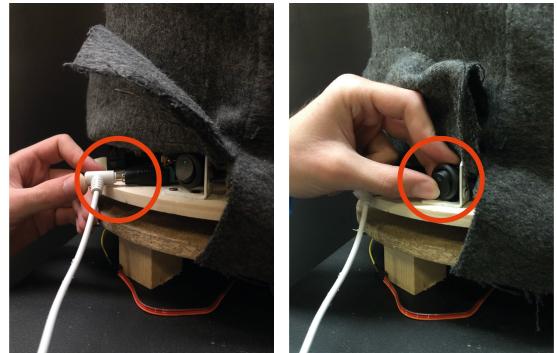


Instruction Manual

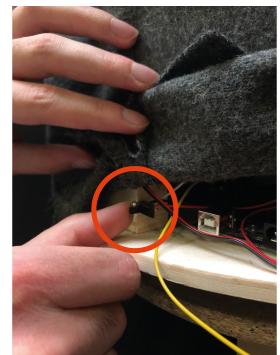
Switch on/off:

Lift the lower flap of the sweatshirt to gain access to the interior. Attach the power supply in the plug. Press the black power button next to the power supply. Reposition the sweatshirt. To switch off, press the button again and disconnect the power supply.



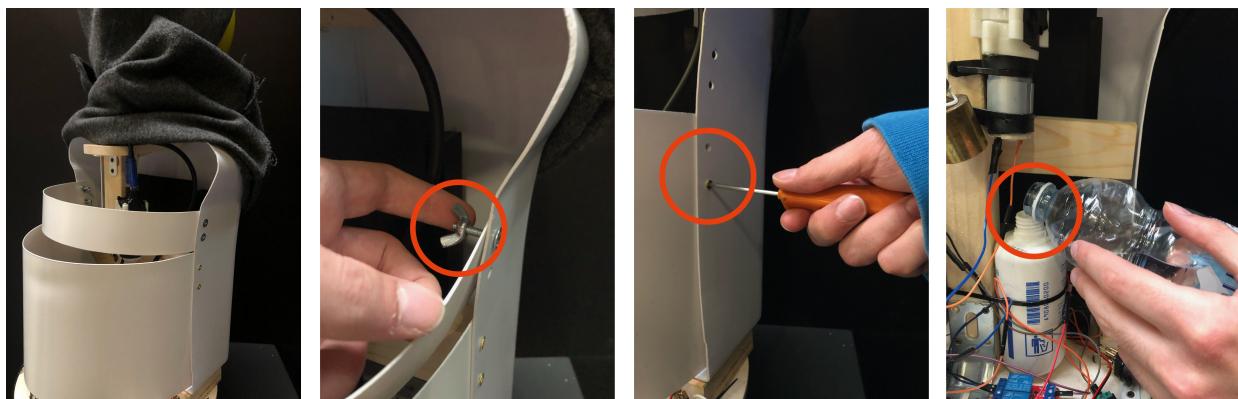
Change modality inside/outside:

Lift the lower flap of the sweatshirt to gain access to the interior. move the switch to the right (indoor mode) or left (outdoor mode). Once switched on, the robot will automatically take its initial position and activate the correct proximity sensors (rear for the indoor situation and front for the outdoor situation).



Refill water:

Raise the sweatshirt. Remove the rear shells by unscrewing them from the right side only: for the upper strip you can simply unscrew the small butterfly behind the screw with your fingers. For the larger band, remove the two screws with a screwdriver. Remove the cap from the empty container, fill with water and close tightly. Replace everything in its original position. Repeat the operation each time the water jet coming out of the pump is weak and dispersive.



Change picture:

To change the image displayed by the robot, you have to lift the hoodie and remove the front shell with a screwdriver. Then remove the current image by detaching it from the side guides

and from the central support. Insert the new image in the side guides and attach it to the central support. Replace the casing.

Possible issues and correspondent maintenance:

- There can be some error in reading the signal from the switch that changes the modality between inside and outside the exhibition and in interpreting such state, in particular in case of turning the robot on while the switch is in the HIGH state(the one connected to red cable) , which corresponds to the "outside the exhibition" mode. To make the robot work in the best way set the mode switch to the "inside the exhibition" mode, which corresponds to the LOW level of the switch (the one connected to the black cable), than turn the robot on, it will set itself in the starting position, it will rotate the basement motor at 0 degrees and make the head look down, in this situation the robot should be placed facing the wall, it will start working when someone passes behind it and will be noticed by the sonar sensor in the back.

Once the robot is on, and waiting to be activated, if the switch button is pressed and set to the HIGH state(red cable), it will pass to the "outside the exhibition" mode, so it will rotate the body such that now it will face the people passing by, and will be activated by the sonar sensor in the front.

After the robot is correctly turned on the modality switch should work correctly.

- If the sliding mechanism of the picture stops working, the reason is that the nut that keeps the motor attached to the 3D printed gear has loosened, the nut should then be tightened with a proper wrench.

To make the robot work properly the image should start from the lowest position, if it gets stuck in the uppest part, it can be placed down by playing the code named "slidingDown.ino" found in the Drive folder or in the GitHub repo, that will put the sliding picture down in its original position after being activated by the sonar sensor in the back;

- It is possible that the motor that turns the basement doesn't works properly, and the firmware is not able to set the robot in the right orientation, in this case the motor can be unstacked by playing the code named "basementTest.ino" that, after being activated by the sonar sensor in the back, will make the robot do a full rotation from 0 to 180 degrees and than take it back to 0, this will reset the motor such that now it should be ready to work correctly;
- At the first running of the robot, when sneezing the water, it might not have enough time to reach the mouth and so it might not work as expected, this is due to the lack of water in the pipes, from the second time the tube will be partially filled and water will take less time to reach the exit, now the sneezing mechanism should work in the correct way.