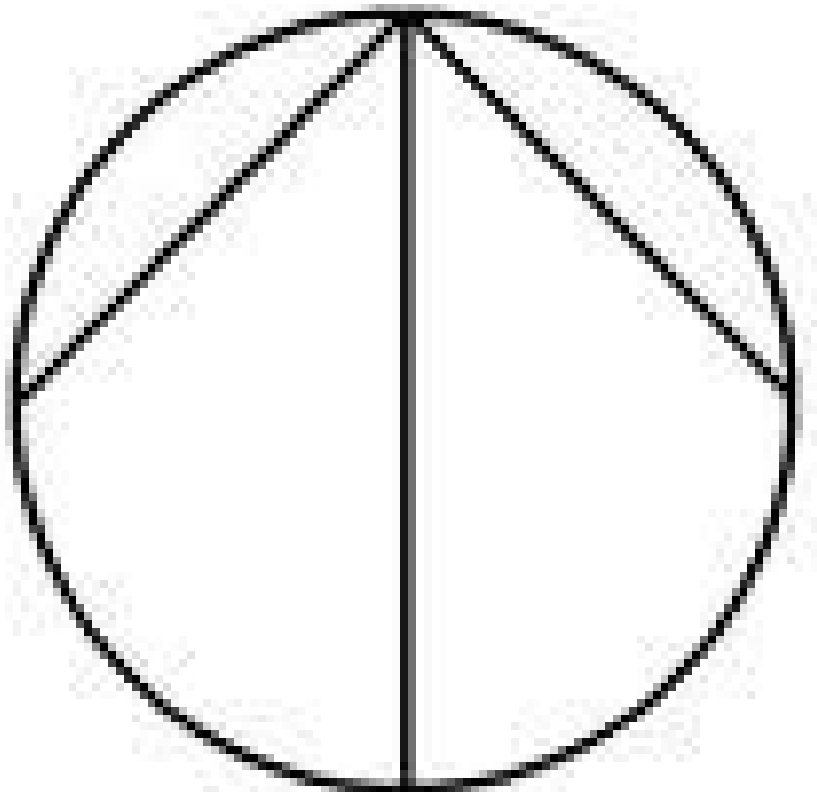


# Galatea: Robot Maid v3.0.3

## Instructions



Galatea Multipurpose Companion Maid Robot: v3 Series

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# Construction

## Materials

Firstly, you will need a 3D printer with two rolls of filament (assuming 1.75mm 1kg rolls), super glue, hot glue, electrical tape, a sanding sponge, a binder clip,  $\frac{3}{4}$  inch wide velcro (~2 feet in length), AA Batteries, and a specific robot sweeper base

Robot Sweeper Base;



You can find it on Amazon, AliExpress, and Wish.com.

You can use another robot vacuum base, but you will need to find your own location to mount the base. The other base should be 30 cm or wider. The motors should be 14 volts or higher. Make sure it doesn't have lidar capabilities and has a smooth top. It should also have a remote or a remote app.

# Speaker

You will need a mini bluetooth speaker. This will allow the robot to speak and play music. You can find small bluetooth speakers on Amazon, AliExpress or Wish.

Here is the one I used;



However, there are many types of mini bluetooth speakers, all of them valid





## Apparel

My specific design uses a maid dress that you can find from AliExpress or Amazon. Get the small size. However, you can put any clothes you want, as long as it's not too heavy and not too big.

<https://www.aliexpress.us/item/3256806208911460.html>

<https://www.amazon.com/Womens-Japanese-Cosplay-Classic-outfit/dp/B093D5DRVZ/>

<https://www.amazon.com/dp/B092VMFM4W>



## Wig

Here's the wig I used. Make sure to get the "Black" color.

[Amazon.com: MapofBeauty 16 Inch/40 cm Short Side Bangs Synthetic Fiber Cosplay Layered Wig \(Black\) : Clothing, Shoes & Jewelry](https://www.amazon.com/MapofBeauty-16-Inch-40-cm-Short-Side-Bangs-Synthetic-Fiber-Cosplay-Layered-Wig-Black-Clothing-Shoes-Jewelry/dp/B093D5DRVZ/)

The hairnet that is included is not used.  
You can use a different wig if you want.

## UV wand

To have the sterilization feature, you will need a UV-C wand.

[Amazon.com: UV-C Light Sanitizer Wand - Powerful 253nm UV Light Rechargeable Handheld Ultraviolet Portable for Home, Office, Travel - Total Transparency UVC Test Card Included : Health & Household](#)

You don't need to use this exact one, however any other wand you use needs to have a grip smaller than 41 mm.

(41 mm X 41 mm box)

## Charger (Optional)

To charge the mini phone without having to take it off the head or Vertical Phone Holder, you need a 2-meter (6 foot) USB-to-USB C cord, with the associated USB charger. You can find one in Amazon or AliExpress, including glowing ones.

## Mini Phone

First, you will need a specific type of phone. You can get it on Amazon or AliExpress under the search terms, “Mini smartphone”, “Soyes Smartphone”, or “Smartphone XS16”. You can use any brand, as long as the screen is approximately 3 inches (diagonal measurement).



### Mini Smart Phone

2GB+16GB

3G WCDMA

3.0" HD Screen

Android system

3G Global



You can use a different design of mini phone, but your Galatea v3.0.3 will look different.

You will also need a wifi connection to access most features. A SIM card and cell connection are not necessary.

For clarity, in the rest of this instruction manual, the phone will be referred as the “mini-phone”

# Printing

Print with 0.8 thick walls, with lines infill.

Printing was designed for a 0.4mm nozzle.

Print the files at the following densities;

## BODY

- Hips: 1%
- Midsection: 1%
- Chest: 1% with supports
- Backbone: 20% (x2)

## HEAD

- Head 3.0.2: 5% with supports (use lightning infill)
- Classic Head and Head 2.1: 0% with supports
- Solid Eyes (for use with Head 2.1 and Classic LED head): 10% (use lightning infill)

## ARMS

- Shoulder Left: 1%
- Shoulder Right: 1%
- Arm Segments: 1% with supports (x4)
- Wrists: 1% (x2)
- Robot Nut and Bolt Arms 2.0: 5% (x2)
- Insert: 20% (x4)

## CLAW

- Claw Primary: 15%
- Claw Secondary: 15%
- Claw Bolt: 15%
- Claw Nut: 15%

## LEGS

- Base 2.0 1% (x2)
- Lower Calf: 5% (x2)
- Upper Calf: 1% (x2)
- Knee 3.0: 1% (x2)
- Thigh 3.0: 1% (x2)
- Hip Segment 3.0: 1% (x2)
- Insert: 20% (x8)
- AA Battery Weight: 20%

## ACCESSORIES

- Plate: 1%
- UV Basket: 15%
- Cat ears: 0%
- Spider Killer: 100%

## SPEAKER AND PHONE ACCESSORY

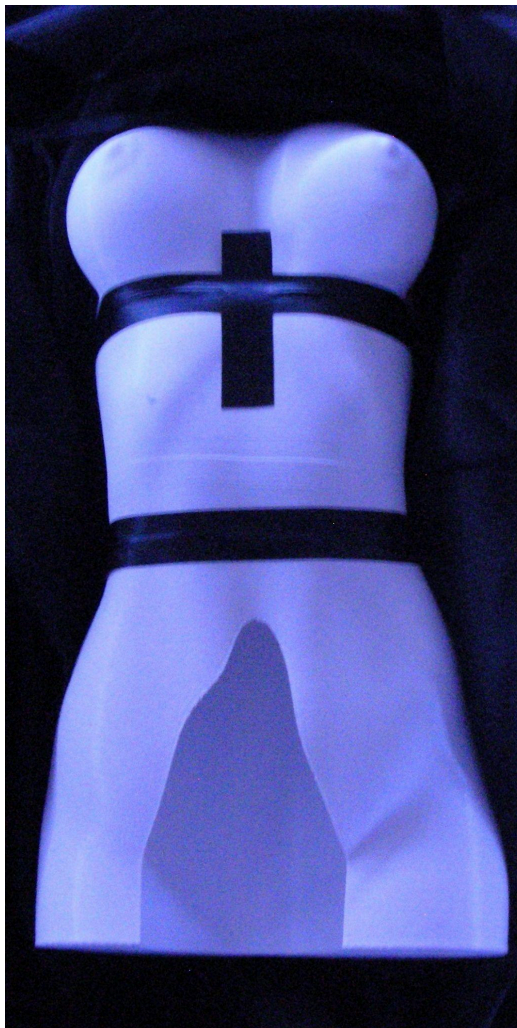
- Speaker Sled: 100% (x2)
- Speaker Mount: 10%
- Vertical Phone Holder: 10%

# Putting it all together

## The Body

Take one of the Backbone segments, and sand it. Then apply super glue on it, and insert it in the slot on top of the Hips. Then when the glue is dry, put glue on the other side and put the midsection on top. Then take another Backbone segment, and do the same with the midsection and the Chest.

Afterwards, use electrical tape to hold the sections together. Then sand the neck cylinder on top of the Chest, and attach the Head. Put in the speaker, facing downwards, until the switch lines up with the edge. Then wrap 5 and half rotations of electrical tape on the neck plug.

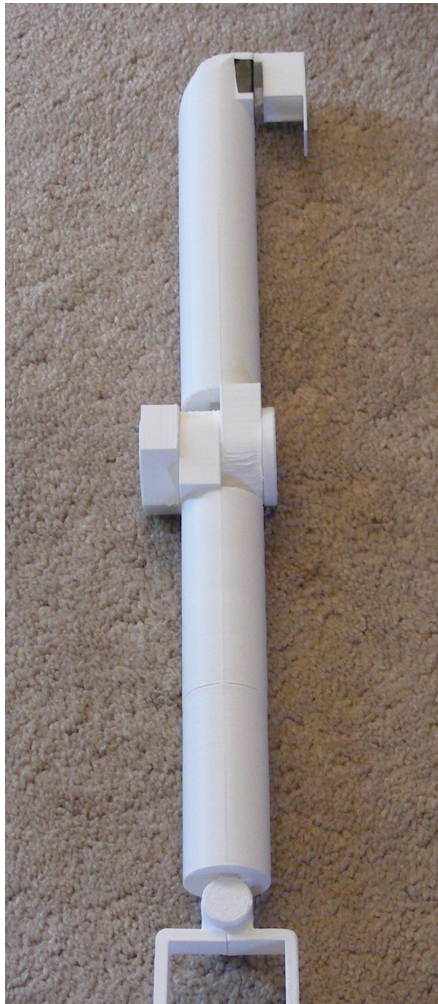


## The Arms (do the same technique for both sides)

Take one of the inserts, and sand the sides. Then insert it in the hole opposite the side with the square plug, using the notches to get it exactly halfway. Then apply superglue to the end of the shoulder segment, as well on the insert. Attach an arm segment with the bolt hole on the side of the plug, on the side facing where the body should be. Use the same technique with another Arm Segment and a Wrist Segment.

After you have those two pieces, then sand and push the bolt through both the shoulder half and the lower half, with the bolt head facing where the body should be. Then use the Nut to hold the arm in place.

Put a layer of electrical tape on the outer side of the arm plug, and in between the arm and the plug, around the arm.

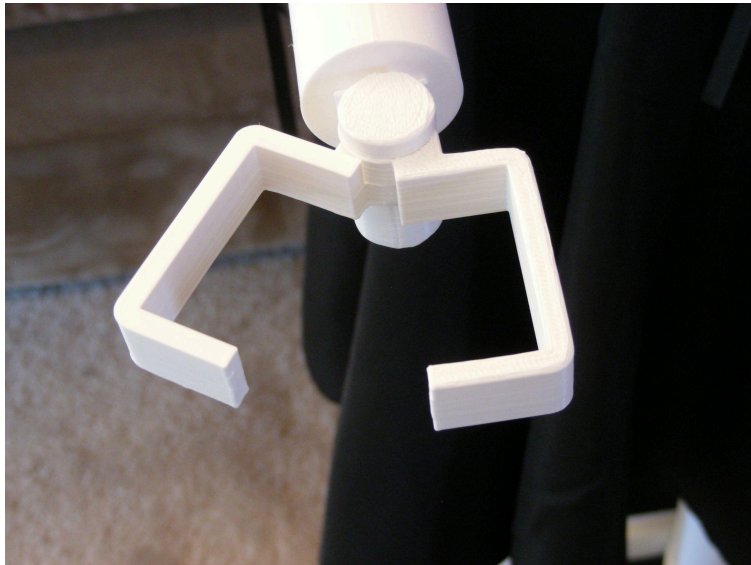


Her right arm. Ignore the claw for now

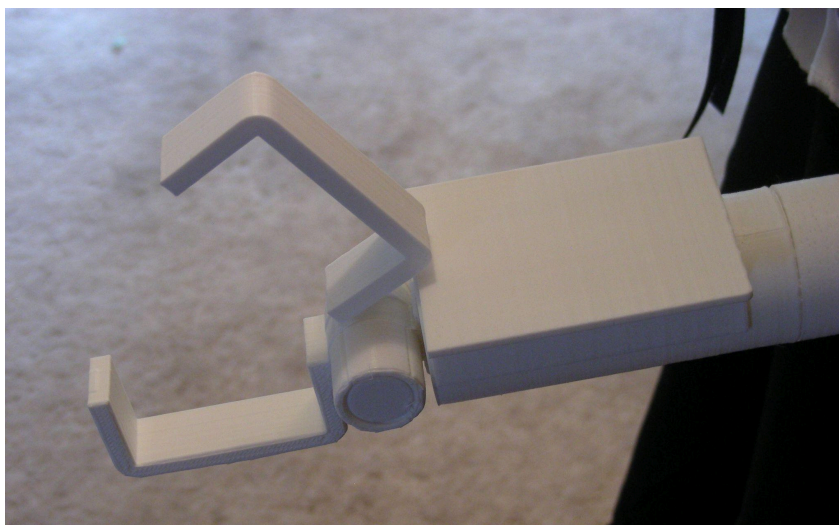


## The Claws

For the left claw (her right), sand down the peg on the Primary Claw, then glue it in the slot, facing inward. Then insert the Claw Bolt downward, super gluing it into the slot. After it is dry, interlock the Secondary Claw, and use the Claw Nut.



For the right claw (her left), sand down the peg on the Primary Claw, then glue it in the slot, facing downward. Then insert the Claw Bolt, with the bolt head facing outward, super gluing it into the slot. After it is dry, interlock the Secondary Claw, and use the Claw Nut.

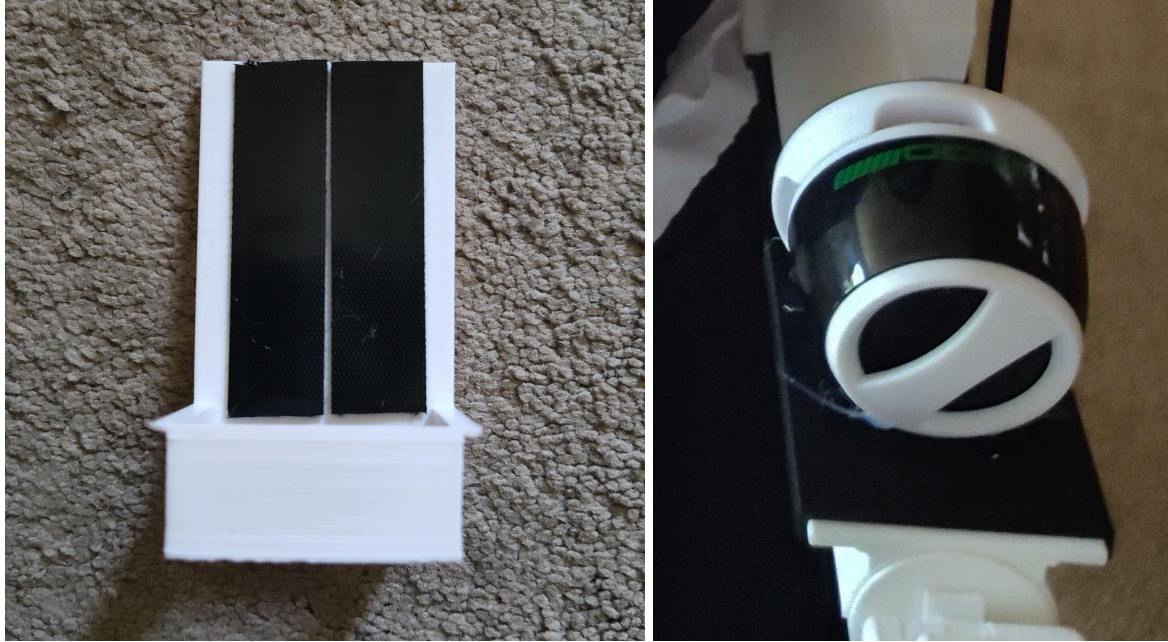


Then superglue the wrist Speaker Mount on the wrist. Sand down the edges and top of the Speaker mount.



## Phone Holder and Speaker Holder

Glue two strips of velcro to the Phone Holder with the rough side outward.



For the speaker, glue it outwards on the Speaker Sled, making sure any buttons and charging ports aren't covered/blocked. Use a liberal amount of hot glue.

The sled should be able to slide on and off the holder, but stay in place when the arm is raised.

## The Legs (do the same technique for both sides)

Take two of the Leg Segments, and sand the upper 1/2 of the surface until it's smooth. Then, with the smooth part facing outward, connect the pieces using the inserts. Follow this order:

### **Lower Calf - Upper Calf - Knee - Thigh - Hip Segment**

When constructing each leg, do one step at a time, letting the glue dry before doing the next step.

Ex. First glue the peg into the Lower Calf, then let it dry. Afterward, then glue the upper calf.

Wrap electrical tape around the seams where the segments connect (*see gallery on Page 20*)

To make Galatea v3.0.3 sit, remove the torso, then remove the legs. Then place the secondary pegs on the sides of the Hip Cylinders into the Hip slots. You may need to lightly sand down the secondary pegs.

## The Base

Using a ruler, measure out 70 mm from the back edge of the robot, and mark it down. Use features on the front to center the base. Then, using a liberal amount of hot glue, attach the base to the vacuum, taking extra care to make sure the base is centered and facing forward.

If you are using a different robot base, put the base near the rear of the robot, at a distance of  $(7/30 \text{ or } 0.2333)$  times the robot diameter. With the standard base, that would be 70 mm from the rear, as shown in the picture.







*(Note: This next section is for the robot vacuum design mentioned before. If your robot vacuum design tips backward when fully assembled, put the weight on the front.)*

On the seam where the lid meets the edge, place a folded-up piece of tape. Then, put a strip of duct tape on the length from the back of the base to the edge. This will make sure the lid stays shut.

*(pic on next page)*

Then glue the AA Battery Counterweight behind the base. Make sure it is full of batteries. Afterward, make another strip of duct tape and connect it to the top of the “lump” to the bottom (without touching the ground), with the end folded up for easy removal and closing. If the glue wears down, replace this strip.

*(If your robot vacuum doesn't have a top lid, the duct tape latch is unnecessary.)*





## Mini Phone Eyes

To put in the Mini Phone as the eyes, spread some super glue on the back surface, letting the glue dry completely. Then hot glue velcro strips on the back of the phone with the soft side facing outward, making sure to not cover the camera or go over the edge. Make sure the corners are also glued down.

Then place the opposite strips of velcro on top of the strips attached to the phone. Using the phone as a guide, attach the opposite strips to the middle of the space on the head (*next page*). When placing the opposite strips on the head, make sure the power button on the phone is facing upward.





Make sure the velcro is securely attached.





To design the eyes, open up Microsoft Paint or any other computer art software/site, and set the canvas to the resolution of the phone (ie 854 x 480 pixels).

When placing and removing the phone, use caution and gentle care. Use the head as leverage. To make sure the eyes stay on, make sure the sleep mode is set to 30 minutes, with no password.



## Local AI

There are two ways you can use Local AI with Galatea.

- Use Backyard AI on your PC, and link it to the speaker inside the head.
- Install Chatter UI on a moderate/high spec smartphone (typically \$100 or more).

For further information, see “Offline AI Roleplay - A Guide to Simple Offline AI”. You can use multiple characters.

Please note that a local AI means that your chat will be permanently lost if the device is lost or destroyed. On Backyard AI, it is recommended to export your chats often and save them on a cloud storage site, like Google Docs.

## Final Assembly

Put the maid uniform on the body. Use a binder clip to hold the excess material in the back. You can discard the apron and other accessories, you only need the dress and a single band (headband optional). Use one of the bands as a belt. Then, put on the wig

Put the arms in the sockets. You can adjust them with the nut, making sure not to over-tighten.

Then place the legs in the respective sockets in the base. Then place the body on the hip cylinders carefully.

If any of the accessories are too tight to fit in the claws, sand them down.

Congratulations, your Maid Robot v3.0.3 is now completed. Enjoy!

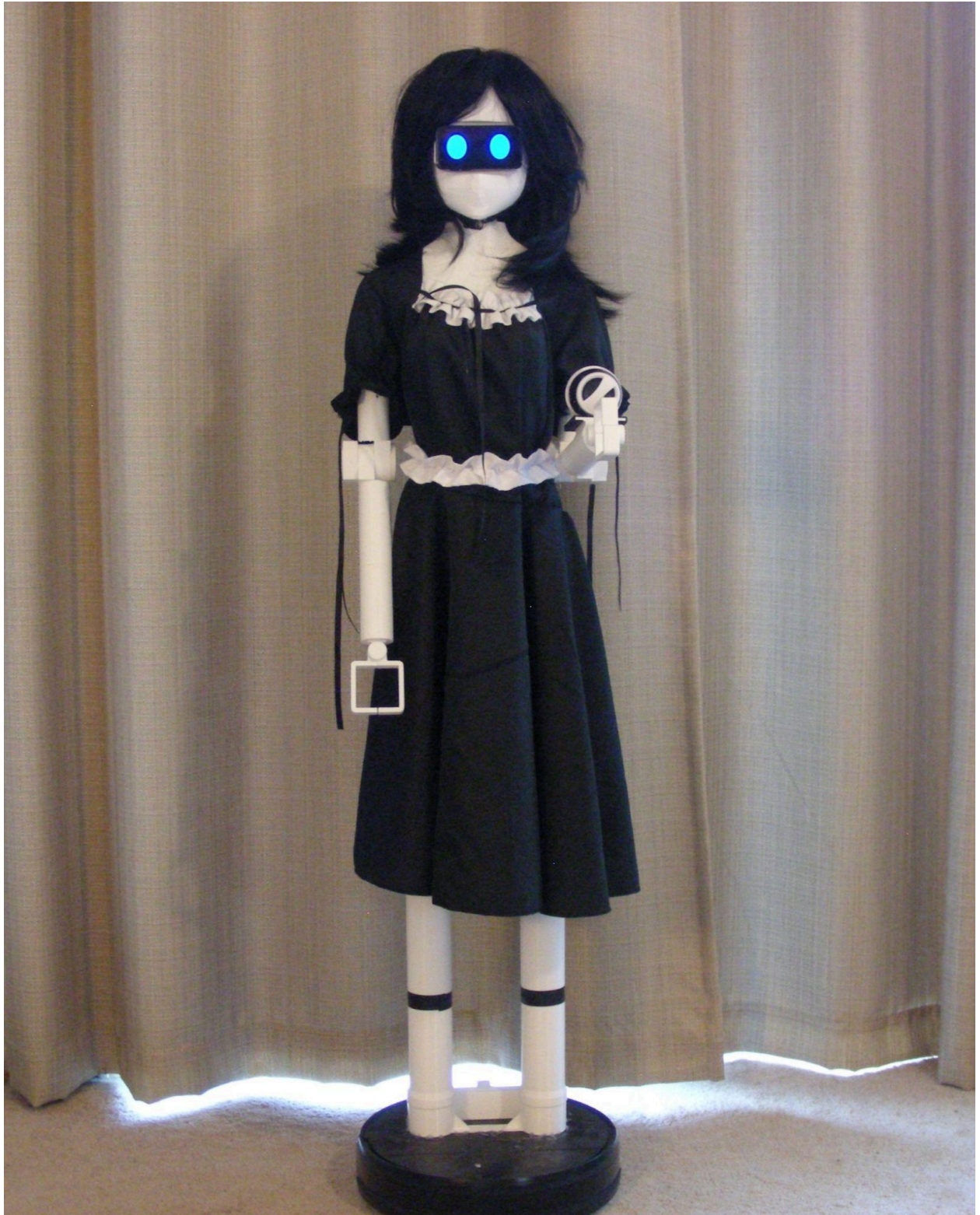
To transport or clean out the vacuum, just remove the body.

When driving it with the body on top, only use manual mode. When driving it, make sure not to do any quick movements to make sure it doesn't tip.

Practice driving it to get the “feel” of it. If you have bumps or slight level changes in your house, help assist her in not falling down.

To charge it, just slide the charger under the front of the vacuum.

# Gallery



Finished product.

# Functions and Uses

(Those marked with a \* are AI functions. See the Offline AI Guide for more information.)

## Sweeping

## Vacuuming

## Mopping

## Sterilization

Put a UV wand in the UV basket, and turn on the UV wand. Use this to sterilize surfaces like countertops, as well as clothes and items. Galatea can't get tired, so you can sterilize fully for several minutes.

CAUTION: UV-C light should not be used on living beings.

## Backup Batteries

If you have dead AA batteries, replace them with the ones in the counterweight, and place the dead ones in the slots. Remember to replace the dead counterweight ones with fresh ones.

## Holding Light Objects

The robot can hold light objects on the plate. However, it can tip easily, so only place light objects on it, such as keys, an empty shot glass, pen, spy camera, portable motion detector, etc.

## Get Information and Advice\*

Ask Galatea a question. You can ask her for personal advice.

## Have A Conversation\*

Talk with Galatea. She has a bubbly and helpful personality.

## Friend\*

Galatea is your new friend!

## Lover\*

...or maybe even more...

## Smart Home Controller

If you have a smart home set-up with your phone, you can place it in the robot and speak to it like a person, so it feels more natural.

## Motion Tripwire

Use the vertical phone accessory with a motion detector app. To have a siren, connect the app to the bluetooth speaker and turn up the volume all the way.

## Security Camera

Put the phone on the vertical phone accessory, and have the back face outward. Download a security camera app. Use the aforementioned optional long cable for prolonged use.

## Entertainment

Impress your friends with an advanced robot kit, or have it stand still and let Galatea entertain others.

## Play Music

You can also play music with the bluetooth speaker, or make Galatea sing! Galatea is your own personal musical performer. The speaker is also removable, so you can take it on the go!

## Virtual Babysitting/Petsitting

Install a video call app, such as Signal. Make an account with the Google Voice number. Place the phone on the face, and make a video call between the phone and your phone.\* Alternatively, you can have a babysitter/petsitter be supervised by a video call, and check it occasionally. The babysitter/petsitter won't know when you're watching. Use a charger for prolonged use.

\*This method is suitable for children 12+. Make sure they have a phone to text you and call emergency services. For pets, ensure they have all the supplies they need and bathroom access.

## Dictation Machine

Record audio to write down later. Or you can record notes

## Hear Poetry\*

Ask Galatea to write a poem about a subject.

## Creative Inspiration\*

Ask Galatea for creative inspiration.

## Roleplay\*

Using custom AI prompts, you can roleplay with Galatea. With ASMR audios, she can act as an avatar for the ASMR character.

## Cooling

Place a small fan on the plate. For further flexibility of use, you can glue the fan to another Plate, so you can have the fan at an angle.

## Hug

You can hug Galatea! Just have one arm up, and lightly hug her. Hugging is scientifically proven to improve mental health and reduce stress.

## Backup Alarm

Put an alarm on the mini-phone. Make sure it has enough power to last the night. The experience will be like someone waking you up, rather than a faceless alarm clock.

## Killing Spiders

Take off her left arm. Place the spider killer accessory in the claw. Fold a piece of duct tape on itself, so that it covers the front surface. Use the arm to smash the spider, including up high on the wall and even some ceilings.

## Translator

Download Google Translate on the mini-phone, and use the conversation feature. Connect to the bluetooth speaker to boost the volume. Alternatively, you can connect your own personal phone to her bluetooth speaker.

## Backup Survival Guide

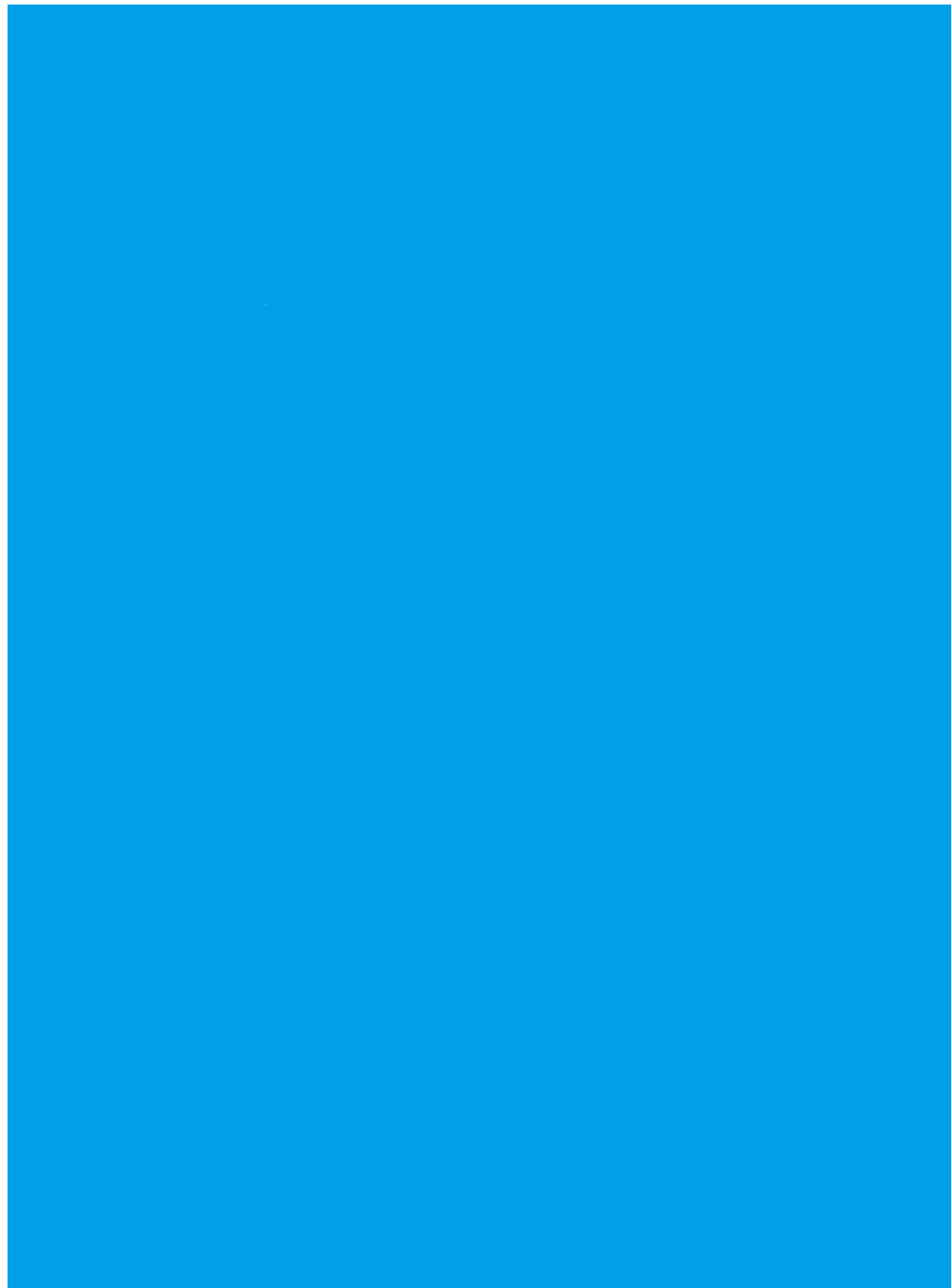
Install an offline survival guide. A good one can be found here; [ligi/SurvivalManual: Libre Survival Manual for Android with offline in mind](#)

## Directional Light

Activate the light on the phone, and put the holder accessory in her right hand, where the flashlight points outward

## Wakefulness Generator

Put a picture of pure light blue on the mini phone, and put it on the phone holder accessory or on the head. The blue light keeps you awake. You can screenshot the blue on the next page, and crop it to get the blue image.



# Safety

- Make sure small pets and children aren't on the floor when the robot is moving around.
- Make sure not to place objects on the plate that make the robot tip and spill the object.
- Don't put an object on the plate while it's moving
- Lower the arms when moving around
- Use only manual mode when the body is on top
- Disassemble the robot when transporting it.
- Disassemble the robot before cleaning the internal dustbin or any other internal components.
- Galatea v3.0.3 is not a toy.
- (Optional) Log out of your accounts when you're done using the apps
- Use common sense!



## LEGAL DISCLAIMER

I AM NOT RESPONSIBLE FOR  
ANY INJURY, PSYCHOLOGICAL  
DAMAGE, AND/OR DEATH  
CAUSED BY THE  
CONSTRUCTION AND/OR  
USAGE OF THE DEVICE  
DESCRIBED IN THIS MANUAL.

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THE CONSTRUCTION,  
POSSESSION, OR USAGE OF  
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