

# SATISFACTION TERMINAL ASSEMBLY GUIDE



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# RELATED DOCUMENTS

User guide

[Source file directory](#)

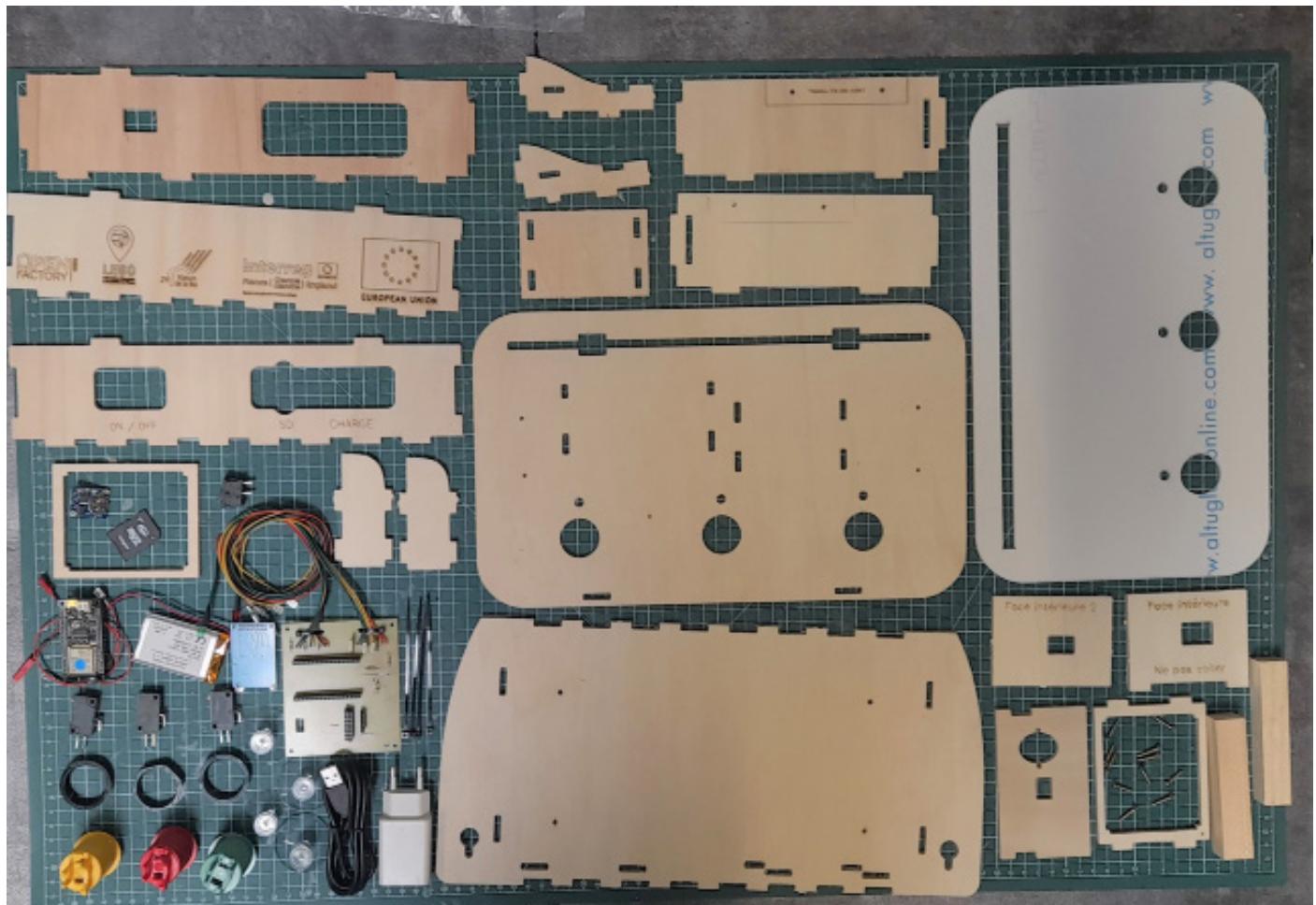
## REQUIRED MATERIAL

Before assembling the terminal, make sure you have all the elements detailed in this section.

Electronic equipment can be found in stores such as Gotronic.

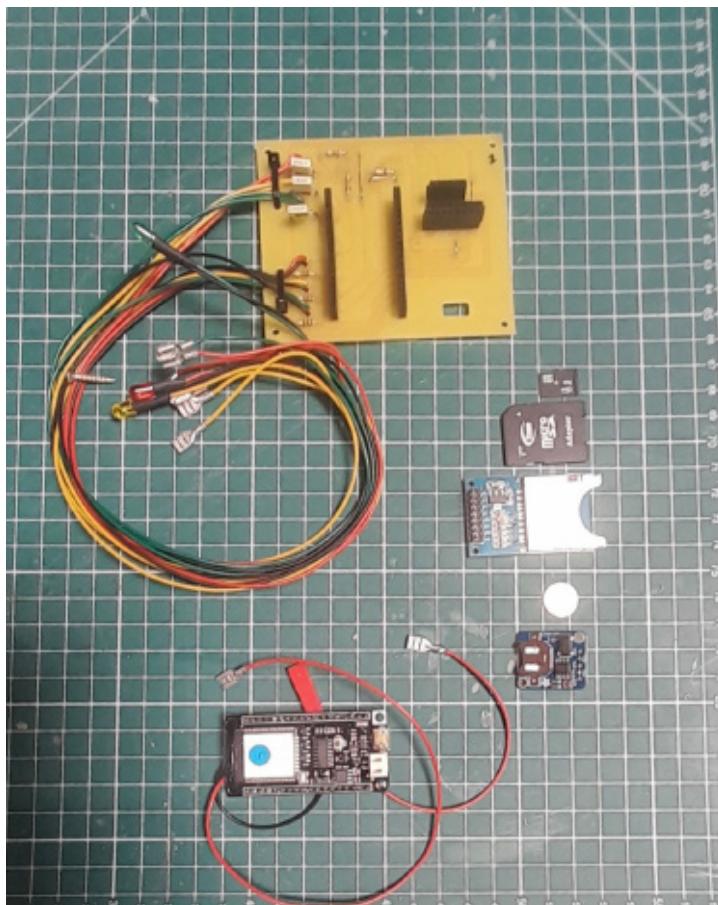
The case parts are machined with a laser cutter or a digital milling machine from 5 mm poplar wood and the front panel is machined from 3 mm white PMMA. Files for the machining are [available here](#) in SVG format.

## OVERVIEW



## DETAIL

- An assembled motherboard including:
  - An electronic card
  - A processor with power cables (red and black)
  - An SD card reader
  - A microSD card and an adapter
  - A real time clock module with a battery



- A green push button (diam. 27.5 mm)



- A yellow push button (diam 27.5 mm)



- A red push button (diam 27.5 mm)



- An R1933 switch



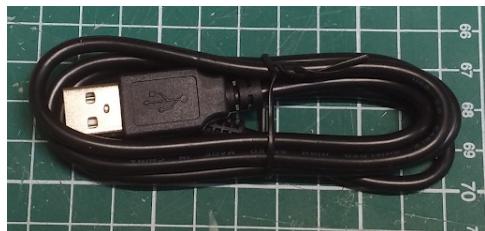
- Four screw-on suction cups



- A set of plates cut in 5 mm poplar (17 pieces)
- Two wooden battens of 20 mm x 20 mm section and 10 cm length
- A pre-cut plate in white PMMA of 3 mm thickness
- A power supply adapter 220 V/5 V-2 A (Warning : this may not be adapted to your country's power sockets)



- A USB cable (USBA to microUSB)



- A 3.7 V/2,000 mAh Lipo battery



- 12 wood screws 3 mm x 12 mm
- 6 plastic clamps
- Wood glue

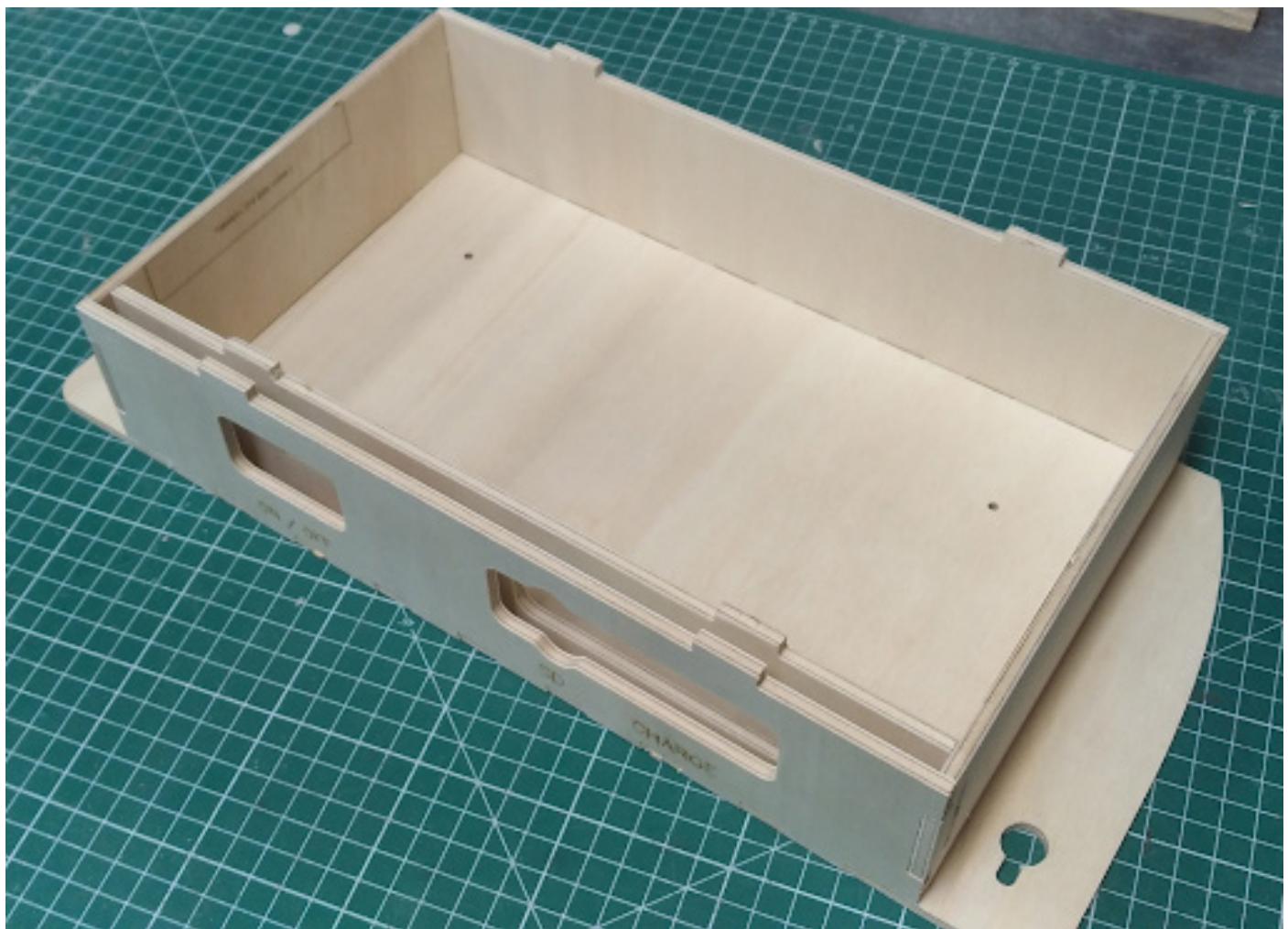
## **WARNING**

Before finally assembling the parts, we recommend that you do a test assembly without glue. This ensures that all parts fit together properly and are in the right direction.

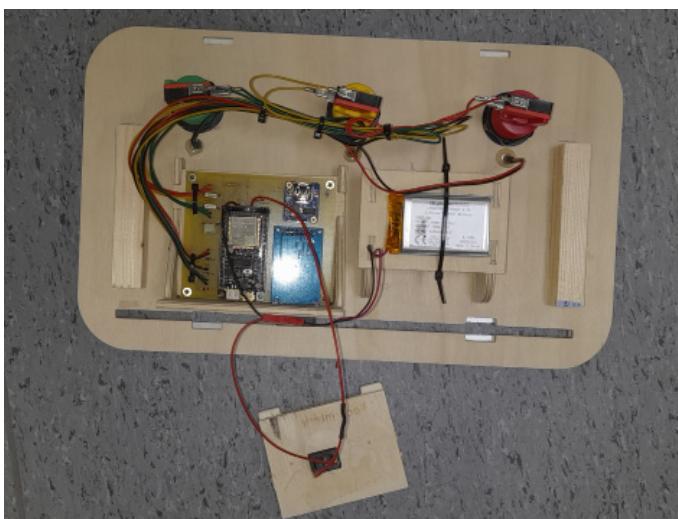


# IDENTIFICATION OF THE DIFFERENT PARTS

CASE

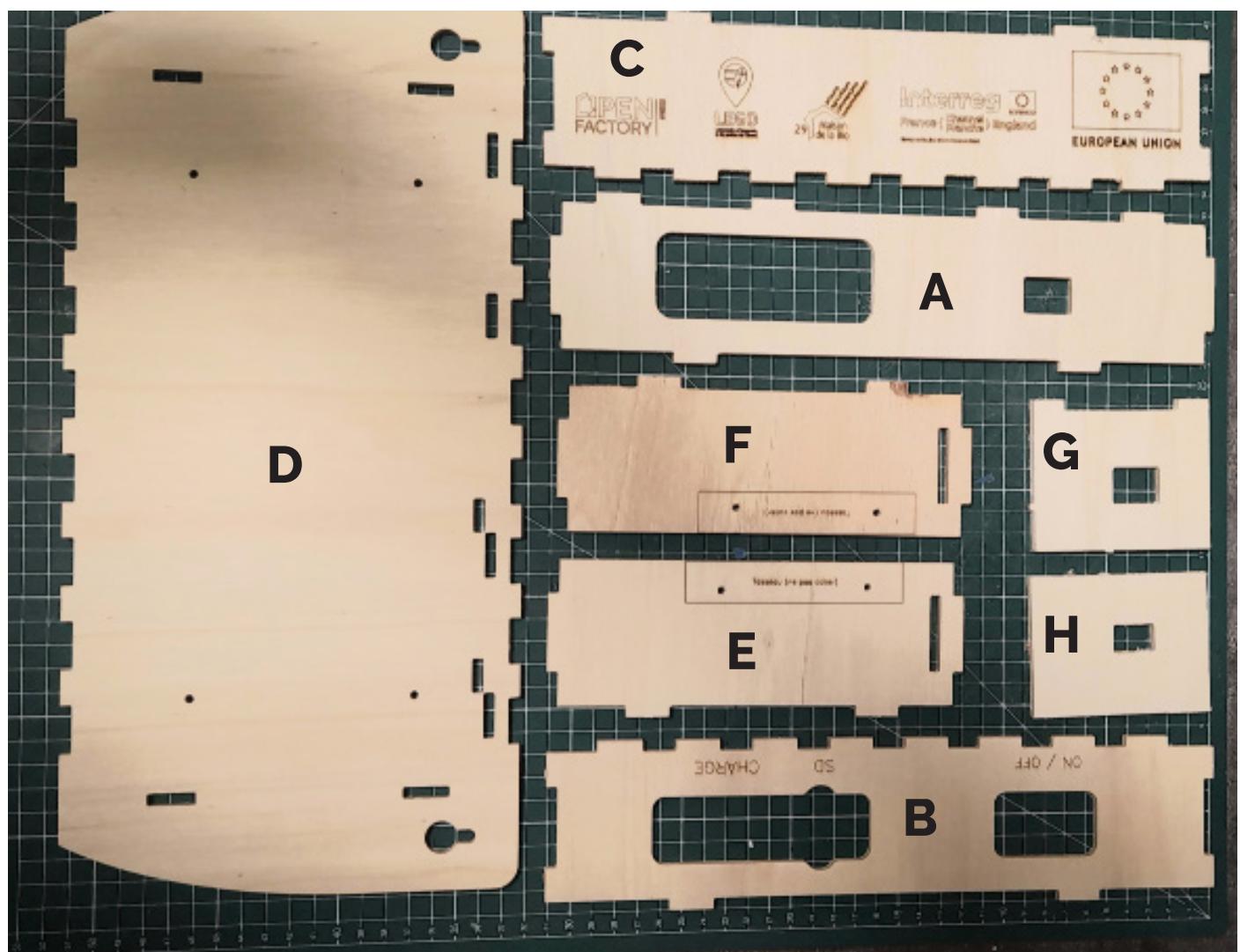


EQUIPPED FRONT PANEL



# CASE ASSEMBLY

## MATERIAL

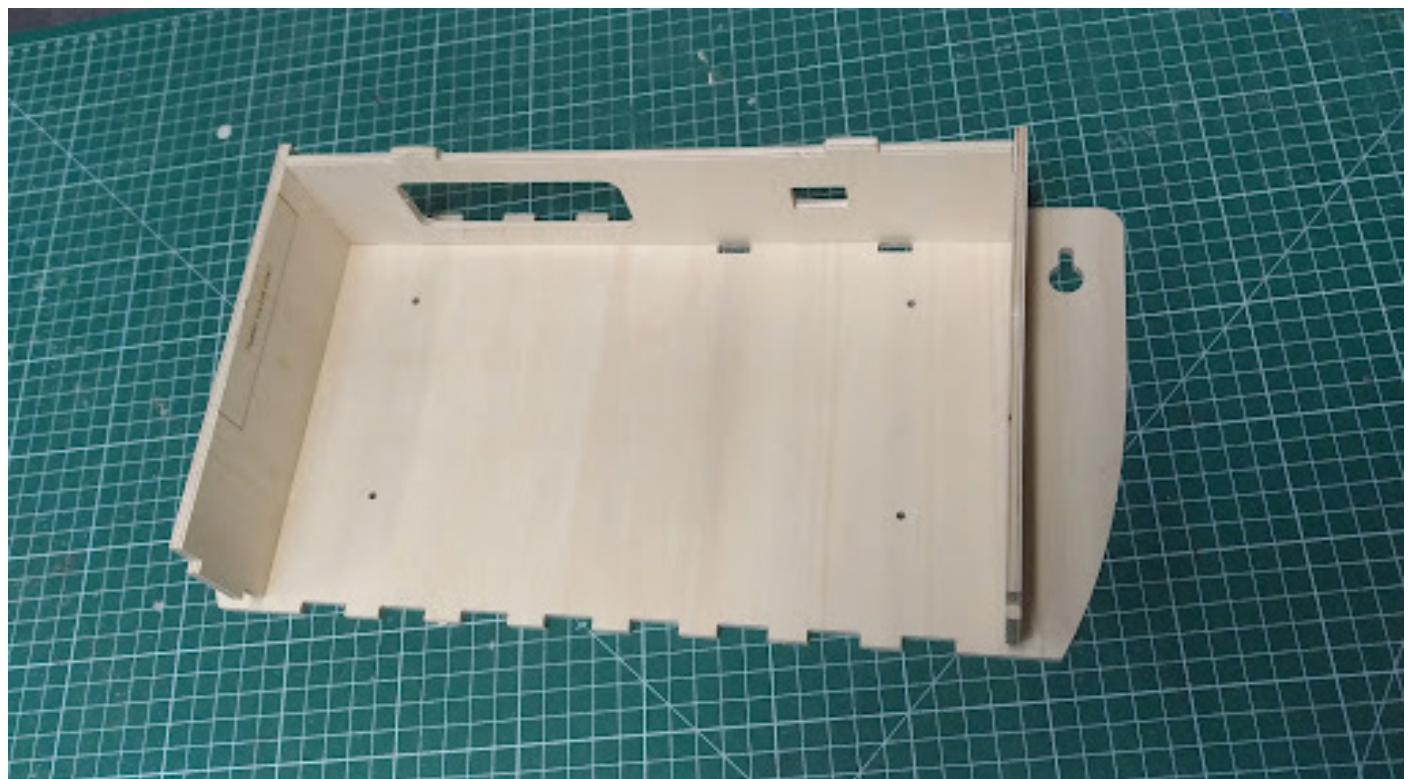


## ASSEMBLY

1 - Glue E and F on A. The markings of E and F must be on the top side and face inside. The 2 tenons of A must be at the top. Check that the markings are placed opposite each other, as shown in the photo.



2 - Glue this set on D.

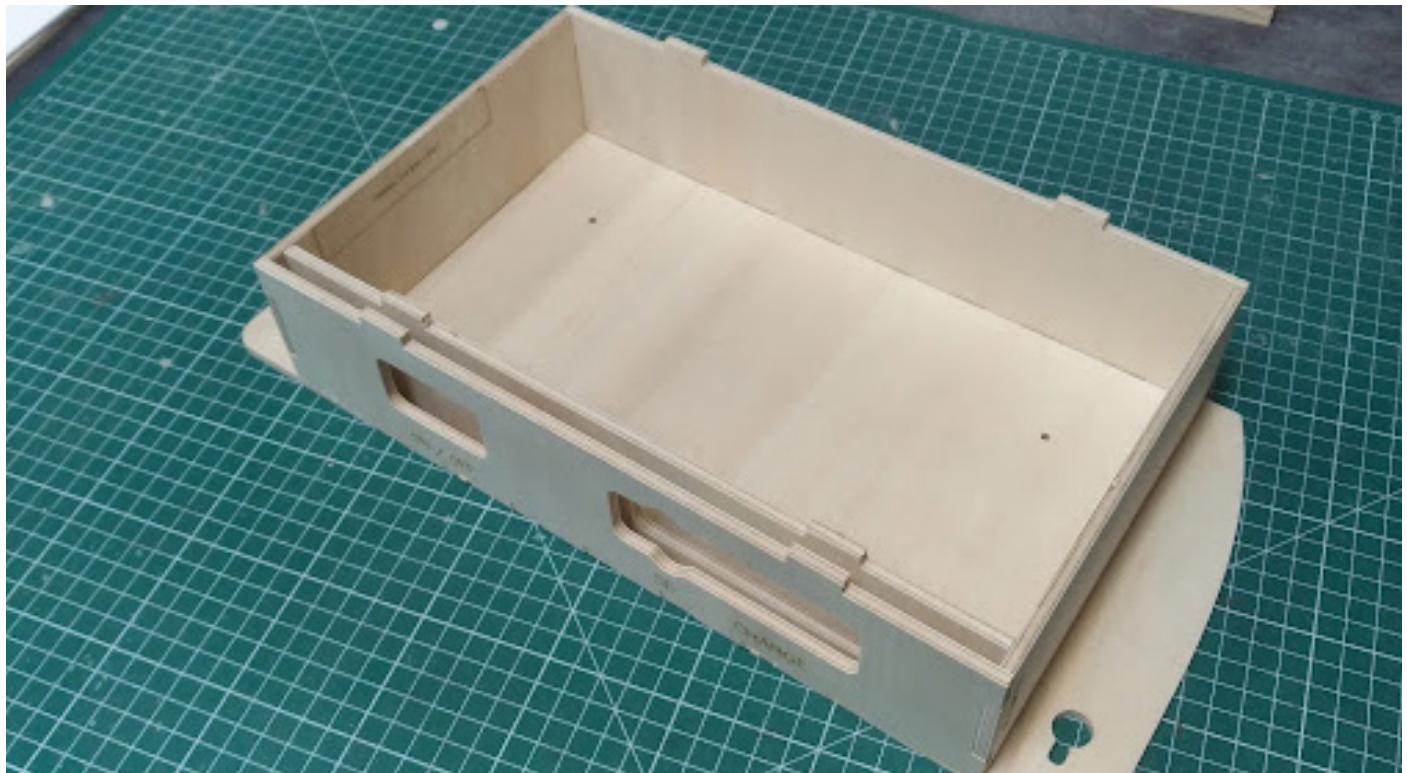


3 - Glue C opposite to A



4 - Turn the box over and glue B in front of A.

To ensure that the spacing between A and B is correct when gluing, insert (between A and B) one of the two back faces.

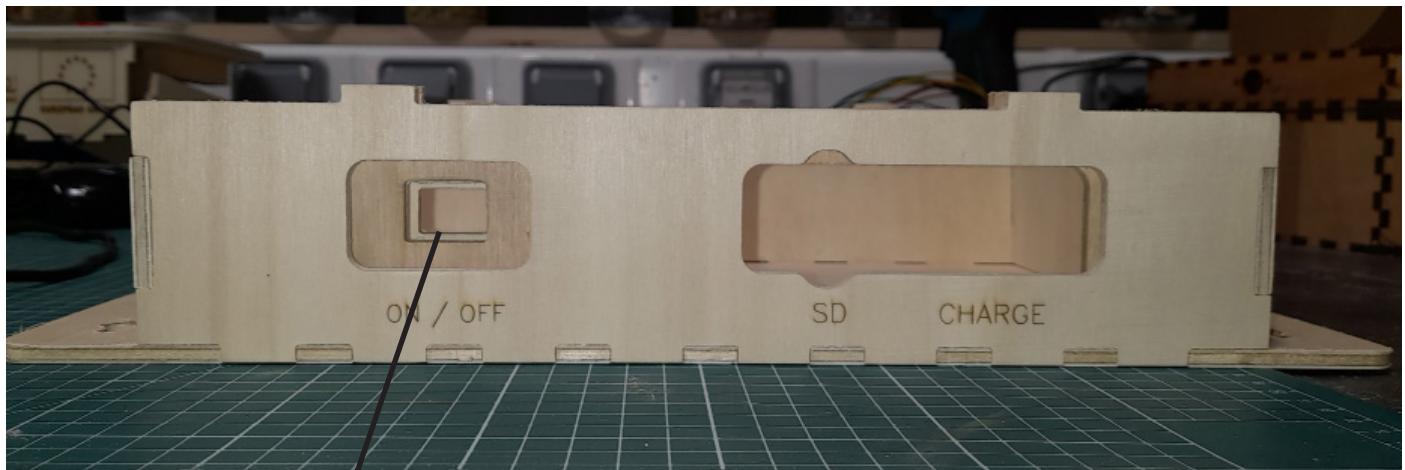


For steps 5 and 6, ignore the markings on G and H.

5 - Insert G into the two notches inside the case. Make sure its window and the window of A are aligned.



6 - Glue H to G, and make sure that the windows are all aligned.

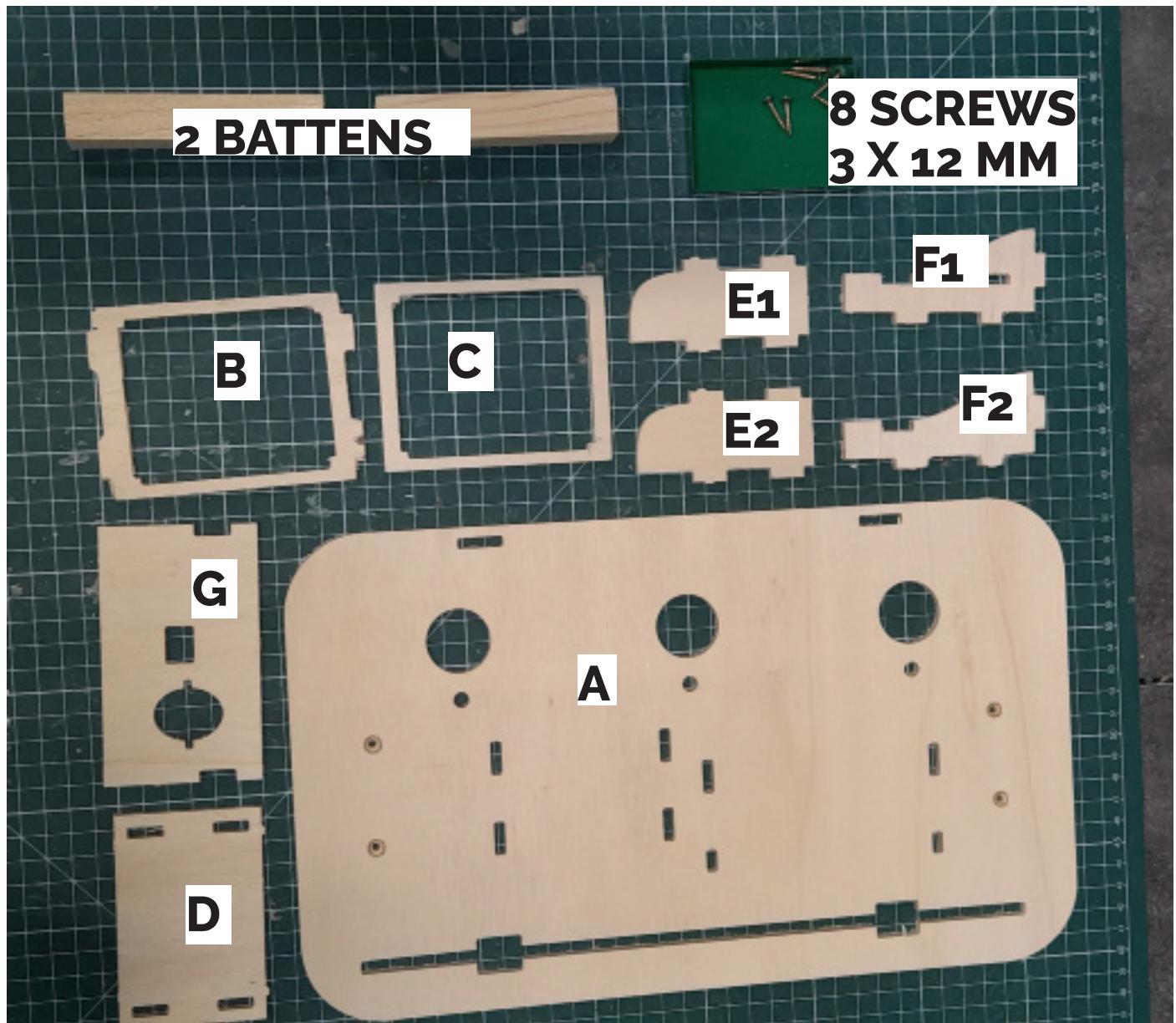


Make sure there is no glue in the area that could block the switch installation.

The case is finished.

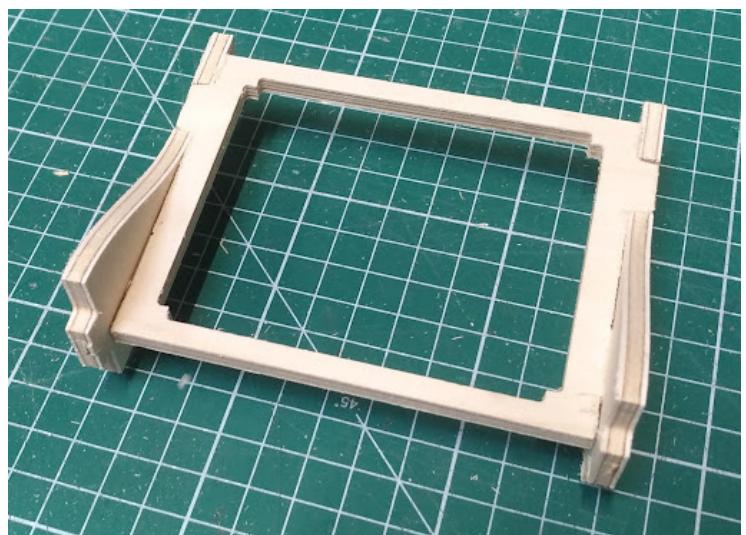
# FRONT PANEL ASSEMBLY

## MATERIAL

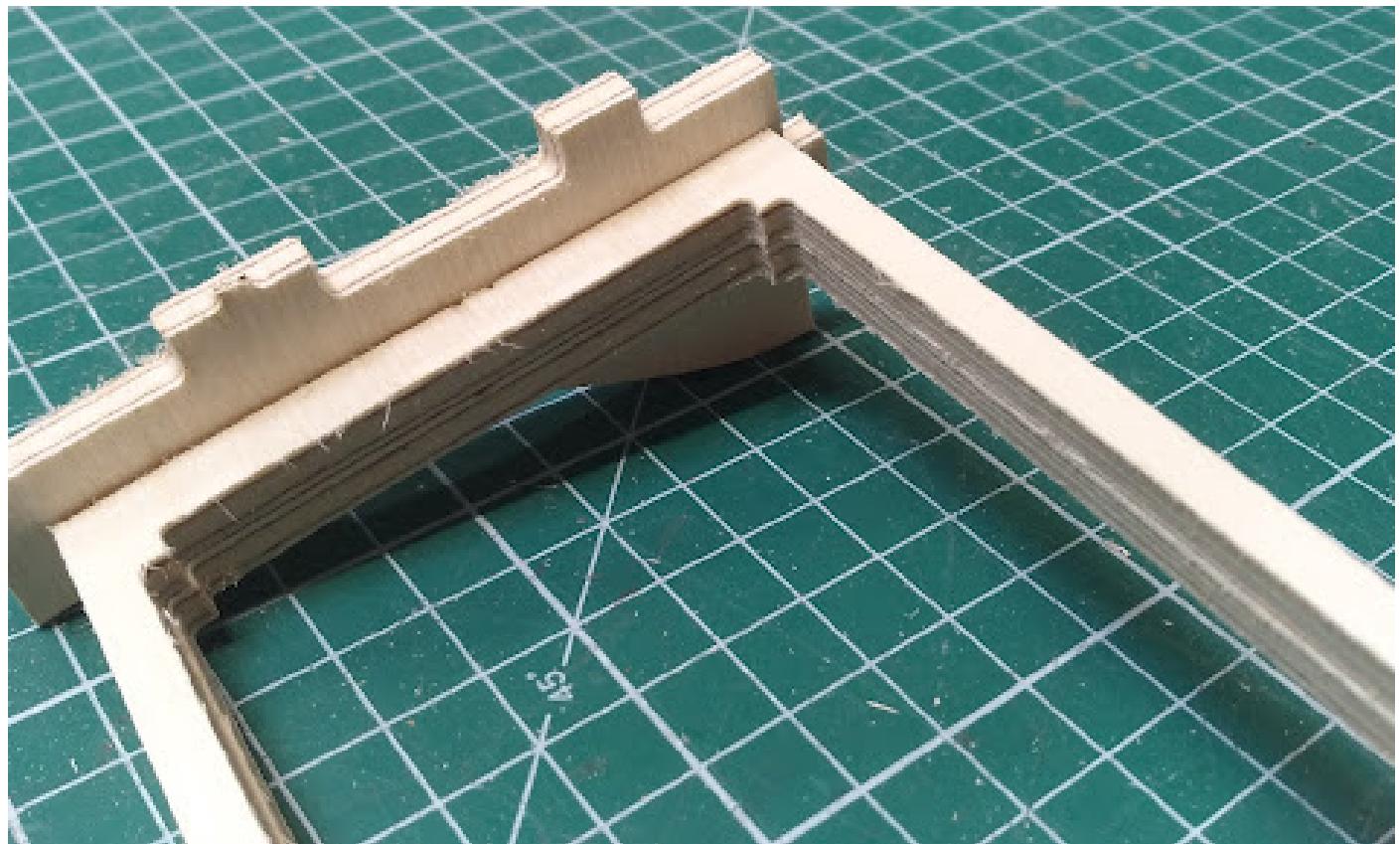


## ASSEMBLY

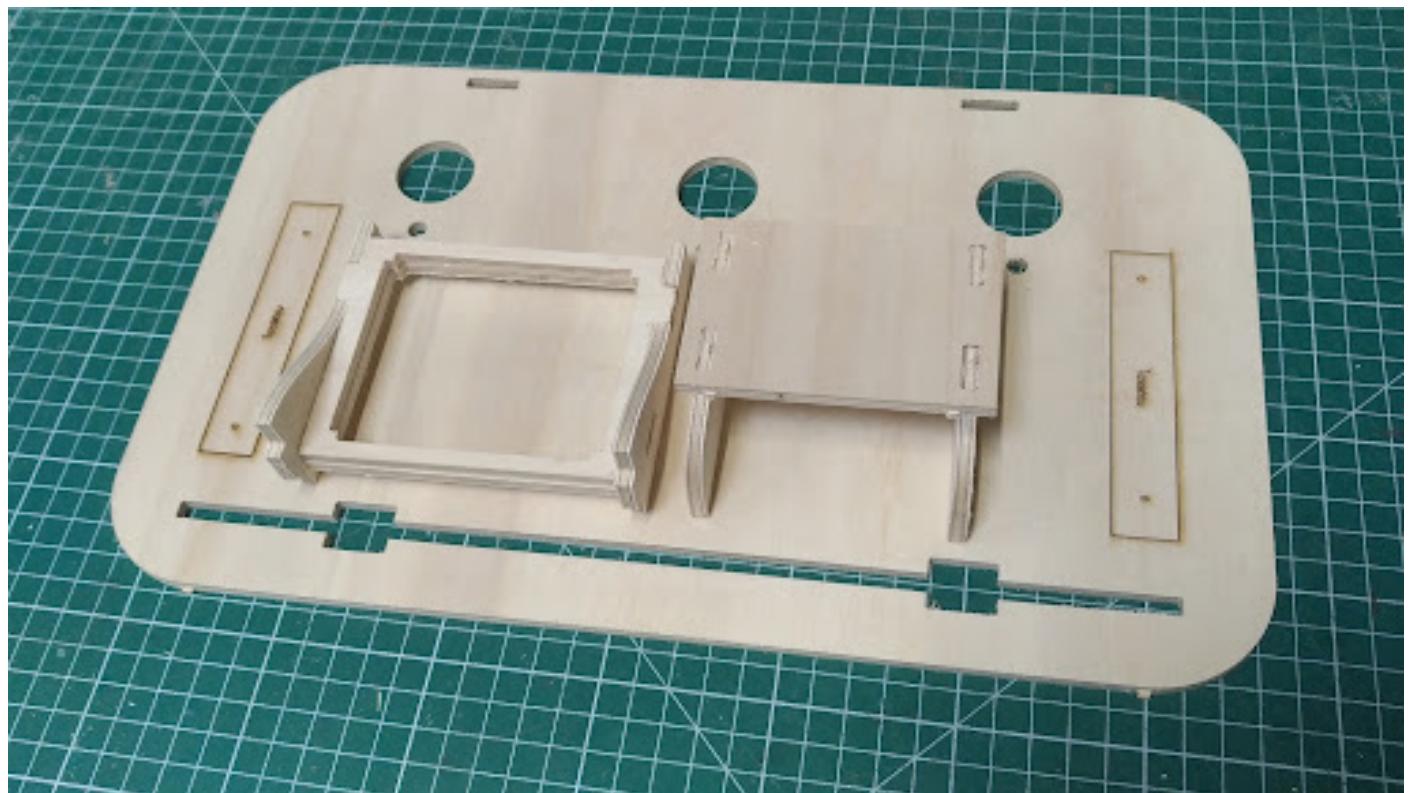
- 1 - Glue D on E1 and E2.
- 2 - Glue B on F1 and F2.



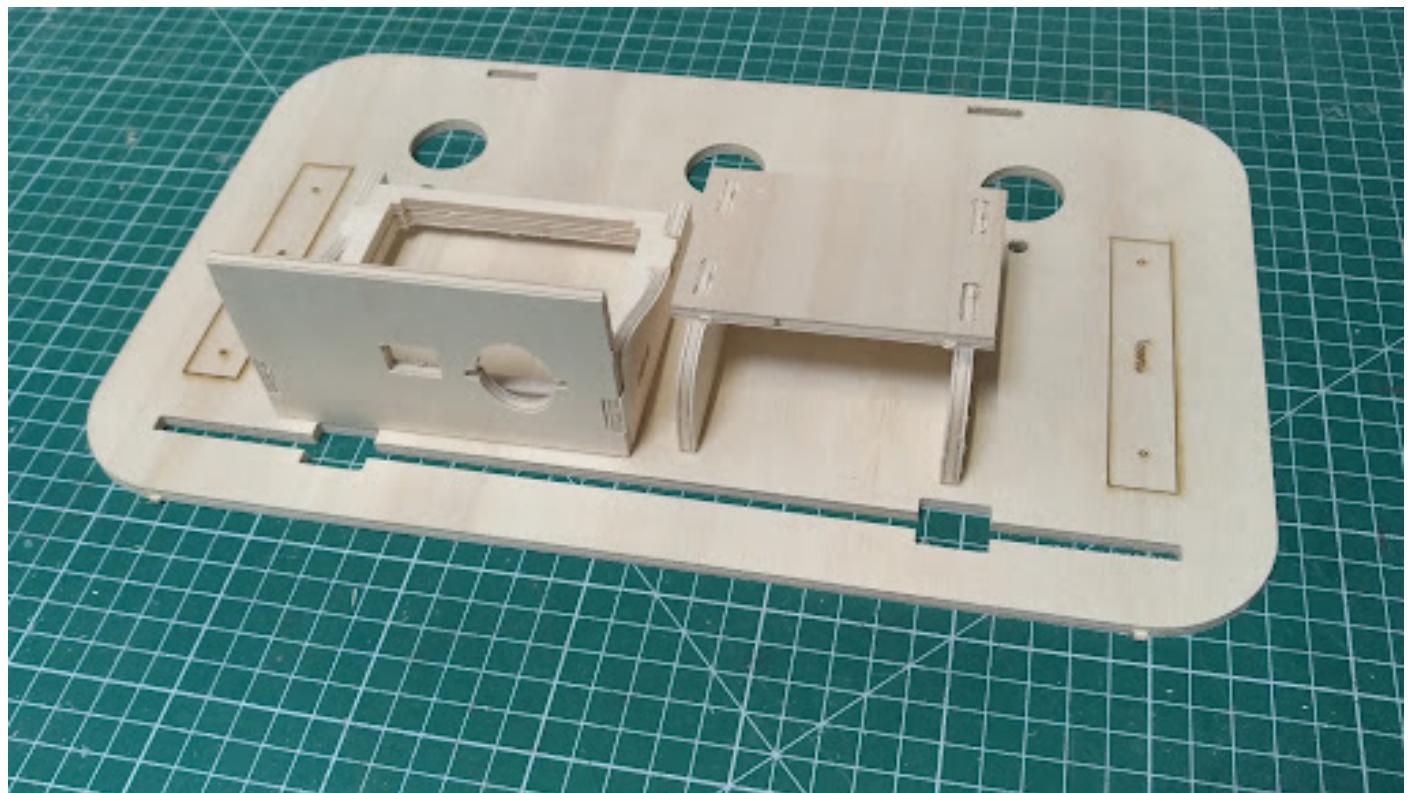
3 - Glue C to B on the side of the tenons of F1 and F2.



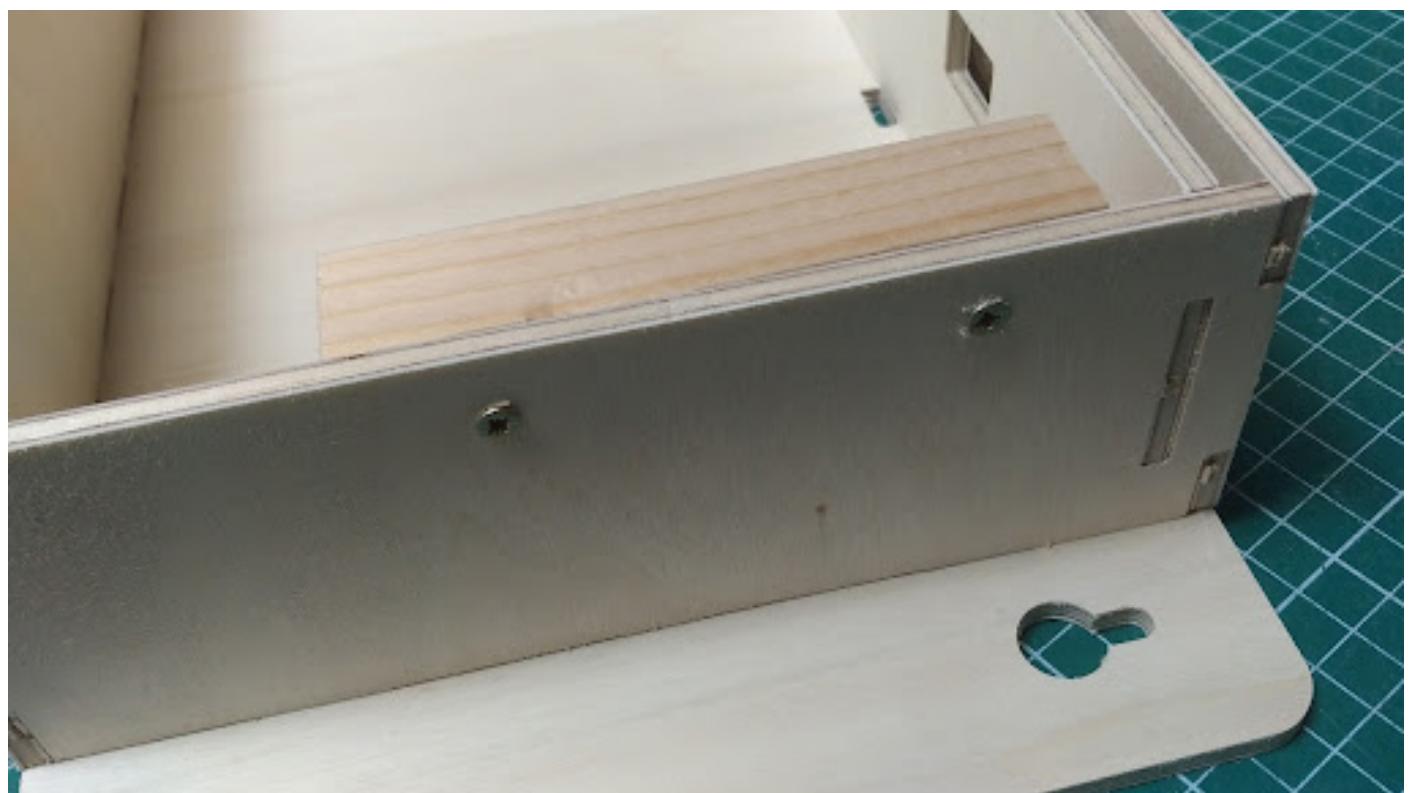
4 - Glue the two sets previously made on A, on the side of the markings.

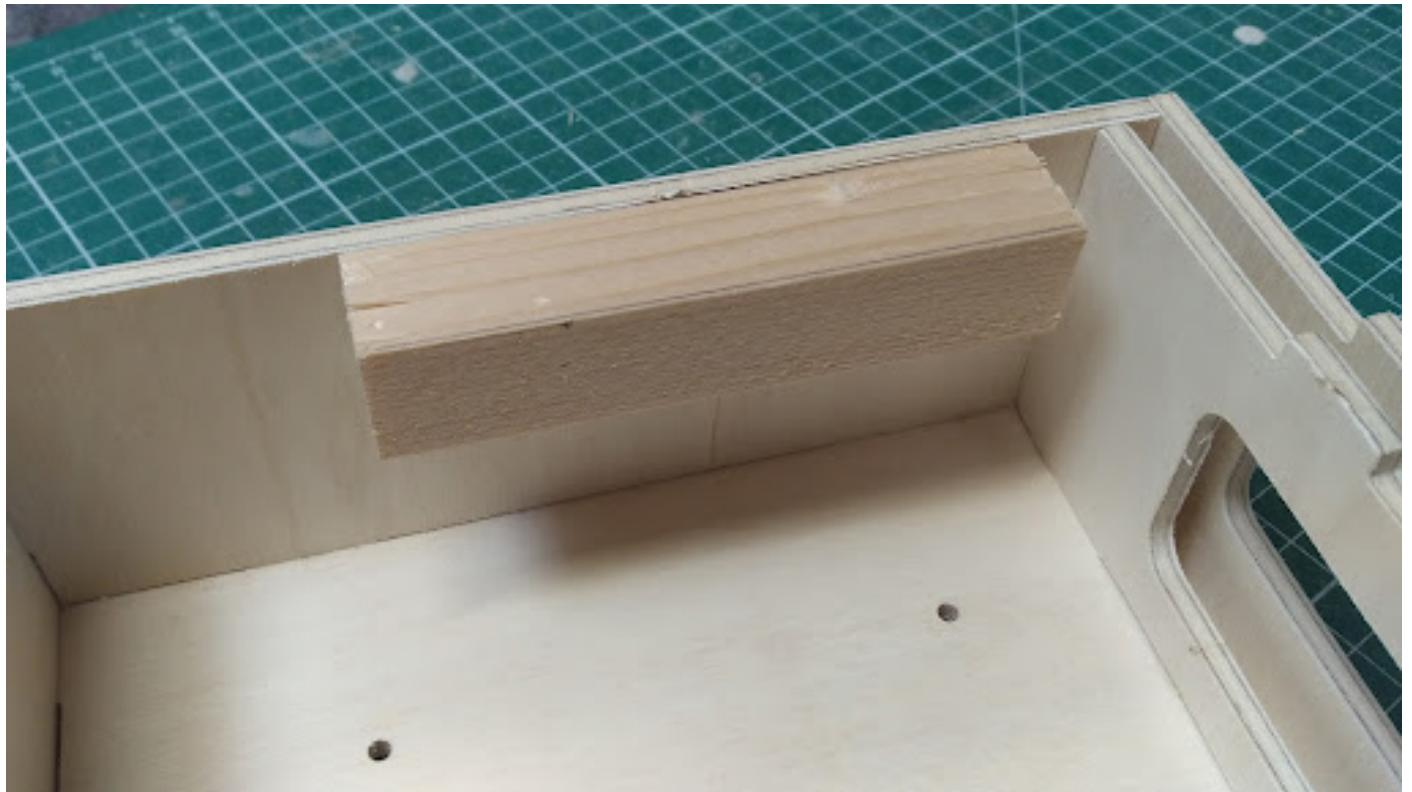


5 - Glue G on the set [B, C, F1, F2].



6 - Take the box and screw the 2 battens on the marked places. Do not use glue.. CAUTION: The top edge of the battens must be aligned with the top edge of the sides of the case. Screw in loosely.

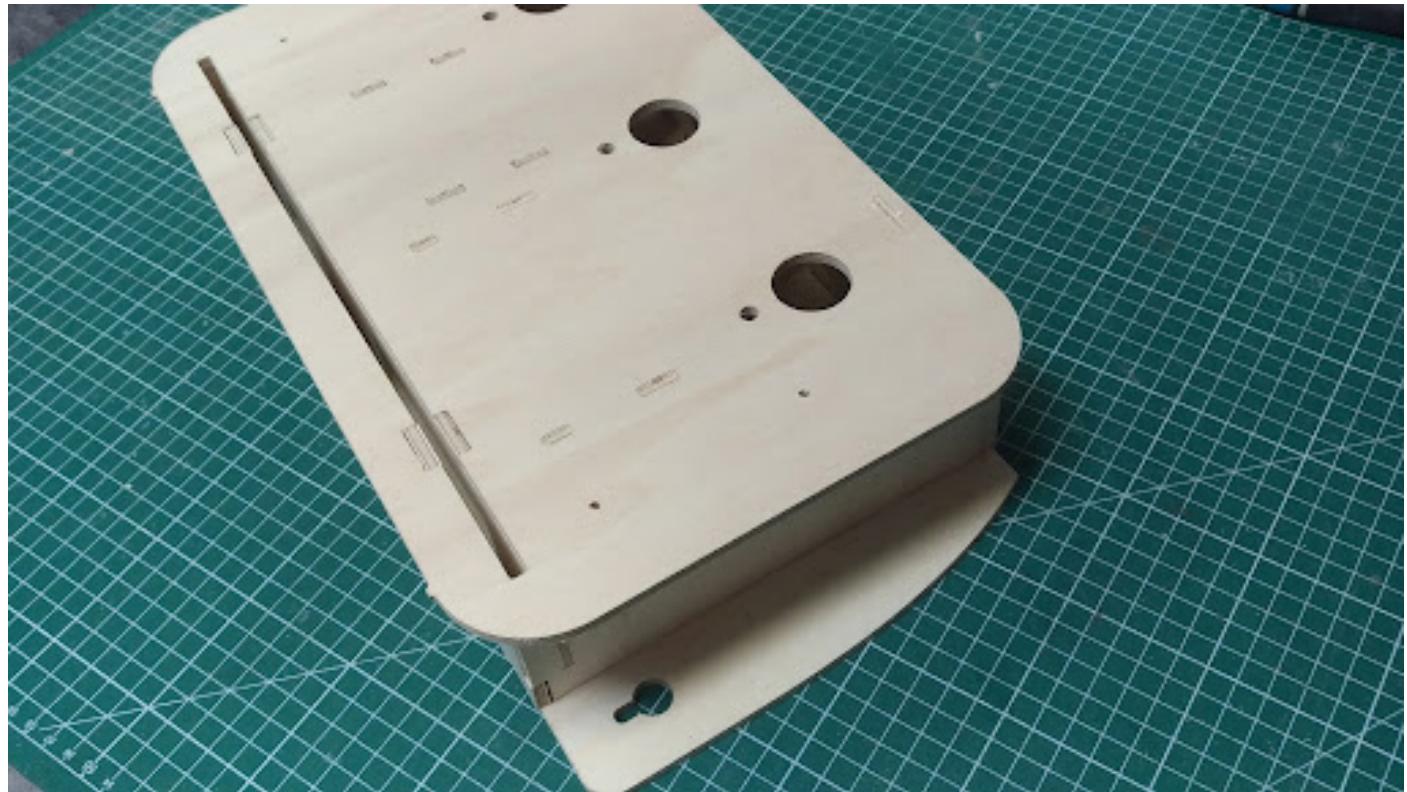




7 - Apply some glue on the top of the cleats.



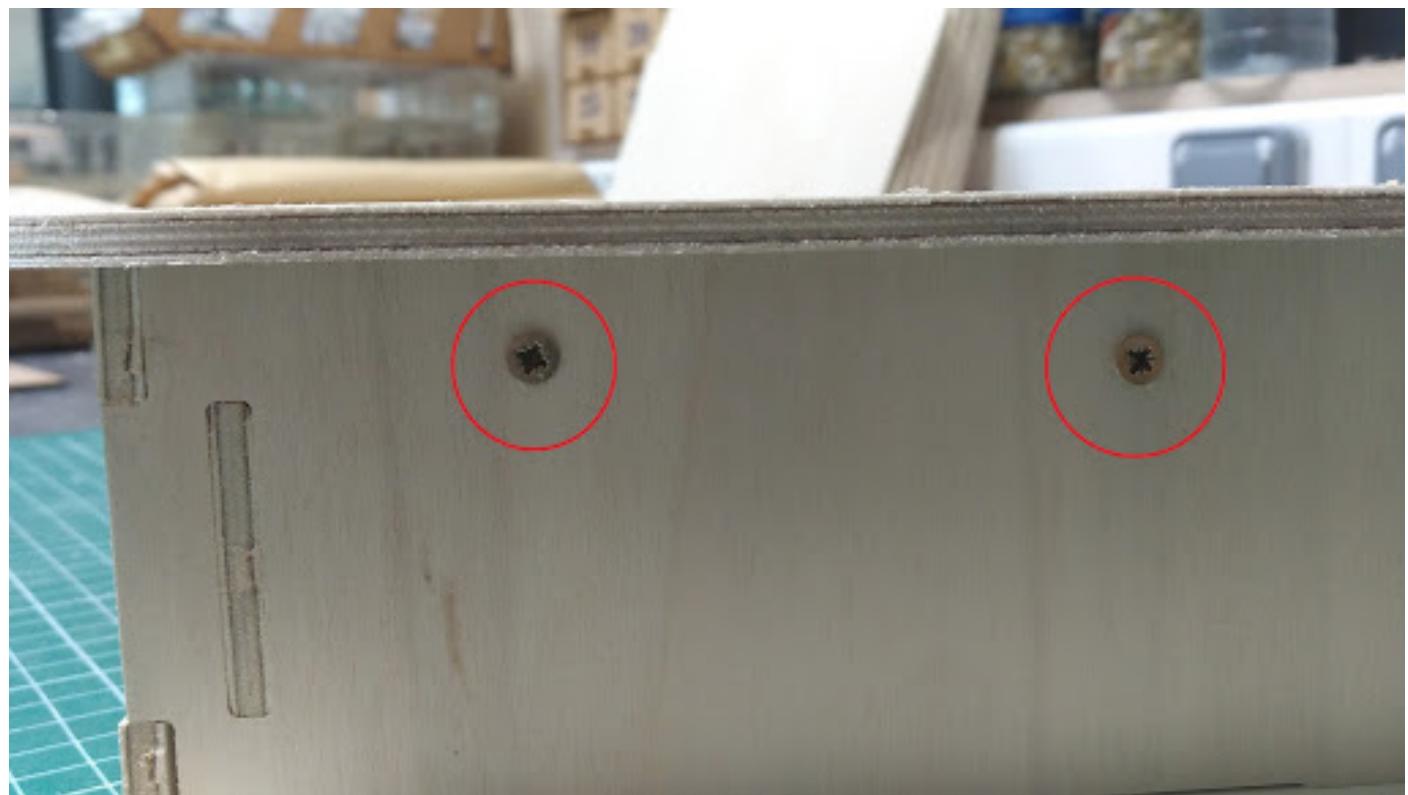
8 - Position the front panel on the case. Check that the 6 tenons fit together properly.



9 - Screw in 2 screws on each side to hold the battens in place. Make sure that the screw heads are flush with the surface of the plate without exceeding the surface.



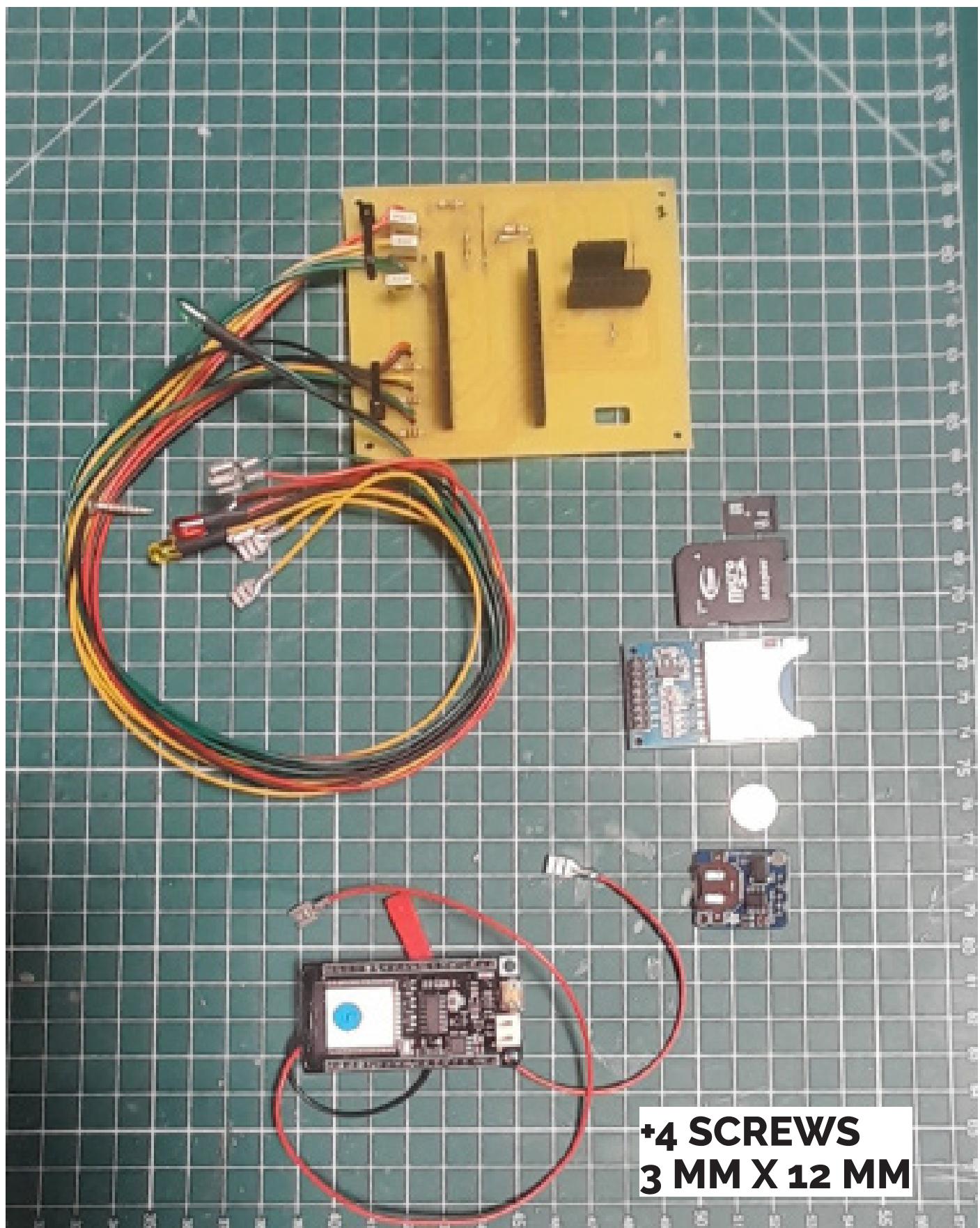
10 - Unscrew the 4 side screws and remove the front panel before the glue sets.



# ASSEMBLY OF THE MOTHERBOARD

You can skip this section if the card is already assembled.

## MATERIAL



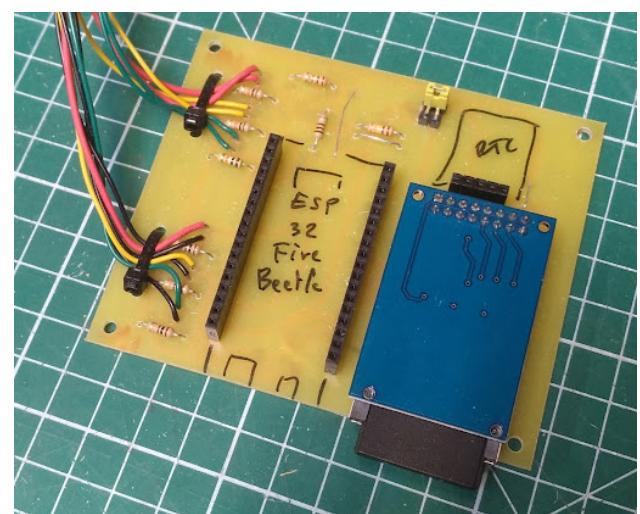
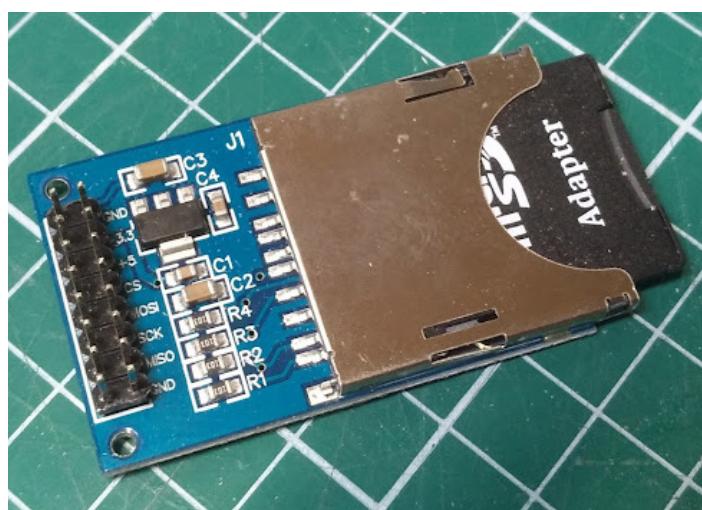
## ASSEMBLY

- 1 - Insert the button cell into its housing on the clock module, respecting the direction of insertion.
- 2 - Insert the microSD card into the adapter.



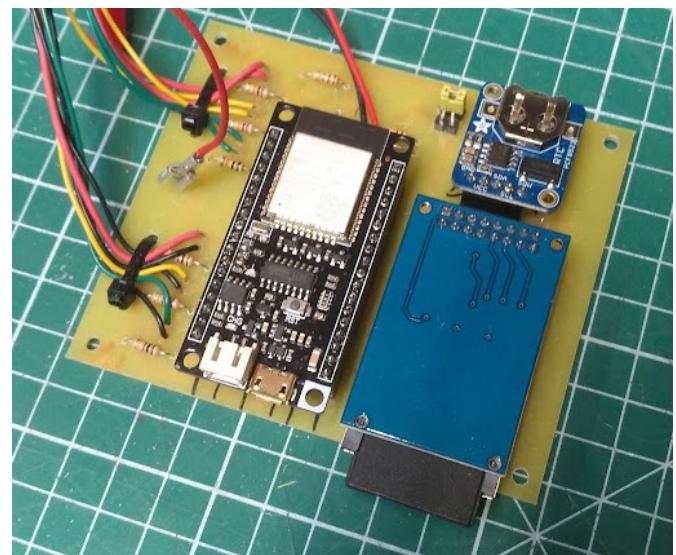
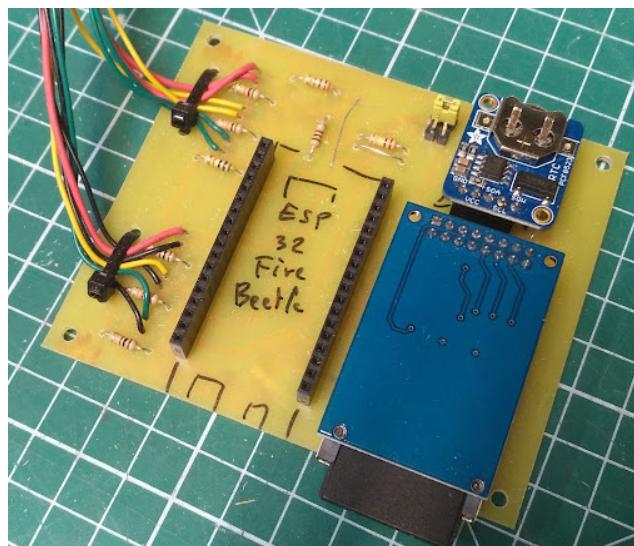
3 - Insert the SD card in the card reader.

4 - Insert the card reader on the connector of the motherboard that is reserved for the card reader. Make sure both rows are connected.



5 - Insert the clock in the connector of the motherboard that is reserved for the clock.

6 - Insert the processor in the connectors of the motherboard that are reserved for the processor. Both sockets must be on the same side as the SD card.



## INSTALLATION OF THE MOTHERBOARD IN THE CASE

1 - Position the motherboard on its support (part B of the front panel). Orient the SD card towards the slot for its passage.



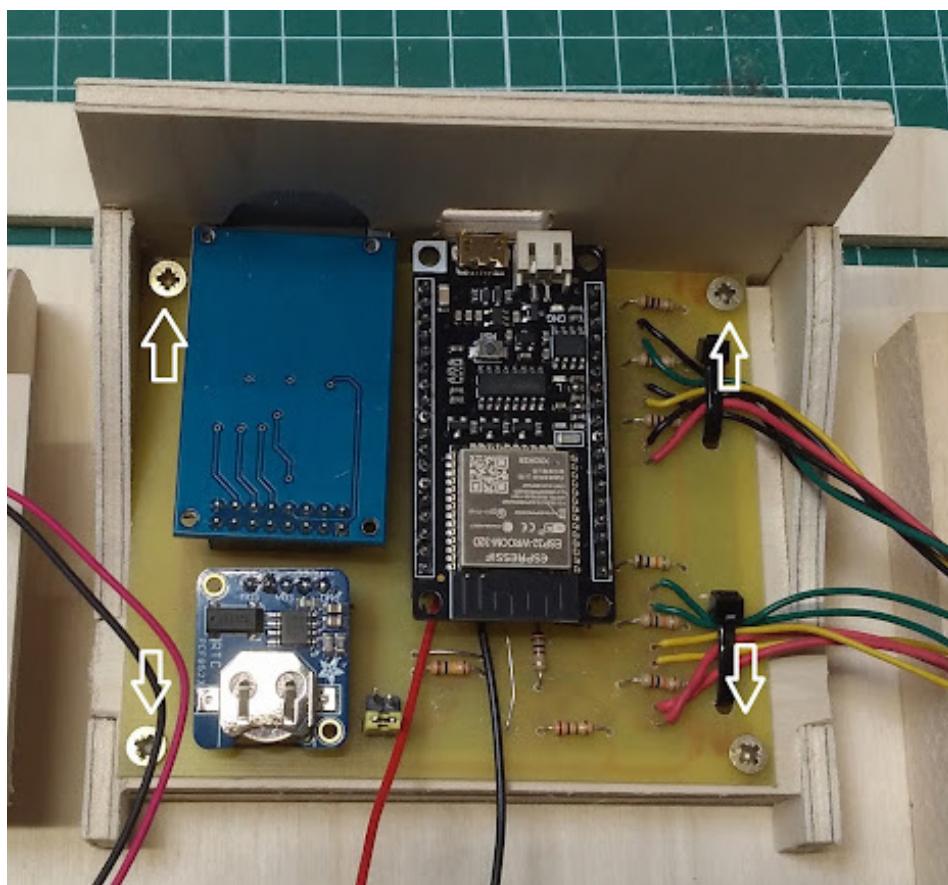
2 - Gently push the motherboard by guiding the SD card reader into the slot of the plate. The blue support plate of the SD card reader must come to rest against the wooden plate.



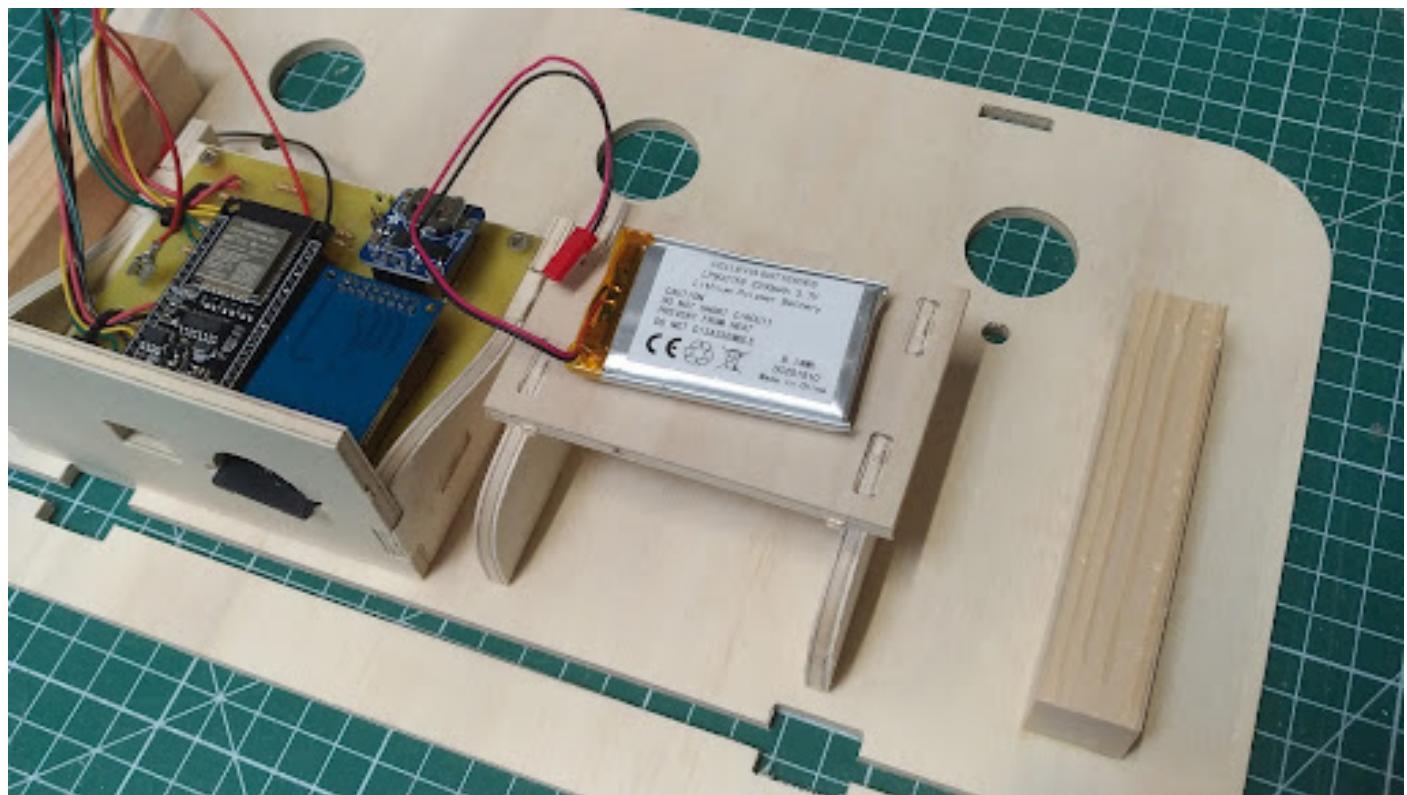
(optional) To facilitate screwing, you can use the following method:

Make a dot in the holes at the 4 corners of the motherboard to mark the location of the screws. Remove the motherboard and drill in the marked slots. Replace the motherboard.

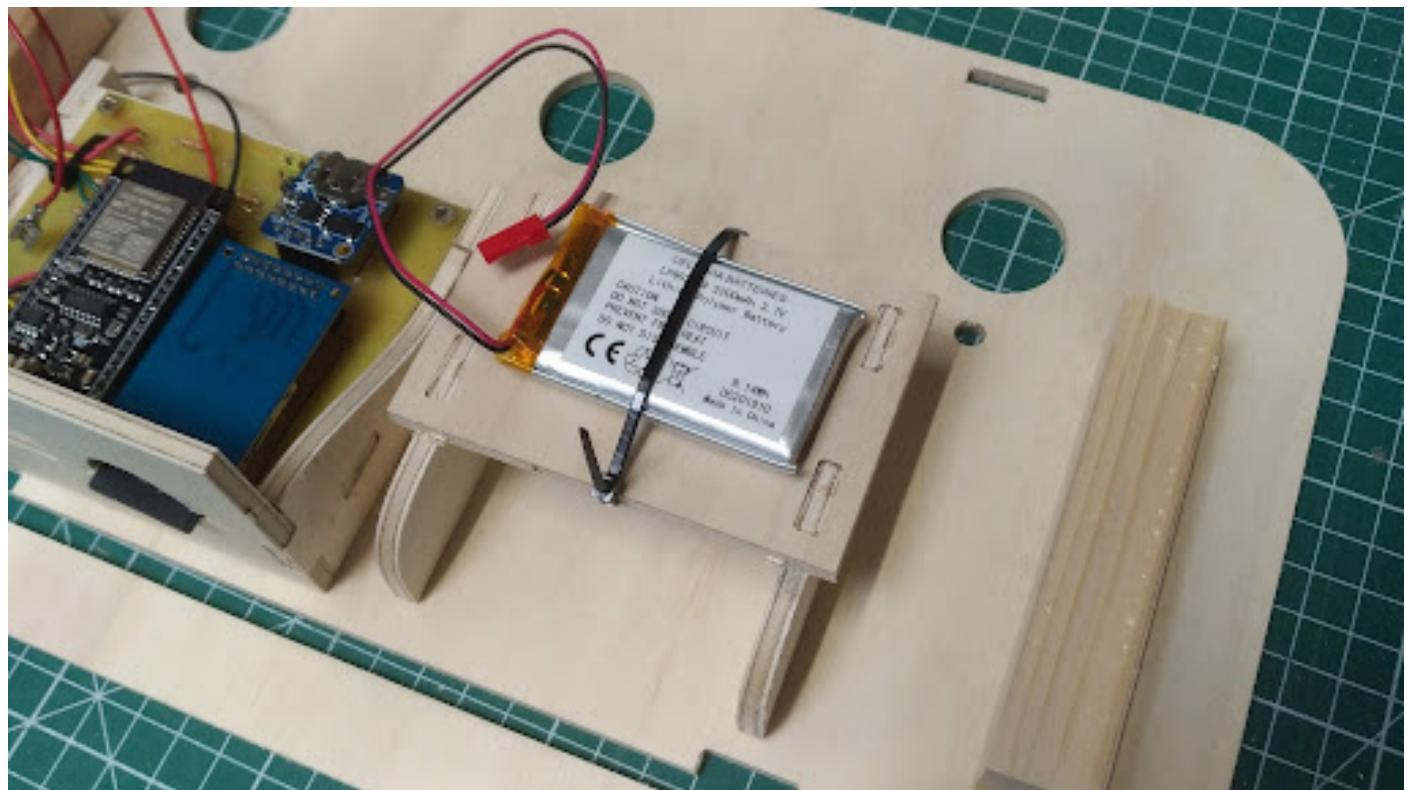
3 - Screw in 4 screws to hold the motherboard in place.



4 - Position the battery on its support with the cable oriented towards the motherboard.

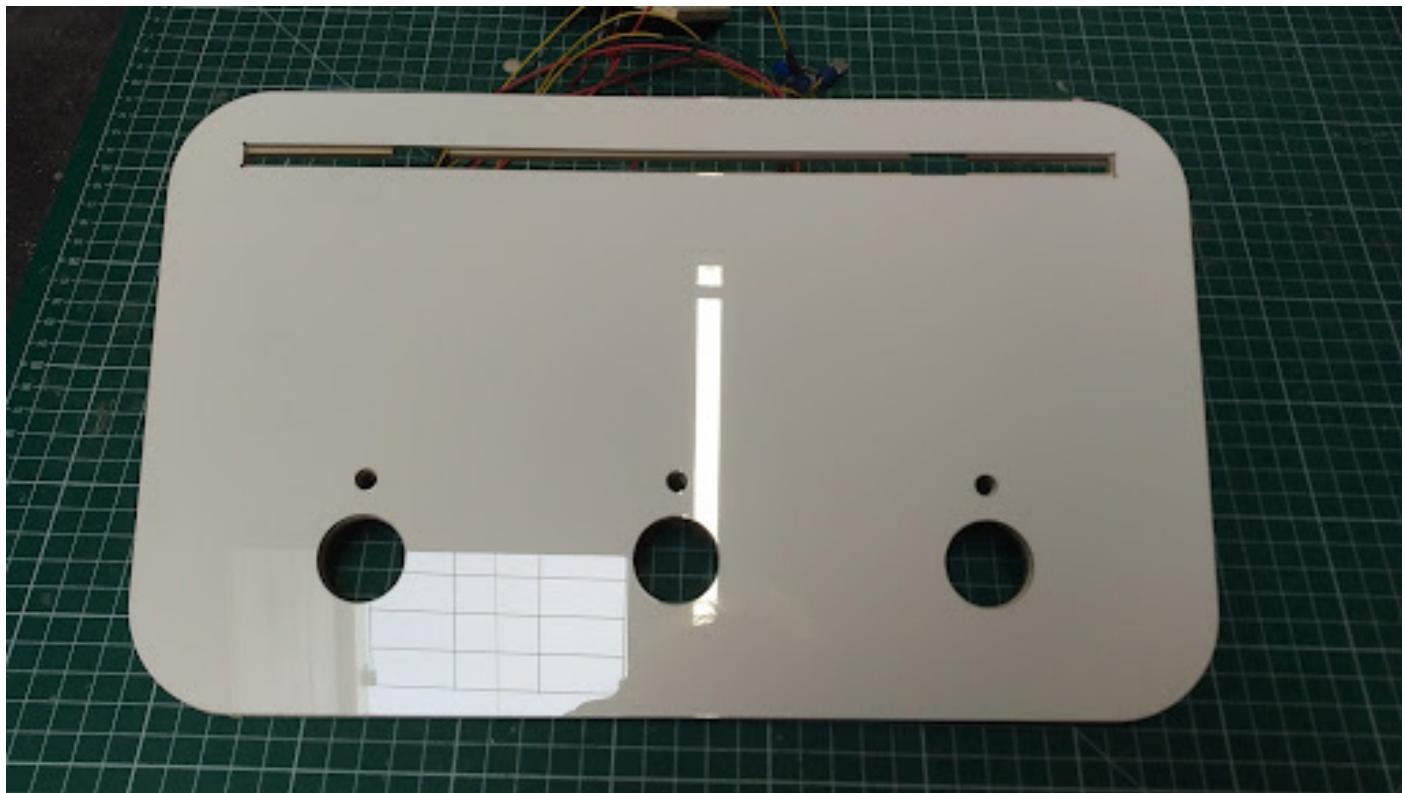


5 - Lock it with two clamps.



# INSTALLATION OF THE VOTE BUTTONS

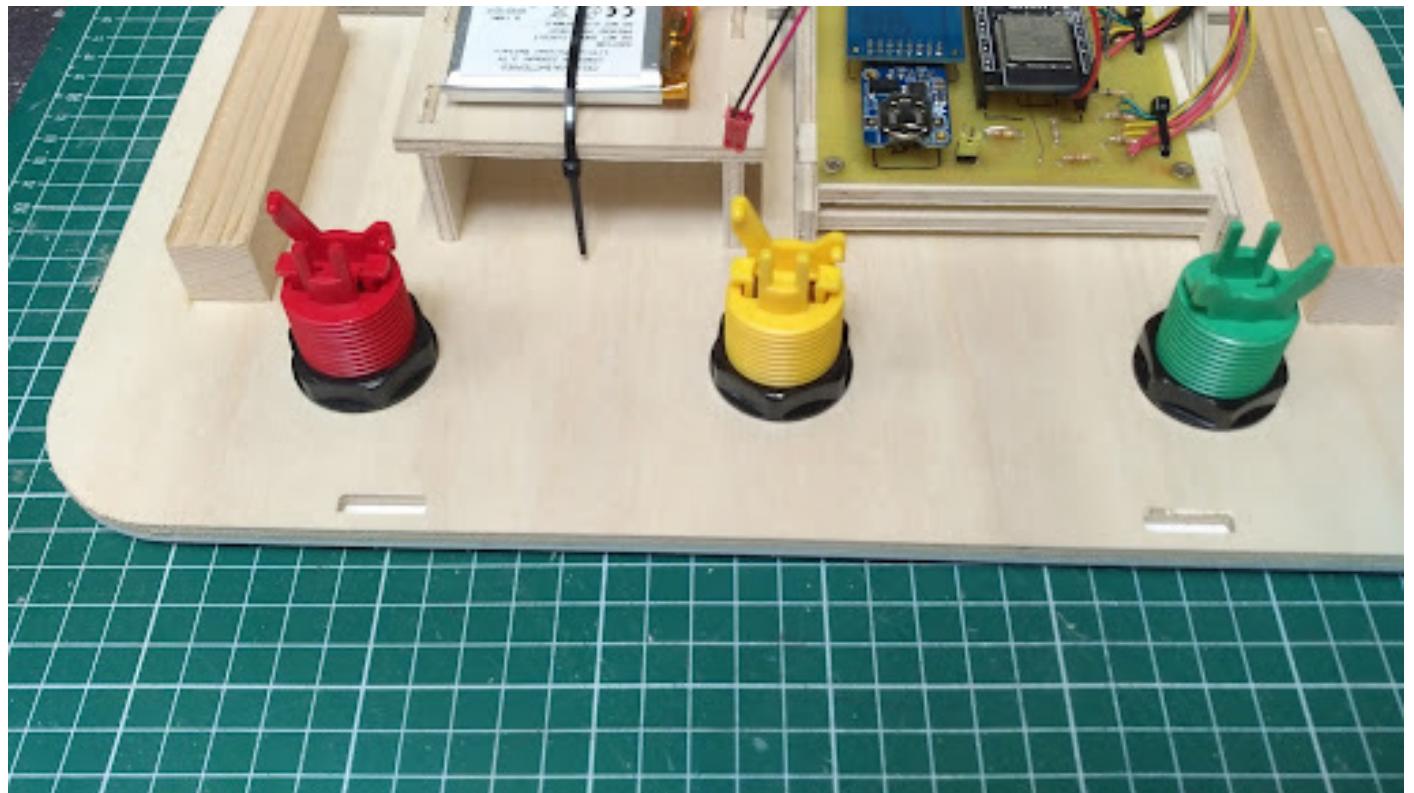
1 - Remove the protective film from each side of the PMMA plate.



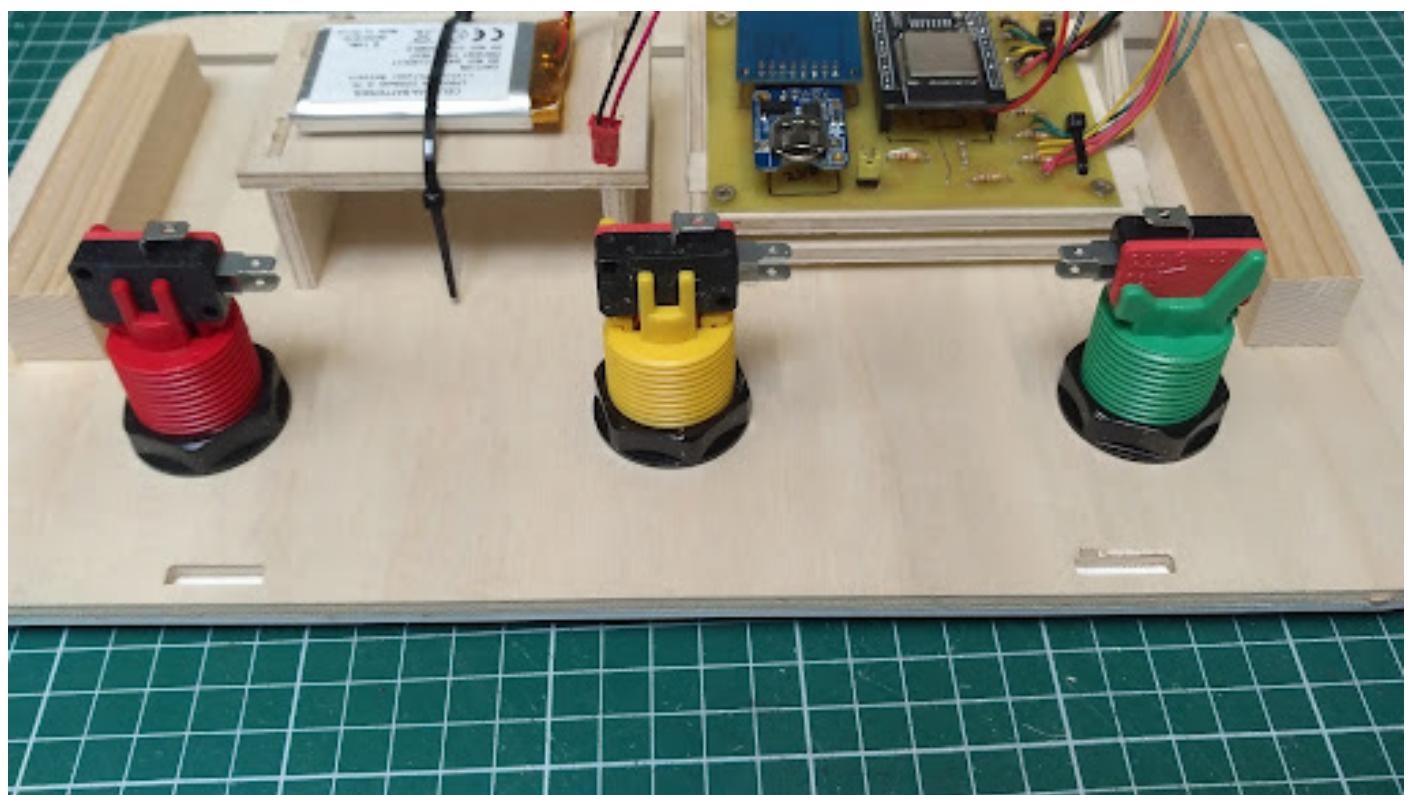
2 - Position the PMMA plate on the front panel and insert the buttons in the holes, respecting the order of the illustration.



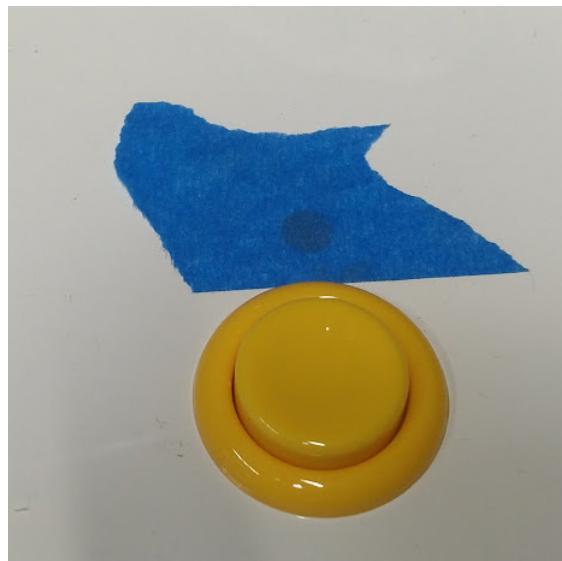
3 - Turn the assembly over and screw on the plastic tightening nuts of the buttons. Orient the buttons as shown in the illustration with the green one reversed from the other two.



4 - Place the switches on the buttons. Spread the plastic walls with pins to insert the switches. The switches insert themselves in their place.



6 - Turn the front panel over and stick a piece of blue tape on the holes above each buttons.

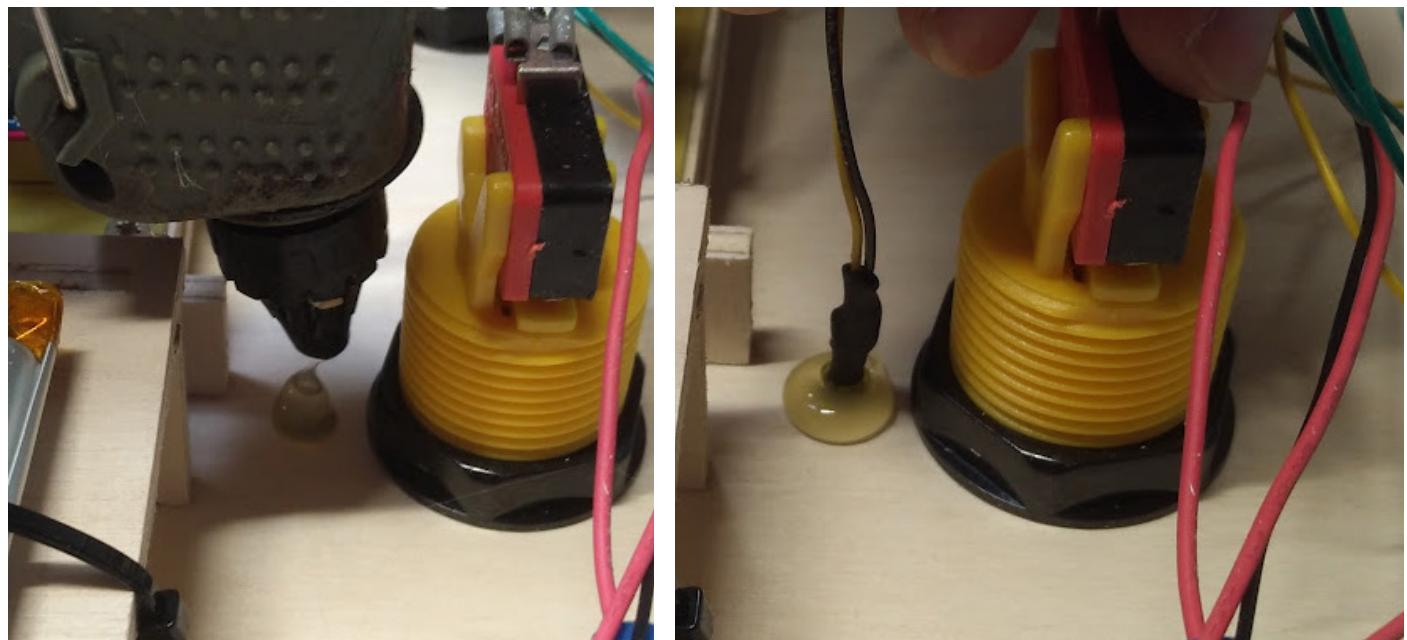


7 - Turn the plate over. Place a 10 mm thick shim underneath the holes so that the buttons do not press against the surface below.

For the three leds:

8 - Fill the hole with hot glue.

9 - Place the LED of the same color as the button in the corresponding hole and hold it there at about half its height while the glue cools.

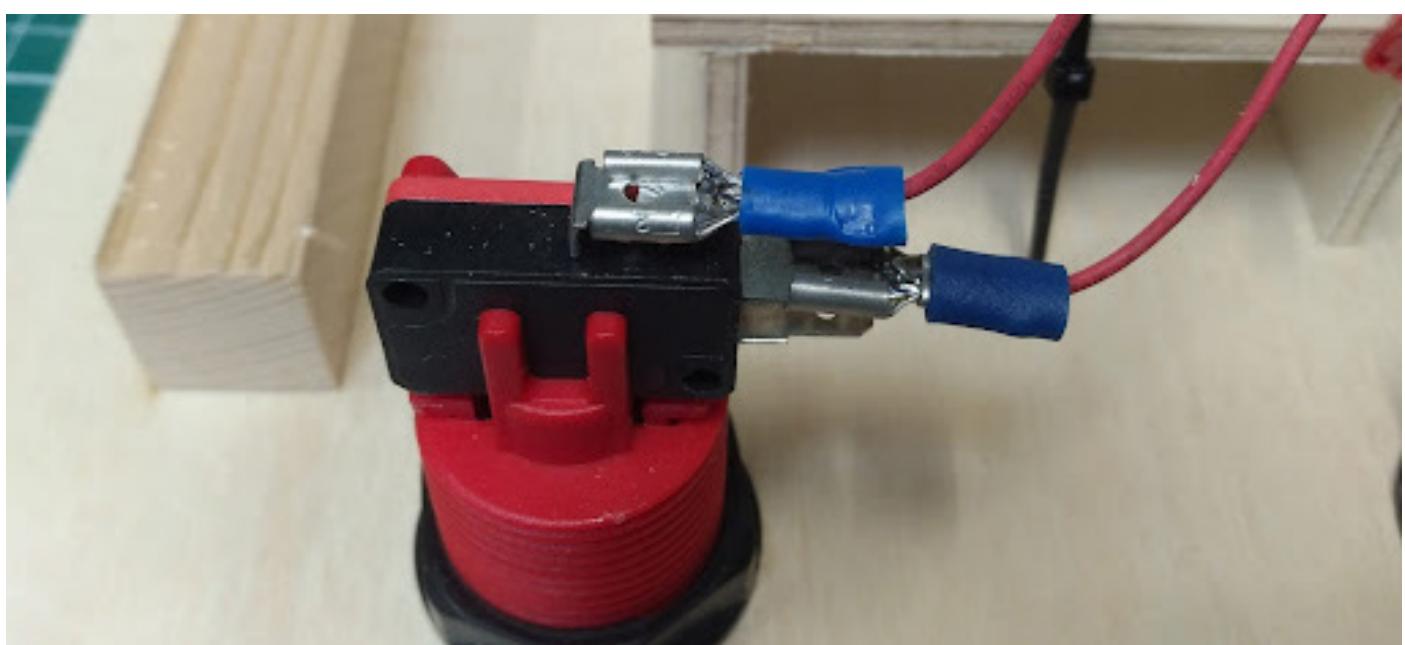
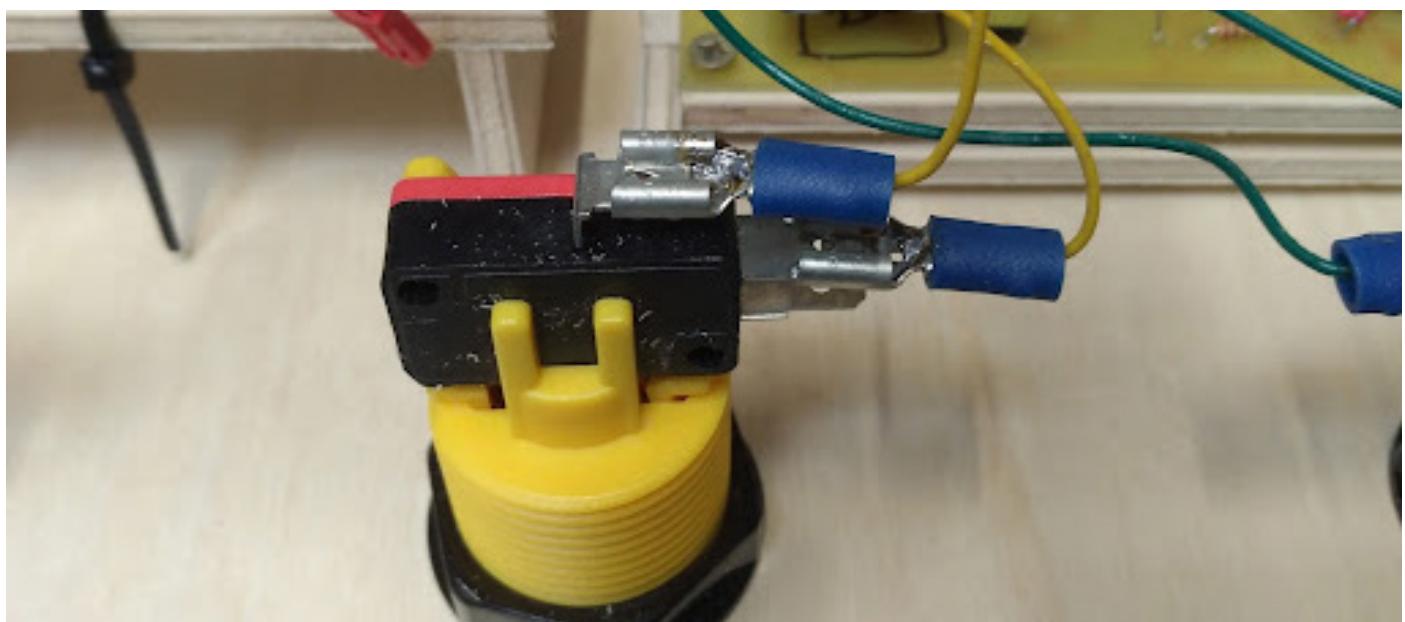
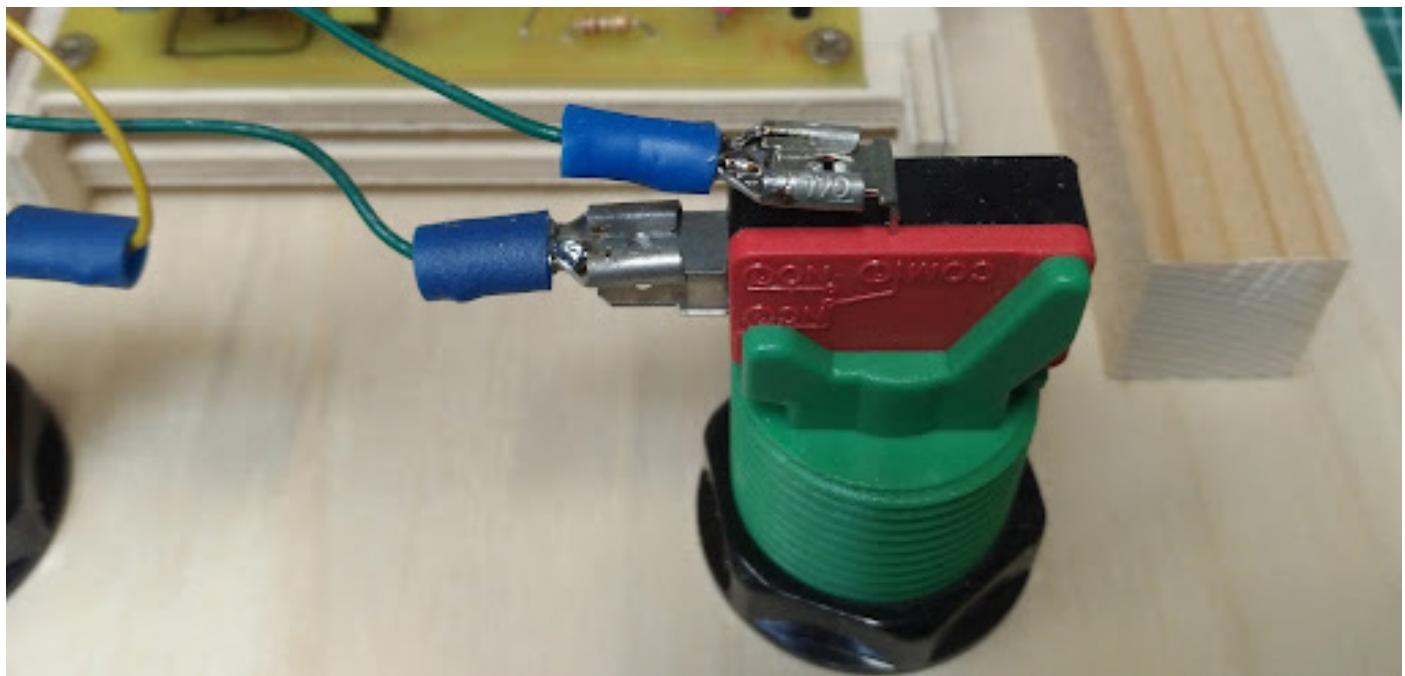


9 - Once the glue has hardened, turn the front panel over and remove the tape.



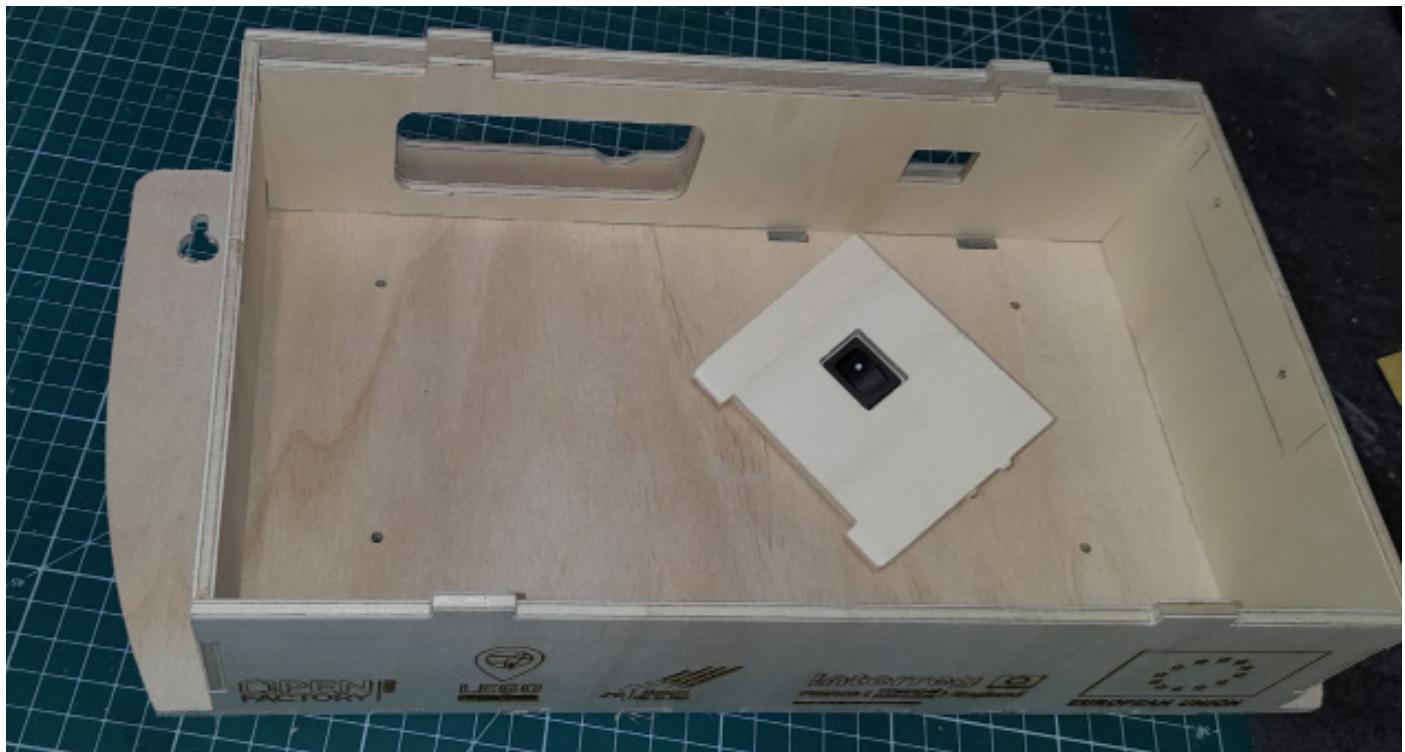
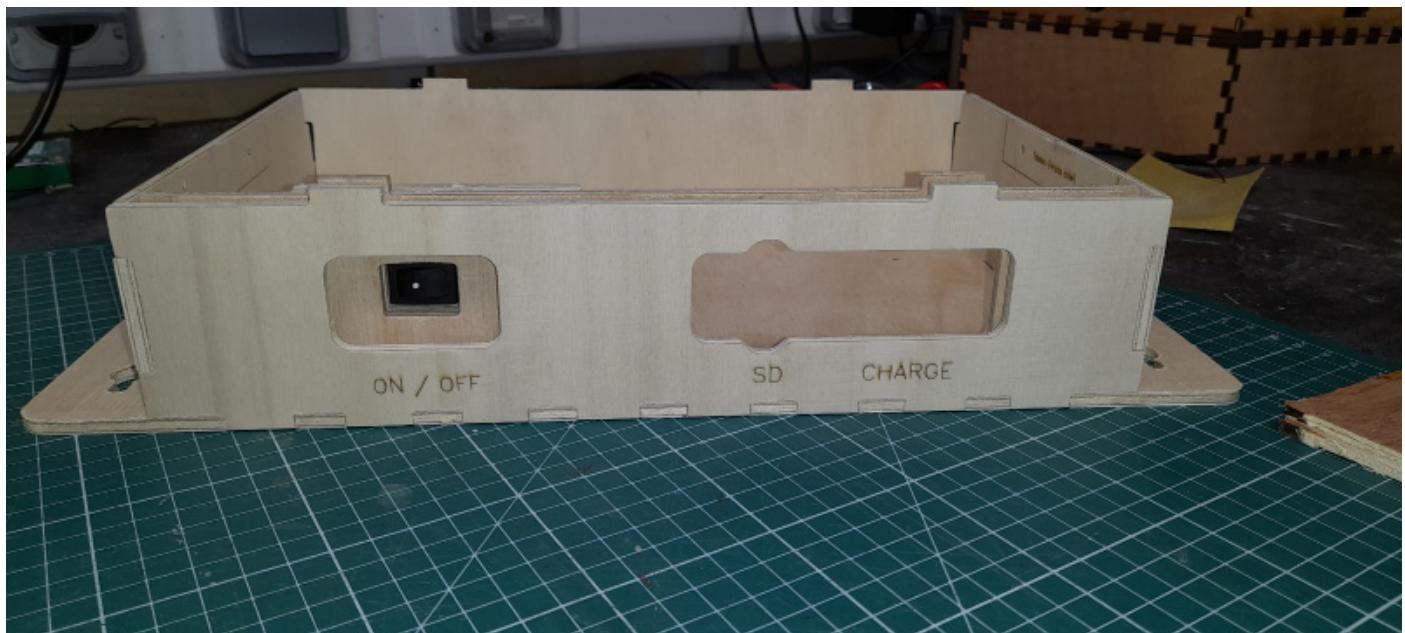
5 - Connect each button to the corresponding cables shown in the illustration (green cables to the green button, etc.). Connect exactly as shown in the illustrations on the next page (one cable to the top pin and the other to the middle pin).



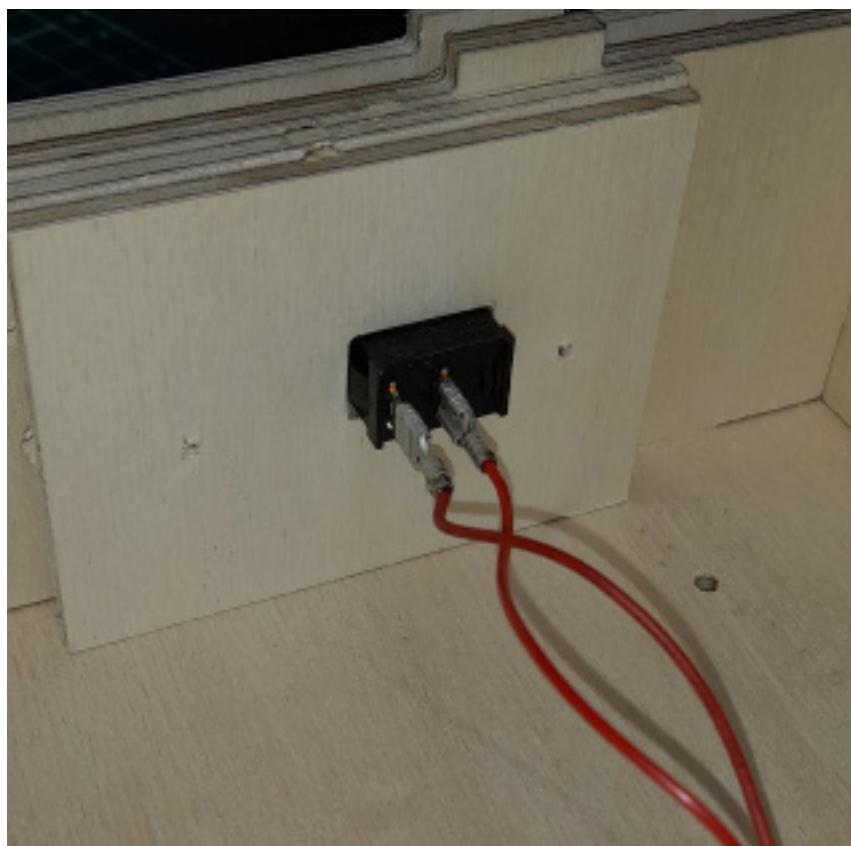
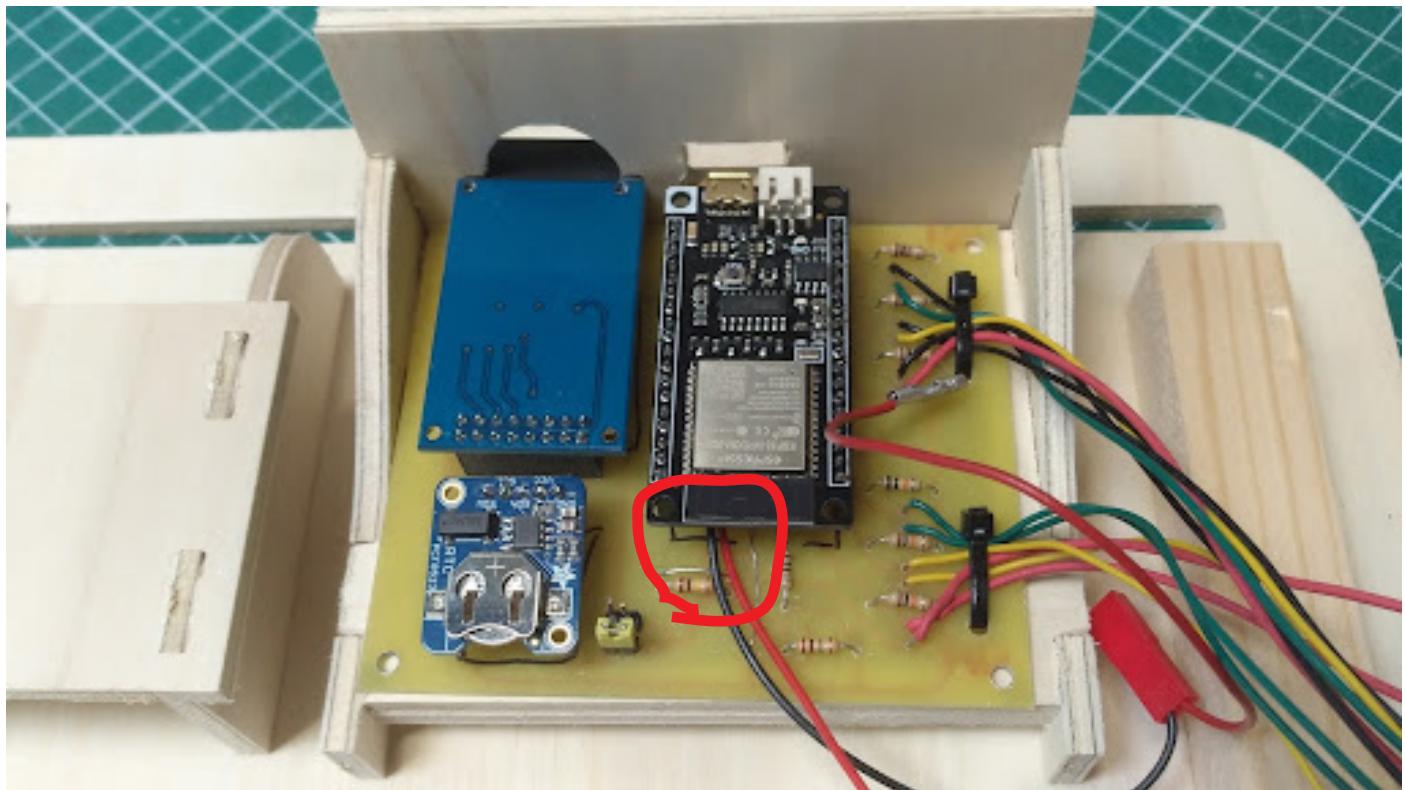


# FINAL ASSEMBLY

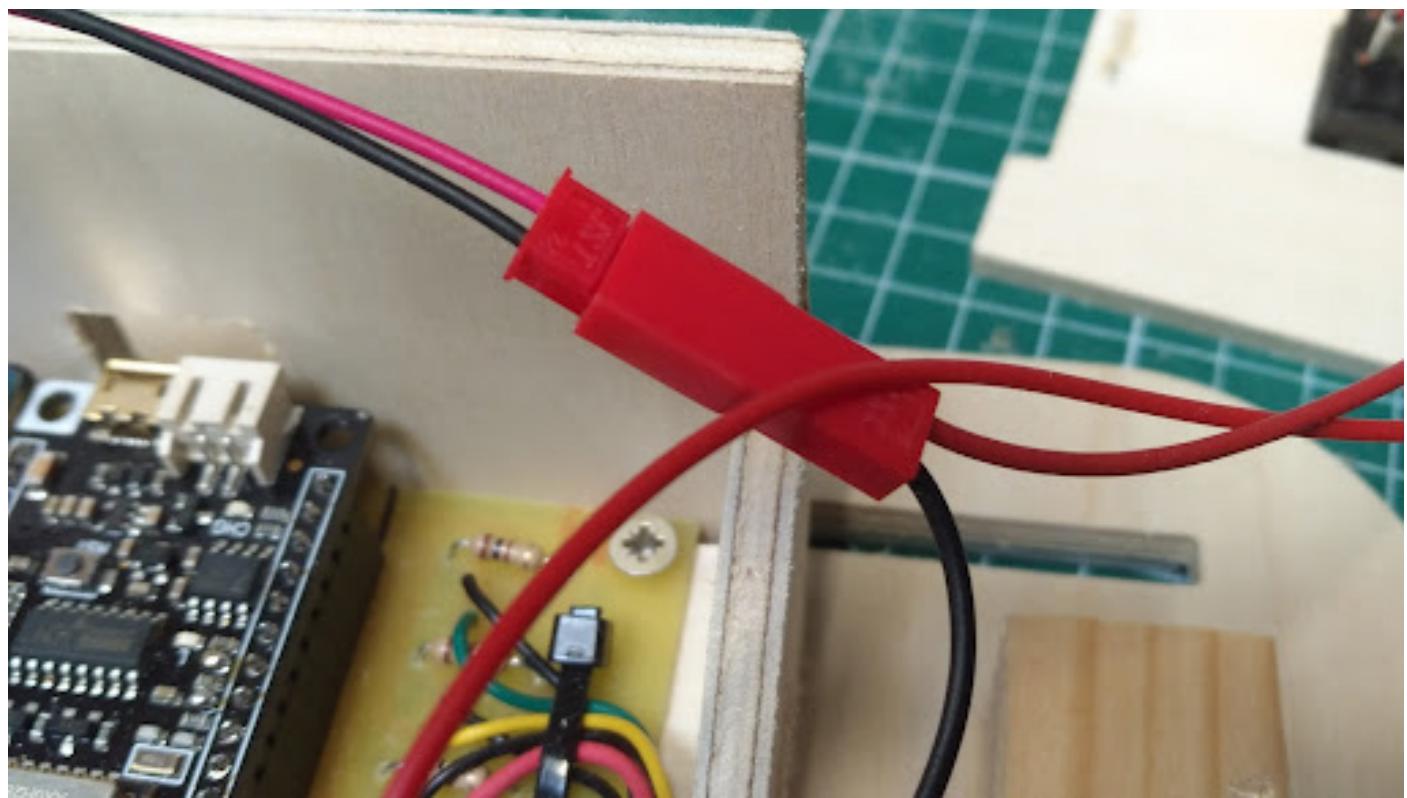
1 - Insert the switch from the outside in its place. The holding piece can be removed to make the operation easier. The dot of the switch must be on the side of the ON marking.



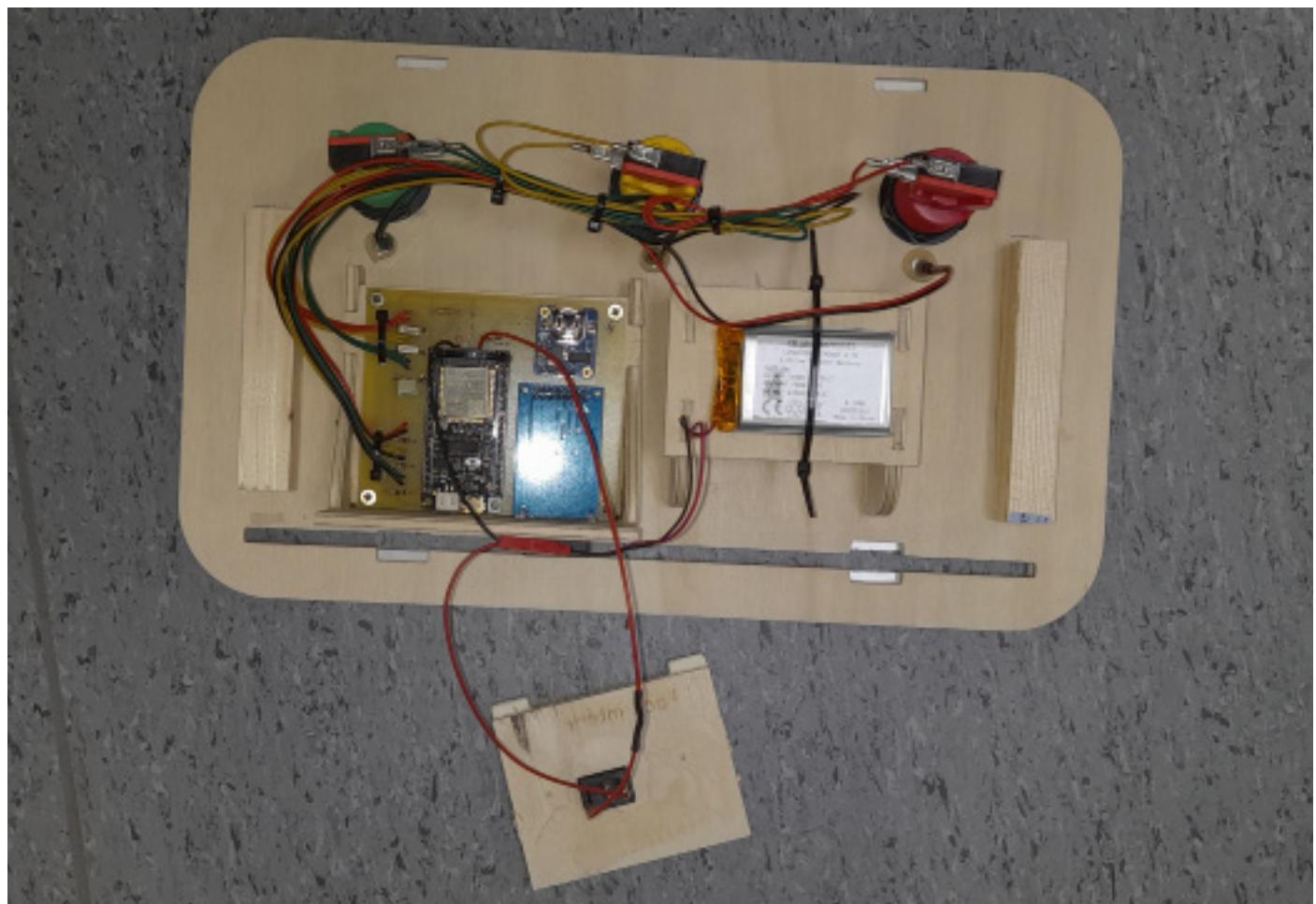
2 - Connect the two red cables from the processor to the switch.



3 - Connect the battery to the motherboard.



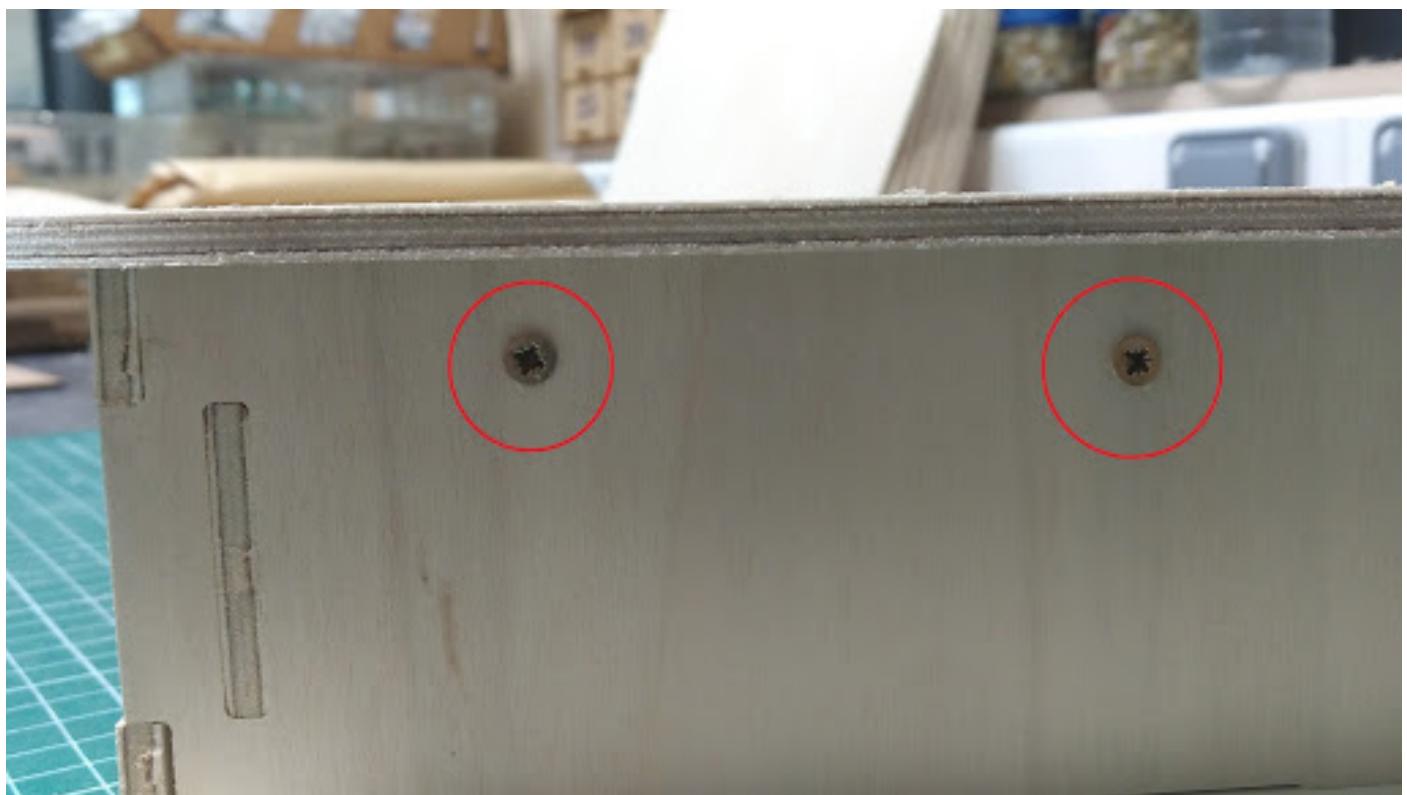
4 - Organize the cables with the clamps so that they do not interfere with closing the terminal.



3 - Place the front panel on the case, checking that the 6 tenons are well positioned in their housing. Do not apply force to the PMMA plate as this could break it.



5 - Screw in the 4 screws on the sides of the case.



Bravo! Your satisfaction terminal is ready. You can proceed to the function check. Do not forget to keep the 4 suction cups, the charging cable and its adapter and the 2 covers for the back of the terminal.

# FUNCTION CHECK

## VERIFICATION OF THE CREATION OF THE CONFIGURATION FILE

1 - Remove the SD card from the terminal.

2 - Turn the switch to ON: the red LED should light up permanently. It may light up dimly once before turning on.

3 - Turn the switch to OFF.

4 - Open the SD card on a computer, if there is any file, delete it.

5 - Insert the SD card into the terminal.

6 - Turn the switch to ON: the red light should blink.

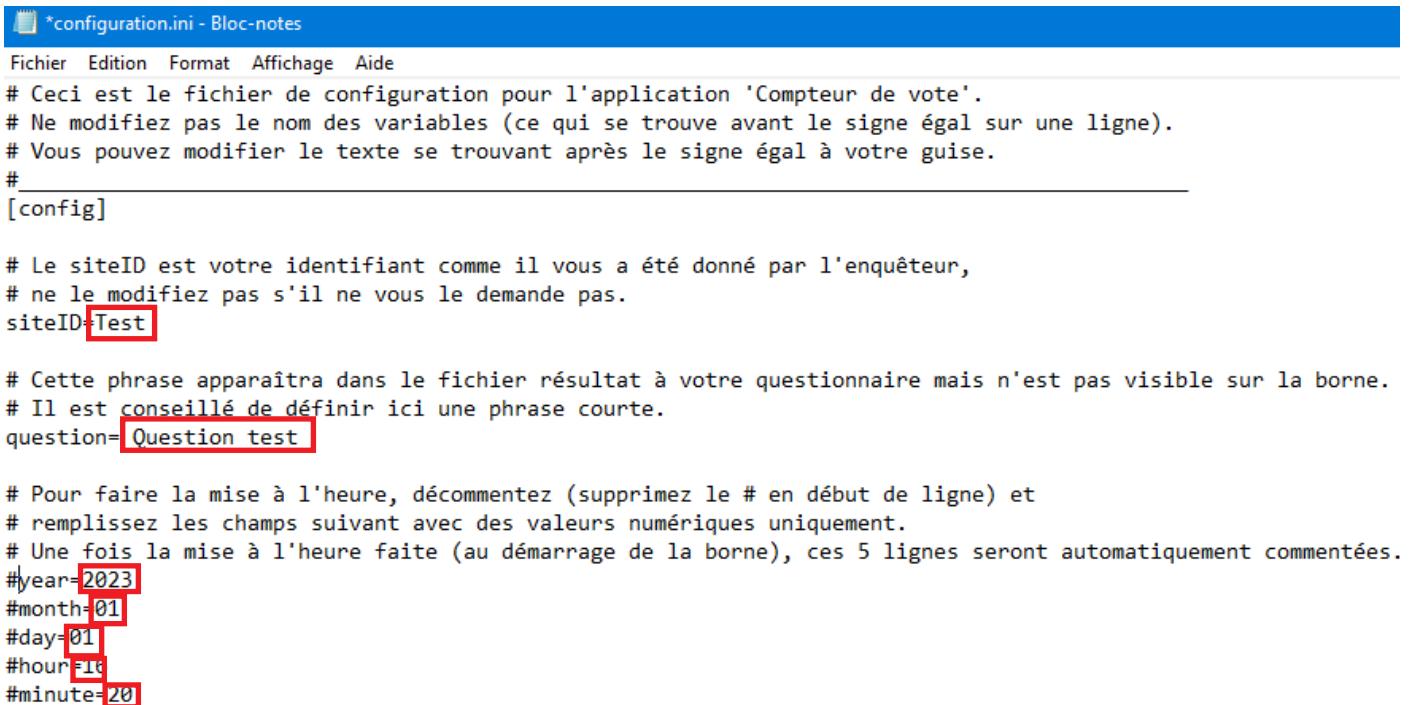
7 - Turn the switch to OFF.

8 - Remove the SD card from the terminal.

9 - Open the SD card on a computer.

10 - Open the file « configuration.ini » (openable with the notepad).

11 - Modify the following fields framed in red. Delete the «#» at the beginning of the date-and-time information lines.



```
*configuration.ini - Bloc-notes
Fichier Edition Format Affichage Aide
# Ceci est le fichier de configuration pour l'application 'Compteur de vote'.
# Ne modifiez pas le nom des variables (ce qui se trouve avant le signe égal sur une ligne).
# Vous pouvez modifier le texte se trouvant après le signe égal à votre guise.
#
[config]
# Le siteID est votre identifiant comme il vous a été donné par l'enquêteur,
# ne le modifiez pas s'il ne vous le demande pas.
siteID=Test
# Cette phrase apparaîtra dans le fichier résultat à votre questionnaire mais n'est pas visible sur la borne.
# Il est conseillé de définir ici une phrase courte.
question=Question test
# Pour faire la mise à l'heure, décommentez (supprimez le # en début de ligne) et
# remplissez les champs suivant avec des valeurs numériques uniquement.
# Une fois la mise à l'heure faite (au démarrage de la borne), ces 5 lignes seront automatiquement commentées.
#year=2023
#month=01
#day=01
#hour=16
#minute=20
```

14 - Save and exit the file.

15 - Insert the card into the terminal.

16 - Turn on the terminal. The green LED should blink three times or light up fixed if you have not changed the date/time information.

17 - Proceed to some votes on the 3 buttons and note the number of votes for each color. The LED corresponding to the button should light up for a few seconds and then go out. The terminal will not take into account any other vote made while this led is lit.

18 - Switch OFF the terminal.

19 - Remove the SD card from the terminal.



20 - Using a computer:

- on a spreadsheet, read the file «xxxx-xx-xx\_detail.csv» (where xxxx-xx-xx represents the date in YYYY-MM-DD format) Check the date number of votes, the name of the identifier and the question.
- with the notepad, read the file «xxxx-xx-xx\_recap.txt» (where xxxx-xx-xx represents the date in YYYY-MM-DD format). Check the date, the number of votes (total and unit), the title of the question and the identifier.

21 - Delete all the files on the SD card. The terminal is ready for use.

2022-05-12\_recap.txt - Bloc-notes

Fichier Edition Format Affichage Aide

Etablissement = Cool Food FTHXZHRYRGK  
 Date = 2022/05/12  
 Question = Aimez-vous les brocolis ?  
 Batterie = 80%  
 Nombre d'appui sur les boutons :  
     Rouge = 2  
     Vert = 2  
     Jaune = 2  
     TOTAL = 6  
 Pourcentage d'appui sur les boutons :  
     Rouge = 33%  
     Vert = 33%  
     Jaune = 33%

	A	B	C	D	E	F	G	H	I
1	Identifier	Date	Heure	Question	Vert	Rouge	Jaune	Niveau	Batterie
2	Cool Food	12/05/2022	10:50:09	Aimez-vous les brocolis ?	0	1	0	81	
3	Cool Food	12/05/2022	10:50:11	Aimez-vous les brocolis ?	0	0	1	80	
4	Cool Food	12/05/2022	10:50:14	Aimez-vous les brocolis ?	1	0	0	81	
5	Cool Food	12/05/2022	10:50:16	Aimez-vous les brocolis ?	0	1	0	80	
6	Cool Food	12/05/2022	10:50:18	Aimez-vous les brocolis ?	0	0	1	81	
7	Cool Food	12/05/2022	10:50:20	Aimez-vous les brocolis ?	1	0	0	80	
8									
9									