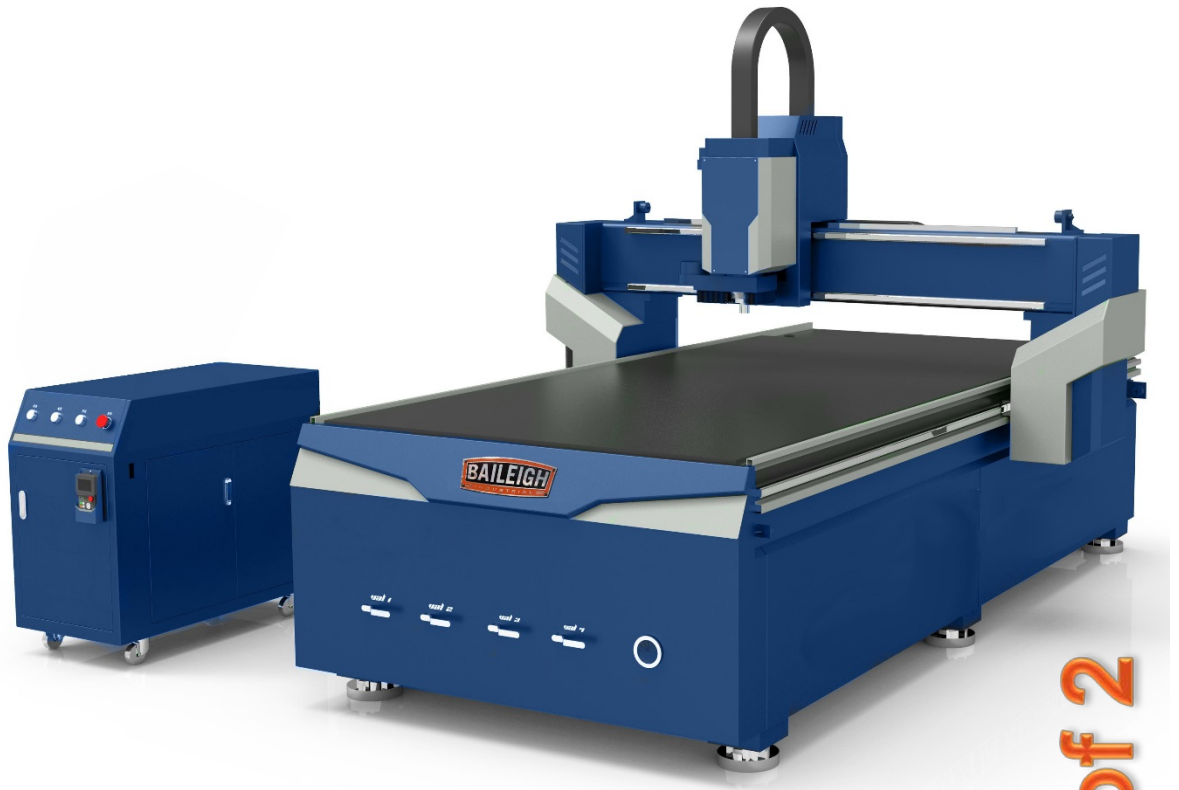




# CONTROLLER MENU TABLES

Wood Working



Book 2 of 2

## ROUTER TABLE MODEL: WR-105V-ATC

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## MENU TREE

The normal operation screen will display is a combination of rows and columns.

X, Y, and Z are each in a row with their coordinate locations relative to the last set workpiece coordinate. The right or 3<sup>rd</sup> column is a display of the active operating conditions and settings. When the machine is not moving it will display "Idle". When it is being moved or running a program, it will display "Run".

The next row down will display the Spindle status. SOff = Spindle Off. When the spindle is running, this will display from 0S to S7 depending upon the operator's settings. These steps or gears are the relative rpm that the spindle will be turning at.

Pressing the "Shift" key will change between "Jog" or "Stepping". This will change the movement of the axes from continues as long as the axis key is pressed to moving a specific distance each time the axis key is pressed.

1X	0.000	Idle
1Y	0.000	SOff
1Z	11.000	Slow
Jog		100%

Pressing the OK key will change to the parameters screen for the operation being performed. Using the up or down arrow keys will move the cursor around the screen to allow for values to be edited as needed. Press ESC to return to the Operating screen. Pressing the

MSpd	8000/	3000
StepXY		0.100
StepZ		0.100
File	T1.NC	

The following is a table of the options that are listed in the full system menu. While most options are available and active, some are not. Those options under the Mfg Parameter require a password to enter to help prevent damage to the material and machine.

When a menu item is highlighted, use the OK key to enter the next level, or accept any changes. Use the ESC to move back a screen or cancel any changes.

Some of the basic parameters from the menu are listed below. DO NOT make changes to the parameters if unsure of the outcome of the change. Some changes can damage the machine or the workpiece if changed incorrectly.



**NOTICE:** While some of these settings are intended to be adjusted by the operator to tune the operation to the material and cut being performed, other settings are not to be changed by the operator. If you are unsure of the effect a change to a setting will have on the performance of the table, do not make the change.  
**DAMAGE DUE TO INCORRECT SETTING WILL NOT BE COVERED UNDER WARRANTY.**

**1. Local Files**

1	Local Files	Program files saved to memory			
---	-------------	-------------------------------	--	--	--

**2. USB Files**

2	USB Files	Program files saved to USC Disk			
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**3. Operations**

3	Operations	1 Back RED Point	1 All Home 2 Z Home 3 X Home 4 Y Home		
		2 Rect Machining	1 Params Settings	EngrDpth 0.300 EachDpth 0.300 ToolDia 1.000 NoseGap 15.000 Height 3065.000 Width 1540.000 X Init 0.000 Y Init 0.000 Mode Horiz. Mill	
				-----Load Now--	
			2 Load The Last	Will start the last program	
	3 Select Line No	Total : 0 StartLi 0 EndLine 0			
		-----Execute Now--			



	4 Machining Info	Time: 0:0:5 X: 109 109 Y: 3088 3088 Z: 0 0		
	5 Park MCS Site	1 Park Mode	Not move	
			To park site	
			To WCS Origin	
			[OK]Select	
	5 Park MCS Site	2 Park Site	1 Input Site	Input park site
				X : 109.500
				Y : 3088.100
				Z : 0.000
			2 Select Site	Current Site OK
				Not ESC
	6 Select WCS	G54 WCS G55 WCS G56 WCS G57 WCS G58 WCS G59 WCS		
		Select by [OK] key		
	7 Array Process	File <File Name> Rows 2 Columns 2 RowSpace 50.00 ColSpace 50.00 Delay 50		
		----Load Now--		
	8 Origin List	1:X 0.00 Y 0.00 Z 0.00 2:X 0.00 Y 0.00 Z 0.00 3:X 0.00 Y 0.00 Z 0.00 4:X 0.00 Y 0.00 Z 0.00 5:X 0.00 Y 0.00 Z 0.00 6:X 0.00 Y 0.00 Z 0.00 7:X 0.00 Y 0.00 Z 0.00 8:X 0.00 Y 0.00 Z 0.00		
		①Save②LD③CDEL		
	9 Nearby Process	Will start the last program		



#### 4. Oper Param

4	Oper Param	1 G00 speed 20000.000mm/min				
		2 Gxx Speed 10000.000mm/min				
		3 Back REF First Yes				
		4 Lifts on Pause 10.000mm				
		5 Offset	1 PublicOffset	PublicOffset X Axis: 0.000 Y Axis: 0.000 Z Axis: -0.100		
				1 G54 Offset	G54 Offset X Axis: 0.000 Y Axis: 0.000 Z Axis: 0.000	
			2 Work Offset	2 G55 Offset	G55 Offset X Axis: 0.000 Y Axis: 0.000 Z Axis: 0.000	
				3 G56 Offset	G56 Offset X Axis: 0.000 Y Axis: 0.000 Z Axis: 0.000	
				4 G57 Offset	G57 Offset X Axis: 0.000 Y Axis: 0.000 Z Axis: 0.000	
				5 G58 Offset	G58 Offset X Axis: 0.000 Y Axis: 0.000 Z Axis: 0.000	
		6 CycleProcess	1 Cycle Process No	Spec.: Enable cycle process Value: No Unit:	Enable cycle process ● Yes ▶ No	
				2 Cycle Times 2	Spec.: Cycle times Value: 2 Unit:	
				3 Cycle Interval 0ms	Spec.: Interval of cycle process Value: 0 Unit: ms	
				SOff In Interval No	Spec.: SPDL off in the	Enable cycle process



			interval Value: No Unit:	<ul style="list-style-type: none"> <li>• Yes</li> <li>▶ No</li> </ul>
	7 G73_G83Retrac 0.000mm	Spec.: G73_G83 retract distance Value: 0.000 Unit: mm		
	8 Ignore F Code Yes	Spec.: Ignore F code Value: Yes Unit:	Ignore F code ▶ Yes • No	
	9 Ignore S Code Yes	Spec.: Ignore S code Value: Yes Unit:	Ignore S code ▶ Yes • No	
	10 SpindleStop	1 SOff at Pause Yes	Spec.: Spindle off when pause Value: Yes Unit:	Spindle off when pause ▶ Yes • No
		2 SOff at Stop Yes	Spec.: Spindle off when stop Value: Yes Unit:	Spindle off when stop ▶ Yes • No
		3 SOff at End Yes	Spec.: Spindle off when end Value: Yes Unit:	Spindle off when finish ▶ Yes • No
	11 Ratio ON MANU Yes	Spec.: Ratio on when MANU mode Value: Yes Unit:	Ratio on when MANU mode ▶ Yes • No	
	DXF Params	1 Lifting Height 1.000mm	Spec.: Lifting height at G00 Value: 1.000 Unit:mm	
		2 Process Depth -1.000mm	Spec.: Process depth Value: -1.000 Unit:mm	
		3 FirstPointAs0 Yes	Spec.: First point as zero Value: Yes Unit:	First point as zero ▶ Yes • No
		4 Shape Process No	Spec.: Process shape separately Value: No Unit:	Process shape separately • Yes ▶ No
		5 Bottom Process	Spec.:	Enable bottom



			No	Enable bottom machining Value: No Unit:	machining ● Yes ▶ No
			Metric Size No	Spec.: Adopt metric size Value: No Unit:	Adopt metric size ● Yes ▶ No
		13 Eng Params	1 Lifting Height 1.000mm	Spec.: Lifting height at G00 Value: 1.000 Unit:mm	
			2 ToolChangeTip Yes-----	Spec.: Enable tool change tip Value: Yes Unit:	Enable tool change tip ▶ Yes ● No
			3 Cycle Times 1	Spec.: Cycle process times Value: 1 Unit:	
			4 Deep Hole Mode 0	Spec.: 0: Recip chip; 1: HS Recip chip Value: 0 Unit:	
			5 Retract Amount 1.000mm	Spec.: Retract amount Value: 1.000 Unit: mm	
			6 Select ToolNo. Yes	Spec.: Process per tool No. Value: Yes Unit:	Process per tool No. ▶ Yes ● No
		14 Plt Params	1 Lifting Height 5.000mm	Spec.: Lifting height Value: 5.000 Unit: mm	
			2 Plt Unit 40.000	Spec.: Plt unit Value: 40.000 Unit:	
			3 Tool step 0.025mm	Spec.: Tool step Value: 0.025 Unit: mm	
			4 Process Depth -1.000mm	Spec.: Process depth Value: -1.000 Unit: mm	
		15 Tool Change	1 ATC Capacity 6	Spec.: Tool magazine	





			capacity Value: 6 Unit:	
		2 CurrentToolNo. 1	Spec.: Set current tool No. Value: 1 Unit:	
		3 Tool Offset	1 Tool1	Tool Offset 1 X Axis: 0.000 Y Axis: 0.000 Z Axis: -0.000
			2 Tool2	Tool Offset 2 X Axis: 0.000 Y Axis: 0.000 Z Axis: -0.000
			3 Tool3	Tool Offset 3 X Axis: 0.000 Y Axis: 0.000 Z Axis: -0.000
			4 Tool4	Tool Offset 4 X Axis: 0.000 Y Axis: 0.000 Z Axis: -0.000
			5 Tool5	Tool Offset 5 X Axis: 0.000 Y Axis: 0.000 Z Axis: -0.000
			6 Tool6	Tool Offset 6 X Axis: 0.000 Y Axis: 0.000 Z Axis: -0.000
		4 ToolChangeTip No	Spec.: Enable tool change tip Value: No Unit:	Enable tool change tip ● Yes ▶ No
		5 Cali Coor (The numbers will be the exact coordinates of the touch pad on your table.)	1 X Cali Coor xxx.xxx0mm	Spec.: X MEC coor of cali block Value: 136.780 Unit: mm
			2 Y Cali Coor xxxx.xxxmm	Spec.: Y MEC coor of cali block Value:3130.032 Unit: mm
			3 Z Cali Coor -xxx.xxxmm	Spec.: Z MEC coor of cali block Value:-100.000 Unit: mm
		6 Cut Up Pos	Spec.:	



			-1.000mm	Cut up position Value: -1.000 Unit: mm		
			7 Change Speed 15000.000mm/min	Spec.: Change tool speed Value: 15000.000 Unit: mm/min		
			8 Pre-TC pos	Pre-TC pos(mm) X Axis: 0.000 Y Axis: 0.000 Z Axis: -10.000		
			9 Tool position (The numbers will be the exact coordinates of each tool holder location on your table.)	1 Tool1		Tool Position 1 X Axis: 413.251 YAxis:3128.979 Z Axis:-145.100
				2 Tool2		Tool Position 2 X Axis: 543.126 YAxis:3128.302 Z Axis:-145.100
				3 Tool3		Tool Position 3 X Axis: 672.849 YAxis:3128.200 Z Axis:-147.100
				4 Tool4		Tool Position 4 X Axis: 804.688 YAxis:3128.200 Z Axis:-147.100
				5 Tool5		Tool Position 5 X Axis: 933.495 YAxis:3128.000 Z Axis:-147.000
				6 Tool6		Tool Position 6 XAxis:1064.705 YAxis:3128.100 Z Axis:-147.000
			10 CalibrateTool No	Spec.: Calibrate tool after change Value: No Unit:		Calibrate tool after change ● Yes ▶ No
11 Back Pre_Pos No	Spec.: Back to Pre_Pos after change Value: No Unit:	Back to Pre_Pos after change ● Yes ▶ No				
12 Change Delay 500.000ms	Spec.: Change delay Value: 500.000 Unit: ms					
16 ProcessEndTip No	Spec.: Red lamp after process	● Yes				



			Value: No Unit:	▶ No	
		17 Cali. Height 1.000mm	Spec.: Height after Calibrate Tool Value: 1.000 Unit: mm		

### 5. Mfr Param

5	Mfr Param Password	1. Velocity	1. Decel. Dist. 10.000mm	Spec.: Decel. distance Value: 10.000 Unit: mm
			2. Approach Speed 1000.000mm/min	Spec.: Approach speed Value: 1000.000 Unit: mm/min
			3. Run Acc. 550.000mm/s <sup>2</sup>	Spec.: The maximum linear Acc. when machining Value: 550.000 Unit: mm/s <sup>2</sup>
			4. Dry Run Acc. 1100.000mm/s <sup>2</sup>	Spec.: The maximum linear Acc. when positioning Value: 1100.000 Unit: mm/s <sup>2</sup>
			5. Max.Turn Acc. 1000.000mm/s <sup>2</sup>	Spec.: Maximum. turn acc. Value: 1000.000 Unit: mm/s <sup>2</sup>
			6. Jerk 10000.000mm/s <sup>3</sup>	Spec.: Jerk Value: 10000.000 Unit: mm/s <sup>3</sup>
			7. Max Speed	*Max speed of axis (mm/min) X Axis: 15000.000 Y Axis: 15000.000 Z Axis: 5000.000
			8. ShortSegSpdLmt Yes	Spec.: Enable short Seg.SpdLmt Value: Yes Unit:
			9. SpdLmt Length 0.500mm	Spec.: Length of short Seg.SpdLmt Value: 0.500



			Unit:mm
		10. Z Down Option 2	Spec.: 0:Not 1:Z single 2:XYZ all Value: 2 Unit:
		11. ZPlungeCutSpd 1000.000mm/min	Spec.: Plunge Spd along Z Value: 1000.000 Unit: mm/min
		12. RefCirRadius 5.000mm	Spec.: Reference circle radius Value: 5.000 Unit: mm
		13. RefCirSpeed 3000.000mm/min	Spec.: Reference circle speed Value: 3000.000 Unit: mm/min
		14. Jump Speed 0.000mm/min	Spec.: Jump speed Value: 0.000 Unit: mm/min
		15. LookAheadDis 0.000mm	Spec.: Look ahead distance Value: 0.000 Unit: mm
	2. AxisOutputDir	*Axis output dir. X Axis: Positive Y Axis: Positive Z Axis: Positive	
	3. Pulse Equiv.	* P Equiv (mm/p) X Axis: 0.0040000 Y Axis: 0.0040000 Z Axis: 0.0040000	
	4. MachineStroke	1. StrkUpperLmt	StrkUpperLmt (mm) X Axis: 1530.000 Y Axis: 3200.000 Z Axis: 0.000
		2. StrkLowerLmt	StrkLowerLmt (mm) X Axis: 0.000 Y Axis: 0.000 Z Axis: -250.000
	5. ChangeStroke	1. StrkUpperLmt	StrkUpperLmt (mm) X Axis: 1530.000 Y Axis: 3200.000 Z Axis: 0.000
		2. StrkLowerLmt	StrkLowerLmt (mm) X Axis: 0.000 Y Axis: 0.000 Z Axis: -250.000



	6. REF.PointSet	1. REFP Speed	Speed (mm/min) X Axis: 3000.000 Y Axis: 3000.000 Z Axis: 1800.000		
		2. REFP Dir	Homing direction X Axis: Negative Y Axis: Negative Z Axis: Positive		
		3. Retract Dist	1. X Retract Dist 2.000mm		Spec.: Retract distance of X Value: 2.000 Unit: mm
			2. Y Retract Dist 2.000mm		Spec.: Retract distance of Y Value: 2.000 Unit: mm
			3. Z Retract Dist -2.000mm		Spec.: Retract distance of X Value: -2.000 Unit: mm
		7. Spindle Set	1. Spindle Gears 8		Spec.: * Spindle gears Value: 8 Unit:
	2. ON/OFF Delay 5000ms		Spec.: Spindle ON/OFF delay Value: 5000 Unit:ms		
	3. Initial Gear 5		Spec.: * Spindle initial gear Value: 5 Unit:		
	4. Max Spdl Speed 24000r/min		Spec.: * Max spindle speed Value: 24000 Unit:r/min		
	8. Y Rotaryaxis	1. YasRotaryAxis No	Spec.: * Y as rotary axis Value: No Unit:		
		2. Rotary Y Pulse 0.00600drg/p	Spec.: * Rotary Y pulse equivalent Value: 0.00600 Unit:deg/p		
		3. mm As Unit No	Spec.: Use mm as unit Value: No		



			Unit:	
		4. Rev.WorkRadius 10.000mm	Spec.: * Rotary workpiece radius Value: 10.000 Unit:mm	
		5. Rotary Takeoff 0.291rad/s	Spec.: Takeoff speed of rotary Y Value: 0.291 Unit:rad/s	
		6. Rotary Y Acc. 6.981rad/s^2	Spec.: Rotary Y acceleration Value: 6.981 Unit:rad/s^2	
		7. Max RotaryVel. 30.000r/min	Spec.: Max. Vel. of rotary Y Value: 30.000 Unit:r/min	
	9. Compensation	Screw Error Comp No	Spec.: * Enable error compensation Value: No Unit:	
		EnableBacklash No	Spec.: * Enable backlash Value: No Unit:	
		Axis Backlash	* Backlash (mm) X Axis: 0.000 Y Axis: 0.000 Z Axis: 0.000	
	10. CaliThickness 10.000mm	Spec.: Touch CAD thickness Value: 10.000 Unit: mm		
	11. Algorithm 2	Spec.: 0: Triangle, 1: S_Type, 2: Trapezoid Value: 2 Unit:		
	12. Arc Increment Yes	Spec.: Enable incremental mode Value: Yes Unit:		
	13. Arc Tolerance 2.000mm	Spec.: Arc Radius Tolerance Value: 2.000 Unit: mm		
	14. Forward Seg 50	Spec.: Prospect. segments		



		Value: 50 Unit:		
15. Sign of BKREF Yes		Spec.: Cancel REF Sign after E-Stop Value: Yes Unit:		
16. Safety Height 30.000mm		Spec.: * Safety height Value: 30.000 Unit: mm		
17. Lube	Enable Auto Lube No		Spec.: Open auto lubrication Value: No Unit:	
	Time Interval 5000s		Spec.: Interval between two lubes Value: 5000 Unit: sec	
	Duration 5s		Spec.: Duration for each lube Value: 5 Unit: sec	
18. G00 Feed 100% Yes		Spec.: * 100% feed for G00 Value: Yes Unit:		
19. SmoothingTime 0.064s		Spec.: Path smoothing time Value: 0.064 Unit: sec		
20. Corner Option 0		Spec.: 0: Not; 1: Curve Smooth; 3: Arc Smooth Value: 0 Unit:		
21. Corner Toler 0.100mm		Spec.: Corner tolerance Value: 0.100 Unit: mm		
22. Control Cycle No		Spec.: Using 1.5ms control cycle? Value: No Unit:		
23. SoftLimitTime 0.500s		Spec.: * Dec. time to soft limit Value: 0.500 Unit: sec		



	24. User Param	1. Parallel to X Yes	Spec.: USERPARAM 1: YES: Parallel to X, NO: Parallel to Y Value: Yes Unit:
		2. Fixed tool Yes	Spec.: USERPARAM 2: YES: Measure fixed tool length, NO: Measure tool Length Value: Yes Unit:
		3. Clamp switch 0	Spec.: USERPARAM 3: 0: Press to output, bounce to close; 1: Press to output, press again to close Value: 0 Unit:





### 6. Param Upkeep

6	Param Upkeep	1 Backup Params			
		2 Restore Backup			
		3 Factory Params			
		4 Export Params			
		5 Import Params			
		6 Import ErrData			

### 7. System Upkeep

7	System Upkeep	1 Language	1. Chinese 2. English		
		2 Export Log			
		3 System Update			
		4 Register	Enter Reg. Code		
		5 Help	Help Message		
		6 Reboot			
		7. Exit			
		8. Delete Log			
		9. Disk Space	Disk Space Left xxxM/236M		
		10. Delete Info			
		11. Modify Code	Old PWD New PWD Confirm -----Modify--		



## 8. Diagnosis

8	Diagnosis	1 System Info	1. Software Ver.	Software Version NK105G3_20_72f2	
			2. Card No.	Card No. WHNC-0105- TQDHW-17BF	
			3. Remaining Time	Remaining Time Limitless	
			4. Register Times	Registered Times 1	
		2 Port List	IN GX01	◦	N
			IN GX02	◦	N
			IN GX03	◦	N
			IN GX04	◦	N
			IN GX05	◦	N
			IN GX06	◦	N
IN GX07	◦		N		
IN GX08	•		N		
IN GX09	◦		N		
IN GX10	◦		N		
IN GX11	•		N		
IN GX12	•		N		
IN GX13	◦		N		
IN GX14	◦		N		
IN GX15	◦		P		
IN GX16	◦		P		
IN ALAM	◦	N			
OUT GY13	◦	N			
OUT GY14	◦	N			
OUT GY15	◦	N			
OUT GY16	◦	N			
OUT GY17	◦	N			
OUT GY18	◦	N			
OUT GY19	◦	N			
OUT GY20	◦	N			
3 Keypress Diag	Press a key:				
4 Inport Diag	0 1 2 3 4 5 6 7	◦ ◦ ◦ ◦ ◦ ◦ ◦ •			
	8 9 A B C D E F	◦ ◦ • • ◦ ◦ ◦ ◦			
5 Output Diag	0 1 2 3 4 5 6 7	◦ ◦ ◦ ◦ ◦ ◦ ◦ ◦			
	Will cycle through each out put.				
6 LED Diag	Press K1 key to test LED				



NOTES



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