Felfil

HOW TO COMPLETE THE BASIC KIT

ECCO QUI LE CARTE DI FELFIL EVO!

Con questi disegni potrai costruire il tuo estrusore e personalizzarlo a seconda delle tue esigenze partendo dai componenti meccanici contenuti nel nostro BASIC KIT!

Il nostro progetto è nato e continua ad essere in modalità OPEN HARDWARE: i file sono liberamente condivisibili e ci piace l'idea che tu possa condividerli con i tuoi colleghi, con i tuoi studenti o con altri utenti. *Ricorda però sono coperti da licenza Creative Commons ed è vietata la vendita!*

Perchè pensiamo che possa esserti utile

Abbiamo deciso di condividere con te questo progetto perchè vogliamo stimolare la tua creatività e permetterti di creare tu stesso un prodotto funzionante al 100%

Cosa troverai in questo pacchetto:

Istruzioni su come completare il Basic kit
Modelli 3D di questa soluzione
File dxf del taglio legno
Istruzioni d'uso

THERE ARE FELFIL EVO DRAWINGS!

With these drawings you can build your filament extruder and customize it according to your needs starting from mechanical components contained in our BASIC KIT!

Our project is born and lives in OPEN HARDWARE philosophy: our drawings are totally freely shared and we we would like you to share them with your co-workers, with your students or others. *Just remember this project is protected by Creative Commons license and you can't sell it!*

The reason why we think it can be useful

We decided to share with you this project because we belive in your creativity and allow you to create a 100% working product by yourself.

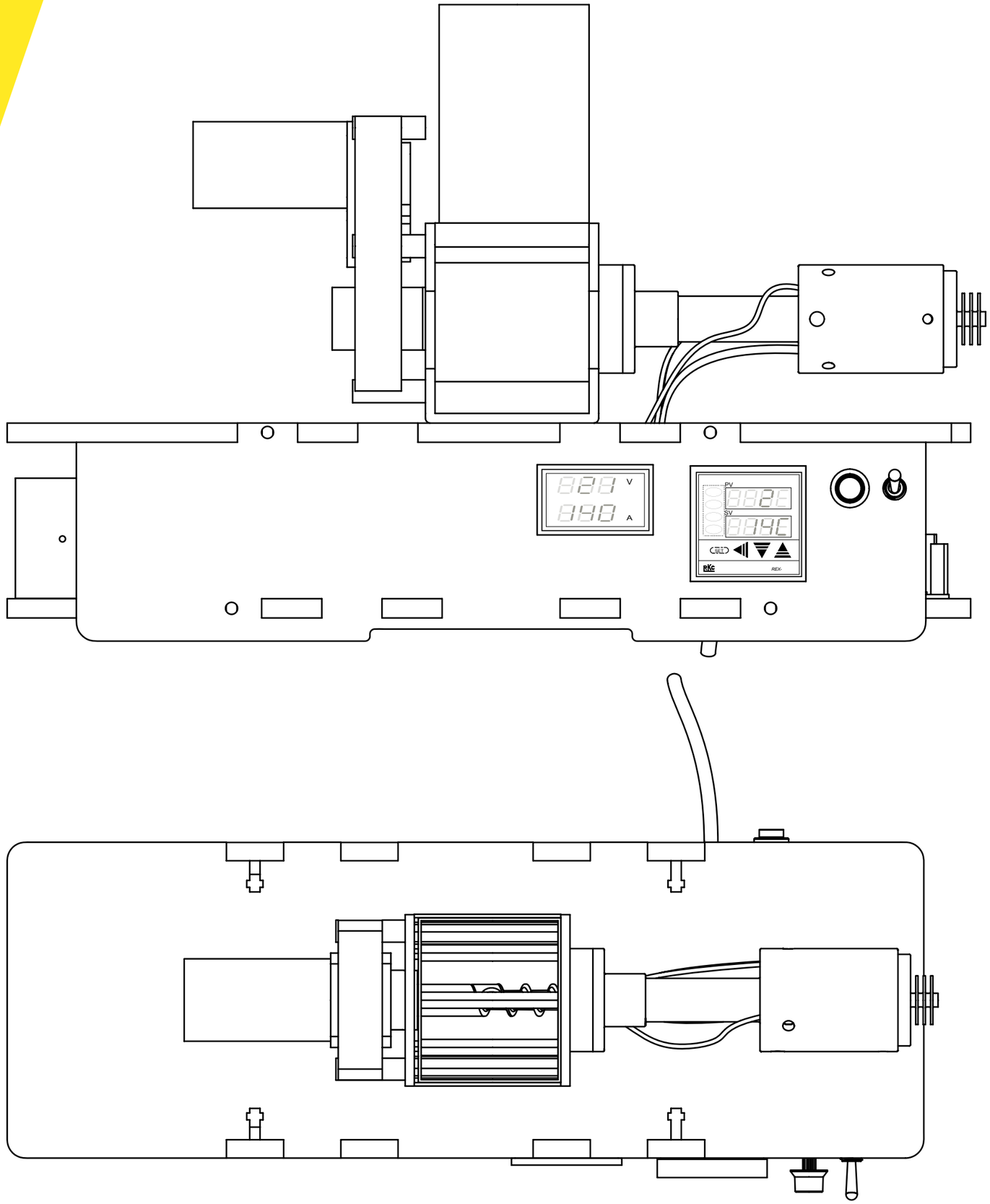
What you will find in this package:

Instructions on how to complete the Basic kit
3D models of this solution
Wood lasercut dxf file
Use Instructions

The Project

This image rapresents the final result of the Felfil Evo Basic Kit upgrade Project

We really hope that you will enjoy making this project as much we did designing it!



BOM
Components

PID REX C-100

SSR - 20 DD

DC motor PWM regulator (12V - 40V 10A)

200 W 12 V Switch Power Supply

DROK mini 0.28" 0-100V/SA

General switch

K type thermocouple

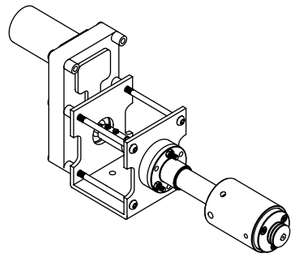
8mm Thickness Wood (laser cutted)

3x Heater Cartridge 40W - 12V (6x20mm)

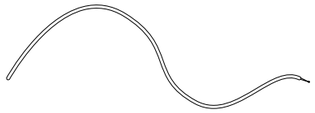
Felfil evo Basic kit

3d Printable Hopper

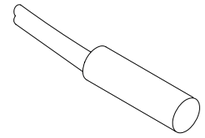
Switch



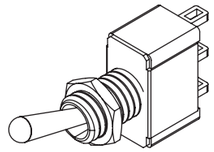
Felfil Evo Basic kit



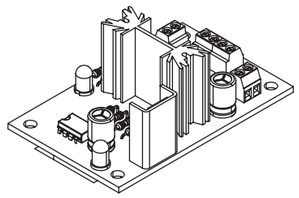
Thermocouple



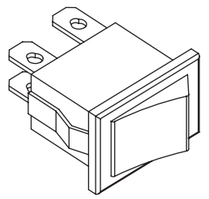
Heater Cartridge



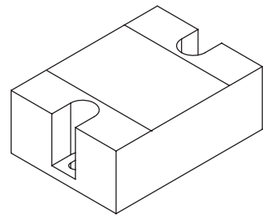
Switch



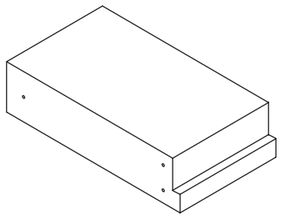
DC motor PWM regulator



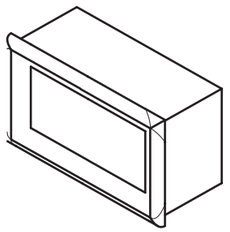
Main Switch



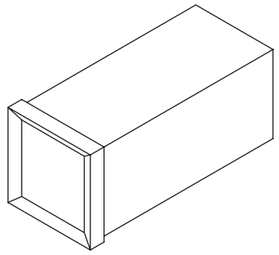
SSR



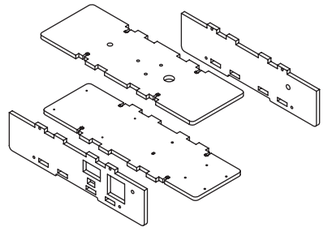
Power supply



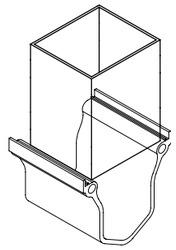
DROK mini 0.28"



PID REX C-100



8mm Wood



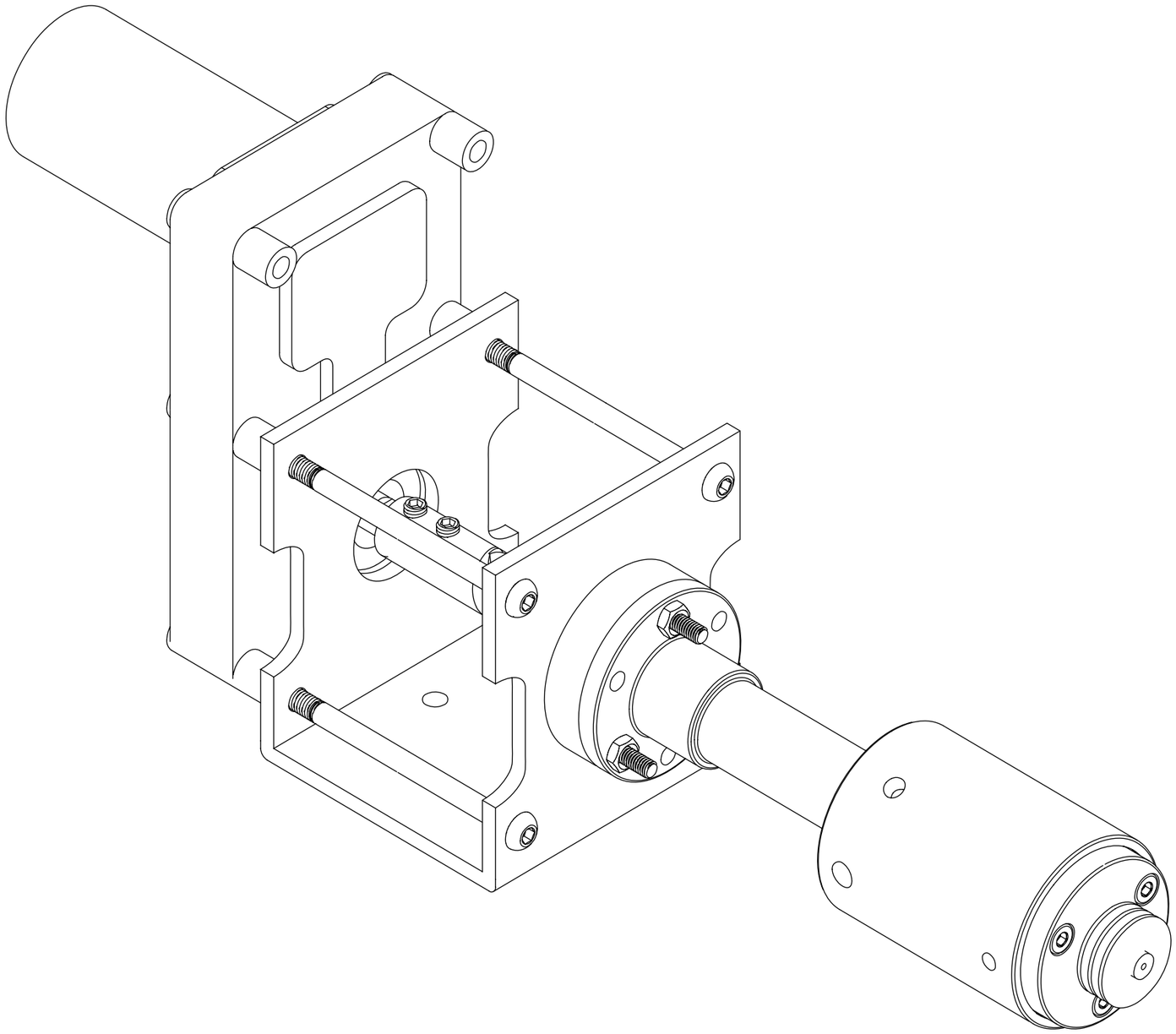
3D Printable Hopper

#1 Assembling

- Build up the Basic kit

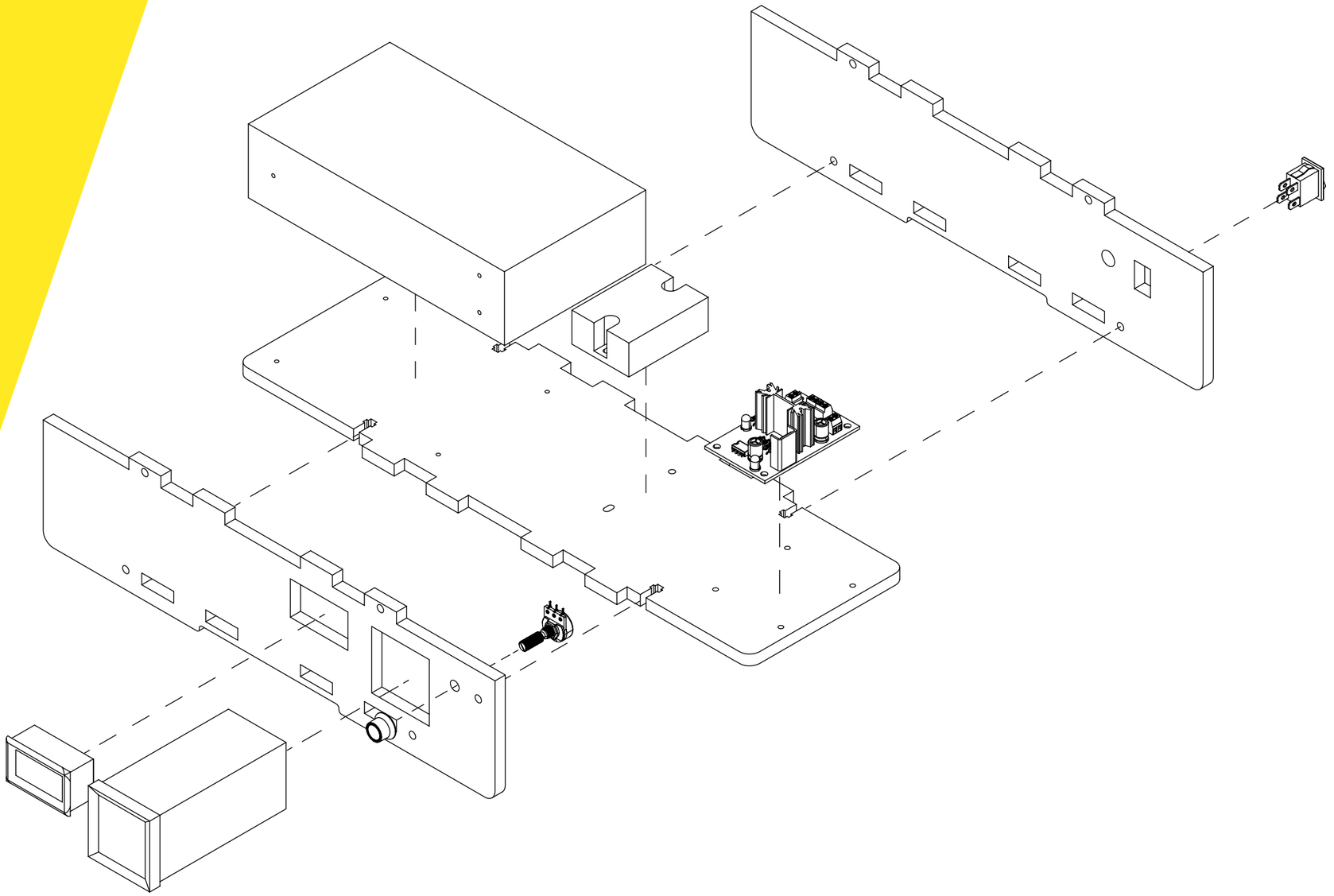
DOWLOAD ITS I NSCTRUCTIONS FROM “SUPPORT” SECTION OF OUR WEBSITE

https://felfil.com/support/



#2 Assembling

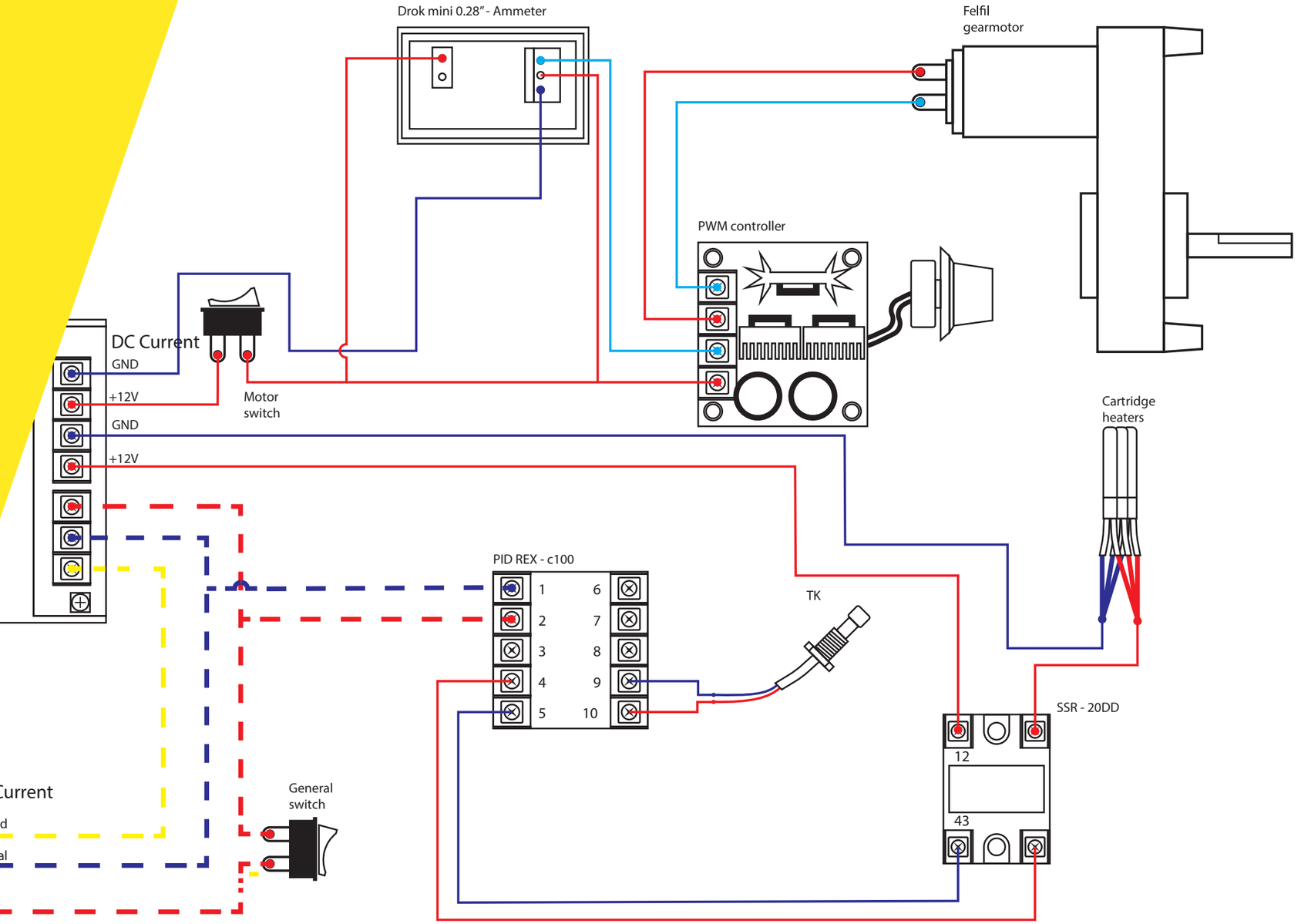
- Insert the components into the proper housings.



#3 Electric connections

- Make the electic connections following this schema.

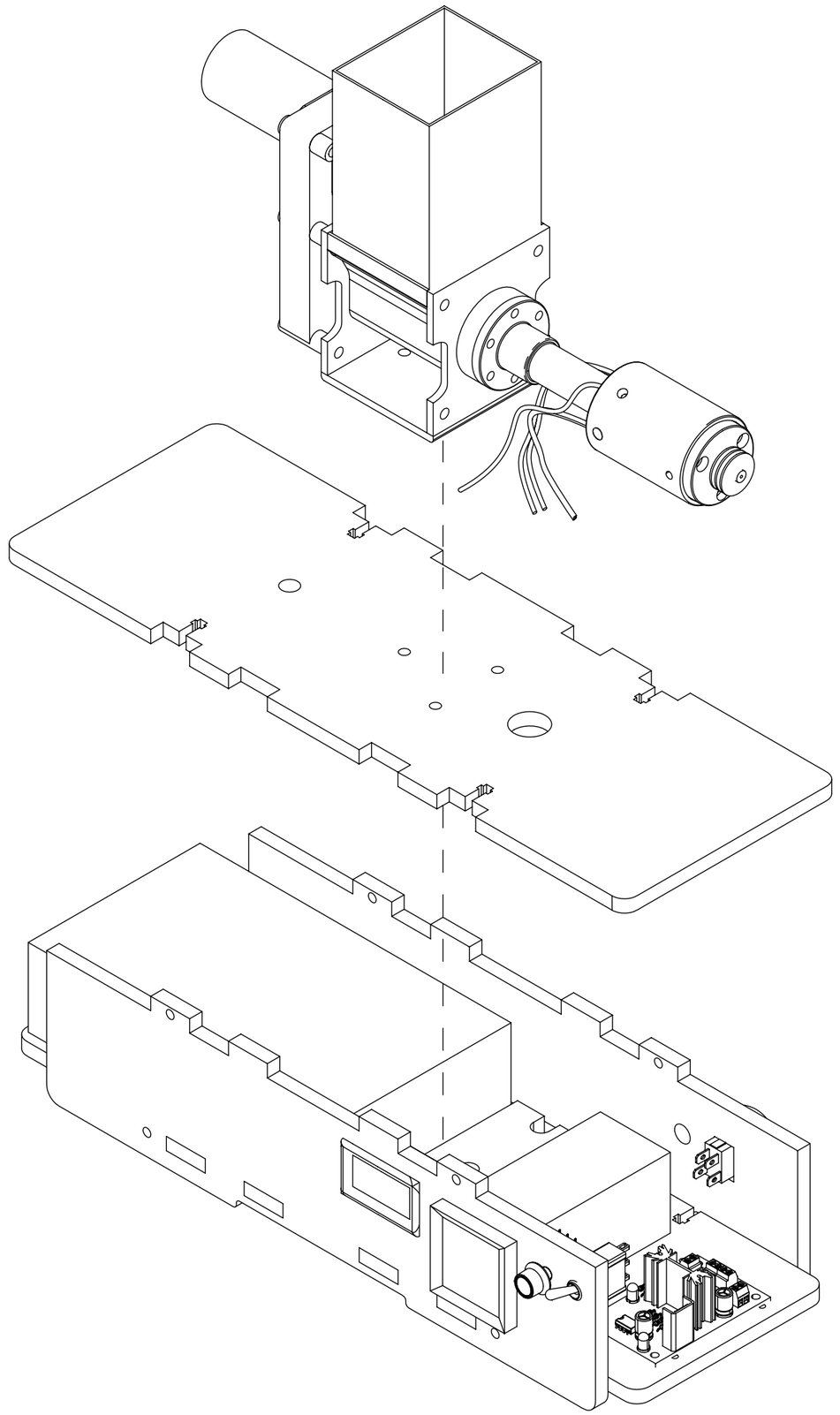
WARNING: These connections could change according to your components.
Please read accurately the components datasheet!



#4 Assembling

- Join the basic kit to the upper wood structure.

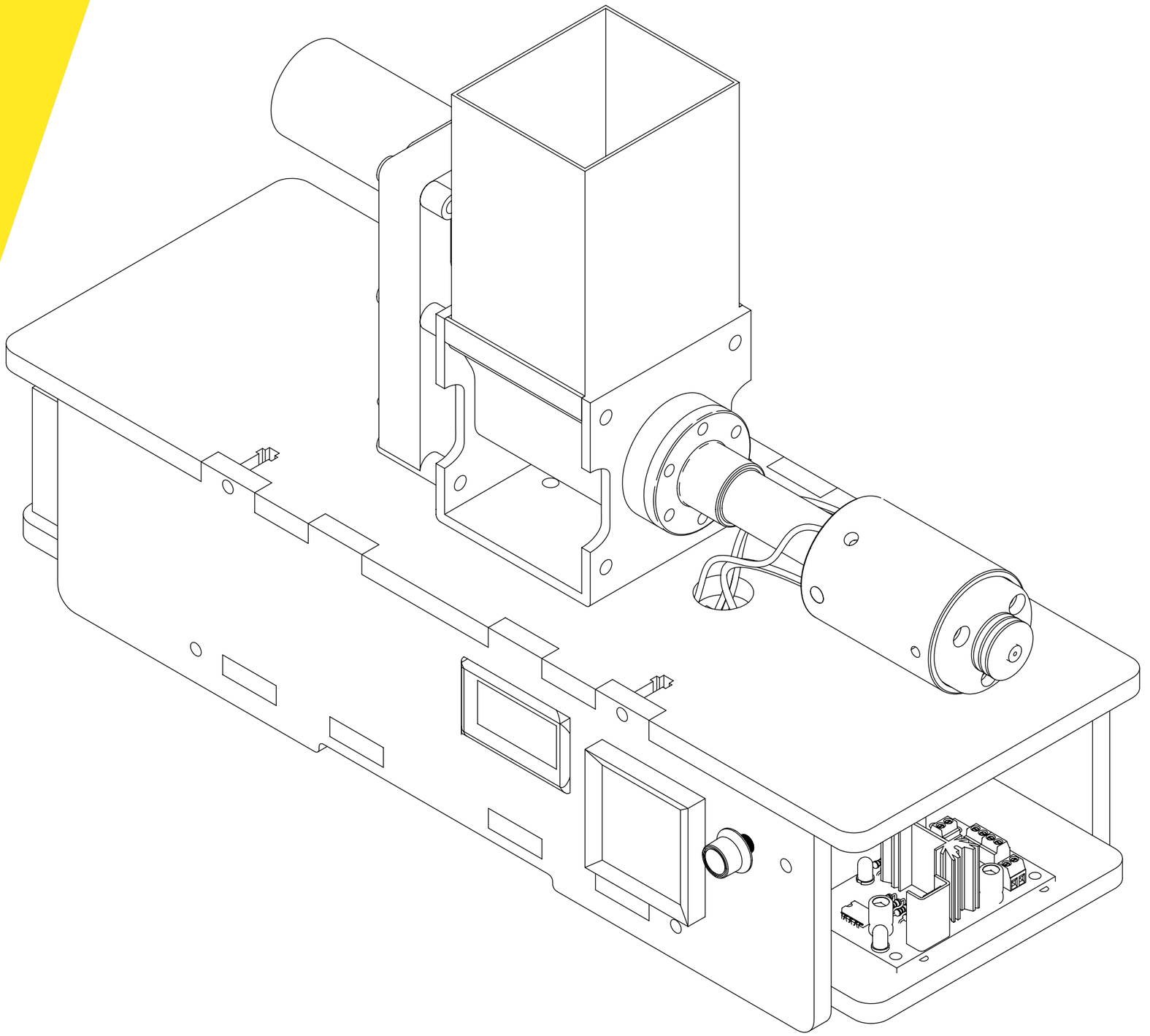
- Then assemble the two previous blocks.



#5 Assembled :P

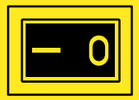
Now you are ready to extrude!

Please connect the power chord to start.

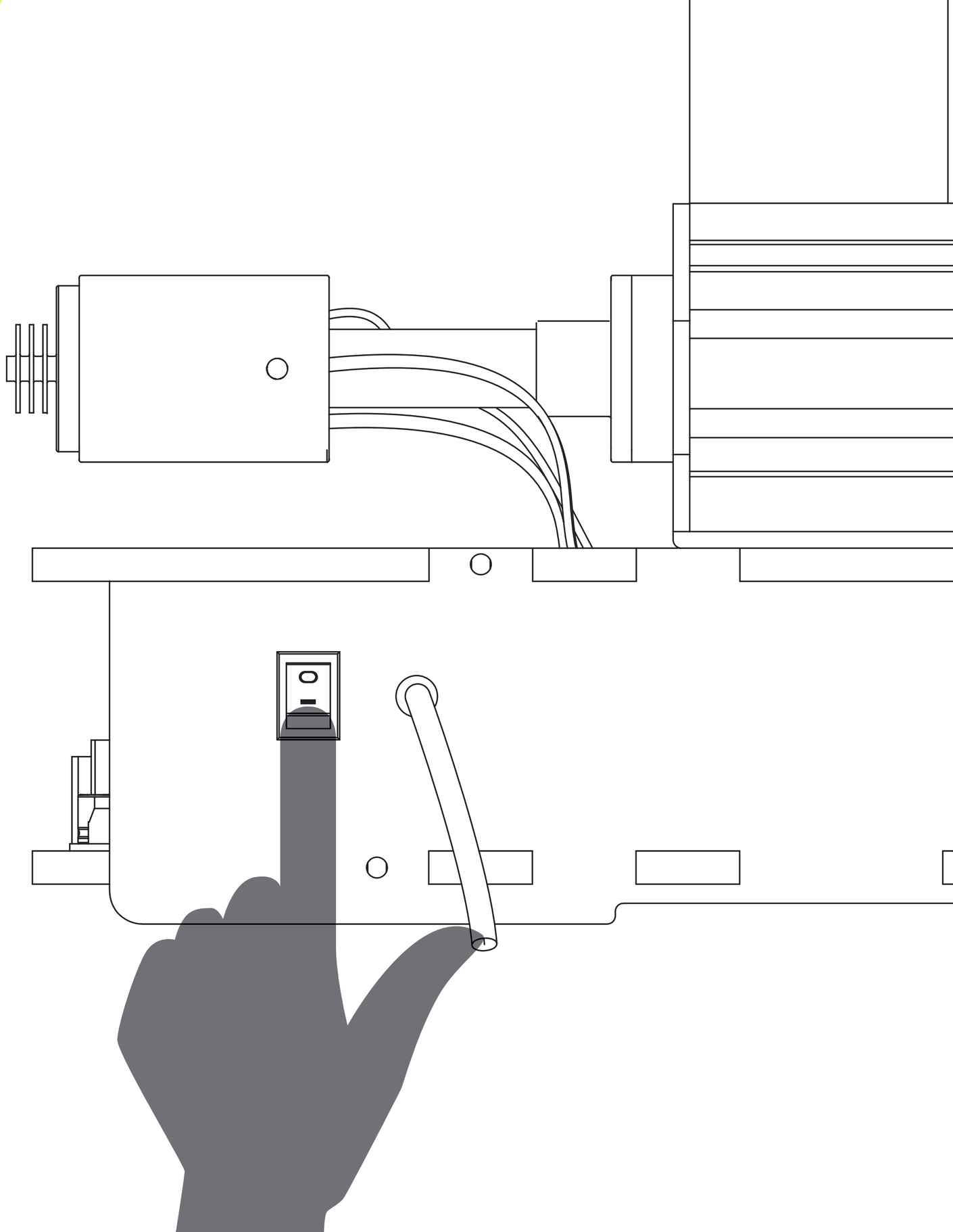


#1 Usage

- Put the switch in (I) position



WARNING: This switch activates the 220V AC current! Please be careful!



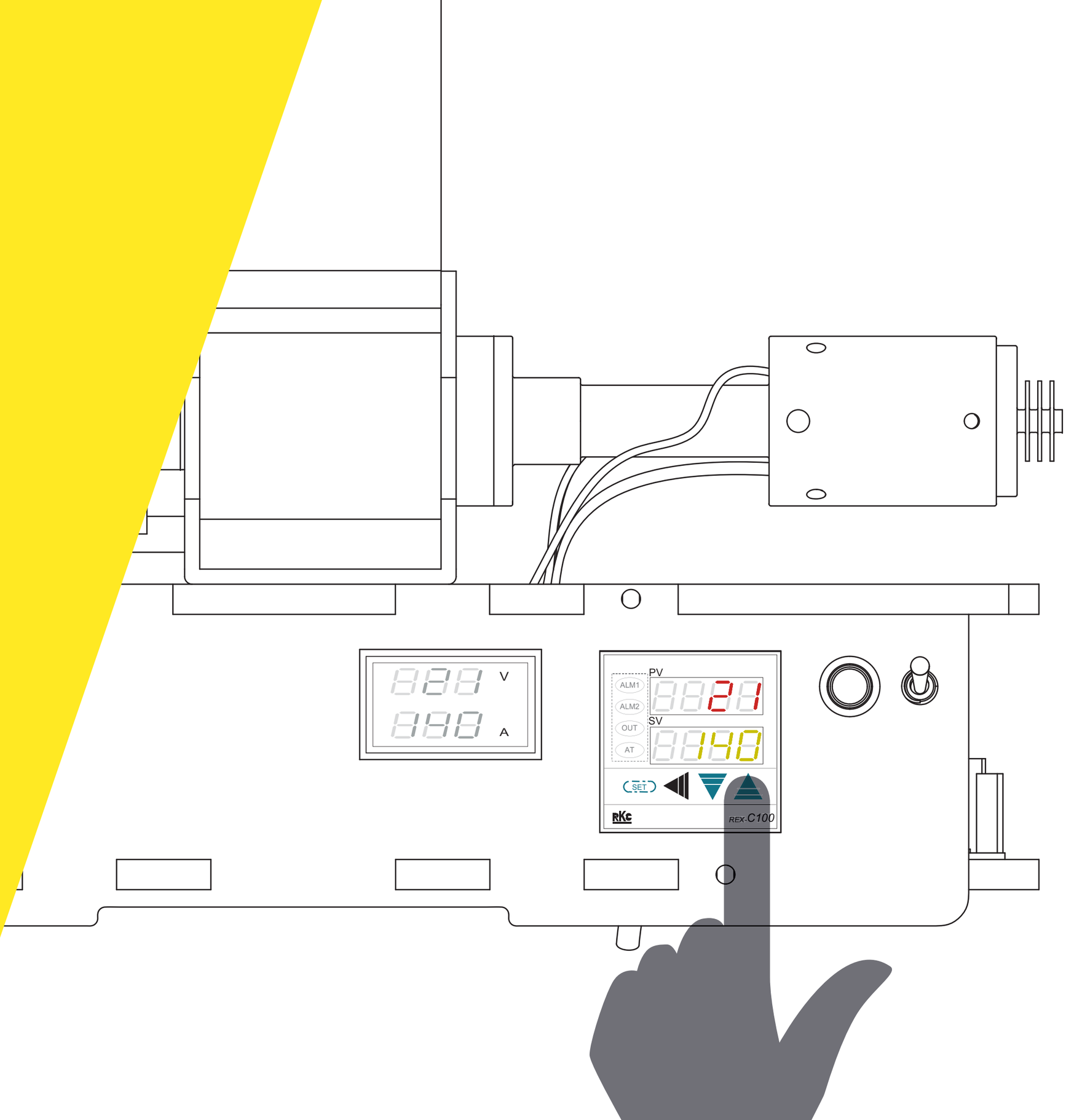
#2 Usage

- Press the button

SET

then use the buttons

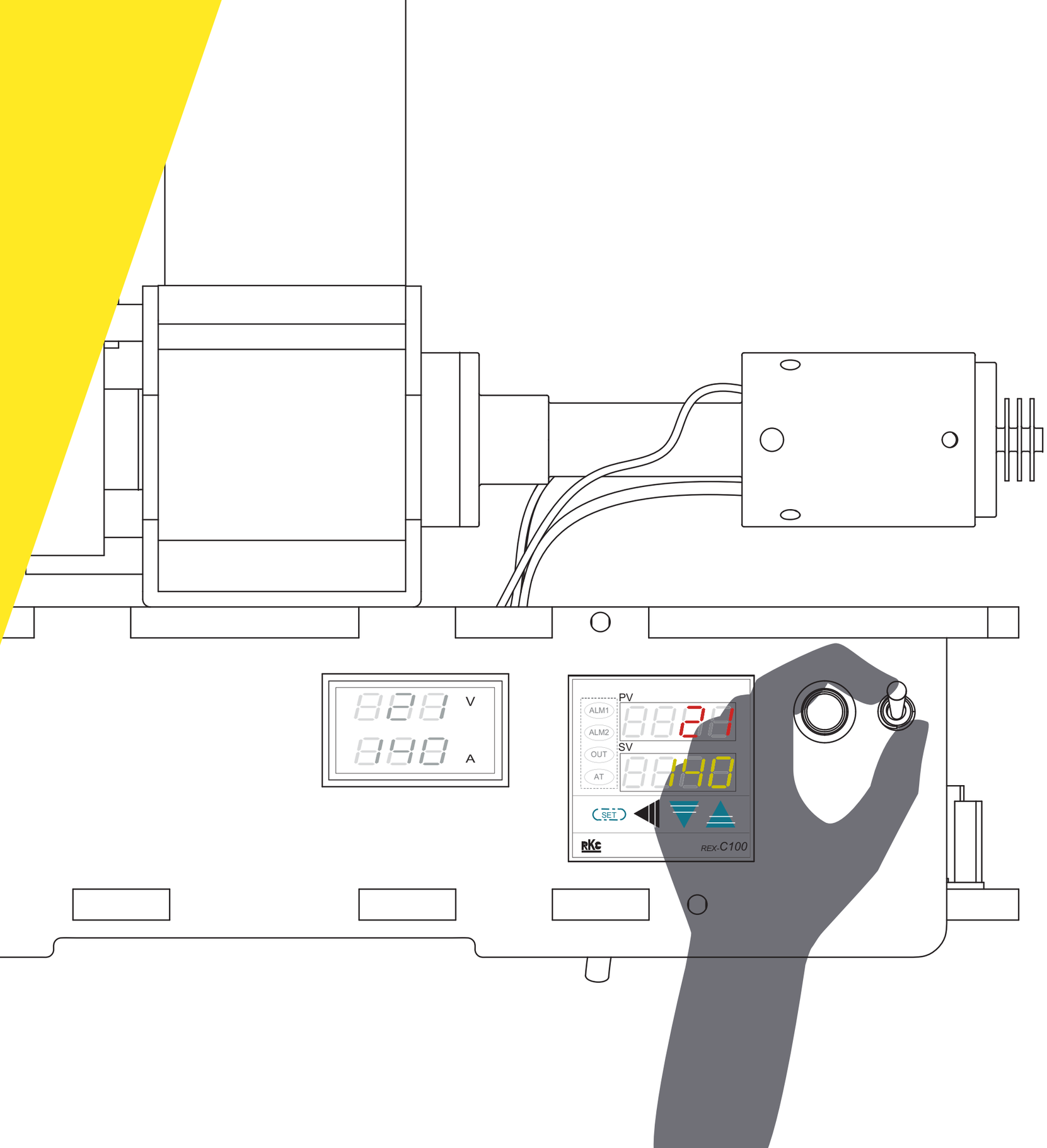
to set the proper temperature (SV) for the material you are going to extrude.



#3 Usage

- Lift the switch to turn on the engine.
Use the knob on the left to regulate its speed.

Warning: Please be sure that eventual polymer in the melting chamber is proper melted.



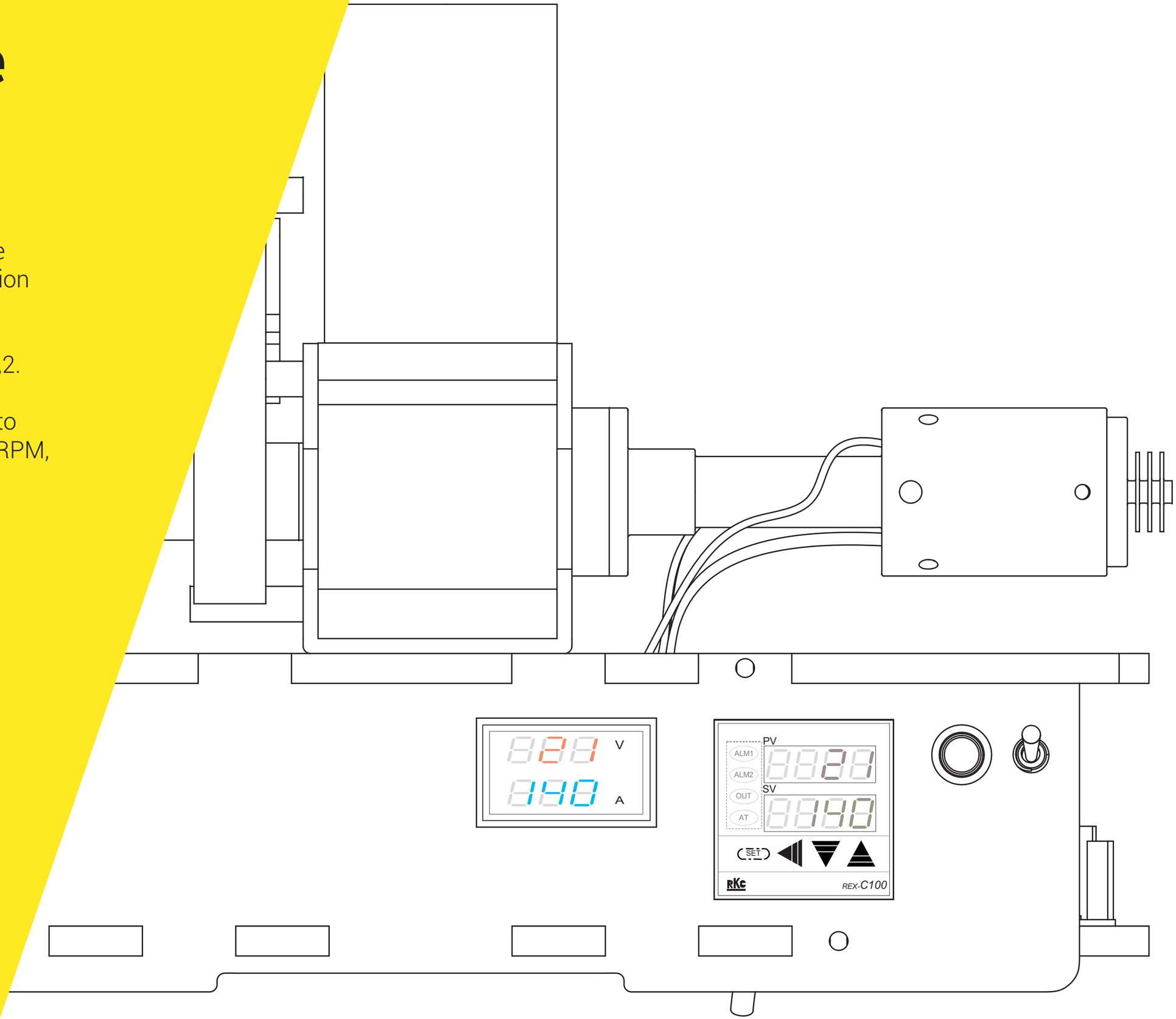
#4 Usage

WARNING: Never exceede 1,9 A with engine absorbtion value.

The correct value is 0,4/1,2.

Set the following V value to obtain the proper engine RPM, rotating the knob.

V	RPM
12	8,5
11	8
10	7
9	6,5
8.5	6
8	5,5



#5 Emptying

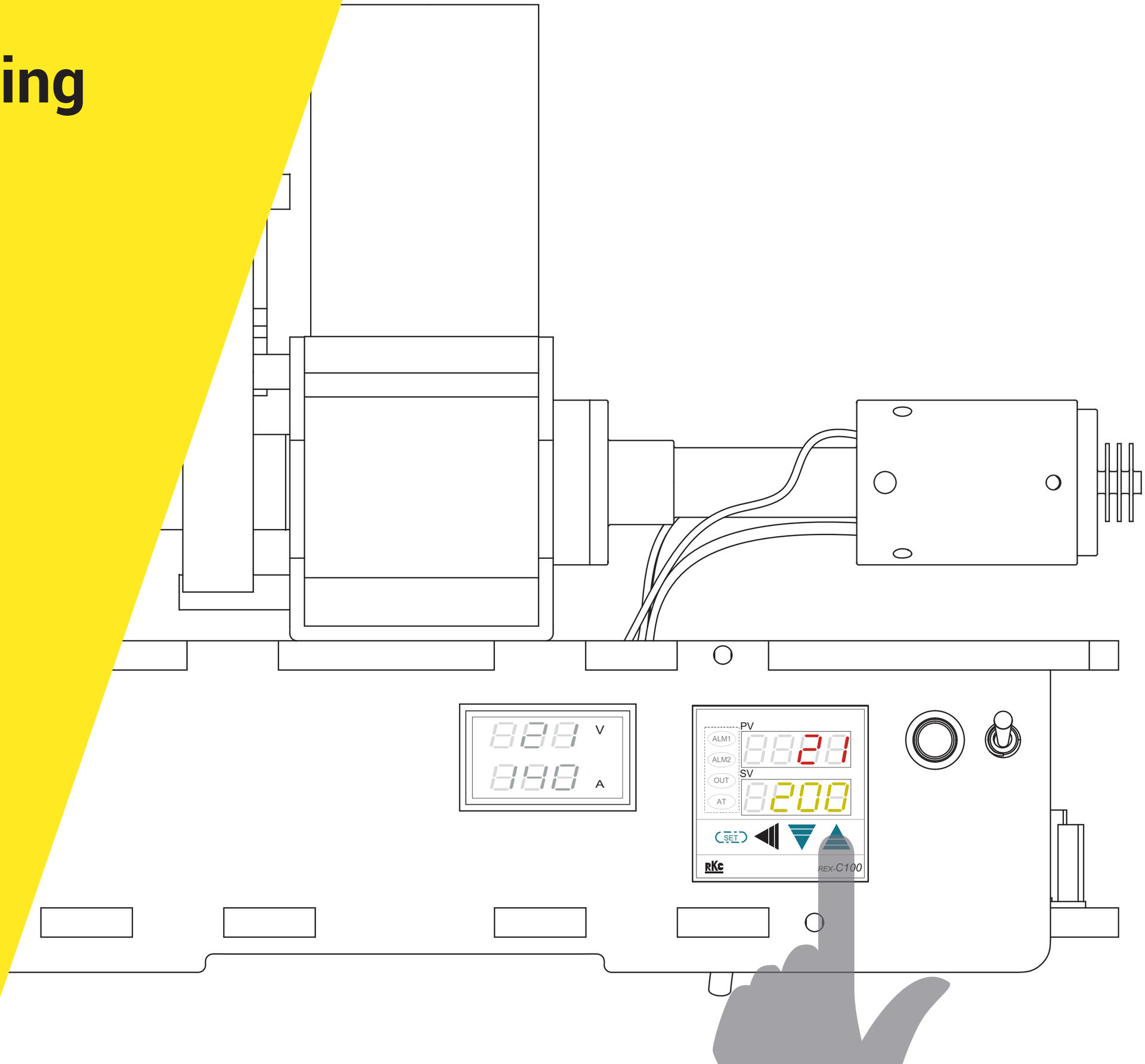
- Press the button

SET

then use the buttons

to set about 200°C

Wait until the melting chamber is totally empty.



THANK YOU FOR YOUR CURIOSITY!

For more info write as at:

support@felfil.com