



DadoMax™

Instructions for DadoMax™

Precision Dado Accessory

version 3.0 release April 15, 2010

This manual covers general operation of the **DadoMax™**. If you have an earlier version of the DadoMax please contact Woodline for an instruction manual for your system.



IMPORTANT

Carefully Read and understand all instructions and manufacturers warnings and instructions before assembly or operation of this product!

Do NOT insert or remove the router bushing from the jig until the router is shut off and has completely stopped rotating. Failure to do so may result in injury and or substantial damage to the router bit and the tool, such damage is NOT covered by warranty.

The **DadoMax™** is a precision router jig for making dado cuts. It eliminates the tedium of measuring the material or adjusting the shimming dado blades.

The **DadoMax™** is designed to work with a 1" outside diameter bushing guide. (Included with the jig) The bushing has a 1 3/16 diameter threaded portion and a 1 3/8" lip. Many routers accept the bushing supplied, some models may require an adaptor. Contact the router manufacturer to obtain an adaptor. Most routers can accept a universal base plate if necessary. Contact Woodline USA if additional 1" bushings are needed.

Each DadoMax™ contains:

- 1 **DadoMax™** body,
- 2 1" Brass bushing with locking nut
- 2 O-ring used as a lock washer for the brass bushing.
- 2 Spare socket head screws
- 1 Hex key wrench
- 1 Carrying case.

These Instructions are available at Woodline.com under the instructions tab.

- 1) The **DadoMax™** is designed to work with BlueMax cam operated guide clamps available from Woodline or equivalent. **DadoMax™** will fit most brands of clamp guides up to 2 1/2 inches wide.
- 2) Woodline recommends 1/2" diameter shank router bits with an overall length of 2 1/4" to 2 1/2 inches. Longer bits can be used for mortising.
- 3)

The **DadoMax™** will auto calibrate with 1/4", 3/8", or 1/2" diameter router bits. Other diameter router bits can be used but manual calibration is required.

WARNING -

WHILE SETTING UP THE DADOMAX JIG OR CHANGING SETTINGS, THE ROUTER SHOULD BE TURNED OFF AND UNPLUGGED IN KEEPING WITH COMMON WORKPLACE SAFETY PROCEDURES.

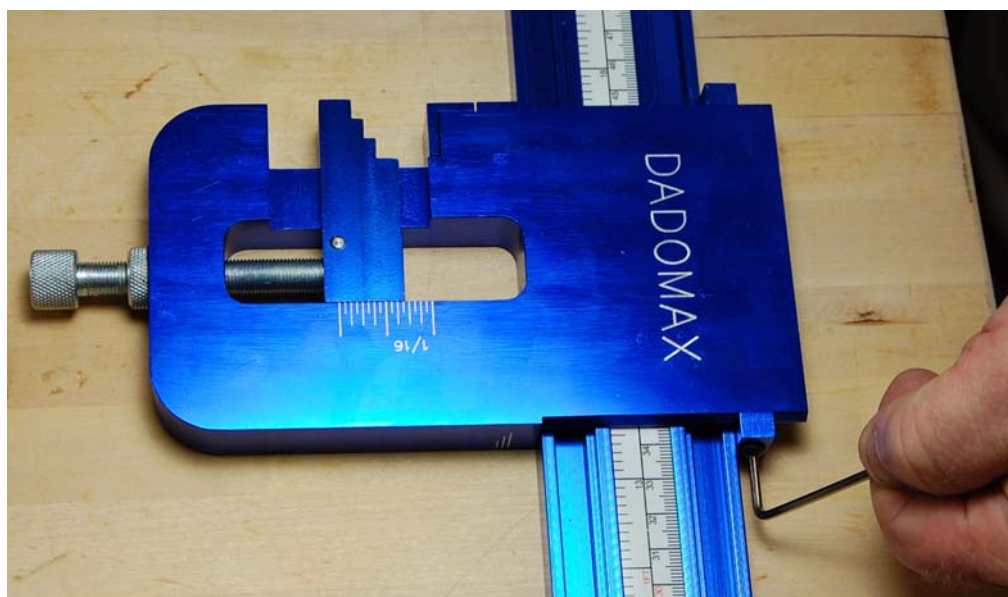
SETTING UP

- 1) Remove router base and install the 1" outside diameter router bushing and the locking nut. Nut must be securely tightened to prevent vibration from loosening the bushing. Nut should be checked periodically during use. The use of a rubber o-ring between (included with **DadoMax™**) the locking nut and the router base will help prevent the nut from vibrating loose.
- 2) Select a router bit from the three sizes referred to (1/4", 3/8", or 1/2") that will allow you to make your dado slot. The cutter must be smaller in diameter than the width of the slot being made.



Install the selected router bit using normal procedures. Make sure the bit and bushing are properly tightened.

The **DadoMax™** should slide freely along the guide rail without excessive play.



To adjust, loosen the set screw holding the slide in place and place the **DadoMax™** over the clamp with the main portion of the body on the opposite side of the clamp from the 90° head. Tighten the set screw while holding the movable slide against the guide to achieve a snug fit. Slide the length of the guide to assure smooth travel adjust as necessary.

SETTING THE DADOMAX™ DEPTH OF CUT

- 1) With the router held upside down, lower the **DadoMax™** face down onto the router to adjust the depth of cut. The amount of the bit protruding through the base of the **DadoMax™** will correspond to the depth of cut.
- 2) If using a plunge router assure the measurement is made with the router fully against the plunge stop.



SETTING THE DADOMAX™ FOR THICKNESS OF WOOD and adjusting the Run Out Compensator™.

- 1) There are three steps in the moveable jaw of the **DadoMax™**. Each step corresponds to a different size bit. 1/4", 3/8" or 1/2" bits can be used. For 1/4" bits the step closest to the center of the jig is used. For 3/8" the center step and for 1/2" bits the outermost step is used. Figure shows 3/8 step being used (middle step)
- 2) Hold the **DadoMax™** over the edge of the board to be inserted in the dado and adjust the moveable jaw until the material is lightly clamped between the step and the fixed portion of the jig. Tighten the lock nut on the threaded rod to lock the jaw securely in place.

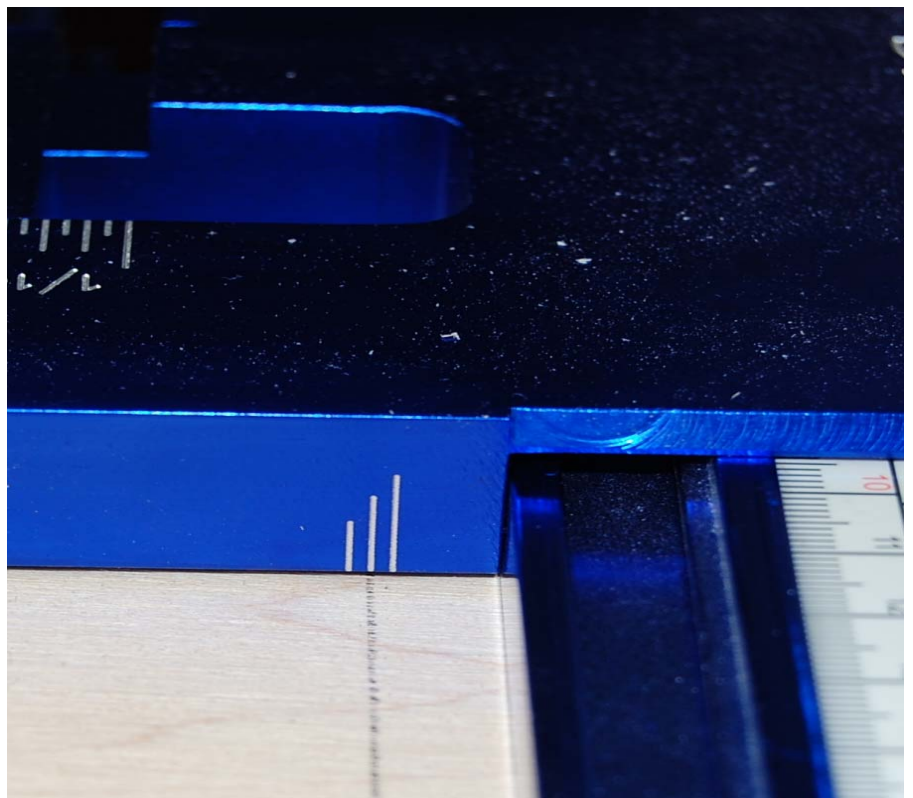
The first time the **DadoMax™** is used with a specific router or bit, the run out compensator may require adjustment. The *Run Out Compensator™* is adjusted by loosening the set screw and sliding the jaw to the left or right. Moving the jaw to the right makes the resulting dado fit loose. Moving the compensator jaw to the left tightens the final dado. Each time the compensator is adjusted, you must reset the thumbscrew for the dado thickness.

- 3) Fine dado width adjustments to fine tune the fit are made by tightening or loosening the threaded rod slightly after a test cut is made.



POSITIONING THE DADOMAX™ TO MAKE THE CUT

- 1) The three markings on the sides and end of the **DadoMax™** are used for aligning your dado cut. The longest mark represents the location using a 1/2" router bit. The medium mark represents the location using a 3/8" bit, and the shortest mark represents the location using a 1/4" bit
- 2) The lines marked on the end of the **DadoMax™** identify the edges of the router bit and are used for *Stopped Dado Cuts*.
- 3) The markings on the sides of the **DadoMax™** identify the edge of the dado cut



closest to the guide rail. Each marking represents where the edge of the dado will be cut for the corresponding size router bit.

- 4) With wood placed on a firm work surface, mark the edges of your intended dado slot. Position the Clamp / DadoMax™ assembly so the marks on the **DadoMax™** are aligned with the markings on the material. Remember to use the markings representing the specific router bit you are using. The length of the line corresponds to the router bit diameter.
- 4) Check the Clamp Guide for square alignment and lock it in place.
- 5) The actual edge of the dado may vary slightly from the indicated line due to the setting of the run out compensator. After the first cut is made check the edge of the cut relative to the indicated line and make note of it for future use.

CUTTING DADOES

- 1) Plug in the router and make the cut by sliding the router forward along the clamp guide, holding the router bushing gently but firmly to the left side against the **DadoMax™**. At the end of the dado cut, slide the router gently but firmly to the right side against adjustable jaw. Bring the router back along the clamp to complete the right side of the dado cut. For dados wider than two times the bit diameter additional passes may be required to remove the center material.
- 2) Turn off the router. After it stops completely, remove it from the **DadoMax™**. Remove any sawdust and check to make sure your material properly fits in the slot. Perform this check before moving the clamp position. If it is too tight, or too loose refer to (FINE TUNING THE CUT)

FINE TUNING THE CUT

- 1) The width of the dado is influenced by several factors. Simply adjusting the positioning knob slightly will fine tune the width of cut. Once set, the jig will repeat the same width dado each time.
- 2) The scale on the top of the body is calibrated in 1/16" increments. It is used to estimate the amount of adjustment. This is an approximation only because it does not take into consideration the setting of the *Run Out Compensator™*
- 3) If the dado adjustment fails to yield an acceptable dado, the *Run Out Compensator™* may need adjustment. Refer to setup section for proper procedure.

Other Types of Cuts

Sliding dovetails

Female dovetail cuts for sliding dovetail joints are easily done with the **DadoMax™**. To perform these specialty cuts, the adjustment for the thumbscrew is screwed in completely so the bushing cannot move from side to side. This is called the "trapped bushing" position. Unless the dovetail bit is 1/4", 3/8" or 1/2" wide the alignment of the cutting position must be done manually by aligning the bit center with the desired cut location. Make the cut from the edge of the board using a stop on the clamp if a non-through cut is desired. The matching male portion of a joint can be made on a router table or table saw.

Stopped dados and mortises

Stopped dados are dados that either start or stop without going all the way to the edge of a board. A stop on the clamp will limit the travel of the **DadoMax™**. Woodline offers a pair of optional stops specifically designed for the DadoMax and BlueMax clamps. Typically one stop is used for stopped dados and two stops are used for mortises.

