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Your RS1000 Pro comes preprogrammed with a number of apps that make it easier to complete a variety of useful functions. For example, there are apps for calibration, making decorative cuts like fluting, and cutting a wide variety of joints. After entering some basic parameters into each app, the system does all the math and moves the fence and router lift as needed to complete the task.

Apps Menu



Apps Menu Screen: Press the Apps button on the Main Control screen to open the Apps screen. The Apps menu contains options for controlling specific **RS1000 Pro** functions. Press a menu item to open the setup screen for that option. To return to the Main Control Screen, press X in the upper right corner.

Establish Bit Parameters

Press the Apps button on the main screen to display the menu of apps. The RS1000 Pro uses parameters for the router bit you enter into the LCD Pendant (Figure 1). Set the diameter of the router bit so the RS1000 Pro can calculate the movements of the fence and router lift for each application. Figures 2 and 3 show you how to do this.

To establish the zero points for the fence and router lift, you must also calibrate these using the touch plate (see next page). The **RS1000 Pro** also allows you to set the motor speeds for moving the fence and router lift (Figures 4 and 5).





Selecting Bit Diameter from the menu displays the current value in the upper right. Press this button to change the diameter.

3 $\mathbf{\hat{T}}$ 0.250 Run Fence Calibration 7 8 9 Run Bit Calibration Bit Diameter(in) 5 4 Motor Speed 1-6 6 Loc 2 1 3 mm J 0 OK

On the numeric keypad, enter the diameter of the router bit installed in the router and press OK.



Change the speed range of the motors that control the fence and router lift by selecting Motor Speed from the menu.

5 个		5		X
Run Fence Calibration Run Bit Calibration	7	8	9	-
Motor Speed 1-6	4	5	6	Loc
	1	2	3	mm
¥	+/-	0		ок

On the numeric keypad, enter a value for the motor speed (1=slow, 6=fast) then press OK.

Run Fence to Bit Calibration

As mentioned on the previous page, the **RS1000 Pro** needs to know the zero location for the fence (Figure 1). For this, use the touch plate accessory. Figures 2 through 7 step you through the sequence of calibrating the fence. Start by selecting Run Fence Calibration from the menu.

NOTE: The correct bit diameter must be entered before continuing to calibrate the fence and router lift.

Once the fence is calibrated, you may need to move the fence back to access the router bit for calibrating it (page 7).





Setting Up Fence "ZERO" Position continued

Run Bit Calibration

Similar to fence calibration, the router bit calibration establishes the zero point for the router lift (Figure 1). This operation also requires the touch plate. Figures 1 through 8 outline the process of calibrating the router bit.

Setting Up Bit "ZERO" Position

Make sure the router bit is below the surface of the table and press OK. The Controls button allows you to make adjustments in the fence and lift position before continuing.

The red screen confirms a proper touch plate connection.

Setting Up Bit Calibration continued

Biscuit Slot

The **RS1000 Pro** includes apps for a variety of joinery options. One is for routing slots for biscuits used to join two workpieces (Figure 1). Select Run Biscuit Slot in the menu and then Press To Run to start configuring and

running the biscuit slot app.

The location of the biscuit slot is set by using the offset parameter. The value entered represents the distance from the edge of the workpiece to the beginning of the slot. The fence will automatically move to the correct location for this distance. The workpiece should be positioned face down when cutting the slots.

NOTE: Visit www.NextWaveCNC.com/appguide or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.

Use the Speed function to set the speed of the fence and lift while cutting the biscuit slot. Press the value field to change it.

J

Inches/Min = 5

Enter a value from 1-14 (slow to fast) for the speed then press OK.

0

OK

Biscuit Slot Setup continued

6 个	0.010 X
Run Biscuit Slot	
Bit Diameter(in)	
Biscuit Size 0-6	
Start Offset(in)	
Extra Depth(in)	
Speed 1-14	and the second se
Clear Parameters	Extra Depth

The Extra Depth option allows you to add space around the biscuit for glue relief and ease of assembly. Press the value button in the upper right to assign this distance.

The Start Offset option sets the distance of the end of the biscuit slot from the edge of the workpiece. Press the value button to change this distance.

Next, set the size of the biscuit slot by selecting a conventional biscuit size using the Biscuit Size function. Press the value button in the upper right to change the biscuit size.

7 1	0.010			X
Run Biscuit Slot Bit Diameter(in)	7	8	9	«
Start Offset(in)	4	5	6	Loc
Speed 1-14 Clear Parameters	1	2	3	mm
↓	+/-	0		ОК

Enter the extra depth distance using the keypad then press OK.

9 1	1.000			X
Run Biscuit Slot Bit Diameter(in)	7	8	9	«
Start Offset(in)	4	5	6	Loc
Speed 1-14 Clear Parameters	1	2	3	mm
V	+/-	0		ОК

Enter the offset distance and press OK.

11 个	2			X
Run Biscuit Slot Bit Diameter(in)	7	8	9	«
Biscuit Size 0-6 Start Offset(in)	4	5	6	Loc
Speed 1-14 Clear Parameters	1	2	3	mm
4	+/-	0		ОК

Select the desired biscuit size from the keypad and press OK.

Biscuit Slot Setup continued

12 🔨	0.156 X
Run Biscuit Slot Bit Diameter(in)	Diameter
Biscuit Size 0-6 Start Offset(in)	
Extra Depth(in) Speed 1-14	
Clear Parameters	5/32" (0.15625)
	Recommended

Start by entering the bit diameter using the Bit Diameter function. A $\frac{5}{22}$ " bit is recommended. Press the value button in the upper right to enter the bit diameter.

13 个		0.156		
Run Biscuit Slot Bit Diameter(in)	7	8	9	-
Biscuit Size 0-6 Start Offset(in)	4	5	6	Loc
Speed 1-14 Clear Parameters	1	2	3	mm
*	+/-	0		ОК

Using the keypad, enter the diameter of the bit and press OK.

Run Biscuit Slot

Run Biscuit Slot continued

Box Joints

Box joints create a super-strong, attractive assembly. The repetitive, accurately sized and spaced pins and slots are a necessity for a perfect fit and ideal for the **RS1000 Pro** to cut. Select Apps from the main menu, then Box Joints.

NOTE: Though not required, the accessory miter gauge fence makes routing box joints a breeze. Simply clamp the workpiece to the miter gauge fence and the **RS1000 Pro** takes care of moving the workpiece the required distances when cutting pins and slots. To use a standard miter gauge, you'll need to manually ensure the workpiece is tight to the **RS1000 Pro** fence before each cut.

NOTE: Visit www.NextWaveCNC.com/appguide or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.

Run Female Box Joint Run Male Box Joint Bit Diameter(in) Material Width(in) Total Pin Clearance(in) Bit Height(in) Clear Parameters

The Bit Height determines the length of the pins and sockets from the end of the workpiece. This minimum value should match the thickness of the workpieces.

5 个		0.750			
Run Female Box Joint Run Male Box Joint	7	8	9	<	
Bit Diameter(in) Material Width(in) Total Pin Clearance(in)	4	5	6	Loc	
Bit Height(in) Clear Parameters	1	2	3	mm	
	+/-	0		ОК	

Enter the desired bit height and press OK.

Box Joints Setup continued

The Total Pin Clearance value reduces the pin width by subtracting the clearance value from each side of the pin.

8 1	5.000 X
Run Female Box Joint Run Male Box Joint Bit Diameter(in) Material Width(in) Total Pin Clearance(in) Bit Height(in) Clear Parameters	Width
4	Charles and

Enter the overall width of the material you're using to create the box joints by pressing the value field.

7 🔶		0.005		X
Run Female Box Joint Run Male Box Joint	7	8	9	-
Bit Diameter(in) Material Width(in)	4	5	6	Loc
Bit Height(in) Clear Parameters	1	2	3	mm
4	+/-	0		ОК

Enter the clearance value and press OK.

9		5.000)	X
Run Female Box Joint Run Male Box Joint	7	8	9	-
Bit Diameter(in) Material Width(in)	4	5	6	Loc
Bit Height(in) Clear Parameters	1	2	3	mm
V	+/-	0		ОК

Enter the width of the workpiece and press OK.

Set the bit diameter by pressing the value field in the upper right. **NOTE:** It's best to measure the actual diameter of the bit with calipers rather than rely on the stated diameter.

11 🔨		0.250)	X
Run Female Box Joint Run Male Box Joint	7	8	9	÷
Bit Diameter(in) Material Width(in) Total Pin Clearance(in)	4	5	6	Loc
Bit Height(in) Clear Parameters	1	2	3	mm
J.	+/-	0	1	ОК

Enter the measured bit diameter using the numeric keypad then press OK.

Run Female Box Joints

The function Run Female Box Joint cuts the spaces, or sockets, between the pins. Select Press To Run to continue.

Pressing OK will move the fence and the lift to the starting position for cutting the female box joints. Ensure there are no obstructions on the router table and press OK.

Using the miter gauge with workpiece attached, make the first cut across the router bit. Repeat until the female joint is complete.

Clamp the workpiece to the miter gauge with the end against the router tabletop and the back edge against the router table fence. Press OK to continue.

As the router lift and fence move, you can press the red button to abort the movement if necessary. Otherwise, the fence and lift continue to move to the starting position.

When all of the cuts are completed, the app stops. Reorient the workpiece to cut the other end and press OK to continue.

Run Male Box Joints

Cutting the male portion (pins) of the box joints follows the same process as cutting the female portion. Press Run Male Box Joint then Press To Run to continue.

Pressing OK will move the fence and the lift to the starting position for cutting the female box joints. Ensure there are no obstructions on the router table and press OK.

Using the miter gauge with workpiece attached, make the first cut across the router bit. Repeat until the male joint is complete.

Clamp the workpiece to the miter gauge with the end against the router tabletop and the back edge against the router table fence. Press OK to continue.

As the router lift and fence move, you can press the red button to abort the movement if necessary. Otherwise, the fence and lift continue to move to the starting position.

When all of the cuts are completed, the app stops. Reorient the workpiece to cut the other end and press OK to continue. Test the fit of the joint and tweak the parameters for a good fit.

Dado Cut

Dadoes and grooves are common joints in making cabinets. boxes, and a wide variety of projects. This app allows you to cut a dado or groove one at a time using different parameters for each.

To cut multiple dadoes or grooves that are evenly spaced, see Dado, Repeating on page 20.

NOTE: Visit www.NextWaveCNC.com/appguide or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.

Dado Cut Setup Press to Clear 2 $\mathbf{\uparrow}$ Run Dado Cut This will reset all Bit Diameter(in) parameters for this app Dado Width(in) Start Offset(in) Bit Height(in) Clear Parameters J

The Clear Parameters function resets all of the parameters to their factory default values.

Use Bit Height to set the depth of the dado.

Press OK to reset parameter values, Cancel to abort this operation.

5 个		0.250		X
Run Dado Cut Bit Diameter(in)	7	8	9	÷
Start Offset(in)	4	5	6	Loc
Clear Parameters	1	2	3	mm
4	+/-	0		ОК

Enter the desired value for the depth of the dado and press OK.

17

Dado Cut Setup continued

6 1	1.000 X
Run Dado Cut Bit Diameter(in) Dado Width(in) Start Offset(in) Bit Height(in) Clear Parameters	Offset
4	

Use the Start Offset function to set the distance of the edge of the dado from the edge of the workpiece.

8 1	0.750 X
Run Dado Cut Bit Diameter(in) Dado Width(in) Start Offset(in) Bit Height(in) Clear Parameters	- Dado
4	

Select Dado Width to set the overall width of the dado.

7 个		1.000		X
Run Dado Cut Bit Diameter(in)	7	8	9	<
Dado Width(in) Start Offset(in) Bit Height(in)	4	5	6	Loc
Clear Parameters	1	2	3	mm
4	+/-	0		ОК

Enter the value for the Start Offset and press OK.

9 个		0.750	NU.	X
Run Dado Cut Bit Diameter(in)	7	8	9	÷
Dado Width(in) Start Offset(in) Bit Height(in)	4	5	6	Loc
Clear Parameters	1	2	3	mm
¥	+/-	0		ок

Enter the width value for the dado and press OK.

Set the bit diameter by pressing the value field in the upper right. **NOTE:** It's best to measure the actual diameter of the bit with calipers rather than rely on the stated diameter.

11 个		0.250)	X
Run Dado Cut Bit Diameter(in)	7	8	9	-
Dado Width(in) Start Offset(in) Bit Height(in)	4	5	6	Loc
Clear Parameters	1	2	3	mm
V	+/-	0	-	ОК

Enter the measured diameter of the router bit and press OK.

TIP: For the best results, rout the joints in multiple passes starting with a shallow pass and increasing the bit height with each pass, finishing with the bit at final height.

Run Dado Cuts

After setting all of the parameters for the dado, select Run Dado Cuts then Press to Run.

Place the workpiece face down (where the dado is to be cut). Press OK to continue.

Make the first pass over the router bit then press OK. The fence will move to the next position. Repeat until the full width of the dado is complete.

ton to abort the movement if necessary. Otherwise, the fence and lift continue to move to the starting position.

After all of the cuts are made, the App Complete message appears. Press OK to exit.

Dado, Repeating

Creating multiple dadoes and grooves that are evenly spaced and of consistent depth is an ideal job for the **RS1000 Pro**. Like the Dado app on page 17, you'll set the bit height, dado width, and starting offset. With the

Dado, Repeating app, you also supply the values for spacing and number of dadoes.

NOTE: Visit www.NextWaveCNC.com/appguide or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.

Dado Repeating Setup

2 个	Press to Clear X
Bit Diameter(in) Groove Width(in) Start Offset(in) Spacing(in) Groove Count Bit Height(in) Clear Parameters	This will reset all parameters for this app
J	Station and sales for

The Clear Parameters function resets all of the parameters to their factory default values.

Select Bit Height to set the depth of the dadoes or grooves.

Press OK to reset parameter values, Cancel to abort this operation.

5 个		0.250)	X
Run Repeating Dado Bit Diameter(in)	7	8	9	÷
Groove Width(in) Start Offset(in)	4	5	6	Loc
Groove Count Bit Height(in)	1	2	3	mm
J	+/-	0		ОК

Enter the desired dado depth and press OK.

20

Dado Repeating Setup continued

6 个	3 X
Run Repeating Dado Bit Diameter(in) Groove Width(in) Start Offset(in) Spacing(in) Groove Count Bit Height(in)	1 2 3, etc.
↓	

Select Groove Count to set the number of dadoes or grooves to cut in the workpiece.

8 1	0.500 X
Run Repeating Dado Bit Diameter(in) Groove Width(in) Start Offset(in) Spacing(in) Groove Count Bit Height(in)	Spacing
↓	

The Spacing function determines the edge-to-edge distance between the dados or grooves.

7 🔶		3		X
Run Repeating Dado Bit Diameter(in)	7	8	9	«
Groove Width(in) Start Offset(in) Spacing(in)	4	5	6	Loc
Groove Count Bit Height(in)	1	2	3	mm
4	+/-	0		ОК

Enter the number of dadoes or grooves and press OK.

9		0.500)	X
Run Repeating Dado Bit Diameter(in)	7	8	9	«
Groove Width(in) Start Offset(in) Spacing(in) Groove Count Bit Height(in)	4	5	6	Loc
	1	2	3	mm
¥	+/-	0		ОК

Enter the desired spacing between dadoes and press OK.

11 个		1.000)	X
Run Repeating Dado Bit Diameter(in)	7	8	9	~
Groove Width(in) Start Offset(in)	4	5	6	Loc
Groove Count Bit Height(in)	1	2	3	mm
4	+/-	0		ОК

Enter the offset value and press OK.

10 1.000 X Run Repeating Dado Bit Diameter(in) Groove Width(in) Start Offset(in) Spacing(in) Groove Count Bit Height(in)

Use the Start Offset function to set the distance of the edge of the first dado from the edge of the workpiece.

Dado Repeating Setup continued

12 个	0.750 X
Run Repeating Dado Bit Diameter(in) Groove Width(in) Start Offset(in) Spacing(in) Groove Count Bit Height(in)	Width
J	in a star in the s

Select Groove Widths to set the overall width of the dadoes or grooves.

14 个	0.250 X
Run Repeating Dado Bit Diameter(in) Groove Width(in) Start Offset(in) Spacing(in) Groove Count Bit Height(in)	Diameter
1	10 M

Set the bit diameter by pressing the value field in the upper right. **NOTE:** It's best to measure the actual diameter of the bit with calipers rather than rely on the stated diameter.

13 🔨		0.750		X
Run Repeating Dado Bit Diameter(in)	7	8	9	-
Groove Width(in) Start Offset(in) Spacing(in)	4	5	6	Loc
Groove Count Bit Height(in)	1	2	3	mm
↓	+/-	0		ОК

Enter the width value for the dado and press OK.

15 个		0.250)	X
Run Repeating Dado Bit Diameter(in)	7	8	9	÷
Groove Width(in) Start Offset(in) Spacing(in) Groove Count Bit Height(in)	4	5	6	Loc
	1	2	3	mm
•	+/-	0		ОК

Enter the measured diameter of the router bit and press OK.

Run Dado Repeating

TIP: For the best results, rout the joints in multiple passes starting with a shallow pass and increasing the bit height with each pass, finishing with the bit at final height.

Run Dado Repeating continued

Pressing OK will move the router fence and lift to the starting position for routing the dado. The fence will move multiple times until the entire width of the dado is complete.

Make the first pass over the router bit then press OK. The fence will move to the next position. Repeat until the full width of the dado is complete.

As the router lift and fence move, you can press the red button to abort the movement if necessary. Otherwise, the fence and lift continue to move to the starting position.

The fence will move to reposition the workpiece for the next cut.

When all of the dadoes or grooves have been cut to their desired width and spacing, the app stops automatically. Press OK to exit.

Half-blind Dovetail Joints

Half-blind dovetail joints are often used in drawer construction. Dovetail sockets are cut on the inside face of the drawer front and back. The dovetail pins routed on the drawer sides fit

into these sockets, creating a strong joint. With the drawer closed, the joint is hidden.

Of course, there are many applications for half-blind dovetail joints limited only by your imagination. The **RS1000 Pro** makes routing these joints easy and accurate.

NOTE: This joint requires a stop block on the fence to limit the depth of the dovetail socket.

NOTE: Visit www.NextWaveCNC.com/appguide or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.

Dovetail Setup 3 Press to Clear ተ 0.250 4.125 This will reset all Run Dove Tails Are You Sure You Want To Bit Diameter(in) parameters for this app reset all parameters Bit Angle to factory defaults? Material Width(in) Spacing(in) Tail Depth(in) OK Cancel **Clear Parameters** The Clear Parameters function resets all of the parameters to Press OK to reset parameter values, Cancel to abort this their factory default values. operation. ተ 0.500 4 0.500 5 ጥ Run Blind Dove Sockets Run Blind Dove Sockets 8 7 9 ← Run Dove Tails Run Dove Tails Bit Diameter(in) Bit Diameter(in) Bit Angle 5 4 6 Bit Angle Loc Material Width(in) Material Width(in) Depth Spacing(in) Spacing(in) 2 1 3 mm Tail Depth(in) Tail Depth(in)

The Tail Depth is one parameter that controls the fit of the final half-blind dovetail joint. Note the recommended values and tips on the screen.

1

Enter the tail depth and press OK. To accept the default value displayed, press OK without entering a value.

J

0

OK

Dovetail Setup continued

6 1	1.000 X
Run Blind Dove Sockets Run Dove Tails Bit Diameter(in) Bit Angle Material Width(in)	Recommended 1.000"
Spacing(in) Tail Depth(in)	G-
*	Decrease to tighten joint

The Spacing parameter sets the center-to-center distance between the dovetails. Note the recommended spacing parameters and tips on the screen.

Enter the overall width of the material you're using to create the half-blind dovetail joints by pressing the value field.

10 ↑ 14 × Run Blind Dove Sockets Run Dove Tails Bit Diameter(in) Bit Angle Material Width(in) Spacing(in) Tail Depth(in)

The Bit Angle is the angle of the dovetail router bit. This value can usually be found on the product packaging for the bit.

7 个		1.000)	X
Run Blind Dove Sockets Run Dove Tails	7	8	9	~
Bit Diameter(in) Bit Angle Material Midth/in)	4	5	6	Loc
Spacing(in) Tail Depth(in)	1	2	3	mm
	+/-	0		ОК

Set the spacing between tails by entering the value and pressing OK.

9 1		5.000)	X
Run Blind Dove Sockets Run Dove Tails	7	8	9	«
Bit Diameter(in) Bit Angle Material Width(in) Spacing(in) Tail Deoth(in)	4	5	6	Loc
	1	2	3	mm
•	+/-	0		ОК

Enter the width of the workpieces and press OK.

11 🔶		14		X
Run Blind Dove Sockets Run Dove Tails	7	8	9	÷
Bit Diameter(in) Bit Angle	4	5	6	Loc
Material Width(in) Spacing(in) Tail Depth(in)	1	2	3	mm
4	+/-	0		ОК

Enter the angle of the dovetail and press OK.

Dovetail Setup continued

12 🔨	0.500 X
Run Blind Dove Sockets Run Dove Tails	Diameter
Bit Diameter(in) Bit Angle Material Width(in)	
Spacing(in) Tail Depth(in)	88. 2 C - 1 B
↓ ↓	

Set the bit diameter by pressing the value field in the upper right. NOTE: It's best to measure the actual diameter of the bit with calipers rather than rely on the stated diameter.

13 🔨	0.500			X
Run Blind Dove Sockets Run Dove Tails	7	8	9	÷
Bit Diameter(in) Bit Angle	4	5	6	Loc
Spacing(in) Tail Depth(in)	1	2	3	mm
V	+/-	0		ОК

Enter the measured diameter of the router bit and press OK.

Run Dovetail Sockets

operation requires a stop block on the fence. Refer to this video for details: {ADD LINK HERE}

Pressing OK will move the router fence and lift to the starting position for routing the sockets. The fence will move multiple times until all of the sockets are routed.

As the router lift and fence move, you can press the red button to abort the movement if necessary. Otherwise, the fence and lift continue to move to the starting position.

Run Dovetail Sockets continued

With the workpiece against the fence, make the first cut until the workpiece contacts the stop block.

Repeat until all the sockets are cut on the end of the workpiece. After the last socket is routed, the app will stop.

The fence will move to reposition the workpiece for the next cut.

Press OK to continue to the app used for cutting the tails in the mating workpieces for the half-blind dovetail joints.

Run Dovetails

Run Dovetails continued

With the workpiece clamped to the miter gauge, make the first cut to define one edge of the first dovetail.

Repeat yntil all the tails are cut on the end of the workpiece. After the last tail is routed, the app will stop.

As the router lift and fence move, you can press the red button to abort the movement if necessary. Otherwise, the fence and lift continue to move to the starting position.

The fence will move to reposition the workpiece for the next cut.

When all of the tails have been cut, the app stops automat cally. Press OK to exit.

Sliding Dovetail Joints

A sliding dovetail joint provides a rock-solid method of joining pieces at right angles. This joint is often used to join shelves to cabinet sides.

The sliding dovetail joint

consists of a dovetail-shaped groove cut in one piece. On the mating piece, a dovetail-shaped tongue is routed on the edge of the workpiece. The tongue slides into the groove, locking the pieces together.

Press the down arrow to access other parameters for sliding

dovetail joints. The Total Tail Clearance sets the amount of

material to be removed from the width of the dovetail.

NOTE: Visit www.NextWaveCNC.com/appguide or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.

Sliding Dovetail Sockets Setup 3 -0.250 \mathbf{T} Press to Clear 2 0.875 This will reset all Bit Angle Are You Sure You Want To Socket Width(in) parameters for this app reset all parameters Start Offset(in) to factory defaults? Tail Board Thickness(in) Tail Depth(in) Total Tail Clearance(in) OK Cancel **Clear Parameters** 1 The Clear Parameters function resets all of the parameters to Press OK to reset parameter values, Cancel to abort this their factory default values. operation. 个 0.001 5 0.001 4 ጥ х Bit Diameter(in) Bit Diameter(in) 7 8 9 Bit Angle Bit Angle Socket Width(in) Socket Width(in) 4 5 6 Loc Start Offset(in) Start Offset(in) Tail Board Thickness(in) Tail Board Thickness(in) Tail Depth(in) Tail Depth(in) 2 1 3 mm **Positive Values Shrink** Total Tail Clearance(in) Total Tail Clearance(in) Negative Values Widen 0 OK J

Enter the value for the Total Tail Clearance and press OK. NOTE: The value entered will be applied to *each side* of the dovetail.

Sliding Dovetail Setup continued

6 个	0.500 X
Run Sliding Dove Tail Bit Diameter(in) Bit Angle Socket Width(in) Start Offset(in) Tail Board Thickness(in) Tail Depth(in)	Depth

The Tail Depth option sets the length (depth) of the dovetail.

8 1	0.750 X
Run Sliding Dove Socket Run Sliding Dove Tail Bit Diameter(in) Bit Angle Socket Width(in) Start Offset(in) Tail Board Thickness(in)	Thickness
↓	

Select the Tail Board Thickness option to set the thickness of the workpiece to be routed to create the dovetail.

7		0.500		X
Run Sliding Dove Tail Bit Diameter(in) Bit Angle Socket Width(in) Start Offset(in) Tail Board Thickness(in) Tail Denth(in)	7	8	9	«
	4	5	6	Loc
	1	2	3	mm
	+/-	0		ОК

Enter the desired value for the depth of the dovetail and press OK.

9 个		X		
Run Sliding Dove Socket Run Sliding Dove Tail	7	8	9	<
Bit Diameter(in) Bit Angle Socket Width(in) Start Offset(in) Tail Board Thickness(in)	4	5	6	Loc
	1	2	3	mm
¥	+/-	0		ОК

Enter the thickness of the workpiece and press OK.

Choose the Start Offset function to set the distance of the socket edge from the edge of the workpiece.

11 个	0.750			X
Run Sliding Dove Socket Run Sliding Dove Tail	7	8	9	÷
Bit Diameter(in) Bit Angle	4	5	6	Loc
Start Offset(in) Tail Board Thickness(in)	1	2	3	mm
J	+/-	0		ОК

Enter the offset value and press OK.

Sliding Dovetail Setup continued

12 🔨	0.500 X
Run Sliding Dove Socket Run Sliding Dove Tail Bit Diameter(in) Bit Angle Socket Width(in) Start Offset(in) Tail Board Thickness(in)	Width

Select Socket Width to set the width of the dovetail socket. If this value is greater than the bit diameter, the *RS1000 Pro* will adjust the fence position to rout the socket in multiple passes.

The Bit Angle is the angle of the dovetail router bit. This value can usually be found on the product packaging for the bit.

Set the bit diameter by pressing the value field in the upper right. **NOTE:** It's best to measure the actual diameter of the bit with calipers rather than rely on the stated diameter.

13 🔨	0.500			X
Run Sliding Dove Socket Run Sliding Dove Tail	7	8	9	«
Bit Diameter(in) Bit Angle Socket Width(in)	4	5	6	Loc
Start Offset(in) Tail Board Thickness(in)	1	2	3	mm
V	+/-	0		ОК

Enter the desired width for the dovetail socket and press OK.

15 🕎	14			X
Run Sliding Dove Socket Run Sliding Dove Tail	7	8	9	÷
Bit Diameter(in) Bit Angle	4	5	6	Loc
Start Offset(in) Tail Board Thickness(in)	1	2	3	mm
4	+/-	0		ОК

Enter the angle of the dovetail and press OK.

17 🔶	0.500			
Run Sliding Dove Socket Run Sliding Dove Tail	7	8	9	-
Bit Diameter(in) Bit Angle	4	5	6	Loc
Start Offset(in) Tail Board Thickness(in)	1	2	3	mm
4	+/-	0		ОК

Enter the measured diameter of the router bit and press OK.

Run Sliding Dovetail Sockets

Press OK to move the fence and lift to the starting position for cutting the dovetail socket.

Make a pass over the router bit to create the dovetail socket and press OK.

Run Sliding Dovetail

Select Run Sliding Dove Tail to begin routing the dovetail.

Place the workpiece vertically with one edge against the router table and one face against the fence and press OK.

Through **Dovetail** Joints

Gap-free through-dovetail joints are the hallmark of quality woodworking. The joints are not

only attractive, they create a strong mechanical bond.

Creating through-dovetails on the RS1000 Pro requires three routing operations: One to create the dovetails, and two operations to create the mating pins.

NOTE: A miter gauge is required for routing through dovetails. We recommend the RS1000 Pro miter gauge accessory for professional results.

NOTE: Visit www.NextWaveCNC.com/appguide or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.

Through Dovetail Setup continued

6 个	1.000 X
Run Dove Tails Run Dove Pins 1 of 2 Run Dove Pins 2 of 2 Bit Diameter(in) Bit Angle Material Width(in) Spacing(in)	Recommended 1.000" Spacing
4	Decrease to loosen joint

The Spacing option sets the distance between the dovetails. Note the tips and recommendations on the screen.

7		1.000		X
Run Dove Tails Run Dove Pins 1 of 2 Run Dove Pins 2 of 2 Bit Diameter(in)	7	8	9	-
	4	5	6	Loc
Material Width(in) Spacing(in)	1	2	3	mm
4	+/-	0		ОК

Enter the value for the desired spacing and press OK.

Set the parameter for the width of the workpieces by selecting Material Width.

9	5.000			X
Run Dove Tails Run Dove Pins 1 of 2 Run Dove Pins 2 of 2 Bit Diameter(in) Bit Angle Material Width(in) Spacing(in)	7	8	9	<
	4	5	6	Loc
	1	2	3	mm
•	+/-	0		ОК

Enter the workpiece width and press OK.

Select Bit Angle to set the parameter for the angle of the router bit. You can usually find this information on the product packaging.

11 🔨		14		
Run Dove Tails Run Dove Pins 1 of 2 Run Dove Pins 2 of 2 Bit Diameter(in) Bit Angle Material Width(in) Spacing(in)	7	8	9	-
	4	5	6	Loc
	1	2	3	mm
	+/-	0		ОК

Enter the bit angle and press OK.

Through Dovetail Setup

12 🔨	0.500 X
Run Dove Tails Run Dove Pins 1 of 2 Run Dove Pins 2 of 2 Bit Diameter(in) Bit Angle Material Width(in) Spacing(in)	Diameter

Set the bit diameter by pressing the value field in the upper right. **NOTE:** It's best to measure the actual diameter of the bit with calipers rather than rely on the stated diameter.

13 🔨	0.500			X
Run Dove Tails Run Dove Pins 1 of 2	7	8	9	-
Run Dove Pins 2 of 2 Bit Diameter(in) Bit Angle Material Width(in) Spacing(in)	4	5	6	Loc
	1	2	3	mm
↓ ↓	+/-	0		ОК

Enter the measured bit diameter and press OK.

Clamp the workpiece to the miter gauge with one face against the miter gauge, one edge against the fence, and the end tight to the router table. Press OK to continue.

After pressing OK, the lift and fence will move to the starting position for routing the dovetails.

While the fence and lift are moving, you have the option to abort the operation, if necessary.

Run Through Dovetail Tails

boards.
Run Through Dovetail Tails continued



Make the first pass and press OK. Repeat the process until all of the dovetails are routed.



After the last pass, the app is finished. Press OK to move onto cutting the pins.

Run Through Dovetail Pins (1 of 2)



Run Through Dovetail Pins (1 of 2) continued



6 0.500 0.000 App Complete OK

Make the first pass over the bit and press OK. Repeat this process until the app finishes.



Run Through Dovetail Pins (2 of 2)



Still leaving the dovetail bit in place, press Run Dove Pins 2 of 2. This operation creates the angled sides of the pins to mate with the dovetails.

Remove the miter gauge and place the workpiece face down on the router table. Press OK.



3.888 PRESS TO ABORT MOVEMENT

Run Through Dovetail Pins (2 of 2) continued

5 🕎	Press to Clear X
Run Dove Pins 2 of 2 Bit Diameter(in)	This will reset all parameters for this app
Bit Angle Material Width(in)	
Tail Depth(in)	alter south and
Clear Parameters	

NOTE: When running this app, stop the cut when the bit reaches the baseline (or bottom) of the pins.

Visit www.NextWaveCNC.com/appsguide for more informa-





Make the first cut and press OK. Repeat the process until the app ends.

Dovetail Test Fit

To ensure gapfree joints when routing dovetails, it's helpful to make test cuts before routing the final

workpieces. The Dovetail Test Fit app creates a test dovetail you can use to adjust any parameters as needed for a

tight fit. We recommend using a cutoff or scrap piece the same thickness as the final workpieces.



NOTE: Visit www.NextWaveCNC.com/appguide or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.

Dovetail Test Fit Setup



The Clear Parameters function resets all of the parameters to their factory default values.



The Tail Depth option sets the depth (or length) of the dovetails. **NOTE:** The depth cannot be greater than the thickness of the mating pin board.



Press OK to reset parameters to their default values. Press Cancel to leave the parameters set as is.

5 1	0.500			X
Run Dovetail Test Fit Bit Diameter(in)	7	8	9	<
Bit Angle Spacing(in)	4	5	6	Loc
Clear Parameters	1	2	3	mm
4	+/-	0		ОК

Enter the desired depth of the dovetail and press OK.

40

Dovetail Test Fit Setup continued

6	1.000 X
Run Dovetail Test Fit Bit Diameter(in) Bit Angle	Recommended 1.000"
Spacing(in) Tail Depth(in) Clear Parameters	Spacing
*	Decrease to loosen joint

The Spacing option sets the distance between the dovetails. Note the tips and recommendations on the screen.

7 个		1.000		X
Run Dovetail Test Fit Bit Diameter(in)	7	8	9	÷
Bit Angle Spacing(in) Tail Depth(in) Clear Parameters	4	5	6	Loc
	1	2	3	mm
*	+/-	0		ОК

Enter the value for the desired spacing and press OK.

8 1	14 X
Run Dovetail Test Fit Bit Diameter(in) Bit Angle Spacing(in) Tail Depth(in) Clear Parameters	Angle

Select Bit Angle to set the parameter for the angle of the router bit. You can usually find this information on the product packaging.



Set the bit diameter by pressing the value field in the upper right. **NOTE:** It's best to measure the actual diameter of the bit with calipers rather than rely on the stated diameter.

9		14		
Run Dovetail Test Fit Bit Diameter(in)	7	8	9	~
Bit Angle Spacing(in) Tail Dopth(in)	4	5	6	Loc
Clear Parameters	1	2	3	mm
V	+/-	0		ОК

Enter the bit angle and press OK.

11 🔶	0.500			X
Run Dovetail Test Fit Bit Diameter(in) Bit Angle Spacing(in) Tail Depth(in) Clear Parameters	7	8	9	÷
	4	5	6	Loc
	1	2	3	mm
v	+/-	0		ОК

Enter the measured bit diameter and press OK.

Run Dovetails Test Fit



After setting the parameters, press Run Dovetail Test Fit to start the app. Select Press To Run to start.



Clamp the workpiece to the miter gauge with one edge against the fence and the end tight to the router table. Press OK.



 4
 0.500
 3.888

 PRESS TO ABORT MOVEMENT

Press OK to move the lift and fence to the starting position to cut a dovetail.

During the movement of the lift and fence, you have the option to abort, if necessary.



Make the first cut and press OK. Repeat until the app is complete.





Flutes are one option for creating decorative, parallel grooves in a workpiece. Using a core box router bit, you can easily create flutes with the **RS1000 Pro**.



NOTE: Visit <u>www.NextWaveCNC.com/appguide</u> or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.

Flutes Setup

2 个	Press to Clear X
Run Flutes Bit Diameter(in) Board Width(in) Start Offset(in) Groove Count Bit Height(in) Clear Parameters	This will reset all parameters for this app
J	Sec. 301 Skewick

The Clear Parameters function resets all of the parameters to their factory default values.



Press OK to reset parameters to their default values. Press Cancel to leave the parameters set as is.



The height of the router bit determines the depth of the grooves. Set this value using the Bit Height option.



Enter the bit height and press OK.

Flutes Setup continued

6	4	x
Run Flutes Bit Diameter(in) Board Width(in) Start Offset(in) Groove Count Bit Height(in) Clear Parameters	2 3, etc	
J		

Specify the number of grooves to rout using the Groove Count option.

8 •	0.500 X
Run Flutes Bit Diameter(in) Board Width(in) Start Offset(in) Groove Count Bit Height(in) Clear Parameters	Coffset
	0 = Equally Spaced

The Start Offset option sets the distance of the centerline of the first flute from the edge of the workpiece. NOTE: Entering a zero value spaces the flutes evenly across the widht.



Press Board Width to enter the overall width of the workpiece by pressing the value button on the upper right.

7 个		4		X
Run Flutes Bit Diameter(in)	7	8	9	÷
Start Offset(in)	4	5	6	Loc
Groove Count Bit Height(in) Clear Parameters	1	2	3	mm
J.	+/-	0		ОК

Enter the desired number of grooves and press OK.

9 个		0.500		X
Run Flutes Bit Diameter(in)	7	8	9	<
Board Width(in) Start Offset(in)	4	5	6	Loc
Bit Height(in) Clear Parameters	1	2	3	mm
4	+/-	0		ОК

Enter the desired distance for the offset and press OK.

11 🔨		6.000)	X
Run Flutes Bit Diameter(in)	7	8	9	-
Board Width(in) Start Offset(in)	4	5	6	Loc
Bit Height(in)	1	2	3	mm
J J	+/-	0		OK

Enter the width of the workpiece and press OK.

Flutes Setup continued

12 🔨	0.750 X
Run Flutes Bit Diameter(in) Board Width(in) Start Offset(in) Groove Count Bit Height(in)	Diameter
Clear Parameters	

Set the bit diameter by pressing the value field in the upper right.

13 🔨		0.750		x
Run Flutes Bit Diameter(in)	7	8	9	«
Board Width(in) Start Offset(in) Groove Count Bit Height(in) Clear Parameters	4	5	6	Loc
	1	2	3	mm
	+/-	0		ОК

Enter the bit diameter and press OK.

Run Flutes



 3
 0.500
 1.000
 4

 Both The Fence & Lift Will Move Together Please Press OK To Begin
 6
 6
 6

 OK
 Cancel
 0
 0
 0
 0
 0

 Press OK to move the lift and fence to the starting position for cutting the flutes.
 During to about the starting position for to about the starting the flutes.
 During to about the starting position for to about the starting the flutes.
 During to about the starting the flutes.

 4
 0.375
 2.888

 PRESS TO ABORT MOVEMENT

 During the movement of the lift and fence, you have the option to abort, if necessary.

Run Flutes continued



With the edge of the workpiece against the fence, make the cut to create the first flute. Press OK to move the fence to cut the second flute.



6 0.375	2.889
PRESS TO	ABORT MOVEMENT

During the operation, you have the option to abort, if necessary.

8 -0.250	1.875
	App Complete
	ОК
After all the flutes are app.	e cut, the app stops. Press OK to exit the

Key Hole

Key hole slots are most commonly used to create a hanging point on the back of frames. The key hole fits over a screw in the wall and locks into place.



The key hole router bit

features two cutting diameters. The larger diameter at the end of the bit creates a clearance hole for a screw or nail head. The thinner shaft of the bit cuts the slot for the shank of the screw or nail.

Select Run Key Hole from the list of apps to get started.



NOTE: Visit www.NextWaveCNC.com/appguide or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.

Key Hole Setup Press to Clear \mathbf{T} 2 This will reset all Bit Diameter(in) Depth of Cut(in) parameters for this app Length(in) Start Offset(in) Lift Speed 1-14 Fence Speed 1-14 Clear Parameters J

The Clear Parameters function resets all of the parameters to their factory default values.



Press OK to reset parameters to their default values. Press Cancel to leave the parameters set as is.



The fence speed can be set to a value from 1 to 14. Press Fence Speed to change the value.

5 个		10		X
Run Key Hole Bit Diameter(in)	7	8	9	<
Depth of Cut(in) Length(in) Start Offset/in)	4	5	6	Loc
Lift Speed 1-14 Fence Speed 1-14	1	2	3	mm
4	+/-	0		ОК

Enter the desired fence speed and press OK.

Key Hole Setup continued

6 个	8 X
Run Key Hole Bit Diameter(in) Depth of Cut(in) Length(in) Start Offset(in) Lift Speed 1-14	
Fence Speed 1-14	Inches/Min = 13

Change the speed of the router lift by entering a value between 1 and 14. The inches per minute is displayed for reference. For dense hardwoods, use a lower speed.

8 1	0.875 X
Run Key Hole Bit Diameter(in) Depth of Cut(in) Length(in) Start Offset(in) Lift Speed 1-14	Offset
Fence Speed 1-14	

Use the Start Offset option to set the distance of the end of the slot from the edge of the workpiece.



Use the Length parameter to set the overall length of the key hole slot. NOTE: The dimension entered is the center-to-center distance between the clearance hole and slot end.

7 个		8		X
Run Key Hole Bit Diameter(in)	7	8	9	-
Length of Cut(in) Length(in) Start Offset(in)	4	5	6	Loc
Lift Speed 1-14 Fence Speed 1-14	1	2	3	mm
4	+/-	0		ОК

Enter the value for the lift speed and press OK.

9 1		0.875	;	X
Run Key Hole Bit Diameter(in)	7	8	9	÷
Length(in) Start Offset(in)	4	5	6	Loc
Lift Speed 1-14 Fence Speed 1-14	1	2	3	mm
4	+/-	0		ОК

Enter the offset value and press OK.

11 个		1.000)	X
Run Key Hole Bit Diameter(in)	7	8	9	÷
Length(in)	4	5	6	Loc
Lift Speed 1-14 Fence Speed 1-14	1	2	3	mm
↓ ↓	+/-	0		ОК

Enter the length of the slot and press OK.

Key Hole Setup continued

12 🔨	0.500 X
Run Key Hole Bit Diameter(in)	
Length(in) Start Offset(in)	Depth
Lift Speed 1-14 Fence Speed 1-14	

The Depth of Cut option sets the overall depth of the key hole slot in the workpiece.

13 🔨	0.500			X
Run Key Hole Bit Diameter(in)	7	8	9	-
Depth of Cut(in) Length(in) Start Offset/in)	4	5	6	Loc
Lift Speed 1-14 Fence Speed 1-14	1	2	3	mm
4	+/-	0		ОК

Enter the desired depth of the key hole and press OK.



Select Bit Diameter to enter the diameter of the key hole router bit at its largest diameter.

15 🔨	0.500			X
Run Key Hole Bit Diameter(in)	7	8	9	-
Depth of Cut(in) Length(in) Start Officiat/in)	4	5	6	Loc
Lift Speed 1-14 Fence Speed 1-14	1	2	3	mm
V	+/-	0		ОК

Enter the diameter and press OK.

Run Key Hole



Run Key Hole continued



Pocket Hole

Pocket hole joinery provides a quick and easy way to join workpieces without a lot of fuss. The router forms a pocket, which is

essentially, a ramped hole. Inside this hole a pocket screw joins the two workpieces.

factory defaults.

For best results, a plunge router bit is recommended. Also, use a stop block on the router table fence to accurately locate the pocket hole.



NOTE: Visit www.NextWaveCNC.com/appguide or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.

Pocket Hole Setup 2 $\mathbf{\hat{T}}$ Press to Clear 3 -0.250 1.875 This will reset all Run Pocket Hole Are You Sure You Want To Bit Diameter(in) parameters for this app reset all parameters Depth of Cut(in) to factory defaults? Length(in) Start Offset(in) Speed 1-14 OK Cancel **Clear Parameters** 1 Use Clear Parameters to reset all of the parameter values to Press OK to reset the values of the parameters.



Use the Speed option to change the speed of the router lift and fence. Use lower speeds on dense hardwoods.

Enter the desired speed (from 1 to 14) and press OK.

⁵ 9 ተ Run Pocket Hole 8 9 7 Bit Diameter(in) Depth of Cut(in) 4 5 6 Length(in) Loc Start Offset(in) Speed 1-14 1 2 3 mm **Clear Parameters** +/-0 OK J

Pocket Hole Setup continued

6 🔨	0.750 X
Run Pocket Hole	1.000
Bit Diameter(in)	Offset
Length(in)	
Start Offset(in)	
Speed 1-14	
Clear Parameters	Enter A Value Less Than
	Target Screw Length

The Start Offset function sets the distance of the end of the pocket hole from the edge of the workpiece. This is determined by the screw length to be used.

8	1.500 X
Run Pocket Hole Bit Diameter(in) Depth of Cut(in) Length(in) Start Offset(in) Speed 1-14 Clear Parameters	Length

Select Length to establish the overall length of the pocket hole.

10 个	0.400 X
Run Pocket Hole Bit Diameter(in)	
Length(in) Start Offset(in)	
Speed 1-14 Clear Parameters	Enter A Value Less Than
J	Board Thickness

The Depth of Cut option sets the depth of the pocket hole at its deepest point. The value must be less than the thickness of the workpiece and may require some test cuts to refine it.

7 🔶		0.750)	X
Run Pocket Hole Bit Diameter(in)	7	8	9	<
Depth of Cut(in) Length(in)	4	5	6	Loc
Speed 1-14 Clear Parameters	1	2	3	mm
	+/-	0		ОК

Enter the offset value and press OK.

9 🔶		1.500)	X
Run Pocket Hole Bit Diameter(in)	7	8	9	<
Length(in)	4	5	6	Loc
Start Offset(in) Speed 1-14 Clear Parameters	1	2	3	mm
V	+/-	0		ОК

Enter the length and press OK.

11 🔨		0.400		
Run Pocket Hole Bit Diameter(in)	7	8	9	-
Depth of Cut(in) Length(in) Start Offset/in)	4	5	6	Loc
Speed 1-14 Clear Parameters	1	2	3	mm
4	+/-	0		ОК

Enter the pocket hole depth and press OK.

Pocket Hole Setup continued

12 🔨	0.375 X
Run Pocket Hole Bit Diameter(in) Depth of Cut(in) Length(in) Start Offset(in) Speed 1-14 Clear Parameters	Diameter
•	

The diameter of the router bit determines the width of the pocket hole. Select Bit Diameter to change this value.

13 $\mathbf{\uparrow}$ 0.375 х Run Pocket Hole 7 8 9 4 Bit Diameter(in) Depth of Cut(in) 4 5 6 Loc Length(in) Start Offset(in) Speed 1-14 1 2 3 mm **Clear Parameters** J 0 OK

Enter the bit diameter and press OK.



Press Run Pocket Hole to start the app.

Run Pocket Hole



Place the workpiece face-down on the router table. **NOTE:** A stop block mounted on the fence helps locate the pocket hole on the workpiece and supports the workpiece.



4 -0.250 4.889 PRESS TO ABORT MOVEMENT

Run Pocket Hole continued



Step and Plunge (Doweling)

Dowel joinery has a long history of being strong and easy to assemble. The issue has

always been accurately aligning the dowel holes in mating workpieces. The **RS1000 Pro** takes the guesswork out of drilling dowel holes.

NOTE: We recommend using a tall stop block attached to the fence to assist in a locating the workpiece for accurate hole placement.



NOTE: Visit <u>www.NextWaveCNC.com/appguide</u> or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.

Step and Plunge Setup



To reset all the parameters to factory defaults, select Clear Parameters.



Change the speed of the router lift using the Lift Speed option. Enter a value between 1 and 14. The inches per minute adjusts accordingly. Use a lower number for dense hardwoods.



Pressing OK changes all the parameters to their factory default values.

5 🔶		8		X
Run Step & Plunge Bit Diameter(in)	7	8	9	«
Depth of Cut(in) Spacing(in)	4	5	6	Loc
Hole Count Lift Speed 1-14	1	2	3	mm
J	+/-	0		ОК

Enter the speed of the lift and press OK.

Step and Plunge Setup continued

6	4 X
Run Step & Plunge Bit Diameter(in) Depth of Cut(in) Spacing(in)	• 1
Start Offset(in) Hole Count	2
Lift Speed 1-14	• 3, etc.

Set the number of dowel holes using the Hole Count function.

7 🔨		4		X
Run Step & Plunge Bit Diameter(in)	7	8	9	-
Depth of Cut(in) Spacing(in)	4	5	6	Loc
Hole Count Lift Speed 1-14	1	2	3	mm
4	+/-	0		ОК

Enter the desired number of dowel holes to be routed and press OK.

8	0.750 X
Run Step & Plunge	
Bit Diameter(in)	
Depth of Cut(in)	O-Onset
Spacing(in)	
Start Offset(in)	
Hole Count	
Lift Speed 1-14	
•	

To establish a predetermined distance from the edge of the workpiece for the first hole, use the Start Offset function.



Create evenly spaced dowel holes by using the Spacing function to set the center-to-center distance between dowel holes.

9 个		0.750)	X
Run Step & Plunge Bit Diameter(in)	7	8	9	<
Spacing(in) Start Offset(in)	4	5	6	Loc
Hole Count Lift Speed 1-14	1	2	3	mm
¥	+/-	0		ОК

Enter the offset distance and press OK.

11 🔨		1.000)	X
Run Step & Plunge Bit Diameter(in)	7	8	9	<
Depth of Cut(in) Spacing(in)	4	5	6	Loc
Start Offset(in) Hole Count Lift Speed 1-14	1	2	3	mm
4	+/-	0		ОК

Enter the spacing dimension and press OK.

Step and Plunge Setup continued

12 🔨	0.500 X
Run Step & Plunge Bit Diameter(in)	
Depth of Cut(in)	Depth
Start Offset(in)	
Hole Count Lift Speed 1-14	
V	

The Depth of Cut option allows you to set the depth of the dowel holes.

13 🔨		0.500)	X
Run Step & Plunge Bit Diameter(in)	7	8	9	-
Depth of Cut(in) Spacing(in)	4	5	6	Loc
Hole Count Lift Speed 1-14	1	2	3	mm
•	+/-	0		ОК

Enter the dowel hole depth and press OK.



Use the Bit Diameter function to set the diameter of the router bit. The dowel hole diameter will match the bit diameter.

15 🔨		0.313)	X
Run Step & Plunge Bit Diameter(in)	7	8	9	÷
Depth of Cut(in) Spacing(in)	4	5	6	Loc
Hole Count Lift Speed 1-14	1	2	3	mm
J	+/-	0		ОК

Enter the bit diameter and press OK.

Run Step and Plunge



Run Step and Plunge continued





During fence and lift movement, you have the option to abort the operation.



With the workpiece in place, press OK to start routing the dowel holes.



At any time during the operation, you can press abort.



Step and Repeat

The **RS1000 Pro** is perfect for repetetive tasks. The Step & Repeat app allows you to make a series of cuts with a prede-

termined distance between them. One application would be using a plunge roundover

bit to create beads. The Step & Repeat function can be used with any plunge bit.

The Step & Repeat function is also ideal for routing parallel grooves using a straight bit. For repetetive routing tasks, the **RS1000 Pro** removes the hassle of routing accurately spaced cuts.



NOTE: Visit <u>www.NextWaveCNC.com/appguide</u> or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.



Step and Repeat Setup continued



Specify how many steps the **RS1000 Pro** moves using the Repeat Number parameter.



Enter the number of cuts, or steps, to make while the app is running. Press OK.



During the Step & Repeat app, the fence moves between each pass to set the distance for the next cut. The Fence Speed parameter allows you to control the speed.



The Step Distance sets the distance of the fence from the centerline of the router bit.

9 🔶		9		X
Run Step & Repeat Bit Diameter(in)	7	8	9	÷
Step Distance(in) Fence Speed 1-14	4	5	6	Loc
Bit Height(in) Clear Parameters	1	2	3	mm
¥	+/-	0		ОК

Enter a value from 1 (slow) to 14 (fast) for the fence speed and press OK.

11 🔨	1.000			X
Run Step & Repeat Bit Diameter(in)	7	8	9	-
Step Distance(in) Fence Speed 1-14	4	5	6	Loc
Bit Height(in) Clear Parameters	1	2	3	mm
Ŷ	+/-	0		ОК

Enter the desired distance for the step distance and press OK.

Step and Repeat Setup continued

12 🔨	0.250 X
Run Step & Repeat Bit Diameter(in) Step Distance(in) Fence Speed 1-14 Repeat Number Bit Height(in) Clear Parameters	Diameter
J	

Set the diameter of the installed router bit using the Bit Diameter parameter.

13 0.250 \mathbf{T} Run Step & Repeat 7 8 9 Bit Diameter(in) Step Distance(in) 5 4 6 Loc Fence Speed 1-14 Repeat Number Bit Height(in) 1 2 3 mm **Clear Parameters** 0 OK J

3.750

Cancel

Enter the bit diameter and press OK.



4.288

PRESS TO ABORT MOVEMENT

At any time during fence or lift movement, you can abort the

operation.

Run Step and Repeat



With the workpiece tight against the fence, make the first pass. Press OK. The fence will move to the next step position.

Run Step and Repeat continued



made.



Tongue and Groove

Tongue and groove joints are commonly used in ceiling or flooring applications using wood planks. A groove on the

edge of a plank engages the groove on the adjacent piece, locking them together and flush with one another.

Tongue and groove joints have many other applications for cabinet construction and other woodworking projects.

When routing tongues, the RS1000 Pro removes material from opposite edges of the workpiece to form a tongue.





NOTE: Visit www.NextWaveCNC.com/appguide or scan the QR code above with your tablet or phone camera to take you to a video demonstration of this app.

Tongue and Groove Setup

х





The Clear Parameters option resets the values of the parameters to factory defaults.

0.250 Δ ጥ Run Groove Run Tongue Bit Diameter(in) Tongue Width(in) Heigh Board Thickness(in) Total Tongue Clear.(in) Bit Height(in) J

The height of the router bit determines the length of the tongue. Select Bit Height to set this distance.

5 个	0.250			X
Run Groove Run Tongue	7	8	9	÷
Bit Diameter(in) Tongue Width(in) Board Thickness(in)	4	5	6	Loc
Total Tongue Clear.(in) Bit Height(in)	1	2	3	mm
¥	+/-	0		ОК

Enter the bit height and press OK.



Tongue and Groove Setup continued

6 个	0.010 X
Run Groove	
Run Tongue	38
Bit Diameter(in)	
Tongue Width(in)	and the second second
Board Thickness(in)	
Total Tongue Clear.(in)	1.1.1.1.1.1.1.
Bit Height(in)	Positive Values Shrink
J	Negative Values Widen

To create a joint with a snug fit without being too tight, finetune the tongue width by choosing the Total Tongue Clearance parameter.

8	0.750	X
Run Groove Run Tongue Bit Diameter(in) Tongue Width(in) Board Thickness(in) Total Tongue Clear.(in) Bit Height(in)	Thickness	
•		

Use Board Thickness to set the thickness of the workpiece.

7 个		0.010)	X
Run Groove Run Tongue Bit Diameter(in) Tongue Width(in) Board Thickness(in) Total Tongue Clear.(in) Bit Height(in)	7	8	9	-
	4	5	6	Loc
	1	2	3	mm
	+/-	0		ОК

Enter the clearance value and press OK.

9		0.750)	X
Run Groove Run Tongue Bit Diameter(in) Tongue Width(in) Board Thickness(in) Total Tongue Clear.(in) Bit Height(in)	7	8	9	«
	4	5	6	Loc
	1	2	3	mm
	+/-	0		ОК

Enter the board thickness and press OK.



Setting the tongue width determines how much material to remove from each edge to form a tongue.

11 🔨		0.500		
Run Groove Run Tongue	7	8	9	<
Bit Diameter(in) Tongue Width(in) Board Thickness(in) Total Tongue Clear.(in) Bit Height(in)	4	5	6	Loc
	1	2	3	mm
V	+/-	0		ОК

Enter the desired tongue width and press OK.

Tongue and Groove Setup continued

12 🔨	0.500 X
Run Groove Run Tongue	Diameter
Bit Diameter(in) Tongue Width(in) Board Thickness(in)	
Total Tongue Clear.(in) Bit Height(in)	

Use a straight bit for routing tongues. Use the Bit Diameter function to set the bit's diameter.

13 个		0.500		X
Run Groove Run Tongue	7	8	9	<
Bit Diameter(in) Tongue Width(in) Board Thickness(in) Total Tongue Clear.(in) Bit Height(in)	4	5	6	Loc
	1	2	3	mm
4	+/-	0		OK

Enter the bit diameter and press OK.

Run Groove



Run Groove continued



With the edge of the workpiece resting on the router table and the face against the fence, make the first pass. Press OK then rotate the workpiece 180° to make the second cut.



After the second cut, the app is complete. Press OK to exit.

Run Tongue



To create the mating tongue for the groove, select the Run Tongue app.

2 0.250 0.375 The Board Should Be Edge Down And Parallel To The Fence. (ok Press OK to continue the app.







Locking Miter Joint

Commonly used for box construction, a lock miter joint is designed to provide plenty of glue surface for added strength.

The design of a lock miter router bit creates a profile on one side of the joint and a

mirror-image profile that meshes with the first to create an interlocking joint.

NOTE: It is necessary to calibrate the router bit using the touch plate. Reference the zero point shown in Step 8 (p.69) and Step 1 (p.70), not the top of the bit.



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Locking Miter Setup



Since the lock miter bit is a large bit, we recommend making multiple light passes to create a smooth joint. Use the Number of Passes option to set this value.



The geometry of a lock miter joint depends a lot on the material thickness. Use the Material Thickness parameter to set this value.



Enter the desired number of passes and press OK. For each pass, the **RS1000 Pro** moves the fence closer to the bit.

5 🕎		0.875		X
Run Lock Miter Bit Diameter(in)	7	8	9	<
Bit Offset(in) Fence Adjust.(in) Material Thickness Number of Passes Clear Parameters	4	5	6	Loc
	1	2	3	mm
4	+/-	0	1	ОК

Enter the thickness of the workpieces and press OK.

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Locking Miter Setup continued

6 个	0.093 X
Run Lock Miter Bit Diameter(in) Bit Offset(in) Fence Adjust.(in) Material Thickness Number of Passes Clear Parameters	FENCE

The Fence Adjust value allows you to fine-tune the fit of the lock miter joint. It's helpful to test the fit on scrap pieces the same thickness as the final workpieces.

7		0.093	1	X
Run Lock Miter Bit Diameter(in) Bit Offset(in) Fence Adjust.(in) Material Thickness Number of Passes Clear Parameters	7	8	9	«
	4	5	6	Loc
	1	2	3	mm
4	+/-	0		ОК

Enter the Fence Adjust value and press OK.



Using the illustration on the screen, measure the Bit Offset.

9		0.125		X
Run Lock Miter Bit Diameter(in)	7	8	9	-
Bit Offset(in) Fence Adjust.(in) Material Thickness Number of Passes Clear Parameters	4	5	6	Loc
	1	2	3	mm
4	+/-	0		ОК

Enter the value for the offset and press OK.

10 个	2.125 X
Run Lock Miter Bit Diameter(in) Bit Offset(in) Fence Adjust.(in) Material Thickness Number of Passes Clear Parameters	Diameter
	19 - X 10 30 10 10

Use the Bit Diameter option to enter the largest diameter of the lock miter router bit. Use a set of calipers to obtain an accurate measurement.

11 🔶		2.125)	X
Run Lock Miter Bit Diameter(in)	7	8	9	<
Bit Offset(in) Fence Adjust.(in) Material Thickness Number of Passes Clear Parameters	4	5	6	Loc
	1	2	3	mm
J	+/-	0		ОК

Enter the router bit diameter and press OK.

Locking Miter Setup continued

12 🔶	Press to Clear X
Run Lock Miter	This will reset all
Bit Diameter(in)	parameters for this app
Bit Offset(in)	
Fence Adjust.(in)	
Material Thickness	
Number of Passes	and the second second second
Clear Parameters	
1	

13 0.250 -0.120 Are You Sure You Want To reset all parameters to factory defaults? OK Cancel

Select Clear Parameters to reset the values of all the parameters to their factory default values.

Press OK to reset parameter values.

Run Locking Miter



If you need to stop the movement of the fence and lift, you can abort the operation.

One side of each joint is cut with the workpiece flat on the router table. The mating piece is oriented vertically against the fence. Rout all the pieces at the same setting and press OK.

Cut 1

<image><section-header>







