

About the Artist:

David C. Roy

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 100 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.

Wood 
that Works

Nautilus • Directions

Kinetic Sculpture by David C. Roy
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To the Owner...

Hello,

Welcome to the world of Wood That Works. This Nautilus is number _____ out of a possible 95 pieces. It was made by me during the month of _____ in 2014. 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 Nautilus has been my full time occupation for more than 25 years. I hope Nautilus brings you and other viewers as much enjoyment as I've found in making it.

Nautilus has been mounted on a wall in my shop and running for at least 2 complete windings (many 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

To wind the sculpture place your pointer finger here and turn the front wheel slowly clockwise while holding the back wheel. Watch for the red tape to appear on the spring. Do not over-wind.



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

Directions:

To Wind

- Hold the back wheel lightly in one hand. Insert your pointer finger as indicated in right photo. Gently and slowly turn it clockwise. Release the back wheel after you stop winding the front wheel.
- You can view a video of David winding Nautilus online at http://youtu.be/AZOWW-VP_JY
- As you wind the sculpture watch the top of the light colored spool the flat spring is winding onto. I have placed a red warning tape about 2 turns from the end of the spring. Stop winding when you see it.
- CAUTION: It is very easy to over wind this sculpture and break the spring. Make sure you turn the front wheel slowly enough so you can stop its motion before you reach the tape at the end of the spring.

To Start

- If Nautilus doesn't start moving on its own when you finish winding, turn the front wheel clockwise.

About Nautilus:

Over the years I have created several sculptures that have the spring drive mechanism located between the patterning wheels. Each of these sculpture used basically the same type of 3 pawl “fly out” mechanism to power an unpredictable motion pattern. The most recent of this type was Evolution. These sculptures all created patterns I liked most of the time but occasionally the mechanism would deliver too much energy to one wheel or the other making it rotate much too quickly and for too long a period. I'd tried several different approaches to mitigating this “misbehavior” and I think I was most successful with Evolution - but it still wasn't perfect. I needed to design a new type of mechanism but for years I couldn't figure it out.

This began to change with Monarch I and became a bit more refined with Monarch II. I figured out how to use a multi-pin two pawl mechanism to deliver smaller, more controlled “pushes” and hence to control the motion while still allowing it to create unpredictable patterns.

I consider the mechanism in Nautilus the next leap forward in this type of sculpture mechanism. It is much smaller than the Monarch II mechanism and quieter while still allowing me a great deal of control over the motion. It just happened that I had also been working on the perfect set of patterning wheels to go with this new mechanism. Nautilus has been through several generations as I've further refined the mechanism and pattern wheels to work together.

I've also spent far too much time looking for the right name for this sculpture. The sculpture reminded me of a gentle surf breaking from a peaceful sea but finding a name that expressed that concept escaped me. Jared, my son-in-law suggested Nautilus after a bit of discussion and I knew it was right.

Directions:

To Mount on Wall:

- Nautilus 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.
- Drill 1/8" pilot holes. If the wall is sheetrock or plaster use plastic anchors provided.
- Screw the sculpture to the wall.

Specifications:

Size: 35"h x 35"w x 7"d

Power Source: negator spring

Approximate Run Time: 5 hours

Materials: hardwood plywood,
bearings, string

Nautilus ©2014



Guarantee:

- My kinetic sculptures are guaranteed to the original owner for a period of five years. All warranties expire with transfer of ownership from the original owner. Damage of the sculpture from exposure to extremes of high or low humidity, or to adverse hot or cold temperatures, or damage caused by normal wear and tear, accidents, misuse, or modification will not be covered by the warranty. Shipping and insurance to and from Wood That Works is the responsibility of the purchaser.
- I will charge a reasonable repair fee if the sculpture was damaged by misuse or needs refurbishment from normal wear and tear.