

# UGEARS

Mechanical models



**NATURAL**

Made from wood materials



**NO GLUE CONNECTION**

Assembling without glue  
and chemicals



**SELF ASSEMBLY**

Details are already cut  
and ready to assemble



**MECHANICAL**

The models produce motion



**EDUCATIONAL**

Perfect for family projects  
through hands-on STEM learning



## And Yet It Moves!



UGEARS is the creator and manufacturer of unique self-propelled mechanical model kits designed for self-assembly without glue and made of sustainably sourced high-grade wooden material.

Each of UGEARS models carries its own idea and concept. The Tractor rides along with a busily rattling of its small but amazingly realistic pistons. The Locomotive with Tender represents a replica of a real steam engine at the beginning of the XX century. With a dazzling rotary motion of the coupling rods, it can run up to a distance of 5 meters. The Truck has a four-cylinder engine with a universal-joint drive propelled by a rubber band motor through connecting gears. The lever switches between three modes - "forward", "back" and "idle" – making the truck go ahead or backwards, or demonstrating the work of an idling engine under the pop-up hood. The "Safe" model will keep your secrets and valuables safe, protected by a three-digit code. The "Theatre" turns a bed time story into an enchanting performance giving you the chance to create your own fairy-tale. Rotate the main wheel and get the characters to interchange along with your story. You will have the Prince, the King, the Castle, the Treasure Chest, the Fool, the Princess, the Dragon, and the Witch to perform in your play.

Some of our designs are inspired by real-life prototypes while others represent an original re-imagining of historical mechanisms with excellent levels of engineering and a quality production process. Each model kit has everything you will need for assembly. The quality of the parts is very high – a laser method is used for cutting items from a plywood board that provides precise hairline cuts. All steps of the assembly are described in detailed step-by-step illustrated color instructions in 11 languages (English, German, Ukrainian, French, Polish, Spanish, Russian, Japanese, Italian, Chinese and Korean).

Our models are the original all occasions gifts, fun and smart hobby for kids and grown-ups of all ages. All Ugears models are made of sustainably sourced wood and require neither glue nor special tools to be fully assembled into functional working models. Also, there is no need for batteries or any external power source as they are powered by rubber bands, gears, cranks and gravity.


In addition, while looking for a way to make the assembly experience smooth and enjoyable for our customers, we invented and patented our very own plywood joint design. All UGEARS models are manufactured at our own production facilities. We guarantee high quality of our products, effective and helpful customer service and fast replacement of spare parts to complete your models worldwide.

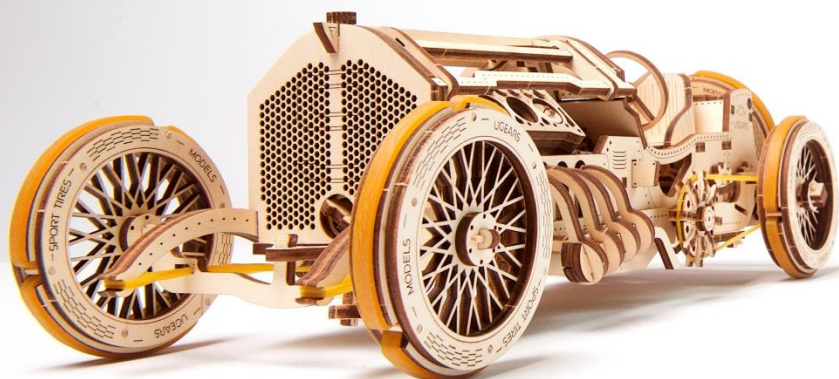
UGEARS is a startup established in 2014 in Kyiv, Ukraine. Today UGEARS offers 50 unique mechanical models of intelligent design. And there are more than 200 ideas for future mechanisms that we plan to realize. Several new models are in development and will be presented by September 2019. The hobbyists are assembling UGEARS models in 80 countries across 5 continents, and we care deeply about the great support, priceless feedback, and kind advice we have received from each of them.

In our age of electronics people still want to be creative with their hands and mind, seeking that rewarding feeling of constructing something with their own hands, inviting their kids and grandkids into the awesome (and, admittedly, old-school but yet-so-cool!) world of mechanics. UGEARS' mission is to give an unforgettable time of working together on things that are popular for all ages. We want family members and friends have fun bonding while creating. And as a result — to get revived mechanical marvels.

Join us in bringing these unforgettable moments to DIYers of all ages!



Truly yours, UGEARS Team 





Upcoming model:

Assemble Me. Fly Around Me



## GLOBUS



At Ugears, we like to think that each of our new models is a wonderful surprise and amazing gift to anybody who loves beautiful mechanics. We want to give more with every model we invent. With this model, Ugears gives you – quite literally – the world. Presenting **the Globus**, a stylised model of Earth with two sets of decorative continents, a rotating mechanism, and curious little extras that make the model even more interesting.

The main module of the model is comprised of two parts: the globe and the platform with the mechanism. The sphere of the globe sits on an axle inclined along the same angle as the axis of the Earth. Like most Ugears models, **the Globus** is animated by means of a rubber-band motor. A lever in the base pulled once clock-wise all the way will fully wind-up the mechanism. As soon as the lever is released, the gears begin their work. If you want it to rotate even slower, you can manually turn **the Globus** and watch the continents float slowly by.

In addition to the main module, the model comes with two interchangeable extra-modules - **the Shuttle and the Sputnik** – which connect to the main module via the planetary gearing and rotate almost twice as fast as the globe and make almost two full spins in one pull of a winding lever.

**The Globus** is easy enough to assemble and very interesting to observe in motion. Unique mechanism and original design make it a clever gift and the perfect decoration for any home or office. The Globus from Ugears is the model you will want to return to again and again. Take your Globus from the shelf and dream about all those amazing places you plan to visit one day.



### Self-assembly, no glue needed

Model size:	8.3 * 7.3 * 7.3 in (21 * 18.5 * 18.5 cm)
Package size:	14.6*6.7*1.3 in (37.8*17*3.2 cm)
Parts count:	184



Assemble Me. Behold  
the Magic of the Fair



Upcoming model:

## CAROUSEL



Round and round and back to where it's all begun... Take a trip to your childhood memories with Ugears beautiful nostalgic model, **the Carousel**, the classic merry-go-round implemented in top-quality sustainable wood.

Here you will find two types of carousel horses that rock up and down as the model spins. The core of the model is a center pole that rotates in a direction opposite to the main platform making it look as if the carousel spins faster than it really does and creates the fascinating dynamics of the whole construction. The pole rises over the roof making it visually more delicate and at the same time giving it more volume. Add little birds soaring over the roof of the carousel along with decorative flying lanterns and you may just sense the aroma of hot dogs and cotton candy!

### Self-assembly, no glue needed



**The Carousel** has a wind-up key under its base that provides tension to the rubber bands attached to the main axle. The pendulum gears down the axle and makes the movement of the modules and details smoother.

It is great fun to observe the model in motion, but if you are one of those people who like to see with their hands, you can rotate **the Carousel** manually. This will allow you to examine every detail in slow motion and give you a full comprehension of how the mechanism works. Put it together, wind it up and we guarantee you will hear that music, feel the buzzing atmosphere of the holiday fair and remember how much joy it was to ride your favourite horse on its happy round and round trip.

Model size:	8.3 * 8.3 * 10.2 in (21 * 21 * 26 cm)
Package size:	14.6*6.7*1.7 in (37.8 * 17 * 4.2 cm)
Parts count:	305



Assemble Me.  
Admire Me



Newest model:

## AMBER BOX



The **Amber Box** from Ugears, the older sister of the Antique Box, is just as beautiful and fascinating as her little sister, the Antique Box, but even more sophisticated. This beauty has all the cool features you can enjoy in the younger model with an extra touch: cleverly built-in five natural amber inclusions to make your experience even more precious.

This model will help you to sort and store your jewellery and small miscellanea in style. Made of eco-friendly materials of a high quality, the Antique Box has a pleasant fresh aroma of natural wood. All you need to put your new **Amber Box** together will be found inside the model's package, including precious Amber stones that will be secured on the lid on the box with special clever fixtures.

The Amber Box is a mechanical puzzle with a smart mechanism inside. To set it in motion, you need to pull the lid that will activate three main blocks: two of which are mirrored mechanisms on each side that move and turn the upper compartments. The third mechanical block moves the lower drawer in the middle of the Box. This step will grant you access **to six compartments**. Take it a step further and you will find **two extra secret compartments**. To discover those you need to feel the hidden button concealed on the back side of the Box – to accommodate your most valued treasures.

**Self-assembly, no glue needed**

The **Amber Box** will provide you with extra-security: its lid has a locking latch that keeps the Box's contents inside and protects it from spillage in transportation or in case of an accidental tipping over.



Model size (open/locked):	11 * 8.7 * 7.9 in (28 * 22 * 20 cm)/ 6.9 * 5.5 * 3.9 in (17.5 * 14 * 10 cm)
Package size:	14.6*6.7*1.3 in (37.8*17*3.2 cm)
Parts count:	189



## Assemble Me. Fill Me Up



## ANTIQUÉ BOX



Delicate, and beautiful, **the Antique Box** from Ugears is designed to keep your treasures safe – and to become a treasure of your collection. The Antique box is a small handsome chest for storing and sorting small miscellanea or jewellery with 8 compartments inside.

The sides of the model are covered with exquisite floral carving with oriental elements. In addition to its beautiful design, it keeps more than one handsome secret, and one of them is a unique mechanism built in the Box. Pull the upper lid to activate three main blocks: two of which are mirrored mechanisms on each side that move and turn the upper compartments. The third mechanical block moves the lower drawer in the middle of the Box. After this little mechanical waltzing, you will gain access to six compartments ready to accommodate your treasures.

But the story doesn't end there – find two extra secret compartments by discovering and pushing the button concealed on the back side. To make sure your treasures are secured we equipped the Antique Box with a locking latch. When the latch is closed you can transport your box, turn it around and upside-down without worrying if it will open and spill its contents. This unique, useful and beautiful **Antique Box** will be a nice decorative element in any home or a beautiful present for someone you care for.

As with all Ugears models, **The Antique Box comes** in plywood boards with pre-cut details that you will assemble with your own hands. The assembly process is simple and fun: everything you need to know to put the model together is in a detailed illustrated step-by-step instruction manual in 11 languages. It also doesn't need any glue or additional tools for assembly. Made of eco-friendly materials, **the Antique Box** has a pleasant fresh aroma of natural wood.



**Self-assembly,  
no glue needed**

**Model size  
(open/locked):**

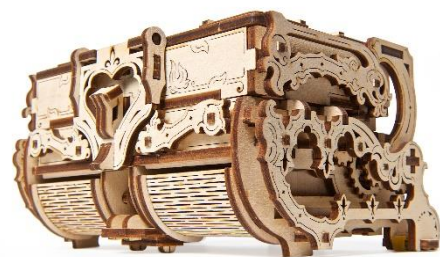
11 \* 8.7 \* 7.9 in (28 \* 22 \* 20 cm)/  
6.9 \* 5.5 \* 3.9 in (17.5 \* 14 \* 10 cm)

**Package size:**

14.6\*6.7\*1.3 in (37.8\*17\*3.2 cm)

**Parts count:**

185





Assemble Me.  
Let Me Fly



## BUTTERFLY



Fascinated by the unique synergy of nature and mechanics, Ugears continues to explore the amazing world of automats and presents an animated kinetic sculpture, **The Butterfly model**. Each of its details designed to make sure it fits its own place and plays its own part in the workings of this outstanding mechanism. Equipped with a rubber-band motor, the mechanical automaton moves imitating the flutter of a butterfly with no external power source or batteries.

### Self-assembly, no glue needed

The delicate wings of **The Butterfly** are made of craft paper. The lower wings change their tilt angle when the model is working to ensure that the movements of the automaton resemble those of a real butterfly. Two front pairs of its legs move while the wings flutter. The back pair of legs are used as launch/stop levers of the rubber-band motor. Your **Butterfly** comes with two sets of wings: a color one and a less bright, beige one, that you can paint as you like.

The Butterfly sits on a flower-shaped platform. The elastic support slightly bounces the model, making its movements more realistic so that The Butterfly dances and flutters in the air approaching the flower. The **Butterfly** is designed in a skeleton-style, which allows you to see the working of gears and blocks inside and understand how the mechanism works.



<b>Model size:</b>	11.4*21.7*15.7 in (29 * 55 * 40 cm)
<b>Package size:</b>	14.6*6.7*1.2 in (37 * 17 * 3 cm)
<b>Parts count:</b>	161



## STEAMPUNK CLOCK

The very essence of Steampunk, the 3D puzzle “Steampunk Clock” from Ugears is here to remind you of the true spirit of this unique style combining art, science, and amazing mechanics.

This model is a miniature imitation of a clock with a delicate carved body and a clever mechanism that sets its gears in motion and gets the hands of the clock moving. Beautiful lace-like ornaments of **the Steampunk Clock** include floral designs, the Sun, stars, and the Moon.

Beautiful gearing of the model includes an original 90-degree angle coupling you can observe when the mechanism is working. Along with a smart gears connection, Ugears engineers implemented another interesting feature: the unsynchronized clock hands sitting on the same axle. Each of them moves with its own pace.

**The Steampunk Clock** is easy to assemble which makes it a perfect model to start with if you are new to the fascinating world of Ugears. Still, in case you have been with us for some time, you will definitely want this outstanding puzzle for your collection.

If you want to spark somebody’s curiosity and introduce them to the fascinating world of mechanics, there is no better way to do it than to invite them to assemble the mesmerising **Steampunk Clock** from Ugears.



**Self-assembly, no glue needed**

<b>Model size:</b>	2.1 * 3.1*4.9 in (5.3 * 7.8 * 12.5 cm)
<b>Package size:</b>	3.5*10.8*0.4 in (9 * 27.5 * 0.9 cm)
<b>Parts count:</b>	43





## Assemble Me. Propel Me



### MONOWHEEL



Today we proudly present the all-wooden mechanical **Monowheel**, a curious and peculiar mechanical model rolling in to join your Ugears collection. This single-wheel mechanism is built in skeleton steampunk style which means you can see and enjoy the beauty of moving gears. **The Ugears Monowheel** is equipped with an original transmission inspired by its predecessors starting in the 1860s: a moving outer element with a stationary mechanism inside.

The parts of the mechanism imitate a real steam engine. The lack of an outer shell grants easy access to rubber bands should you need to replace them. Two working modes guarantee even more fun. Mode one with the feet locked will give you uninterrupted rolling straight ahead for about 1.5 – 2 meters (5.7-7.6 ft) until the rubber-band motor's resource is completely released. After that the model gracefully turns around and stops.

The second mode with the feet in the unlocked position your **Monowheel** will roll ahead while the rubber-band motor is working. After that it turns around, its feet hide inside and the model keeps rolling until it runs into an obstacle. In this mode, the model can cover up to 5 meters, which inspired us to play some mechanical bowling using our new model as a bowling ball. We recommend this new sport to all our friends! As to the technical characteristics: the Ugears Monowheel kit comes with 300 parts, including 19 spare parts. and like all Ugears family models it assembles easily following step-by-step, full-color instructions. **Let the fun roll in!**



**Self-assembly,  
no glue needed**

<b>Model size:</b>	7.3*3.7*6.3 in (18.5 * 9.5 * 16 cm)
<b>Package size:</b>	14.6*6.7*1.6 in (37.8*17*4.2 cm)
<b>Parts count:</b>	300



Assemble Me.  
Master Harbors with Me



## TUGBOAT



As you might have noticed, we at Ugears love the sea and marine devices inspire our creativity. The idea **behind the Tugboat** was to create a functional mechanism with a certain spice that would make it both down-to-earth and interesting. **The Tugboat** is driven by a rubber-band motor powered by the tension of the rubber connected with a bearing. The reduction gear transfers energy to the drive wheel and further to the asymmetrical wheel pair. The pendulum slows and evens the motion of the tugboat. The asymmetry of the wheel pair grants the model its unique way of moving, imitating a boat rocking on the waves, while the working pendulum creates a specific noise similar to one produced by the real-life diesel motor many boats are equipped with.

The winding key on the drive wheel is blocked by a ratchet gear. There are two control levers, one of which stops the mechanism and the other launches it – stop and start lever correspondingly. Use two ropes with hooks to hook up and transport small freight – wheeled models or a paper boat. Your Tugboat will run from 1.5 to 3 meters (5-10 ft) depending on the type of surface.

Like all other Ugears models, this mechanical model kit comes with step-by-step, full-color, truly easy to follow instructions in 11 languages (English, German, Ukrainian, French, Polish, Spanish, Russian, Japanese, Italian, Chinese and Korean) and requires neither glue nor special tools to be fully assembled into **functional Tugboat**.

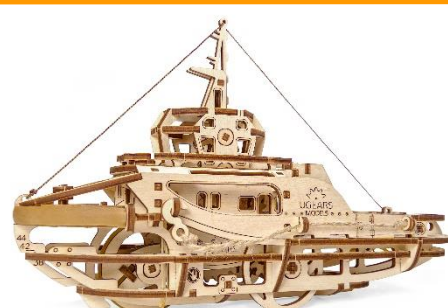
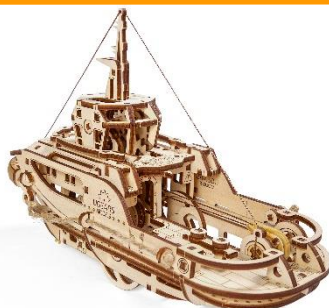


**Self-assembly,  
no glue needed**

**Model size:** 11.2\*4.7\*7.3 in (28.5 \* 12 \* 18.5 cm)

**Package size:** 14.9\*6.7\*1.3 in (37.8 \* 17 \* 3.2 cm)

**Parts count:** 169



Assemble Me.  
Dream along with Me



## DREAM CABRIOLET VM-05



**The Dream Cabriolet VM-05** mechanical model kit: the highly detailed and extremely realistic Ugears' tribute to the automobile industry highlights of the 50s, the period of magnificent luxury cars and **convertibles** and, of course, rockabilly music, swing dresses, bobby socks.

The 50s had given automobiles a completely new look, producing absolutely unique recognisable designs. Comprised of 739 parts, this Ugears self-propelled assembling model is equipped by a rubber-band motor that powers the mechanism and drives the car. **The Cabriolet** can go forward or back. To ensure you can take a close look at the beautiful eight-cylinder V configuration engine in operation, we introduced the idle mode. In this mode, your Cabriolet will stay still letting you look under the hood to appreciate the beauty of the moving gears.

Should you want to put your vehicle in motion, pull the transmission lever on the steering column. Both front and rear wheels of the model are suspended to make its ride ultimately smooth. To make the design of this unique model even more realistic, Ugears engineers added a few important elements that make the automobile look extremely lifelike. We believe you will enjoy the window cranks and fully functional windshield wipers as well as a lifting jack and a repair toolkit mounted under the rear trunk.

Another mechanical feature is the trunk and hood opening mechanisms that add some extra-vividness to this highly detailed vintage vehicle.



**Self-assembly,  
no glue needed**

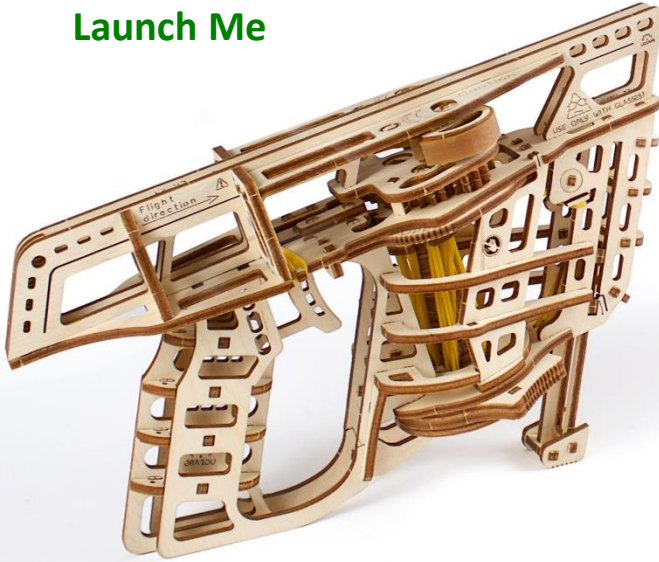
<b>Model size:</b>	13.8*6.2*3.5 in (35*15.7*9 cm)
<b>Package size:</b>	14.9*6.7*2 in (37.8*17*5 cm)
<b>Parts count:</b>	739



**Assemble Me.  
Launch Me**



**You Tube**



## FLIGHT STARTER

**You Tube**

**The Flight Starter**, a new exciting and curious model from Ugears. Loaded with smart mechanics and a lot of fun, this portable hand catapult is a mechanical launcher for light flying airplane models, three of which you will find in the kit.

The model's one of a kind design is a pure work of imagination that produced a look resembling something from outer space – a star ship, a shuttle or a deadly blaster gun from a science fiction adventure film. The all sci-fi design is implemented in the Ugears iconic skeleton steam-punk style that allows you to look inside the working mechanism which you get to assemble with your own hands.

**The launcher** is equipped with a rubber band motor that provides tension that powers your plane when released. The trigger that sets off the mechanism has a safety lock. The tension and therefore the distance your aircraft is going to cover are controlled by a winding crank. The range of this new cool ballistic model can exceed 30 meters – depending on the “bolts” used and how tight the crank was wound. A special support makes the crank a part of the platform for the aircraft you will launch.

**The kit** is comprised of 198 parts and **includes a glider and two paper airplanes** you can use with your **Flight Starter** along with those planes you want to design by yourself.



**Self-assembly,  
no glue needed**

<b>Model size:</b>	11.2*13.4*7.5 in (28.5*34*19 cm)
<b>Package size:</b>	14.9*6.7*1.3 in (37.8*17*3.2 cm)
<b>Parts count:</b>	198





## WHEEL-ORGANIZER

The Wheel-Organizer model: craft kinetic storage for up to 6 pens and pencils with a beautiful Steampunk planetary mechanism inside. Having twisted the wheel, as the genuine captain, you can choose the direction and... a right assistant – pen or pencil – for a project you are working on. The model kit is comprised of 51 parts. You will work with a natural material that is nice to the touch and gives you a very pleasant feel. It's easy to build and nice to give as a present or compliment to your friends and colleagues. Like all Ugears models, you can assemble the Wheel-Organizer without glue and special tools, enjoying a pleasant faint scent of wood during the process. The precut parts are made from high-quality and sustainable wooden material and fit together like a puzzle. Just put it together with your own hands and get your pens and pencils organized on your desk.

Newest model:

Self-assembly,  
no glue needed

Model size:

13.8\*11.4\*4.7 in (11\*9\*9.3 cm)

Package size:

14.6\*6.7\*1.6 in (18.5\*2.75\*0.5 cm)

Parts count:

51



## Assemble Me. Walk Me



## HORSE-MECHANOID



**Ugears Horse-Mechanoid** – a unique assembling model that joins nature and mechanics. It's a Ugears' tribute to early automatons, the attempts to create a walking machine made by the Ancient Greeks, inventors of Japan and China, and Leonardo da Vinci himself. In walking mechanisms designed by many engineers before balance was realized by means of additional extremities or other extra-supports. Ugears designers paid special attention to the anatomy because it was important to make our Horse a real walking quadruped. And we found a smarter way to achieve stability in motion. The innovative mechanism of this beauty makes **the Bionic Horse** a real walking quadruped. All the joints and movements closely resemble those of a real horse, but powered by rubber bands, gears, cranks and gravity. To animate the legs the engineers implemented a claw mechanism.

The bionic heart of your horse is a pendulum installed in the chest of the mech. The oscillations of the pendulum slow the transmission of energy from the rubberband motor to the movable elements extending the working time of the mechanism. **The Horse-Mechanoid** won't carry you over the horizon – the distance it can cover in one winding is quite limited. Although, it is enough to observe the work of the unique mechanism and enjoy the beauty of the mechanics of the model.

The mane and tail of the horse that are meant to flow in the wind are made of flexible rubber bands. When moving, **the Horse-Mechanoid** shakes its head swaying its soft rubber mane.

**Self-assembly,  
no glue needed**

**Model size:** 13.8\*11.4\*4.7 in (35\*29\*12,5 cm)

**Package size:** 14.6\*6.7\*1.6 in (37.8\*17\*4.2 cm)

**Parts count:** 410



## Assemble Me. Sail Me



## TRIMARAN MERIHOBUS



Carried by the wayward wind of travel, the graceful and stylish **Trimaran Merihobus** from Ugears invites you to leave your peaceful harbour and sail away on an exciting marine mechanical adventure. The new mechanical bench model kit is designed to show off a great deal of details such as winches, rigging, and hulls, which makes her a very realistic miniature copy of real-life prototypes. The kit has everything you might need for assembly (including winches, rigging and hulls) and requires neither glue nor special tools to be fully assembled into functional working classic multihull sailboat.

The body of the sailboat is made in the “skeleton” style to ensure good visibility of the mechanism and the design of the sailboat, including such details as bulkheads, frames and beams. The rear rudder blade is steered by the ropes connected through the pontoons to the master wheel on the stern. The hydrofins on the side of the pontoons make the model stable and steady while creating a visual effect of the elevation of the model. The side pontoons are attached to the main body with a load frame designed to match the style of the hulls. Also, they carry a boat davit mechanism with a winch.

The mainsail and fore staysail on the mast can be set or taken in, just like on real trimarans. The mainsail of **the Trimaran Merihobus** is set on the mast groove with the main top halliard. The staysail “rolls up” on a stay. At the front under the bowsprit you will find the staysail’s winch drum. Sail booms are operated by a lever that pulls the sheet of the boom.

The model comes with several templates for a flag of a ship. Create your own design and using the winch, hoist the ensign up the mast. The anchor cable winch based inside **the Trimaran’s** body has an automatic-tensioning mechanism that picks up an anchor. The Ugears’ designers used a strong but thin white thread for the rigging of **the Merihobus**. This ensures the structure of the boat remains neat and light even with a lot of details while making the mast and other elements remain in their positions. And of course one mustn’t miss a lovely little finishing touch - a tiny seahorse carved in the bow of the boat. The curious sea creature known also as the merihobus gave your boat her name.

**Self-assembly,  
no glue needed**

<b>Model size:</b>	16.1*9.1*22 in (41*23.5*56 cm)
<b>Package size:</b>	14.6*6.7*1.2 in (37.5*17*3.5 cm)
<b>Parts count:</b>	237



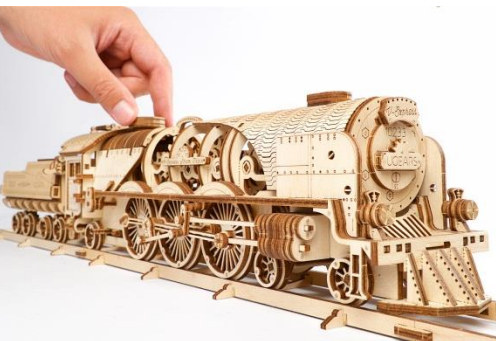
Assemble Me. Travel Me



## V-EXPRESS STEAM TRAIN with TENDER

The Victorian Age filled with the spirit of the Industrial Revolution is a source of internal inspiration for designers and engineers. Ugears turns to this fascinating era once again to **create the V-Express Steam Train with Tender**. The minutely detailed design of the model reveals the beauty of moving details: gears and a flywheel, and the workings of the cylinder-piston arrangement, the ladder and the fire hole with the door you can open.

Assembling the **Ugears' V-Express Steam Train with Tender** you will feel like an inventor engineer discovering for the first time the magic of the complex mechanism taking shape in your hands. Wind it up – and **full steam ahead**. One full winding will give your Express energy enough to cover a distance of up to 4 m (13 ft). You can change the direction of movement by switching a small lever on the side of the models' body. The locomotive has three settings: forward, back and idle.

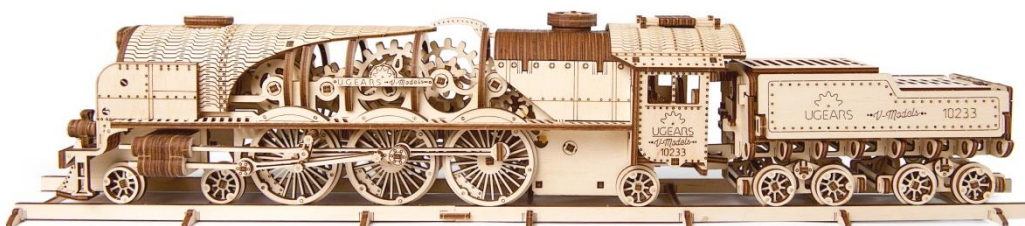


When the mechanism of the model is working in idle, you can safely observe the work of the moving elements. If you want to test another exciting option of your new model – switch it into the “Back” setting. The Express will roll back and automatically hook up with its tender.

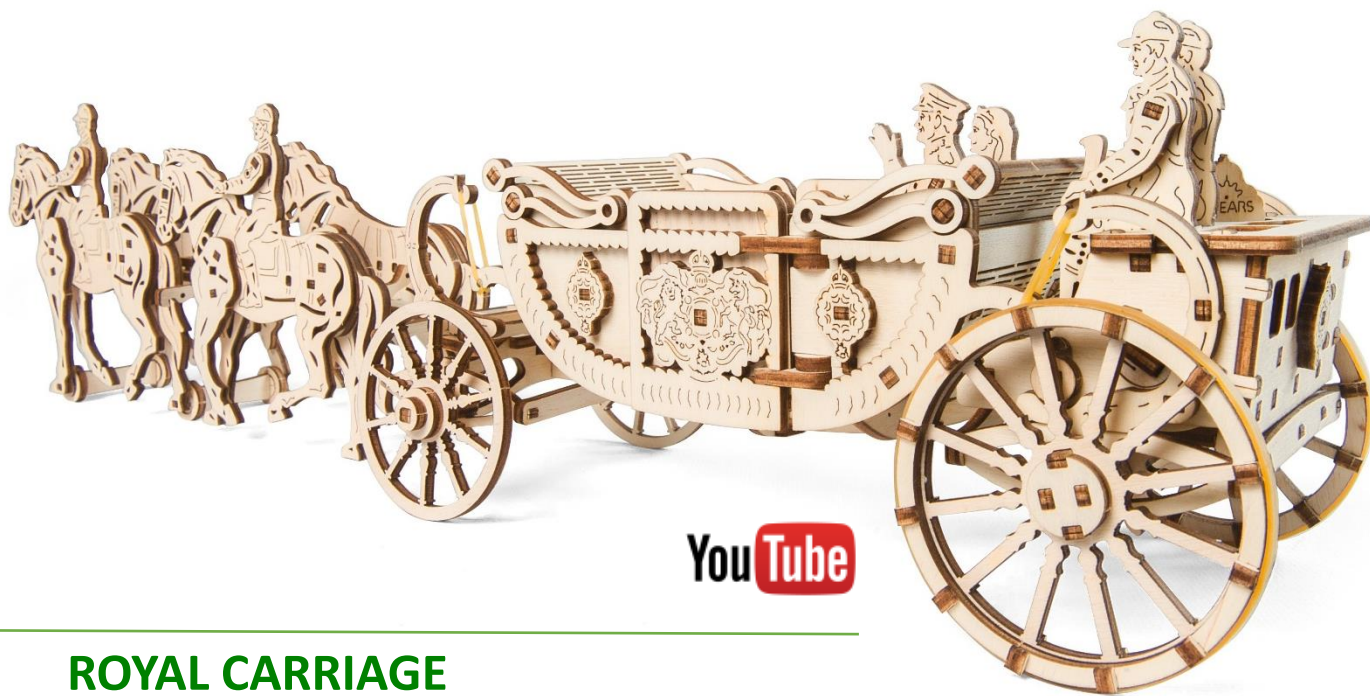
The Tender of the V-Express Steam Train is worth mentioning as a separate point. The coal car with lifting sides has a hatch that you can lock with a tiny latch. Of course, driven by a rubber-band motor, the locomotive needs no coal, which leaves plenty of room in the tender for some small cargo you might want to deliver: sweets, knickknacks and messages.

Self-assembly,  
no glue needed

Model size:	22*4.7*4.7in (56*12*12 cm)
Tracks size:	96.5*4.7*4.7 in (245*12*12 cm)
Package size:	14.6*6.7*2 in (37.8*17*5 cm)
Parts count:	538







## ROYAL CARRIAGE

Inspired by the Royal Wedding of Meghan Markle and Prince Harry on the 19th May, 2018 and the 1902 State Landau, the intricate and elegant Carriage is drawn by four graceful horses, the Ugears team has released its incredibly detailed build-your-own model of the Royal Carriage.

Richly detailed, The Royal Carriage kit comes with two sets of figures, Prince Harry in his finest military dress and his beautiful bride Meghan, as well as HRH The Queen and HRH The Duke of Edinburgh. You can choose which royals will go on a stroll – two figures at a time. The seats of the passenger compartment imitate soft leather, the coachmen wear their finest dress coats, and the Royal coat of arms is laser etched on the door panels. The doors lock in the open or closed position. The rubber band suspension belts make the design of the coach even more realistic.

The model is driven by a small and compact rubber band motor that is easy to assemble. The clever design of **the Carriage** allows you to observe the workings of the mechanism through the carved body of the model. The winding key is shaped to look like the Royal coat of arms but with a Ugears logo laser etched on it. Despite the small-sized motor, a fully wound up (20 half-turns of the winding key) model can cover up to 4 m (13 ft). This is possible due to a freewheel mechanism that ensures that the model continues to move for some time because of momentum after the motor has finished its work.

The front wheels of **the Carriage** have a small turning angle and the back wheels can be blocked to prevent the wind up model from fleeing away prematurely. When you are ready to send your Royal Carriage for a stroll, switch the small lever in the rear that will release the back axle.



**Self-assembly,  
no glue needed**

**Model size:** 20.5\*4.7\*5.1 in (52\*12\*13.5 cm)

**Package size:** 14.6\*6.7\*1.6 in (37.8\*17\*4.2 cm)

**Parts count:** 290





Assemble Me. Whirl Me

## TOWER WINDMILL



**The Tower Windmill** from Ugears is more than a mechanical model. It is an exciting adventure into the history of old England designed in “Victorian steampunk skeleton” style. The model is based on the Chesterton Windmill, a 17th-century cylindrical stone tower windmill that was built outside the village of Chesterton, Warwickshire county. When spinning rapidly the aerodynamic twist sails create fairly strong wind. It also can work the other way around: blowing air directed at the sails will make them spin. Use a fan to demonstrate to your kids how real windmills operate. A double planetary gear reducer with differently shaped gears provides the necessary speed. The model is powered by a removable rubber band motor. Once the motor is removed, the Windmill can work in a manual mode that allows you to observe and examine the fascinating complex mechanism in detail. The rubber band motor drives the sails by means of a screw conveyor (worm feeder) and gear transmission. The design of the gear transmission includes a flexure link, the type of chain drive assembled out of many small links. The full-fledged chain drive made out of plywood has never been used in the Ugears models before. Resembling a spiral staircase, the rotating base of the arched tower is a part of the screw conveyor mechanism that is a chief part of the model’s mechanism. While taking origin from the English prototype, the Ugears also addresses the Spanish classic: **the Tower Windmill kit** comes with the figures of the Ingenious Nobleman Don Quixote and his quirky companion Sancho Panza.

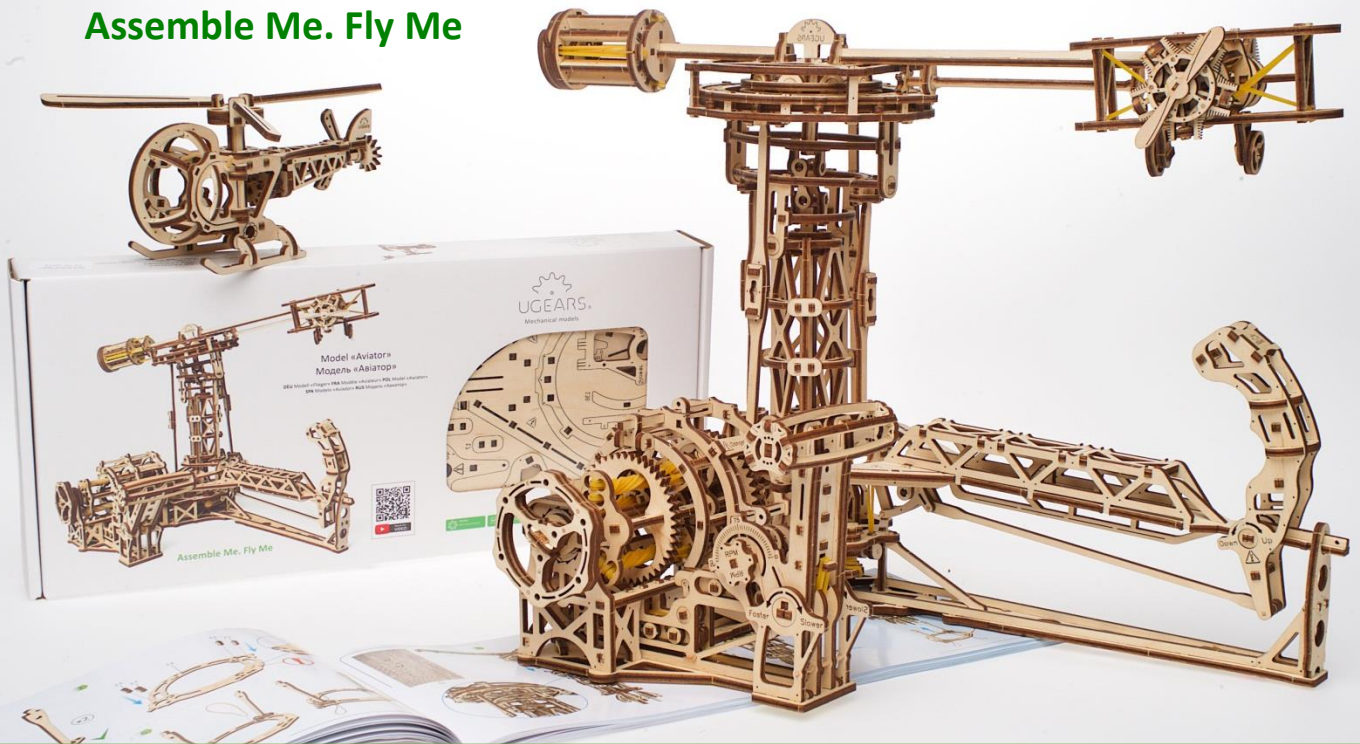
**Self-assembly,  
no glue needed**



<b>Model size:</b>	13.8*18.9*8.7 in (35*48.5*22 cm)
<b>Package size:</b>	14.6*6.7*2 in (37.8*17*5 cm)
<b>Parts count:</b>	585



## Assemble Me. Fly Me



## AVIATOR

Do you fly in your dreams? Grab the wheel, become airborne and Come fly with the “Aviator”, the first ever aircraft model from Ugears. The flight control tower bars regulate the speed, and the roll and pitch of the airplane or helicopter.

**The model has three modules: the airplane, the helicopter and the flight control tower.** As a beginner pilot you might want to start with the **helicopter** which is not as difficult to control as the airplane. Easier to manipulate but no less exciting, your chopper has a cockpit with doors that open and shut, and three-blade main and tail rotors. **The airplane** has a higher velocity and requires a certain skill to operate. This module is based on the wire-braced biplane and has a 5 piston motor.

Your cockpit is **the control tower**, a sophisticated device with a high-performance motor that powers the rotation of the swash plate with the bar – with an aircraft on one side and balance weight on the other.

The control tower is operated with two control bars:

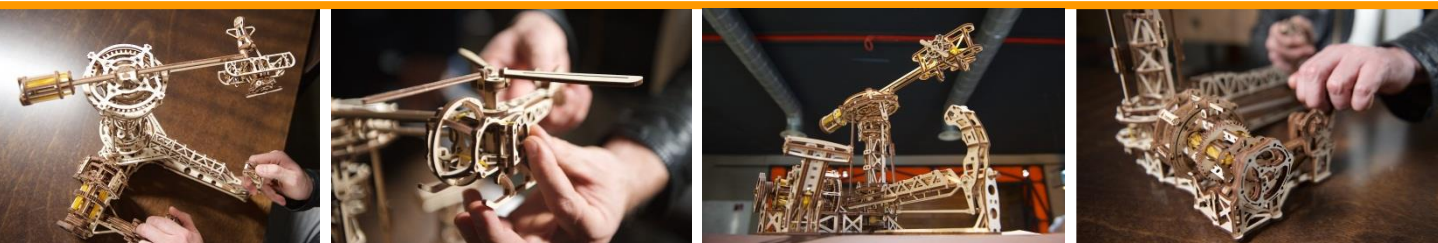
- the control column regulates the roll and pitch of the flying machine;
- and the Motor controller to adjust RPM (revolutions per minute) sets the speed of the aircraft.

Fine tuning ensures the proper operation of the swash plate. When all three units are assembled and you are ready to dive into the sky, it is time to wind up the motor. Make sure you don't overextend the rubber bands in the motor – maximum winding must not exceed 25 half-turns. Hold on to the control column while releasing the Motor controller's lock to launch your model. Wind it up - and you are ready to soar into the sky!

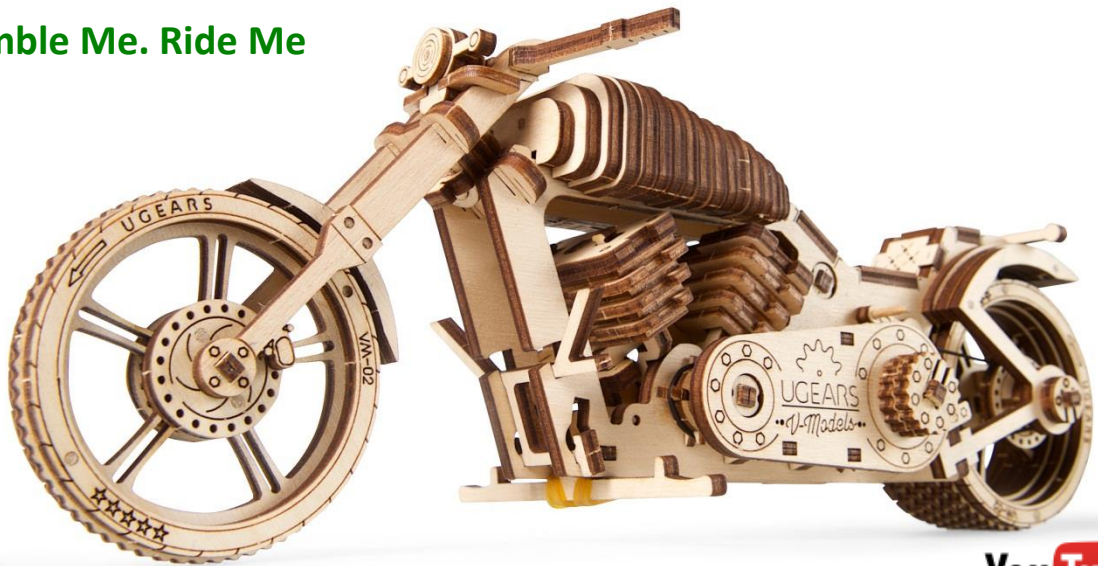
Self-assembly,  
no glue needed



Console size:	16.5*13.4*12.2 in (42*34*31 cm)
Plane size:	5.5*4.7*3.1 in (14.5*12*8 cm)
Helicopter size:	8.7*7.1*3.5 in (22*18.5*9 cm)
Package size:	14.6*6.7*2 in (37.8*17*5 cm)
Parts count:	726



## Assemble Me. Ride Me



## BIKE VM-02

Feeling like you've been quite a couch-potato lately? Has life been a bit too comfortable and twice as boring? Drop it now – because the spirit of the road is calling upon you. Get your leather jacket on and absorb the exhilaration of total velocity with the bold and beautiful **Bike** from Ugears.

**The Bike** is driven by a powerful rubber band motor that makes the motorcycle ride for as much as 3 meters in one winding. **The energy produced by the motor is transmitted by a belt drive to the mechanism.** The design of the Bike allows you to observe the work of the mechanism, including the moving pistons that look absolutely fascinating.

**The wide back wheel ensures that the model is steady** and won't tip over and turning handlebars send your bike in whatever direction you choose making your ride even more exciting.

When you reached your final destination and it is time to park your motorcycle, use a center stand to set the model on the shelf.

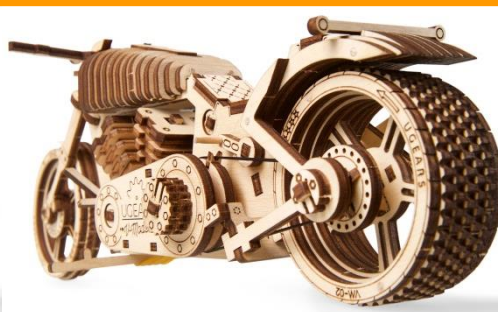
Graceful and bold, your new model carries the true spirit of the road. The combination of a high-tech exterior and eco-friendly materials make the model a welcome gift to a friend or a business partner. Detailed realistic design ensures that the model will become a wonderful complement to any home or office.

Like all other UGEARS models, **the Bike** comes with step-by-step, full-color, truly easy to follow instructions and require neither glue nor special tools to be fully assembled into functional working Bike. A motorcycle has never been merely a means of transportation; it's always been and will forever represent a challenge, speed, and true freedom. Create the spirit of the road with your own hands. Hold on to your handlebars and breathe in the smell of highway with **the new Bike Model from Ugears.**

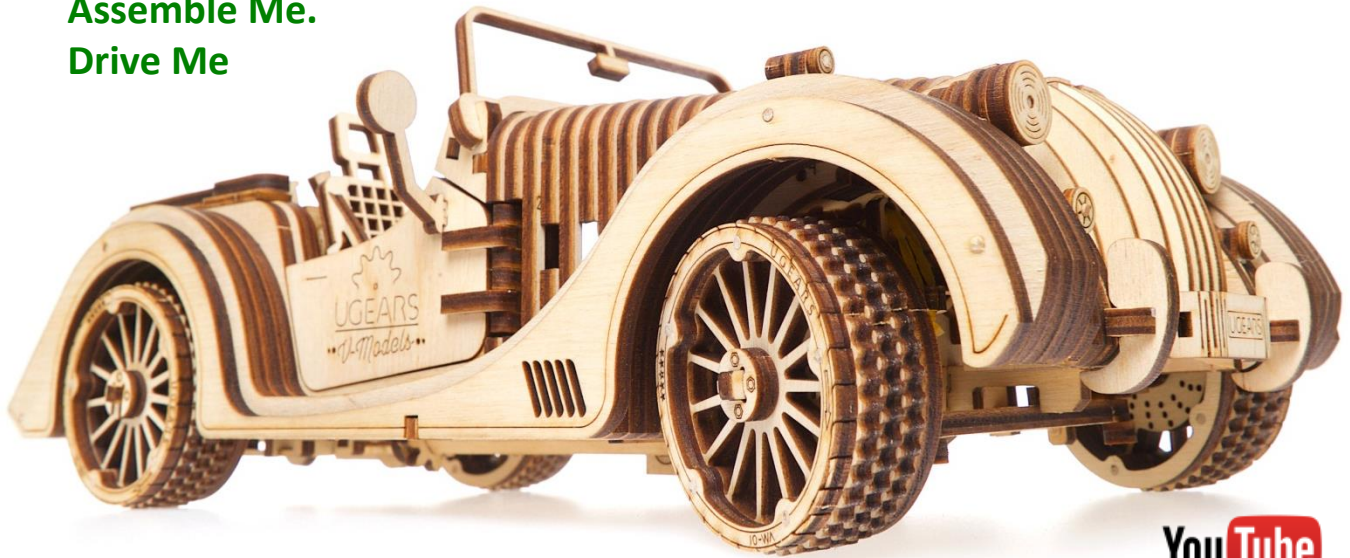


**Self-assembly,  
no glue needed**

<b>Model size:</b>	10.1*3.3*4.1 in (25.8*8.4*10.5 cm)
<b>Package size:</b>	14.6*6.7*1.2 in (37*17*3 cm)
<b>Parts count:</b>	189



**Assemble Me.  
Drive Me**



## ROADSTER VM-01

Once again, Ugears returns to everybody's favourite classics and introduces an exquisitely elegant and vigorously fast **Roadster** sports car.

Your adventure begins when you open the box with your new mechanical model kit from Ugears. This is when you will experience the pleasant smell of natural wood that will stay with you all the way through the process of assembly, testing and play. Building the model is fascinating and exciting: with your own hands you will put flat plywood parts together to create a 3-dimensional moving mechanical marvel. However, assembly is just a part of the fun: when the Roadster is finished you will definitely want to see what it is capable of and take it for a test-drive. Even when you get to the curb and are ready to put your model away, we would recommend to park it in a well-visible place in your house or office. Classic shapes and iconic Ugears' design makes your Roadster a wonderful complement to any interior.

The unique charisma of the model comes from both its outstanding technical characteristics and detailed realistic retro-design. **The clever combination of the plywood elements of different thickness – 4 and 2 mm – ensures that the motorcar's body looks streamlined and clear.** Open the hood to see **the powerful V8 engine** and watch the moving valves.

The Roadster sports car has **a transmission that switches it in three modes: forward, back, and idle.** The driving direction can be adjusted with the steering wheel. The suspension of the front wheels makes the Roadster look even more realistic. With a powerful rubber band motor, the car covers up to four meters in one winding. The winding key is designed to look like a spare wheel at the rear of the Roadster.



**Self-assembly,  
no glue needed**

**Model size:**

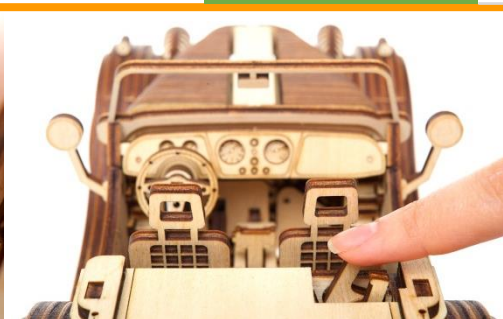
11.8 \* 5.1 \* 3.9 in (30,5 \* 13 \* 10 cm)

**Package size:**

14.6 \* 6.7 \* 1.6 in (37 \* 17 \* 4,2 cm)

**Parts count:**

437



Assemble Me.  
Adventure Me



## HEAVY BOY TRUCK VM-03

Imagine – early morning: the mist crawling along the highway fills the air with a sleepy chill. It is not the coffee that wakes you up, but a turn of the key that sends the fuel along the veins of your 18-wheel beast making it purr like a giant mighty cat. Have you ever experienced anything like that? Now is your chance to join the noble tribe of long-haul truckers with a **“Heavy Boy Truck VM-03” model from Ugears.**

Robust and powerful, **the Ugears Heavy Boy Truck VM-03 has a R6 engine driven by a rubber band motor.** With one winding, the truck can go for about 5 meters. The transmission system implemented in the model has **three modes: forward, back and idle.** The front sprung wheels turn to set the direction. The detailed design includes all iconic elements of a long-haul truck – two big pipes and two pairs of mirrors as well as a realistic hook up system that connects your tractor unit to the trailer. For more convenient access to the cabin, a small ladder is mounted under the cabin door. In the rear of the truck you will find a shovel and a gas can. Moreover, for the tired driver, the Heavy Boy can offer a cosy sleep station with a TV-set!



The romance of the road and the might of a large and fast automobile will leave nobody indifferent. Whether you are a loner or a company man, the time on the road will clear your head and you will learn to cherish the time with your close ones even more. Fill the tank to the brim and venture forth **with Ugears’ Heavy Boy Truck VM-03** to explore new routes.



**Self-assembly,  
no glue needed**

**Model size:**

15 \* 5.1 \* 6.7 in (38\* 13.5 \* 17.8 cm)

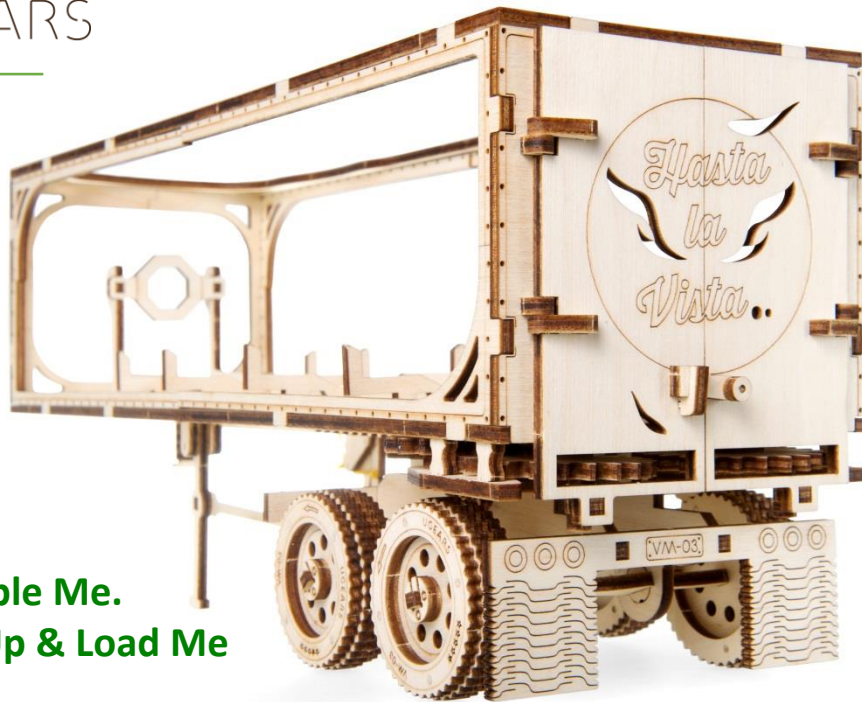
**Package size:**

14.6 \* 6.7 \* 2 in (37.8 \* 17 \* 5 cm)

**Parts count:**

541





**Assemble Me.  
Hook Up & Load Me**



## HEAVY BOY TRUCK TRAILER VM-03

The Heavy Boy Truck from Ugears is an interesting and exciting model on its own. But don't you have a feeling that a tractor unit might use something to actually pull? To complete your long haul freight traffic experience we would like to draw your attention to **the Heavy Boy Truck Trailer VM-03**.

Should you decide to have a shot at freight forwarding, you will need a trailer. And this is exactly what this model is. **This capacious Heavy Boy Truck Trailer can carry your favourite things, it will deliver a box of chocolates, a load or fruits or even a ship in a bottle.**



The attractive design guarantees that it will fit nicely with any interior. Use **an automated conveyor** to load your trailer with potted plants and you will have an absolutely unique wheeled garden.

Hook up your Heavy Boy Truck Trailer to the tractor unit **with the automatic coupler** – and you will have a perfect pair ready to hit the road. Some things are just better together!

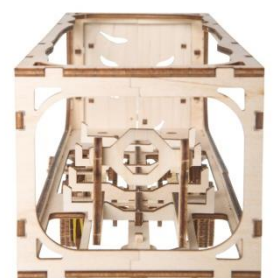
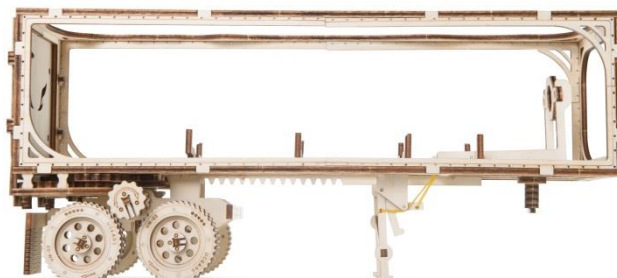
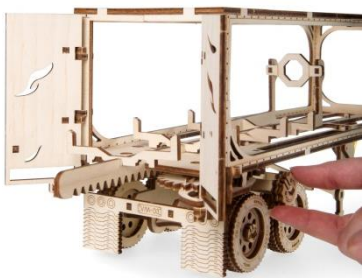


**Self-assembly,  
no glue needed**

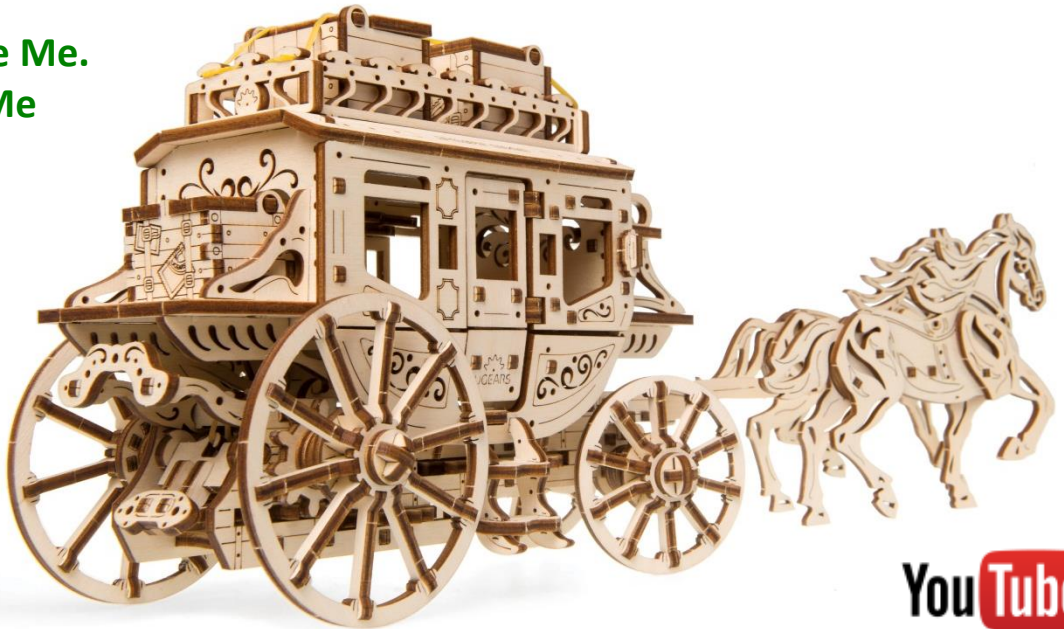
**Model size:** 14.2 \* 4.7 \* 6.3 in (36.5 \* 12 \* 16 cm)

**Package size:** 14.6 \* 6.7 \* 1.2 in (37.5 \* 17 \* 3 cm)

**Parts count:** 138



## Assemble Me. Convey Me



## STAGECOACH

UGEARS introduces the legendary carrier from the late 18<sup>th</sup> – 19<sup>th</sup> century, a model that would be a delight to your eyes and at the same time would be able to face the challenges of the Wild West – should you decide to re-create this romantic period at home with your family. As a result, the **Stagecoach** has a solid frame and wheels sturdy enough to play with, and a delicate cabin that gives the model an iconic Ugears look.

The doors of the cabin open to let the passengers in and out. If you'd like to deliver a message to your family, two cargo crates on the roof of the cabin will conveniently accommodate your letter. In case your kid is waiting for a package of sweets from the outskirts of civilization at the other end of the table, you can also use your Stagecoach's cabin or crates to deliver those. Also, the crates can be removed and replaced with whatever small package you need delivered.

Simple and comprehensive mechanics guarantees fast but interesting assembly that people of any age will enjoy. Invite your whole family to spend time together re-creating the Wild West spirit and deepening the bonds between you with this exciting game. Your Stagecoach is fast and needs just a few turns of the winding key to get going. Lock the rear wheel axle to make sure the model is not running away from you while you are winding it.

When all the parcels are delivered, letters sent, and the game is over, you will not want to put your Stagecoach away. Beautiful detail on the side of the cabin, delicate carving combined with curious mechanical elements ensure that the model can become an original handsome addition to any interior.

Made out of high quality plywood without glue, your eco-friendly puzzle will bring hours of joy to the whole family and will make you closer than ever.



**Self-assembly,  
no glue needed**

**Model size:** 15.7\*4.9\*6.3 in (40 \* 12.5 \* 16 cm)

**Package size:** 14.6\*6.7\*1.1 in (37 \* 17 \* 2.7 cm)

**Parts count:** 248





Assemble Me.  
Battle Me



## Archballista-Tower



UGEARS goes romantically medieval and invites you to become a siegecraft expert with its new exciting model – **Archballista and Tower**. Inspired by the best examples of ancient artillery, legendary battles of the past re-enacted in films, books, and games, this model provides a new spin on the classic war machine to test you great conqueror’s skill.

UGEARS’ new model consists of two parts: the siege machine itself and the mechanical tower. Both units are moveable and have plenty of articulated details. **The Archballista** has two modules: the firing unit and the base. The base has adjustable legs stabilising the machine during firing. The firing unit – or the actual ballista – shoots wood bolts. The firing mechanism can shoot up to four bolts in a round.

Traverse and elevation mechanism enables the ballista to be set at the required angle in horizontal and vertical planes to ensure the best aim. The lever of the winding mechanism can be found on the right side of the model’s body. The same lever works as a trigger that launches your bolt at the target when the aiming is set.

The firing module can be detached from the base and mounted on the top of **the Tower** – the second part of the Archballista-Tower model. Decorated with delicate ornaments a classic ivy-cloaked castle tower with a heraldic gryphon/dragon on a coat of arms hides a few interesting constructional features. The gear on the side of the tower is a part of the mechanism that raises the second level revealing the spiral staircase and interior structure. The tower is completely extended when you can see the whole shield with a dragon that is set parallel to the tower’s wall.

Practice your aiming accuracy, take over the castle, dive into the romantic times of true chivalry and maybe save a damsel in distress with **UGEARS Archballista and Tower model**.

### Self-assembly, no glue needed

Tower size:	6*3.7*3.8 in (15.3 * 9.5 * 9.6 cm)
Archballista size	3.5*3.2*5.6 in (9 * 8.1 * 14.2 cm)
Package size:	14.6*6.7*1.1 in (37 * 17 * 2.7 cm)
Parts count:	292





## FLEXI-CUBUS

Flexi-Cubus is a mechanical puzzle-octasphere in the form of a steampunk skeleton cube made out of eight joint-connected spheres. This flexible connection allows the spheres to move and roll over one another creating different geometrical shapes.

Each sphere is a mini-mechanism comprising six segments connected with a hinged joint.

The geometrical anti stress toy takes the shapes of a rectangle and a 3D cube transforming by bending the joints from one to the other and back as many times as you want.

The Flexi-Cubus is designed as a means to improve your attention and focus on a task you are working on. It will help you to relieve anxiety and stress, and direct your thoughts and feelings in a positive way.

The infinite transformations of the fidget puzzle Flexi-Cubus will help you to come up with more and more brilliant ideas!

**Self-assembly,  
no glue needed**

<b>Model size:</b>	4.5*2.4*1.1 in (11.5 * 6 * 2.8 cm)
<b>Package size:</b>	10.9*7.3*0.2 in (27.8 * 18.5 * 0.5 cm)
<b>Parts count:</b>	144





#### Technical specifications:

Caliber: 1.5\*60 mm

Barrel length: 230 mm

Total height: 130 mm

Weight: 390 gram

Capacity: 5 rubber bands

Firing range: 10 m

## WOLF-01 HANDGUN



UGEARS presents a new unique item for your collection of wooden models – **loaded with fun, aimed at positive emotions, the Wolf-01 mechanical handgun.**

This new arrival to UGEARS latest range is not a plain wooden toy where functionality is limited to imaginary shooting by means of yelling “Bang-bang!”. The Wolf-01 is a proper mechanical handgun that can make up to 5 shots per round. It has outstanding performance and technical specifications, including the most important – a huge load of safe and peaceful fun!

The Wolf-01 shoots rubber bands of 60 x 1,5 mm calibre and has an effective firing range up to 10 meters. Smart and elegant design ensures that your gun fits your hand perfectly and is very convenient to hold and aim. Quite simple and comprehensive assembly will not take much time. In one evening you can equip your whole family with these new toys and have a grand family fun-battle or shooting match.

Stylish dashing and chic, the Wolf-01 is your weapon of choice in case you play some spy games. A secret compartment in the handle will conceal a microfilm or extra rubber-band-bullets. For night-time missions the gun is equipped with a special quick-release fixture for a light-torch. The gun has a safety lock that will prevent unwanted release and misfires.



**Self-assembly,  
no glue needed**

Model size:

9.1\*5.1\*1 in (23 \*13\*2.5 cm)

Package size:

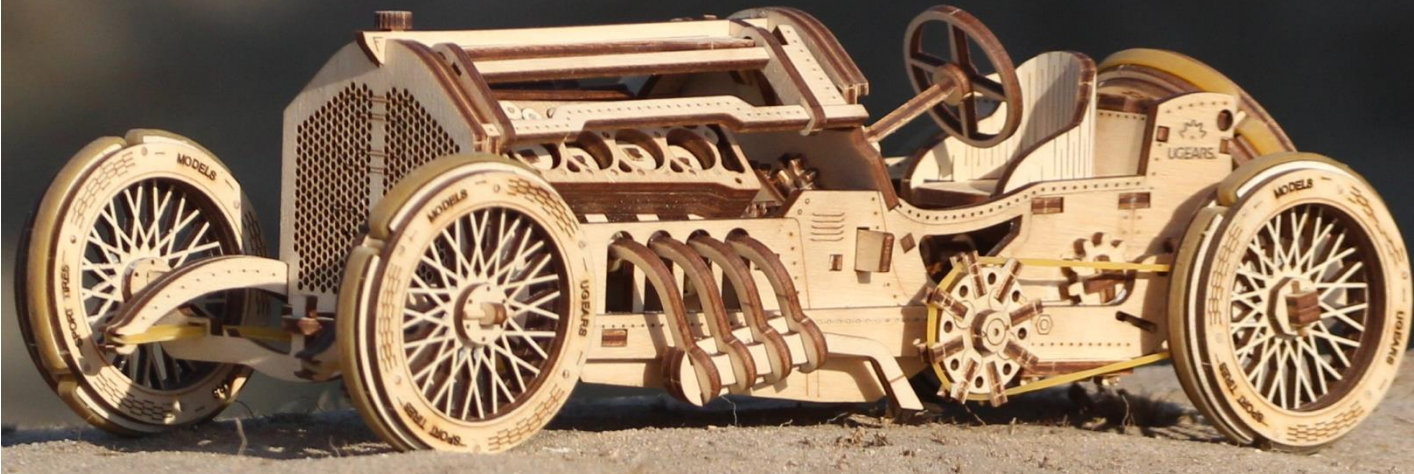
14.6\*6.7\*1.2 in (37 \* 17 \* 3 cm)

Parts count:

62



## Assemble Me. Cross the Finish Line First



### U-9 GRAND PRIX CAR



The thrill of speed, roar of engines, wheel to wheel battles and shiny frames flashing before the eyes of wildly excited audience of the early car races – it’s all there, in UGEARS’ fascinating **U-9 Grand Prix Car** based on iconic designs of the golden age of the automobile industry at the beginning of the XX century.

**Model U-9** recreates the magnificent and imposing appearance of Grand Prix winner models from drive shaft to spare wheel. Under the hood of this new model you will find a V8 engine equipped with a powerful fan and 16 fully functioning valves. To wind it up just use the hand crank in its front. Your new vehicle has a link rod and a transmission switching the modes between idle, reverse, and race ahead, baby! The U-9 has a spring-suspended fork and rubberized wheels ensuring smooth but rapid acceleration and a long driving range.

The design of this beauty is based on the racing-sports cars that participated in the very first Grand Prix race that had taken place in Italy back in the early 20<sup>th</sup> century. Adopting the sleek flowing lines of the old Formula One prototypes, UGEARS engineers and designers gave this new model an exquisite and truly elegant “old-school” appearance highlighted with a drive belt on the outside of the car and other peculiar design elements. The Oblong shape coupled with the bold style of the radiator grille is meant to bring you the feeling of the dawning age of car racing.

A model kit has everything you might need for assembly. The quality of the details is very high – the parts of the models are outlined with a CNC laser cutter on a plywood board. The details have to be pulled out of the boards and assembled to create a complete model. The car is using **Ugears signature “know how”** that allows implementing assembly without glue or any additional tools.

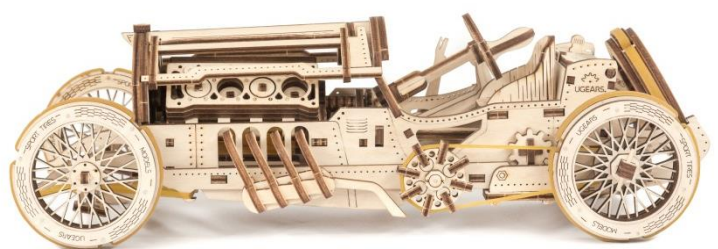
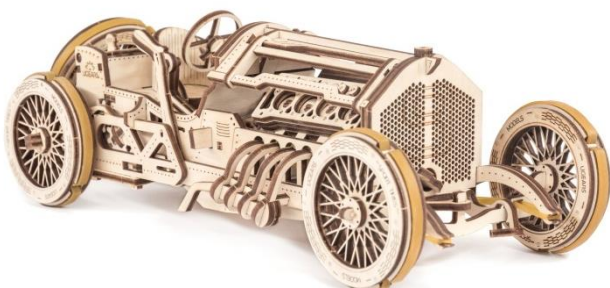


**Self-assembly,  
no glue needed**

**Model size:** 13.8\*3.7\*5.1 in (35 \* 9,5 \* 13 cm)

**Package size:** 14.6\*6.7\*1.1 in (37 \* 17 \* 2,7 cm)

**Parts count:** 348





Assemble Me.  
Play Me



## HURDY-GURDY



Inspired by the art of medieval craftsmen and enriched by smart engineering of the XXI century Ugears is introducing — **Hurdy-Gurdy** – the world's first mechanical musical model and the genuine gem of the collection. It is the most extraordinary mechanical model kit which is all-in-one: model for self-assembly, toy and fully fledged musical instrument. **Just build it together with your own hands and feel like Stradivari or a popular Hurdy-Gurdy star!** The Ugears Hurdy-Gurdy model was successfully launched on Kickstarter in July, 2017 (<http://kck.st/2rWPdJX>).

Based on the 15th Century organistrum, Ugears has created an intricately detailed, fully functional version of this medieval instrument. **The finished model looks remarkably akin to the original 16th century hurdy gurdy, giving it a wonderfully medieval aesthetic.** This wooden attractive and educational model has a highly detailed exquisite décor of the body crafted in romantic style and turns the assembly and playing process into an exciting game and brings you hours of pleasure and fun.

**It's easy to play** dancing melodies, from folk to modern. To start the music flowing, the player just need to crank the handle with one hand to kick off a drone sound from the bourdon and melody strings. Pushing the wooden buttons with the fingers of the other hand changes the pitch of the melody string, as "spring-loaded" wooden blocks essentially shorten the string. Ugears will include some tablature with the kit to get newbies off to a flying start.

**The Ugears Hurdy-Gurdy comes with everything needed for assembly.** All the pieces are precut into the plywood boards and are easily removed for assembly following the detailed instructions provided. The only non-wood parts, by necessity, are the two strings that rub against the crank powered wheel and the rosin used to wax it.



### Self-assembly, no glue needed

Model size:	15.7*6.5*8,7 in (40*16.5*22 cm)
Package size:	14.9*6.7*2 in (37.8*17*5 cm)
Parts count:	292





**Assemble Me. Treasure Me**



## TREASURE BOX



The true jewel of Ugears new collection of wooden models is an exquisite Mechanical Treasure Box for jewellery and notes. The delicate through-carved work of its lid and sides invites you to gain a glimpse into the mystery that the moving gears conceal.

Although only the one who can solve the secrets of the puzzle-box will get to enjoy the treasure of beautiful mechanics in its action. One would imagine that in order to open the box, we'd need a key – and the key is right there, beautifully embedded in the carved lid. All you need to do to take it out is to slightly turn the key clockwise. Although, getting the key is only a part of the puzzle. To set the gears in motion, before taking the key out, you want to unblock the mechanism that lifts the lid by turning the key counter-clockwise.

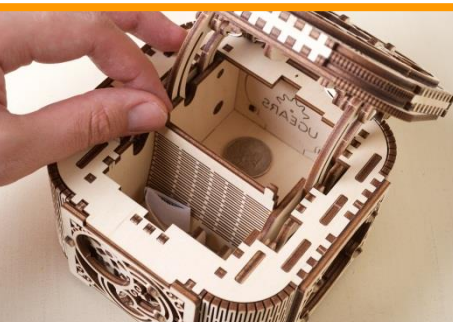
When all the secrets are revealed and the box is opened, inside you will find a small compartment for jewellery, notes and other small items. You may be sure, your treasures and secrets are safe with the new Ugears Treasure Box.

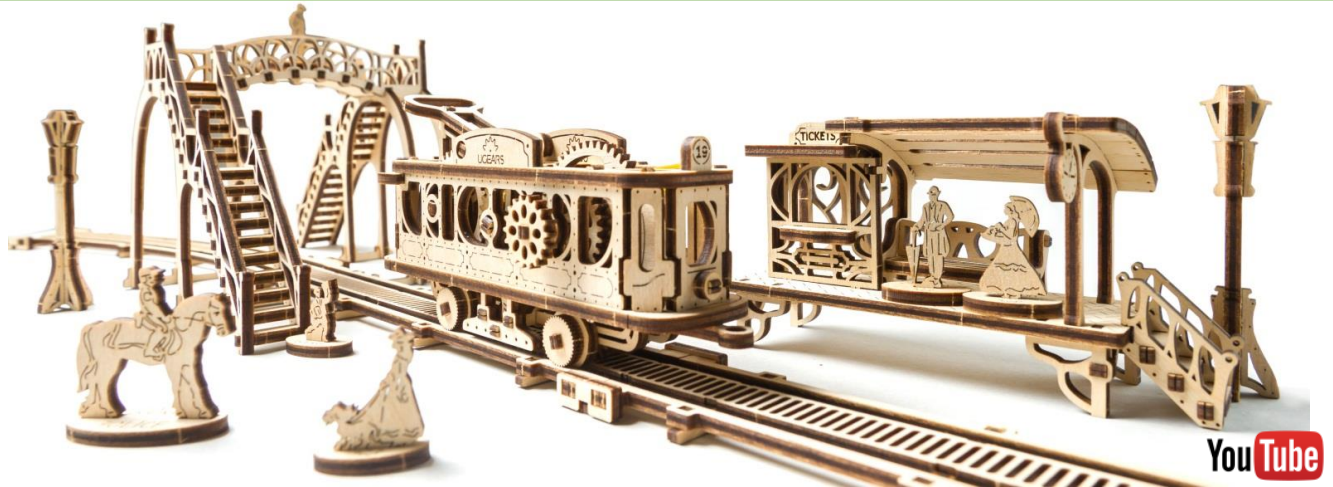
**Self-assembly,  
no glue needed**

**Model size:** 5.6\*5.6\*3.6 in (14.2\*14.2\*9.1 cm)

**Package size:** 14.6\*6.7\*1.3 in (37\*17\*3.3 cm)

**Parts count:** 190





## TRAM LINE. Mechanical Town Series

Every town has its transportation system and the Mechanical Town has its Tram Line. A model which you can build with your own hands, play and create your own stories with people living in the town. The new model is interactive and is made entirely of wooden materials. It's great for your hobby & collection. Each part has a unique design and fascinating engineering. The UGEARS' Tram Line model doesn't need glue or special tools or even toothpicks to connect parts, which makes putting it together even more exciting. The fully assembled model retains moving parts and elements and remains entertaining and educational for family projects.

**Tram Line model consists of 14 parts**, which come in a convenient scale for building and playing with.

- **Self-propelled Tram Car** is equipped with an overhead pantograph to switch "drive" mode and a knob to open and close the doors. Wind-up the tram car and watch it move on the rails, entering the Depot. After making a 180 degree turn on the turntable, it moves on its own to the end of the line. There is no electricity inside: just gears, wheels, cranks, a rubber band engine and tons of fun!
- **Tram Stop on the platform** complete with a clock, a bench, little stairs and a Ticket Kiosk. The stairs are removable and can be placed on any part of the platform.
- **Tram Depot with a gate and Turntable** where the tram drives in to prepare for the next trip according to the route timetable. The depot is also equipped with a Turntable for turning the tram 180 degrees for the next trip. There is a special "tongue" on the rails of the turntable which stops the tram in the locked position, and disengages after the turn of the turntable allowing the tram to move on to the return route.
- **Footbridge** – the pedestrian crossing - is made in the shape of arches and set across the tracks. It can also be set at a crossroads, and cars can pass under the arches.
- plus **10 parts and characters** to interact with: straight and radius tracks with junctions, street lamps, a Gentleman, a Young Inventor, a beautiful Stranger, an Ice-cream Seller, a sheriff on the horse, a Factory Worker and News-Boy

**Self-assembly,  
no glue needed**

**Model size:** 35.4\*7.1\*4.7 in (90\*18\*12 cm)

**Package size:** 14.8\*5.5\*1.2 in (37.5\*14\*3 cm)

**Parts count:** 284





## RAIL MANIPULATOR. Mechanical Town Series



Developing its new fascinating series, Mechanical Town, Ugears presents another addition to the collection: the Rail Manipulator. Set up in the dock of Mechanical Town not far from the Robot Factory, the Manipulator is a purely utilitarian model, which by no means makes it less entertaining than the other models in the range. Like the rest of the Ugears models, the Manipulator is designed to make sure the fun goes on after the assembly is completed. With a number of extras that come in the box, the model guarantees hours of an exciting new pastime. Speaking of extras, with the Manipulator itself, you also receive two sections of rails, the shed under construction, two shipping crates with doors, crane, freight carriage, and five characters.

### Design

The Manipulator is a mechanical claw with three levers that sits on a platform on the rails. The rails can be connected in parallel or in one line. The settings are completed with a pseudo-metal shed under construction made of giant trusses which arrived straight out of the Industrial age with one of the characters, a roofer with a hammer, sitting on a beam of the shed. The Worker holding signal flags assists the Manipulator operator to control the process, while the Worker with a shovel and the Worker with a wrench are minding their own business in the docks. The model also includes one of the docks' most important pieces of equipment, the Crane. It can be disassembled and put back together almost by a wave of the hand. And an important addition to the setting is the Freight carriage with drop sides. All the parts of the set are made of a high-quality plywood and needs no extra materials or tools to assemble.

### How does it work?

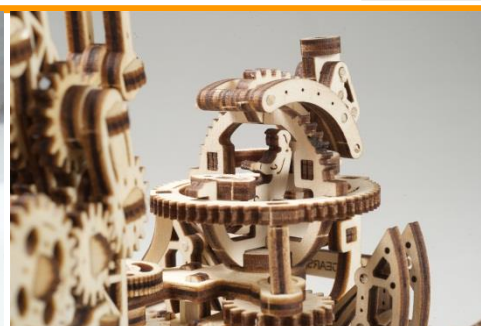
The claw itself sits on a platform that can rotate manually or by a valve. The operator's cab, equipped with a protection lid and adjustable headlight, is found in the front part of the model. The counter-clockwise rotation of the cabin switches the Manipulator's modes: 1) initial position (driving mode) – the claw's rotation platform locked, the model moves along the track; 2) 90 degree turn (free mode) – the rotation platform is unlocked; 3) 180 degree turn (loading mode) – the wheels of the models are locked along with the gear in the front axle that connects to the ledge on the rails. The rear of the model carries the lever that controls lifting, lowering, and holding of four foot supports providing extra-steadiness while operating the claw. With its articulated claw, the Ugears Manipulator can load and move the freight crates in the Carriage with an extraordinary – up to 1 cm – preciseness. Based on the original prototypes, the Manipulator will teach you about the operational and constructional peculiarities of the real-life machines, such as cranes, excavators, robotic arms, etc; their mechanics and functionality.

**Self-assembly,  
no glue needed**

**Model size:** 15.8\*19.7\*8.3 in (40\*50\*21 cm)

**Package size:** 14.6\*5.5\*1.2 in (37\*14\*3 cm)

**Parts count:** 356







## DATE NAVIGATOR

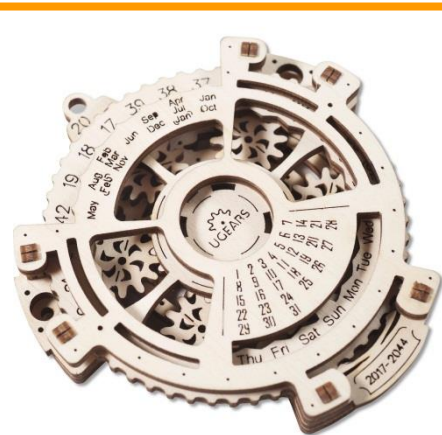
The **Date Navigator** is your daily companion to keep track of your adventure and discovery in 2017-2044 with a beautiful Steampunk planetary mechanism inside.

Just set the year and the month and find out what day of the week it is going to be. Never get lost in time again!

The **Date Navigator** helps to identify the day of the week for any date from 2017 to 2044 will become a great companion in planning your future endeavors.

**Self-assembly,  
no glue needed**

Model size:	4.13*3.9*0.7 in (10.5*9.8*1.8 cm)
Package size:	7.3*10.8*2 in (18.5*27.5*5 cm)
Parts count:	24



## Assemble Me. Run Me



### 460 STEAM LOCOMOTIVE WITH TENDER



The UGEARS 460 Locomotive with Tender employs all technical solutions we've come up with in our previous models, and more. It looks realistic and unique at the same time. The spinning gears, pistons and wheels carry the soul of XIX-century engineering, when locomotives represented the mainstream of technical progress. This was the time of fierce competition between developed countries in construction of the steamers.

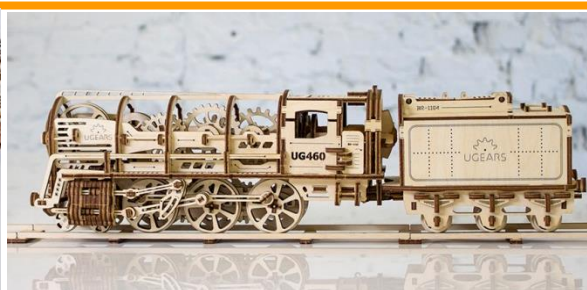
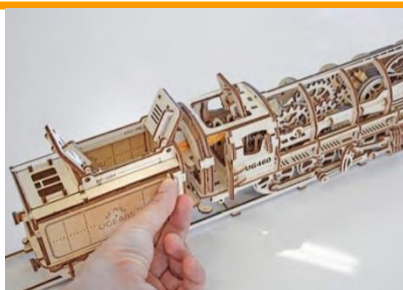
This model was a big hit during our 2015 Kickstarter campaign. It is the largest one, rich with details, and it is the fanciest model of the entire UGEARS range, as it consists of the highest number of parts. When completed, the Locomotive stands out as a truly original piece of mechanics that required diligent assembly work. (Although it may sound complex, it is not that hard to build).

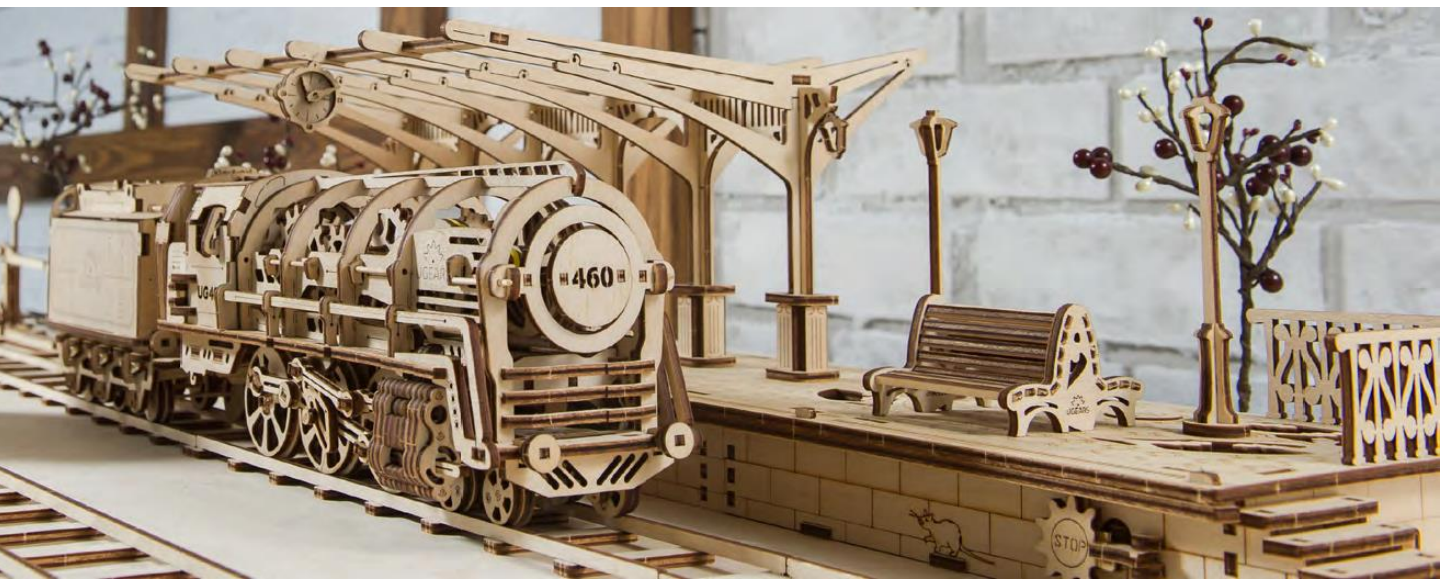
Using the massive gearwheel array, this relatively big model can run up to a distance of 5 meters. The distance and speed depend on the winding of our largest 12-band rubber band engine. The engine is started with a lever near the driver's window.

We've tried our best to make the locomotive's main mechanism move as close to the real thing as possible with asynchronously operating piston and valve. They're clearly visible inside the model, allowing a spectator to see how steam would get into the Locomotive's steam chamber. The little doors and roof hatch let one take a look inside the Locomotive's cabin, complete with an instrument panel and a retractable ladder beneath the door.

**Self-assembly,  
no glue needed**

Steam locomotive size:	12*3.9*4.9 in (31.5*10*12.5 cm)
Tender size:	6.3*3.5*4.5in (16*9*11.5 cm)
Package size:	14.6*6.7*1.6 in (37*17*4 cm)
Parts count:	443






## RAILWAY PLATFORM

Every train needs a proper station and our Railway Platform is just the ticket. In addition to being a beautiful reproduction of a European railway station complete with a clock, lamps and a bench, this model features a secret removable drawer with a lock and key for extra security.

Self-assembly,  
no glue needed

Model size:	29.4*7.2*9.6 in (74.8*18.2*24.5 cm)
Package size:	14.6*6.7*1.4 in (37*17*3.5 cm)
Parts count:	196

## RAILS with CROSSING

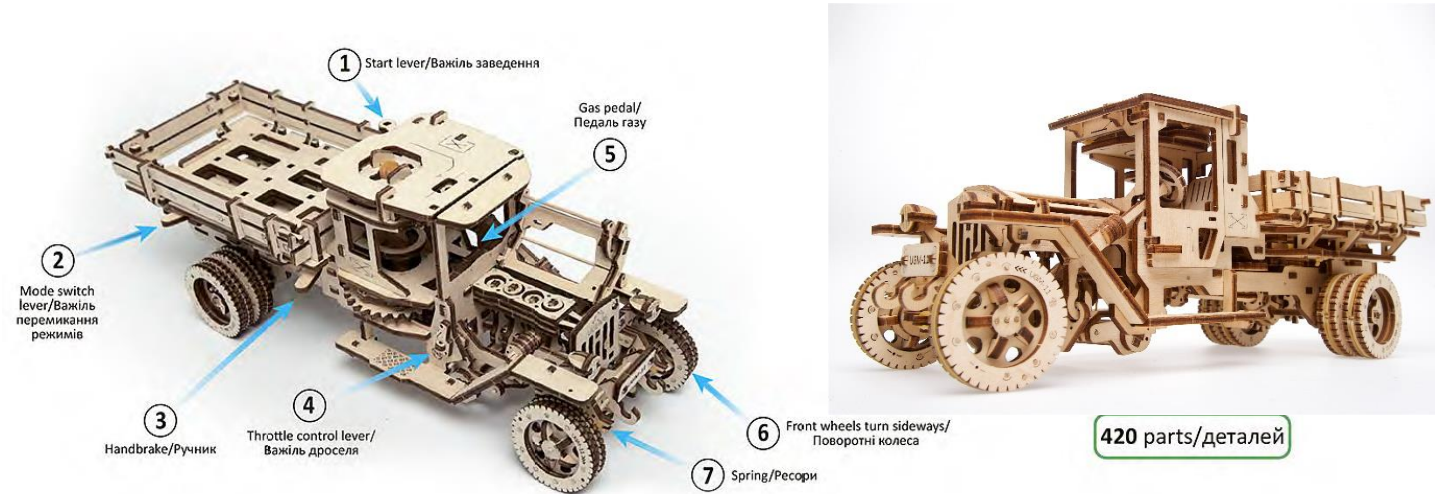


Where there's a railroad there's a crossing, and this kit includes both. You'll get 4 meters of track and a crossing complete with stop signs and gates that raise and lower at the touch of a lever.

Self-assembly,  
no glue needed

Model size:	160*4.7*8.8 in (407*12*22.5 cm)
Package size:	14.6*6.7*1.2 in (37*17*3 cm)
Parts count:	200





## Assemble Me. Propel Me



# UGM-11 TRUCK

UGM-11 Truck represents a new generation of our mechanical models. This is a model that could take more than one hour to complete, but the rewards are absolutely worth the effort for the fans of mechanics.

The model is equipped with a four-cylinder engine, which is driven by a crankshaft, which, in turn, is powered by a fully functional drive shaft, turned by a rubber band engine via a system of gears. The Truck is what we call 100% rubberpunk, which means a perfect blend of the clockwork and steam punk worlds.

The gear-change lever on the side of the truck allows for three modes – forward, backward, and idle. The rubber band engine winds up with a lever mechanism conveniently placed on top of the Truck's cabin. 'Start' the engine in idle mode and see four pistons moving realistically under the folding hood. Open the cabin door and observe the fully functioning steering wheel connected via a steering column to the front wheels suspension. There's even a working gas pedal!

We deliberately designed this model to have a raw, open look to it, so the spectators could appreciate the sophistication of the feature-packed mechanism.

**Self-assembly,  
no glue needed**

Model size: 13.3 \*4.7\*4.9 in (34\*12\*12 cm)

Package size: 14.6\*6.7\*1.5 in (37\*17\*4 cm)

Parts count: 420





## SET of ADDITIONS for UGM-11 TRUCK



UGEARS Truck Series with THREE Additions - Tanker, Fire Ladder, Trailer Chassis – a new generation of our mechanical models with more technical elements and details that make it even more exciting. The Set of Additions for UGM-11 Truck – a perfect way to turn your Truck into Tanker or Fire Truck with a ladder and assemble the Truck’s trailer. The set of Additions for Truck includes:

- **Tanker** with a unique opening mechanism. Designed and fit well for standard 0.33 L cans. Twist the knob on the tanker’s cap and unfold it in surprising way. The Tanker have a raw, open look so even the casual observer could appreciate the marvels going on inside.
- **Extendable 3-section Fire Ladder** on slewing platform. Has the length of 70cm in unfolded state. The Fire Ladder has several controls. Press the lever and lift up the ladder. Turn the platform to the right or to the left. Fix the selected position with a special ratchet. All three sections of the ladder are extending ahead. Ascend the ladder and you’ll get a real crane with hook at its end. There is even a little ladder to help a firemen to climb on the truck in few seconds. Like in a real Fire Truck it is mounted on back.
- **Trailer ‘s Chassis** wheels on which the Truck’s “bed” is set. The Trailer Chassis has very realistic springs which are swinging during driving. There is a special rack under the drawbar, so that the model could stand independently.

**Self-assembly,  
no glue needed**

<b>Tanker:</b>	6.69*4.53*5.32 in (17*11.5*13.5 cm)
<b>Fire Ladder:</b>	14.17*4.72*6.89 in (36*12*17.5 cm)
<b>Chassis:</b>	8.86*4.33*4.13 in (22.5*11*10.5 cm)
<b>Package size:</b>	14.6*6.7*1.7 in (37.5*17*3.6 cm)
<b>Parts count:</b>	322



**Assemble Me.  
Let Me Blossom**



## MECHANICAL FLOWER



Mechanical Flower-etui is a tempting gift idea for your beloved one. Elegant petals, pleasant smell of wood, with Ballerina & Tree of Luck for your favorite jewelry inside. All you need to start or drive your love-story!

If you turn the ring at the base of the flower, the petals open. Continue to twist the ring to close the flower. You can store and present sweets, small items and jewelry inside the Flower-etui. The kit includes two stands of different shape: in the form of Ballerina and in the form of Tree of Luck for bracelets.

### Self-assembly, no glue needed

Model size:	5.12*5.12*6.3 in (13*13*16 cm)
Package size:	14.6*6.7*1.2 in (37.4*17*3 cm)
Parts count:	101



## Assemble Me. Open Me Up



### COMBINATION LOCK



Inspired by “The Da Vinci Code”. We dived into the world of conspirology, secrets and cryptography while designing our new intriguing Cryptex model. The Combination Lock consists of two parts. It opens if you set the right 3-digit combination. You can hide the keys, small items and your own secrets inside.

The Lock has a convenient "eyelet" to hang the lock on a bag. Try to create your own Da Vinci Code's Cryptex with 1000 combinations of 3 digit code. Assemble UGEARS Lock and get the idea of modern combination lock principle.

**Self-assembly,  
no glue needed**

Model size: 3.82\*2.6\*3.86 in (9.7\*6.6\*9.8 cm)

Package size: 14.6\*6.7\*1.2 in (37.5\*17\*3 cm)

Parts count: 34



**Assemble Me.  
Carry Cargo with Me**



## MECHANICAL TANKER

A cool wooden model for self-assembly from the UGEARS Trucks Collection.

Based on UGM-11 Truck, the **Mechanical Tanker** model has real TANKER with the unique opening mechanism which fits well for standard 0.33 L cans. Twist the knob on the tanker's cap and unfold it in surprising way. This model is deliberately designed to have a raw, open look so even the casual observer could appreciate the marvels going on inside.

The **Mechanical Tanker** is equipped with a four-cylinder rubber band engine and moves on its own forward in the "drive" mode and back on "reverse" transmission mode. Start the engine in 'idle mode' and look at four pistons which move realistically under the folding hood.

Original gift idea, smart and engaging hobby, that brings together fathers and sons and takes grown-ups back to the childhood memories and the world of creation.

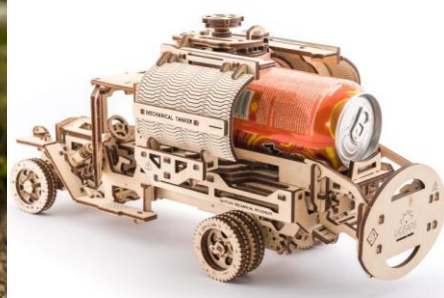
Like all other UGEARS models, the **Mechanical Tanker** comes with step-by-step, full-color, truly easy to follow instructions and several spare parts inside. The cutting is well done; each of the parts comes out of the plywood sheets easily. No glue and special tools are needed for putting the model together. You can assemble it at home on the table. Fits together like a puzzle without glue or special tools thanks to UGEARS' patented plywood joints.

**Self-assembly,  
no glue needed**

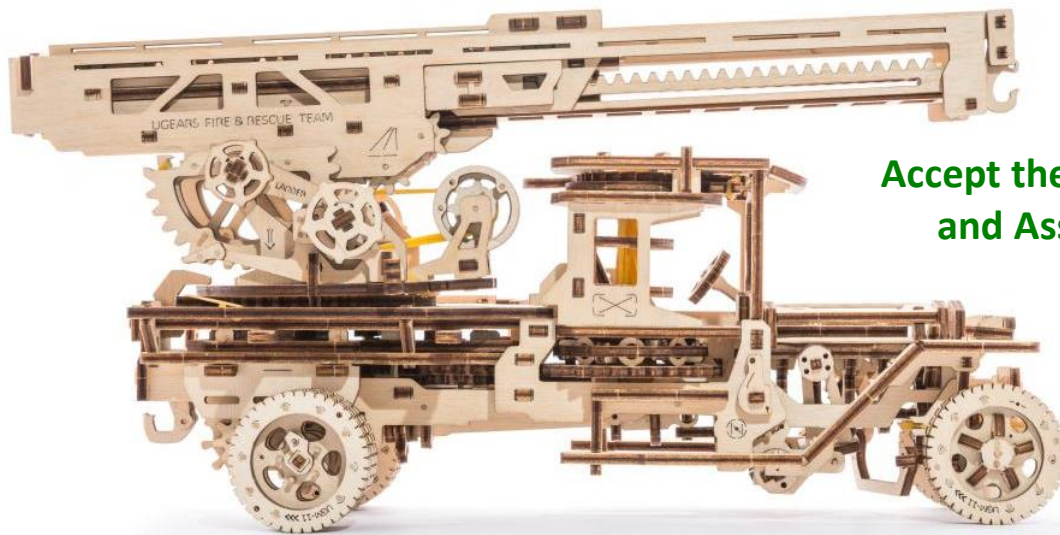
**Model size:** 13\*7.1\*4.9 in (33\*18\*12.5 cm)

**Package size:** 14.6\*6.7\*2.2 in (37.2\*17\*5.7 cm)

**Parts count:** 594







Accept the Challenge  
and Assemble Me



## FIRE LADDER TRUCK

The **Fire Truck** is a self-propelled wooden model from the new UGEARS **Trucks collection**. Intelligent design mixed with smart engineering inside. The Fire Truck functions like a real Rescue & Fire Truck with turning foot, moving apart & ascending ladder, which transforms into real crane with hook.

The **UGEARS Fire Truck** is equipped with the retractable 3-Section Fire Ladder on a rotating platform. Length when fully extended – 70cm. The Fire Ladder has several controls. Press the lever and lift up the ladder. Turn the platform to the right or to the left. Fix the selected position with a special ratchet. All three sections of the ladder are extending ahead. Ascend the ladder and you'll get a real crane with hook at its end.

There is even a little ladder to help Firemen to climb on the truck in few seconds. Like in a real Fire Truck it is mounted on back.

Based on UGM-11 Truck, the **Fire Truck** is equipped with a four-cylinder rubber band engine and moves on its own forward in the "drive" mode and back on "reverse" transmission mode. Start the engine in 'idle mode' and look at four pistons which move realistically under the folding hood.

Made from sustainable wooden materials the kit has all you need for assembly: a set of high-quality plywood boards with precisely cutout parts, detailed step by step instructions and several spare parts inside.

**Self-assembly,  
no glue needed**

**Model size:**

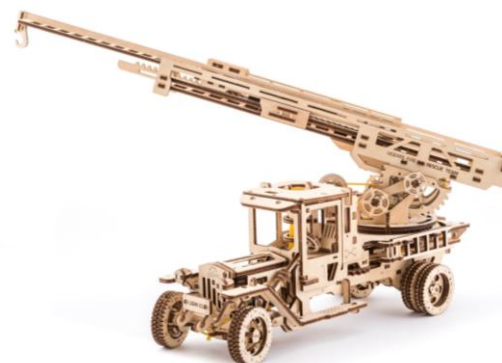
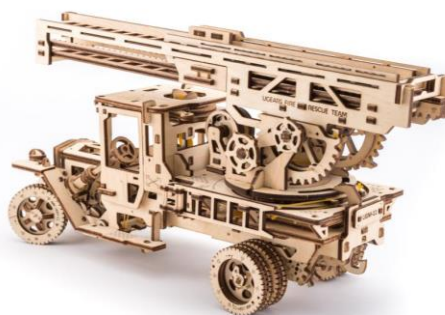
13.6\*7.9\*4.9 in (34.5\*20\*12.5 cm )

**Package size:**

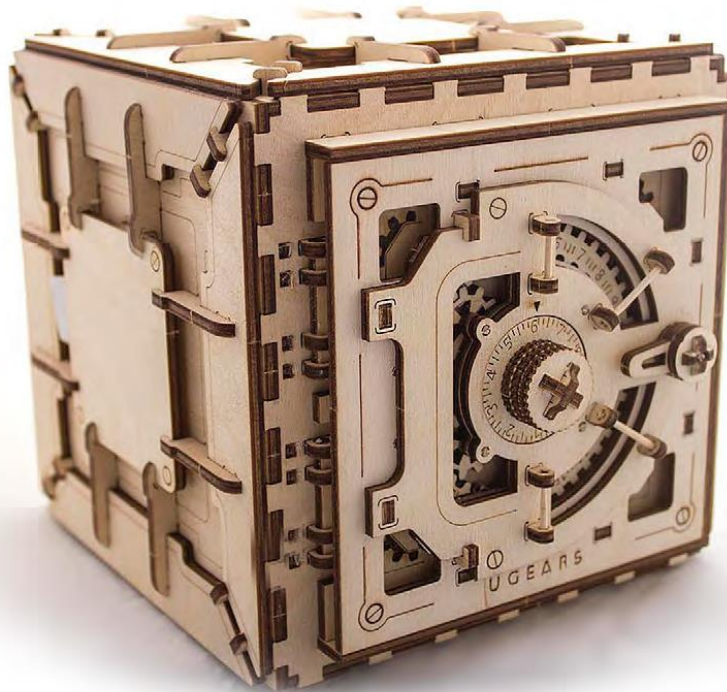
14.6\*6.7\*2.2 in (37.2\*17\*5.7 cm)

**Parts count:**

537



## Assemble Me. Bank on Me



### SAFE



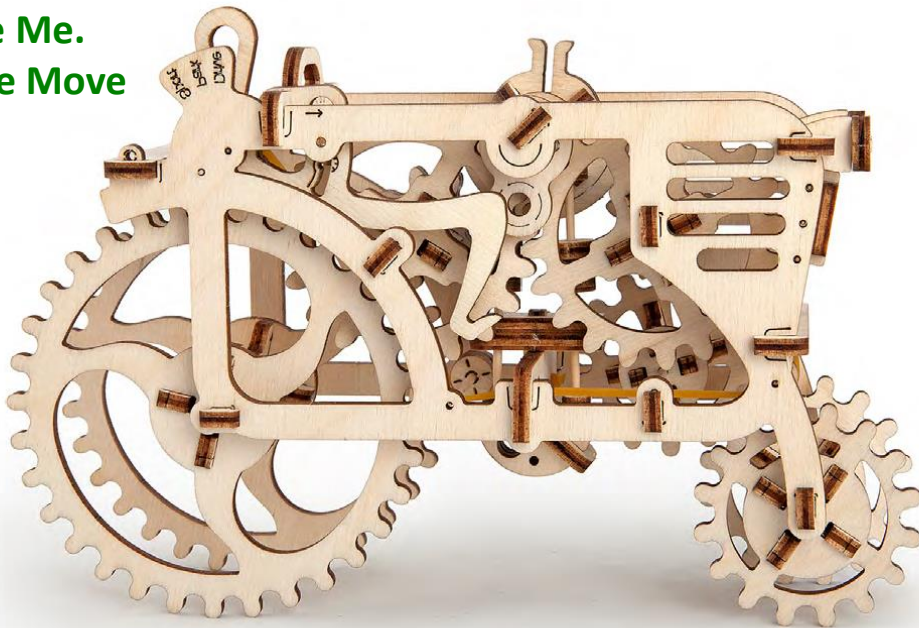
This is a real safe with a functional 3-digit combination lock. Build your own safe with a unique lock combination and store your precious things (or candy) in it! An outstanding gift on its own, once assembled, it may serve as a secret gift package, requiring a person to practice some safecracking skills. It is possible to get the right combination by twisting the knob and listening carefully to the clicking sounds (provided the safecracker knows the basic algorithm of opening the lock described in the instruction manual). The UGEARS Safe is a great customizable toy, guaranteed to bring fun!

### Self-assembly, no glue needed

Model size:	7.7*7.3*6.9 in (20*18*18 cm)
Space inside the safe:	6.1*5.5*4.1 in (15*14*10 cm)
Package size:	37*17*4 cm
Parts count:	179



**Assemble Me.  
Watch Me Move**



## TRACTOR

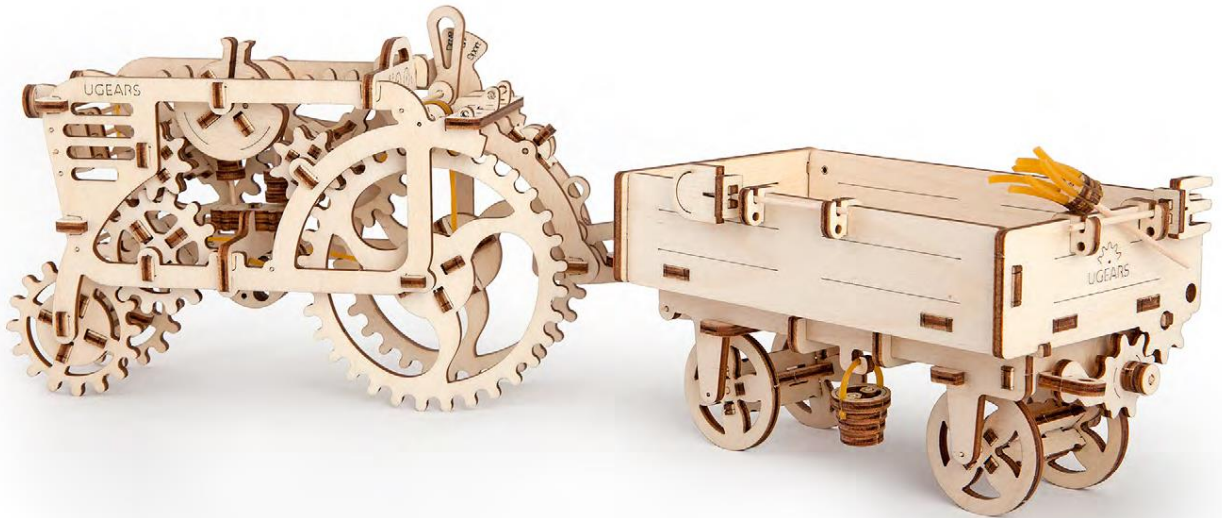


The Tractor from UGEARS is a rattling greeting from the past century. No electronics, just plywood, rubber band motor, and tons of fun! The motor has a transmission switch that provides three options: “park,” “drive,” and “sport.” The “drive” mode will get it going slowly, covering about 5 cm per second. Switch the model to “sport” to see your Tractor speeding up ahead!

### Self-assembly, no glue needed

Model size:	7.9*3.4*5.4 in (20*9*14 cm)
Package size:	14.6*6.7*1.2 in (37*17*3 cm)
Parts count:	97





## TRACTOR'S TRAILER



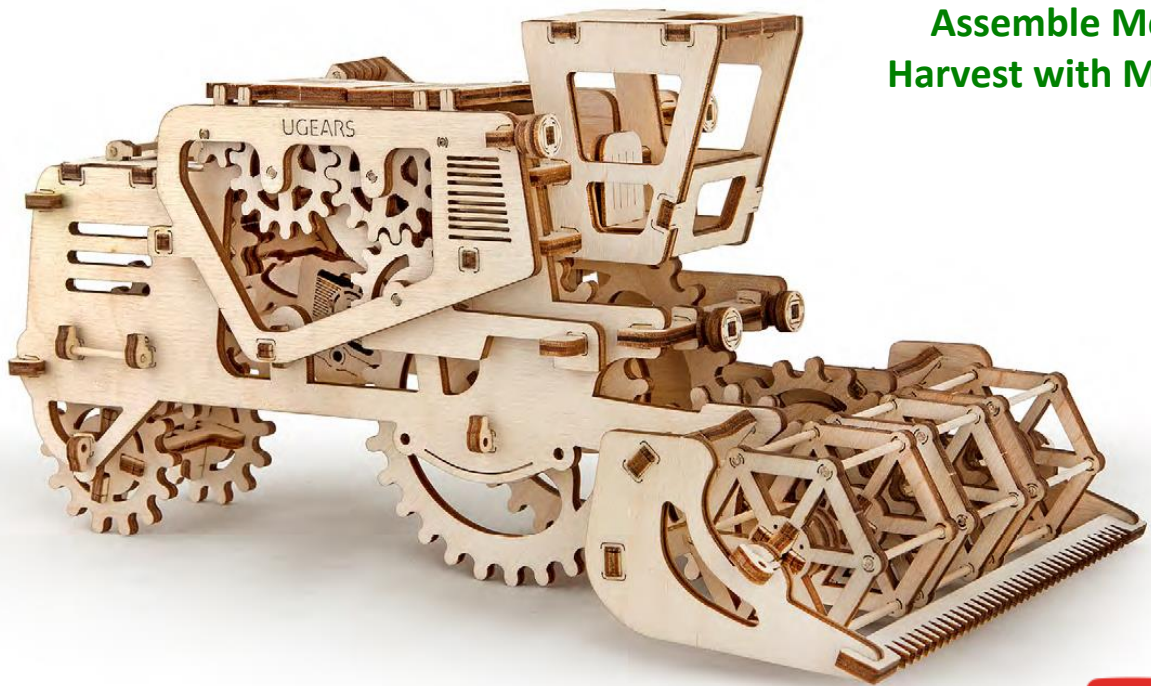
Every self-respecting tractor should have its own farm trailer. A special lever opens a side of the Trailer's bed for loading or unloading. It also has everything a farmer needs at hand: a fork, a shovel, and even a broom and a small bucket, hanging underneath the base. Each Trailer is complete with a hook interface, which connects it to the Tractor.

### Self-assembly, no glue needed

Model size:	8.2*4*3.8 in (21*10*10 cm)
Package size:	14.6*5.5*1.2 in (37*14*3 cm)
Parts count:	68



**Assemble Me.  
Harvest with Me**



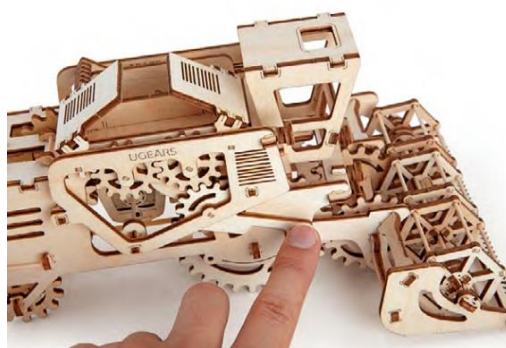
## COMBINE HARVESTER



The UGEARS Combine Harvester is a model that is a top-to-bottom demonstration of the wonders of mechanics. When the Combine is moving forward, the reel starts spinning as it does in a real-life prototype. The model has a built-in secret box which opens with a lever located to the left of the driver's cabin. The Combine's rubber band engine is wound up by simply dragging the model backwards or spinning the large back wheel. On the other side of the cabin, there is a "handbrake" lever that locks the Combine in place. Release the lever for an improvised drag race!

### Self-assembly, no glue needed

Model size:	10.8*6.5*5.2 in (27*16*13 cm)
Package size:	14.6*6.7*1.2 in (37*17*3 cm)
Parts count:	154



**Assemble Me.  
Watch Me Tick Away**



**TIMER (20 minutes)**



One of the most beautiful UGEARS models, the Timer is an exquisite mechanical device, which can be set for any time ranging from 1 to 20 minutes. Wind up the alarm mechanism, and the alarm will go off when time runs out. The Timer has a unique roller pendulum and an amplitude adjustment system on the back wall. Just like other UGEARS models, the Timer is powered by plain office rubber bands. We have improved this model several times to achieve perfect results. Now everyone can build this amazing clockwork mechanism, equally fit for both work desks and living rooms.

**Self-assembly, no glue needed**

Model size:	6.8*3.15*10 in (17*8*26 cm)
Package size:	14.6*6.7*1.2 in (37*17*3 cm)
Parts count:	107



## Assemble Me. Stage Your Story



## MECHANICAL THEATER



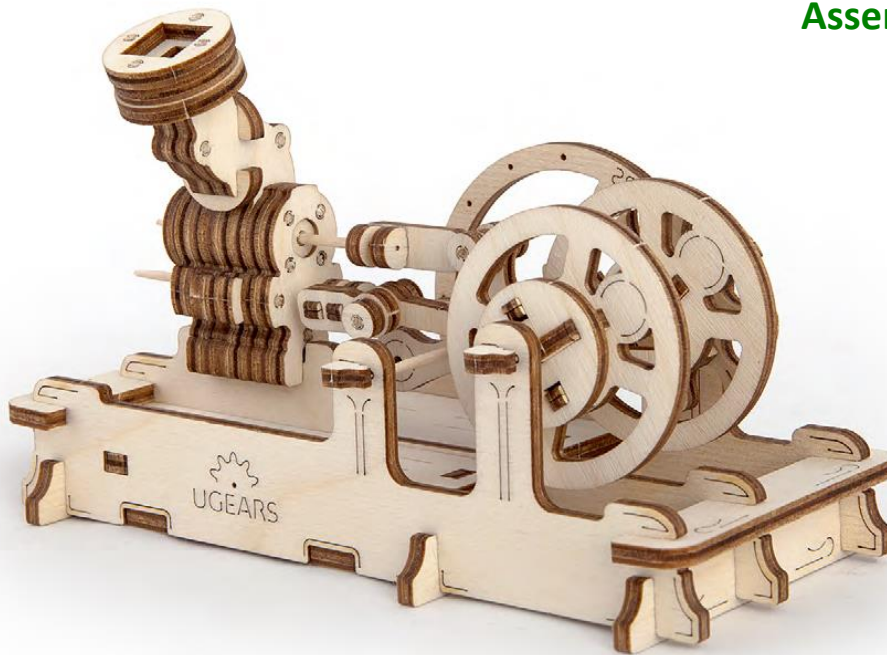
This is an example of a very intricate mechanism with an artistic touch – and it never ceases to amaze our customers. Spin the wheel and see the characters pop up on stage: the Prince, the King, the Castle, the Dragon, the Witch, the Jester, the Princess and the Treasure Chest. Kids love to make up their own stories and plays featuring Mechanical Theater characters. This model makes for a unique, one-of-a-kind present to someone you love.

### Self-assembly, no glue needed

Model size:	8.4*7.4*3 in (21*19*8 cm)
Package size:	14.6*6.7*1.2 in (37*17*3 cm)
Parts count:	70



**Assemble Me.  
Start Me**



## PNEUMATIC ENGINE



A sneak peek into a once-great era of steam engines. A Pneumatic Engine from UGEARS is a small but fully functional model of a steam engine. One just needs to blow into a special socket or use an ordinary air balloon, and Pneumatic Engine will start its operation. The most amazing thing about it is that it is made entirely of plywood! The engine has a built-in air pressure tachometer and two built-in compartments for spare parts.

### Self-assembly, no glue needed

Model size:	6.4*3*3.9 in (16.2*7.8*10 cm)
Package size:	14.6*5.5*1.2 in (37*14*3 cm)
Parts count:	81





**Assemble Me.  
Open Me**



## MECHANICAL BOX/ETUI



This pretty box is capable of bringing a little mechanical magic into your home or office, as well as being useful – the Box may serve as storage for business cards or plastic toy cars, among other things. Push the lever on the side, the lid will open and reveal the contents. The set includes two removable panels – one with a small opening for cards and one without it. This is a great little toy, which doubles as a unique business cards storage.

**Self-assembly, no glue needed**

Model size:	7.7*3.5*7.4 in (20*9*19 cm)
Business cards storage space:	3.54*1.97*0.79 in (9,5*5,7*2 cm)
Package size:	14.6*6.7*1.2 in (37*17*3 cm)
Parts count:	61



## Assemble Me. Measure Your Strength With Me



### DYNAMOMETER



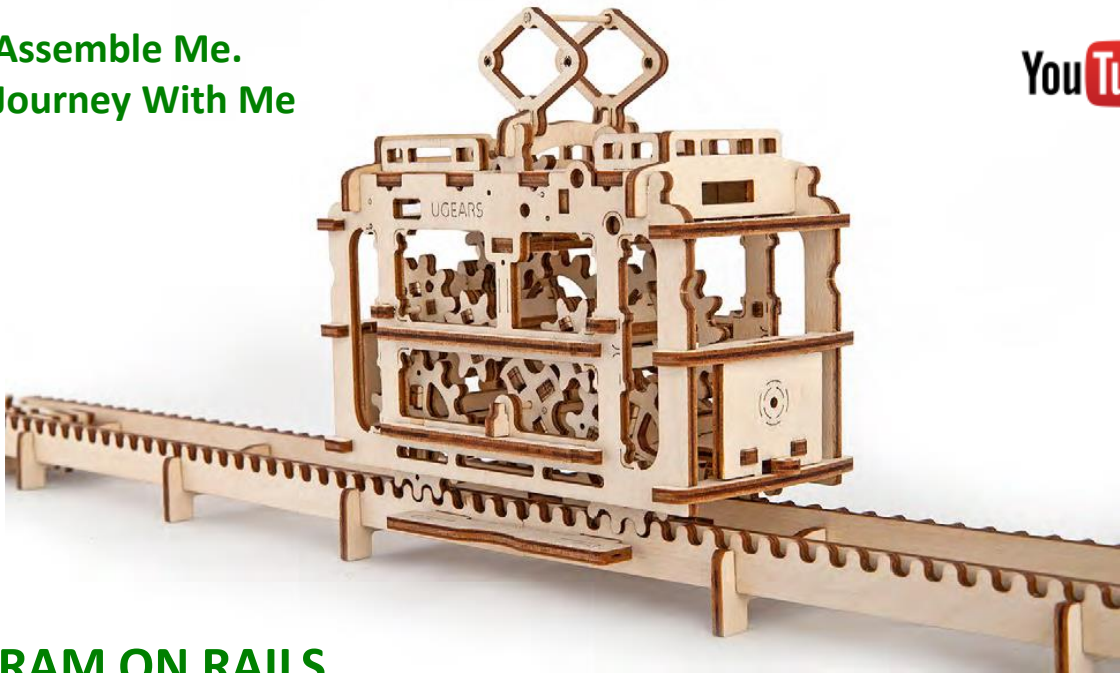
This is a model that uses the same principle as our Pneumatic Engine, but has a certain game element added to it. Blow on the top gear and the whole system will come alive. Depending on the air pressure you apply, the arrow will point to a certain picture, which symbolizes the task you could do. The Dynamometer is one of the simplest UGEARS models to build. At the same time, it demonstrates some basic principles of mechanics – in particular, the cascade of gears and the mechanical junction, known as the Geneva drive.

#### Self-assembly, no glue needed

Model size:	5.8*2.8*6.7 in (15*7*17 cm)
Package size:	14.6*5.5*1.2 in (37*14*3 cm)
Parts count:	48



**Assemble Me.  
Journey With Me**



## TRAM ON RAILS

A tram (also known as “tramcar,” “streetcar” or “cable car”) is one of the oldest types of urban transportation. The UGEARS Tram is inspired by the first streetcars and funiculars, and is probably the most romantic model in our portfolio – in addition to a ton of built-in retro flair, it can carry a love message to the other side of the table in a secret built-in box!

The model is propelled by a rubber band engine (tram mode) or can be pulled by gravity (funicular mode) when one end of the rails is tilted up with a special lever. Levers on both ends of the road can be used to elevate the model above ground, creating a bridge. The Tram’s pantograph functions as a lever, which pushes out the wind-up wheel of the rubber band engine. There’s also a start lever, a direction shifter, a brake lever, and even an emergency exit to the roof.

**Self-assembly, no glue needed**

Model size:	30.2*2.9*6.3 in (77*7*16 cm)
Package size:	14.6*6.7*1.2 in (37*17*3 cm)
Parts count:	154





## U-FIDGETS-TRIBIKS

**U-Fidgets-Tribiks:** the unique sets of 4 individual miniature models for self-assembly for grown-ups and kids from 5 years to 80 and beyond. It's made entirely from high-grade wooden materials. All component parts are already cut off and can be easily removed from the board. The model assembles easily like a puzzle without glue, toothpicks and special tools by following an illustrated color manual.

Use them to organize your thoughts and ideas, drive new insights, relieve stress and to regain control over your emotions. Each model has an eyelet for hanging. Let them become your everyday life companions as key-charms or original trinkets. Also it's a great welcome gift to your beloved or a compliment to your friends and colleagues.

Self-assembly, no glue needed

**Series: Creation. Movie camera, Guitar, Book, Parthenon.** Set of 4 models

Model size:	2.7*4.3*5 cm / 1.5*6.7*2.9 cm / 2*4,6*4,3 cm / 1.9*3.8*6.8 cm
Package size:	3.9*2.8*0.6 in (10*7*1.6 cm)
Parts count:	8-15 depending on a model



**Series: Gearsmas. Snowflake, Moon, Snowman, Bell.** Set of 4 models

Model size:	1.5*4*4.8 cm / 1.5*4.8*4.9 cm / 1.5*4.7*3.7 cm / 1.5*4.6*3.7 cm
Package size:	3.9*2.8*0.6 in (10*7*1.6 cm)
Parts count:	8-10 depending on a model



**Series: Happy New Gear. Christmas Ball Bauble, Clock, Stocking, Christmas Tree.** Set of 4 models.

Model size:	1.5*5*4.3 cm / 1.5*5*4.6 cm / 1.5*4.4*3.5 cm / 1.5*4.3*3.9 cm
Package size:	3.9*2.8*0.6 in (10*7*1.6 cm)
Parts count:	8-13 depending on a model





## U-FIDGETS-TRIBIKS

**U-Fidgets-Tribiks:** the unique 4 sets of the individual miniature models (4 tribiks in each set) for grown-ups and kids which are made entirely from wooden materials and assemble easily without glue or toothpicks. Use them to organize your thoughts and ideas, drive new insights, relieve stress, regain control over your emotions. Let them and become your everyday life companions as key-charms or original trinkets.

Self-assembly, no glue needed

**Series:** Power, Freedom, Intelligence, Passion

Model size:	3.3*2.2*5.6 cm / 5.6*2.2*5.4 cm / 4.9*2.2*5.0 cm / 5.2*2.2*5.7 cm
Package size:	3.9*3.0*0.6 in (10*7.5*1.6 cm)
Parts count:	8-10 depending on a model



**Series: Ships.** Sailing yacht, Sailboat, Boat, Submarine

Model size:	1.8x4.5x7.2 cm / 2.2x5.1x6.6 cm / 2.0x4.6x6.0 cm / 1.8x4.9x7.8 cm
Package size:	3.9*3.0*0.6 in (10*7.5*1.6 cm)
Parts count:	12-17 depending on a model

**Series: Vehicles.** Sports Car, Tractor, Truck, TramCar

Model size:	2.7*2.3*8.0 cm / 2.0*4.0*6.5 cm / 2.2*3.4*6.7 cm / 2.2*4.5*6.7 cm
Package size:	3.9*3.0*0.6 in (10*7.5*1.6 cm)
Parts count:	14-18 depending on a model



**Series: Aircrafts.** Helicopter, Hydroplane, Airship, Airplane

Model size:	3.2*4.4*5.2 cm / 5.3*3.5*5.9 cm / 1.8*3.3*7.3 cm / 6.2*3.7*6.4 cm
Package size:	3.9*3.0*0.6 in (10*7.5*1.6 cm)
Parts count:	13-19 depending on a model

All our models are result of the UGEARS engineering team's collective imaginations. Most of them are inspired by real-life mechanisms. Currently, UGEARS has 48 mechanical models in our portfolio. 5 new models are in development and we have more than 200 ideas for the future.

We have patented several ways to assemble the parts in our models, which allow to build a mechanical self-moving construction without the use of glue.

Our products have certificates of compliance with health and safety regulations.

Information on the packaging is translated into 7 different languages: English, Ukrainian, German, French, Polish, Spanish, Russian.

All UGEARS model kits include a detailed step-by-step full-color assembly instructions manual. The assembly instructions come in 11 languages: Ukrainian, English, German, French, Polish, Spanish, Russian, Japanese, Italian, Chinese and Korean.

Produced in Horenka Village, in a suburb of Kyiv, Ukraine. A production cycle running from raw materials to finished products has been established, including a two-level quality control. Today UGEARS team consists of more than 200 enthusiastic people. They invest their creativity and love in their craft which you receive in each of the models.

