About the Artist:

Mechanics and motion have always fascinated me. During college I studied physics, engineering and chemistry to further my understanding of how things worked. I graduated with a degree in physics from Boston University in 1974. This intuitive understanding of motion and mechanics combined with the artistic influences of my wife, Marji, led me to the creation of kinetic sculptures. In 1975 we started “Wood That Works” and I became a full time sculptor. Since then I have designed and handcrafted over 150 different limited edition and one-of-a-kind kinetic sculptures. I have exhibited in numerous juried, invitational and group events. My work is displayed in galleries and private collections around the world. I currently maintain a studio in rural northeastern Connecticut.

David C. Roy
To the Owner...

Hello,

Welcome to the world of Wood That Works. This Monarch II is number ______ out of a possible 75 pieces. It was made by me during the month of ______ in 2013. I build, test and pack each sculpture myself, doing 6-12 pieces of an edition per month. It takes several years for me to complete an edition and some are never finished as I move on to new designs. Designing and building kinetic sculptures like Monarch II has been my full-time occupation for more than 30 years. I hope Monarch II brings you and other viewers as much enjoyment as I've found in making it.

Monarch II has been mounted on a wall in my shop and running for at least 2 complete windings (several hours) before I pack it. I make every effort in design, construction and packing to make sure the piece will perform problem-free for years to come. I use only the finest materials. Of course, problems can still occur no matter how hard I try to prevent them. My answer to this is a warranty to the original owner against defects in materials and workmanship for five years. See the guarantee section of this booklet for details.

It leaves me happy and satisfied to find that my work has made it’s way into new lives. I hope it brings you years of enjoyment.

David C. Roy

Stop Ratchet lever
Do not push!

Lightly hold the back wheel here with your right hand while winding.

To wind the sculpture insert your pointer finger here and, after positioning the butterfly lever, wind slowly in a clockwise direction.

Sound Information:
Monarch makes a random clicking sound. It usually a soft sound but occasionally gets louder when the two wheels reverse at exactly the same time and the mechanism is triggered with extra force.
About Monarch II:

Why Monarch II so soon after Monarch I? It certainly wasn't planned.

A few months ago I had a brainstorm in the shower (I do all my best designing in the shower!) I realized that concepts from a mechanism design I had been working on for my new sculpture Swoop would also apply to Monarch. If it worked, it would be a much more elegant solution to creating basically the same motion. I did a few experiments to test the concept and it looked promising so I started to modify Monarch drawings to see how it would change things.

Initially I thought I could implement the change and keep the edition the same. As I worked on it, I realized that the new mechanism would allow me to simplify the visual clutter in the center of the sculpture, another plus. It also made the change very obvious and I didn't think I could just continue the edition under the same name.

I decided to end Monarch I at 36 and start Monarch II as a new edition of 75. The motion and feel of the two versions are exactly the same, the change is in the details.

Monarch makes a random clicking sound. It is usually a soft sound but occasionally gets louder when the two wheels reverse at exactly the same time and the mechanism is triggered with extra force.

Specifications:

- Size: 34"h x 4"w x 7"d
- Power Source: negator spring
- Approximate Run Time: 6 hours
- Materials: hardwood plywood, bearings, string

Monarch II ©2013
Directions:

To Mount on Wall:
- Monarch does not need a template for wall mounting. The orientation of the circular base is not important. Clearance of 18 inches is needed from the center of the sculpture out in all directions.
- Hold the sculpture in the desired location against the wall.
- Place a sharp instrument through the screw holes, marking their positions on the wall.
- If the wall is sheetrock or plaster use plastic anchors. Drill 1/8” pilot holes for the anchors provided.
- Screw the sculpture to the wall.

To Wind (Two-Step Process)
- IMPORTANT NOTE: As you wind the sculpture you will notice a small double “Y” lever rotating back and forth. I call this the stop ratchet lever because it stops the sculpture from unwinding. NEVER push this lever after the sculpture has been wound. The sculpture will rapidly unwind, spinning the pin wheel and possibly damaging the spring or sculpture.
- Winding Monarch is a simple two step process. First, position the ratchet and pin for winding and second, wind the sculpture.
- To correctly position the lever and pin for winding, hold the back wheel in your left hand and rotate it until the butterfly lever (see arrow below) is in the 9 o’clock position.
- Hold the back wheel lightly in one hand. Insert your pointer the on the front light wheel. Gently and slowly turn it clockwise continuing to hold the back wheel with your left hand. As you wind the sculpture watch the flat brass spring on the large spool in the center. I have placed a red warning tape about 2 turns from the end of the spring. Stop winding when you see it. It takes about 20 turns if the sculpture is completely unwound. After you release your right hand from the winding wheel, you can let go of the back...

! Put your finger on the brass pin below the butterfly lever (left image below) and push it to just above the lever, leaving it resting on the top side of the lever (right image below).