

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 200 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

Dimensions • Directions

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

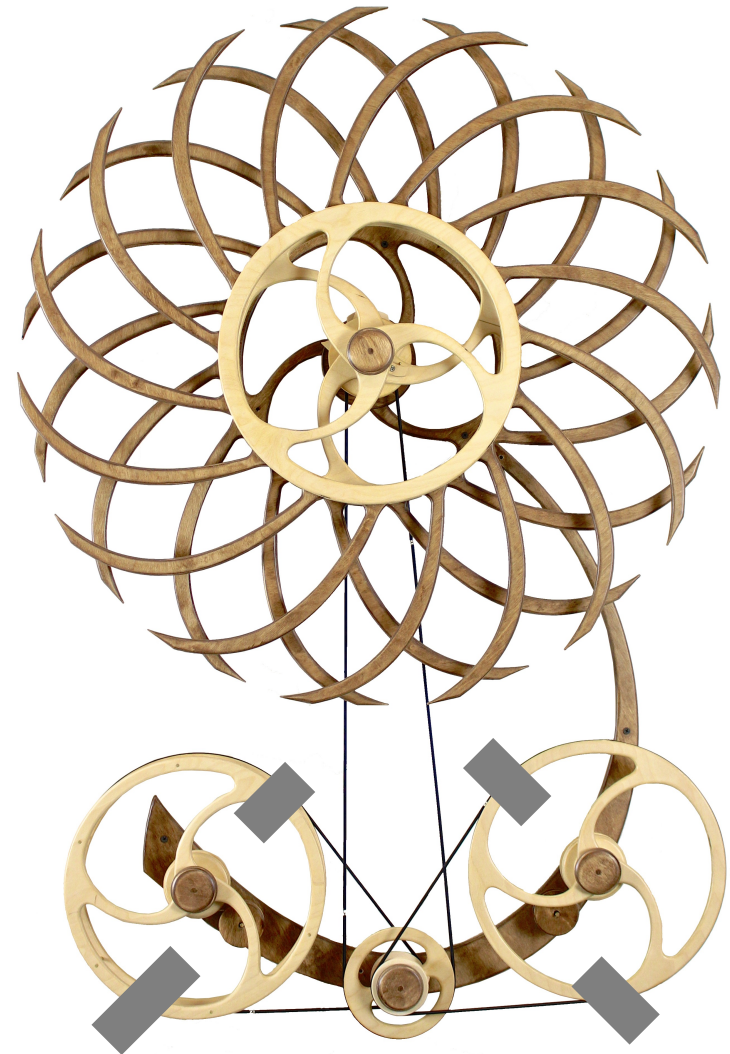
Hello,

Welcome to the world of Wood That Works. This Dimensions is number _____ out of a possible 95 pieces. It was made by me during the month of _____ in 2015. 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 Dimensions has been my full time occupation for more than 35 years. I hope Dimensions brings you and other viewers as much enjoyment as I've found in making it.

Dimensions 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



Before Moving Sculpture:

- Always tape the spring-belts in place before moving the sculpture. This will save a lot of aggravation when it is time to set the piece up again.
- See the diagram for the best tape locations. They are shown as gray rectangles.
- Remove the large patterning wheels before taking the sculpture off the wall in a reverse procedure to the installation.
- Be sure to save the small spacer. It is required.
- Never lay the sculpture on a horizontal surface for a long period of time without supporting the patterning wheels. I use crumpled newspaper to support and separate the wheels when packing the sculpture.

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.

About Dimensions:

In 1997 I designed a sculpture called Phenomenon. It created an optical illusion of a 3d torus or a ball. This was one of my favorite optical patterns. I decided it was time to revisit it and use new tools and techniques to improve upon it.

I first spent lots of time exploring just what made this visual illusion “work”. I started with the original wheel and varied the curves, angles, sizes and number of spokes looking for what would “break” the effect and what would enhance it. The final wheel is slightly smaller in diameter than the original with 2 additional spokes. The new spokes are curved and formed somewhat differently but resemble the original.

My mechanism designs have come a long way since 1997. They are more efficient, quieter, and in some respects simpler. The fruit of this work can be seen most clearly in the increased run time. Phenomenon was a long running piece for 1997 at 15 hours. Dimensions is one of the longest running pieces I've ever made at around 40 hours of continuous motion per winding.

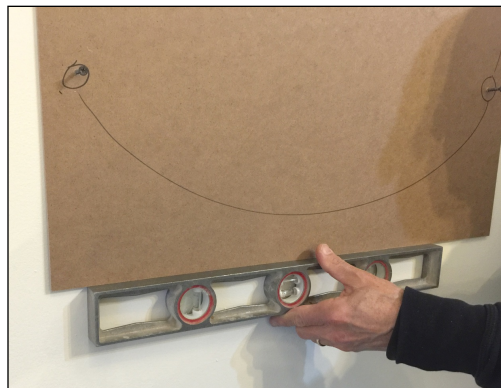
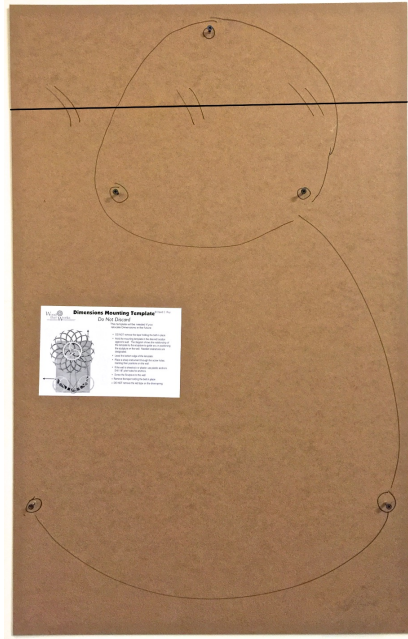
Specifications:

Limited Edition of 95
Size: 49”h x 34”w x 7”d
Power Source: negator spring
Approximate Run Time: 40 hours
Materials: hardwood plywood,
brass, bearings
Dimensions © 2015

Directions:

To Mount on Wall:

- DO NOT remove the tape holding the spring-belts in place.
- The mounting template comes in two pieces. Hold the larger piece in the desired location against a wall. The diagram on the next page shows the relationship of the template to the sculpture to guide you in positioning the sculpture on the wall. Minimum clearance distances are noted
- Attach the bottom template to the wall with 1 screw.
- Level the bottom edge of the template. Insert a second screw to mark the location and hold the lower template in place.
- Position the smaller top piece of the template along the top edge aligning marker lines.
- Insert a screw a couple of turns into each hole to mark their positions on the wall.
- Remove screws, remove template and save the template.



To Wind:

Important First Time winding instructions:

- The first time you wind up this sculpture after unpacking requires special attention. Shipping may have caused parts to move unexpectedly.
- First look for obvious things that might have come out of alignment in shipping like belts out of pulleys.
- Only wind each spring TWO turns in a clockwise direction for the first run. Make sure the metal band is winding inside the larger spool walls. If it isn't, shift it so that it does. It should be fine for all future windings. A short run will show you if parts slid out of alignment during shipping.
- If it doesn't run as expected email him at david@woodthatworks.com.



Winding Wheels

Subsequent windings:

- Turn the winding wheel clockwise 20 turns if completely unwound. Less if not.
- Pay close attention to the top of the light colored wood spool directly behind the winding wheel. Stop winding as soon as you see the red tape appear on the metal band. This is placed about 2 turns from the end. Winding beyond this point may damage the sculpture.

To Start:

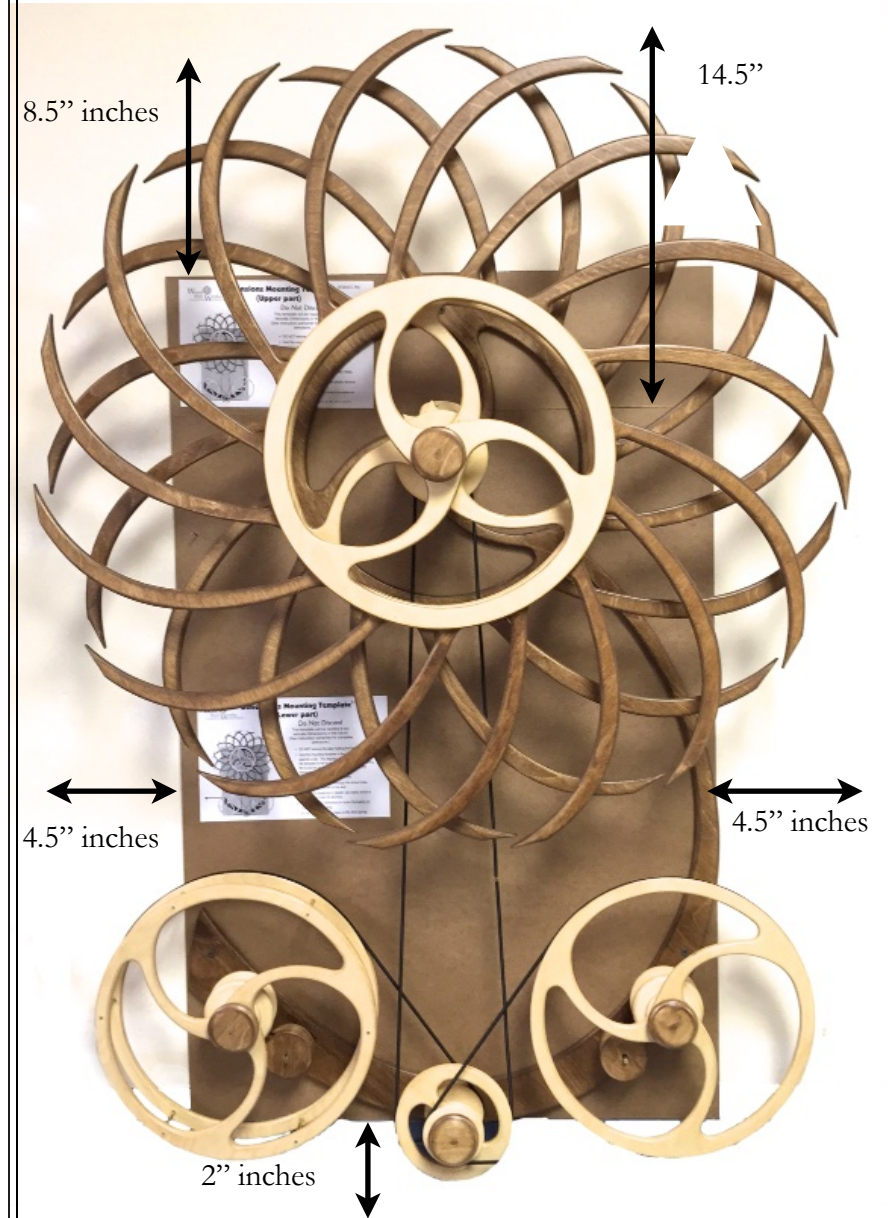
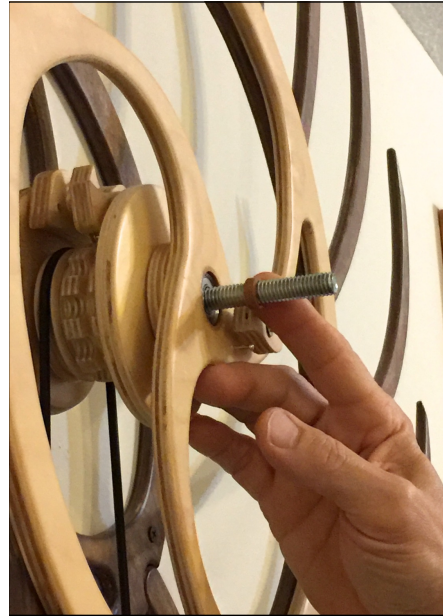
- If the sculpture does not start by itself after winding, **gently** push both patterning wheels in a clockwise direction.

To Stop:

- Slow the motion of the patterning wheels with your hand and let them come to rest.

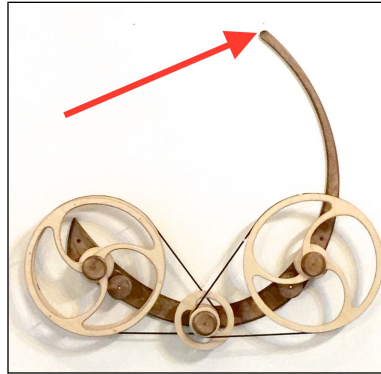
Directions:

- Once the first wheel is in place, slide the very important small spacer on the shaft. An extra spacer is provided with this instructions in case you lost the first one. Do not use both!
- Slide the front wheel on. Once this wheel is on the shaft, rotate it clockwise to properly place the lever on the front side of the back wheel.
- Screw the cover knob in place. Do not over tighten. Just finger tighten. Over tightening will pinch the pieces together causing it to not operate.



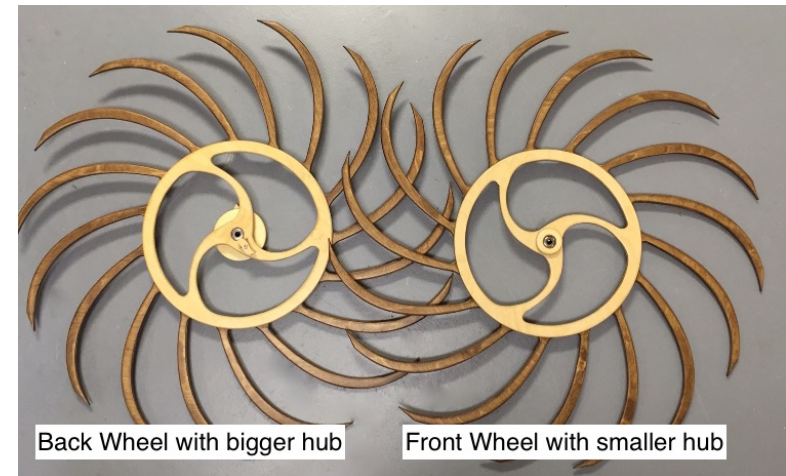
Installation Directions (con't):

- Drill pilot holes in the wall using a 1/8" bit. If the wall is sheet rock or plaster use plastic anchors.
- Screw the bottom base to the wall first using both screws.
- Note there is a small pin protruding from the top of the sweep (see arrow).
- Align the corresponding hole located in the notch of the upper ring to that pin and slide them together.
- Screw the upper base into place (3 screws)
- Remove all blue tape holding springs in place.
- Thread the included extra spring belt from left to right through the center of the upper part of the sculpture. It should be positioned to rest inside the pulley slot.
- Bring this spring belt down and around the center pulley of the lower portion and hook the two ends of the spring belt together.



Installation Directions (con't):

- Remove the blue tape on the center shaft holding the spacer in place. Remove the front knob and the spacer being careful not to lose the spacer. It is important!
- Place both wheels side by side on the floor. Notice one has a larger center wheel. That is the back wheel and needs to be slid on the shaft first. The side with the extra disk slides on toward the wall.



- When you slide each wheel on, know that the shaft contains 2 bearings, one in the front and one in the back. It will slide easily when aligned. Don't force it.
- Slowly rotate the wheel counter-clockwise after it is on the shaft. This will properly seat the lever on the back side.

