

GLAMBOT[®]

QUICK START GUIDE

Instructions to assemble the modular components + capture cinematic videos.

Rev. 07 | effective: 03/01/25

Updated 3/18/25



PART 1: ASSEMBLY INSTRUCTIONS



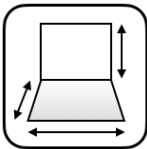
WARNING: A collision with Glambot® may cause physical damage to property, person, or the robotic arm. Ensure proper clearance of the robot at all times. All persons and objects must remain outside the work envelope. By operating Glambot® you are assuming the associated risks and liabilities.

BEFORE YOU START

Please review all the requirements, understand the safety precautions, and prepare the appropriate tools prior to beginning the assembly and initialization of the robotic arm.

BASIC DEPLOYMENT REQUIREMENTS

SPACE



10ft x 10ft footprint
9ft high

PERSONNEL



team lift

SURFACE



solid + stable
ground

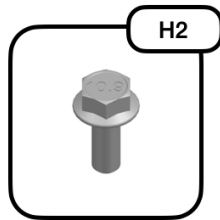
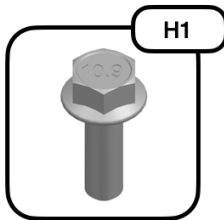
TIME



estimated time
30 min

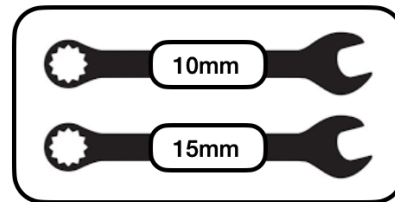
HARDWARE [INCLUDED]

- (8) H1 - M10 x 1.5 x 30L flanged hex head screw
- (4) H2 - M6 x 1.0 x 16L flanged hex head screw



TOOLS [INCLUDED]

- 15mm wrench
- 10mm wrench



VIDEO TUTORIAL

Get a step-by-step video tutorial on setting up your Glambot®

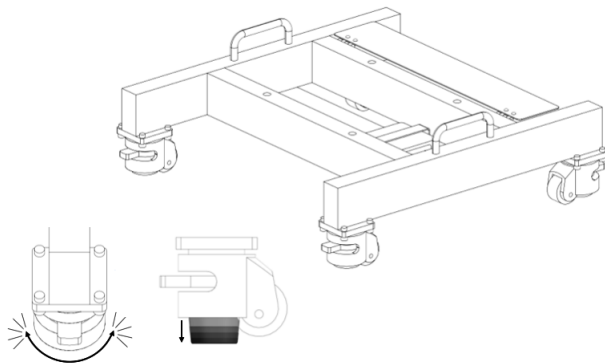
If you have any questions during your deployment, please call +1 (855) GLAMBOT

For more information and videos visit: www.getglambot.com/glambot-resources



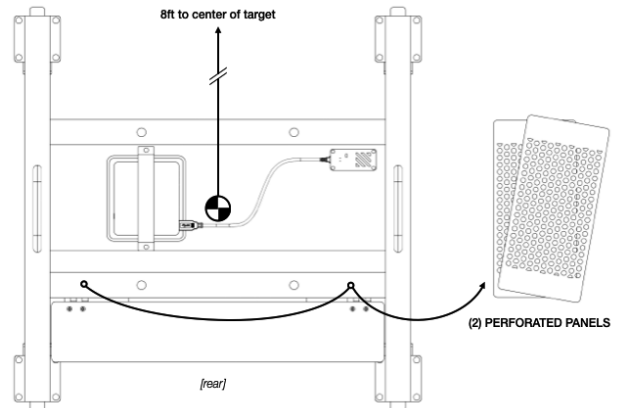
ROBOT ASSEMBLY

- 1. BASE INSTALLATION:** Place the BASE on the floor in the desired location with the power strip facing back. Level the BASE using the ratchet adjustment integrated into each of the (4) casters.

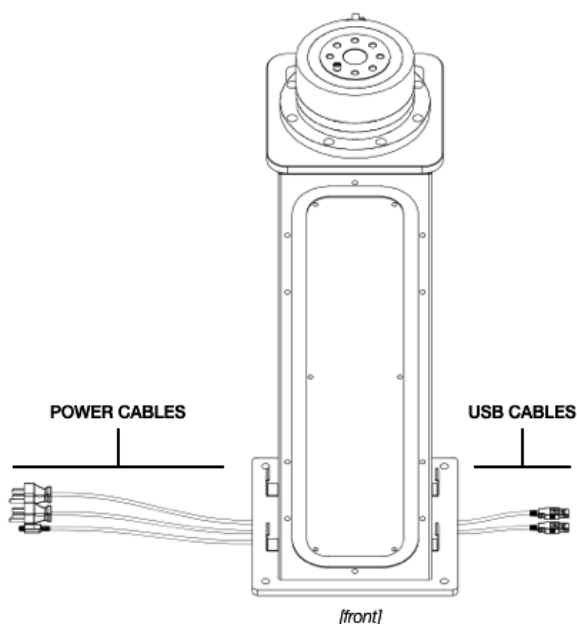


PRO TIP: use the integrated ratchet lever to extend the rubber foot to the ground.

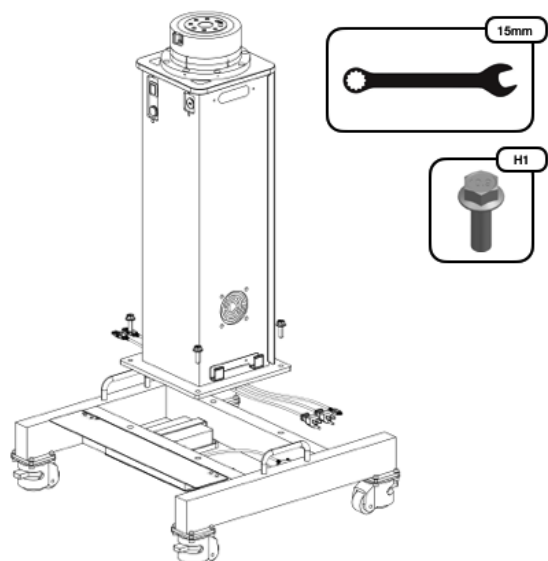
- 2. BASE PREPARATION:** Align and locate the center of the base 8ft from the desired target location. Remove the (2) magnetic PERFORATED PANELS to allow access to the electronics and wiring.



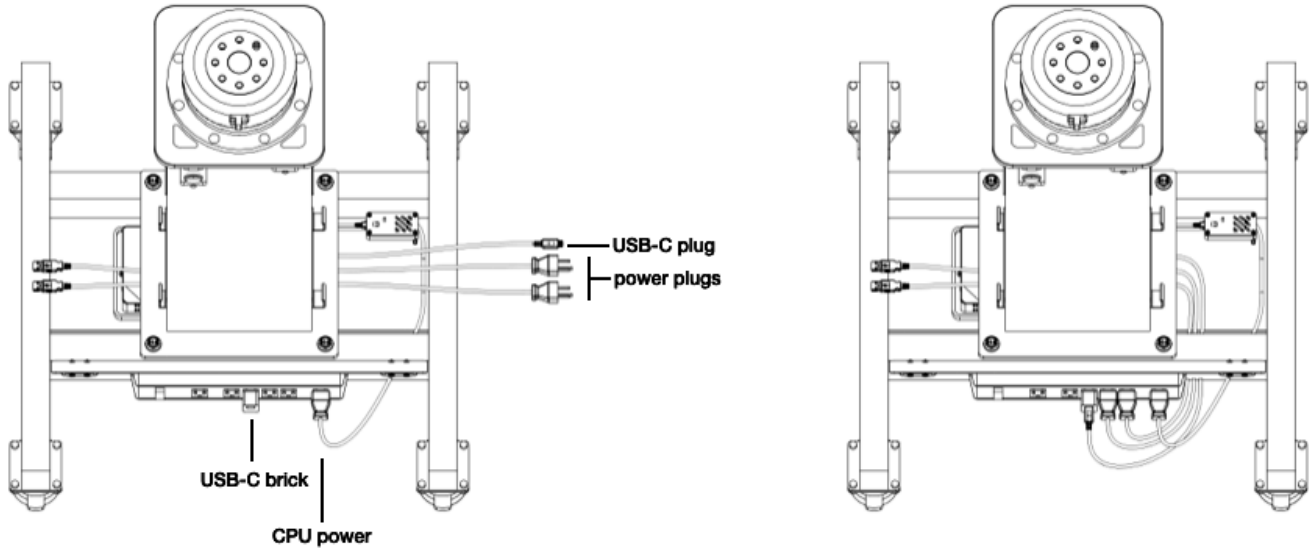
- 3. PEDESTAL PREPARATION:** Facing the front of the tower ensure the POWER CABLES are laid to the left and the USB CABLES are laid to the right.



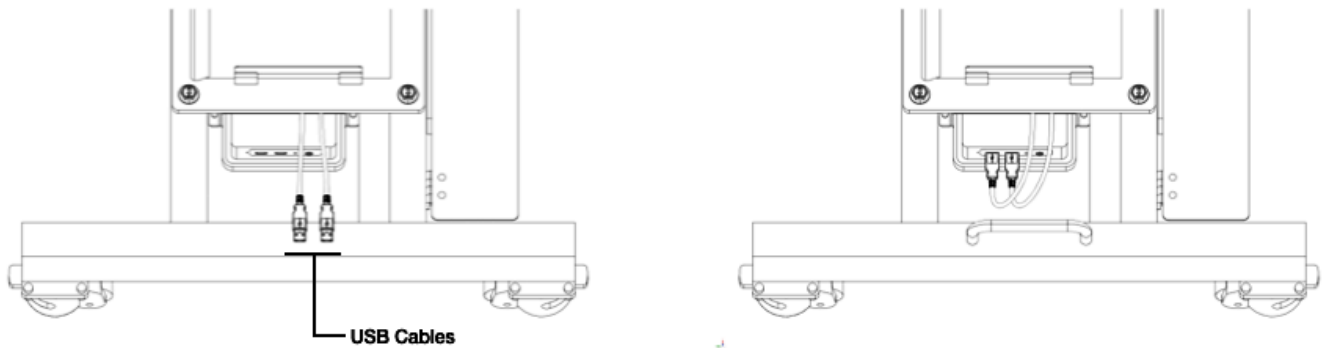
- 4. PEDESTAL INSTALLATION:** Place the PEDESTAL centered on the BASE aligning the mounting holes checking that no wires are pinched. Using the 15mm wrench, attach the (4) M10 flanged hex head bolts - labeled H1. Tighten securely.



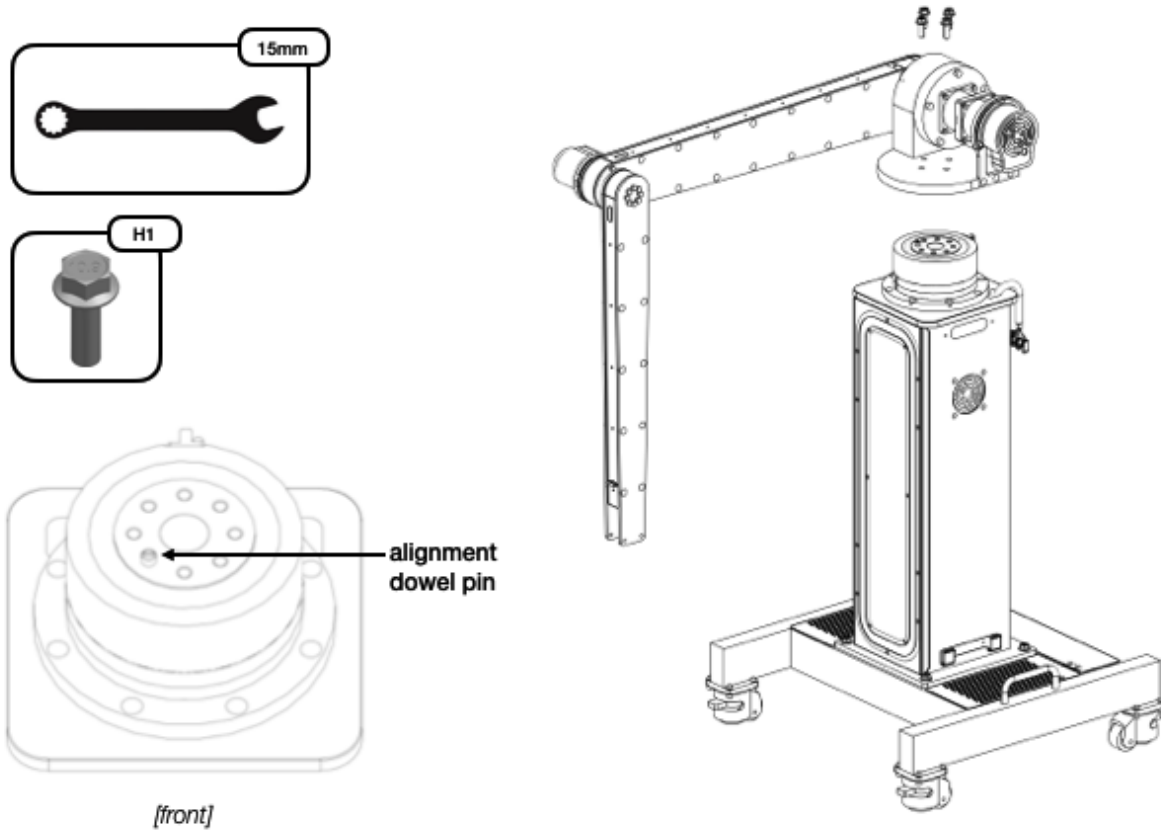
- PEDESTAL POWER WIRING:** Route the (2) power plugs + (1) USB-C cable under the frame and plug into the power strip at the rear of the BASE. Follow the CPU power for a routing reference to the power strip. The USB-C cable will land at the power brick that remains on the power strip.



- PEDESTAL USB WIRING:** Plug the (2) USB-A cables into the mini-PC. Re-install the (2) magnetic PERFORATED PANELS.

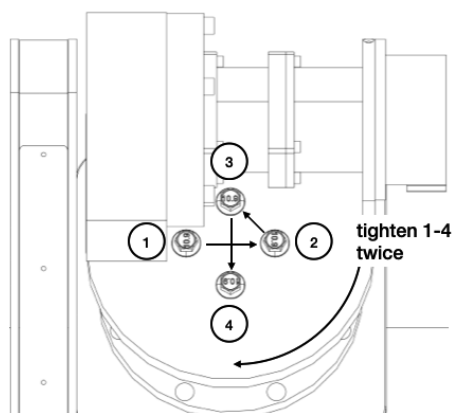


7. **SHOULDER INSTALLATION:** Extend the elbow joint out from the stowed 160° to 90°. With the ARM directed straight ahead to the front, align the dowel pin, and set on the PEDESTAL. Attach using the (4) M10 flanged hex head bolts - labeled H1. Tighten securely in a cross pattern.



Note: recommend having (1) bolt ready to install and hold the arm once located

Note: to fully tighten this connection, perform the cross pattern tightening sequence at least twice.

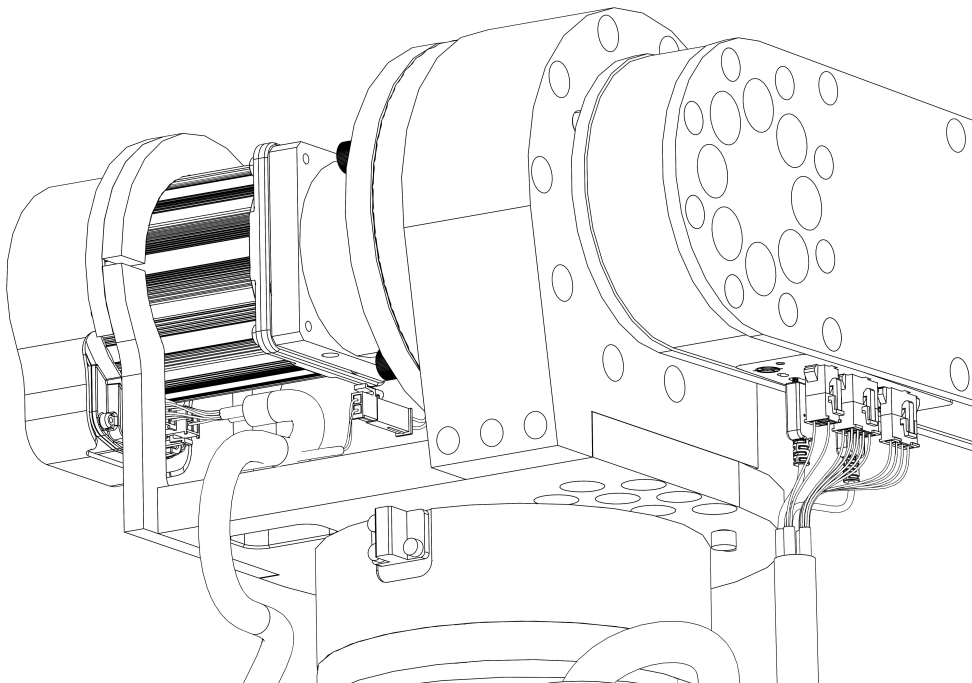


8. **SHOULDER WIRING:** Looking from the rear, begin with the right-side harness. Plug in the (5) connectors into the panel on the bottom side of the ARM:

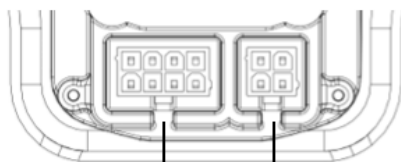
- 8-pin elbow connector
- 4-pin square connector
- 4-pin rectangle connector
- USB-C cable [power] *signified by a yellow collar on the cable*
- USB-C cable [data]

Then, attach the left-side harness. Plug in the (3) connectors of the lift motor harness to the lift motor assembly:

- 8-pin data connector – into motor
- 4-pin power connector – into motor
- 2-pin power connector – into brake

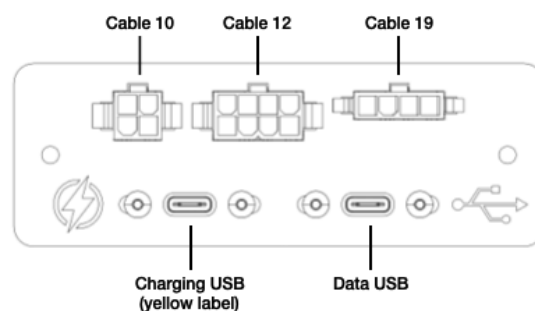


MOTOR ASSEMBLY Detail



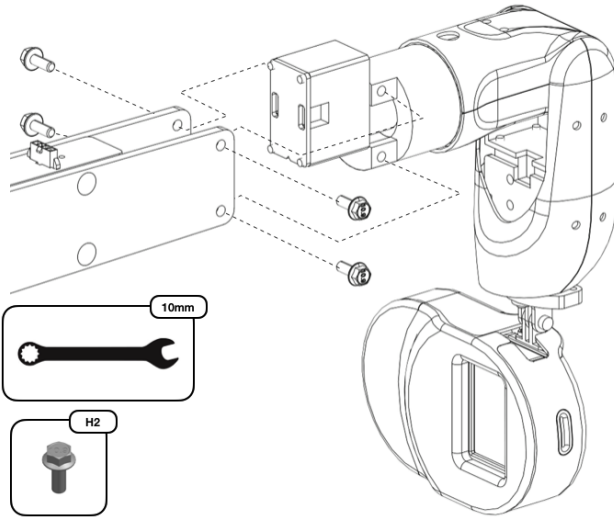
Cable 9 Cable 8

ARM Detail



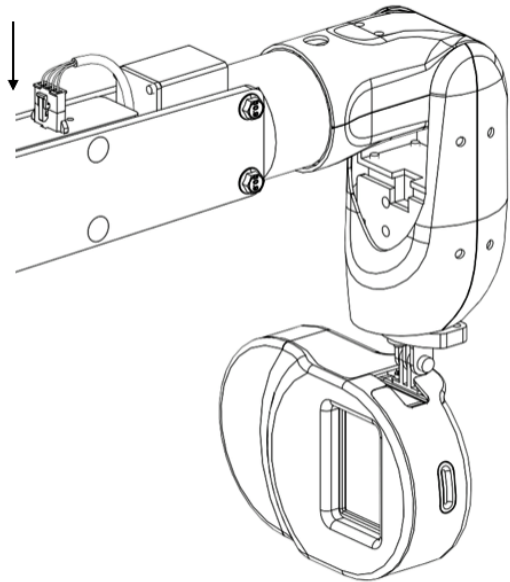
Charging USB (yellow label) Data USB

9. **WRIST INSTALLATION:** Extend ARM2 to the horizontal position. Orient the wrist assembly such that the nesting motor protrudes up out the top of the arm. Slide the wrist assembly between the plates at the end of the ARM assembly. Using the 10mm wrench, attach the (4) M6 flanged hex head bolts - labeled H2. Tighten securely.



Note: take care not to pinch (2) cables upon inserting WRIST assembly into ARM.

10. **WRIST WIRING:** Plug in the (1) free cable to the panel on the top side of the ARM. If holding the ARM, gently let the arm fall to hang vertically.

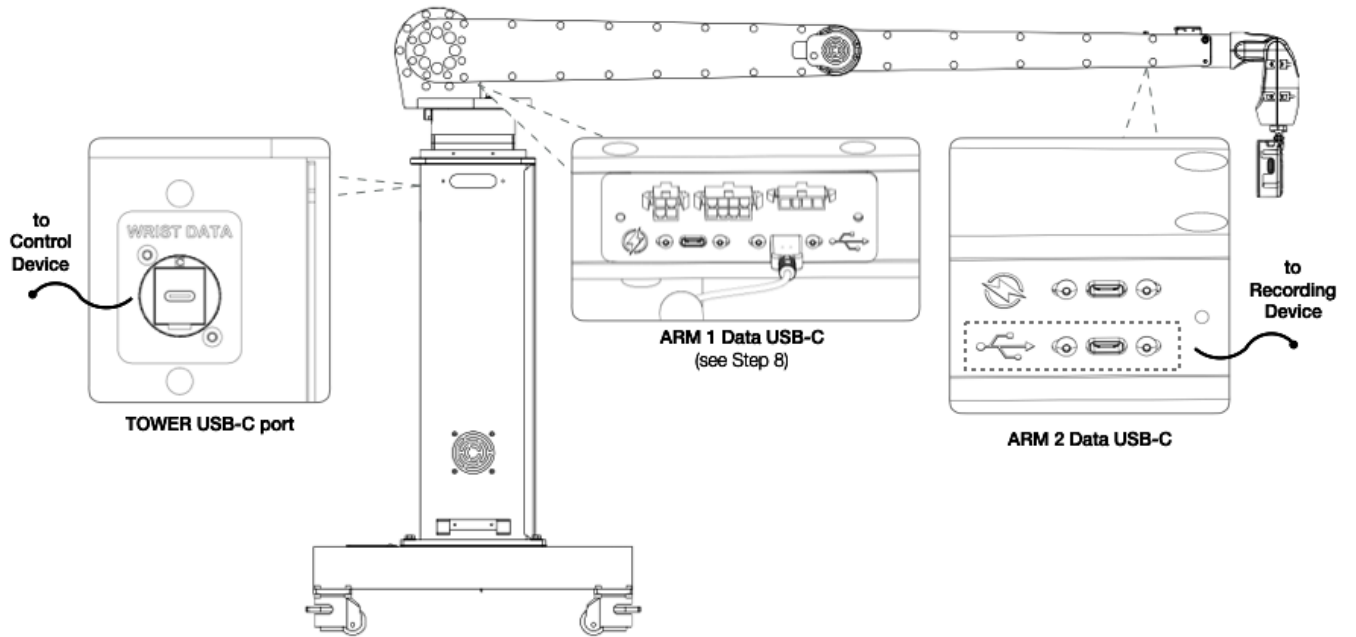


11. **END EFFECTOR INSTALLATION:** Choose your recording device and follow the instruction for that specific end effector in Appendix A. Additional hardware will be required for each mounting type.

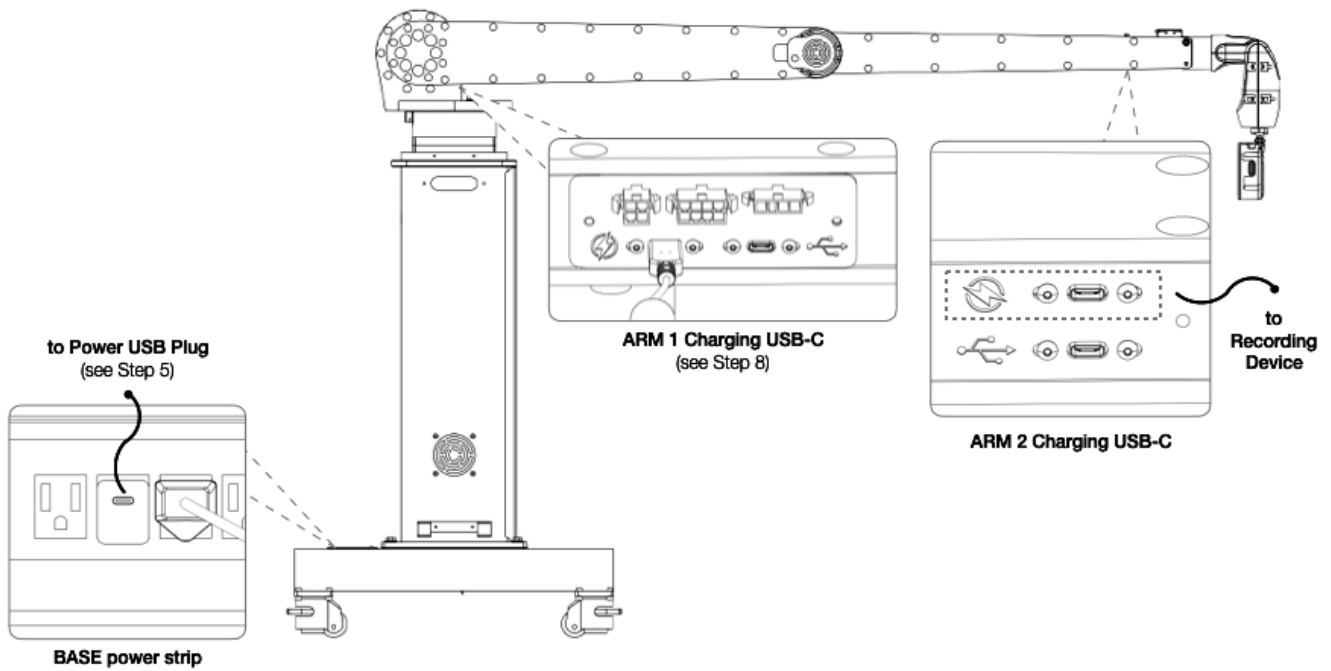
Note: Total weight of end effector assembly shall not exceed 3lbs.

12. **ACCESSORY CONNECTIONS:** Based on your END EFFECTOR selection, determine whether you will need to connect accessory USB-C cables for charging and/or data transfer. Refer to the schematics on the next page for the Power and Data layouts through the unit:

DATA Connection:



POWER Connection



You have completed the Glambot® assembly! Proceed to the Initialization Instructions.

PART 2: INITIALIZATION INSTRUCTIONS



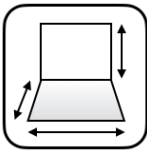
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BEFORE YOU START

Please review all the requirements, understand the safety precautions, and prepare the appropriate tools prior to beginning the assembly and initialization of the robotic arm.

BASIC DEPLOYMENT REQUIREMENTS

SPACE



10ft x 10ft footprint
9ft high

POWER



US,CAN,MEX:
NEMA 3 prong
110-120V | 60Hz | 1500W

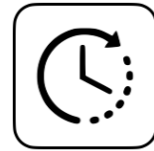
REST OF THE WORLD:
Country adapter required
220-240V | 50-60Hz | 1500W

SURFACE



solid + stable
ground

TIME



estimated time
10 min

VIDEO TUTORIAL

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For more information and videos visit: www.getglambot.com/glambot-resources



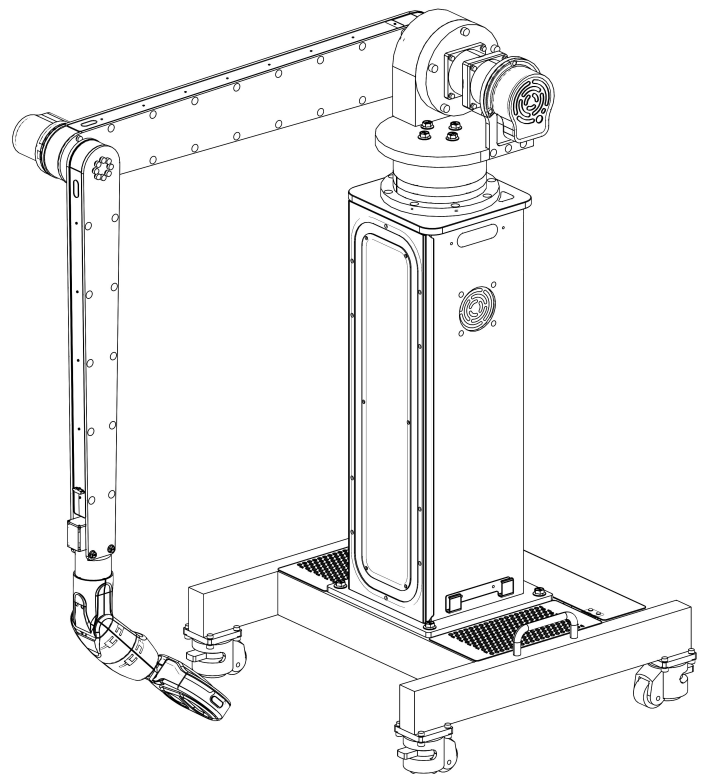


**DO NOT TURN ON THE GLAMBOT®
PRIOR TO PERFORMING ALL THE PRE-LAUNCH CHECKS**

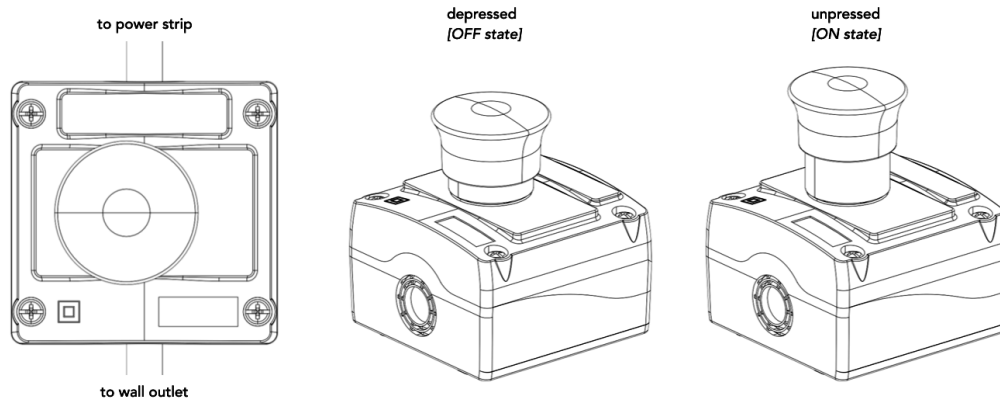
Remove any tools and equipment from the envelope of the robot before continuing.

13. PRE-COMMISSIONING CHECKS: Once you have completed assembly of the Glambot® you can proceed to commissioning the system and capturing videos. Before the initial, and any subsequent starts, make sure to check the following:

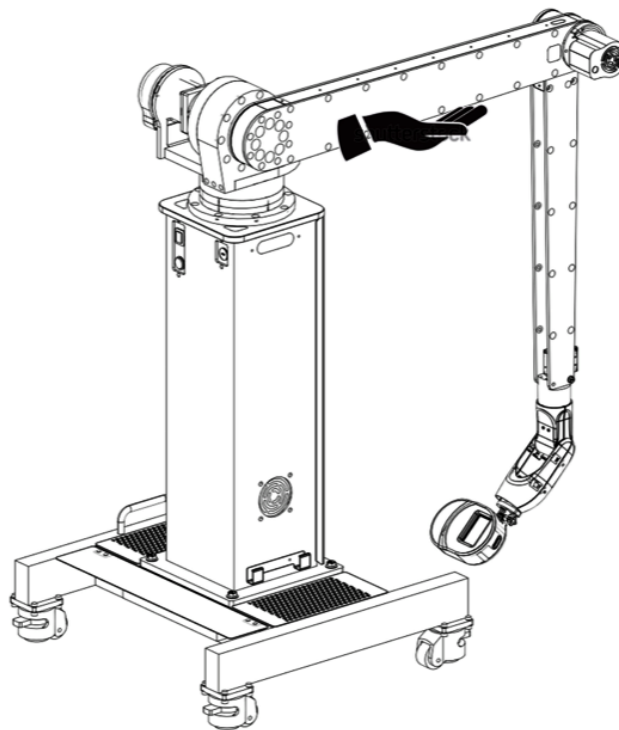
- The Glambot® is located securely on a sturdy surface and can remain stable during operation.
- The end effector is securely attached to the wrist and will not fall out during operation.
- All cables are intact, connected to appropriate connectors, properly secured.
- The emergency stop button is attached to the machine and is located where the operator can reach it from his/her workplace at any moment.
- All risks identified during a risk assessment of the operating environment have either been eliminated or mitigated by implementing appropriate measures.
- There are no obstacles within the envelope of the Glambot® that could prevent the arm from moving freely or operating properly.



14. POWER: Check the status of the EMERGENCY STOP and POWER STRIP to ensure they are both in the off state. Locate a convenient receptacle and plug in the EMERGENCY STOP cable. Pull up on the emergency stop button to allow power and turn on the switch to POWER STRIP.



15. **BOOT:** The Glambot® will begin the boot sequence which lasts 30-60 seconds. No action by the attendant is required for this step.
16. **CALIBRATION:** Upon boot completion the robot will begin the calibration sequence. The motors will make an audible sound upon powering up. First, the wrist motors will orient to their respective "zero" positions. Then, the remaining (3) motors will physically calibrate by moving through and extended range of motion in the following order: ELBOW, LIFT, PAN.



Note: after the WRIST moves to the 90° position, use your hand to support the arm to allow the brake to initialize. The goal is to momentarily hold the arm in place, not press up too hard nor let it fall. Remove your hand once the lower arm begins moving.

17. **NETWORK CONNECTION:** In parallel to CALIBRATION, the Bluetooth and Wi-Fi networks will be established. Find the following networks and pair the "Control Device" (phone, tablet, laptop) to the Glambot® Wi-Fi network and the "Recording Device" to the Glambot® Bluetooth network.

Wi-Fi network: glambot-XXXX | pw: Glambot1!

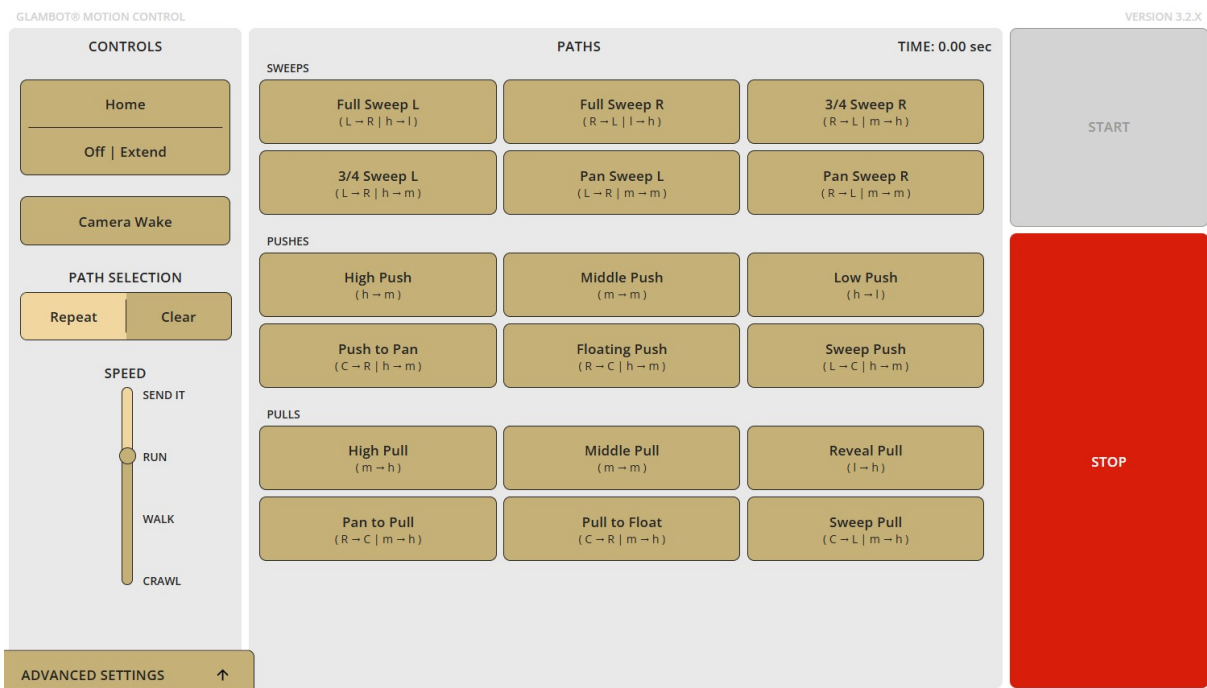
Bluetooth network: glambot-XXXX

Note: refer to robot ID tag and replace XXXX with your unit number.

18. **CONTROL:** After boot + calibration the robot will be controlled through a webapp. To open the webapp, navigate to the browser on the "Control Device" and enter the following web address:

`http://glambot-XXXX.local:8080/webapp`

Note: refer to robot ID tag and replace XXXX with your unit number.



For additional instructions on the webapp layout and operation, please refer to Appendix B.

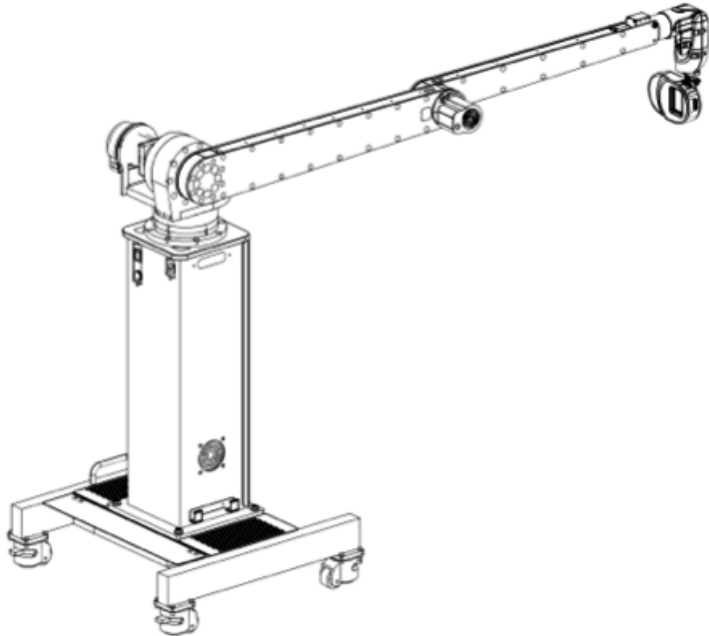
19. **EXECUTION:** Using the webapp, confirm the speed selection, then select the desired path, then press 'Start'.

Note: the webapp will grey out all buttons except the 'Stop' button and the robot will move to the path start position, it will pause for the wait duration, the execute the path with recording a video. Upon completion, all buttons on the webapp will become available again.

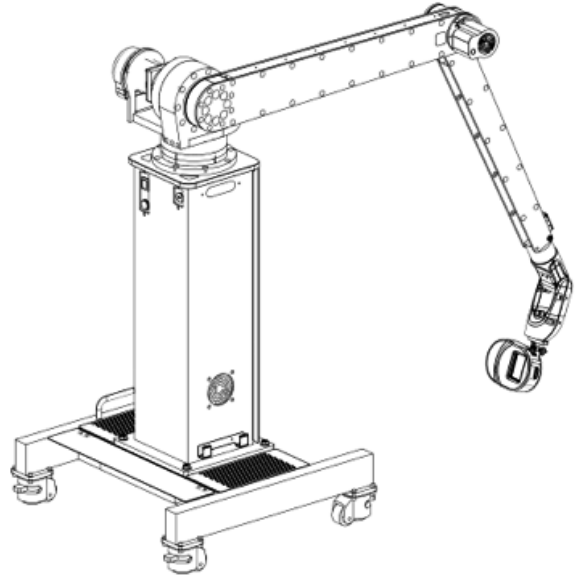
The setup for filming varies based on the recording device and connection type. Please refer to the specific setup in Appendix C.

PART 3: DECOMMISSIONING INSTRUCTIONS

20. **POWER OFF:** Using the webapp, command the arm to the 'Extended' position. Depress the emergency Stop to remove power from the arm. The motors will disengage and the ELBOW will relax to the vertical position.



'OFF / Extended' position



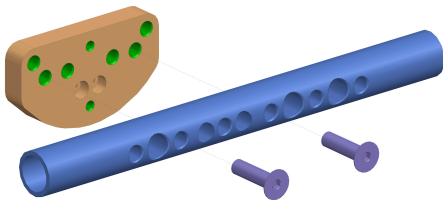
powered off status

21. **DISASSEMBLY:** The order for disassembly is opposite of assembly, starting with removing the WRIST assembly, then the ARM assembly, and finally the TOWER. When disassembling any joint first disconnect the wire connections, then remove any fasteners. Store fasteners in orderly manner and take care not to pinch any wires during storage of the arm components.

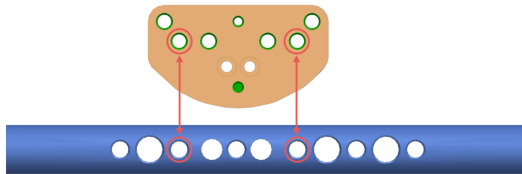
APPENDIX A: End Effector Attachment

DSLR ATTACHMENT

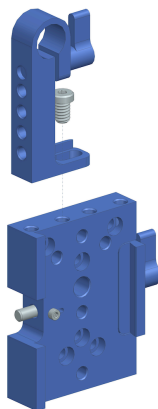
1. Install the Mounting Rod from the Universal DSLR Attachment to the Wrist coupler with (2) M5x20mm flat head screws using a 3mm hex key.



Note: align the rod with the output bracket as shown below.

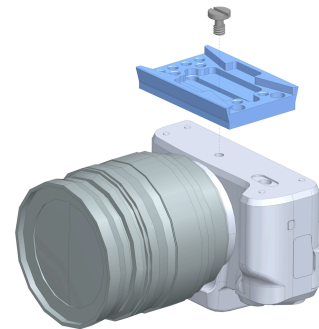


2. Prep the Hanger from the Universal DSLR Attachment by orienting the Hanger to the Foot and securing with (1) socket head screw using a 4mm hex key.

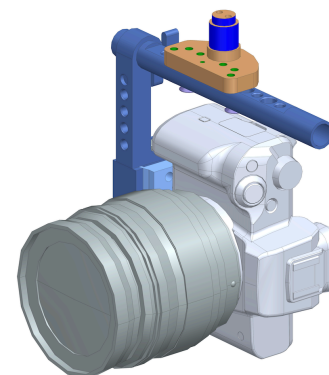
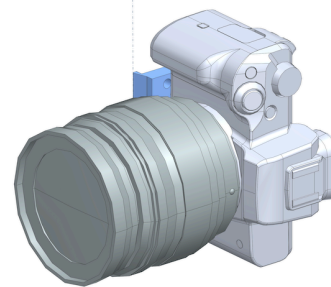
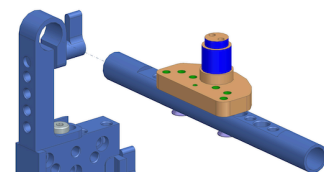


3. Prep the camera and Slider from the Universal Attachment by centering the camera on the Slider and securing with the 1/4-20 camera screw using a flat head screw driver.

4. Complete the assembly by sliding the camera onto the hanger. Press past the detent and

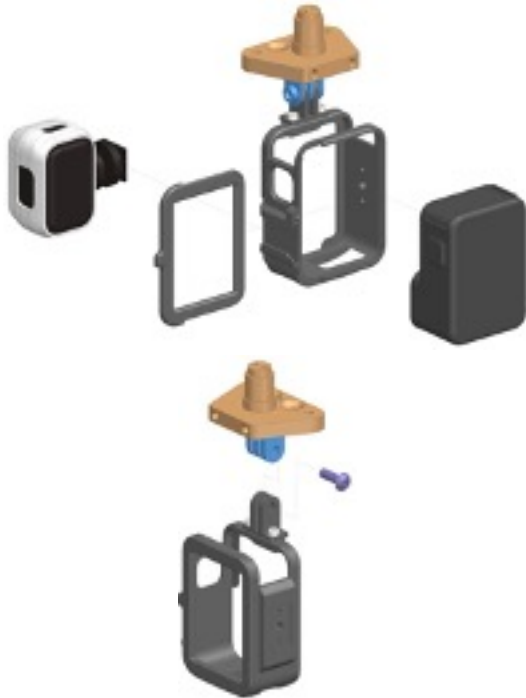


secure with the integrated clamp. Then, slide the Hanger onto the Rod and secure with the integrated clamp.



GO-PRO ATTACHMENT

1. Install the GoPro Adapter to the Wrist coupler with (2) M3x10mm socket cap screws using a 2.5mm hex key.



2. Slide the GoPro cage into the GoPro adapter and fasten with the (1) included M5x6mm button head screw using a 3mm hex key.

3. Slide the back cover off the cage and insert the GoPro. Then slide the Video Light onto the cage at the cold shoe location and secure with the double thumb nuts.

4. Install the (2) M3x6mm button head screws partially into the GoPro cage side mounting holes. Then, slide the plastic cover over the assembly with the slot wall behind the pre-installed screws. Tighten the screws with a 2mm hex key through the side access hole.

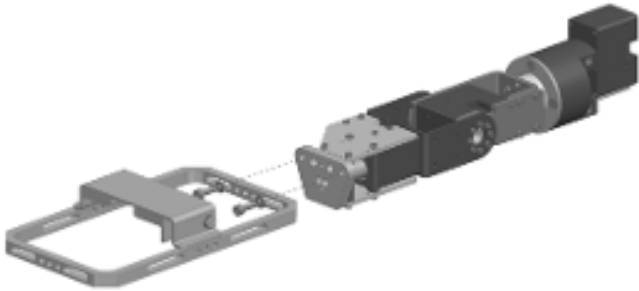


5. Snap the Rear Cover into the mounted Front Cover.



SMARTPHONE ATTACHMENT

1. Align the universal bracket to the output bracket. The bracket is located using the (2) slots on the top edge. Install the (2) M5x16mm socket cap screws and flat washers using a 4mm hex key.

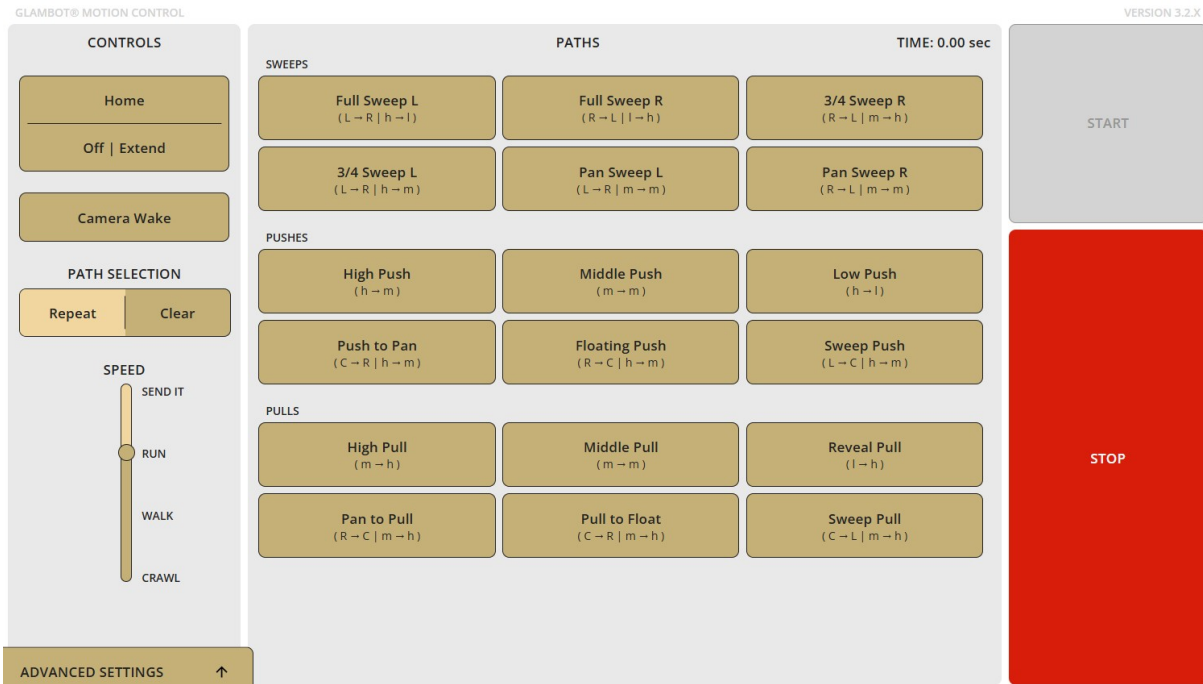


2. Install your phone into the universal bracket and secure by tightening the thumb screw clamp.



APPENDIX B: WebApp Details

The webapp is a custom control board for the robot that is accessible through the internet browser when the control device is linked to the local Glambot® Wi-Fi network.



MAIN SCREEN DEFINITIONS

Paths: Controls the movement that will be executed to capture a video.

Sweeps: Paths that main movement is side-to-side.

Pushes: Paths that start away from the subject and move towards the target.

Pulls: Paths that start near the subject and move away from the target.

Home: Moves to a collapsed position for stowing while the unit is powered.

OFF /Extended: Moves to a horizontal position used for powering off & assembling.

Start: Initiates movement after a path is selected.

Stop: Halts the robot at any point while executing a movement.

Camera Wake: Sends Bluetooth trigger to control device.

Path Selection: Determines if the path selection is maintained or clears after execution.

Speed: Slider to select the overall speed of the robotic arm during a movement.

Time: Duration of the selected path(s).



ADVANCED SETTINGS

TARGET HEIGHT
 High Medium Low

PATH START DELAY
 3s 5s 10s

CONNECTION TYPE
 Bluetooth USB

ERROR LOG
 [11:46:59] E00: No Errors. Close Window.

LEGEND

| Movements | Direction |
|---------------------|---------------------|
| Sweep: Side-to-Side | L: Left h: high |
| Push: Back-to-Front | R: Right l: low |
| Pull: Front-to-Back | C: Center m: middle |

ADVANCED SCREEN DEFINITIONS

Target Height: Adjusts the focal height of the camera during the path.

Path Start Delay: # of seconds the motion pauses at the start pose prior to executing a path.

Connection Type: Selects the method of connection to the recording device.

Error Log: Shows error message for troubleshooting.

Legend: Defines the abbreviations for the path directions + height at start and stop.

APPENDIX C: Filming Setup

Note: All the set ups assume using Snappic to record, edit, and share the video.

iPhone Filming

- A. CONNECTING BLUETOOTH: Connect the iPhone on the wrist to the Glambot® Bluetooth. Ensure no other devices are connected to the Glambot® Bluetooth or it won't be discoverable.
- B. CONNECTING SNAPPIC: Open the Snappic app of the iPhone. Next:
 - 1. Open the event profile - Select Accessories - Volume Buttons - Done
 - 2. Configure Camera - Back Ultra Wide Camera - Done
 - 3. Start Photo Booth
 - 4. Configure settings: Focus Smooth Focus - ON, Burst Focus Lock - OFF, Stabilization STANDARD
 - 5. Start Photo Booth

WIRED Go-Pro Filming:

A. CREATING A WIRED CONNECTION:

- 1. Download the GoPro Quik app onto your Snappic iPhone, or other control device.
 - a. drag down on the GoPro screen - Preferences - Connections - GoPro Quik app
- 2. On the Snappic device, open the GoPro Quik app
 - a. bring both devices near each other - allow connection to both devices via Bluetooth
 - b. to confirm successful connection, GoPro Quik app on iPhone should show GoPro battery percentage and/or show access to previous Glambot® video gallery
- 3. If not already done, attach the GoPro to the wrist end effector
- 4. Connect a 2-3ft USB-C cable to the Glambot® wrist-side USB-C "data" port Connect the other end of the cable to the GoPro.
- 5. Connect a 5-6ft USB-C cable to the Glambot® shoulder-side USB-C "data port Connect the other end of the cable to the Snappic device.
 - a. to confirm successful connection, GoPro should appear with: "USB Connected" message

B. CONNECTING BLUETOOTH: Connect the iPhone on the wrist to the Glambot® Bluetooth. Ensure no other devices are connected to the Glambot® Bluetooth or it won't be discoverable.

C. CONNECTING SNAPPIC: Open the Snappic app of the iPhone.

- 1. Open the event profile - Select Accessories - Volume Buttons - Done

2. Configure Camera - GoPro Camera WIRED
3. Start Photo Booth

D. RECOMMENDED SETTINGS:

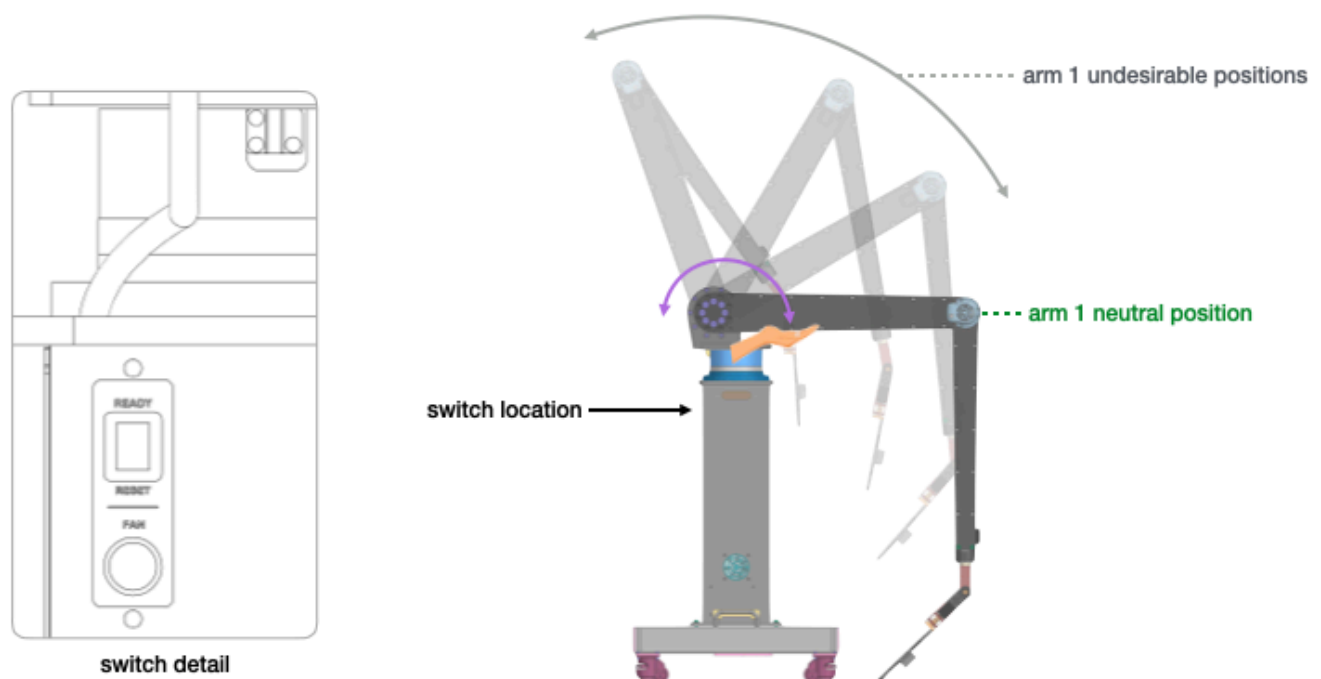
1. Drag down screen on GoPro and swipe right to show default settings
 - a. Video Mode: Highest
 - b. Controls: Pro
2. GoPro camera main screen should show default settings;
 - a. 4X, L, Stabilization: on
 - b. Standard: 1080/240/L
3. Open Snappic on iPhone, or other control device:
 - a. Select "Video" and confirm settings are:
 - i. Preset: Standard
 - ii. Resolution: 1080
 - iii. Frame Rate: 240fps
 - iv. ISO Min & Mx: Auto
 - v. Color Profile: Natural
 - vi. Sharpness: Medium
 - vii. Max Lens Mode: Off
 - viii. Digital Lens: Linear/Max Super View
 - ix. Anti-Flicker: 60Hz
 - x. Bitrate: High
 - b. Select "Slowmo" tab and confirm the settings are the same as above.

APPENDIX D: Additional Features

SHOULDER BRAKE:

The intended position for the Glambot® to be turned off in for assembly/disassembly is the 'OFF/Extended' position (see Step 20). However, if power is lost when not in this position, there is an integrated tool that will allow manipulation of the arm back to the neutral position such that it may be restarted.

1. First, unplug the PC power brick from the power strip in the back of the BASE.
2. While supporting the arm, toggle the switch on the back of the tower from 'Ready' to 'Reset'. This will free the joint for movement and allow for movement to the neutral position.



3. Once at the neutral position, toggle the switch back to the 'Ready' position.

Note: the Glambot® will not operate with the switch in the 'Reset' position. The arm will fall to the ground and there is risk for damage if started with the switch in the 'Reset' position. Double check that the switch is in the 'Ready' position.

4. Re-plug the PC power brick and restart the system.