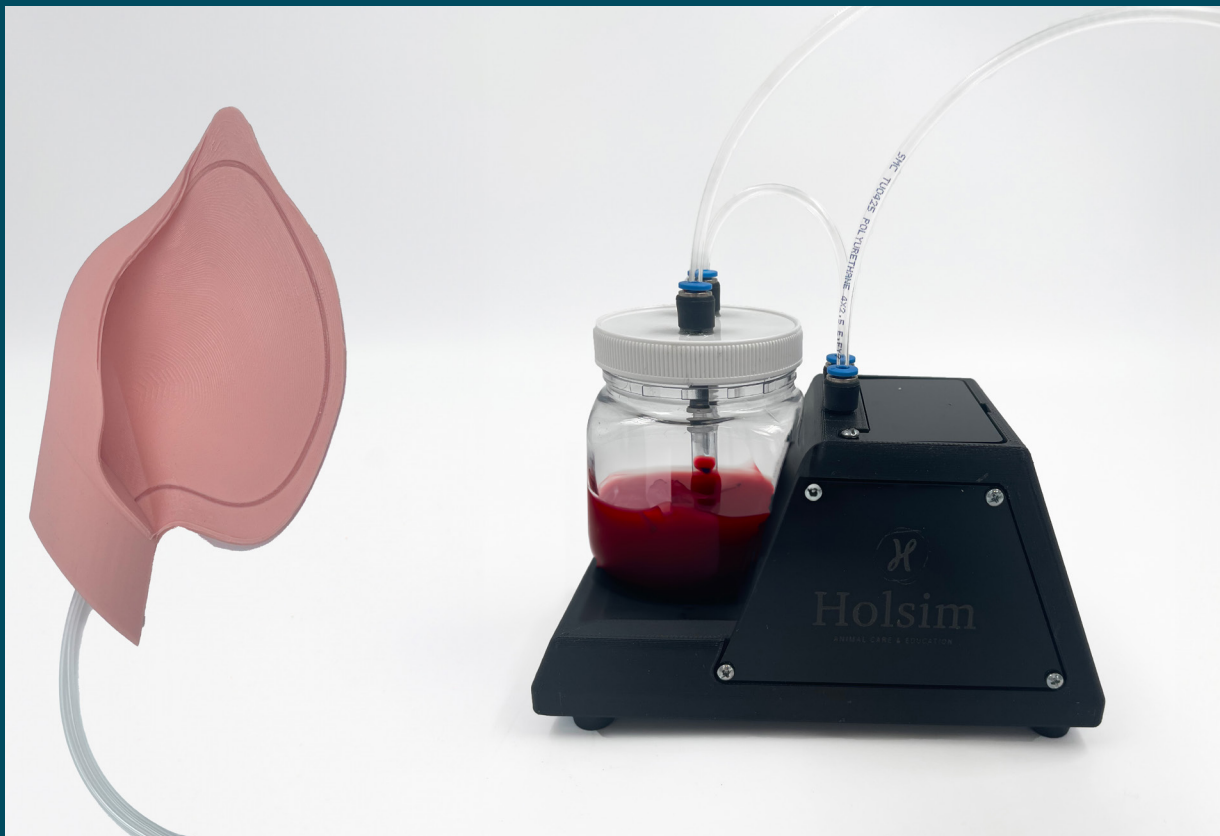


# USER MANUAL



Set up and operation instructions of  
the Holsim Blood Sampling Ear Model.



## Porcine Blood Sampling Ear Model – Desk Top

Revision A:  
Porcine Ear Blood  
Sampling - Desk Top

Product SKU:  
P400-K100

Last Updated:  
25 September 2023



# Part List

## Equipment Required:

- Desk or Table
- Appropriate Needle for Injection – We recommend using a 1", 20 gauge needle.
- Holsim Blood Pump
- Holsim Artificial Blood

All other operational equipment required is to be provided by the user.

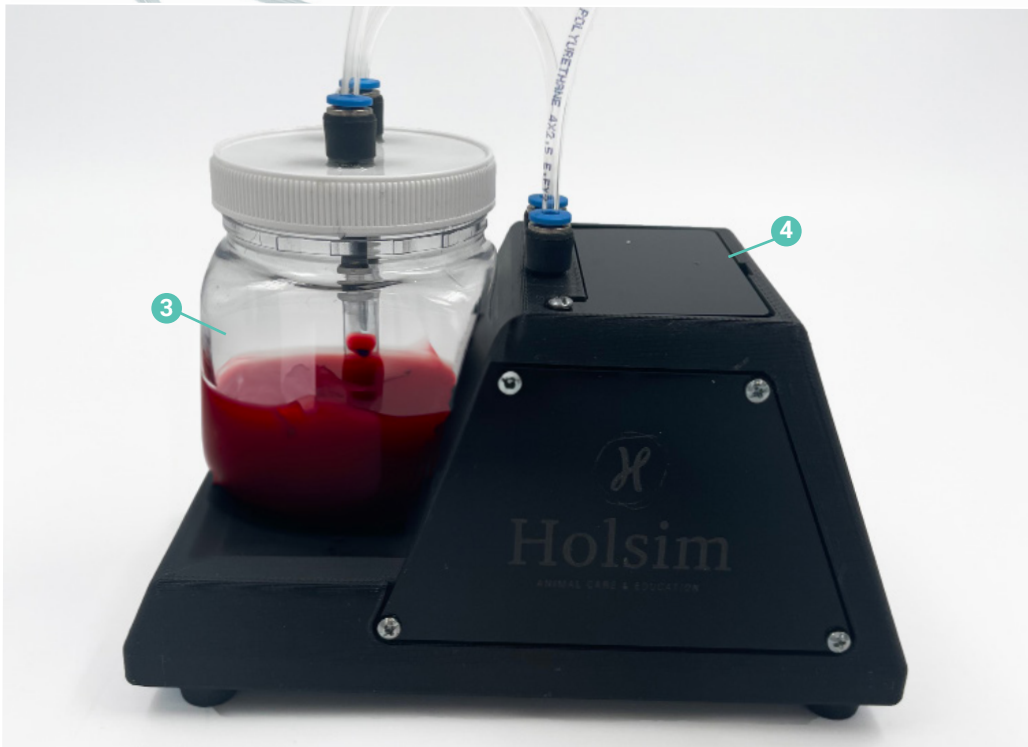
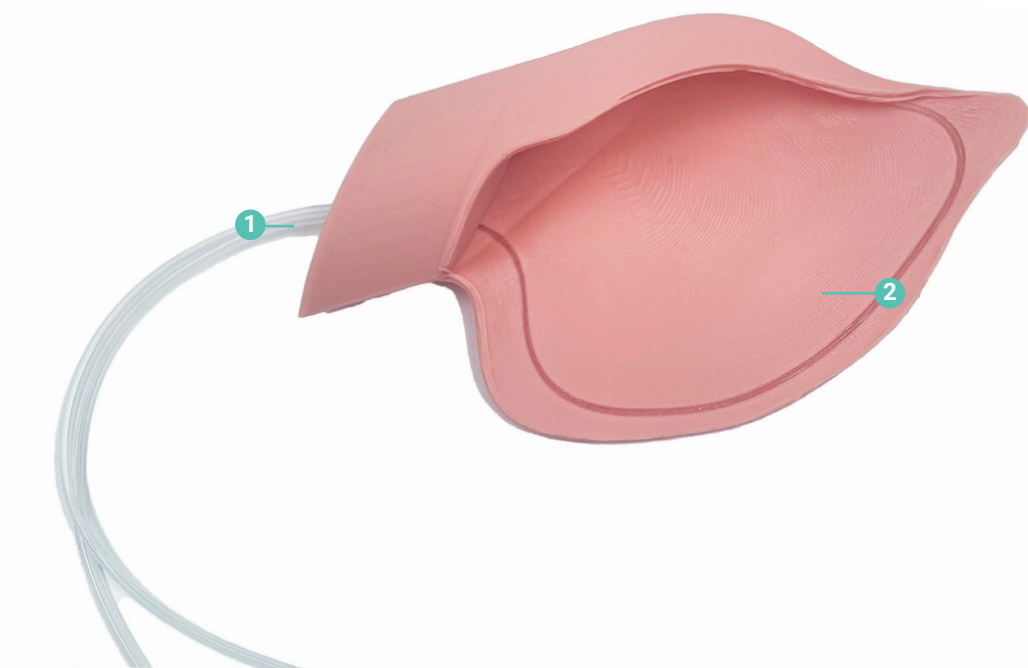
## Blood Sampling Ear Set Up:

1. Blood pump connectors
2. Ear showing auricular vein
3. Holsim artificial blood
4. Holsim blood pump

For all parts or repairs, please contact holsim through our website [www.holsim.co.nz](http://www.holsim.co.nz)



# The Parts





# The Ear

## 1 STEP ONE

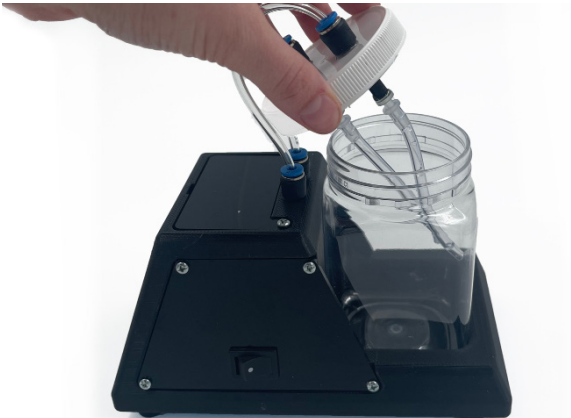
### Connect to blood pump

- Connect the Holsim Blood Pump tubing to Ear using barbed connectors. Note it does not matter which tube connects with which connectors.





# The Set up



## 1 STEP ONE

### Set up the blood pump

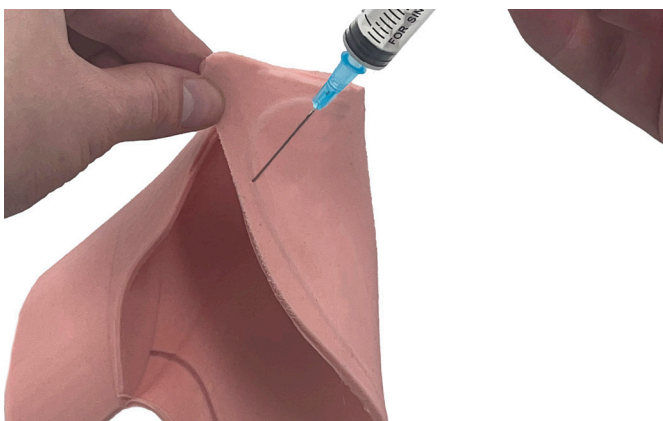
- Unscrew the lid and pour the Holsim Artificial Blood into the Holsim Blood Pump jar with tubing.
- Replace lid and tighten



## 2 STEP TWO

### Switch pump on

- Switch the blood pump on.
- The blood should slowly pulse through the tubing, into the auricular vein and back round into the jar.



## 3 STEP THREE

### Insert needle at 25 degrees

- Stroke the outside of the ear to dilate the vessels in the ear and make the vein raise.
- Palpate the vein and fold the ear back on itself.
- Insert the needle on the back of the ear at 25 degrees to the skin.



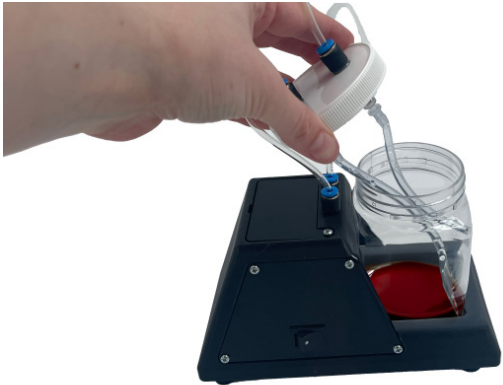
# The Clean Up



## 1 STEP ONE

### Undo jar lid

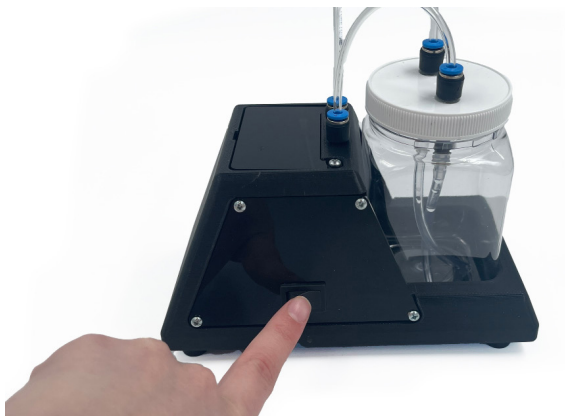
- Once the blood sample has been obtained, undo the jar lid with the pump connectors on it and hold the tubes above the blood in the jar.



## 2 STEP TWO

### Drain tubing

- With the jar tubing out of the blood, the pump will pulse the remaining blood in the tubes into the jar without sucking any more blood up.



## 3 STEP THREE

### Turn pump off

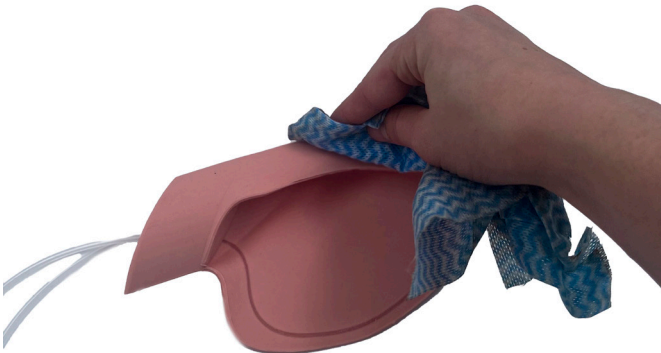
- Once all the blood has drained from the tubing switch the pump off.



#### 4 STEP FOUR

##### Flush tubing with water

- It is best to flush the tubing out with water to have them clean before storing the pump.
- You can do this by replacing the jar of blood with one of water. turn the pump on to flush the tubing and vein.



#### 5 STEP FIVE

##### Clean ear and store

- Wipe any blood from the ear surface and allow tubing to dry.
- Store ear and blood pump in a clean airtight container.



# Holsim

34D Somerset Street,  07 839 5018  
Hamilton, New Zealand  [info@holsim.co.nz](mailto:info@holsim.co.nz)