Keen-One Harmonic Drive EQ Mount

MrDeepAddicted

VIEW IN BROWSER

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Summary

This is 3D printed Harmonic Drive. OnStep system is compatible with Stellermate(INDI) and ASiair.

Learning > Physics & Astronomy

Tags: astronomy   astronomytelescope   astrophotography   equatorial   harmonicdrive   onstep

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Upadated: 2 Oct 2022
Uploaded HarmonicD_RA.zip This include STEP file.

Upadated: 7 September 2022
Uploaded Simplest OnStep System & Case

Upadated: 18 August 2022
CupGear_TPU_v2 >>> CupGear78_PETG
TPU is too soft for CupGear, so I redesigned CupGear78_PETG

Keen-One is Harmonic EQ Mount with OnStep controller

This is remix. Many Thanks to Mr RomanHujer!

All parts are printed PETG.

Parts list for 1 unit.
2 units are required for use as a dual-axis (RA & DEC) equatorial mount.

BOM for 1 Unit

1 x 6812ZZ Bearing-60x78x10
1 x 6807ZZ Bearing-35x47x7
6 x 606ZZ Bearing-6x17x6
1 x 17hs4401s-pg5.18: 1 (Geared Steppermotor)
https://ja.aliexpress.com/item/32864312875.html
1 x Aviation Plug GX12 4pin Male

2 x M3 6mm
1 x M3 10mm
4 x M3 12mm
6 x M3 15mm
4 x M3 30mm

4 x M4 20mm
6 x M4 35mm
6 x M4 45mm
10 x M4 25mm

7 x M3 Nut
12 x M4 Insert Nut
20 x M4 Nut
2 x M6 Nut
2 x M8 Nut (Thin 5mm type)

1 x Arca Swiss Quick Release

Assembly Instruction *Written in Japanese but you can change language setting.
https://mr-deep-addicted.com/?page_id=1770

Onstep controller is not included.

I uploaded Simplest OnStep System & Case for control this telescope mount.
https://www.printables.com/model/273808-simple-onstep-system-case-wemoscnc3

This remix is based on

HrEM - Harmonic EQ Mount

by Roman Hujer

Model files

bearingholda.stl

mainhousing_v2.stl

bearingholdb.stl

motorcover.stl

wavegenb.stl

motorholda.stl

outputplate.stl

outputshaft_v2.stl

motorholdb_v2.stl

wavegena.stl

vixenpolarf_attachment.stl

cupgear78_petg.stl

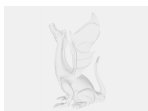**circular79t.stl**
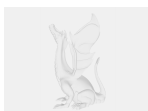
cupgear_tpu_v2.stl

Other files

howtoassemble_v2.pdf

harmonicd_ra.zip

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