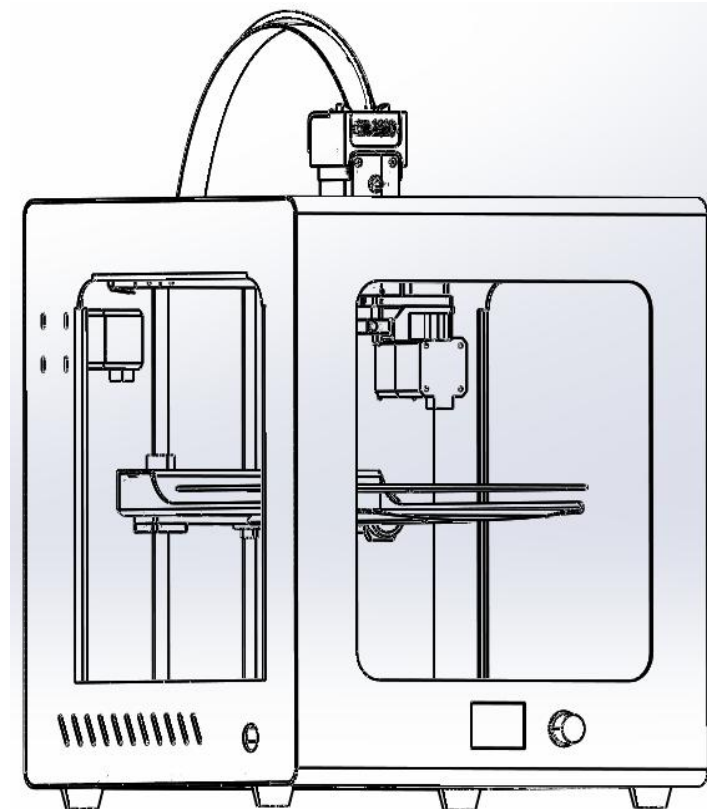# CR-2020 Using Guide

User notes

Please use the materials that original manufacturer recommended , please do not use other manufacturers of materials, so as not to cause nozzle clogging. Please do not attempt to use this machine in any way that is not described in the instructions, to avoid accidental personal injury and property damage.

This machine is suitable for ventilation, cool, dry and dusty environment. Please do not place this machine in the vicinity of inflammable and explosive materials or high heat source. Please do not place the machine in a large vibration or other unstable environment.

Please use the power cord attached to this machine.Do not plug the power plug when the hand is wet.Please use the qualified three socket with wire.Do not deliberately pull, excessive distortion of the machine with wires, to prevent the circuit or short circuit .

Do not use the machine under the age of 10, do not use the machine without personnel supervision, so as not to cause injury to the adult. Often do product maintenance, regular cleaning and lubrication of machine.

After printing,you can use the tools to remove model with the help of temperature,do not directly touch the nozzle.

Basic parameter

Printing size: 200*200*200mm
Layer height:0.05~0.4mm
Nozzle size:0.4mm
Print speed:<200mm/s normal50mm/s
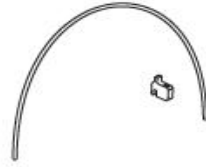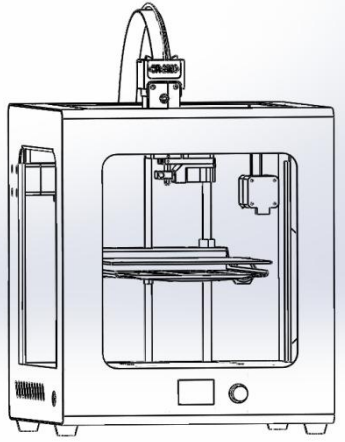Printing material:1.75mm PLA   ABS Wood and so on
Support format:STL obj gcode
System:Linux,Windows and OSX
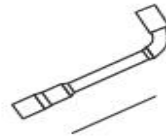Applicable voltage: input, 110 v, 110 v, 24 v output
Environmental requirements: 10 -30 ℃, Humidity 20-50%
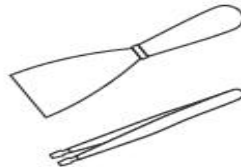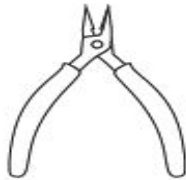
1.Open box

Material Guide
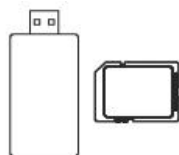
Material Spool

Cutting Knife
&
Scalpel

Allen Keys

Nozzle Key
&
Nozzle Needle

Pliers

Spatula
&
Tweezers
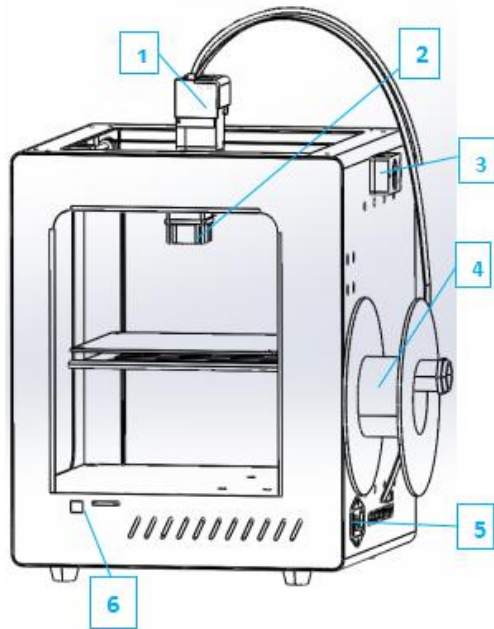
Service Grease

Power Cable

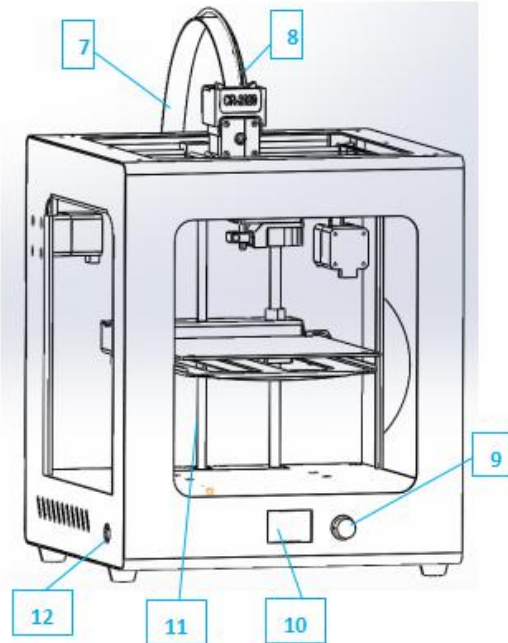SD Card &
SD Card
Reader

2.Parts instruction

1.Extruder

2.Nozzle and fan

3.Broken material detection

4.Rack

5.Switch and power socket

6.SD and USB

7. Extrusion line

8. Guide tube

9. Control knob

10. Display

11.Z axis
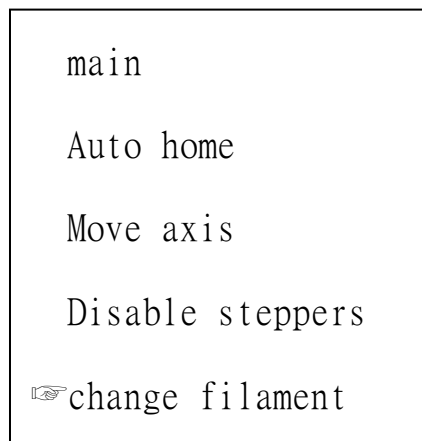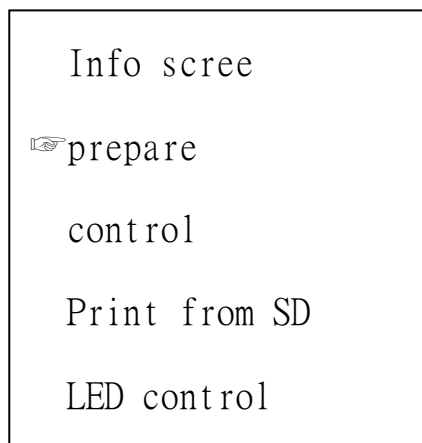
12.Reset switch

3.Installations

①Connect the power cord.

②Install extrusion line,guide tube and rack .

③Load material，when feeding, the material tray should rotate counterclockwise.

4.Load material

1.All installations have been done well. "prepare">> "change filament"

```
  Info scree
☞prepare
  control
  Print from SD
  LED control
```

```
  main
  Auto home
  Move axis
  Disable steppers
☞change filament
```

2."Load"

```
  Prepare
☞ Load
  Unload
```
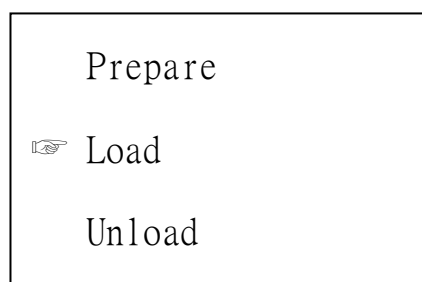
Attention:When the material is unloaded, the material is quickly pulled out, otherwise the consumable material will be blocked.

3.When temperature reaches the preset temperature,extruder will move.

5.Adjust platform

Adjusting platform is very important.It has effect on the printing quality and success.Before your printing,when you have adjusted the platform,the later can not adjust platform.

1. "prepare">> "Bed Auto Leveling"

Info scree	main
☞prepare	Auto home
control	Move axis
Print from SD	Disable steppers
LED control	☞Bed Auto Leveling

2. After choose the command,according to the screen,by rotating platform of screws,check the platform with a horizontal nozzle of A4 paper. Choosing "Auto home">> " Disable steppers",Then you move the nozzle,you may find that there are shallow scratches on the paper.
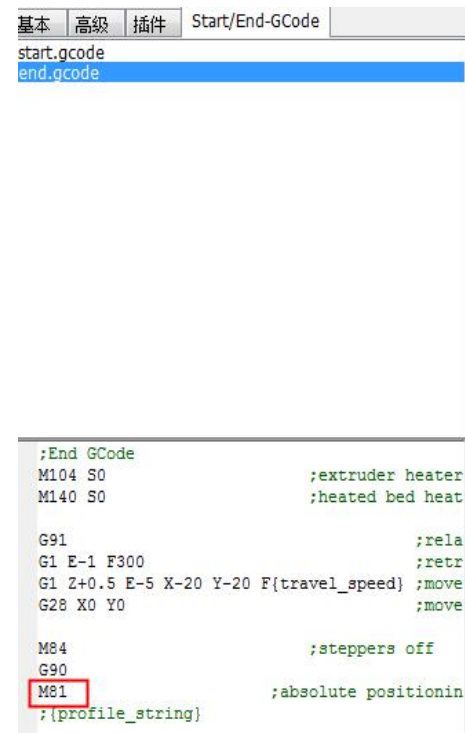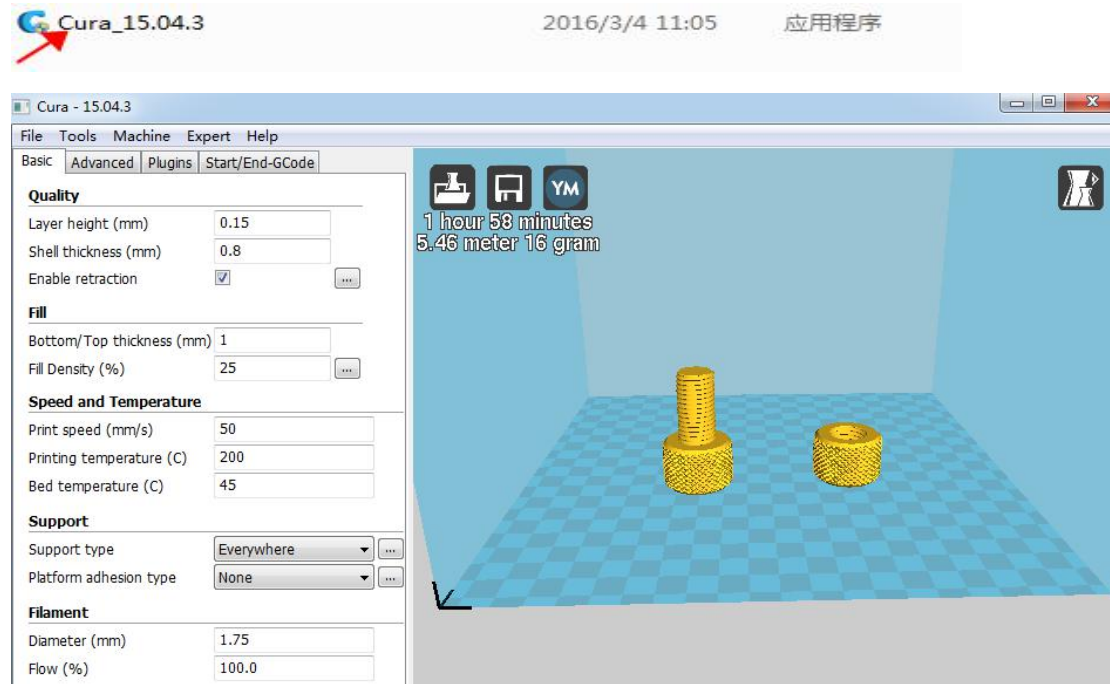
| Prepare	Main	main
☞ Next	☞Auto home	Auto home
	Move axis	Move axis
	Disable steppers	☞Disable steppers
	Bed Auto Leveling	Bed Auto Leveling

6.Install software

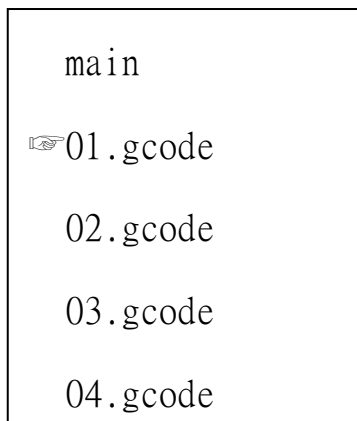**Double click Install Package.Details refer to the software description**

from SD card.

Add new machine wizard: "other">> "Prusa Mendel i3",then changing settings.If you want to automatic shutdown,you should add the "M81" command in the "end.gcode". You can open your machine by the reset switch.

7.Printing

1.Choose "Print from SD" .

```
Info scree

prepare

control

☞Print from SD

LED control
```
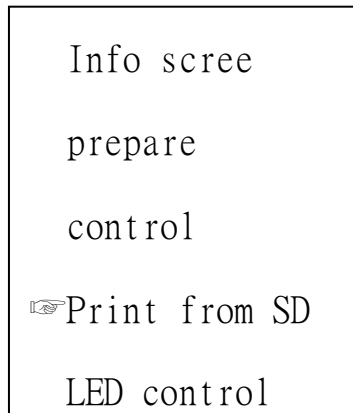
2.Choose the file what you want to print.

```
main

☞01.gcode

02.gcode

03.gcode

04.gcode
```

3.**Waiting the temperature .When temperature reaches what you set,It starts printing.**

4.After printing,the heat will reset automatically ,and you can separate the model from bed.

8.Menu item function description

Menu options	Sub menu	Explanation
Info screen		Show the nozzle and bed temperature, Fan and printing speed,printing time.
Prepare	Main	Return to previous menu
	Disable steppers	Moving X Y Z axis by your hands
	Auto home	Return to the origin position
	Preheat PLA	Different materials have different printing temperature.
	Preheat ABS	
	Bed Auto Leveling	Adjusting platform
	Change filament	Load and unload material
	Cool down	Closing heating
	Move axis	Moving X Y Z axis by switching the knob.There are three choices,stepping 10MM/1MM/0.1MM
Control	Main	This selection is generally not used. We advice that these parameters are not modified.
	Temperature	
	Restore failsafe	Restore factory settings
Print from SD		Selecting the file that what you want to printing. (.gcode)
LED control		Take on/off LED