

P-HUG

User Instructions and components



Giffy

User instructions

1 Put Giffy on a surface



2 Install the App and then fill out the SSID and password of your network

Install the P-Hug application from our Github repository (<https://github.com/AlessandroBarbiero/Robotics-and-Design-project/App>). Insert the name of the network and the password. Set the Wifi network, We recommend using the hotspot of your phone.

3 Connect the NFC

There is an NFC installed on the head of Giffy. Hoover your smartphone close to Giffy's head, after connecting with the NFC Giffy will make sure that you are connected with the Jacket, you will hear a message that says "attempting to connect with the jacket". You will listen to a sound that says "P-Hug is connected"

Make sure that Giffy and the jacket are connected to the same network



4 Turn on the power button back of Giffy's head

You'll find a small switch button on the left-back side of Giffy. As soon as you turn the switch on you'll hear a sound that confirms that Giffy is trying to connect to a network

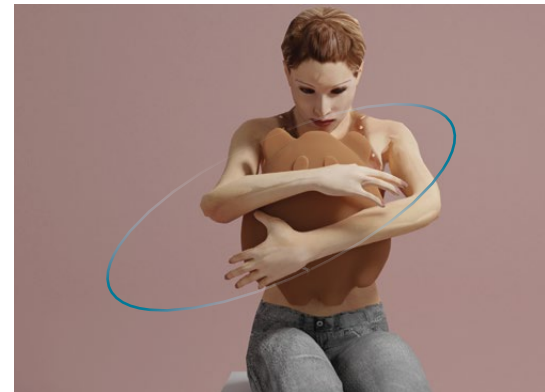
5 Caress time

After you are connected to the jacket you can proceed to the caresses. for the cares application move your hands gently from the head of Giffy down wards. Giffy moves it's ears up and down. It will also convey cute sounds that will make your experience more interesting.



6 Hug time

An additional message that you can transfer to your partner is a hugg sensation. Hug Giffy around its belly. You'll see Giffy's ears moving up and down and it will convey a kiss sound.



7 Shake Giffy!

An additional message that you can transfer to your partner is a shaking sensation. Shake Giffy, you will listen Giffy making funny sounds.



Jacket



User instructions

1 Wear the jacket

2 Tightening the strap

The jacket has a strap so that you can tighten it around you. Adjust it according to your size and your comfort.

3 Powering up the jacket

You will find a red button on the left side of the Jacket. Turn it on in order to be connected with Giffy.



4 Install the App and then fill out the SSID and password of your network

Install the serial bluetooth Terminal App that is available on Playstore. First open your bluetooth phone settings and pair HC-05 device. If a pin is asked insert "1234". Then open the app, click on the left top menu and go into Devices. Select "HC-05" device. The Jacket will print the instruction on the app. We recommend to use the hotspot of your smartphone.



- If you don't have an Android smartphone you can download Bluetooth Serial Terminal from Microsoft Store. You should pair the device and then you can find it in the top left part and click "Connect". Be sure to set "transmit line entry" to "carriage return and linefeed".

- Make sure that Giffy and the jacket are connected to the same network

5 Connecting to the network and connecting to Giffy

When the jacket is connected it will vibrate 4 times. Two times on the left for the connection to the WiFi Network and two times to the right for the connection to Giffy.

6 The caress sensation

When your partner sends caresses, you will get vibrating somewhere near your shoulders and your back.

7 The hug sensation

You will fill a tightening feeling just above your belly when your partner sends hugs

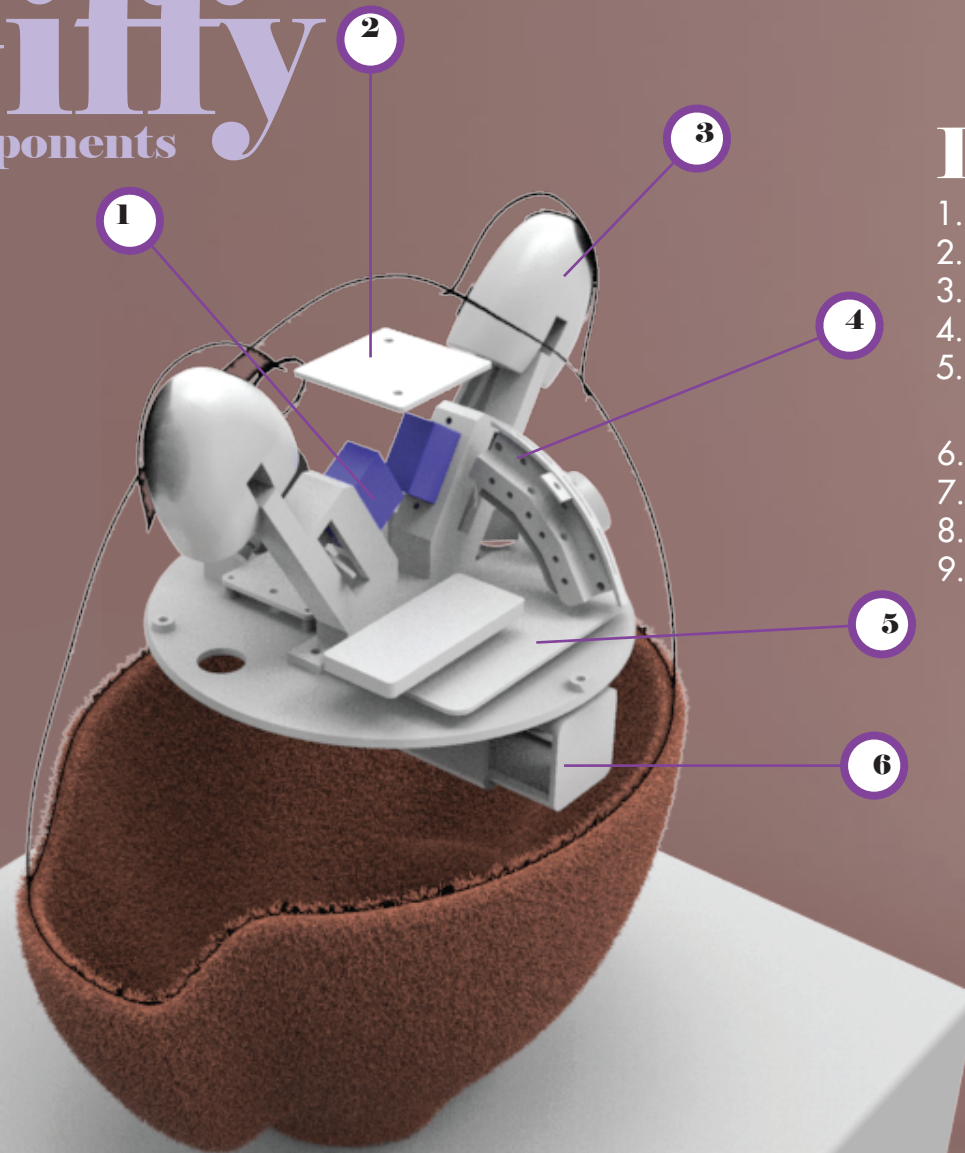
8 Giffy disconnects

When Giffy disconnects the jacket will vibrate two time on the left and than two time on the right



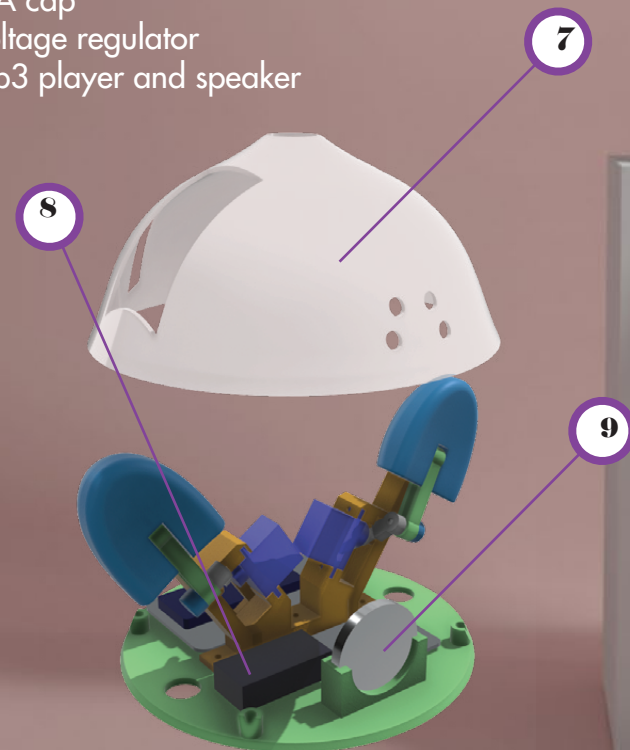
Giffy

Components

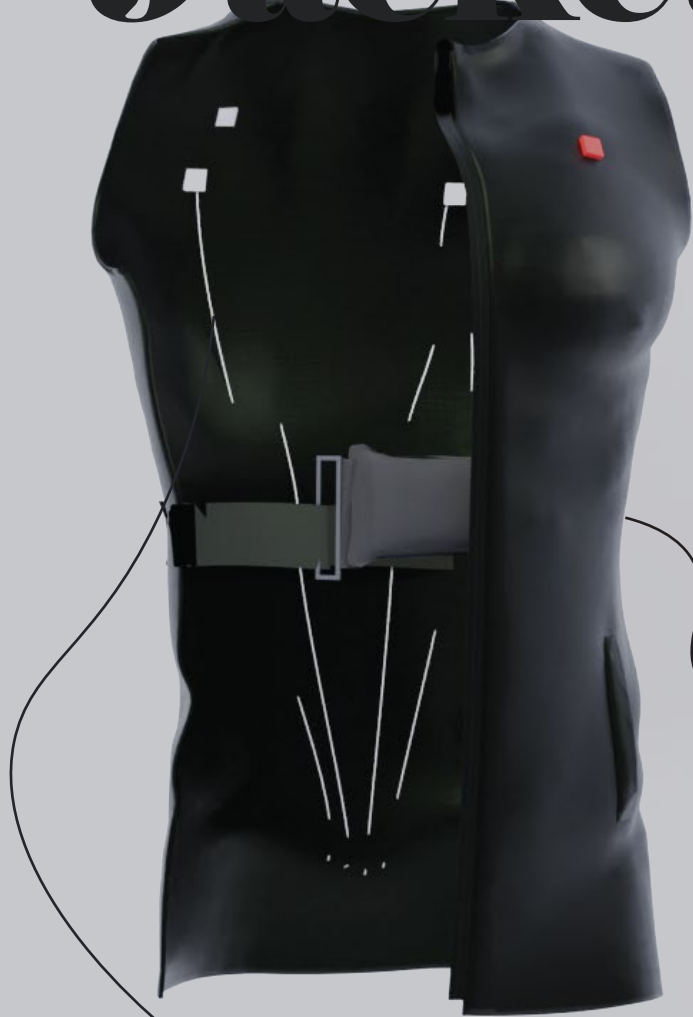


Description

1. Servo Motors
2. NFC tag
3. 3D printed moving ears
4. Connector for the sensors
5. Electrical components soldered on an ElectroCookie
6. Battery pack
7. PLA cap
8. Voltage regulator
9. Mp3 player and speaker



Jacket



Components

Adafruit Feather Huzzah
Motor driver
Raspberry Pi Pico
Vibration motors
Air pump
Battery pack
Voltage regulators
Relay
Bluetooth module

Vibration motors
Air chamber
Power bank

