Effective control signal low				
Complete signal active low				
knife-set vibration speed	180.000	rev/min	0.000 ~ 4590.000	
Knife-lift vibration speed	18.000	rev/min	0.000 ~ 4590.000	
Sharpening vibration speed	2790.000	rev/min	0.000 ~ 4590.000	
Vacuum Pressure	-1.000	Кра	-25.500 ~ -0.200	
To <mark>keep the vacuum pressure</mark>	-1.000	Кра	-25.500 ~ -0.200	
Collecting material speed	0.010	m/s	0.000 ~ 50.000	
Drilling 1 Speed	30.000	rev/min	0.000 ~ 6000.000	
Drilling 2 Speed	30.000	rev/min	0.000 ~ 6000.000	
Normal pressure value	0.000	Кра	0.000 ~ 4000.000	
Mane felt independence move	0.050	m/s	0.050 ~ 0.250	ĺ
15 T	0.000	<i>i</i> .	0.000 0.150	i

(Figure 21)

- 2.2.1.5 Special parameter
- ✤ Note: This parameter is only allowed to be modified in the alarm state.

Cale sial Darm				
special Para		Malar		
	Parameter item	Value		
Machine	69 6 0	BK	-	
Machine S		1		
Machine I	уре	Single Machine		
1Head		MAXONMILLHEAD		
2Head		DELTA	-	
3Head		DELTA	<u> </u>	
4Head		NULL	-	
Show		bk		
Length		250		
Width		210		
Serial	22	bk325160000000		
	Obstacle Detection			
	Automatic Knife Initialization			
	Hand Operator	24bit	•	ĺ
	Air Area Adjustment	~		
	CNC Router Function	~		
	Valve Function			
	EOT Fault Fast Response (Pause)	Г	22	
	CNC Router Fault Fast Response (Pause)			
[A]Com	C Board			
	V Ayla(Only Custom Madal is Valid)			

(Figure 22)

2.2.1.6 Functional configurations of FZ1 board (duplicate feeding)

1 Func Config	-	X
stepping motor		
Secondary Feed Enable		
Second Feed Length		mm
Percentage Of Gear		%
Delay		s
Jitter Times		7

(Figure 23)

[Duplicate Feeding Function] : Choose to open the function.

【Feeding Length】: Second-feeding length; The distance between the front and the back of the cutter according to the first-time feeding (0mm--440mm).

[Electronic Gear Ratio] : The ratio between the set distance and the actual movement distance; Adjust the step factor of the feeding motor when there is difference between the actual feeding length and set value (50%--101%).

【Delay Time】: The interval between the first and second feeding (0--25.5s).

[Shaking Time] : The up-down frequency of the sucking discs of the feeding device (0--255).

2.2.1.7 External parameters

The external data can be set and read, which can be used to install on Pad equipment and be compatible with the machine code.





2.2.1.8 Factory Parameter

Factory parameter is the one set before the machine delivered out of factory. **[** Save as Factory Parameter **]** Save the current parameter as factory parameter corresponding to recovering the factory parameter.

2.2.2 Serial Port Configuration

Choose [Serial Port Configuration]. A [Choose Serial Port Number] dialog pops up, in which choose the relevant serial port number.

Green sign shows the successful connection of DSP board.:

Serial port.COM3

Red sign shows the DSP board's connection is failed.:

Serial port.COM3



2.2.3 Language Setting

Configuration(T) Help(H)		
Parameter(P) Serial Configuration(C)	` _ (5
Language	Local Language	12. 20
Automatic Knife Initialization Gas Hole Setting(G)	English(USA)	_
Skin		-



- ✤ Note: Native language changes according to the operation system.
- 2.2.4 Background Color Setting

Change color of the coordinate axis.

(Figure 26)

2.2.5 Machine Configuration

Introduce another means of changing machine's special parameters as below.

• Click [Machine Configuration], a popup dialog as below Figure 27.

Special Para	m				
-	Parameter item	Value			
Machine		вк	-		
Machine S	ub	1	-		
Machine T	уре	Single Machine	-		
1Head		MAXONMILLHEAD	•		
2Head		DELTA	-		
3Head		DELTA	_		
4Head		NULL	-		
Show		bk			
Length		250			
Width		210			
Serial		bk325160000000			
	Obstacle Detection				
	Automatic Knife Initialization				
	Hand Operator	24bit	•		
	Air Area Adjustment	v			
	CNC Router Function				
	Valve Function	~			
	EOT Fault Fast Response (Pause)				
	CNC Router Fault Fast Response (Pause)				
[A]Com	C Board				
	V Avla(Only Custom Madal is Valid)		1		

(Figure 27)

• Choose the relevant serial port number and click Test Communication as below Figure 28, which shows the correct connection of the serial

port hardware.

机器设置 串口号:	Сомз	•		〔通信	应用		「清除回	1显			
同步未成〕 read mac ,machine serial=bk3	力 hine mod :: BKM ,: 3251600	el 20,180,N 0000, ve	lame:iEcho E r:,2.2.4–G1	3KM Cuttei,F 60510D,140	lead:32779,f	-unCtrl:0>	X6100,0X0	002,0X000	0	e de de de se de de de de de	**

(Figure 28)

 Change the needed parameters and click Apply as below Figure 29, which shows the parameters are changed successfully and just need to power on again.

串口号:	Сомз 👻	测试通信	应用	清除回显	
serial=bk3	25160000000, ver	,2.2.4G160510D,14	0	******	*
serial bk32 !serial bk3 name:iEch !name:iEc ,machine	25160000000 25160000000传送所 no BKM Cuttei ho BKM Cuttei传送所 set 36,120,180,323	成功 成功 779,1			E
Imachine function s Ifunction	set 36,120,180,322 set 6100,0002,0000 set 6100,0002,000	779,1,传送成功) 0传送成功			

(Figure 29)

2.3 Help

He	elp(H)	
	Cutterserver User Manual(M)	
	About CutterServer(A)i-	
	Diagnosis(K)	
	КеуМар	
	simulate cutting	
	Online upgrade	
	Error code query	

2.3.1 About CutterServer

Check CutterServer version.

2.3.2 Diagnosis

Check the machine's serial number, C board and the version of DSP board.

Diagnosis			×	
Para	ameter item	Value		
Serial No		bk325160000000		
DSP version NO		2.2.8-LC180903M		
Handle version NO	50			
c n d l f	The Version No	2.1.06		
C Board Information	Function Control Word	OF,		
	FpgaErr:	81,		
	Motor:	C425,C348,717F,		
505.0	EmgOlsPaus:	FF,		
FPEG state	EndoerConfigX2U:	0B,		
	FpgalOStatus:	0E,		
	FpegVersion:	1.3.9		
	X:	0		
	Y:	0		
F	Z:	1		
Encoder value	U:	1		
	V:	0		
	W:	0		
	1F344	Other-Point Moving-There is a barrier.		

(Figure 31)

2.3.3 Shortcut Key

КеуМар			
Кеу	Description		
Ctrl+Alt+Shift+C	Sys Config Dialog		
Ctrl+Alt+Shift+M	Config Special Param Dialog		
Ctrl+Alt+Shift+S	Test Dialog		
Ctrl+Alt+Shift+L	Save As Factory Parameter		
Ctrl+P	Pump Switch		
Ctrl+ALT+SHIFT+D	Diagnosis		
Ctrl+Alt+Shift+P	Parameter Dialog		
Ctrl+Alt+Shift+E	Expand Param Dialog		
Space	Start Or Pause Cut		
Esc	Cancel		
Ctrl+G	Gas Hole Setting		
Ctrl+Backspace	Continue Cutting		
Shift+S	Blade socket index sorting		
٤.	uu la		

(Figure 32)

2.3.4 Cutting Simulation

When the software is unconnected to the machine, then it can simulate the cutting with the data.

• Choose and click the needed plt. Tsk cutting files as the below Figure 33.



(Figure 33)

• Open [Automatically Start Cutting Simulation], drag the Speed Bar to adjust the cutting simulation speed; [Cancel], can cancel the current cutting simulation, and it can restart after the completion of the cutting simulation.



(Figure 34)

2.3.5 Online Update

Choose **(**Online Update **)** under the Help menu bar, and also can download the offline installation package.

◆ Note: If the online update software cannot close automatically, then

then update needs to wait after software closed manually.



(Figure 35)

船 Update			×
CutterComServer upgrade p	rogram		
Download progress	The file name	0 KB/S	
1			
1 N.	- 14 M	50	

(Figure 36)

2.4 Single Interface of Dual Beam Mode

2.4.1 Single Interface of Dual Beam Mode

New-added single interface of dual beam mode in CutterServer.



(Figure 37)

2.4.2 Toolbar



Toolbar changes when the CutterServer is installed on the dual-beam cutter.

[A] : Toolbar A shows the tool configurations on the main gantry

(B) : Toolbar B shows the tool configurations on the auxiliary gantry

2.4.3 Status Bar

dd und	ահահաններիություն	վող <mark>ի</mark> նվայիսվույիս	ในปละโดยโดปละไม่ปละโลปละไม่ไม่ได้ได้เป็นได้เป็นไม่ได้ได้ได้ได้ได้ได้ได้ได้ได้ได้ได้ได้ได้ไ	հահո
A	红光 Select	就绪	■ 通信□:COM3 ■ 气器	泉
В	红光 Select		■ 通信□:COM8	

For the dual-beam cutters, the status bar has two lines which show the current status of the main and auxiliary gantries, the chosen tool, vacuum on-or-off, and communications.

2.4.4 Software Operation

The operation for the dual-beam cutters generally keeps same as the single gantry cutters. It only needs to click [A] or [B] in the toolbar and the icon for the relative activated gantry will light.

2.4.5 Basic Configuration

When CutterServerV3.0.0.1 is applied on the dual-beam gantry cutter, it needs to open the SYSConfig file under CutterServer's installation directory and to change BeamsCount=1 into BeamsCount=2, as below Fugure 38.



(Figure 38)

- **2.5** Parameter Modification
- 2.5.1 Configuration Parameter Modification

Through the shortcut keys to enter the configuration parameter modification dialog. (Shortcut keys: Ctrl+Alt+shift+C)

Note: modificate the configuration parameters needs to pass the permissions first.

Permission to confi	rm	
	Administrator:	Administrator 🗸
Ca de las	Password:	•••••
	The password is verify the user'	s an important basis to s legitimacy.
200	Ent	ter Cancel

(Figure 39)

2.5.2 Commands Parameter

	Function Con	figuration	Other functional settings	Knife holder configuration
To add a comn command out o Categories:	and to a toolbar: If this dialog box t	select a cat to a toolbar. nan <u>d</u> s:	egory and drag the	
Command too Tools tool bar	bar 0	Start Pause Cancel Preview		

(Figure 40)

【Command Bar】: Choose the tool according to the needs (by clicking the lift mouse button).

[Socket Bar] : Choose the socket according to the needs (by clikcing the lift mouse button).

Function Cor	figuration		
<u>C</u> ommands To add a comr command out	Function Con nand to a toolbar of this dialog box	nfiguration : select a cat to a toolbar	Other functio
Categories: Command too Tools tool bar	l bar 0 0 0	man <u>d</u> s: Socket 1 Socket 2 Socket 3 Socket 4 Socket 5	

(Figure 41) (Figure 42)



2.5.3 Functional Configuration Modification

(Figure 43)

【Configurations Display in Status Bar】: Choose to display/hide according to the needs.

[Machine operation direction configuration] : Change the control button for the movement direction of cutting head.

[Task Configuration **]** : Change the history and property of samples.

【 Automatically Close Vacuum Pump 】 : Control if automatically close the vacuum pump after cutting.

[Display Cutting Time] : Choose to see the cutting time in the main interface as below figure 44.

(Figure 44)

【Coordinates Reset】: Make the cutter and operation interface by turning the coordinates.

Example: For the position of the cutter and computer stand as below picture 45, then it should choose the coordinate 5.



(Figure 46)

2.5.4 Tool Configuration Modification

Change the tool parameter according to the relative cutting tool.

Knife holder/knife tool modification Parameter item Value SOCKET2 EOT ✓ Positive angle of knife and X axis CUT1 Knife-up compensation CUT2 Knife during compensation FLAT	Parameter Set		
Parameter item Value SOCKET2 EOT Positive angle of knife and X axis CUT1 Knife-up compensation EOT Knife of the compensation CUT2	Knife holder/knife tool modification		
SOCKET2 EOT Positive angle of knife and X axis CUT1 EOT Knife-up compensation CUT2 FLAT	Parameter item	Valu	ie
Positive angle of knife and X axis CUT1 EOT Knife-up compensation CUT2	SOCKET2	EOT	~
Knife-up compensation CUT2	Positive angle of knife and X axis	CUT1	
Kine up compensation CU12	Knife-up compensation	EOT	
		FLAT	
	Knife lifting angel	VCUT	







2.6 Special Parameter

2.6.1 Special parameter setting

Through the shortcut keys to enter the special parameter setting. (shortcut keys: Ctrl+Alt+shift+M).

 Note: special parameters need to be modified under the machine alarm status and after modification, it needs to power on again.

Special Para	Im		-	
	Parameter item	Value		
Machine		вк	-	
Machine S	ub	1	-	
Machine T	уре	Single Machine	-	
1Head		MAXONMILLHEAD	•	
2Head		DELTA	•	
3Head		DELTA	<u>•</u>	
4Head		NULL	<u>*</u>	
Show		bk		
Length		250		
Width		210		
Serial	20	bk325160000000		
	Obstacle Detection			
	Automatic Knife Initialization			
	Hand Operator	24bit	•	
	Air Area Adjustment	V		
	CNC Router Function			1
	Valve Function	V		i
	EOT Fault Fast Response (Pause)			
[A]Com	CNC Router Fault Fast Response (Pause)			ĺ
[A]Com	C Board	V		
	V Aula(Only Custom Madal is Valid)		1	1

(Figure 49)

2.6.2 Introduction of Multi-usage Cutting Head

Multi-usage cutting head, that is, one cutting head for two cutting tools.

When using the mutli-usage cutting head, it needs to add the relations between sockets and cutting tools.

Cutting	РРТ	PTM	PTMS	MAM_D
Head Type				
		One		
Relative	Dual	Punching	One Rotary Tool;	Marking
Cutting	Punching	Tool; One	One Punching Tool (with rotation and without height)	Head
Tool	Tool	Rotary		
		Tool		

When SC, GLS machines use multi-usage cutting head, it will automatically turn into SC or GLS cutting head type, then other models can use the multi-usage cutting head.

2.6.3 Test Interface

Through shortcut keys to enter into the machine test interface. (shortcut keys: Ctrl+Alt+shift+S).

Test interface currently mainly is applied for the camera's offset adjustment on LCP model.





Chapter 3: Notes

- When two tools install in the same cutting head, after the second tool's initialization, it needs to use the first tool again, then for the safety, the lowering depth of the first tool cannot be saved in the DSP setting, it needs to do the initialization for the first tool again.
- Open the program which shows "...menu bar..." dialog.

CutterC	ComServer	
2	Due to a software update the toolbar '菜单栏' has changed Would you like to reset your customized toolbar and load new one?	the
	是(Y)	\$(N)

(Figure 51)

Solution:

 \bigcirc Use the shortcut keys (WIN+R) to open, and input regedit to open registration list.

²Open the below path in turn, delete ConfigNew file folder, and reopen the software.



(Figure 52)

• In the XP system, CutterServer and SmartCut are under the same directory, and it shows "cannot position entry point _ftol2 to DLLS msvcrt.dll."

CutterServe	r.exe: Start Error	×
😮 Ca	ntinousCut.dll not found. File must be available to run the plication!	
	确定	

(Figure 53)

Solution:

Delete opengl32.dll file under the SmartCut installation directory, and open CutterServer again.

• Serial Port Cannot Connect

Solution: delete the serial port in the computer manager and install again.