



E16 User Manual

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PREFACE

Dear customer:

Thanks for choosing and using Anet 3D printer. For your convenience, please read the instructions carefully before using them and follow the instructions strictly.

E16 3D printer is a melt deposition molding process, which can print 3D models and so on designed by computer into real objects.

Special Version:

1. All the contents in this manual have been checked carefully. If there is any misprint or misunderstanding of the contents, Anet reserves the right to interpret it.
2. This user manual is for reference only and does not constitute any form of commitment.
3. It is recommended to use Anet original filament.

1 Use Instruction

In order to prevent damage to you and others in the process of using, please pay attention to the following items!

- Please do not attempt to use the machine in any way not described in the instructions to avoid accidental personal injury and property damage.
- Please do not place this machine near inflammable and explosive articles or high heat sources. Please place this machine in a ventilated, cool and dust free environment.
- Please do not place the printer on a platform with high vibration or other instability. The shaking of the machine will affect the printing quality of the printer.
- Please do not replace the power cord of other products during installation. Please use the original power line supplied with the machine. The working power supply uses 110V/220V AC. The power plug must be plugged into the three holes socket with ground wire to avoid damage to components or accidents such as fire and electric shock.
- Please do not touch the nozzle and heating bed while the printer is working to prevent high temperature burns and personal injury.
- Please do not wear gloves or wrappers when operating the machine to prevent the movable parts from causing crushing and cutting injuries to personal parts.
- After printing, use the remaining temperature of the nozzle to clean up the filament on the nozzle with the help of tools. Do not touch the nozzle directly with your hands during cleaning to prevent scalding
- Use a shovel carefully to avoid personal injury when removing model.
- Please often does product maintenance. In the event of power failure, it regularly cleans the printer body with dry cloth to wipe away dust and bonded printing materials, foreign objects on guide rails, and lubricating oil is recommended for sliding parts, screw rods and bearing parts.
- Children under 14 years of age or elderly people over 60 years of age, please use this machine under the adult people to avoid personal injury.
- The 3D printer were tested twice before delivery, some test residual filament may flow out as at the beginning of use, please feel free to use them.
- It is recommended to use E16 in a well-ventilated environment. Please cut off the power supply after using.

2 Installation Instruction

- Please make sure the packing is intact before receiving the goods.
- After unpacking, please check carefully whether the parts list is consistent with the physical parts.
- If you have any problems, please contact your supplier or Anet in time.
- Pictures in this manual are for your reference, please take the object as the standard.

3 Annex List

No.	Picture	Name	Qty.	No.	Picture	Name	Qty.
1		Vertical Frame	1	10		TF Card and Reader	1
2		Chassis	1	11		Shovel	1
3		Power Supply Box	1	12		Ruler	1
4		Toughened Glass 300*300*3mm	1	13		Plier	1
5		Filament Holder Kit 1	1	14		Screwdriver	1
6		Filament Holder Kit 2	1	15		Black Ribbon	10
7		Power Line	1	16		Hot End M3*3 Black Jackscrew*2	3
8		Hexagon socket screw M4*10 -2pcs M5*20-4pcs	6	17		Fixing Clip	4
9		M1.5/M2.5/M2/M3/M4 Hexagon Wrench	5	18		Filament*0.25kg	1

Sheet 1

Attention: Pictures in this manual are for your reference, please take the object as the standard.

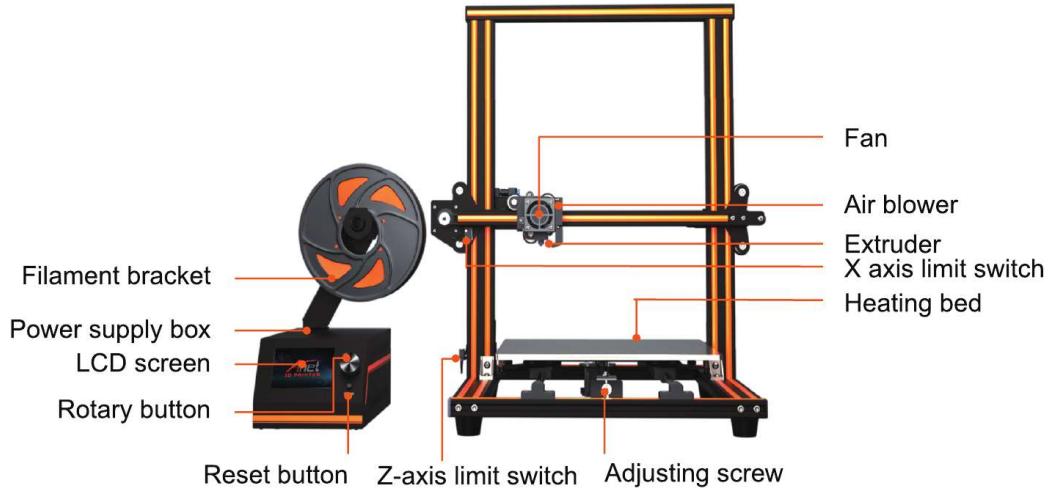
Items 9 - 18 in the annex list and toughened glass are gifts and do not enjoy the warranty policy.

4 Parameter

Model: E16	Nozzle diameter: 0.4mm
Layer precision: 0.1-0.3mm	Product dimension: 500*480*594mm
Printing speed: 40-120mm/s	Product weight: 10.2±0.1kg
XY axis position precision: 0.012mm	Packing dimension: 605*535*243mm
Z axis position precision: 0.004mm	Packing weight: 13.1±0.1kg
Printing material: PLA,ABS,HIPS etc.	Build volume: 300*300*400mm
Filament tendentiousness: PLA	Display: LCD Screen
Filament diameter: 1.75mm	Offline printing: Yes
Software language: Chinese/English	Support file format: STL,G-Code,OBJ
Module support automatically: Optional	Operating system: Windows/Mac
Slice software: Cura	Environmental requirements: Temperature 0-40°C , Humidity 5-80%

Sheet 2

5 Name of Parts



Picture 1 Front view

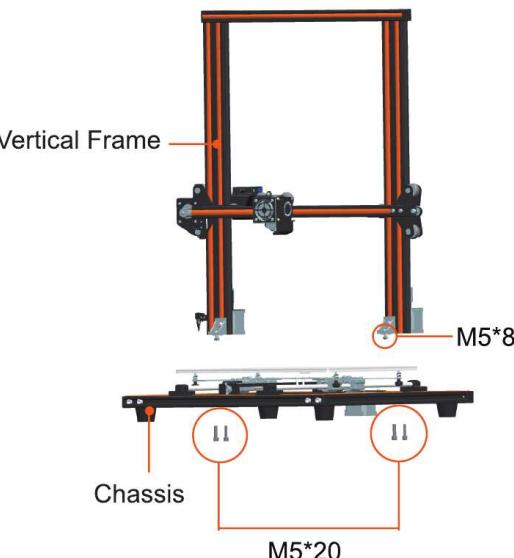


Picture 2 Front view

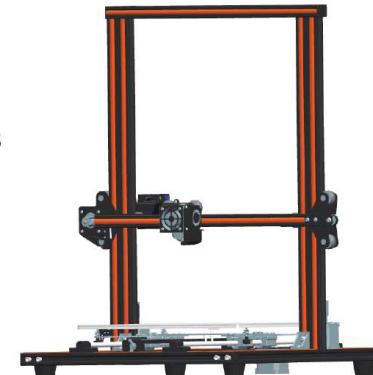
6 Installation

6.1 Vertical Frame Installation

1. Place the frame on the chassis and align the screw holes, insert the 4 M5*20 screws from the bottom to connect the vertical frame and chassis, and then tighten the screws.
2. Tighten 2 M5*8 hexagon socket screws to complete the vertical frame installation, as shown in picture 4.



Picture 3



Picture 4 Installation completion diagram

6.2 Power Supply Box Installation

- Put the filament holder kit 1 on the power supply box and lock it with M4*10 screws, the filament holder kit 2 is installed on the filament holder kit 1 as shown in picture 5.
- The aviation connector connecting cable and power cable are inserted into the main body of the power box, as shown in picture 6.



Picture 5



Picture 6

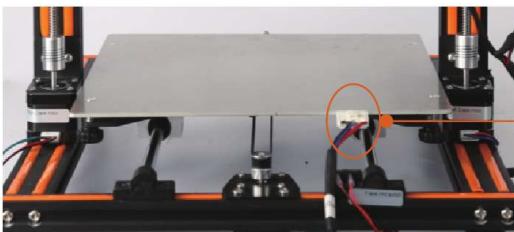
6.3 Machine Cable Connection

- According to the cable label in Sheet 3, wire the cable label one by one with the label on the machine.
- Heating bed cables are wired as shown in picture 7.

Label name	Cable label	Labels on the machine	Remark
Motor Label	X axis motor	X axis motor	When wiring, the cable label corresponds to the label on the machine and is inserted into the corresponding position on the machine.
	Y axis motor	Y axis motor	
	Extruder Motor	Extruder Motor	
	Left Z axis motor	Left Z axis motor	
	Right Z axis motor	Right Z axis motor	
Limit switch label	X: axis limit switch	X: axis limit switch	
	Y: axis limit switch	Y: axis limit switch	
	Z: axis limit switch	Z: axis limit switch	
Heating bed label	Hotbed	As shown in picture 7	

Sheet 3

Attention:
Cables with
Hotbed label
is inserted in
the locations
shown.



Picture 7

6.4 Voltage Setting

Adjust the voltage according to the local mains input standard.

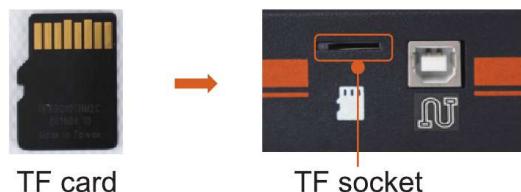


Picture 8

Attention: according to the local mains input requirements, the power supply to the left position of the toggle switch is 110V, and to the right position is 220V.

6.5 TF Card Installation

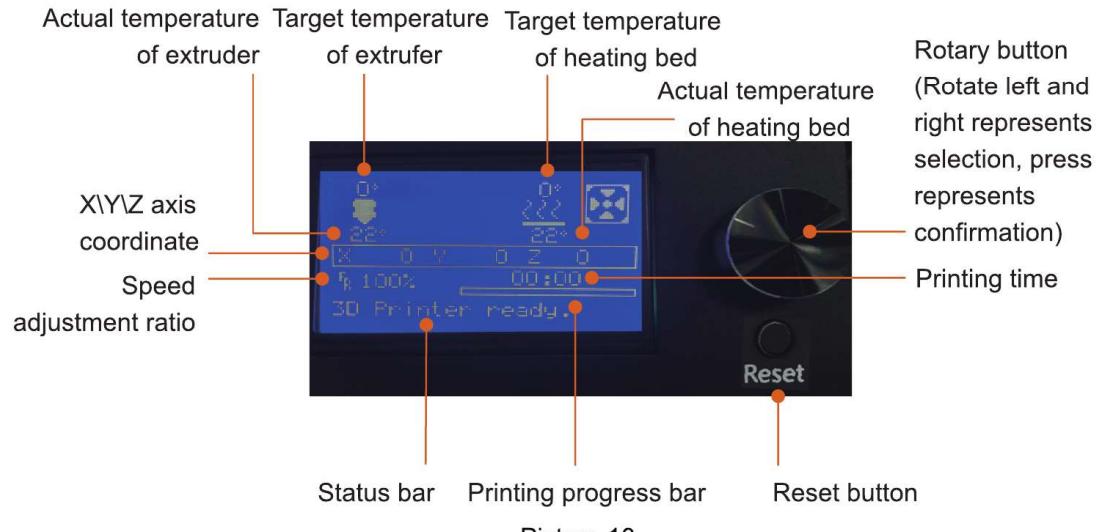
Take out the TF card and insert the TF card as shown in picture 9.



Picture 9

7 Machine Function Introduction

7.1 Operating Interface



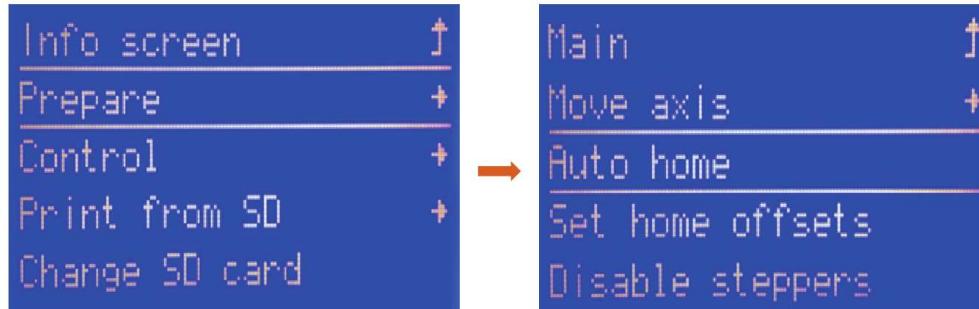
Picture 10

7.2 First Printing

7.2.1 Machine leveling

1. Install toughened glass: press the rotary button to enter the main menu, click "Prepare" → "Move axis" → "Move Z" → "Move 10 mm", turn the rotary button clockwise to raise the Z axis by about 20 - 30 mm, and place glass on the heating bed and fix it with a clip.

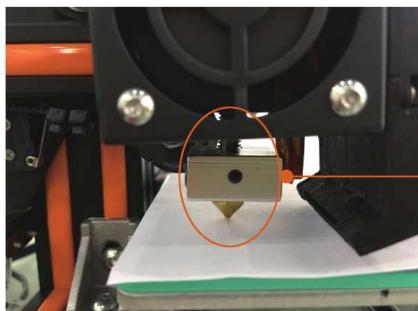
2. Auto home : press the rotary button to enter the main menu, select "Prepare" → "Auto Home", and the machine starts to move towards the position of the limit switch until the machine stops moving, as shown in picture 11.



Picture 11

3. Disable steppers: press the rotary button to enter the main menu, select "Prepare" → "Disable steppers".

4. Manual leveling: moving the nozzle to the heating bed and observing the distance between the nozzle and the heating bed from the front of the machine (shown in picture 12), if the distance between the nozzle and the four corners of the heating bed is 0.1 mm (the thickness of a piece of A4 paper, A4 paper can pass through the gap and feel slight resistance), leveling is not required; If the distance between the nozzle and the four corners of the heating bed is greater than or less than 0.1 mm, adjust it according to step 5.



Picture 12

The distance between the nozzle and heating bed.

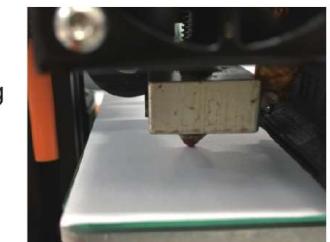
5. Adjust the distance: fine - tune the " distance " so that the its size is about 0.1 mm to meet the printing requirement. Move the nozzle to the other three corners of the heating bed, and adjust the spring compression of the four corners of the heating bed in one direction (clockwise or counterclockwise) (shown in picture 13), so that a piece of A4 paper (about 0.1 mm) can pass through this distance and feel slight resistance, and there is no scratch on the platform when moving the extruder (picture 14).



Adjusting spring
Nut

Attention: turning the nut counterclockwise is tight and turning the nut clockwise is loose.

Picture 13



Attention: A4 paper can pass through the gap between the four corner nozzles of the heating bed and the heating bed with slight resistance.

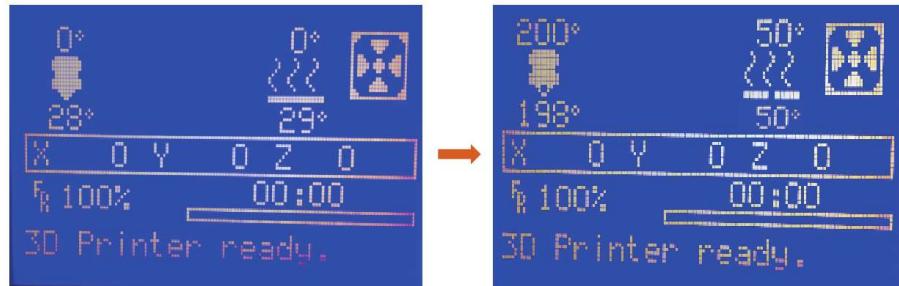
Picture 14

7.2.2 Load Filament

1. Machine preheating

Before loading filament, the machine needs to be preheated. The following picture illustrates PLA filament as an example, and the operation is as follows.

Operation method: press rotary button → "Prepare" → "Preheat PLA" → "Preheat PLA", the machine starts to warm up (at this time, it returns to the main interface and the machine is warming up).



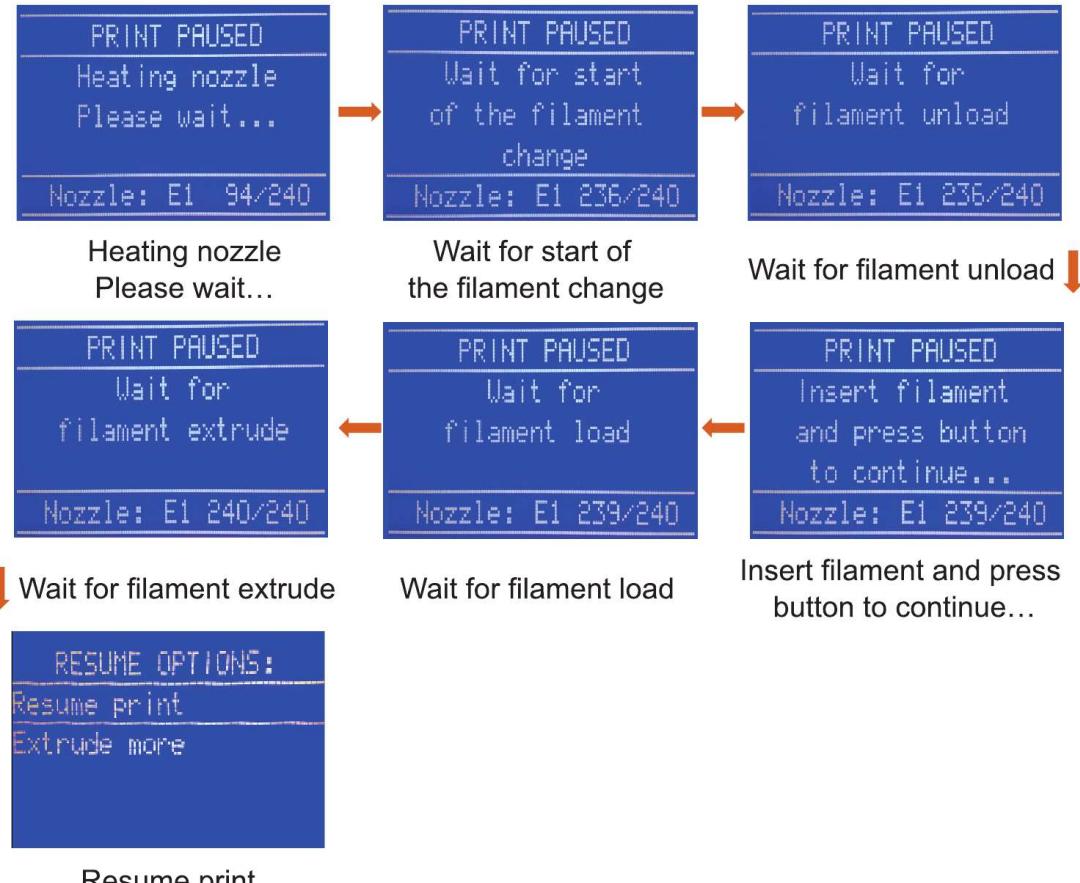
The heating bed and extruder
Picture 15 reach the target temperature.

Attention: If you want to print with ABS filament, you must select "Preheat ABS" for preheating.

2. Load Filament

Load filament automatically:

- 1) A roll of PLA filament: Filament specifications: Diameter:1.75mm; Material: PLA; Printing temperature: 200-230°C;
- 2) Please press rotary button →“Prepare”→“Change filament”, the main interface will display “Heating nozzle Please wait...”, the interface will display “Wait for start of the filament change” after the nozzle temperature rises to the target temperature →“Wait for filament unload ” →“Insert filament and press button to continue...” → then please press rotary button;
- 3) Straighten up the filament (or cut the filament into bevels with plier),then pass the filament through the extruder;
- 4) Meanwhile the main interface will display “Wait for filament load” →“Wait for filament extrude”, please click “Resume print” to start printing;
- 5) If the nozzle has filament outflow, the installation of filament is successful. If the installation of filament is not successful, please select “Extrude more”to re-load.

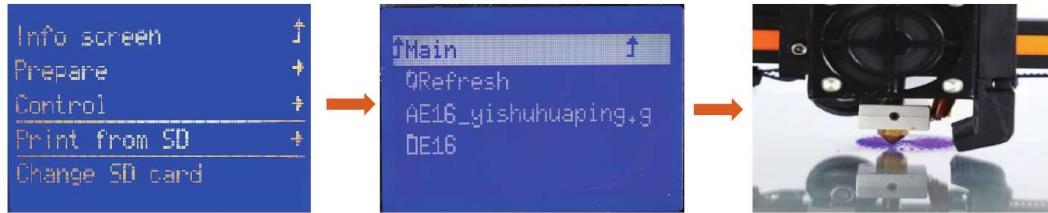


Picture 16

Attention: The function of automatic material advance and retreat is carried out according to the steps of material return first and material feed later, when the first printing has not started installing filament yet, please wait for 1 - 3 minutes. After the interface displays “Insert filament and press button to continue”, insert filament into the extruder for automatic feeding.

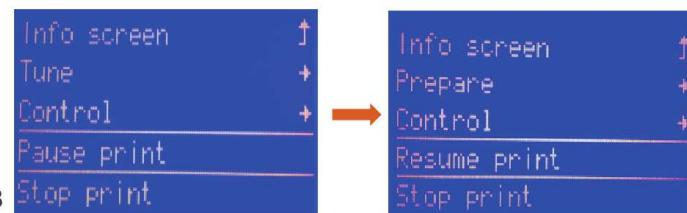
3 Printing

1) After leveling is completed and the filament is installed successfully, press the rotary button to enter the main menu, press " Print from SD" → " Main" and select the file under " Main" to start printing for the first time.



Picture 17

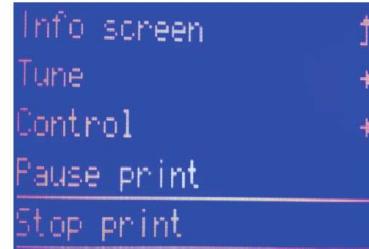
2). In the process of printing ,if you want to pause printing , please press the rotary button to enter the main menu ,press " Pause print" to pause printing, the machine stops after moving about 3-5cm in the z - axis ,and then press " Resume print" →"Resume print",the main interface will display“wait for print to resume” to resume printing , as shown in picture 18



Picture 18

Attention: If you do not operate the knob after suspending printing, you will return to the main interface in about 1 minute.

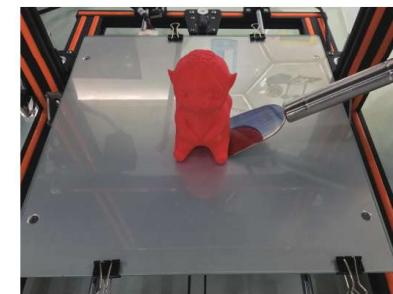
3. If you want to stop printing during printing, press the knob to enter the main menu, press "Stop print" to stop printing, press the reset button to resume normal operation of the machine and select to reprint the model, as shown in picture 19.



Picture 19

4 Remove model

After the model printing is finished, the model is shoved down against the glass surface with a shovel, as shown in picture 20.



Picture 20

7.3 Unload Filament

Automatic unload of filament:

Method of automatically unloading filament: Please press rotary button →"Prepare"→"Change filament", the main interface will display "Heating nozzle Please wait.....",wait for 1-2 minutes ,the interface will display"Wait for start of the filament change"after the nozzle temperature rises to the target temperature →"Wait for filament unload " ,the machine automatically unload filament ,then pulls out the filament in the vertical direction and unload the filament.

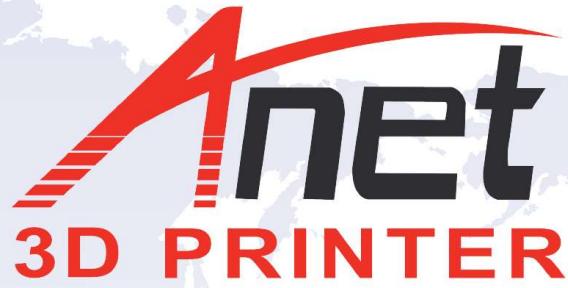


Heating nozzle
Please wait...

Wait for start of
the filament change

Wait for filament unload

Picture 21



If you have any problems with the product, you can obtain the relevant services through the following channels:

Facebook after - sales group: www.facebook.com/groups/anet3dprintersupport

Website: www.anet3d.com

After – sales service email: anet@anet3d.com