

**BEST
NEW ROUTER
PRODUCTS**

Router and CNC Special

American Woodworker

THE BEST RESOURCE FOR YOU AND YOUR SHOP #152, Feb/Mar 2011



Diamond Inlay



New Compact Router



Showcase Jewelry Box



Router-Made Pens



**Small Shop
Computerized Carving**



**9 Tips for Making
Complex Moldings**



**Weekend Project:
Bonsai Stand**



**Seat-Scooping
Router Jig**

Motorized Router Lift

Lock Miter Jig

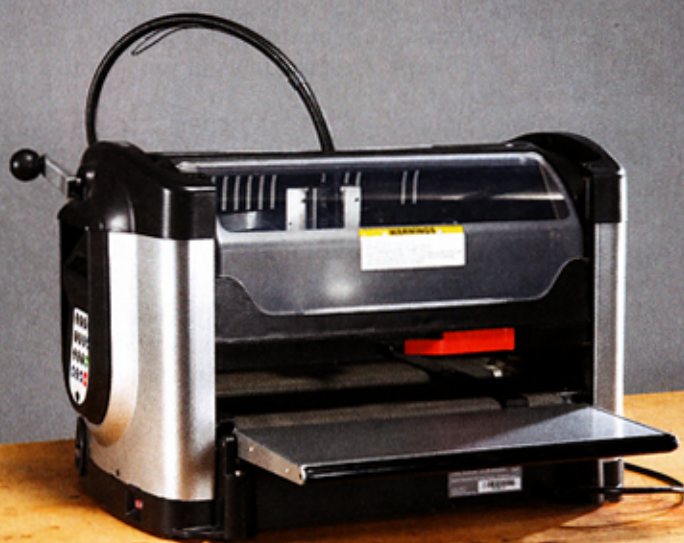
Cam-Action Bench Dog



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Display Until March 14, 2011

CarveWright Version C



High-tech, easy-to-use push button operation makes it almost goof-proof.

The CarveWright Version C has several upgrades from the previous model, including a quieter spindle, simple-to-loosen chuck, modified board tracking system and reinforced frame design. Optional upgrades include heavy-duty rubber table traction belts (which replace sandpaper traction belts) and several new software options. CarveWright's simple push-button operation and high-tech engineering make it very easy to use.

Price: \$1599 (basic model)

SOURCE:
www.CarveWright.com

The hardware

The most significant things about the CarveWright Version C are its ease of operation and oops-proof approach to CNC routing. I've carved several dozen designs on the machine and haven't had a single "crash." That is to say, all the designs turned out as planned without the bit ever cutting at the wrong place or depth. I can't say this about my work on the other machines.

NASA engineers invented the CarveWright and loaded it with technology. It has several sensors that work in tandem with the software to automatically measure a board's width, length and thickness. It even prompts you when to change the bit and then automatically measures the bit's projection to ensure the correct cutting depth. It knows if your board is the wrong size for your design and will offer you the option to scale your design or to insert a new board.

This high-tech, oops-proof design comes at a price though. The sensors and mechanical parts that make the automatic operation possible

require regular cleaning and lubrication. Maintenance requirements are spelled out in the owner's manual and the machine operated smoothly (without warning messages) as long as I performed the necessary maintenance before each carving. This is more maintenance than most other kinds of woodworking machines require.

The CarveWright lives up to its name—its overall carving ability is very good. Unlike gantry-style CNC machines, the CarveWright feeds the board through the machine, similar to the way a surface planer feeds a board. The spindle carriage, which holds the router bit, operates like an ink jet printer, zipping back and forth as the board feeds through. The machine will accommodate boards up to 5" thick, 14" wide, 144" long and up to 20 pounds, but I found the machine had trouble feeding 3/4" thick by 14" wide boards that were much over 8' long. Narrower boards that were longer worked fine, but needed to be well supported at both ends while carving.

The software

CarveWright comes with its own preparatory design software that is easy to learn and well suited for relief carving, sign making and small-parts cutting. Optional software is available that allows you to import your own designs from other programs, including both 2D and 3D shapes. CarveWright also maintains a pattern store with 100s of carving designs for sale, ranging from about \$5-\$20. The large selection includes everything from shell carvings to rosettes, to animals and automobiles.

Pros: Compact size, near goof-proof user interface, operates independent of your computer, can carve long boards, uses both 1/4" and 1/2" diameter bits.

Cons: Tendency to stall unless regularly cleaned and lubricated. Light duty—not intended for commercial use.



The **CarveWright spindle** consists of a carriage with bearings that run on parallel round guides. The router bit is held in a chuck that is driven by a flexible shaft. Changing the router bit simply requires loosening an allen screw. The chuck accepts steel-shank bits from 1/8"-1/2" diameter. The Z-axis touch plate automatically measures the projection of the bit to ensure correct cutting depth.



To see a video of the CarveWright in action and maintenance tips, visit AmericanWoodworker.com/CNC

Carving designs are loaded onto a memory card at your computer. The memory card is then inserted into the machine, allowing you to keep your computer out of your shop

and away from the dust. Once the card is inserted, it's all push-button operation, as the machine steps you through several prompts to make sure the board, design and bit are correctly set up. Only then will it start carving.



CarveWright Project Gallery



SERGE CARON

Armoire doors and panels made by Serge Caron, Quebec, Canada. Carved using the CarveWright. More pictures and information at www.lahucheapin.com.



BRANDON MACDOUGALL

Four and five string hollow body violins made by Brandon MacDougall, Ojai, California. Carved on the CarveWright. More pictures and information at www.liquidguitars.com.