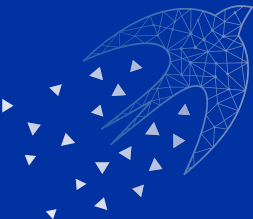


**Phætus®**

# **APUS Extruder Product Instruction**



Please read and keep this manual carefully  
before using our products properly

## Product Appearance



Thank you for buying Phaetus'  
APUS Extruder

## Product Features

**Easy  
maintenance**

**Optimized RNC  
Dual Drive Gears**

**155g lightweight  
all metal design**

**6.3 : 1 Gear ratio**

## Specifications

**Product Name:** APUS Extruder

**Product Size:** 67mm\*64mm\*42mm

**Product Color:** Blue

**Product Net Weight:** 155g

## Compatible Filaments

Compatible with all thermoplastic filaments including but not limited to PLA, ABS, PETG TPU, PP, PC, PA PEEK and PEI as well as typical composite fibre filaments such as PLA-CF, ABS-CF, PETG-CF and PA-CF/GF. Composite filaments such as steel, wood, boron carbide, tungsten and fluorescence materials can be processed by the extruder.

## Parts & Accessories



Motor Extension Cable -5cm  
(Molex Micro Fit 3.0-DuPont TJC8-4)

Motor Extension Cable -5cm  
(Molex Micro Fit 3.0-JSTXHP-4)

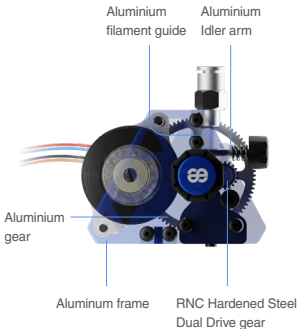
H2.0 Hex Key

H2.5 Hex Key

Button Head Screw M3X12

Cap Head Screw M3x12

# Product Material



## Product Advantage

- Small Nema 14 stepper motor for high speed printing
- 6.3 : 1 Gear ratio to ensure high torque
- 155g light weight design of the aluminium frame ensures heat dissipation of the stepper motor.
- Specialized teeth design of the RNC hardened steel dual drive gear system to get a very good grip on filament with very high reliability.
- Easy loading and unloading of filament using the manual wheel.
- Gravity align to the fix mount ensure the stability of high speed printing.
- Very easy to disassemble during maintenance due to the “3-Screws-System”

# Copyright

Phaetus

© 2022 Phaetus. All rights reserved.

[phaetus.com](http://phaetus.com)

Phaetus, the Phaetus logo, are trademarks of Phaetus, registered in China and other countries and regions.

Other company and product names mentioned herein may be trademarks of their respective companies.

Every effort has been made to ensure that the information in this manual is accurate. Phaetus is not responsible for printing or clerical errors.



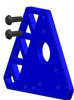


Phætus®

[www.phaetus.com](http://www.phaetus.com)

# Assembly Steps

1. Use 2 M3\*8 screws to fix the filament inlet on the front plate. Pay attention to the direction of the filament inlet that it should face outward.



1

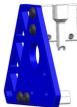


2

2. Use 2 M3\*8 screws, and secure the extruder connection on the front plate.

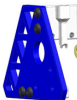


1

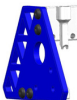


2

3. Press two F683ZZ bearings into the Idler Hob Gear.

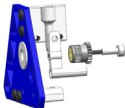


1

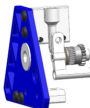


2

4. Use the plug screw 3\*8\*M2.5, lock the Idler Hob Gear to the Idler Arm.

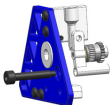


1

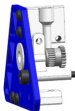


2

5. Use M3\*8 screws to fix the Idler Arm on the front plate.

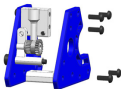


1

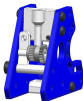


2

6. Use 4 M3\*8 screws, secure the back plate to the components.

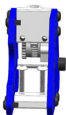


1

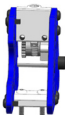


2

7. Place 2 M3\*12 screws into the hole of the extruder connector.

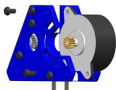


1

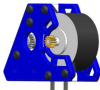


2

8. Use 2 M3\*6 screws, fix the stepper motor to the back plate.

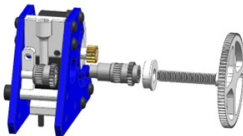


1

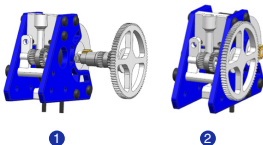


2

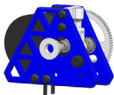
9. Install the MF126ZZ bearing into the gear shaft firstly, and then screw the drive hob gear to the bottom of the gear shaft.



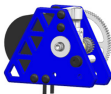
10. Install the mounted gear shaft into the back plate, and note that the flange of the bearing is close to the side back plate.



11. Install the bearing MF126ZZ on the front plate, and note that the flange of the bearing is close to the front plate.

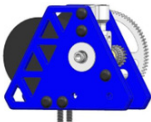


1



2

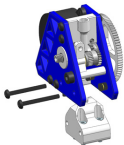
12. Put 4 M3\*12 screws into the hot end connector.



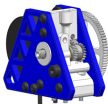
1



13. Use 2 M3\*25 screws. Start from the front plate and secure the hot end connector. The screws lead to the back plate.

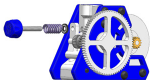


1



2

14. Install the adjustment screw. Pass them through the spring and idler arm, and then fix them on the filament inlet.



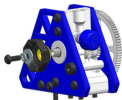
1



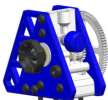
2



15. Install the manual wheel on the gear shaft, and then thread the M3\*8 screws through the elastic pad and the flat pad in turn and fix them on the gear shaft.

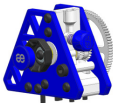


1

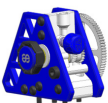


2

16. Attach the cap to the manual wheel.



1

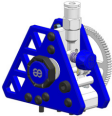


2

17. Install the pneumatic interface.



1



2

18. The exploded view of the entire product is shown below.

