

## About the Artist:

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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 130 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

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Double Cascade • Directions

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

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Hello,

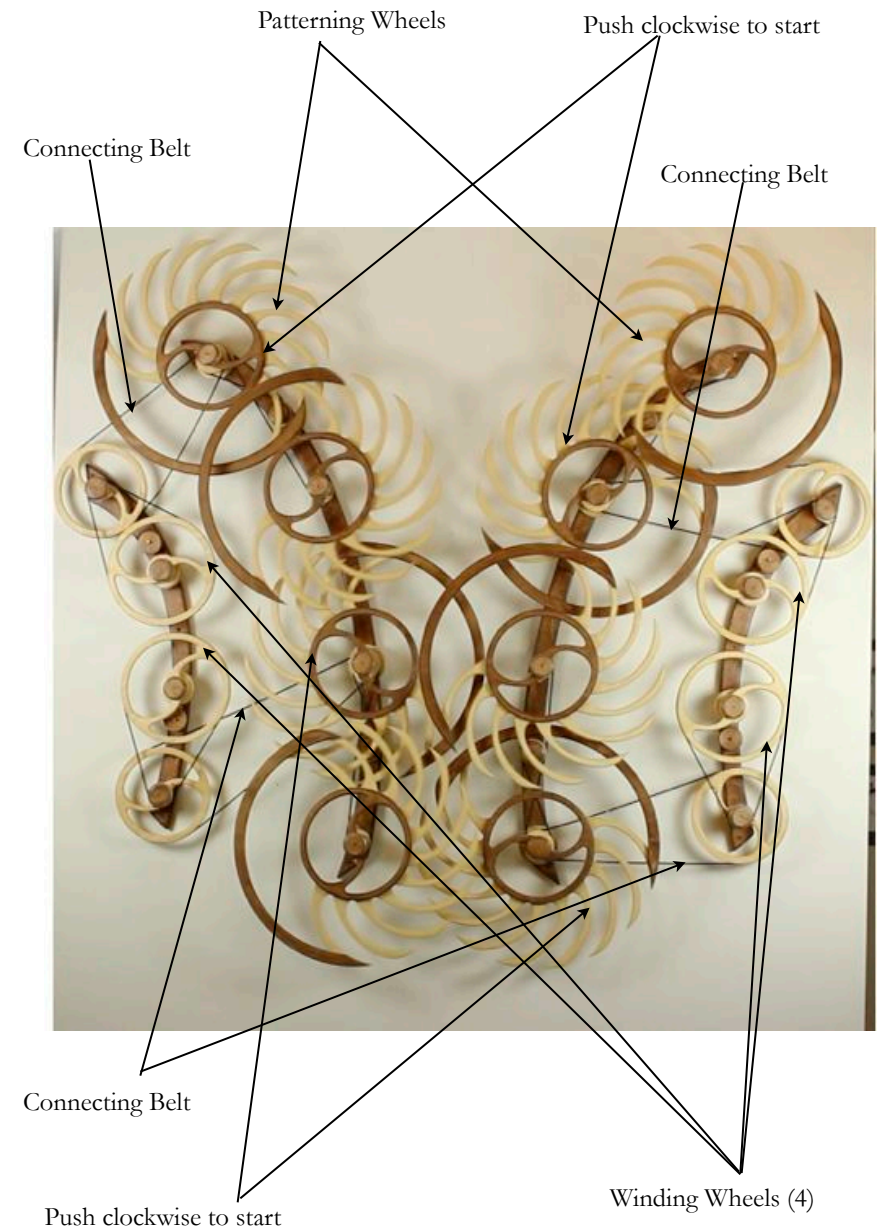
Welcome to the world of Wood That Works. This Double Cascade is a modified design made specifically for the Cosells. The photos of the sculpture on the wall show the sculpture in a "squished" orientation. My display wall wasn't wide enough to hold it as designed!

Designing and building kinetic sculptures like Double Cascade has been my full time occupation for more than 30 years. I hope Double Cascade brings you and other viewers as much enjoyment as I've found in making it.

Double Cascade has been mounted on a wall in my shop and running for several weeks before I packed 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



## Directions:

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*These directions apply to both sides of the sculpture.*

### **To Wind**

- Turn the winding wheels in a clockwise direction 23 turns. There are four separate winding areas
- 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 1 turn from the end.

*Winding beyond this point may damage the sculpture.*

### **To Start**

- If the sculpture does not start immediately after winding push the outside patterning wheel (see diagram) in a clockwise direction to start 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 Double Cascade:

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Double Cascade follows from the inspiration of my earlier design Falling Water. From that I created the single unit White Water sculpture which can be expanded. In Double Cascade I've arranged two Falling Water sculptures in a quad formation. The motion appears to tumble down the cascading design.

I have improved on the original Falling Water design by simplifying the drive mechanism and slightly modifying the way I use precision ball bearings to make the sculpture long running and reliable. The result is a run time far beyond any single spring sculpture I have created at more than 24 hours on a full winding.

## Specifications:

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One-of-a-kind modification

Size: 66"h x 91"w x 6"d

Power Source: negator spring

Approximate Run Time: 24+ hours

Materials: hardwood plywood, bearings, string

Double Cascade ©2011

## Directions:

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### To Mount on Wall:

- The center of the 4 templates is the center of the sculpture. Allow an extra 2 inches above the template.
- Hold the lower left mounting template in the desired location against a wall. Level the bottom edge of the template. Temporarily screw it in place using two screws. Mark the other hole locations with a sharp instrument.
- Line up the lower right template with the lower left. Make sure it is level. Screw it in place with 2 screws. Mark the other holes.
- Repeat with the upper two templates.
- Place a sharp instrument through all the screw holes, marking their positions on the wall. Remove all templates.
- Note- All photos show the sculpture with the template behind it to help with labeling. You will remove the template and proceed without them on the wall even though the photos show them still there.
- Drill pilot holes. If the wall is sheetrock or plaster use plastic anchors.
- Install the right lower winding mechanism first.



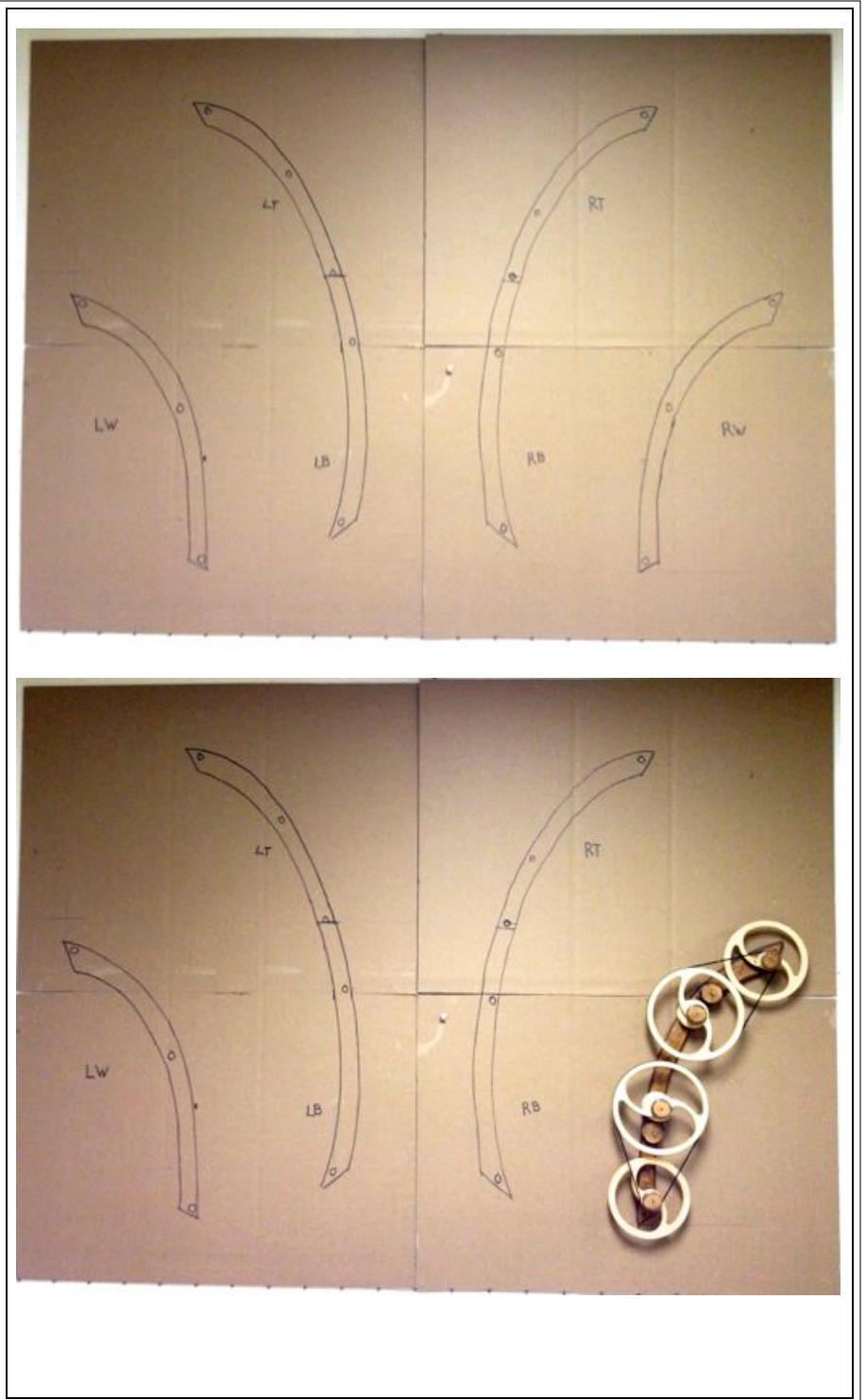
## Directions:

### To Mount on Wall (continued):

- Repeat with the left side.
- Screw the winding mechanism to the wall first (LW).
- Screw the lower patterning wheels (LB) to the wall using only the bottom two screws.
- Install the top portion (LT) using the top screw first then the bottom screw that joins the upper and lower portion overlap. Install the middle screw last.
- Attach the drive spring belts according to their labels. The belt goes from the smaller pulley wheel on the winding mechanism to the smallest pulley behind patterning wheel. There are two on the right half, one to the bottom patterning wheels and one to the top.

### Before Moving Sculpture:

- Always let the sculpture unwind and 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.
- Blue Painter's tape is recommended.
- The 4 connecting belts are removed for moving.



## Directions:

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### To Mount on Wall (continued):

- After installing the right winding mechanism (RW), install the right lower patterning wheels (RL) putting in only the bottom two screws.
- Install the top portion (RT) using the top screw first then the bottom screw that joins the upper and lower portion overlap. Install the middle screw last.
- Attach the drive spring belts according to their labels. The belt goes from the smaller pulley wheel on the winding mechanism to the smallest pulley behind patterning wheel. There are two on the right half, one to the bottom patterning wheels and one to the top.

